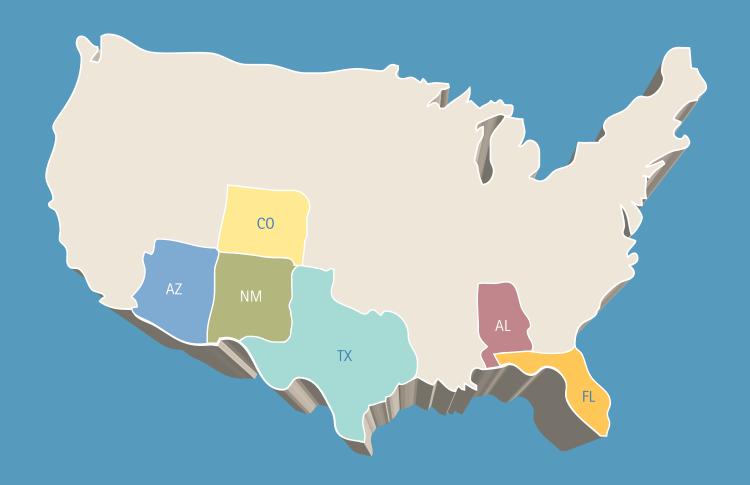


# US Regional Watch

Economic Research Department

Second Quarter 2009

1 2 3 4



- Sunbelt's economy: on the road to stabilization and recovery
- The region's labor market benefits from its industry mix and local characteristics
- In the Sunbelt Region, exports are more oriented toward fast growing countries
- Bank losses to affect Sunbelt less than the rest of the U.S.

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Closing date: May 31, 2009

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Although most economic indicators remain weak, the pace of the economic contraction is slowing down. While the level of uncertainty surrounding the potential impact of the stimulus package remains elevated, output is likely to be positive in the second half of the year. This perspective is confirmed in the BBVA Compass Sunbelt Region by our State Monthly Activity Indexes, which indicate that the worst is behind us.

In fact, we expect the Sunbelt Region to lead the upturn. However, the recession has been so profound that recovering lost ground will take a substantial period of time. In addition, the nature of the crisis, structural changes and the magnitude of the fiscal policy response will have significant effects on potential economic growth.

Therefore, the biggest challenge moving forward is assuring a sustainable solid rate of expansion. To achieve this goal, both monetary and fiscal stimuli must be successful and, at the same time, include an efficient exit strategy that guarantees price stability and fiscal prudence.

Facing these developments implies both costs and benefits. Regional outcomes will depend on how well state economies are prepared to benefit from these changes and on the type of policy actions that are compatible with these challenges.

A key element of differentiation is economic diversification. According to our analysis, the employment composition structure in the Sunbelt has allowed the region to lose fewer jobs than would have been lost under an average mix. During the recovery process it is also likely that the labor market in the Sunbelt will expand faster than U.S. average. Moreover, international trade has been a significant driver for economic growth.

Our analysis indicates that although global trade has fallen to its lowest level in 25 years, different assistance packages will help to support foreign demand. The BBVA Compass Sunbelt Region could benefit greatly from the global recovery, as a significant share of exports are high value-added exports and are intended for fast-growing economies. These strengths, along with positive prospects for the banking industry in our region, will support higher potential economic growth rates than in the rest of the country.

Finally, this issue marks the beginning of a new period of collaboration with our university partners within the Sunbelt Region. This is part of BBVA's dedication to our communities, and the Economic Research Department's commitment to an objective analysis and the desire to support our readers and clients with a better value proposition. The expertise and knowledge of our university partners is an invaluable asset from which we all benefit.

We hope you enjoy reading this issue.

Sincerely, Nathaniel Karp BBVA Compass U.S. Chief Economist

### Global Outlook

# The economic situation is improving in the second quarter, with falling financial market tensions and an apparent reduction in the pace of deterioration of real activity.

Global economic growth in the first months of 2009 was characterized by persistent tensions in the financial markets, which began to recede in the second quarter. In May the spread of banks' credit default swaps¹ in the U.S. reached its lowest level since the demise of Lehman Brothers, while for European banks it attained its lowest value since November 2008. Moreover, there have been important corrections in interbank markets, as the 3-month OIS spreads² have reached their lowest levels in the U.S. and the European Monetary Union (EMU) since the beginning of 2008. However, both variables are still at very adverse levels in comparison with those registered in the pre-crisis period and also those of the first phases of the crisis.

The continuation and deepening of global economic contraction in the first months of 2009 have lagged the high levels of risk aversion observed. Data from the first quarter of 2009 still showed GDP in the U.S. contracting at -1.6% on a quarterly basis, a pace very similar to that of the previous quarter. In Europe, growth maintained an exceptionally negative tone, with GDP contracting in the first quarter by 2.5%. However, the general tone of recent economic indicators is less negative according to the data available to date (corresponding to April and May). This change suggests that the pace of the recession may be mitigating, although it is likely that activity will still see declines in the short term. Financial markets reacted positively to this possible inflection in the economic situation, but the continuity of this improvement is still subject to a high degree of uncertainty, as the final duration of the crisis remains the key unknown in the global outlook.

### Public policies to stabilize the financial system and stimulate the economy are broader in the U.S.

In the first half of 2009, given the persistence of financial tensions and continued contraction of the global economy, governments have accelerated the adoption of economic measures to stabilize the financial system and return to a positive growth path. The U.S. government has been the most proactive in the adoption of these policies, especially after the new administration implemented new programs to stabilize its financial system. Overall, the evaluation of the U.S. financial stabilization program is positive, because it has a global perspective of the problem with credible stress scenarios accounting for both sides of the bank's balance sheet and because it involves the private sector in the solution. Nevertheless, the implementation of these approved programs is very difficult, and if both of these elements are not well articulated or the potential synergies are not properly realized, its impact could be reduced.

In Europe, the policies to stabilize the financial system continue to be adopted at the national level, with diverging initiatives among countries.

# Banks: CDS 5-year senior debt (bp)



Source: Bloomberg

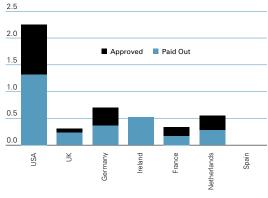
\*Included banks: Barclays, RBS, Lloyds, HSBC, Alliance & Bingley, Standard Chartered, Allied Irish Bank, BNP, Deutsche Bank, ING, Unicredito, UBS, Credit Suisse, Credit Agricole, Societe Generale, Intesa, BBVA, Santander

# Interbank Markets: OIS Spread 3 Months (3M Libor-3M OIS)



Source: Bloomberg

# Government Capital Programs Approved (% of bank assets)



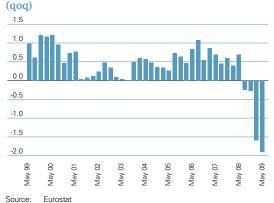
Source: Bloomberg

<sup>1</sup> A credit default swap (CDS) is a swap contract in which the buyer of the CDS makes a series of payments to the seller and, in exchange, receives a payoff if a credit instrument - typically a bond or loan - goes into default.

The differential between the interbank rate and the Overnight Index Swap, so it reflects the degree of risk of interbank loans.

## **BBVA** Compass

### EMU: Quarterly GDP Growth



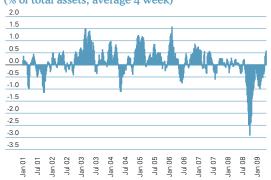
#### **EMBI Spreads**



Source: Datastream & JP Morgan

# Emerging Economies: Inflows of Fixed Income Retail Funds





Source: Bloomberg

The European Central Bank (ECB) cut its official rate to 1%, while deciding to maintain its weekly auctions of liquidity under the "full allotment" system until at least December 2009, and has extended the maturity of its loans to 12 months. Moreover, the ECB announced in May that it will eventually acquire €60 billion of covered bonds, however the details of this plan have not yet been made public.

# Emerging countries are affected by the global crisis, but are receiving important support.

Emerging countries have also been affected by the global financial crisis and the abrupt fall in international trade, and some of them will probably fall into recession this year. However, the biggest emerging economy, China, has launched programs to stimulate the economy through a massive fiscal plan and an exceptional easing of bank credit. As a result, the Chinese economy, which showed a substantial reduction in its rate of growth in the last quarter of 2008, began to justify the expectations that it may reach a growth rate of 8% for 2009. Furthermore, it is remarkable that the impact of the global crisis in emerging economies has been, at this point, limited to real activity, without producing a financial crisis in main developing countries. However, it is true that some regions are especially vulnerable. In particular, Eastern European countries are exposed to elevated risks, given the characteristics of their financial systems.

Regarding financial variables, the negative mood in the financial markets, which predominated in the beginning of the year, was reversed at the end of the first quarter. Especially important to emerging markets has been the G-20 meeting held on April 2, in London. In this meeting, the leaders of the main economies decided to augment the resources of the International Monetary Fund (IMF) by \$750 billion and allow the issuance of an additional \$250 billion of Special Drawing Rights. This increase in IMF resources allows financing the Flexible Credit Line, a new program of the IMF that aims to help those countries with solid fundamentals but which are experiencing temporary financial troubles. Currently, Mexico, Poland and Colombia have agreed credit lines through this program. Recently, the emerging economies have benefited from the increase in risk appetite registered in global financial markets. Hence, there have been recent net inflows of capital to Asian and Latin American countries.

# In spite of the recent stabilization and policy measures, the intensity and beginning of the recovery is still uncertain.

The combination of the effectiveness of policies to put the financial system on a more solid footing and the fiscal policies to stimulate demand will attract attention over the next months. Their final impact will determine when the recovery will start, its rhythm and which will be the most dynamic areas. While recent data suggest that the pace of economic deterioration is slowing, the exit from the recession will be under very modest growth rates, well below potential growth. Moreover, it is probable that the exit from recession will not be simultaneous in major economies. In particular, it might occur later in Europe than in the U.S., given the slower pace of adoption of policies to stabilize the financial system, the smaller fiscal impulse and less support from non-conventional monetary policy.

### U.S. Outlook

As we near the end of the second quarter, we are finally seeing some relief in the economic freefall of the previous two quarters. There are "signs of stabilization" in economic activity as the decline in a handful of short-term indicators has stopped accelerating or reversed.

The consumer outlook has improved which could spark a slow increase in spending by those who are secure in their employment. The weak job market, however, poses a risk to the recovery of consumption as the economy continues to shed hundreds of thousands of jobs each month and companies institute unpaid furloughs, reduced work weeks and salary cuts.

In addition, the decline in the housing market appears to be nearing a bottom as deep price discounts, favorable mortgage rates and the tax credit for first time buyers are attracting both new and repeat buyers. Nevertheless, we do expect to see further downward price adjustments because inventories are high and foreclosures are still occurring.

Furthermore, non-residential investment will continue to suffer as businesses reign in their spending because of declining corporate profits and credit market constrictions. Lastly, demand for U.S. exports faltered as the recession resonated throughout the world which presents an additional barrier to U.S. recovery.

The financial markets have also given off some positive signals through increases in equity prices and improvements in spreads in select bond markets. Better than expected results from the stress tests have helped to boost investor confidence as well. Nevertheless, the U.S. financial system has a long way to go. The FDIC Quarterly Banking Profile showed that banks face further challenges as they sort through the toxic assets on their balance sheets. Furthermore, credit markets remain tight even though the Federal Reserve Senior Loan Officers Survey indicated that we could see slight easing in the second quarter.

In order to further support economic recovery, the Fed has authorized purchases of up to \$1.75 trillion in long-term Treasuries, agency debt and mortgage- backed securities. This expansionary monetary policy, coupled with the fiscal stimulus package, has sparked some debate in the market regarding the possibility of high future inflation. However, given that indications in the economy point to economic slack in labor and product markets large enough to keep price pressures contained, inflation could actually remain below optimal levels for economic growth. Therefore, we believe that the Fed will maintain interest rates at the current level of 0-0.25% for a prolonged period of time.

The positive developments in economic activity need to be handled with care because risks to recovery are still prevalent. At the moment, the economy is still contracting, so we expect to see negative GDP growth in the second quarter, but at a slower pace than in 1009. Consumption, however, is expected to lead the resurgence in economic activity in the second half of the year, but the high unemployment rate, the greater propensity to save and the high degree of uncertainty regarding the impact of the fiscal stimulus package could present risks to this scenario.

# BBVA US Surprise Activity Index (Index 2004-07=100)



Consumer Confidence & National Association of Home Builders Indices



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



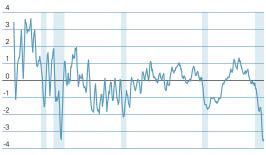
# Capacity Utilization & Unemployment Rate (variation from 10yr average, unemployment is inverted)





### BBVA Compass Sunbelt Region Outlook: Signs of Stabilization in 2Q09

# BBVA Monthly Activity Index: Sunbelt (3mma, %, shaded areas=recession)

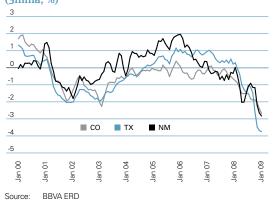


76 78 80 82 84 86 88 90 92 94 96 98 00 02 04 06 08 Source: BBVA ERD

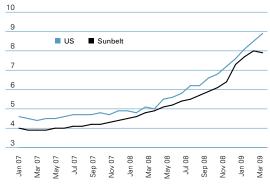
## BBVA State Monthly Activity Index (3mma, %)



BBVA State Monthly Activity Index (3mma, %)



**Unemployment Rate** 



Source: BLS

As of 2Q09, the economies of the BBVA Compass Sunbelt Region remained in recession; however, there is some evidence that the worst might be over. The State Monthly Activity Index for the Sunbelt went up slightly from -3.6 in March to -3.5 in April, yet, this was the second lowest reading since the beginning of the series in 1976. Although still in negative territory, the SMAI improved in Arizona, remained virtually unchanged in Alabama and Florida and deteriorated further in Colorado, New Mexico and Texas.

#### Job losses eased

Overall, labor market conditions remained weak, though there is some evidence that the pace of job losses has slowed. In April, the Sunbelt accounted for 12.8% of U.S. mass layoff events, a share that has declined steadily from 15.6% in February. April's mass layoff events in the U.S resulted in 256,930 initial claimants for unemployment insurance of which 28,364 (approximately 11%) were located in the Sunbelt Region. This is significantly lower than the Sunbelt's share of U.S. GDP (19%).

In April, the Sunbelt's unemployment rate remained 1 percentage point below the U.S. average. It fell slightly in Arizona, Colorado, Florida and New Mexico but remained unchanged in Alabama and Texas. Moreover, initial unemployment insurance claims seem to have reached a peak in all states excluding Arizona (see Box: Initial jobless claims: a light at the end of the tunnel).

According to the Establishment Survey, total non-farm payroll in the Sunbelt decreased 3.6% year-over-year (yoy) compared to 3.4% in March. This rate was slightly lower than the national average (-3.8%). Florida and Arizona experienced the largest drops (-4.9% and -6.9% respectively), although in both cases the decline eased from the previous month. In Alabama, Colorado, New Mexico and Texas employment contraction accelerated. Job losses were above the U.S. average in Alabama and Colorado and below in New Mexico. Although employment in Texas fell 1.6% in April, the decrease was 2.25 times less than the U.S. average. Among sectors, the pace of job losses remained the same in private services and construction, while accelerating in manufacturing, natural resources and mining.

### Positive but limited surprises in the housing market

Home prices continued to adjust downwards. In March, the S&P Case & Shiller Home Price Index decreased by 36% yoy in Phoenix, twice the decline at the national level. Meanwhile, home prices in Dallas continued to decline (-5.6% in March), although at a smoother rate than in the rest of the nation. The FHFA (formerly OFHEO) Home Prices Index points in the same direction. In 1Q09, prices fell on a yoy basis in Arizona and Florida although at a slower rate than in the previous quarter. In contrast, price appreciation in Alabama, Colorado and Texas continued to decelerate.

Sales of existing homes decreased 5.7% yoy in 1Q09 after falling 7.8% in the previous quarter. Given home price trends, it is not surprising that existing home sales have started to recover in states that experienced the sharpest adjustments. For instance, sales in Arizona

(%)

increased 50% yoy in 1Q09. In Arizona, sales have been increasing for three consecutive quarters. Likewise, existing home sales rose 25% yoy in Florida, posting the second straight month of positive change after eight consecutive months of declines.

However, existing home sales have not moved in the same way across all states. In fact, in those where prices had not fallen sharply, sales continued to contract, suggesting that further price reductions might be needed in order to boost demand. This was the case in Texas and Colorado, where sales decreased 22% and 16% yoy respectively in 1Q09. Similarly, sales in Alabama continued to fall on a yoy basis; however, its pace slowed from -37% to -25% in 1Q09.

Overall, the outlook for residential construction has improved in recent months. In fact, building permits, a gauge of future residential construction, increased in April for the third consecutive month, an opposite pattern from national average, which continued to decline. In April, total permits rebounded in Alabama, Arizona, Colorado and New Mexico, and decreased in Florida and Texas, yet the latter experienced a sharp increase in the previous month. Permits for single-family homes as a share of total issuance have increased steadily after reaching a low of 59% in December 2008. This is also a positive outcome since the single-family sector was the most affected by the housing crisis.

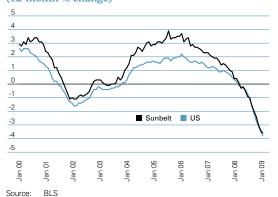
In April, the largest increase in building permits in the BBVA Compass Sunbelt Region took place in Arizona where permits are now very close to September 2008 levels. Permits also experienced a substantial increase in Colorado, although levels are still well below those in 2008. In Alabama and New Mexico, permits climbed to the highest level since October and September 2008 respectively. Issuance remained virtually unchanged in Florida and declined significantly in Texas, reversing four consecutive months of increases.

#### Risks from a global recession

International trade in the Sunbelt has been hit by the global recession. In 1Q09, total exports of goods fell 46.8% from the same quarter of a year earlier, the lowest rate since the series was first recorded in 1997, but still below the national average (22.3%). Exports' downward trend accelerated in all six states, with New Mexico experiencing the sharpest decline (63.4%). We expect exports to recover slowly after other sectors in the economy begin to improve. This is because some trading partners may start to recover after the U.S.

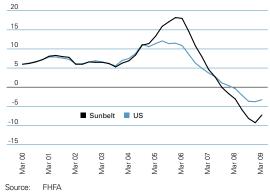
Finally, as recent trends in employment and the housing market suggest, the Sunbelt seems to be leading the U.S. recovery in large part due to its inherent strengths. Moving forward, some states are likely to show positive outcomes in the housing sector, especially Florida and Arizona which experienced the sharpest price adjustments. In contrast, Alabama and New Mexico are likely to adjust downwards for the next few quarters. Texas and Colorado's resiliency is weakening as home prices gradually decline and the global recession deepens; however, as the U.S. economy stabilizes during the rest of the year, these states will experience a milder adjustment than the rest of the nation.

# Non-farm payroll (12-month % change)



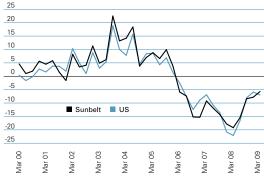
### **FHFA Home Prices**

(4Q % change)



### Existing Home Sales

(4-Q % change)



Source: NAR

### **Building Permits**

(12-month % change, 6mma)



Source: U.S. Census Bureau



### Economic Slowdown in the BBVA Compass Sunbelt Region in 2008

# BBVA Compass Sunbelt Region economy lost speed in 2008

After fifteen years of high growth rates, in 2008, economic growth in the BBVA Compass Sunbelt Region was 0.7% year-over-year (yoy) according to the new data released in June 2008 by the Bureau of Economic Analysis (BEA), which is similar to the national average. Within the region, performance was rather heterogeneous. While Florida and Arizona experienced declines in real GDP in 2008, Colorado, New Mexico and Texas tended to grow faster than the nation. Alabama's economy grew at a rate in line with the national average.

Florida and Arizona, which benefited from a strong housing market in previous years, were negatively affected by recent weakness in construction. As a consequence, state GDP dropped -1.6% and -0.6% respectively. Also contributing to the economic slowdown in these states were declines in the transportation and trade, and finance and insurance industries.

Colorado, New Mexico and Texas economies have taken advantage of the growth of the healthcare and the information industries as well as the expansion of professional and technical services. Mining had a very positive contribution to Colorado's GDP growth, which was 2.9%. Utilities expansion aided growth of 2% in New Mexico in 2008, while the real estate industry contributed positively to Texas's economic growth, which was also 2.0%.

Alabama's economy grew slowly in 2008, as declines in construction and non-durable goods manufacturing were offset slightly by growth in the professional and technical services, government and health care industries.

# Economic Growth, Constant \$2000 YoY % change

	2006	2007	2008	BBVA Forecast 2008
Alabama	2.0	0.9	0.7	0.9
Arizona	6.3	1.4	-0.6	-0.3
Colorado	2.7	2.0	2.9	1.6
Florida	4.1	0.0	-1.6	-0.9
New Mexico	2.3	2.0	2.0	1.5
Texas	4.9	4.4	2.0	1.9
BBVA Compass	4.4	2.3	0.7	0.8
Source: BEA & BE	N/A FRD			

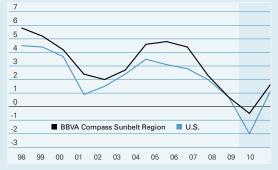
These growth rates do not differ significantly from our previous forecasts except for those of CO and FL. In CO, mining, healthcare and information output grew above estimates, while in FL, the construction and manufacturing output dropped further than initially estimated.

# GDP forecasts for 2009 and 2010 for the BBVA Compass Sunbelt Region point to higher growth rates than the rest of the states.

Economic growth in the states where BBVA Compass is present will remain above the national average for the next two years, supported by strong fundamentals, such as population growth, income per capita and productivity. As a matter of fact, productivity advances that have taken place in the region over the past decade have allowed some industries to improve their competitive position and take advantage of globalization.

In 2009, economic growth will be negative in all the states in the Sunbelt excluding Texas, where GDP will be positive in real terms. Arizona and Florida economies will deteriorate further, while New Mexico and Colorado will show a weak or slightly negative growth rate due to the slowdown in the high-tech and information industries. They will also be affected by the fall in commodity prices. Alabama will experience a weak growth rate due to the negative contribution of manufacturing. In 2010, we expect economic growth to be positive in all six states.

# GDP Growth (YoY % change)



Source: BEA & BBVA ERD

# The Evolution of Employment in the BBVA Compass Sunbelt Region

# In the BBVA Compass Sunbelt Region, employment is deteriorating at lower rate than the national average.

The current economic downturn is significantly impacting employment: from January 2008 to April 2009 more than 6.9 million jobs vanished in the U.S. In only 16 months, nonfarm employment dropped 4.7%, the largest decline since data has been collected by the Bureau of Labor Statistics (BLS). During the same period, in the BBVA Compass Sunbelt Region, employment followed the national trend but decreased at a lower rate: 1.15 million jobs were lost, which accounted for 4.4% of the total number of unemployed. However, within the Sunbelt, labor market performance has been quite heterogeneous: while the change in employment from the peak has been higher than the national average in some states (AZ, FL, and AL), in other has been similar (CO) or milder (NM and TX) in others.

The employment variation rate, when measured in a year-over-year (yoy) basis, was more negative in AZ, CO and AL than the national average, but more positive in FL and NM. In TX, the rate of employment deterioration was similar to the national average.

The difference in the evolution of employment in each state points out not only the unique composition of the states' economic base or industrial mix, but also some local characteristics (such as natural resources, education level or the legal environment for business) that provide the region with comparative advantages for some industries.

In order to estimate the impact of industrial diversity and local factors on the labor market, employment shifts in all major economic sectors along the BBVA Compass Sunbelt Region have been explored using a regional shift-share analysis. This technique was first used in the early 40's by the U.S. National Resources Planning Board¹ to cope with regional characteristics. Shift-share analysis is a useful tool to identify the changing elements of regional employment in a delimited period of time.

# The shift-share methodology: national, regional and industrial mix effects on local employment.

Shift-share analysis is a method that decomposes changes in state employment into various factors. This approach uses three components to explain the differences between regional and national employment growth. The first is the national growth effect, a component that mirrors national trends - it is the share of the change in local employment that can be attributed to a change in the national economy. The second component is the industry mix effect, which insulates the fact that, nationwide, some industries have grown faster or slower than others. Finally, there is the competitive effect, which is usually attributed to some local comparative advantage - it describes the extent to which factors unique to the state have caused growth or decline in state employment.

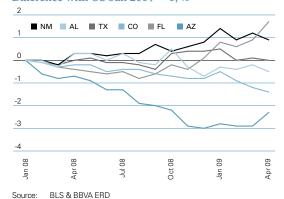
#### Labor Market Downturn

Job losses (% of Total) and Duration (Months)



Source: BLS & BBVA ERD

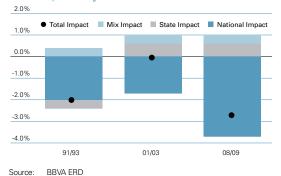
# Employment Change YoY Difference with US Jan 2009 = 0, %



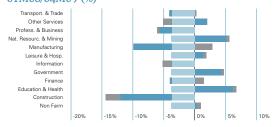
Hoover, E. 1971. An Introduction to Regional Economics. Alfred A. Knopf, Inc. New York.



### Employment Change BBVA Compass Sunbelt Region National, Industry Mix & State Factors

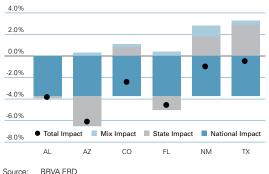


### BBVA Compass Sunbelt Region Employment Variation 01M08/04M09 (%)



Source: BBVA ERD

## Employment Change 2008-09 National & State Factors



The three components of shift-share analysis can be obtained with the following identity:

$$\begin{aligned} \mathbf{e}_{it} &= \mathbf{e}_{it-1} * ((\mathbf{E}_t - \mathbf{E}_{t-1}) / \mathbf{E}_{t-1}) + \mathbf{e}_{it-1} * (((\mathbf{E}_{it} - \mathbf{E}_{it-1}) / \mathbf{E}_{it-1}) - ((\mathbf{E}_t - \mathbf{E}_{t-1}) / \mathbf{E}_{t-1})) + \mathbf{e}_{it-1} * (((\mathbf{e}_{it} - \mathbf{e}_{it-1}) / \mathbf{E}_{it-1}) - ((\mathbf{E}_{it} - \mathbf{E}_{it-1}) / \mathbf{E}_{it-1})). \end{aligned}$$

Where  $\mathbf{e}_{it}$  is the state employment in sector i at time t,  $\mathbf{e}_{it-1}$  denotes the initial level of state employment in sector i at time t-1.  $\mathbf{E}_{t}$  is national total employment at time t,  $\mathbf{E}_{t-1}$  is national total employment at time t-1,  $\mathbf{E}_{it}$  is national employment in sector i at time t-and, finally,  $\mathbf{E}_{it-1}$  is national employment in sector i at time t-1.

# Industry mix and local characteristics have been two positive elements for the local labor markets.

State-level employment for major industries was obtained on-line from the BLS's Employment Statistics Survey, which classifies employment into eleven categories. Data for the BBVA Compass Sunbelt Region was calculated by adding together the data from AL, AZ, CO, FL, NM and TX. The period of reference starts in Jan 2008, after employment reached its maximum, and ends in Apr 2009, which is the latest data available. The average for the first four months of 2009 was contrasted against the average for the first four months of 2008 to avoid seasonal effects.

According to the results, the Sunbelt's particular industrial mix and regional characteristics have been two positive elements for the local labor markets: employment in the region decreased at lower rate than the national average. In fact, the peculiarities of the industrial structure in the region helped to maintain 0.4% of the total employment while the local characteristics helped to maintain 0.6% of total jobs. When compared with previous recessions, the shift-share analysis reveals that the particular industrial mix in the region helped to mitigate the national impact in the last two recessions, while the local characteristics have only played a positive role in the current decade.

In particular, if the BBVA Compass Sunbelt Region had followed the national trend, 4.7% of total employment in the region would have disappeared, however the composition of the region's industry mix helped to maintain almost 95,000 jobs. In addition, the specific characteristics of the region helped to preserve more than 160,000 jobs. On the one hand, education and health care, energy, public administration, tourism and leisure related industries have benefited from the existence of industrial clusters located across the region, while on the other hand, the elevated weight of construction and manufacturing industries in the industrial composition has been negative for employment. Meanwhile, industries such as finance, insurance, real estate and transportation and trade have been more favored by distinctive local factors.

From the state perspective, in regards to employment changes in the current recession, the industry structure or composition mix has been beneficial for all the states in the Sunbelt Region except for AL, where it was neutral. The region's advantage comes from the lower weight of the manufacturing industry in the Sunbelt states (except AL), compared to the national average. Local characteristics have played a positive role for the recent employment evolution in TX, NM and CO, but impacted AZ, FL and AL negatively.

### Local factors can play either a positive or negative role for different industries and can condition economic performance.

In addition to the national trend, local factors can play either a positive or a negative role in different industries and can determine local economic performance. In Texas, all industries, excluding information, have benefitted from local characteristics. As a consequence, fewer jobs were lost compared to the national trend. Even construction and manufacturing benefitted from the characteristics of the local markets.

In Colorado, the natural resource, manufacturing and low value-added services industries benefitted largely from the local attributes. On the contrary, local factors had a negative influence on professional and technical services, which has a higher share in Colorado than the national average.

In New Mexico, the particular composition of the natural resources, construction and low value-added services industries have played a negative role in local employment. In contrast, manufacturing and high value services have both benefitted from local characteristics.

In Alabama, local characteristics played a positive role in transportation and trade, even though that industry has a higher share of the state economy than the national average, while they played a negative role in construction, high value-added services and natural resources.

In Florida and Arizona, only the manufacturing industry, which had a small share of the local economic base, took advantage of the local characteristics. Construction (with a very high share in the economy of both states), transportation and trade and the services sectors were all negatively affected by local attributes.

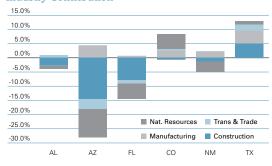
#### Where is the future?

In general, in a global economy, the tradable sector is more exposed to competency and, within the manufacturing sector, only those industries with strong local advantages will have the capability to generate mid and long term employment. The non-tradable sector, on the contrary, is less exposed to international competency and could benefit from general economic growth. Both the tradable and non-tradable sectors would benefit from potential innovations generated in existing industrial clusters.

In the mid term, some industries will develop with population growth, such as utilities, education or government, while the development of others will be more dependent on the economic cycle, such as construction, transportation and trade. In the first case, they will be a permanent source of employment while in the second, employment will be more volatile.

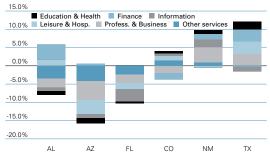
Some service industries, mostly those related to the population and income growth, are structural in expansion, such as health care, hospitality and leisure. These industries are, in general, labor intensive and will help to expand employment in the mid and long term. Other services, such as the high value-added, have a strong capacity to generate positive externalities to other sectors; therefore, employment growth in these services could stimulate general employment growth.

# Local Characteristics & Employment Industry Contribution



Source: BBVA ERD

# Local Characteristics & Employment Service Industry Contribution



Source: BBVA ERD



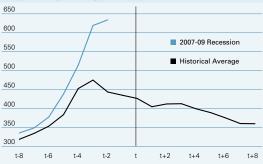
### Initial Jobless Claims: A Light at the End of the Tunnel

It has been well publicized that there are some signs of stabilization in the economy at the national level as seen in various high frequency indicators. However, it is more difficult to determine what is happening at the state level. While there are a number of high frequency economic indicators at the national level, they are scarce and often lagged at the state level. Initial jobless claims, released on a weekly basis, is the most frequent indicator that is published on a state and national level. Besides this benefit, claims have also proven to be a valuable predictor of the end of recessions.

Initial jobless claims surged across all regions as the economic downturn echoed throughout Main Street, Wall Street and beyond. In the U.S., claims have sustained levels above 600,000 since the last week of January 2009. This data, combined with the fact that continuing claims have been rising consistently week over week since the beginning of the year, illustrates the extent of the deterioration of the labor market. Most recently, however, U.S. initial jobless claims have stabilized, albeit at a high level. Although the number of claims is not increasing, the high number is worrisome for the economy. As a result, the ongoing weakness in the labor market could bode poorly for consumption as consumers tighten their wallets and save more in preparation for continuing tough times.

# US Average Initial Jobless Claims (K, quarterly average, t=end of recession)

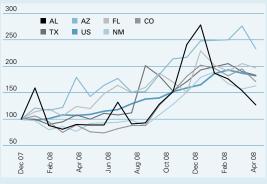
BLS & BBVA ERD



Throughout history, U.S. jobless claims have proven to have an interesting relationship with recessions. By identifying the point at which initial jobless claims peaked during each of the previous recessions, we have determined that claims climax on average three quarters prior to the end of the recession. We are forecasting that, on a quarterly basis, claims will peak in 2Q09, which would indicate that the end of the recession could occur in 1Q10.

Each state in the BBVA Compass Sunbelt Region is unique in the way it has been affected by the current recession. However, it is evident that they all have one aspect in common: this recession has hit each state's labor market harder than any previous recession in the last two decades (data available since 1987). On the bright side, every state except Arizona shows some signs of having hit a peak in 1Q09. This development, however, is recent, with claims maxing out in January (Alabama, Colorado and Florida), February (New Mexico) or March (Texas). Given the volatile nature of the indicator, there is a possibility that some states could reach a higher peak during the second quarter.

# Initial Jobless Claims by State (Index)



Source: BBVA ERD & U.S. Department of Labor

Initial jobless claims in the BBVA Compass Sunbelt Region have historically moved in tandem with those of the U.S. In the current recession, it appears that the movement of average claims in the Sunbelt is ahead of that of the national average. On a quarterly basis, the region peaked in 1Q09 and claims have subsequently fallen 2.4%, while the peak for the U.S. is expected in 2Q09. This data implies that economic activity in the Sunbelt Region is on track with, or ahead of, that of the overall economy.

Although initial jobless claims are a valuable indicator, they are a snapshot of just one aspect of the states' economies. Other factors, such as diversity of industry and dependence on internal/external markets, could accelerate or slow recovery. For example, Texas could benefit from the diversity of its industry base, but be limited by its dependence on exports because of the depth of the global recession. Nevertheless, accepting the limitations of the indicator, we can conclude that the drop in the region's initial jobless claims could predict the beginning of its recovery.

# **University Spinouts: Opportunities from Technology Commercialization**

By Bruce Kellison, Associate Director, Bureau of Business Research, IC<sup>2</sup> Institute. The University of Texas at Austin

Increasingly, commercialization of university-based technology is big business. Around the world, companies forming around technologies developed by university researchers are key drivers of economic growth, technological innovation and higher productivity in local economies. In the U.S., the Association of University Technology Managers (AUTM) reports that in 2007, 555 startup companies were launched from U.S. research universities, research institutes and hospitals, a figure that has risen steadily. Many of the benefits of technology transfer are intangible, such as enhancing the reputation of the institution, attracting and retaining outstanding faculty and providing training opportunities for students. Yet beyond those hard-to-measure benefits, the direct economic impact of startup company formation and licensing disclosures on local and regional economies is compelling.

### National economic impact

In its 2007 survey of U.S. technology transfer professionals, AUTM members reported that 16.5% of all licenses and options for the use of disclosures and patents executed by their membership went to startups and another 50% went to small companies<sup>1</sup>. Small companies and startups, typically operating near a research institution so that the founders can easily access the researchers working at a university or hospital, can often act more nimbly to develop a technology than a larger company.

Of the 555 startup companies formed around commercialized university or hospital technologies in 2007, respondents to the AUTM survey reported that 402, or 72%, were local companies operating in proximity to the institution from which the technology was licensed. In addition, since 1991 there have been 3,388 companies formed around technologies spun out of university-based research units, including those formed in 2007. Only 103 out of the 3388 went out of business, which is a remarkably low "death" rate for startup companies.

#### Income for universities

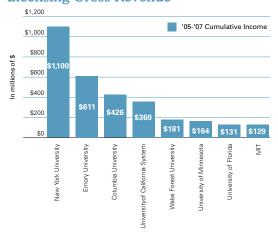
Licensing income from technologies developed on campus can be a significant revenue stream for universities. Some research universities earn enormous sums licensing their technologies to private-sector companies. For the most recent three-year period for which data are available (2005-2007), the top-earning school, New York University, earned \$1.1 billion. The average university earns far less than this, and when one factors in the costs of operating a technology transfer office, submitting patent applications and defending legal challenges to patents held by the university, among others, the economics of technology commercialization for most universities are a breakeven proposition.

#### University spinouts and their effects on Texas

Texas, once known primarily for cattle ranching, oil and gas production and chemical refining, has expanded its economic base over the last 30 years and diversified into a number of high-tech sectors. Texas is dominated by 3 Tier-1 research universities: The University

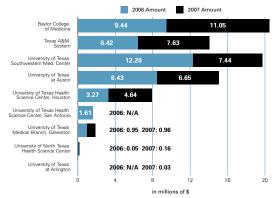
### AUTM U.S. Licensing Activity Survey, FY2007 Survey Summary, editors Robert Tieckelmann, Ph.D., Richard Kordal, Ph.D. and Dana Bostrom.

### Top 8 U.S. Universities, Licensing Gross Revenue



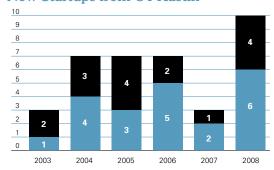
Source: AUTM U.S. Licensing Activity Survey, 2007

### 2007 License Income by Texas Universities



Source: AUTM U.S. Licensing Activity Survey, 2006, 2007

#### New Startups from UT-Austin



Source: Office of Technology Commercialization, The University of Texas at Austin

### **BBVA** Compass

# Snapshot: Molecular Imprints, Inc. (MII)

MII, based in Austin, is a nanotechnology company founded on the research of The University of Texas at Austin researchers Grant Willson and S.V. Sreenivasan, who is currently chief technology officer of the company while continuing to teach at UT. MII provides enabling lithography systems and technology for manufacturing nano devices, micro structures, advanced packaging, bio devices, optical components and semiconductor devices. MII has succeeded in producing a device that is so precise it can mechanically produce what formerly could only be performed with light. MII pioneered the market for its patented technique called step-and-flash imprint lithography (S-FIL™). MII has won numerous industry awards and follow-on grant and investment funding of over \$90 million. Founded in 2001, MII now has more than 125 employees and has filed for, or holds, more than 700 patents.

### **Snapshot: OrganicID**

OrganicID is a Colorado Springs startup founded in 2004 on RFID (radio frequency identification) technology developed at The University of Texas at Austin. The company holds proprietary technology to design and develop low-cost, item-level RFID tags for inventory control and supply-chain applications. In 2006, OrganicID was bought by Weyerhaeuser Company and is now a wholly-owned subsidiary.

of Texas at Austin, Texas A&M University and Rice University. While there is an ongoing public policy debate in Texas over whether to expand the number of such universities in Texas to reach levels that states like California, with 9 such campuses, and New York, with 7, the state has a number of medical research and teaching centers that also play a significant role in generating technology, especially in the bioscience arena (see sidebar).

While Austin and Dallas-Fort Worth are known for semiconductor manufacturing and telecommunications, respectively, Houston has leveraged its healthcare research assets into a world-class biotech sector. Biotech patents, like disclosures, are an indicator of the presence of commercializable technology that can be licensed to large pharmaceutical companies and/or to local startups.

A 2006 study conducted by researchers at the Bureau of Business Research at The University of Texas at Austin evaluated the Texas Advanced Research Program (ARP), which funded basic research at Texas public universities that would "help provide the knowledge base needed for innovation." The study found that from the \$161 million invested into the program's 1,312 research projects between 1987 and 2001, the state's economy enjoyed a return of \$5.70 for every dollar invested in the program through follow-on research funding, license and royalty revenue and start-up commercial activity.<sup>2</sup> Additionally, eleven start-up companies were formed based on ARP-funded research projects. Active companies employ over 301 full-time employees with 172 based in Texas. Total salaries are estimated to be at least \$19 million. The total economic benefit from the startups (revenues, venture capital funding, employee salaries and research and development funding) is more than \$123.6 million. The total benefit in Texas is estimated to be over \$45 million, with the remainder occurring in California.

### Effects of the downturn on spinout activity

While it is too soon to tell with any certainty how the current recession will affect the portfolio of technologies managed by schools like UT Austin, there is some evidence that if anything, spinoff activity and new company formation will accelerate, not stagnate, around university research as a result of the downturn. As engineers at established high tech firms are laid off, the opportunity costs for entrepreneurship are lowered, and the available talent pool for entrepreneurs assembling teams around licensed technology is deepened. For instance, the Austin Technology Incubator, a unit of the IC2 Institute at The University of Texas at Austin, has seen renewed levels of interest from Austin-area technologists, professors and entrepreneurs in bringing new companies into its "pipeline," driven largely by the sudden availability of recently unemployed talent. Because university research is largely unaffected by changing economic conditions, there will be that much more opportunity to bring university spinoffs to market once the recession abates.

<sup>2</sup> James Jarrett, "Impact Assessment of the Advanced Research Program," Bureau of Business Research, The University of Texas at Austin, 2006. (http://http://www.researchintexas.com/ ARPImpactStudyExec.pdf).

# Advanced Technology and Innovation in Colorado

By Gary Horvath, Managing Director, Business Research Division, Leeds School of Business, The University of Colorado at Boulder

Since 1990 the advanced technology (AT) cluster has played a significant role in the health of the Colorado economy. During this period, AT employment has experienced extended booms and busts. AT employment has increased at an annualized rate of 2.2%, slightly below the average rate for the state. As might be expected, the majority of AT workers are located along the Front Range (Ft. Collins-Denver-Colorado Springs), with the highest concentration in Boulder County.

For purposes of this analysis, the major components of the AT cluster include portions of the Manufactured Durable Goods; Information; and the Professional, Scientific, and Technical (PST) sectors. The PST component accounts for 58.3% of total AT employment, followed by Information at 22.4% and manufacturing with 19.3%.

In 1990, Colorado had 123,600 AT workers, accounting for about 8.1% of total employment. For the remainder of the decade, expansion was driven by high growth in the telecommunications, computer hardware, software, and internet sectors during the "Internet Bubble." By 1999, total AT cluster employment had risen at an annualized rate of 4.8%, or by 65,300 employees, compared to 3.8% for total employment.

From an overall employment perspective, the boom of the 1990s peaked at 2,274,600 total workers in December 2000, whereas AT peaked in March 2001, at 215,100 employees. At that point, the AT cluster accounted for 9.6% of total state employment. It dropped to about 7.7% in mid-2005 and has since remained at approximately that level.

With a high concentration of AT workers, the state was hit hard by the 2001 technology recession. It took the overall economy 54 months before it returned to the record employment level reached in December 2000.

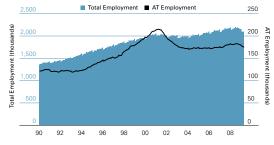
After peaking in March 2001, the AT cluster fell harder and faster than the overall U.S. economy and has not returned to its 2001 zenith. Between 2000 and 2008, AT recorded an annualized decline of -1.6% compared to overall growth of 0.7% for total employment.

During this period, the AT cluster performed differently than the overall economy for a variety of interconnected reasons. Many companies in durable goods manufacturing sectors reduced employment by outsourcing operational functions not directly related to the production of their goods. In addition, increased efficiencies were gained as a result of increased capital expenditures. In many cases, these investments resulted in a smaller workforce. Offshoring also occurred as companies scrambled to remain competitive, particularly in the electronics and computer manufacturing sectors. Finally, the economic slowdown resulted in consolidations, mergers, and buyouts, especially in the telecommunications sector.

The AT cluster is important to Colorado for a number of reasons. First, it is both a contributor and benefactor of Colorado's creative

### Colorado Employment

Advanced Technology vs. Total Employment



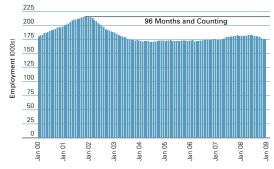
Source: Colorado Department of Labor & Employment

### Colorado Employment



Source: Colorado Department of Labor & Employment

### Colorado AT Employment

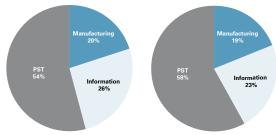


Source: Colorado Department of Labor & Employment



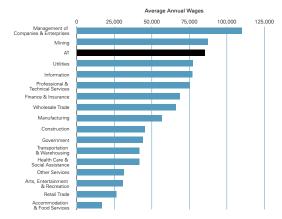
#### AT Employment and Wages 2007

2007 Total Wages \$15.2 Billion 2007 Total Employment



Source: Colorado Department of Labor & Employment

#### Colorado Wages (2007) AT Cluster vs. Other Sectors



Source: Colorado Department of Labor

# AT Percentage of Private Sector Wages and Employment

AT as % of Total Employment AT as % of Total Wages

Source: Colorado Department of Labor

class, which is attracted to the state's active outdoor lifestyle, spirit of innovation, performing arts community, and professional sports and recreational activities. Second, Colorado is uniquely positioned because of its combination of research universities, private sector AT companies, and federal laboratories. Finally, average annual wages for the AT cluster (\$85,539) are typically higher than most traditional sectors and the state average of \$45,637 (2007 data). As a result, total Colorado AT wages account for 17.2% of total private wages in Colorado. Together, these factors allowed Colorado to attract one of the country's most highly educated workforces.

Although Colorado's level of AT employment has yet to return to its 2001 peak, the cluster will be instrumental in the recovery from the current recession. In particular, state economic development efforts are focused on the creation of a diversified economy based on tourism and various technology based areas within the AT cluster such as photonics, nanotechnology, aerospace, biosciences, software, data storage, and green technology. The latter has recently received attention given Colorado's assets in this area and President Obama's focus on renewable energy and Governor Ritter's New Energy Economy Program. Under the program, Colorado is projected to consume 20% of its energy from renewable sources by 2020.

While the future appears bright for the renewable industry, it currently is a relatively small portion of Colorado's economy. The Business Research Division estimates that there are fewer than 5,000 direct renewable energy workers in Colorado, with a larger indirect number. Most of these jobs are manufacturing or research-based positions.

While a return to overall employment growth is not expected until 2010, both direct and indirect renewable energy efforts will be responsible for creating jobs in various sectors. For example, weatherization programs will spur short-term job growth in the construction sector. Similarly, construction activity will occur as a result of increased solar panel installation.

More significantly, the National Renewable Energy Lab (NREL), located in Golden, will continue to increase in prominence. NREL is currently in a positive funding phase, recently receiving additional funding of \$110 million. Cooperative efforts, such as the Colorado Renewable Energy Collaboratory and the University of Colorado at Boulder's Energy Initiative, will play critical roles in advancing new technology and positioning the state as a leader in green technology. Increased job activity in these areas will be reflected in the government sector.

On the private sector side, manufacturing will be the primary benefactor of new job creations. RES-Americas and Vestas have moved operations to the state and will increase the number of jobs related to wind energy. In addition, Abound Solar and Ascent Solar will add workers to produce solar photovoltaic cells and solar panels. Looking ahead, Conoco Phillips has announced plans to re-develop the former StorageTek campus into a research facility for bio-fuels.

As the recovery becomes broader based in 2010 and beyond, the other pieces of AT (nanotechnology, photonics, aerospace, biosciences, software, data storage, and green technology) should be well positioned for growth.

# Taxonomy of Exports in the BBVA Compass Sunbelt Region

# The BBVA Compass Sunbelt Region economy is taking greater advantage of the increase of trade and commerce worldwide.

Beginning in the mid 80's, international commerce has increased dramatically and the weight of total exports in GDP has doubled worldwide to reach a 32.7% share in 2008. In the U.S., exports have also grown considerably since the mid 80's and have almost doubled as a share of GDP to 12.8%. The main forces driving worldwide trade include¹: technological innovations (new production methods, new tradable products, expanded global production and more efficient manufacturing), broader political changes (collapse of the Soviet Union, fall of the Berlin Wall and China's reforms) and new economic policies (deregulation and elimination of restrictions on trade, foreign investment and financial transactions).

From 2001, when the last recession took place, to 2008, U.S. exports grew steadily and its share in GDP increased by 3%. The weakness of the dollar, a significant increase in international trade and further fragmentation in production of both goods and services have been the main factors that supported the U.S. expansion of exports in recent years. In the BBVA Compass Sunbelt Region (AL, AZ, CO, FL, NM and TX), exports have followed the national trend but the Sunbelt export growth rate has been even more dramatic. In fact, over the last ten years, export growth averaged 6.3% a year in the Sunbelt while averaging 3.9% in the rest of the country when measured in constant dollars.

However, exports have dropped severely nationwide since September 2008 primarily as a result of the financial downturn and lower external demand. After decreasing 3.8% year-over-year (yoy) in the last quarter of 2008, exports plunged 18.3% in the first quarter of 2009. According to our forecast, U.S. exports will drop 20.7% in 2009 in real terms (-27.2% yoy change for goods and -5.5% for services). As in the case of most past recessions, the weight of exports in the economy will decline and reach a weight of 10.0% by the end of the year.

# Exports from the BBVA Compass Sunbelt Region are more concentrated in fewer products than the national average. The industrial mix is more focused towards external demand.

In general, the BBVA Compass Sunbelt Region economies are more open to the external sector as export industries have a larger share in the total production of the region than the expansion in the national economy. In addition, exports from the Sunbelt are more oriented towards fast growing countries. As result, in the long term, benefits from both globalization and further increases in worldwide commerce will be larger for the Sunbelt. At the same time, the structural composition of exports also implies higher volatility.

In the last ten years, five major industries have been the main drivers of exports, not only at the national level but also for the BBVA Compass Sunbelt Region, where they have an even higher concentration. In 2008, exports from these five industries (chemicals, transportation equipment, non-electrical machinery, petroleum and coal and computer and electronics) accounted for 60% of total exports at the national level

# Exports (As % of GDP)



Source: BEA & BBVA ERD

### Exports 1Q98 - 1Q09

YoY Change %. Quarterly Data. \$ Constant.



Source: Wisetrade & BBVA ERD

# Exports 2008 (Composition by Industry %)

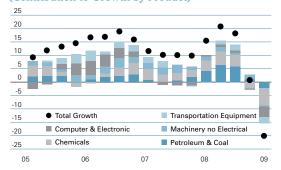


Source: Wisetrade & BBVA ERD

World Trade Organization, 2009. "World Trade Report 2008: Trade in a globalized World"

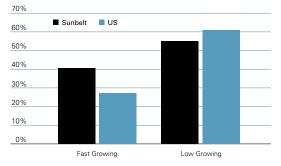
## **BBVA** Compass

# BBVA Compass Sunbelt Region Exports (Contribution to Growth by Product)



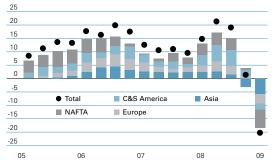
Source: Wisetrade & BBVA ERD

## Exports by Country (% of Total 2008 exports)



Source: Wisetrade & BBVA ERD

# BBVA Compass Sunbelt Region Exports (Contribution to Growth by Country)



Source: Wisetrade & BBVA ERD

and more than 70% of the BBVA Compass Sunbelt Region exports. Moreover, in this period, the contribution of these five industries to export growth has been significantly greater in the BBVA Compass Sunbelt Region (72%) than in the rest of the nation (54%).

However, in the first quarter of 2009, the decline in Sunbelt exports was also led by those five industries, which contributed for almost 80% of the decline in total regional exports. In 2009, the worldwide investment contraction will have a negative impact on chemicals, transportation and machinery exports while lower personal consumption will have a greater impact on petroleum and computer exports.

# BBVA Compass Sunbelt Region exports are more oriented toward fast growing countries than other states.

Only ten countries comprise almost 60% of total U.S. exports, with Canada and Mexico as the main markets for U.S. products (with a share of 20.0% and 11.7% of total exports in 2008 respectively) followed by China and Japan, both with a share above 5%. Exports to Europe accounted for 22% of total exports. With regard to destination markets in Sunbelt exports, concentration is similar to the national average, but with a different composition: Mexico and Canada are the main markets (with a share of 25.0% and 10.5% in 2008 respectively), followed by China and Brazil, both with shares above 4%.

Compared to the national average, BBVA Compass Sunbelt Region exports are more oriented to countries with a higher economic growth rate, which gives the region a relative advantage. In 2008, exports to fast growing countries (those which grew above the world average in 2005-2008) accounted for more than 40% of the Sunbelt exports while they accounted for only 27% of total U.S. exports. Comparatively, while U.S. exports to low growth countries – such as the European Union, Japan or the NAFTA partners – accounted for about 58.9% of the national exports, they accounted for 53.3% of the Sunbelt exports.

The regional composition of the exports by country of destination shows also some of the spatial location advantages: while the Sunbelt exports are more oriented to Mexico or South American markets, exports from the other states are more focused on Canadian or European markets. Analyzing the contribution to export growth by country in the last ten years for the Sunbelt, it can be said that increased commerce with NAFTA partners explains one-third of the growth in total exports, while trade with Asia contributed 20% and trade with the Central and South American region contributed 17.5%.

# Within the BBVA Compass Sunbelt Region, TX, AL and AZ are more oriented to external markets while NM and CO are more focused on internal demand.

In the Sunbelt, exports are more significant to the economy than to the national economy: its share averaged almost 9 points of GDP in the current decade, one point above the national average. However, there are important differences within the BBVA Compass Sunbelt Region: while exports of goods are especially relevant in TX, where they accounted for almost 15% of the state GDP in 2007, and relatively important in AL and AZ, with a share around 8% of GDP; in NM and CO exports are not as relevant and in 2007 they accounted only for about 3% of the state GDP.

From a dynamic point of view, in some states within the Sunbelt Region, the industrial mix is shifting toward a more export-oriented economic base. This is the case in FL, AL and TX, where exports increased their share in the last five years. In other states, such as AZ, the industrial structure is shifting towards industries more focused on the national market and exports are decreasing their share in the state economy.

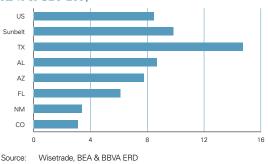
Distribution of the main export industries within the Sunbelt is relatively heterogeneous and the 2009 exports downturn will have different effects among the states. First, the computer and electronic exports downturn will more severely affect NM, AZ, and CO (where this industry is the primary export industry), as well as TX (where it is the second primary export). This industry's share of exports is declining over time and will continue this trend in the coming years as new competitors come into the market.

Second, lower chemical exports in 2009 will have an impact especially in TX, where it is the primary export industry, and also in AL, FL where this industry accounted for about 15% of total exports. It will also affect the CO economy where its share is almost 10% of total exports. This decline will have a minor impact in NM or AZ, where the chemical industry is not especially relevant.

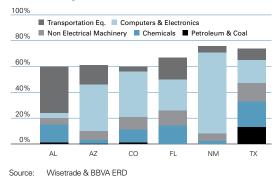
Third, a further decline in transportation equipment exports will particularly impact the economies of AL (a 35% share of the total state exports), FL and AZ (a share of around 16%). It could also affect the TX and NM economy but with lower intensity. Finally, a fall of petroleum and coal exports will primarily affect TX, where this industry is highly concentrated and accounts for 13% of total state exports. Although NAFTA partners are the main destination for the Sunbelt exports, some other markets are relevant and their economic performance may affect the region's economy. According to our forecast, Mexico GDP will drop 6.3% in 2009, affecting mainly AZ and TX exports (more than 30% destined for Mexico) and to a lesser extent in NM and CO. The Canadian economy will also experience a recession in 2009, which will mainly affect CO, AL and NM, where exports to this country account for 27.8%, 17.3% and 15.3% of exports, respectively.

In 2009, lower growth of China or Malaysia's economies will result in lower exports for NM, where the exports to those markets accounted for 22.5% and 20.8% of total exports, respectively. Economic slow-down in Asia will also affect CO, AL, AZ and TX but less intensively because those market shares are only 4% to 6% of total exports. An economic slowdown in South America will mostly impact FL exports, which are quite focused in those markets. Moreover, the German economic slowdown will affect AL exports because it is the destination of 19% of AL exports.

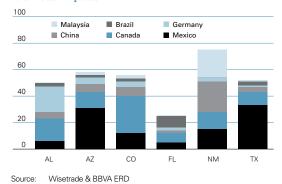
## Exports of Goods As % of GDP 2007



# Exports Composition by Industry % of Total Exports



## Exports Composition by Country % of Total Exports



### The Effect of the Availability of Trade Finance on Trade Flows

The latest figures on export growth show a double-digit contraction and recent projections on trade flow growth for 2009 made by various international institutions are at the lowest level of the past 25 years. The World Trade Organization (WTO) expects a decline of 9%, and the International Monetary Fund (IMF) a decline of 11% for 2009. Historically there has been a close relationship between trade volumes and economic growth but this relationship seems to have been magnified over the past few years as a consequence of vertical integration in production through multinationals. This implies that products cross borders several times before arriving in the hands of the final consumer.

There are several arguments to explain this negative projection but it is difficult to disentangle the weight of each one. Among the arguments supporting these grim expectations is the lack of available trade finance, which has been compounded by the current economic slowdown. In this article, we review the implications of the availability of trade finance on trade flows, the current data on trade finance and the actions taken by several international organizations to boost trade.

Trade activity requires trade finance availability and facilitators (such as banks and other institutions including export credit agencies and insurance companies), as they play an important role when transactions are not purely between an importer and exporter. The facilitators offer products to mitigate the risk of nonpayment and credit risk, while also offering trade lending. Since data on trade finance is limited, it has been difficult to get a clear picture of the severity of the problem. To overcome the lack of data, and in an attempt to obtain a grasp of the current situation, there is a survey¹ being conducted by the Bankers Association for Finance and Trade and the IMF.

From the results of this survey we can conclude that the fall in trade finance activity is due to both the decline in demand for credit from importers and exporters, along with the fall in supply by financial institutions in their process of de-leveraging their balance sheet. There are several factors that are affecting demand, but the most prominent is the large drop in commodity prices compared to a year ago. Essentially to transport the same quantity of a product, the amount to be financed is reduced due to lower prices. Given that around 25%

of trade finance activities are related to oil and derivatives, the impact of the decline of commodity prices is not insignificant on trade finance activity. Also affecting demand is the impact of increased financing costs which ultimately impact trade activity. For instance, importers of manufactured goods with low profit margins may not be able to afford more expensive letters of credit, while on the other hand, importers of manufactured goods with high profit margins find it easier to absorb trade costs. It's important to note that intra-firm trade requires less trade finance and that during more difficult economic times, importers and exporters tend to use more traditional products such as letters of credit.

There are also regional differences which impact trade finance. For example, more advanced economies have not reported a significant decline in the availability of trade finance. A possible explanation is the shift to more traditional instruments, rather than utilizing open accounts between importers/exporters in a high risk environment. There are also regional differentiations among emerging economies. For instance, trade finance to and from emerging Asia has been hit particularly hard and could be a consequence of the severe impact of the increase in costs on low-margin products. Trade financing has also fallen in some Latin America countries (primarily Argentina). In other countries the central banks and the governments are providing additional liquidity in the form of U.S. dollars.

### Risks posed by the decline in trade

There are fears that given this decline on trade flows, protectionist measures by national authorities might be implemented, such as tariffs and subsidies or exchange rate intervention to restore competitiveness. History has proven that these kinds of actions can have very negative effects, and now given the vertical integrated supply chains, these effects could be even more drastic. In spite of believing that the slump in economic activity is the main driver of the decline in international trade flows, national authorities have been actively enhancing measures to help exporters. After the G-20 Summit, international organizations announced that the World Bank will provide \$50 billion and the export credit agencies up to \$200 billion for trade finance. This should help to boost trade flows, and could possibly signal to the markets that errors from previous crises will not be repeated again.

<sup>1</sup> http://baft.org/content\_folders/lssues/IMFBAFTSurveyResults20090331.ppt

# Banking Trends and the BBVA Compass Sunbelt Region

### An overview of credit in the U.S. economy

The banking system faces two major effects of the current recessionary environment. First, the private sector's demand for loans is shrinking as business, investment and other activity slows. Second, distress in the banking sector is pushing down the supply for loans as some banks close and other banks deleverage their balance sheets. The rise in individuals' precautionary and general savings rates add to the size of deposits, but at the same time reduce spending on goods and services. However, given recent U.S. debt levels, increased savings represent a needed corrective measure.

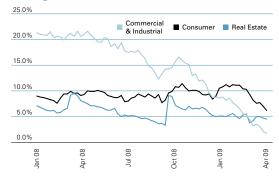
Examining the year-over-year (yoy) growth of commercial bank lending in three different segments demonstrates many of these trends and some insights into future issues. Commercial and industrial lending during the beginning of 2008 grew roughly 20 percent on a yoy basis and then growth steadily fell to 2 to 3 percent. This demonstrates the economic shakeout in the business sector. Data for real estate lending demonstrates an uptick in yoy growth during September 2008, when the government announced a series of real estate debt guarantee programs.

Furthermore, pressure on the banking system from the economic downturn is evident in the aggregate banking data. The country's deposit growth demonstrates steady yoy growth. Transaction deposits (equivalent to cash) have seen a notable rise as consumers and businesses raise their precautionary demand during economic uncertainty. Increases in transaction deposits require banks to increase their reserves with the Federal Reserve. Large time deposits (greater than \$100,000) have seen a sharp drop in growth for a variety of reasons including: extremely low interest rates, uncertainty about banks' health and a desire for greater liquidity in uncertain times.

In terms of future trends, consumer lending had previously demonstrated a steady yoy growth rate of around 10 percent until recently. As the unemployment rate moves higher, fewer consumers can service their individual debt. This creates rising delinquencies for major U.S. credit card companies. As a result, consumer credit growth slows, both as a result of declining employment prospects and rising delinquencies on consumer debt.

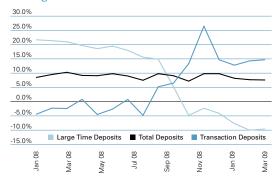
A useful measure of banks' operating environment is the Federal Reserve's Senior Loan Officer Opinion Survey, which is based on responses from roughly 75 banks. In the most recent April 2009 survey, the Federal Reserve reported that lending terms remained tight across the commercial banking system. One change arose from the prime-based mortgage lending segment, where banks noted an increase in demand. The Federal Reserve will include special questions within the survey; the most recent survey highlighted international trade finance and asset quality. Naturally, asset quality is of importance during times of distress and heightened delinquency. The majority of respondents suggested that they expect credit quality to decline this year. Trade finance has suffered recently as the world recession generates less exchange between countries, thereby lessening the need for financing. A majority of survey respondents reported tightening terms for trade finance.

# U.S. Commercial Bank Lending YoY % growth



Source: Bloomberg & Federal Reserve

# U.S. Commercial Bank Deposits YoY % growth



Source: Bloomberg & Federal Reserve

# Credit Card Delinquency Rate YoY % growth

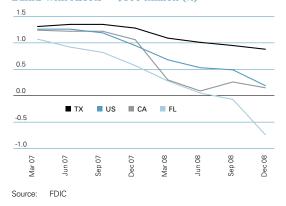


## **BBVA** Compass

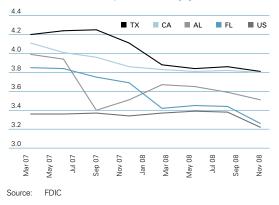
# Net Charge-offs to Average Loans Banks with Assets > \$100 million (%)



#### Net Operating Income to Average Assets Banks with Assets > \$100 million (%)



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



### Focus on the BBVA Compass Sunbelt Region

In order to better understand banking conditions at the state level it is necessary to examine some of the most common metrics for banking performance. For example, net charge-offs (NCO) to average loans represents the percentage of a bank's loan portfolio that has been written-off as a loss on the income statement. The more loans that must be written off, the higher the NCO percentage.

At the state level, the NCO rate for Texas appears mostly stable and below the trend for the U.S., with Florida and California moving relatively in line with the U.S. Arizona, however, is above the U.S. trend for NCOs, which is broadly consistent with the explosive growth in housing that Arizona experienced and must now correct. Florida's NCO rate appears consistent with the U.S. rate so far, but the state may have a significant number of commercial real estate delinquencies which raise its NCO rate over time. Texas, on the other hand, avoided a considerable amount of the housing boom and has maintained its economic growth potential.

Florida's banking conditions can be better understood when examining the ratio of net operating income to average assets. This metric represents the performance of a bank before taxes as a proportion of its average assets. For the U.S., this ratio has fallen considerably, with California closely following this trend. Texas, however, has roughly maintained its ratio, while Florida's ratio has fallen into negative territory.

An alternative look at the operating environment of banks in different states is to examine the net interest margin (NIM). Traditionally, banks must pay interest on liabilities (i.e. deposits and borrowing) and earn interest on earning assets (i.e. loans and securities). The difference between interest earned from earning assets and paid on liabilities is the NIM, which is a sign of the bank's ability to act as an intermediary. While banks have other noninterest income from different sources, NIM remains informative for a bank's overall performance. Many states in the BBVA Compass Sunbelt Region maintain a higher NIM than the U.S. average, with the exception of Florida, whose NIM has converged rapidly with that of the entire U.S. There are numerous possible influences on the NIM that include, but are not limited to: regulation, increased competition, company mergers, economic growth and capital markets.

### A perspective on bank failures

Given all the operating constraints, it is no surprise that as of May 1, 2009, 32 banks have failed in the United States. This year's failures now exceed 2008's failures and assistances. Combined with 2008's 30 Federal Deposit Insurance Corporation (FDIC) bank failures and assistances, the 2008-2009 era so far has experienced more bank failures and assistances than the entire period from 1995 to 2007. However, 1988-1989 remains unmatched as the worst era for bank failures in U.S. history since 1934, when roughly 1,000 banks failed or were assisted. In 1989, the FDIC closed or assisted 504 banks, which represented 4.2 percent of all banks. In 2008, the FDIC closed 30 banks, which represented around 0.4 percent of the banking population. The average annual rate for the entire period 1934-2009 is 0.37 percent. Bank failures are trending upward, which is of major concern to banks and regulators alike. However, bank failures so far have not breeched historic levels.

### Stress Tests and the BBVA Compass Sunbelt Region

### What is the government stress test?

On May 7th, 2009, the government announced the results of its stress test regimen for 19 major U.S. bank holding companies. The stress test was delivered by a government created task force of economists, bank examiners and other specialists. These teams conducted in-depth reviews of the asset quality, provisioning, earnings and general operating conditions at each bank holding company. In order to create a worst-case scenario, the stress test used the Great Depression as a benchmark for the loan loss rates under these examinations. The main idea was to use a worst-case scenario to see if the banks' portfolios of assets and securities could withstand hard economic conditions. If the bank did not meet the estimated capital buffer needed to absorb losses emanating from the adverse scenario, it was asked by the government to raise additional capital.

### Why do we need a stress test?

The experience of Japan during the 1990's is a strong example of what government officials wish to avoid by utilizing the stress test. Although there are conflicting views of Japan's "lost decade" of financial crisis and deflation, many observers regard the slow reform of the banking system as propagating the Japanese downturn. It is argued that Japanese banks did not provision adequately for future losses, thereby slowly realizing losses and becoming "zombie banks." Other countries have used stress tests, as administered by the International Monetary Fund, or their home governments, to understand the banking system's resilience to external economic shocks. By using an adverse scenario stress test based on the Great Depression, the government hoped to push banks into more forward-looking assessments of their losses. An additional benefit of the stress test was to give the general public greater confidence in banks as a result of a close examination by government officials.

# What do the results mean for the BBVA Compass Sunbelt Region?

In the aggregate, the government estimated loan losses for these 19 bank holding companies under the adverse scenario during 2009-10 at \$455 billion, excluding securities and trading losses. In order to focus the stress test results on the BBVA Compass Sunbelt Region, it was necessary to make a number of assumptions. Given the deposit share of each bank in the Sunbelt states, a loan-to-deposit ratio of 92.17 was used to generate loans in each state. Next, we adjusted the loss rate

outlined in each banks' stress test report for each state's delinquency rate to reflect a state's asset quality. We assumed that loan exposure by each category (real estate, commercial and consumer) is the same in each state. From this, we generated the two-year loss for each state as a percentage of state Gross Domestic Product (GDP) as reported by the Bureau of Economic Analysis (BEA) and adjusted to 2008 by the Philadelphia Federal Reserve Coincident Index. In order to understand the potential employment foregone by such credit losses, we utilized the high correlation between Sunbelt non-farm payrolls and growth of loans and leases. Under our calculations, for every 1% change in credit there is a 2% change in the Sunbelt's payroll, or roughly 508,000 jobs. These jobs are best viewed as lost potential – the destruction of credit by non-performing loans or losses has reduced capital flows to businesses in the Sunbelt, thereby reducing potential projects and employment.

State	Est. Loss % GDP	Employment Gap	Emp. Gap % Total Payroll		
Alabama	2.53%	29,988	1.56%		
Arizona	3.51%	63,066	2.56%		
Colorado	1.54%	26,806	1.17%		
Florida	4.77%	245,782	3.30%		
New Mexico	1.15%	6,435	0.77%		
Texas	2.86%	244,726	2.34%		
Total Sunbelt	3.25%	616,803	2.43%		
Non-Sunbelt	4.17%	2,686,923	2.51%		
Total U.S.	3.97%	3,303,726	2.49%		

Source: BBVA ERD & Federal Reserve

The results of our exercise demonstrate that states with the most troubled residential and commercial real estate sectors (AZ, FL) are the hardest hit by credit losses under the stress test. In contrast, CO, TX, AL and NM have much lower credit losses as a percentage of state GDP. However, the Sunbelt in general has a lower burden of credit losses per GDP than the rest of the U.S. In terms of foregone employment, CO and NM both remain largely unaffected by credit's influence on potential business activity. The amount of forgone employment in Florida is significantly larger than the rest of the Sunbelt, despite the fact that the Sunbelt overall demonstrates a lower payroll burden than the rest of the U.S.

Overall, the results offer an approximate impact of credit losses on potential business activity in the Sunbelt area. The most leverage-consuming parts of the Sunbelt are feeling the largest brunt of the payroll effect of credit losses.



### **Fact Sheet**

Environment	US	Alabama	Arizona	Colorado	Florida	New Mexico	Texas
Land cover/use surface (thousand acres, 2003)	1,937,664	33,424	72,964	66,625	37,534	77,823	171,052
% of total							
Crop	19.0	7.5	1.3	12.5	7.7	2.0	14.9
Range	20.9	0.2	44.2	37.2	7.2	51.3	56.2
Forest	20.9	64.4	5.7	4.9	33.9	7.0	6.2
Total environment releases (pounds per capita)	14.07	24.82	50.56	4.29	8.26	5.46	10.05
Air	5.37	13.79	0.64	0.66	4.44	0.49	3.71
Ozone depleting potential (CFC-11)	0.016	0.0150	0.0028	0.0018	0.0031	0.0003	0.0156
Water	.76	1.23	0.00	1.03	0.13	0.03	1.25
Land	7.22	9.80	49.59	2.60	2.29	4.93	1.46
Underground	0.73	0.00	0.34	0.00	1.40	0.00	3.63
Total off-site transfers (pounds per capita)	12.30	18.11	3.44	10.41	1.62	4.46	15.79
Total production-related waste (pounds per capita)	86.11	263.35	66.04	2.91	23.37	34.15	169.79
Superfund (number*)	1,308	15	9	18	52	13	45
Cancer risk score (per 1 million)	564	400	440	440	510	230	550
Noncancer risk score (tons per capita)	6,130	18,018	6,923	2,632	2,073	3,780	5,755
Number of housing units with high risk of lead hazards	2,722,400	38,000	11,000	21,000	46,000	13,000	110,000
% of total housing units	2.6	2.20	0.60	1.30	0.70	1.90	1.50
Number of days with air quality (5, 2007):							
Good	75.00	74.5	56.4	72.8	89.7	59.7	76.0
Moderate	22.3	24.7	30.6	25.7	9.6	34.0	21.9
Unhealthy for Sensitive Groups	2.3	0.8	8.0	1.4	0.7	4.1	1.9
Unhealthy	0.4	-	5.0	-	0.0	2.2	0.1
Person-days in exceedance of NAAQS**	9,037,952,136	9,979,302	172,843,464	29,405,580	14,656,745	12,184,687	113,569,088
Emissions (tons. per 1,000,000)							
Carbon Monoxide	97.4	2.6	2.2	1.5	5.9	0.9	6.2
Nitrogen Oxides	25.4	0.6	0.5	0.4	1.1	0.3	2.2
Volatile organic compound	18.2	0.4	0.3	0.3	0.9	0.1	1.4
Greenhouse emissions (ranking, 2006)		39	17	26	13	42	41
Recycling rate (ranking, 2006)		29	28	44	24	41	22
Community Water Systems w/ reported health-based violations (%, 2008)							
Systems	4	5	16	12	9	15	10
Population served	6	2	4	3	6	12	8

<sup>\*</sup> Sites scheduled for cleanup on the National Priorities List (NPL), commonly known as the federal Superfund program; these are some of our nation's worst toxic waste sites
\*\* National Ambient Air Quality Standards
Source: U.S. Environmental Protection Agency, Census, CFED

### **Forecasts**

Year-over-year % change

	1009	2009	3009	4009	2007	2008	2009	2010		1009	2009	3009	4009	2007	2008	2009	2010
US									Sunbelt								
Real GDP					2.2	1.3	-2.0	1.1	Real GDP					2.3	0.7	-1.0	1.5
Employment	-3.1	-4.0	-4.3	-3.6	1.1	-0.4	-3.8		Employment	-2.8	-3.6	-4.0	-4.0	1.8	-0.3	-3.6	
Personal Income	0.8	-0.4	0.0	2.9	6.1	3.8	0.8		Personal Income	2.5	1.1	1.8	2.4	6.2	4.4	1.9	
Home Sales	-9.7	-5.6	-8.3	-0.5	-14.8	-16.6	-6.8		Home Sales	-6.1	-7.0	-6.7	0.9	-13.4	-13.0	-4.8	
Home Prices	-7.0	-6.0	-3.0	-1.0	1.6	-5.5	-4.3	1.7	Home Prices	-7.3	-7.5	-5.9	-4.3	1.3	-6.6	-6.3	0.1
Alabama									Arizona								
Real GDP					0.9	0.7	-1.8	0.4	Real GDP					1.4	-0.6	-2.8	0.9
Employment	-1.8	-1.8	-0.8	-0.7	1.3	0.0	-1.9		Employment	-6.4	-6.7	-6.8	-5.8	1.5	-2.1	-6.4	
Personal Income	3.2	3.5	6.0	5.5	5.7	4.6	2.9		Personal Income	0.5	-1.0	-1.0	-0.5	5.5	2.7	-0.5	
Home Sales	-34.9	-26.1	3.4	24.7	-6.9	-27.9	-14.5		Home Sales	46.8	26.2	5.8	16.5	-26.5	7.4	21.8	
Home Prices	1.0	0.3	0.2	0.0	5.3	2.9	0.3	1.7	Home Prices	-13.6	-6.3	-2.3	0.0	0.0	-11.3	-6.2	1.3
Colorado									Florida								
Real GDP					2.0	2.9	0.2	1.2	Real GDP					0.0	-1.6	-2.2	1.7
Employment	-2.6	-4.2	-5.2	-5.1	2.3	0.8	-4.3		Employment	-5.1	-4.9	-4.8	-4.1	0.0	-3.1	-4.8	
Personal Income	3.6	3.2	3.4	3.3	6.0	4.9	2.4		Personal Income	0.6	-0.4	0.5	1.4	5.2	2.4	0.5	
Home Sales	-7.6	-0.6	2.1	8.1	-3.2	-10.9	-9.8		Home Sales	21.9	11.0	4.3	3.0	-27.9	-8.8	9.8	
Home Prices	0.4	-1.5	-2.8	0.0	2.2	1.0	-1.4	0.5	Home Prices	-14.6	-16.9	-14.2	0.0	-1.2	-14.4	-14.2	-2.1
New Mexico									Texas								
Real GDP					2.0	2.0	-1.5	0.9	Real GDP					4.4	2.0	0.1	1.7
Employment	-1.6	-2.7	-3.1	-2.9	1.4	0.4	-2.6		Employment	-0.5	-2.0	-2.9	-3.8	3.3	2.1	-2.3	
Personal Income	3.7	1.9	3.0	4.0	4.4	5.6	3.1		Personal Income	4.0	2.3	3.1	3.3	7.5	6.1	3.1	
Home Sales	-27.5	-25.4	-23.7	-26.5	-23.0	-26.8	-25.8		Home Sales	-21.4	-19.4	-13.3	-3.8	-2.6	-15.3	-15.0	
Home Prices	-2.7	-3.5	-3.4	0.0	7.3	0.3	-2.9	1.9	Home Prices	2.1	1.7	1.5	0.0	6.0	3.5	1.5	1.4

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

### Economic Structure

	us	Sunbelt	AL	AZ	со	FL	NM	TX
GDP (2008, \$ Billions)	14,265	2,612	165	246	236	742	75	1,149
Population (2008, Thousands)	304,060	60,741	4,662	6,500	4,939	18,328	1,984	24,327
Labor Force (1Q09, Thousands)	154,048	30,038	2,142	3,137	2,725	9,218	955	11,861
NonFarm Payroll (1Q09, Thousands)	132,953	25,421	1,920	2,464	2,279	7,7,450	834	10,474
Income Per Capital (2008, \$)	39,751	37,842	33,643	32,953	42,377	39,070	32,091	38,575
Households (2007, Thousands)	115,564	22,122	1,854	2,226	1,886	7,182	746	8,307
Houses/1000 Hab, (2007)	424.0	413.4	461.8	420.8	437.6	477.7	437.6	394.6
Home Price (1Q09, YoY Change (%))	-6.5	-7.3	4.5	4.9	11.2	2.7	9.8	-7.3
Home Ownership Rate (2008, %)	67.8	68.8	73.0	69.1	69.0	71.1	70.4	65.5
Exports of Goods (2008, \$ Billions)	1,300.1	292.5	15.8	19.7	7.7	54.3	2.8	192.1

Source: BEA, BLS, Census & FHFA



# Notes





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