BBVA Research

United States
Regional Outlook

Fourth Quarter 2010

Economic Analysis

- Regional data confirm expectations of a slow road to recovery
- California's agriculture production harnesses advanced technology and reaps benefits from global trade
- Hospitals employ physicians to reduce costs and enhance care
- High state budget deficits require action from legislatures
- Opportunities to establish and expand small businesses add dynamism to the economy

BBVA Compass

Index

Closing Date: November 3, 2010

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Editorial

Latest economic data confirm that the ongoing recovery remains sluggish. Thus, we maintain our outlook of further weakness as we move into 2011. We project annual GDP growth of 2.3%, which is down from the 2.7% change for 2010. Our baseline scenario assumes that private investment will continue to expand at a strong pace, mainly driven by low borrowing costs and solid external demand. Since the start of the recession, businesses cut labor costs, increased productivity and improved their financial position much faster than households. In recent quarters, investments in equipment and software, along with inventory accumulation, have been driving the recovery. However, we expect these trends to moderate.

Weak sales prospects and elevated regulatory uncertainty is holding back firms from even stronger investment and, most importantly, hiring. This is reflected by high unemployment rates and abnormally high unemployment duration, which generate labor market uncertainty. This, coupled with a weak recovery in real estate prices, will drive families to maintain high precautionary savings and continue reducing their debt levels. As a result, private consumption growth will remain constrained, resulting in a negative feedback loop. In this environment of slow growth, excess capacity in both the goods and labor markets will remain elevated, thereby keeping a lid on price pressures. Thus, fears of inflation may be significant down the road but not in the near future. In any case, while risks are tilted to the downside unprecedented fiscal stimulus, stabilization in the housing market, improvement in financing conditions and solid sales abroad will help the economy to avoid a double-dip recession.

Moreover, recently announced measures of additional monetary easing will provide further support to the recovery process. We expect the Fed to keep interest rates low well into 2012 and to continue Large-Scale Asset Purchases and unconventional measures for a prolonged period until economic conditions, particularly in the labor market, show a marked improvement. However, a private-led self-sustained recovery is still in the making, and fiscal and monetary stimuli have limited effects, particularly if risk perception is not reduced significantly so that private savings can finance the private investment. Thus, the main policy-focus for 2011 should be on reducing uncertainty and business costs to spur credit growth, private investment and job creation. This can be achieved by implementing reforms to assure fiscal consolidation while reducing inefficient government bureaucracy, tax rates and regulations. In addition, special attention should be paid to bolster infrastructure and improve basic education.

In this issue we provide an analysis on California's agriculture and food processing industry. The success of this sector highlights the benefits of specialization, innovation and low dependence on government aid. Although there are manifold risks, some related to climate change and over-regulation, prospects remain strong particularly if the industry can continue to adapt to a changing environment and increased globalization. In addition, we discuss the renewed trend of physician employment in hospital systems and analyze its potential to impact healthcare delivery. We find that successful employment models offer physicians a high quality of life while they can boost hospital revenue, lower treatment costs and raise the quality of patient care. Besides the risks emanating from weaker private demand, state finances pose a significant challenge to our economy which should not be overlooked. Our analysis highlights short- and mid-term pressures, which could have been avoided if more prudent behavior during the boom years had been taken. Finally, we take an in-depth look at small businesses' contribution to job creation. Our analysis tries to clarify some common misconceptions while at the same time understanding the lackluster trends mainly driven by the real estate-inspired credit crunch. Our results confirm a slow recovery.

We hope you find this issue helpful to your business.

Sincerely,

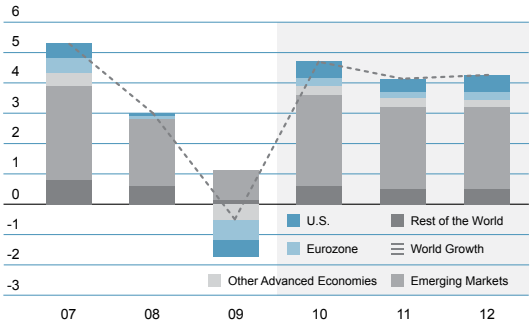
Nathaniel Karp
BBVA Chief U.S. Economist

Global Outlook: Full Steam Ahead for Emerging Markets

The global economy continues to grow strongly, primarily in emerging countries, whereas cyclical and financial concerns dominate advanced economies.

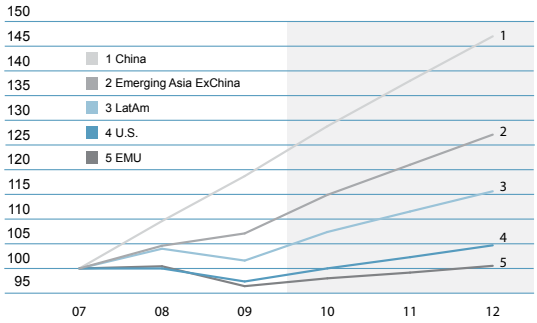
Global growth is expected to reach 4.7% in 2010, and 4.1% in 2011 (Chart 1), mostly unchanged with respect to three months ago. This strong performance is due to more rapid growth in emerging economies, which have been less affected by the financial crisis and have recovered quickly. In contrast, renewed cyclical concerns in the U.S. have joined the financial concerns that still dominate Europe, where macroeconomic and fiscal adjustments are still pending. Thus, the outlook for the next two years highlights the growth gap between advanced and emerging economies (Chart 2). This growth gap will persist in spite of government attempts in emerging economies to slow growth rates to mitigate risks of overheating. There are also significant policy differences between these groups. In the U.S., monetary expansion is set to intensify relative to Europe (and most other countries), and thus the U.S. dollar's expected depreciation against the euro will complicate Europe's recovery. In emerging economies, a strong asymmetry in the exchange rate policy between Asia and Latin America forces the latter to bear (together with the euro) a disproportionate part of the exchange rate appreciation derived from renewed monetary easing in the U.S.

Chart 1
Global GDP Growth and Contributions



Source: BBVA Research

Chart 2
GDP Levels: 2007=100



Source: BBVA Research and Datastream

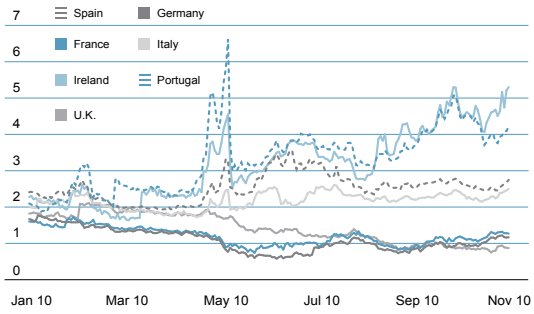
Financial stress in Europe is still a concern, though systemic risk is lower than projected in early 2010. Fiscal consolidation remains crucial to sustain confidence.

After decisive commitments to reduce high fiscal deficits, obtain international backing and collaborate with distressed governments to conduct financial sector stress tests, sovereign spreads have stabilized, and markets have started to differentiate between sovereign assets. Thus, the risk of a systemic event, such as a government default, has declined. Additionally, financial markets have started to re-open selectively and renewed private debt issuance signals lower tensions.

Notwithstanding these developments, financial market stress in Europe is still the main source of risk for the region (Chart 4). Given the strong cross-border integration in Europe, elevated perceptions of sovereign risks are significant components of aggregate financial stress (Chart 3). The strengthening of the euro adds an additional cyclical challenge because the best performing economies have been supported by robust external demand. Short run sources of macroeconomic vulnerability in the region include fiscal sustainability, external imbalances and further delays in restructuring weak banking systems. Heightened financial stress and euro appreciation necessitate decisive measures to tackle these sources of instability. The key is to continue to build confidence and lay the foundation for private sector demand to rebound autonomously. To sustain growth over the long run, however, governments must address needed structural and institutional reforms such as the prevention and resolution of future fiscal imbalances.

Chart 3

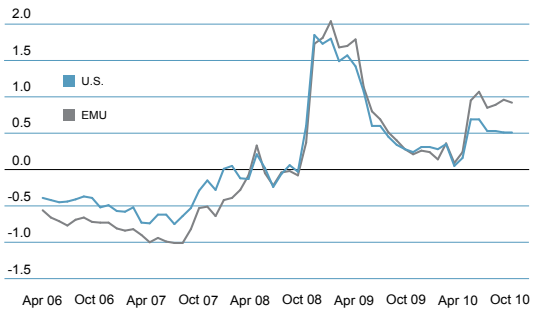
Sovereign Risk: 3-Year Government Bond Yields (Europe)



Source: Reuters/Haver Analytics

Chart 4

Financial Stress Index



Source: BBVA Research

Emerging markets face increasing policy dilemmas from strong growth, abundant global liquidity and competitive foreign exchange interventions.

Emerging economies continue to grow fervently, as emerging Asia leads the world recovery. In both Asia and Latin America, the principal source of the recovery stems from private domestic demand growth over policy-induced stimulus. Looking ahead, growth in Asia will slow as governments attempt to reign in domestic credit growth, and thus reduce the risks of overheating. This region, however, will continue to contribute the most to global growth.

Both Asia and Latin America are confronting a tradeoff: ease monetary policy to depreciate their currencies to preserve their competitiveness in foreign markets, or allow domestic demand and capital inflows to flourish with a strong currency. For example, some countries have introduced administrative measures to discourage capital inflows while others have slowed their rate of monetary tightening.

Given the inflexibility of exchange rates in Asia (and China in particular), Latin America suffers a disproportionate effect of the adjustment, and thus further local currency appreciation may start to restrain growth. Many countries in the region are discussing exchange rate interventions although experience reveals that these measures may only slow the appreciation, rather than prevent it entirely. Increased intervention in foreign exchange markets risks deterioration to retaliatory trade measures. This reality highlights the importance of flexible exchange rate regimes throughout the world.

Monetary policy in advanced economies will be lax for a long time, adding pressure to exchange rates worldwide.

Prospects of low growth and subdued inflationary pressures in advanced economies will translate into low interest rates for a prolonged period in the three most important economies - the U.S., Europe and Japan. Currently, additional monetary expansion in the United States partially explains the recent depreciation in the dollar versus the Euro; however, we believe that exchange rates should eventually reflect long-term fundamentals. Better growth prospects and stronger investment inflows in the United States should cause the dollar to strengthen over the mid-term. At the same time, abundant global liquidity, faster expected GDP growth and high returns to capital investment sustain pressure toward currency appreciation in emerging markets.

U.S. Economic Outlook

The recovery has not been as strong as previously expected. The Bureau of Economic Analysis (BEA) advance release estimated that the U.S. economy grew 2.0% (Q-o-Q, annualized) in 3Q10 and recent economic trends indicate that the pace of the recovery remains weak. Our models, however, indicate a low probability of a double-dip recession. We continue to forecast a moderate recovery due to an underlying deleveraging process that is restraining consumption growth, weak labor markets that are hindering income and employment growth, and regulatory and demand uncertainty that is affecting investment. Our baseline scenario assumes the U.S. economy will grow at annual rates of 2.7% and 2.3% in 2010 and 2011, respectively.

The main contributors to GDP growth in 3Q10 were inventory re-stocking, nonresidential investment and personal consumption expenditures (PCE). PCE grew 2.6% in 3Q10 beating market expectations. Although this is the highest increase since 4Q06, PCE growth is expected to remain subdued due to the ongoing deleverage process, high unemployment and tight credit markets. Weak real personal income growth in 3Q10 also implies that the recent increase in PCE is unsustainable and points toward slower growth ahead. Therefore, we expect personal consumption to increase 1.8% in 2011, which is relatively weak compared to previous recovery periods.

Although residential investment contributed positively to growth in 2Q10, it declined 29% in 3Q10 which indicates that the housing industry remains a drag on the economy in 2H10. Residential investment has declined in 17 of the last 19 quarters, and excess housing supply is limiting new construction. Housing starts are slightly above their historical minimum, but they will remain low until inventory clears. Therefore, contrary to prior recessions, residential investment will not lead the current recovery and we expect it to make only a small contribution to GDP growth in 2011. Inflation has surprised the market to the downside in 2010, and has thus heightened the risks of further disinflation (lower but positive inflation). So far, increases in non-shelter prices have compensated the disinflation in shelter prices and have thus contained the risk of deflation (negative inflation). Shelter prices, however, appear to be stabilizing, which should further ease deflationary pressures. Furthermore, labor markets remain weak. The current slow pace of economic recovery is limiting large-scale job creation; therefore, the unemployment rate has decreased only 0.1pp in 3Q10 to 9.6% and is likely to remain elevated in 2011. High long-term unemployment, weak construction activity and restricted labor mobility heighten concerns about the U.S. labor market. In this environment, inflationary pressures remain contained, and we expect inflation to remain low but positive throughout 2010 and 2011.

Taken as a whole, the disinflationary trends, low capacity utilization, high unemployment, and slower-than-expected growth have raised warning flags at the Federal Reserve. The Fed perceives current conditions as “unacceptable” and therefore, in its November meeting, announced a second round of quantitative easing (QE2). The Fed expects to purchase around $600 billion of longer-term Treasuries (a pace of $75 billion per month) and to continue to reinvest $35 billion of principal payments from agency debt and mortgage-backed securities every month. Thus, total Treasury purchases will reach around $900 billion ($110 billion per month) by the end of 2Q11.

The total impact of QE2, however, is not certain. The success of QE2 will depend on the flow of investments into riskier assets with higher returns from safe havens. In an ideal scenario, this shift would generate higher lending which eases deflationary risks and supports real estate prices and consumption growth. This approach, however, risks generating another asset bubble and/or competitive currency devaluation. Public statements by FOMC members indicate that a majority view the benefits of QE2 as higher than potential costs. These members believe that cyclical influences dominate any structural changes and thus they argue that further monetary easing can stimulate the recovery. In our current baseline scenario, we do not expect the Fed to raise the federal funds target rate until late 2012.

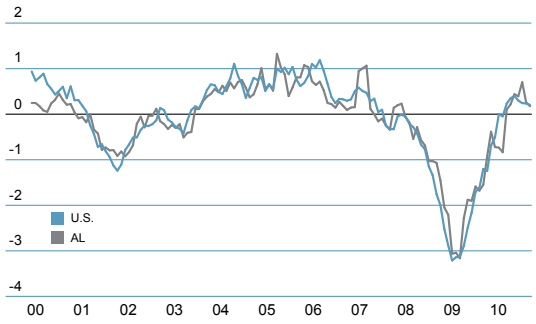
BBVA Compass Sunbelt Regional Outlook

Alabama

The three-month moving average (3mma) of the BBVA Compass State Monthly Activity Index (SMAI) shows that Alabama is expanding at the same pace as the U.S. During the first half of the year, Alabama's activity ramped up faster than the U.S. average, as rapid gains in exports and modest private sector job creation helped to bring the unemployment rate down by over two percentage points. The leveling of this rapid growth is consistent with our outlook for the country. Nevertheless, we expect positive growth ahead as the state's investments in high-tech and transportation manufacturing are now paying dividends.

Chart 5

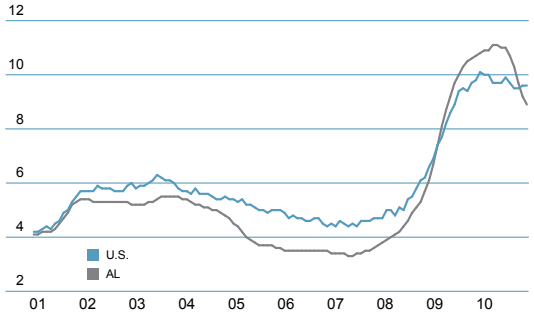
BBVA Compass State Monthly Activity Index, 3mma



Source: BBVA Research

Chart 6

Unemployment Rate, Seasonally Adjusted (%)



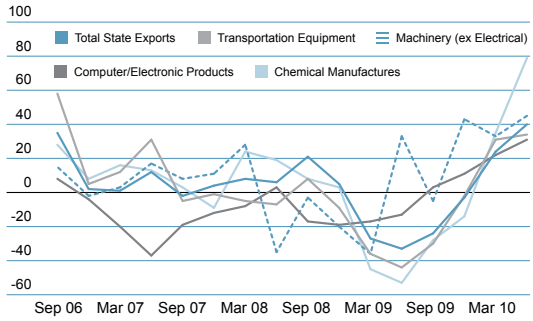
Source: BLS

Robust emerging market demand for Alabama's exports boosted growth during the first half of the year. Through the second quarter, total exports were up 32% from the same period in 2009. Chemicals, transportation equipment, machinery, computers and electronic equipment all led the export surge. To illustrate the contribution of emerging markets, 1H10 exports to China, Mexico and Brazil (approx. 20% of total) are up 121%, 58% and 49% over 1H09, respectively, while exports to Germany (10% of total) are down 3.4%. We expect that these rates will moderate as emerging markets take steps to temper their fast growth rates. Indeed, the contribution of exports to 3Q10 U.S. GDP dropped below one percentage point in the October advance release.

Partially as a result of rising exports, private sector employment growth has been positive across sectors in Alabama. Even though construction and professional and business services employment lags, the trade, transportation and utilities, education and health services, leisure and hospitality and manufacturing sectors have managed to generate jobs during the year. Consequently, total non-farm employment is up nearly 1%, and the unemployment rate has edged below 9% - well below the U.S. average. While the nation's unemployment rate has edged down just 0.5% from its peak in nearly a year, Alabama has been able to shed over 2% from its peak rate in just nine months.

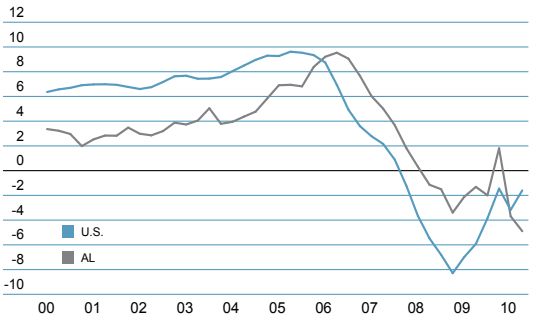
While the pace of private sector job creation is far from rapid, the net positive job creation points to a solid foundation for recovery. The auto sector's gradual recovery will continue to aid Alabama's expansion. Although the annualized monthly pace of sales is well below its historical average of nearly 16 million units, the pace is rising, and we expect that low borrowing costs will support the increasing trend.

Chart 7
Alabama Exports, Total and Selected Industries, Y-o-Y % change



Source: WiserTrade

Chart 8
Housing Price Index, Purchase Only, Y-o-Y % Change



Source: FHFA

Alabama's fiscal situation is in better shape than many other states. The projected budget deficit for the 2011 fiscal year is the 5th smallest in the country: it is slightly above 8% compared with 19% nationwide. While total tax revenues are still declining, sales tax revenue should pick up as consumption continues to grow and buoy aggregate revenues. Due to the comparatively small projected deficit, efforts to balance the budget should not adversely affect state GDP.

While Alabama's home prices surged along with the U.S. in mid-2005 to mid-2006, their rise was not as inflated compared to other states in the nation and therefore did not suffer the swift decline compared to the U.S. average. Nevertheless, the housing market continues to weaken throughout the state, as price indexes in all but the Tuscaloosa and Huntsville MSAs reported Y-o-Y declines in excess of 5% in 2Q10. Along with these price declines, construction employment recently resumed its slide and the year-to-date pace of building permits through August is now below that of the same pace in 2009. Permit issuance and existing home sales surged in early 2010 in response to federal fiscal incentives such as the home-buyer tax credit; however, once this stimulus expired, the weak fundamentals of the housing market now dominate the current trends.

Alabama's economy surged ahead of other Sunbelt states and the U.S. in early 2010; however, softening international demand and a weak national labor market have dampened its growth. Across the state, the recovery has been heterogeneous, as the north's high-tech, military and automotive presence has helped create jobs and buffer the downturn. Thus, our baseline scenario points toward relatively high 2.2% growth in 2010, followed by a modest rate of 2.0% in 2011. Given that Alabama's average population growth has been lower than the U.S., this growth should translate into a rising per-capita income.

Texas

The BBVA Compass State Monthly Activity Index (SMAI) reveals that Texas is continuing to expand faster than the U.S. average. Although most states have experienced a growth deceleration in the second half of 2010, Texas' growth has accelerated and remains solidly positive. Clearly, the Lone Star State leads the recovery.

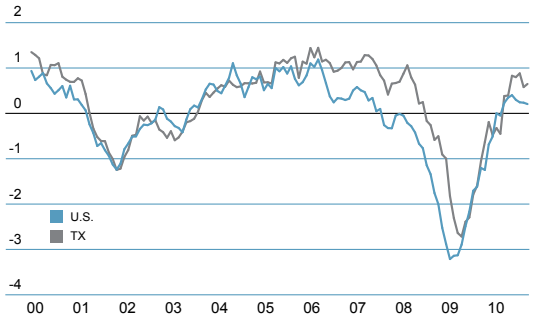
On a seasonally adjusted basis from January through September 2010, Texas created 182,200 private sector jobs - approximately 16% of the U.S. total. Texas can boast about creating the most private sector jobs in the country and is one of only six states whose year-to-date private sector job creation exceeds 2%. In 2010, the support activities for mining sector and the manufacturing of fabricated metal products sector have both increased employment by more than 15%, while employment in the manufacturing of agricultural, construction and mining machinery has risen nearly 10%. A healthy service sector is paramount to GDP growth, and Texas does not need a prescription. A swath of service sectors from oil and gas extraction to health care-related industries has added more than 3% to each of their payrolls. Furthermore, contrary to the

perception of a languishing U.S. manufacturing industry and the exportation of high-skill jobs, Texas' manufacturing sector has increased employment nearly 3.5% in 2010, and key durable goods sectors such as motor vehicles, iron and steel mills & ferroalloys and aerospace products & parts (along with the mentioned fabricated metals and machinery industries) have led this charge with growth rates between 4 and 7%.

Although the pace of job creation slowed across industries in September's preliminary employment report from the BLS, we believe that the state's solid performance results from a private-sector led recovery that has eluded many other state economies. Furthermore, the value of exports through the first half of 2010 is up 30% on a Y-o-Y basis. Texas continues to benefit from its leading position as a top exporter of petroleum and coal products (the state supplies 54% of the U.S. industry total). This industry's 120% Y-o-Y export growth in 2Q08 helped buffer the onset of the national recession, and the value of this industry's exports is up over 63% in 1H10 from 1H09. While we expect this pace to moderate, Latin America accounts for nearly 70% of Texas' petroleum product exports (Mexico, 30%), and high projected growth in this region will sustain fervent demand. There are minimal risks to the contribution of exports to growth. Other significant export sectors are also experiencing strong demand, and although Europe remains mired in a fiscal crisis with low growth prospects, emerging markets are a primary destination for Texas' products.

Chart 9

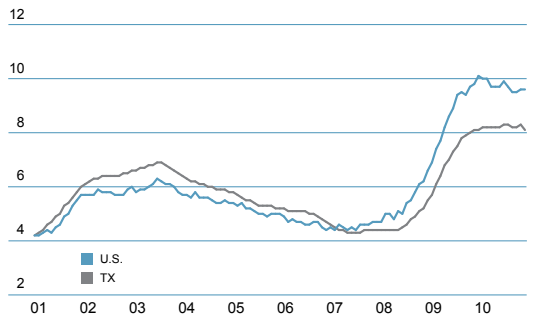
BBVA Compass State Monthly Activity Index, 3mma



Source: BBVA Research

Chart 10

Unemployment Rate, Seasonally Adjusted (%)



Source: BLS/Haver Analytics

Retail sales continue to support growth, as they are posting positive growth over the year. The nearly 3% differential relative to nationwide retail sales indicates that private consumption will continue to boost Texas' GDP. Rising sales brings additional tax revenue, and indeed, sales tax collections were up nearly 7% in September over the prior year. On the fiscal front, Texas' projected budget deficit for 2011 is around 10% of expenses (the 16th lowest out of 46 projected deficits); however, stable home prices and property tax receipts along with an ample rainy day fund (see the related article on state finances) to balance the budget minimize downside risks from state and local government budget cuts or tax increases.

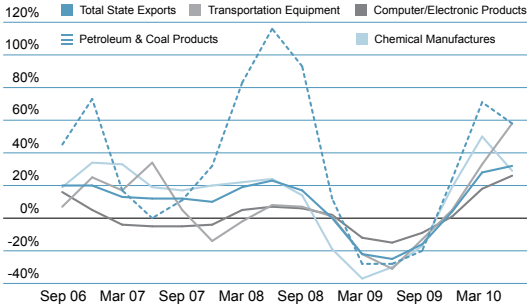
Chart 11

Texas and U.S. Monthly Retail Sales, Y-o-Y % change

Source: Dallas Fed and Commerce Dept.

Chart 12

Texas Exports, Total and Selected Industries, Y-o-Y % change



Source: WiserTrade/Haver Analytics

Texas' residential market remains attractive, as housing prices are stable and slightly positive on a Y-o-Y basis. While temporary fiscal incentives such as the homebuyer tax credit may cloud the underlying trend, home sales were up nearly 15% in the second quarter on a Y-o-Y basis. The pace of building permits, however, turned negative on a Y-o-Y basis in June through August despite the surge of activity in January through May. Looking ahead, Texas' positive job creation and expanding population favor residential investment, but we do not expect a strong resurgence in the housing market. Total mortgage delinquencies appear to have peaked, and the foreclosure rate is edging downward. These factors point to a hardening foundation for construction activity to resume in the mid-term. Finally, the commercial real estate market will remain subdued into 2011, despite increasingly favorable lease terms and property sales.

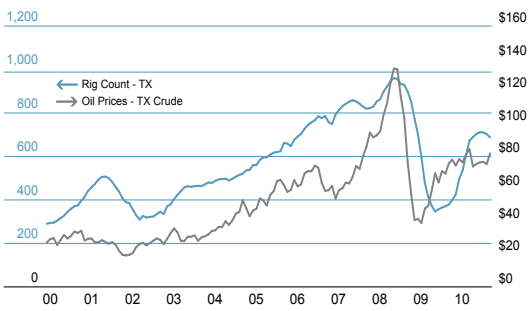
Chart 13

Housing Price Index, Purchase Only, Y-o-Y % Change

Source: FHFA/Haver Analytics

Chart 14

Texas Rig Count and West Texas Crude Oil Prices

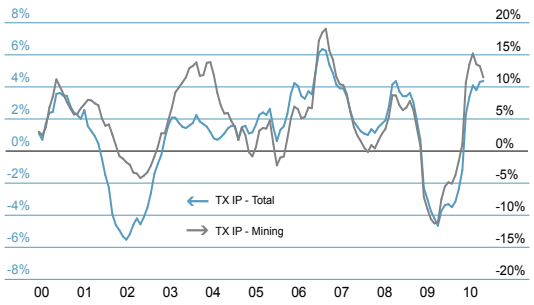


Source: Dallas Fed with data from Baker-Hughes

Stable petroleum prices are supporting energy investment and production. This all important sector in Texas creates high-skill jobs and income growth. Additional regulation pertaining to oil and gas or slower-than-expected growth in Mexico and other emerging markets are the primary sources of risk to Texas' output.

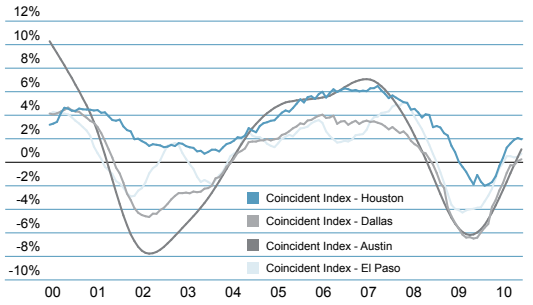
In summary, we believe that private sector job creation, limited fiscal challenges, stable housing market, rising international energy demand and surging exports will sustain Texas' recovery. We expect Texas' Gross Domestic Product to grow by 3.0% in 2010 and 2.8% in 2011 – both rates are well above the U.S. average. We maintain that Texas has the most favorable prospects for growth in the BBVA Compass Sunbelt Region.

Chart 15
Texas Industrial Production, 4-quarter % change



Source: Dallas Fed

Chart 16
Selected MSA Coincident Indexes, Y-o-Y % Change



Source: Dallas Fed

Arizona, California, and Florida

Arizona, California and Florida remain mired in the fallout of the housing sector, and high unemployment clouds their prospects for a quick rebound. While California's growth has remained essentially stagnant for the entire year due to lackluster job creation, Arizona and Florida experienced a boost of positive activity after March that slowed to a crawl by July in Arizona and September in Florida. From late 2009 through the first half of 2010, the national surge in exports contributed more to California and Florida; however, the Y-o-Y 1H10 performance was near the U.S. average in California and below average in Florida and Arizona. We expected the pace to slow in 2H10, and the lower observed contribution of exports to U.S. GDP growth in 3Q10 is softening activity in these states.

Chart 17
BBVA Compass State Monthly Activity Indexes, 3mma

Source: BBVA Research

Chart 18
BBVA Compass State Monthly Activity Index, 3mma

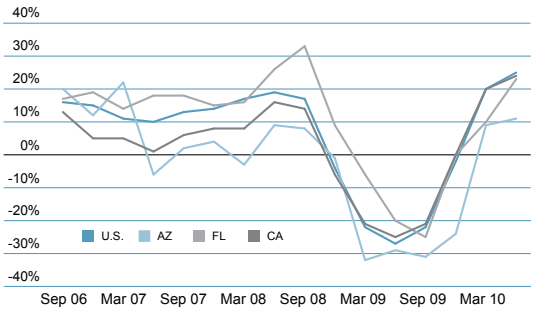
Source: BBVA Research

California, Arizona and Florida are struggling to create jobs in the private sector. Through September, the professional and business services industry holds the brightest outlook for California; this sector has consistently created jobs each month in 2010 and is responsible for nearly 42,000 positions through September. On the flip side, total losses in the construction industry nearly negate all of these. For all three states, their manufacturing industries were creating jobs through the first half of the year; however, in recent months, these industries have begun to pare their year-to-date gains and are now only responsible for approximately 600 jobs in Arizona, 4,700 in California and now -700 in Florida. This trend is disconcerting, because manufacturing jobs are highly-productive and add rapidly to output as new positions are created. As a result of these and other similar industry trends, the unemployment rate ticked up in all three states. It has now reached a new peak of 9.7% in Arizona, and it is only 0.4% off its peak (12.3%) in Florida and 0.2% off its peak (12.6%) in California.

The lack of appreciable declines in unemployment clouds the outlook for these states. The federal fiscal stimulus and related tax credits were designed to help the economy stand on its own two feet; yet, even with the complementary robust international demand for state exports, the private-sector led recovery does not appear to have taken firm hold. We project that rising domestic food prices and international demand for U.S. food exports will support California's agricultural industry, and thus the state's output growth.

Looking ahead, Arizona, California and Florida face an increasingly challenging fiscal situation without the private-led recovery as their total projected budget shortfalls are three of the highest in the country. Additionally, Arizona and California consistently underfunded their pension plans during the high-return years to ramp up spending on other projects, and they now require significant cash to fund those plans. Florida behaved more responsibly in this case and maintained adequate funding levels throughout the 2000s. Nevertheless, investment revenues and state tax revenues plummeted during the recession due to declines in the equity market, private sector layoffs and reduced consumer spending; year-to-date tax revenues are only slightly positive in these states. Growing consumer spending should support rising sales tax revenue; however, the pace is expected to remain modest.

Chart 19
Growth of Total State Exports, Y-o-Y (%)



Source: WiserTrade/Haver Analytics

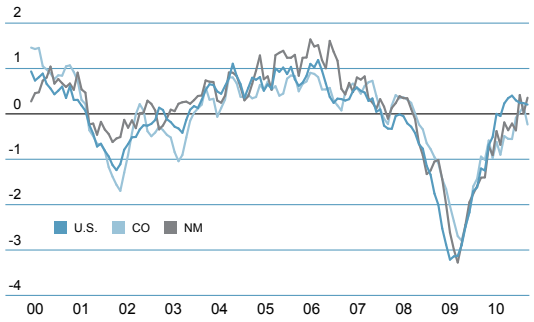
Chart 20
FHFA Purchase Only Housing Price Index, Y-o-Y (%)

Source: WiserTrade/Haver Analytics

In our baseline scenario, in 2011, we expect Arizona and Florida to grow at 2.5%, slightly higher than the U.S. (2.3%). We anticipate slightly slower growth for California of 2.4%, as the state and municipal governments dig themselves out of fiscal holes and employment recovers at a snail's pace.

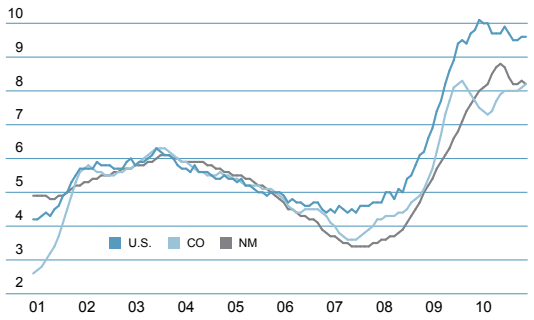
Colorado and New Mexico

Chart 21
BBVA Compass State Monthly Activity Indexes, 3mma



Source: BBVA Research

Chart 22
Unemployment Rates, Seasonally Adjusted (%)



Source: BLS/Haver Analytics

New Mexico has recently posted positive activity during the 3rd quarter, as a broad set of private service industries added to payrolls. The unemployment rate remains below the U.S. average, and the projected 2011 state fiscal budget deficit (as a percent of planned expenses) appears minimal (the 4th smallest in the nation). While New Mexico has begun to recover later than other states, the private-sector led recovery appears to be taking hold. Strong international demand for commodities and rising prices is helping to propel New Mexico forward, and we expect growth ahead. The housing market reveals mixed weakness, as existing home sales through 2H10 were supported by tax credits, yet housing prices continue to decline on a Y-o-Y basis due to low sales rates and high inventories. Along with the rest of the U.S., we expect the recovery in the housing market to occur gradually. Building permit activity weakened and signals minimal plans for new construction.

Colorado remains stalled in weak growth with very low rates of job creation. Total nonfarm employment remains negative for 2010, and there has been little private sector job creation. The employment situation disappoints because housing prices as measured by the purchase only index appear stable, existing home sales have been strong and building permit activity has been positive. In the near-term, nationwide we have seen strong performance of the support activities for mining sector which should spill over into Colorado's activity. At present, the unemployment rate continues to increase, and is now at a higher level than during the recession (as is the case with Arizona).

For both Colorado and New Mexico, the surge in exports that helped other states register positive activity in the first half of the year is less relevant because the share of exports to GDP hovers slightly above 3% in these states. On the fiscal front, Colorado has significant challenges ahead due to a large projected budget shortfall in the coming fiscal year and underfunded pension liabilities. Some combination of government spending cuts and tax increases is likely on the horizon, and these could further erode Colorado's small, positive gains. In the mid to long term, we expect Colorado to return to above-average GDP growth, as favorable demographics and high-tech industries support expansion.

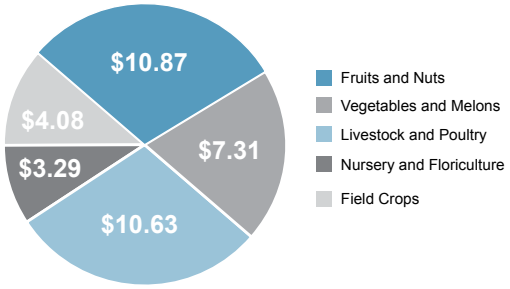
We forecast 2011 GDP growth in Colorado and New Mexico of 2.2%, as their later exit from the recession has restrained GDP activity. Nevertheless, their large firms are operating with high measured productivity, and this will boost output rapidly once private sector hiring resumes.

California's Agriculture and Food Processing

California's economic success is not limited to the popular industrial clusters of Silicon Valley and Hollywood: agriculture is one of the most profitable industries in the Golden State, as it produces more than 400 agricultural commodities that generate $36 billion in revenues per year. Fertile soil and a Mediterranean climate create a comparative advantage for the cultivation of certain vegetables, fruits and nuts. The success of the agriculture sector is not only the result of good weather and geography but also of strategic management and creativity that generate high returns in a constantly evolving market.

Chart 23

California's Agriculture: Gross Cash Receipts ($bn)



Source: California Department of Food and Agriculture

Table 1

California's Top 20 Commodities, 2008

Rank	Commodity	Value (millions)
1	Milk and Cream	$6,924,121
2	**Grapes, All**	$2,937,838
3	**Almonds (shelled)**	$2,343,200
4	Nursery Products	$2,273,500
5	Cattle and Calves	$1,822,856
6	Hay, Alfalfa and Other	$1,797,032
7	Lettuce, All	$1,580,831
8	Berries, All Strawberries	$1,578,175
9	Tomatoes, All	$1,317,321
10	Rice	$1,183,325
11	Flowers, Foilage	$1,015,394
12	Chickens, All	$787,679
13	Broccoli	$663,319
14	Oranges, All	$608,682
15	**Pistachios**	$569,900

Source: California Department of Food and Agriculture

California's agriculture in figures

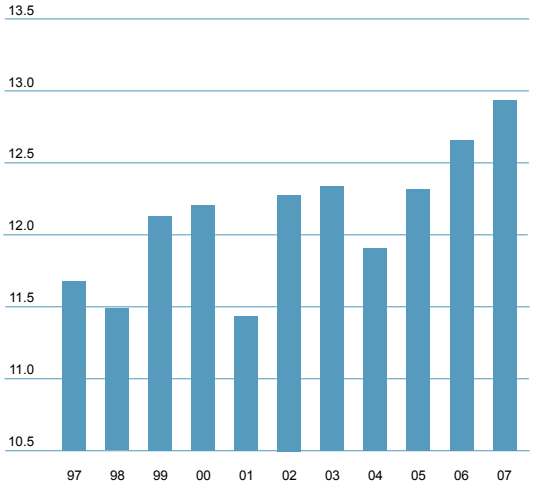
In 2008, there were 591,152 persons working in California's farms, agriculture support activities and food processing. This total amounts to 12.3% of total U.S employment in these industries, which is a higher share than Texas (8.4%) and Iowa (3.3%) - the next top agricultural producers in the country.[1] In the Central Valley, approximately 25% of total employment is related with agriculture and food processing.[2] Labor intensive crops depend significantly on seasonal workers; however, changes in consumer preferences, global trade and increasing competition for markets and resources have increased the demand for high-skill workers. The California Governor's Office of Planning and Research estimates that $1 billion of exports creates 27,000 jobs.

Productivity figures are staggering. In 2007, California accounted for 12.9% of the total value of agriculture and food processing output (A&FP) in the United States, almost double that of Texas, the nation's second largest food producer.[3] The state generates around 11.2% of the total value of agricultural crops and commodities in the United States with only 3% of the country's land and 4% of its farms and ranches. In 2008, around 30% of California's farms had sales of more than $100,000 compared to 16% in the U.S., and its counties are among the most productive.[4]

1: Bureau of Labor Statistics
2: Governor's Office of Planning and Research, California Rural Policy Task Force. 2003. "California Agriculture: Feeding the Future." Available online.
3: Bureau of Economic Analysis
4: California Department of Food and Agriculture

Chart 25

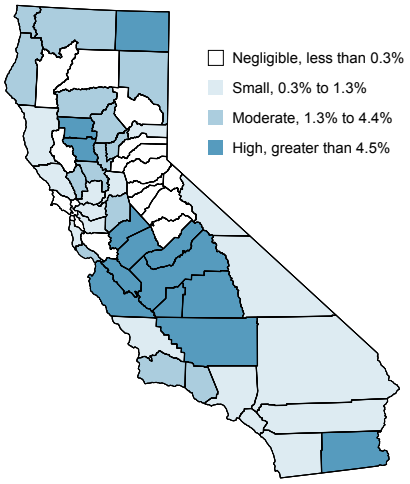
Farm and Food Production (California's share of U.S., %)



Source: BEA

Map 1

County Share of Personal Income from Farming and Food Manufacturing, Quartiles, 2006-2008 avg. (%)



Source: Bureau of Economic Analysis

The rise of agriculture: Innovation, technology and evolving consumer tastes

Significant investments in infrastructure, highways, airports, ports, higher education and urban development all helped agriculture to flourish. During the 1950s, publicly funded large-scale projects boosted the amount of irrigated land, which facilitated the relocation and expansion of production to the central valleys. At the same time, increasing income and urbanization shifted consumer's preferences towards fresh vegetables, beef and horticulture products.[6] In the 1970s, the industry began to specialize as farmers sought to satisfy a more exigent and wealthier consumer and increase profit margins. In this period, the appreciation of farm assets, due to rising food prices, created the conditions to support private investment, and turned the industry into a capital-intensive industry. Over the past 30 years, California's agriculture confronted ups and downs in prices, financial crises, severe droughts and tougher regulation. Yet, the industry managed to succeed in an increasingly globalized market thanks to its specialization in high-value products, consumer-driven marketing, technological change and management innovation.

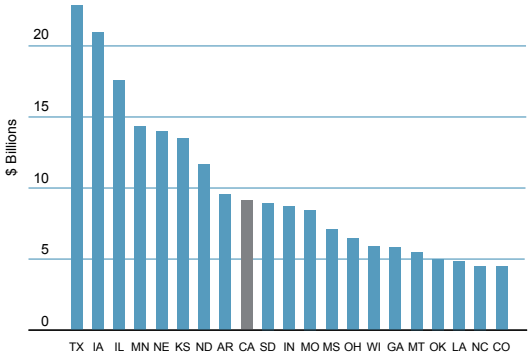
Specialization: The key for success

More than 60% of the state's farms are less than 50 acres in size, which suggests a high degree of specialization. In addition, the state is the only producer of specialty crops such as almonds, dates, grapes and pistachios. California's producers have focused on market niches that demand high-value added agricultural products. Since most of these products do not apply to federal subsidy guidelines, California receives a significantly lower amount of federal aid than other states, which fosters a competitive environment and forces farmers to rely more on management innovation and technological investments such as controlled climate storage to protect their margins.

The industry benefits from strong links with California universities who conduct cutting-edge field research in genetic engineering. This research will make important contributions to pest control and the eradication of tree diseases.

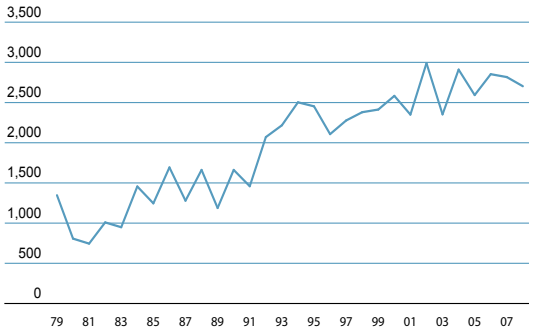
6: Giannini Foundation of Agricultural Economics. 2004. "A Stylized History of California Agriculture From 1769 to 2000" *Whither California Agriculture: Up, Down or Out? Some Thoughts About the Future.* University of California. Available online at http://gianni.ucop.edu.

Chart 26
Top Total USDA-Subsidies by State, 1995-2009 ($bn)



Source: Environmental Working Group. Compiled from USDA data
Note: other states are less than $4.9 bn

Chart 27
California Pistachios (yield per acre, 3-year moving average)



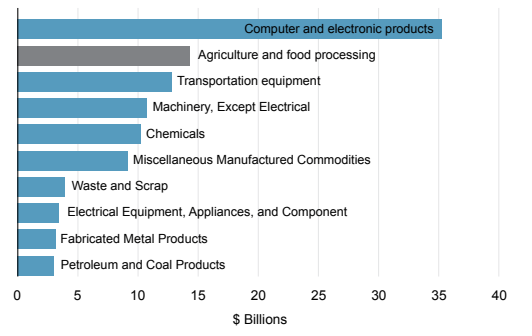
Source: USDA

The production of high-value crops requires consumer-oriented marketing strategies. Paying special attention to quality at each stage of production has become a major characteristic of California's agriculture. Economies of scale and scope have been achieved by vertical and horizontal integration. For instance, the winery industry demonstrates vertical integration: the same company controls each stage of production from growing and harvesting the vineyards to processing and distributing the final product. California's wineries have thus been able to reduce their costs and compete successfully against major producers like Spain and France. Another example is the pistachio industry, whose farmers delegate processing and marketing to large companies such as Paramount Farms. Pistachio and almond growers thus benefit from top-notch processing technologies and brand recognition.

International Trade: Strong demand and increasing competition

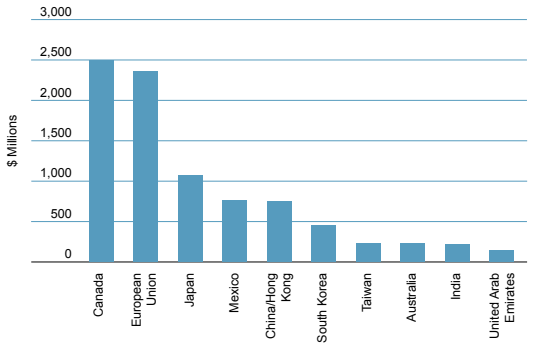
Although most agriculture and food processing production serves domestic markets, California is the top exporter of food products in the U.S. These exports account for 12% of the state's total exports, which is second to computer and electronic products. The state's total value of agriculture and food processing exports was $14.29 billion in 2009 and has doubled since 1997. California's top agriculture and food export destinations are the European Union, Canada, Japan, Mexico and China. Agribusinesses have benefited significantly from NAFTA and specific bilateral trade agreements. The rapid expansion of emerging economies in Asia and Latin America creates challenges and opportunities for California. Demand for California's products will increase, however, their rise may increase market competition and add to the volatility of prices.

Chart 28
Top Ten California Export Commodities, ($bn)



Source: WiserTrade

Chart 29
Top Ten California Agricultural Export Markets, ($mn)



Source: California Department of Food and Agriculture

Future trends and challenges

Looking ahead, globalization, communication technology and population growth will continue to shape California's agriculture and food processing industries. Farm consolidation will continue as a response to the increasing bargaining power of buyers. This will put small businesses at a disadvantage relative to the larger companies. Communications technology will prove useful to reduce the need for intermediaries between producers and final consumers. Specialization will only intensify as worldwide demand for high-value added products increases.[7]

A constant flow of technology will allow farmers to improve crop yields, and comply with environmental and food safety regulations. Export growth will remain robust due to rapid emerging market expansion. Nonetheless, international trade will also bring more competitors. For instance, countries like Chile, China and Australia are actively competing with California in the production of certain crops such as grapes and walnuts.

Population growth will increase the size of domestic markets; however, it will also put substantial pressures on water availability. The state is expected to have 46.4 million inhabitants by 2030 that will compete directly with farmers for water supply. Another threat to water accessibility is global warming, which could increase the frequency of droughts and significantly impact dairy, forestry and crop production.

In summary, global trade, constantly changing demand and alterations in weather patterns may boost price volatility, and thereby increase the expected return on capital investments. Moreover, food safety and environmental regulations will continue to add uncertainty to food production. Despite these challenges, California's agriculture will leverage its management innovation and technological development to maintain its global leadership position.

7: Johnston, Warren and Harold O. Carter. 2001. "Structural adjustment, resources, global economy to challenge California agriculture." *California Agriculture*, 54(4): 16-22.

Hospitals' Employment of Physicians Enhances Clinical Integration

Introduction

We are standing at the precipice of a significant restructuring of the U.S. hospital system. In the 2Q10 U.S. Regional Outlook, we delved into the key trends of rising competition, declining reimbursements and new regulations that are demanding organizational changes and efficiency improvements. The U.S. hospital landscape is highly fragmented and the majority of general community hospitals are owned and operated by non-profit boards or local governments. In this environment, multiple inefficiencies prevail, and many of these hospitals face significant risks because their profitability continues to decline. Their increasing reliance on Medicare revenues (more than 60-80% for some hospitals) along with soaring costs are pushing many hospitals into insolvency. Hospitals must improve management, streamline processes, implement best practices and coordinate with physicians to deliver high quality care at lower costs. Recent articles highlight the sale of non-profit public hospitals to larger hospital systems and for-profit hospital companies who must restore profitability. These larger companies can harness economies of scale and attract the necessary capital to invest in technology and hire physicians to bolster revenue and reduce costs. [1,2] Additionally, regulatory changes are forcing action. Hospital management, therefore, is turning attention to cultivate relationships with physicians and achieve true "clinical integration".

The longstanding independent relationship between physicians and hospitals in the United States contributes to rising treatment costs and risks to revenue at hospitals. Hospitals offer doctors privileges to use their facilities to treat patients, yet doctors retain the ability to admit patients to any nearby hospital, regardless of their affiliation. On the cost side, they have complete autonomy to order tests and determine treatment plans, and hospitals incur substantial overhead to maintain sufficient staff and resources to fulfill the doctors' orders on demand. As a result, hospitals are less able to stabilize their revenue streams and treatment costs climb because the independence insulates doctors from the consequent costs of their decisions and limits the ability of hospitals to maneuver expenses. Additionally, different reimbursement procedures for doctors and hospitals drive a wedge between the decisions of hospital management and physicians. As Dr. Brant-Zawadzki states, "the reimbursement model dictates the delivery model, and that's really the perversion of our health care system. If we were to design it right, we would design the delivery model first, and then base the reimbursement model around it." [3]

Today, a confluence of industry factors is eroding this wedge. Because reducing this wedge can result in substantial efficiency gains and cost savings, hospitals are actively re-defining their relationships with physicians. As a primary example, hospitals are expressing a revived interest in employing physicians directly, and doctors are welcoming these offers. We expect the employment model to proliferate because it aligns the interests of physicians and hospital management and offers hospitals an enhanced ability to project revenues and tailor treatment costs. Further consolidation in the industry will encourage physician employment, as large hospital systems and for-profit companies are currently pioneering this model.

In this article, we present a short history of key developments to hospital-physician relationships, a framework to think about refining the relationship and thoughts on future physician employment models.

1: Sataline, Suzanne. "Cash-Poor Government Ditching Public Hospitals." Wall Street Journal. August 29, 2010.
2: Devitt, Caitlin. "Selling Nonprofit Hospitals to For-Profits Has Upside." The Bond Buyer. May 5, 2010.
3: H&HN Magazine. "Physician-Hospital Relationships: Is the Model Broken? Can it be Fixed?" Page 50, December 2009. Available online: www.hhnmag.com

A Brief History of Hospital-Physician Relationships: Autonomy

Traditionally, doctors have held the dominant negotiating role in hospital-physician relationships, in part because hospitals rely on doctors to refer patients. Many doctors, however, are able to operate in private practice and freely grow their own client base. As a result, during the 20th century, physicians achieved significant autonomy with minimal oversight. Doctors gained unilateral control over their patient treatment plans and received fee-for-service compensation from private insurers and the government. Hospitals, on the other hand, were viewed like a free workshop in which doctors could use the available resources to care for patients.[4] In the U.S., "hospitals employ a skeletal medical staff, but for the most part care is divided between two separate agents, the hospital, which provides the facilities needed for the practice of secondary and tertiary care and the physician who is granted admitting privileges by the hospital, and then manages the treatment of the patient both inside and outside the hospital".[5] The medical industry rationalized this model with two arguments. First, medicine was strongly perceived to be an altruistic profession, and second, it was commonly believed that the doctor-patient relationship should be protected against bureaucratic and corporate control due to the moral implications of its practice. [6,7]

Prior to 1990, this autonomy model benefited both hospitals and physicians. Doctors admitted patients to hospitals, and doctors and hospitals were compensated based on the amount of services that each provided. Patients (along with their doctors) could choose where to be treated, and insurance companies and Medicare paid bills based on historical costs and location-specific adjustments. Doctors and hospitals enjoyed a seemingly permanent honeymoon, as revenues rose rapidly and costs soared unchecked.

Private insurers noticed the dramatically rising costs, and formed Health Maintenance Organizations (HMOs) in the early 1990s to exert more control over treatment costs. These HMOs presented the first challenge to the autonomous physician model for hospitals. HMOs established networks of hospitals and physicians that limited options for patients, demanded lower prices from hospitals in exchange for admission to the exclusive HMO network, and experimented with new payment schemes.[8]

HMOs promoted a gatekeeper model of health care management: in this model, patients first had to consult a primary care physician who could then refer the patient to a specialist if necessary. Consequently, hospitals had to join a network and aggressively court primary care physicians to increase admission referrals. Some hospitals sought to employ primary care physicians directly, but they shied away from employing specialists.[9] Furthermore, HMOs and Medicare implemented novel reimbursement methods for hospitals such as capitation, case rates and per diem rates. These changes prompted hospitals to reduce costly services and the length of patient stays. Insurers, however, continued to pay doctors directly on a fee-for-service basis. This environment kindled tensions between hospital management and physicians, as doctors perceived that administrative decisions infringed on their independence. Hospitals discovered that they needed to educate physicians about the use of resources.[10]

Hospitals responded to HMOs with vertical integration and initiated contracts with Independent Practice Associations (IPAs) and Physician Hospital Organizations (PHOs). The planning and management of healthcare service delivery entered a more bureaucratic phase: hospitals formed stronger links, joined systems, and they pioneered new approaches to physician compensation with exclusive contracts and salaried positions such as hospitalists.[11] Although

4: New Jersey Commission on Rationalizing Health Care Resources, Final Report, 2008.
5: Dor, A. & Watson, H. "The hospital-physician interaction in U.S. hospitals: Evolving payment schemes and their incentives," *European Economic Review,* 1995, 39, 795 - 802
6: Casalino, L. & Robinson, J. C. "Alternative Models of Hospital-Physician Affiliation as the United States Moves Away from Tight Managed Care," *The Milbank Quarterly, Blackwell Publishing on behalf of Milbank Memorial Fund,* 2003, 81, 331-351
7: Kitchener, M.; Caronna, C. A. & Shortell, S. M. "From the doctor's workshop to the iron cage? Evolving modes of physician control in US health systems," *Social Science & Medicine,* 2005, 60, 1311 - 1322
8: Casalino and Robinson, op. cit.
9: Burns, L. R. & Muller, R. W. "Hospital-Physician Collaboration: Landscape of Economic Integration and Impact on Clinical Integration," The Milbank Quarterly, Blackwell Publishing on behalf of Milbank Memorial Fund, 2008, 86, 375-434
10: Cuellar, A. E. & Gertler, P. J. "Strategic integration of hospitals and physicians," *Journal of Health Economics,* 2006, 25, 1 - 28
11: Casalino and Robinson, op. cit.

HMOs collapsed in the late 1990s as patients demanded more flexible options for healthcare services, the hospital-physician relationship remains permanently altered, as hospitals discovered the advantages and pitfalls of physician integration.

Hospitals and Doctors in the U.S.: A Principal Agent Problem

We can characterize the relationship between doctors and hospitals in the U.S. as a principal-agent problem. In this problem, the principal (hospital management) induces a particular level of effort from the agent (physician) by aligning incentives. For example, given an expected outcome, hospital management might want a physician to choose the least costly patient treatment plan. To affect the physician's decision, however, the hospital must have some levers of control. Historically, legal impediments, independent compensation and the bargaining power of doctors restricted a hospital's available levers to affect a doctor's decisions. Even as hospitals offered doctors positions on management committees, or department chairman positions, many physicians shunned the administrative burdens of hospital management if those tasks did not directly increase their incomes.[12] Thus, little effort was made to coordinate care and minimize the total treatment cost.

As fee-for-service payments to hospitals have waned in favor of per-diem or Diagnosis Related Group payments, each admitted patient presents a risk to the hospital's profitability. Once the diagnosis is made, revenues flow from pre-determined schedules, but treatment costs vary across patients. Initially, the hospital desires to minimize a patient's length of stay because it may not be able to discern whether the patient will entail low or high costs and generate positive or negative profit, respectively. The independent practitioner model leaves hospitals to bear a disproportionate share of financial risk, because the doctor receives payment on a fee-for-service schedule for his services regardless of the patient's profitability, and thus the doctor has no incentive to shorten the patient's length of stay.

To ameliorate this clash of incentives, hospitals are experimenting with new levers through non-economic integration such as hospital committees and technology platforms and economic integration such as joint equity ventures, employment contracts and bonuses.[13] As hospitals seek to maximize the number of patients they serve while minimizing costs and physicians seek to maximize their incomes, appropriate financial integration such as employment contracts may yield higher returns for both hospitals and physicians. As employees, physicians now share the hospital's financial risk, because their decisions ultimately affect the hospital's bottom line, and as employers, hospitals have the right incentives to improve systems that coordinate patient care.

Physician Employment at Hospitals

Today, demand, supply and regulatory changes are reshaping the medical services industry and ushering in sophisticated models of economic integration between hospitals and physicians. On the demand side, patients expect to freely choose their providers, and both private insurance companies and government programs are expanding bundling of reimbursements. On the supply side, an increasing percentage of young doctors report a desire to maintain a work-life balance, and the erosion of entry barriers and the proliferation of ambulatory care centers and for-profit hospitals increase competition. Additionally, the 2010 healthcare legislation requires quality measurement and reporting on patient outcomes, creates incentives for hospitals and doctors to jointly adopt electronic medical records and new reimbursement methods and it effectively curtails the rapid growth of new and existing physician-owned hospitals.

The sum of these changes is shifting the industry balance from individual physicians toward group practices, Accountable Care Organizations (ACOs) and hospital employment models. The 2008 BLS Occupational Handbook estimates that approximately 19% of physicians and surgeons were employed at hospitals. In contrast to the 1990s when hospitals pursued physicians, today, physicians are seeking employment at hospitals. The 2009 AMN Survey of Hospital CEOs indicates that hospitals view physicians as the primary "rainmakers," and the majority of respondents indicated that they are stepping up efforts to recruit physicians.

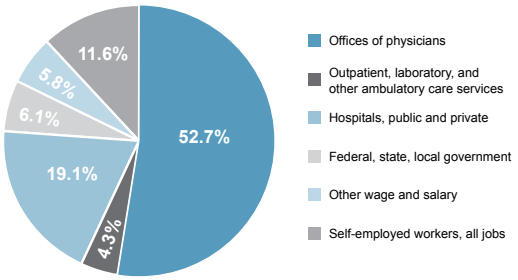
12: Burns and Muller, op. cit.
13: Ibid.

Merritt-Hawkins, a national physician placement firm, reports a growing trend of hospital searches for physician employment. Their report states, "Today, many physicians, specialists in particular, are seeking hospital employment to relieve them of the stress of high malpractice rates, the struggle for reimbursement, administrative duties and the general risks and hassles of private practice."[14]

Kerry Vermillion, Senior Vice President and CFO of Baptist Health Care in Pensacola, Florida observes, "We are seeing 90% of physicians out of training want to work for someone else, and let that entity handle the business aspects of the practice from management to technology integration. Furthermore, existing physicians, who would have previously not considered employment, are seeing their incomes challenged and are re-assessing that position."

Chart 30

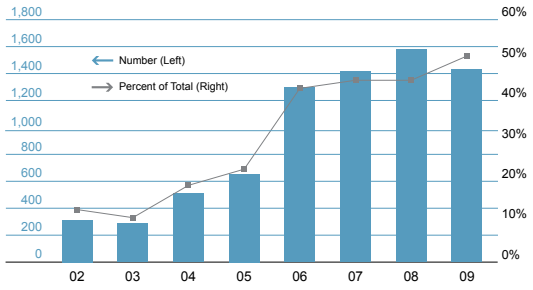
Distribution of Physician and Surgeon Employment, 2008



Source: BLS

Chart 31

Recruitment Searches for Hospital-based Physicians



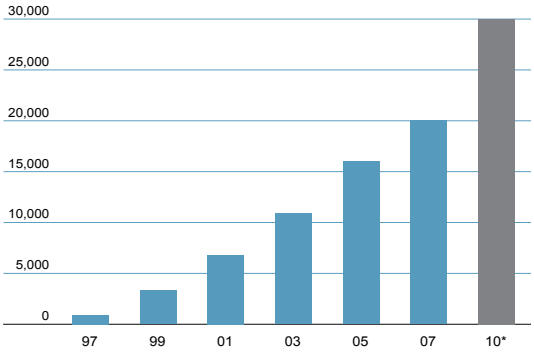
Source: Merritt-Hawkins

Kent Skolrood, Senior Vice President and President of the Physician Enterprise Organization at Baptist Health Care explains that employing physicians can offer a competitive advantage for hospitals. In the near term, he states, "the focus of physician employment is not so much about cost savings; rather, it is really more about preserving our revenue stream and increasing our market share. Healthcare is local, and we are responding to competitors." Vermillion agrees, and points to the benefits of employing a "critical mass of primary care physicians" to increase hospital referrals and revenue through a reduction in the number of affiliated physicians who make referrals to multiple hospitals.

Employing physicians is not a new idea. "During the 1990s, [Primary Care Physicians] were often targeted for acquisition and employment by hospitals under the label integrated salary model," but support fizzled as payer methods and hospital and physician incentives were misaligned.[15] The trend toward a successful employment model begins in the mid 1990s and grows from the positive experiences with hospitalists. Hospitalists are doctors who manage the care of inpatients in lieu of the primary care physician. Presumably, a hospitalist can devote more attention to inpatients: he does not have to divide his time between the hospital and an office practice. This separation of the inpatient and outpatient care responsibilities has resulted in shorter length of stays, better quality hospital care and fewer unnecessary expenditures and procedures: initial data revealed significant cost and length of stay reductions in excess of 15%.[16] A 2007 Washington Post article writes, "the ranks of hospitalists have exploded from a few hundred physicians in 1997 to 20,000 today -- about as many as there are gastroenterologists or neurologists. That's the fastest growth for any medical specialty in the country."[17]

14: Merritt-Hawkins, "2010 Review of Physician Recruiting Incentives," Available online: http://www.merritthawkins.com
15: Burns and Muller, Op. Cit.
16: Wachter, Robert M. "The State of Hospital Medicine in 2008." *The Medical Clinics of North America.* 92:2008, 265-273.
17: Baker, Beth. "The Hospitalist is In…" *The Washington Post.* September 11, 2007, Page HE01.

Chart 32
The Rise of Hospitalists



Source: Wachter 2008. With data from the Society of Hospital Medicine (* - forecast)

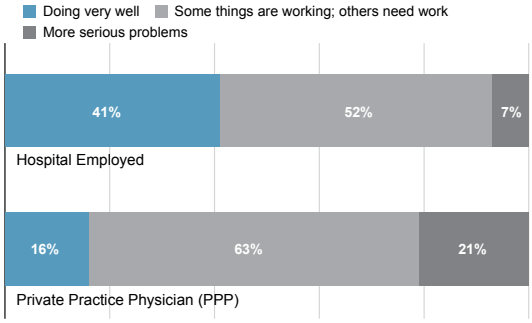
Table 3
Projected Growth of Physician and Surgeon Employment

(Employment figures in thousands)	2008 Employment	2009 Employment	% Change
Total employment, all workers	661.4	805.5	21.79
Total wage and salary employment	584.2	725.0	24.11
Healthcare	512.5	645.7	25.99
Ambulatory healthcare services	384.6	508.1	32.11
Hospitals, public and private	126.9	136.5	7.54
Self-employed workers, all jobs	77.2	80.4	4.22

Source: BLS 2010 Occupational Handbook

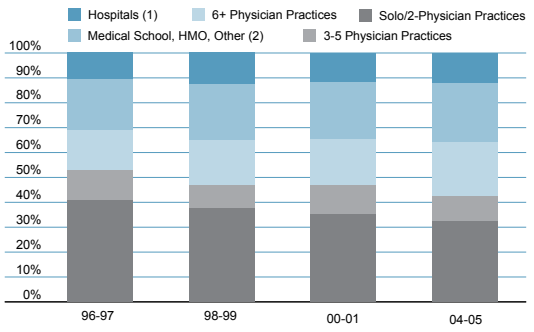
Initially, some hospitalists were used for convenience (for example, approving surgeon plans, writing prescriptions and certifying death), rather than patient care. As hospitalists have engaged more in patient care, their success in reducing costs and producing better outcomes is now leading hospitals to employ primary-care physicians, specialists, ER physicians and intensivists. Part of the noted cost savings comes from the hospitalist's knowledge of procedures, plans and organization of the hospital. In a 2005 Noblis survey of Physician-Hospital Alignment, 5 of the top 10 most effective strategies involved employing physicians. Data and anecdotal experiences suggest that employment relationships can boost economic security for physicians and improve the work-life balance; however, hospitals must view employed physicians as a "fundamental strategic asset" and provide leadership development opportunities to engage them with hospital administration.[18] Surveys point to relatively high physician satisfaction with hospital employment relationships.

Chart 33
Physician Satisfaction with Hospital Employment



Source: American College of Healthcare Executives, ACPE 2008 Survey (324 responses): Private Practice vs. Employed Physicians

Chart 34
Physicians are Leaving Solo Practices Employment by Type, Survey Data



(1) Includes physicians employed in hosptials and office-based practices owned by hospitals. Forty percent were office-based in 2004-2005.
(2) Includes physicians employed in community health centers, freestanding clinics and other settings, as well as independent contractors
Source: HSC Community Tracking Study Physician Survey

18: American College of Healthcare Executives, 2009 Congress on Healthcare Leadership.

While some physicians are seeking employment in hospitals, changes to regulations and payment schemes are forcing the hand of both physicians and hospital managers. Some hospital managers claim that the employment trend is arising out of necessity. On the reimbursement side, private insurers and government programs continue to modify payment schemes that force hospitals and physicians to negotiate their respective compensation together. For example, payers increasingly make bundled payments for a set of services to hospitals only, and then hospital management must decide how to divide the revenue. Vermillion envisions that the focus of physician employment will consider cost reductions in 2-3 years as reimbursement methods from Medicare bundle payments and stress quality over quantity. At present, he notes, "the current system pays primarily on volume of services."

Regulatory Changes

The 2010 Patient Protection and Affordable Care Act pushes the frontier further, as it contains many new regulations that shift the balance of power from physicians to hospitals. Cuts to Medicare reimbursements demand ever greater organizational change for cost reduction. Hospitals and doctors now have strong incentives to adopt electronic medical record (EMR) technology, as federal program reimbursement levels will be tied to its adoption, and the American Recovery and Reinvestment Act provides additional federal stimulus dollars for doctors and hospitals that demonstrate use of EMR. Compared to independent hospitals and doctors' offices, hospital systems and for-profit companies are in the best position to secure the necessary capital for this expensive investment. Thus, hospitals are approaching physicians and offering them adoption subsidies in exchange for some type of committed relationship. Skolrood cites the difficulties of EMR implementation at independent physician offices. He cites the intimidation of electronic record conversion as an impediment to investment, "As a doctor, do I spend a lot of money for a new system that demands a large amount of my time, entails a short-term risk to my productivity and may be the wrong system, or do I go to a hospital that already has a system supported by an IT department?"

Additionally, the 2010 healthcare legislation imposes severe limitations on doctor-owned hospitals that accept Medicare, as any new hospital must be certified as a Medicare center by December 31, 2010. And, existing and new doctor-owned hospitals that are certified on or before that date face ownership caps and growth restrictions as determined by the number of beds. The law has effectively curtailed new investment in this fast growing medical industry, and it is a boon to small community hospitals who argue that these doctor-owned facilities "cherry-pick" the best patients. Physician Hospitals of America argues that this new provision will end development plans for more than 60 new hospitals, and leaves the prospect of future development bleak. The lawsuits have already begun, but in the meantime, projects that had already sunk hundreds of thousands of dollars into planning have been put to a halt.[19]

Finally, the new healthcare legislation emphasizes quality and value measurements that focus on patient outcomes. A measure of value includes the ratio of the outcome divided by the cost. Thus, reducing that denominator will be a spotlight for hospital management, and physician employment can produce significant reductions to overhead costs through their process knowledge and higher efficiency of inpatient treatment.

As a consequence, more doctors will look to hospitals for employment as they leave solo-practices, need to adopt electronic medical records for higher reimbursements and are unable to invest in physician-owned hospitals. In turn, hospitals will look for doctors to employ as they focus on high-value services, enhanced outcomes and higher efficiency. Clearly, we expect the recent healthcare legislation to increase financial links between doctors and hospitals and promote employment models.

19: Silva, Chris. "Physician-owned hospitals: Endangered species?" *American Medical News.* June 28, 2010. Available online: http://www.ama-assn.org/amednews/2010/06/28/gvsa0628.htm

Successful Employment Models: Full Clinical Integration

We believe that most hospitals will increasingly pursue financial integration with doctors, and the rise of for-profit companies and large non-profit systems will encourage physician employment to increase revenue, capture market share, reduce costs and enhance patient outcomes.

Having physicians employed at hospitals can reduce the number of doctors that a Medicare patient typically sees during a hospital visit and will reduce physician coordination costs to share information. Presently, at one end of the spectrum, fully-integrated systems such as the Mayo Clinics, Cleveland Clinic, Billings Clinic and the Kaiser Permanente Clinics will serve as models for other hospital systems, as they employ almost all of their physicians directly. These highly integrated systems "have developed sophisticated models of economic integration" such as inter-entity transfers from funds flow models "to determine how hospital surpluses should be allocated to the medical group to support patients' care and physicians' incomes, as well as the academic goals of teaching and research."[20] Eventually, these models translate into performance-based pay for physicians based on quality and outcome metrics.

Chart 35

A Spectrum of Clinical Integration

Less Integrated				More Integrated
Bundled payment for single episode of care	Bundled payment for chronic care management	Clinically Integrated PHO	Medical staff includes both employed and independent physicians	Medical staff includes only (or almost only) fully-employed physicians
Fairview Health (Minneapolis)	Fairview Health (Minneapolis)	Advocate Health Care (Chicago)	Presbyterian Health (Albuquerque)	Cleveland Clinic (Ohio)
Geisinger Proven Care Program for Coronary Artery Bypass Graft Surgery (Danville, PA)	Sutter Health (California)	Tri-State-Health (Maryland)	Virginia Mason Hospital (Seattle)	Billings Clinic (Montana)
	Park Nicollet Health (Minneapolis)		Geisinger Hospital (Danville, PA)	Kaiser Permanente (multi-state)
			Intermountain Health Care (Utah)	

Source: Trendwatch, February 2010, American Hospital Association

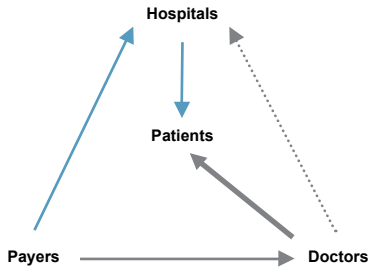
Successful new models will ensure that hospitals and physicians share the risks and benefits of high-quality patient treatment. Skolrood describes a typical system with multiple elements. A base salary provides a monthly draw, but, as a practice matures, a "practice contribution model" drives pay. This model returns the excess of collections and expenses to the doctor and incentivizes correct coding accuracy, high performance and low overhead. Finally, an additional percentage of base pay is based on quality using Physician Quality Reporting Initiative (PQRI) standards. These specific measures include patient satisfaction, and objective measurements that translate into a year-end bonus. He explains that this model can enhance physician performance, because the natural competitiveness and internal drive of physicians causes them to strive to not only maximize their incomes, but also to be at the top of peer-reported comparative quality assessments.

Hospital-physician relationships and the microeconomic structure of employment contracts will continue to be the focus of incentive alignment, cost-containment efforts and best practice studies. Skolrood cites the need of hospital administrators to demonstrate fairness and to build and maintain trust with employed physicians. "Physicians are scientists. We can show them why their compensation is reasonable based on data, and let them draw their own conclusions." Such candidness helps to sustain an employment relationship, build respect and counter the perception that hospitals do not appreciate the value that physicians provide.

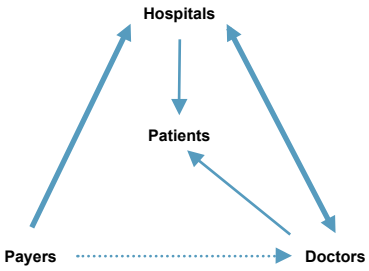
20: Burns and Muller, Op. Cit.

Chart 36

Hospital Physician and Payer (Government and Private Insurance) Relationships: Past and Future



Past: Independent physicians have weak links with hospitals, receive compensation directly from payers, and control patient treatment.



Clinical Integration, Towards the Future: Hospitals coordinate patient care with physicians, receive bundled payments, and distribute with linked doctors who receive fewer fee-for-service payments

Source: BBVA Research

Risks and Barriers to Change

Hospitals seeking to employ physicians will confront both legal and cultural barriers. There are a host of legal restrictions from anti-kickback laws to state prohibitions that may need to be addressed for this model to flourish. Texas and California still have laws on their books that inhibit hospitals from hiring physicians. In Texas, these prohibitions revolve around the concerns about the corporate practice of medicine, and since state laws only permit an individual to hold the license to practice medicine, courts have interpreted this requirement as limiting hospitals from hiring physicians directly; however, the state medical board now offers waivers. As academic centers, for-profit healthcare companies and large systems receive waivers to this rule, smaller hospitals will be at a disadvantage in these states. The accompanying table highlights some of the key potential regulatory and cultural barriers to success.

Table 4

Potential Barriers to Employment

Legal	Cultural
Antitrust (Sherman Act)	Mistrust between management and doctors
Ethics in Patient Referral Act ("Stark Law")	Aging physician workforce
Anti-kickback Law	Market power of independent physicians
Civil Monetary Penalty	Lack of compensation beyond productivity
IRS Tax-exempt Laws	Lack of physician administrative leadership
State Corporate Practice of Medicine	Role of specialists and "turf" issues
State Insurance Regulation	Conflicts between evidence-based and intuition-based practice
Medical Liability	Physician reluctance to take call
	Minimal time of physicians spent in hospitals

Sources: Trendwatch, Feb. 2010, AMA and Burns and Muller, op. cit.

Furthermore, cultural barriers persist between hospital management and physicians. The failed attempts at integration during the period of HMOs sparked a conflagration of tensions between hospital management and doctors due cultural differences and a lack of trust among older physicians.[21] As the physician workforce continues to age, older physicians may be less willing to work with hospital management as an employee. Top strategies for successful employment models suggest employing a doctor as a Chief Medical Officer, for example, who can deal with the administrative and political needs of employed physicians. Bringing doctors to the administrative decision-making table will be paramount to successful integration.

21: Crosson, Francis and Laura Tollen, Eds. Partners in Health: *How Physicians and Hospitals can be Accountable Together.* Kaiser Permanente Institute for Health Policy: Jossey-Bass. May 3, 2010.

Differing agendas of physicians in a family practice group setting can make the purchase of these practices a formidable challenge. Skolrood emphasizes that some physicians often have difficulty adapting to a group culture and relinquishing ownership, thus any employment contract must balance the right amount of autonomy. Furthermore, many physicians are used to exercising quick decisions with less business advice, and a conflict can arise with administrators. For example, hospital administrators may take longer to evaluate a proposal for new equipment. Thus, Skolrood offers newly-employed physicians "a back door to get out easy, as they can buy back their practice. We don't want disgruntled employees."

Additional risks stem from even greater regulation and special interest lobbying efforts to prevent hospitals from employing physicians directly in defense of autonomous decision making and a separation of cost-consciousness from treatment decisions. While this approach to medicine recognizes the inherent intuition of doctors and treatment decisions, it ignores the potential for efficiency gains from information sharing, new technology and evidence-based treatment plans. There is little evidence, however, that aligning physician and hospital management incentives through employment contracts leads to perverse patient outcomes and poorer quality treatment than the independent physician model.

Bottom Line

As pressure to contain costs mounts, hospitals and doctors are entering into new relationships to solve incomplete contracting problems. In the near-term, we expect hospital systems and for-profit companies to purchase independent hospitals, adopt technology and experiment with new models of physician employment. There is no one clear answer to achieve full clinical integration and successfully align physician incentives with hospital management to deliver high-quality outcomes at the lowest cost. Given that the majority of hospitals are independent and non-profit, eliminating the existing wedge between management and physicians through consolidation and employment models will produce large efficiency gains in healthcare. The net effects of the 2010 Patient Protection and Affordable Care Act are currently unclear, as it did little to remove legal barriers that inhibit physician employment and protect the industry's fragmentation, but it did make changes that will encourage hospitals and physicians to collaborate directly. Without substantial reorganization to harness economies of scale and implement nationwide best-practices, costs in the hospital industry will only continue to rise at high rates.

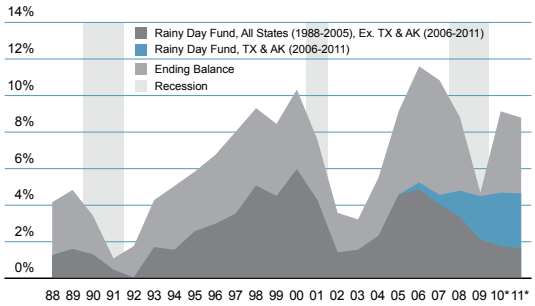
Boom and Bust: State and Local Government Fiscal Distress

While much attention has centered on the federal government's massive deficits, state and local governments have been paring their expenditures as a result of severe shocks to their revenue streams. State governments rely primarily on individual income, corporate net income and sales tax revenues; these categories fell by 17.1%, 9.4%, and 8.3%, respectively in 2009 from 2008. Although property tax revenues have continued to grow on a Y-o-Y basis, local governments have not been spared by the recession. On average, property taxes comprise 26% of total local government revenue while transfers from the state governments supply nearly 31%. The reduction in state revenue has occurred concurrently with the recession, and states with high unemployment rates face significant budget pressures. High unemployment results in less taxable income and lower consumption growth, and thus lower tax revenue.

State and local government officials should have recognized the pro-cyclical nature of their revenue stream; however, many state and local governments have now found themselves deep in a fiscal hole of their own creation. The prosperity of the 2000s filled state government coffers and, in response, elected officials ramped up spending and debt. After the 2001 recession, state and local government tax revenue surged as employment and incomes grew, the housing bubble inflated property values and consumers took on debt to finance additional consumption. Additionally, high returns on pension assets complemented the revenue from income, property and sales taxes. Flush with cash, some states chose to exercise fiscal prudence and make large contributions to Rainy Day Funds to stabilize their budget in the event of a recession, but other states chose to avoid saving while they increased government services and payrolls, inadequately funded their pension systems and even committed to higher pension obligations for current workers.

Chart 37

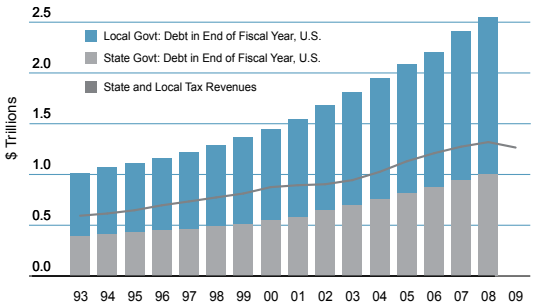
State Rainy Day Fund and Ending General Fund Balances, FY 1988-2008, % of annual expenditures



Source: National Association of State Budget Officers
(* - forecast)

Chart 38

State and Local Government Debt and Total Tax Revenues



Source: U.S. Census/Haver Analytics

The majority of states have little remaining in their rainy day funds. At the end of fiscal year 2010, the National Association of State Budget Officers projects a total rainy day fund balance of only $29 billion, but 63% of that total is held by Alaska and Texas.[1] If we exclude these two states, the average rainy day fund balance as a percent of total expenses drops from 4.7% to 1.8%. This statistic underscores the lack of available liquid funds that states can use to offset revenue shortfalls and balance their budgets. Because all but one state (Vermont) must balance their

1: National Association of State Budget Officers, "The Fiscal Survey of States," June 2010. Available online: http://www.nasbo.org

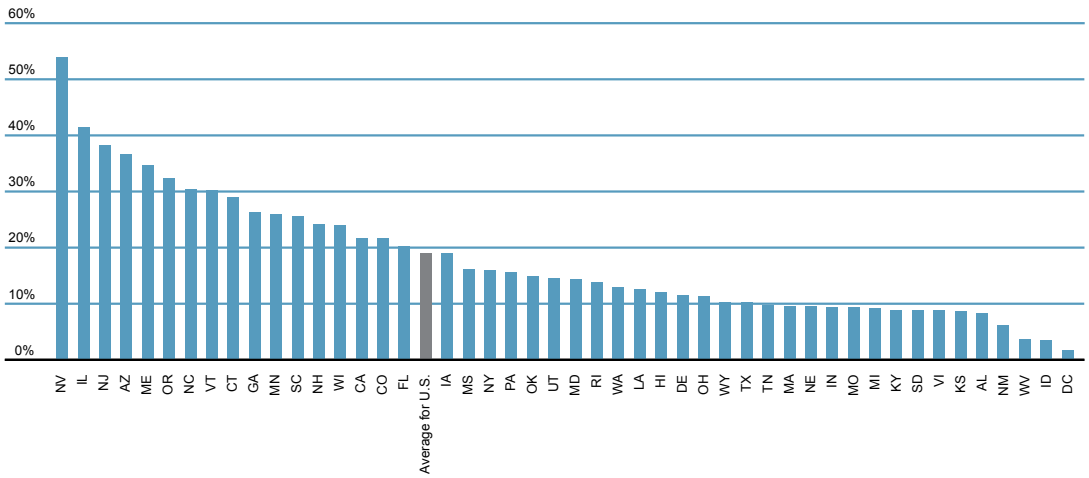
budgets according to state laws, legislators must enact steep budget cuts and/or increase taxes. The American Recovery and Reinvestment Act provided a surge of deficit-financed federal money and essentially bought time for state legislatures to pass updated budgets; however, the length and severity of the recession is forcing profligate state and local governments to streamline essential services and cull bloated spending on over-budget projects.

Some opponents object to state and local budget cuts because they believe that government actions should dampen the downturn of the business cycle by providing a stimulus when economies need it. While many of these critics decry the pro-cyclical state budget cuts this year and next, many of these same people hailed and lobbied for the pro-cyclical spending increases during the good times. Furthermore, aside from Rainy Day Funds, balanced budget obligations legally handcuff state legislatures from providing the counter-cyclical impulse that these critics desire, because state and local governments are unable to borrow money to finance their general spending. State and local level debt-financed spending is usually reserved for capital projects that generate long-term returns. Hence, prudent fiscal behavior may have mandated smaller spending increases and even larger contributions to budget stabilization funds during the boom years that could be used in a crisis. Aside from these funds, the only indirect way that states can borrow money to finance general spending obligations derives from federal government transfers, and thus increases in the national debt.

Currently, 46 states are facing a budget shortfall for the 2011 fiscal year. As a percentage of the 2010 fiscal year budget, Nevada, Illinois, New Jersey, Arizona, Maine, Oregon, North Carolina and Vermont face the highest shortfalls, in excess of 30%.

Chart 39

State Finances: Projected Fiscal Deficits, FY 2011 as a %of FY 2011 Budgets

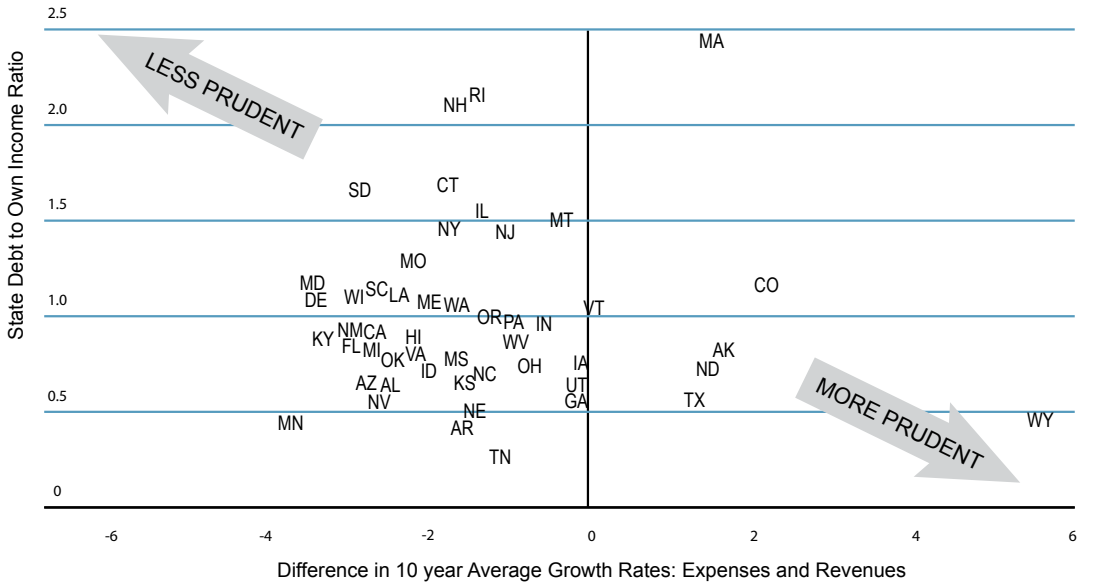


Note: Alaska, Arkansas, Montana, and North Dakota report no budget shortfall for the period.
Source: National Association of State Budget Officers, July 2010

State Finances: Rising debt, revenues and expenses

Over the 10 year period ending in 2008, the average annual real growth rate of per-capita total expenses exceeded that of revenues by more than 1% for 36 state governments. This long-term imbalance illustrates how the current state budget predicament developed. To compound the issue further, real per-capita state debt grew in excess of 4% in a majority of states during this time. Much of this debt was taken on to finance long-term construction projects, but nevertheless, the ratio of state debt to state tax and fee revenue (revenue from own sources) now exceeds 100% in 19 states. The accompanying graphic illustrates the situation.

Chart 40
State Finances: Fiscal Prudency and Profligacy



Source: U.S. Census, BBVA Research and Haver Analytics

The composition of total state and local government debt is heterogeneous across states. On average, approximately 40% of debt is held by the state government, while the remaining 60% remains in local government issuance. But, this composition ranges between 12-15% for the state in Tennessee and Texas to nearly 80% in the northeast states of Vermont, Rhode Island, Connecticut and Massachusetts. Thus, the risks that rising state-level debt presents to the states will vary by its composition. States with low debt have lower relative debt service needs, and thus have more flexibility for budget modifications.

In the near term, the high level of public debt and underfunded liabilities in some states and municipalities, combined with the revenue shock, raises the possibility of state or local government defaults. Indeed, the cost of insuring 5-year public debt in some states has spiked during the last two years.

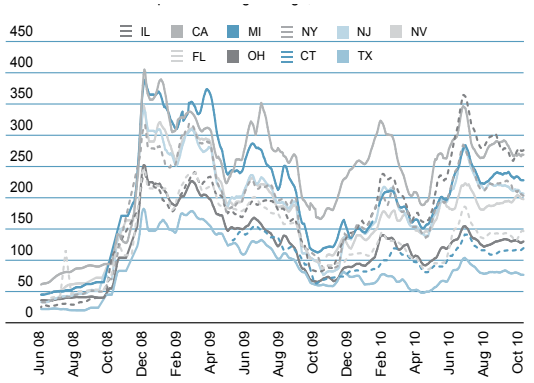
The market recognizes these risks, as borrowing costs rise for those governments in the worst fiscal positions. As a measure of this state government borrowing risk, we look to the credit default swaps for state five-year bonds. The higher number is related to a higher risk of default. We should note that there does not appear to be a mechanism in place for state default, it is questionable as to whether a state has actually defaulted in the past (shortly after the Great Depression), and we can't answer whether the federal government would permit a state to default. Given these qualifications, however, we do find a positive relationship between the current level of the CDS, the state's debt to own-income ratio and the unemployment rate. We measure the debt-to-income ratio as the level of state government debt to the state's self-generated tax and fee revenue stream. The unemployment rate is the current September rate as announced by the Bureau of Labor Statistics. As not all states have available CDS rate data, we consider the 5-year credit default swap rate for 12 states.[2] Our estimation results suggest a relationship between a state's fundamentals and its perceived risk of default.

$$\log CDS = \alpha + \beta \left(\frac{Debt}{Income} \right) + \delta\ (Unemployment\ rate) + \varepsilon$$

2: The data was obtained from Bloomberg on 10/19/2010, and the twelve states are: CA, IL, NY, TX, MI, NJ, FL , MD, OH, NV, CT, WI

Chart 41

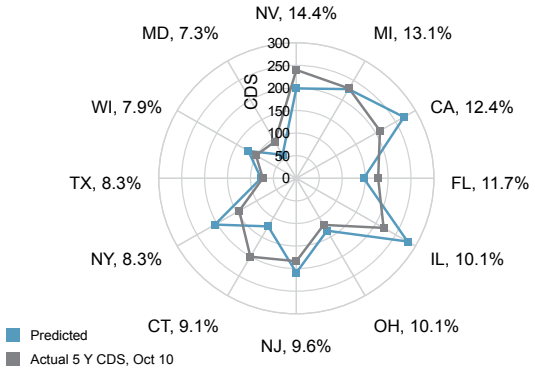
Credit Default Swaps for 5 Year Bonds, Selected State Governments, 7-period moving average, Basis Points



Source: Bloomberg

Chart 42

Actual vs. Predicted CDS, ordered by current Unemployment Rate



Source: BBVA Research

The significance of debt-to-income and the unemployment rate suggest that states with higher CDS tend to have higher debt levels and a worse labor market. As a result, the market expects these states to pay a premium to issue debt to fund new projects, pay pension obligations or re-issue expiring debt. Over the long term, these higher borrowing costs will result in higher debt service payments as a percentage of expenditures and may require even more tax increases or cuts to other programs.

Underfunded Liabilities: Lurking in the shadows

While the CDS model presented focuses on a state's perceived risk of default relative to its current debt situation and labor market, an important missing component is the state's underfunded liabilities. These state and local government underfunded liabilities are primarily retirement pension, health insurance and other benefit obligations for current and retired workers. Historically, pension plans experienced high returns, and thus as public employee unions negotiated for even more generous retirement packages, some governments opted to reduce their annual contributions to increase spending on other priorities. The Pew Center reports, "In 2000, slightly more than half the states had fully funded pension systems. By 2006, that number had shrunk to six states. By 2008, only four—Florida, New York, Washington and Wisconsin—could make that claim… during the past five years, 21 states failed to make pension contributions that average out to at least 90% of their actuarially required contributions."[3]

Furthermore, due to the high returns, state and local governments reported the present value of their liabilities with an expected return of around 8%. Because the present value of these obligations falls with the higher discount rate, some argue that state and local governments are hiding the true cost of these unfunded liabilities.[4] Joshua Rauh and Robert Novy-Marx, the Pew Center, the National Center for Policy Analysis and the Cato Institute have all produced independent research highlighting the extent of underfunded liabilities. Depending on different assumptions about the expected rate of return on current assets, the rate of inflation, and the rate of payouts, the total liability estimate ranges between $1 trillion to over $3.3 trillion. Rauh provides estimates of the lifespan of states' current pension assets in fulfilling their payments. Based on a 3% inflation rate (which is linked to annual cost of living increases in pension plans) and an 8% annual return on assets, Rauh estimates that current payment obligations will exhaust Illinois' pension assets first in 2018 followed by Connecticut, New Jersey and Indiana in 2019. With these same assumptions, he calculates that only New York and Florida will never run out of money and that 20 states will run out of money in 15 years.[4]

3: Pew Center on the States, "The Trillion Dollar Gap: Underfunded State Retirement Systems and the Roads to Reform," February 2010. Available at http://downloads.pewcenteronthestates.org/The_Trillion_Dollar_Gap_final.pdf.
4: Robert Novy-Marx and Joshua D. Rauh, "Public Pension Promises: How Big Are They and What Are They Worth?" Working Paper, December 2009, pages 2 and 18. Available at http://ssrn.com.

As a result, and to counter their investment losses during the recession, some states are raising employee contributions and enacting non-pecuniary changes, such as increasing the retirement age for state workers (new and recently hired workers are most affected due to legal restrictions). In 2009, 15 states enacted pension system reforms, and this number is likely to rise in 2010. Furthermore, to cover their investment losses, we expect some states to issue Pension Obligation Bonds. The state of Illinois made such an issuance in March 2010; however, these bonds present risks to state finances, because the expected returns must exceed the borrowing costs. In the case of Illinois, for example, the elevated risk of default is translating to higher borrowing costs. If the returns are not great enough, and the state defaults, a federal government bailout will transfer the state's costs to all U.S. taxpayers.

Table 5

Relationship of Unemployment and Debt to CDS rate

	(1) Log CDS	(2) Log CDS	(3) Log CDS
Log State Debt to Own-Income	0.743*	0.695*	
	(3.24)	(3.20)	
Log Unemployment Rate	2.072***	1.687***	
	(5.15)	(7.65)	
State Debt to Own-Income			0.755*
			(2.72)
Unemployment Rate			0.196**
			(4.76)
Constant	0.284	1.219*	2.248**
	(0.30)	(2.42)	(3.82)
Observations	12	11	12
Adjusted R-squared	0.657	0.614	0.609
t statistics in parentheses	* p<0.05** p<0.01 *** p<0.001		

Source: BBVA Research

Table 6

Funding Level of Pension Obligations, 2008

Percent of a fully-funded contribution		
100%	Less than 80%, greater than 66%	Less than 66%
Florida	Alabama	Massachusetts
New York	Alaska	Connecticut
Washington	Mississippi	**Illinois***
Wisconsin	Colorado	Oklahoma
	Nevada	Rhode Island
	New Hampshire	**Kansas***
	Hawaii	Kentucky
	New Jersey	West Virginia
	Indiana	
	South Carolina	
	Louisiana	
	Wyoming	
	Maryland	

*Have less than 60% of assets on hand to meet current obligations
Source: Pew Center on the States, 2010

Municipal Challenges: High Debt and the Evaporation of a Tax Base

Municipal governments must also make significant modifications to their taxes and spending. The largest share of state and local government debt belongs to municipalities, as they issued exorbitant amounts of debt in recent years to fund expansion. Certainly, unlike state governments, municipalities have defaulted on bond payments in the past, and some, such as Harrisburg, PA, may even declare bankruptcy such as Vallejo, CA did in 2008. A recent article highlights Harrisburg's predicament: 2011 estimated revenue is 56M; 4.5M is reserved for delayed payments, and 12M would be needed to service debt. The article suggests that at least 10M in additional cuts from general services are necessary.[5] Historically, municipal bonds are viewed as lower risk investments, because the recovery rates are typically higher than comparable corporate debt.[6] One exception to the high recovery rates, however, is evident in the rising defaults of "dirt bonds" that municipal governments use to establish special taxing districts to fund new neighborhoods. These bonds have been used in fast-growing states like California, Florida, Texas and Colorado, and they shift the costs to the residents; however, without new residents, the bonds must be paid from developer reserves, and technically enter default. Estimates put the total of Florida's dirt-bond issuance between 2003 and 2008 at $6.5 billion, and default on $2.7 billion of bonds is expected this year.[7]

Further adding to the near-term problem is the collapse in property values. To date, property tax collections have been positive on a Y-o-Y basis; however, their growth rate has slowed. Our research suggests that when homeowners contest the former appraised values of their homes to lower their tax liabilities, the municipalities with the largest declines in housing prices may suffer declines in revenue within 24 months. The prospect of lower revenue is demanding sizeable cuts to budgets and local government employment.

5: Miller, Dan. "Harrisburg controller on city's best course of action," October 31, 2010. Available online: http://www.pennlive.com.
6: Fitch Ratings, "Default Risk and Recovery Rates on U.S. Municipal Bonds." January 2007.
7:Hart, Jerry. "'Dirt bond' default wave sweeps over Florida," March 10, 2010. Available online: http://staugustine.com.

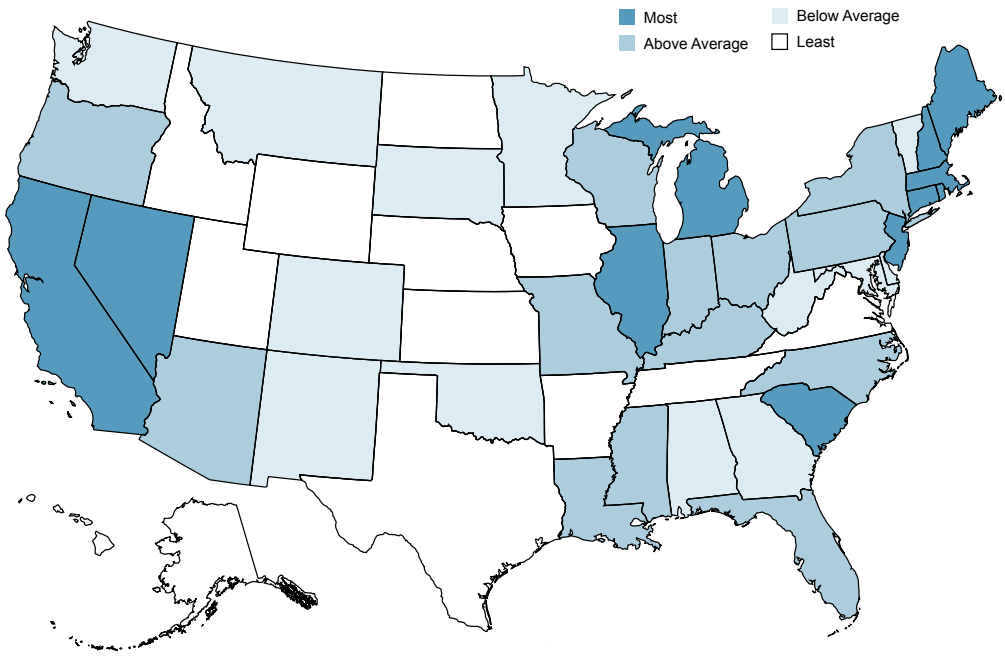
Municipal governments have their own underfunded pension and health care obligations that they must fund for their workers.[8] While the total of these obligations is less than state governments, additional tax increases to pay for these obligations threatens to cause residents to leave and further erode the tax base.

A Very Long Road to Recovery

State and local governments have significant challenges ahead given the macroeconomic prospects of low growth and stubbornly high unemployment. Rising debt service and underfunded pension obligations will force states to raise taxes or cut spending on services. Although state tax collections are now positive on a Y-o-Y basis, we expect states to experience subdued growth of income and consumption taxes as the labor market remains weak, and households reduce spending to increase their savings and pay down debt. Furthermore, a storm may be brewing for municipal governments that experienced the most dramatic falls in housing prices, as the tax-assessor's recorded housing values will gradually be revised downward as homeowners reduce their tax liabilities. The most irresponsible state legislatures face a hard sell to voters, as they will expect state residents to pay more taxes to pay for their profligacy and outsized pension promises. Budget cuts, layoffs and service reductions will hamper recovery efforts, as former government workers must transition into the private sector. The impact, however, will be heterogeneous, as states that continue to add residents and workers will produce the revenue to maintain service levels.

Map 2

State Government Fiscal Distress, by Quartile



Note: This map presents aggregate state fiscal distress as measured by an index that combines standardized values of the projected FY2011 deficit, the debt to own-revenue ratio, the difference of the 10 year average growth of expenses and revenues, the current unemployment rate, and the 10 year annual average GDP growth.
Source: BBVA Research

8: Collins, C. and A. Rettenmaier, "Unfunded Liabilities of State and Local Government Employee Retirement Benefit Plans," National Center for Policy Analysis. July 2010. Available online: http://www.ncpa.org/sub/dpd/index.php?Article_ID=19634

Small Business Employment and Credit: Rhetoric and Reality

Small business growth is often mentioned in the media as meriting extra attention in terms of employment generation. This article investigates to what extent small businesses warrant extra attention in terms of job growth and credit usage. The first section of the article specifically focuses on net employment creation by firms of different sizes and with different definitions of what constitutes a small business. The second section of this article focuses on the different types of finances available to small businesses, the effect of small business credit on economic growth and our outlook for small business credit growth in select segments. It specifically details the disparaging effect of the housing bubble on the smallest of small businesses and the role of commercial real estate in financing small business development. Our first task, however, is to review the employment picture for small businesses and also pin down a more fine-grained description of small businesses in the U.S.

The State of Small Business Employment

People commonly view small business data through one particular definition. This section demonstrates that, depending on your chosen definition of small businesses, the implication of the data changes dramatically. We also detail the different publicly-available datasets for understanding small business employment creation. The data shows that small businesses – those firms will less than 100 employees – are increasingly losing ground in terms of share of total employment to firms with more than 500 employees. In term of net creation of employed persons, both firms with less than 100 employees and firms with more than 500 employees are for the most part equal. However, data on net job creation shows that firms with one to four employees are lagging the hiring rates of all other firms during the trough of the recession.

Understanding Firm Size and Growth

Before we begin to sift through the data on small businesses, we must first clear the air about three instruments we use to describe the dynamics of small businesses over time: definitions, datasets and observed trends. First, the definition of small businesses is set by the Small Business Administration as those firms with less than 500 employees. However, globally a variety of different definitions exist, ranging from 100 to 500 employees. This article will generally refer to small businesses as those firms with less than 100 employees, although we will describe data for all size classes in order to demonstrate important differences between the 100 and 500 employee barrier. It is important to note that when using the 500 employee limit, more than 80% of firms employed fewer than 10 workers and less than 3% employed 50 or more. Using the 500 employee limit therefore does not adequately describe the number of small firms as efficiently as a lower limit.

Second, the data collected by different organizations and agencies may be subject to different concerns. A relatively up-to-date dataset on small and large firms is the Business Employment Dynamics (BED) from the Bureau of Labor Statistics (BLS). The data span quarterly is only from 1992 to 4Q09, but it is formed from 98% of employment on nonfarm payrolls. The dataset tracks four types of job flows: employment gains at opening establishments, expansions at existing establishments, losses at closing establishments and contractions at existing establishments. The sum of openings and expansions represents total job gains, while the sum of contractions and closings represents total job losses. The closings and openings data also provide a measure of firm birth and death rates, which are important measures of competition and creative destruction in the economy. The BLS utilizes a “dynamic sizing” methodology for awarding employment growth to different size categories of firms. This method awards a firm’s quarterly employment gain or loss to each size class in which the change occurred. For example, a firm with one to four employees that hires 20 additional employees from quarter to quarter will credit job growth to the five to nine employee category, followed by the 10 to 19 employee category, and so on. Some commentators point to the fact that while the economy grows, the size classes remain the same over time, resulting in a reclassification

bias. Other possible datasets are the Business Dynamics Statistics (BDS) and Compustat. These datasets are more "longitudinal" in design, but are not necessarily as up-to-date as we would hope given the need to describe current issues facing the economy. We tend to focus on different datasets depending on the issue requiring confrontation.

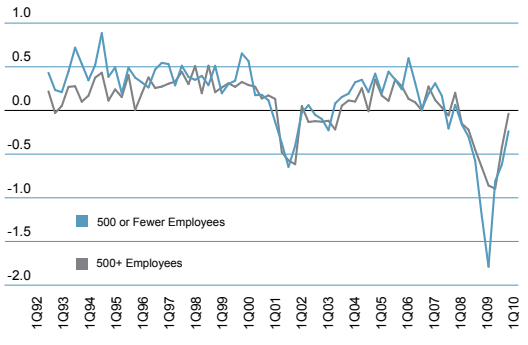
Lastly, over the years economists developed a number of observed trends governing the growth and development of firms. We generally expect small firms to grow faster than large firms, but large firms hold a higher probability of survival over time. In what is known as Gibrat's Law, the expected increase in firm size in each time period is proportional to the current size of the firm. If firms are considered to reside within a "life cycle," small firms grow quickly, but as they mature their prospects for rapid growth decline. In the beginning of an industry's life, a large number of firms may exist but then later face a cataclysmic "shakeout" process as technologies or business models dominate over others, quickly eliminating competitors and converging to a more mature industrial structure. Turbulence within an industry is also important – essentially this is the "churning" of firms as they enter and exit, grow or shrink. This may vary between different industries due to industry-specific patterns of demand or displacement through technology or new products. From the perspective of small firms, this research suggests we should expect them to demonstrate higher growth, higher entry and lower survival rates than large firms. However, to what extent are small businesses more or less important for creating employment than large firms? Given our definitional and statistical challenges, we next take a look at the data in detail.

Who creates more employment?

We begin using the BED data to demonstrate how the use of one small business definition over another changes our perspective on which category represents the engine of employment creation. Chart 43 demonstrates the standard story using the 500 employee small business definition: small firms generate more net job growth (job gains less job losses) than large firms. Small firms are worse off during the most recent recession than large firms. However, the message changes when we switch the small business definition to 100 or fewer employees: in this case in Chart 44, large firms generate more net jobs than small firms and large firms are worse off than small firms in both recessions. The message changes even further when we use a three-way categorization: firms with less than 100 employees ("small firms"), firms with 100 to 500 employees (we will call this "medium-sized" firms), and all other firms. In this case we see something more interesting in Chart 45: both large and small firms are roughly equal in net job creation, but during the most recent recession small firms are worse off, the reason for which we detail in the following section on financing. For the purposes of understanding small business' contribution to employment, we believe this three-way distinction is best.

Chart 43

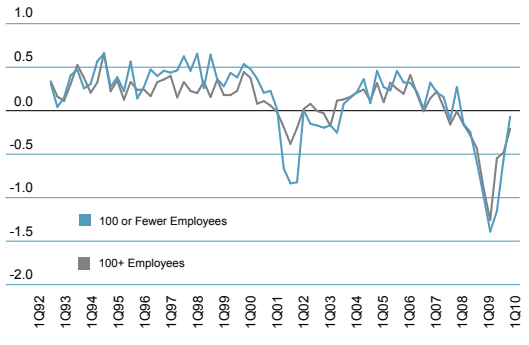
Standard Small Business Definition Net Job Growth (mn persons)



Source: BLS and BBVA Research

Chart 44

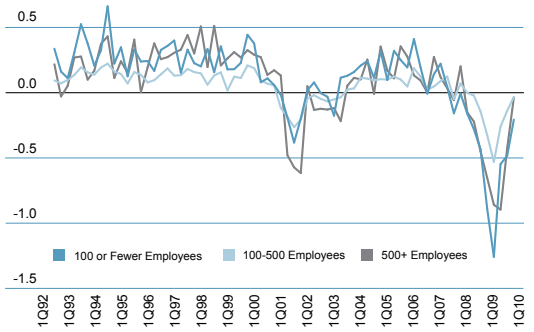
Nonstandard Small Business Definition Net Job Growth (mn persons)



Source: BLS and BBVA Research

Chart 45

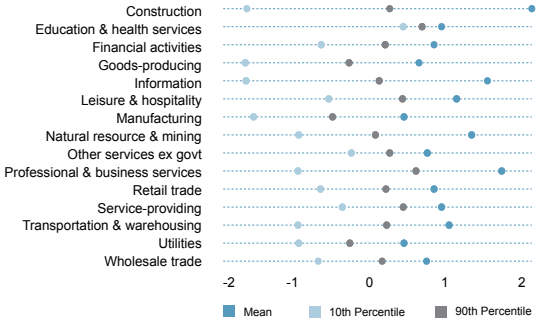
Threeway Small Business Definition Net Job Growth (mn persons)



Source: BLS and BBVA Research

Chart 46

Net Job Creation Rates by Industry



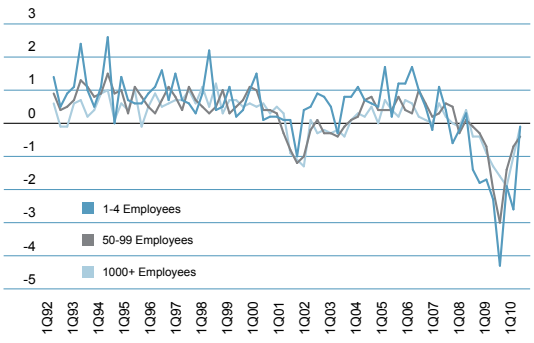
Source: BLS and BBVA Research

Which size category of firm is at risk for job creation?

Another metric of job creation is to look at the rate of job gains and job losses, the difference between which is the net job creation rate. This indicator demonstrates the net pace of job creation by different firm size classes in the economy. A comparison between firms with one to four employees, firms with 50 to 99 employees and the largest firms in Chart 47 suggests recovery in job creation, with the smallest of firms suffering the worst during the recession. Chart 48 illustrates that for our preferred small business definition, all firm size classes are behaving distinctly from firms with one to four employees. The steeper declines in firms with one to four employees may entail serious implications for new firm establishment and entry rates into the economy as the one to four employee size category represents the highest rate of openings of all size classes. From a very long term perspective, net job creation rates describe areas of long-term structural change in the economy. Taking an average of the quarterly net job creation rates since 1992, we find that the top five states for net job creation rates are, in ascending order, Texas, Idaho, Arizona, Utah and Nevada. Part of this trend is related to population growth as states with larger populations and more mature industrial structure will have slower rates of net job creation. For example, California and New York are ranked 40th and 46th, respectively. Michigan's average quarterly net job creation rate is negative, a result suggestive of the struggles of manufacturing over the past two decades. At the national level, this trend in long term structural change is mirrored in Chart 46, which shows that some industries like manufacturing have a negative mean net job creation rate. The education and health industry is unique in that not only is its mean job creation rate is in positive territory, but also its 10th and 90th net job creation rate percentiles are also in positive territory. An additional consideration is if a state contains more small businesses than another state, its net job creation rate will be higher due to the inherent higher growth rates of small businesses.

Chart 47

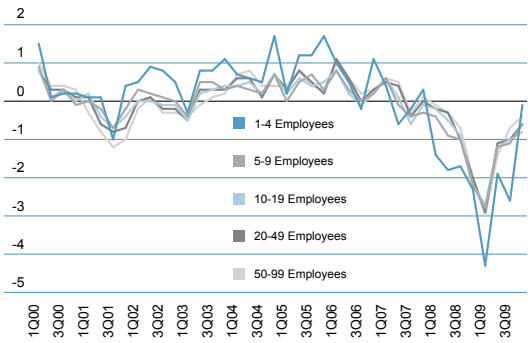
Net Job Creation Rates by Firm Size (%)



Source: BLS and BBVA Research

Chart 48

Net Job Creation Rates by Firm Size (%)

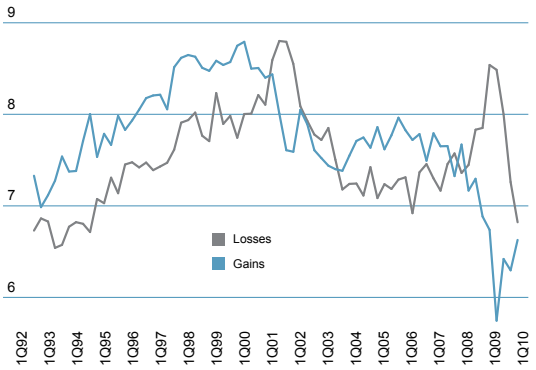


Source: BLS and BBVA Research

Who is responsible for job gains and losses?

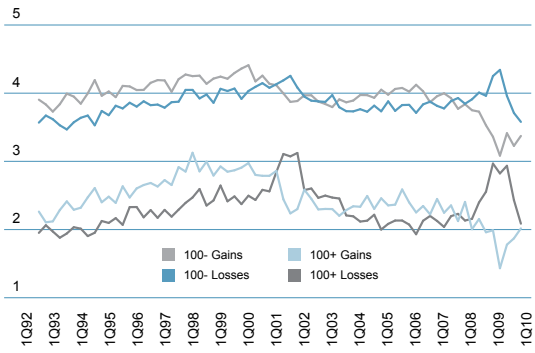
Another often-discussed issue revolves around the "jobless recovery" in the early 2000s. As Chart 49 illustrates, the number of employment gains grew steadily until the 2000-2001 recession. While employment losses increased in tandem with the employment gains, the gap between the two figures remained large enough to offer steady net employment creation. After the recession, the magnitude of national employment gains and losses reached a lower level than before the recession, resulting in the "jobless recovery" moniker. Chart 49 also indicates serious dislocations in the most recent crisis, with job losses at their lowest level since 1994, but hiring remains sluggish. An important issue to keep in mind is that the level of employment gains and losses reflects only new additions or subtractions to payrolls. Small firms are highly dynamic, while large firms are mature, suggesting small firms are responsible for more new hiring and firing than large firms. This is reflected in our charts of various definitions of small and large businesses and their level of employment gains and losses. The most important part of this is the net employment creation rates for the size categories rather than the level of gains and losses. However, for the national level for all firms, the level of employment losses and gains may impart some useful trends. Given the life cycle of firms and the fact that only new job gain and losses are tracked by this dataset, what other data is available on the importance of small and large businesses in employment? Additionally, what can this dataset tell us about the dynamics – the rates of entry, exit, expansion, and contraction – of differently-sized firms?

Chart 49
National Job Gains and Losses (mn persons)



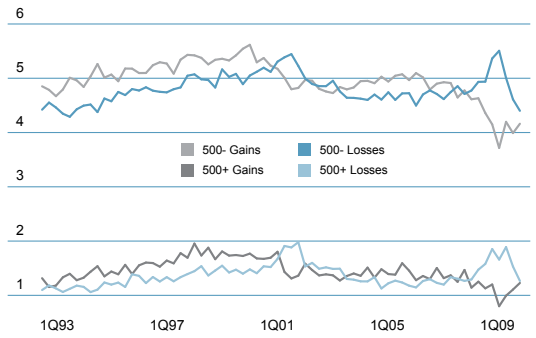
Source: BLS and BBVA Research

Chart 50
National Job Gains and Losses (mn persons)



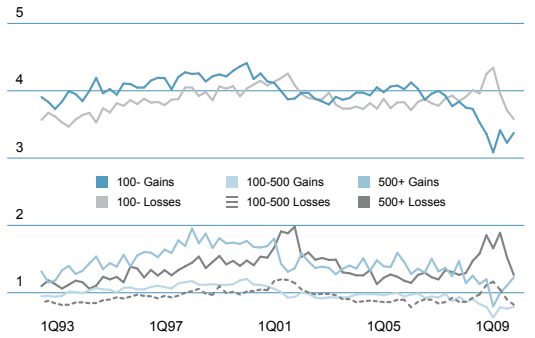
Source: BLS and BBVA Research

Chart 51
National Job Gains and Losses (mn persons)



Source: BLS and BBVA Research

Chart 52
National Job Gains and Losses (mn persons)



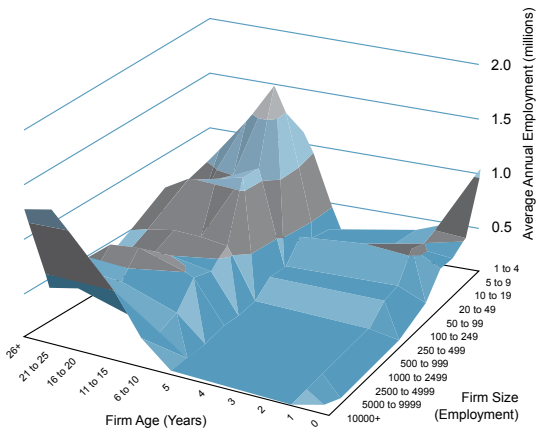
Source: BLS and BBVA Research

Are small or large businesses responsible for most total employment?

For the answer to this question, we turn to an annual dataset from the Census' County Business Patterns. For each year, the Census differentiates total employment by firm size. We create different definitions of small and large businesses using this dataset. In this case, we are looking for the percentage of total employment that is attributable to large and small businesses rather than net changes in employment. In 2006, using a 500 employee division between small and large businesses, the share of employment between large and small firms is split 49.8% to 50.2%, respectively. Firms with 100 employees or less, however, constitute only 35.6% of total employment, illustrating again the small business definition issue. A notable feature of the data is that while the total employment share of firms with between 100 and 499 employees remains roughly constant since 1988, the employment share of firms with less than 100 employees declined while the share of firms with more than 500 employees increased. Using the BDS, we can tease out some of the relationships between firm size, average level of employment and firm age. Larger firms tend to be older. At the same time, older small firms comprise a larger level of employment than younger small firms, except for the smallest of firm size category. A close examination of Chart 53 shows that very young, very small firms generate a very robust level of employment compared to older, very small firms.

Chart 53

Firm Age and Firm Size



Source: Census

Table 7

Annual Share of U.S. Employment, by Firm Size (Employees)

Year	0-4	5-9	10-19	20-99	100-499	500+
2006	5.0%	5.8%	7.2%	17.6%	14.6%	49.8%
2005	5.1%	5.9%	7.3%	17.6%	14.5%	49.6%
2004	5.1%	6.0%	7.4%	17.9%	14.6%	49.1%
2003	5.1%	5.9%	7.3%	17.8%	14.5%	49.3%
2002	5.1%	5.9%	7.3%	17.7%	14.2%	49.9%
2001	4.9%	5.8%	7.2%	17.7%	14.3%	50.1%
2000	4.9%	5.9%	7.3%	17.8%	14.3%	49.9%
1995	5.4%	6.4%	7.7%	18.4%	14.6%	47.5%
1990	5.5%	6.7%	8.1%	18.9%	14.5%	46.3%

Source: Census

The data suggest that the employment size distribution of firms in the U.S. economy over time shifted to the balance of larger firms. One possible reason for this shift is the nature of the global economy. Large-scale, capital-intensive goods that originate in the United States are built by large firms with a strong competitive advantage in research, development and distribution. These large firms themselves rely on a supply chain that comprises similarly-large firms, a trend that occurred as pressure on the firm integrating a supply chain cascaded down to suppliers to more intensively innovate and reach higher scale. For example, Boeing and Airbus are the only two companies that manufacture large commercial aircraft. Locked in intense competition, Boeing relies on other large firms to supply the numerous components that Boeing integrates into the final product.

A second consideration is the role of large firms in the systematic discovery of new products and processes in the economy. Although the U.S. began its life as an economy of small landowners and merchants during colonial times, the U.S. invented the modern corporation as we know it today (although the British invented the first multinational corporation with the East India Company in the 18th century). During the late 19th and early 20th centuries, U.S. companies discovered the merits of scale economies, mass production and concentration of research and development. These pressures have only increased in a more globalized economy, a possible explanation for the employment size distribution shift.

Which firm size generates more openings or closings?

We discussed previously that the net job creation rate for firms with one to four employees declined, while other-sized firms' rates improved. We also described that, based on a three-way size grouping of firms, the smallest firms demonstrated the greatest decline in net employment creation during the most recent recession. A slightly different approach is to examine the rate of openings, closings, expansions and contractions by each size class of firms. The data in Table 8 suggest that large firms' rate of contractions are higher than all other firms, but large firms' rate of closings is much smaller, consistent with the life cycle view of firm growth. In contrast, very small firms offer the highest rates of openings and closings, showing the dynamism of this sector of the economy in terms of entry and exit. The average rate of employment gains and losses from openings and closings for firms with one to four employees is higher during the most recent recession than the average rate for the entire dataset. The most cyclical sensitivity appears to occur at both ends of the size spectrum. Averages may obscure trend shifts that occurred, for example, following the previous recession.

Table 8

Business Employment Dynamics, Average Rate of Employment Creation, 1Q92 - 4Q09

	Gains		Openings		Expansions		Losses		Closings		Contractions	
	1992-2009	2008-2009	1992-2009	2008-2009	1992-2009	2008-2009	1992-2009	2008-2009	1992-2009	2008-2009	1992-2009	2008-2009
1 to 4 employees	12.2%	13.4%	34.8%	41.6%	6.2%	6.5%	12.3%	13.0%	35.3%	43.1%	6.5%	6.3%
5 to 9 employees	9.6%	9.8%	10.4%	11.0%	9.5%	9.5%	9.8%	9.5%	10.6%	11.0%	9.6%	9.1%
10 to 19 employees	9.9%	9.9%	7.4%	7.3%	10.6%	10.5%	10.0%	9.7%	7.7%	7.1%	10.6%	10.2%
20 to 49 employees	11.8%	11.4%	6.0%	5.4%	13.4%	12.9%	11.8%	11.5%	6.5%	5.2%	13.1%	12.9%
50 to 99 employees	7.5%	7.1%	2.5%	1.9%	8.8%	8.4%	7.4%	7.3%	2.9%	1.9%	8.5%	8.5%
100 to 249 employees	8.0%	7.5%	1.7%	0.9%	9.7%	9.1%	7.8%	7.8%	2.3%	1.1%	9.2%	9.3%
250 to 499 employees	4.8%	4.5%	0.7%	0.3%	5.9%	5.5%	4.7%	4.8%	1.0%	0.4%	5.7%	5.7%
500 to 999 employees	3.9%	3.6%	0.4%	0.1%	4.9%	4.5%	3.9%	4.0%	0.6%	0.2%	4.7%	4.9%
1000 or more employees	14.7%	13.0%	0.5%	0.2%	18.5%	16.2%	14.3%	16.1%	0.7%	0.3%	17.8%	19.7%

Source: BLS and BBVA Research

The Present and Future of Small Business Credit

In this section we explain why these firms and other small firms are experiencing financing trouble during this recession. While fundamentally small firms face a serious lack of demand, considerations over the availability of credit remain important. We discuss the degree of small business lending at banks of different sizes. We also detail the magnitude of credit at partnerships and proprietorships, which constitute roughly half of all small businesses. Previous analysts of small businesses note that the housing bubble is a serious impediment to small business finance. Falling real estate values, the argument proceeds, severely limit small firms' capacity to borrow. We dig deeper into this issue to demonstrate that trouble in commercial real estate is the main cause of small business finance difficulties. Real estate loans represent 72% of credit available to non-farm non-corporate businesses. Many small businesses borrow against commercial real estate to raise capital to invest in their business. Smaller banks tend to specialize not only in small business lending, but also in commercial real estate. The shakeout of the real estate market not only adversely affected the real estate balance sheet of small firms, but it also impinged on small banks' ability to continue financing small businesses. The end result is a real estate-focused credit crunch that negatively affects the balance sheet of borrowers and lenders alike and severely tightens available credit.

Sources of finance for small businesses

Small firms generally face one major disadvantage over large firms: information on small business' balance sheets and performance is difficult to verify and track. The institution of commercial banking is designed to overcome this information problem: the banker acts as a monitoring mechanism on small business performance by leveraging the institution's knowledge of the borrower, the local economy and other bank contacts. This information may not even be statistical, but qualitative in nature. Once an institution gathers enough information,

they do not necessarily share it with other institutions, since the information is not only costly to gather, but it also constitutes a source of competitive advantage for the bank. On the other hand, very large firms in the U.S. have access to capital markets and offer easily-verifiable statistics on their balance sheets and performance.

Very small firms rely on a diverse array of financing sources that try in different ways to overcome the information verification issues. These sources of finance include: 1) relationship lending, 2) financial statement lending, 3) asset-based lending, 4) factoring, 5) leasing, 6) credit scoring, 7) equipment lending, 8) real-estate related lending, 9) trade credit and 10) venture capital. Relationship lending is built on the basis of communication between a bank loan officer and a small business owner. Financial statement lending uses audited financial statements from small businesses to form a loan agreement, but not all small businesses can maintain or afford audited financial statements. Asset-based lending involves monitoring collateral advances against accounts receivables and inventories and attempts to provide working capital to small businesses. This type of financing is relatively rare around the world and exists in only countries with the most financial depth, illustrating the difficulty of its implementation. Factoring and leasing relate to assets purchased by the small business and are therefore more easily verified.

Credit scoring is a method through which lenders assess borrowers' chance of default through a statistical model based on the borrower's characteristics. The models will consider past repayment on loans, for example, as one predictor of a borrower's default risk. While credit scoring increased markedly over the past decade, a variety of issues keeps credit scoring from universal implementation. Financial firms operate in unique ways and may or may not be able to use a credit score within the routines of their lending operations. Individual business loans may be unique in terms of their size, purpose or loan terms. As a result, small banks tend to adopt credit scoring less often as large banks, although firms may use personal credit scores instead of a formal credit scoring model. A positive note is the use of credit scoring has improved the provision of loans to low and moderate income areas.

Equipment lending and real estate-based lending are determined through the appraised value of assets used as collateral to garner financing. Trade credit is a form of financing between a supplier and a customer. A small business may borrow on terms from one of its suppliers in order to bridge the gap between procurement and use of the item. Most trade credit is extended for 30 to 60 days and at high rates of interest. Trade credit is most prominent in industries with large inventory costs relative to labor costs, such as construction, manufacturing and wholesale or retail trade. Trade credit is used by roughly 80% of firms with five to 99 employees, according to the Federal Reserve. Trade credit usage exceeds all other financial service usage by small businesses except for checking accounts. Venture capital also represents another possible source of finance for small businesses, but it is restricted to those industries undergoing abrupt technological change, such as the state of information services in the late 1990s.

Small businesses for the most part rely on commercial banks for financing, although finance companies increased their presence in recent years mostly as a result of vehicle loans. The major non-depository institution sources of financial service usage by small businesses are finance and leasing companies, financial management services and brokerage firms to handle trust and pensions. Commercial banks are dominant across the variety of financial services as 96% of all small businesses used a depository institution. Financial service use generally increases with the size of the small business. The Federal Reserve noted in its survey of small business finance that credit line usage as a percentage of all firms increased from 27.7% to 34.3% and vehicle loans increased from 20.5% to 25.5% between 2002 and 2007. For the very smallest of businesses, personal finances become entwined with the finances of the firm. Personal credit card usage as a finance option declines with increasing firm size, while business card usage increases with firm size. The role of the proprietor's balance sheet, credit extension and the health of small businesses is an important issue which we address in the following section.

What is the current state of small business finance?

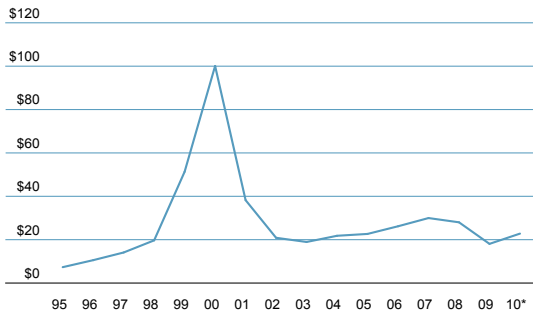
Although weak demand is the primary problem facing small businesses, according to a recent National Federation of Independent Business (NFIB) study, tight credit conditions are also a major concern. The best predictors of small business success in gaining credit, according to the NFIB, are high credit scores, customers of banks with less than $100 billion in assets, more properties collateralized for business purposes and fewer second mortgages. Data on commercial bank lending to small businesses is available on an annual basis for commercial and industrial (C&I) and commercial real estate (CRE) lending. Small business loans are those loans of value less than $1 million. Smaller banks tend to dominate CRE loans to small businesses. In 2009, banks with assets over $50 billion comprised 33% of CRE loans to small businesses, while banks with under $50 billion comprised 67% of CRE loans to small businesses. The picture for C&I lending is more even: in 2009, banks with greater than $50 billion in assets represented 44% of C&I small business lending, while banks will less than $50 billion in assets represented 56% of C&I small business lending. On an annual basis it is difficult to make comparisons between differently-sized firms and their focus on small business lending due to merger effects. For all commercial banks, C&I small business lending dropped 2008 to 2009 by -2% and CRE small business lending declined by -4.6%.

Non-farm non-corporate businesses are essentially partnerships and proprietorships that comprise half of all small businesses. Although these firms are not the entire sample of small businesses, these firms are likely the most at risk from a credit crunch as these firms experience the greatest informational asymmetries with regard to raising finance. The most important sections of the liabilities side of the nonfarm non-corporate balance sheet are credit market instruments and trade payables. Trade payables refer to trade credit – as a form of finance extended from other firms it is not considered a credit instrument. Within the credit market instruments category are bank loans not elsewhere classified, other loans and advances and mortgages. “Other credit” is principally loans from the Federal Government and savings institutions. Bank credit is for the most part, but not entirely, C&I lending from commercial banks.

The mortgages section of the small business balance sheet warrants close attention. The NFIB rightly attests that the housing bubble severely affected the ability of small businesses to post collateral, creating a pro-cyclical affect on small business finances that constrains the recovery. This is also entwined with the idea that for the smallest firms, personal finances and business finances are enmeshed, so the individual’s home price decline strongly affects the collateral of the business. Nearly 76% of businesses, according to the NFIB, occupy CRE. Often the business owner assumes a loan against the collateral of the property in order to reinvest the capital into the business itself. Although bank loans to non-farm non-corporate businesses in nominal terms declined dramatically during the recent crisis (Chart 55), the main focus of trouble revolves around mortgage loans. Mortgages represent around 73.2% of all credit market instruments for non-farm non-corporate businesses.

Chart 54

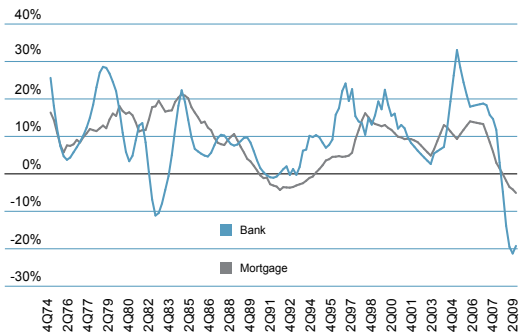
Venture Capital, ($bn)



Source: PWC/National Venture Capital Association
(* - forecast)

Chart 55

Nonfarm Noncorporate Business Credit



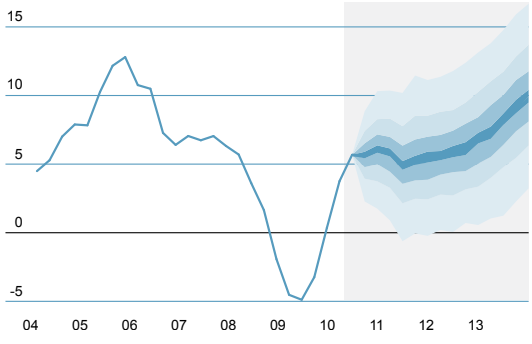
Source: Federal Researve and BBVA Research

The CRE component of this mortgage category constitutes a continuing drag on small business finances. The mortgages component consists roughly 50% of CRE and 20% of home mortgages in 2Q10. We model commercial real estate based on vacancies, returns on investment, service employment growth and gross domestic product (GDP) growth. Our forecast for non-farm non-corporate CRE is for continued declines in 2010 followed by slow growth in 2011. We expect that small business CRE is reaching a bottom in terms of Y-o-Y% change similar to the national CRE trend. The forecast for total trade credit is different from the trend in national CRE: total trade credit already staged a recovery and we expect continued positive nominal Y-o-Y growth rates. However, we expect continued Y-o-Y declines for non-farm non-corporate trade credit for the rest of the year and slow growth farther in the future. This forecast is similar to the non-farm non-corporate trade credit growth rates following the credit crunch of the early 1990s that resulted from high rates of small bank failures from the savings and loans crisis. We expect that some of the most troublesome CRE deals are actually the largest deals rather than the small business-oriented CRE loans. Small business CRE loans are also likely to be less frequently securitized, not only due to the size of the market, but also as the source of the loan is a smaller bank less inclined towards securitization. Even most small business C&I loans are not securitized – only those with a SBA guarantee become actively traded on the secondary market.

Given that we expect slow credit growth for certain parts of non-farm non-corporate firms, we can also test the influence of this credit on the economy. Utilizing a method established by Bernanke and Blinder (1988) to demonstrate the response of GDP to a shock in total credit, we delete the amount of non-farm non-corporate credit from the total credit and examine the differing response of GDP. Chart 59 demonstrates that while all other forms of credit are mostly important for the response of GDP to credit, the removal of small business credit still imparts a notable effect. It is important to note here that this is simply a rough approximation of the response of GDP to credit in a world without small business credit. Removing the small business credit leaves the model open to an omitted variable bias. Overall, we can expect slow small business credit to provide a drag on the recovery of GDP, but not one so large as to imperil the recovery.

Chart 56

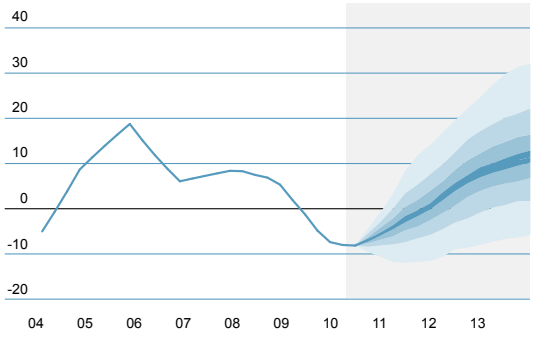
Forecast of Trade Credit (Y-o-Y % change)



Source: BBVA Research

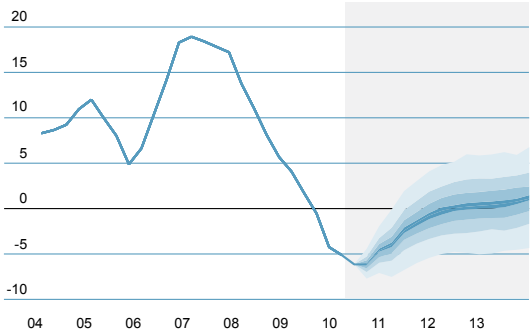
Chart 57

Forecast of Small Business Trade Credit (Y-o-Y % change)



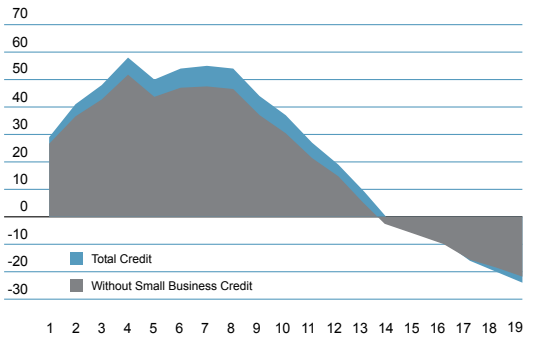
Source: BBVA Research

Chart 58
Forecast of Small Business CRE (Y-o-Y % change)



Source: BBVA Research

Chart 59
Response of GDP to 1% Credit Shock (Y-o-Y % change)



Source: BBVA Research

Bottom Line

Small businesses continue to need help, but given our chosen definition of small businesses, their contribution to total job creation is no different from large businesses. Over time, large businesses have increased their share of total employment in the economy, but in the most recent recession the smallest of firms are showing a lackluster performance owing, we argue, to the real estate-inspired credit crunch in the commercial banking system. This is particularly acute in the commercial real estate category, although we expect trade credit to non-farm non-corporate businesses to lag total trade credit growth. A world without small business credit would demonstrate less GDP growth, but given the variety of other influences credit has on the economy through consumption, large businesses and the financial system, small business credit is merely one cog of a giant machine.

Small businesses, however, are essential components of the dynamism of the economy due to their high rates of entry and exit, so a prolonged unhealthy small business sector would very negatively impact the United States. Nonetheless, small and large businesses warrant equal attention in terms of job creation, although their sources of finance are completely different, with large businesses focused on capital markets and small businesses focused on the banking system. In the end, we need all parts of the orchestra playing together in order to make the symphony work.

Arizona Border Counties: Impact of Mexican Immigrants and Visitors

Vera Pavlakovich-Kochi, Ph.D., Eller College of Management, The University of Arizona

Costs and Contributions to Economy Associated with Immigrants and Visitors from Mexico

A recent article, Costs and Contributions to Arizona's Economy from "Border Effect,"[1] estimated that the measurable fiscal costs associated with Mexican immigrants in Arizona -- comprised of the cost for immigrants' children education, hospital uncompensated care costs, AHCCCS costs, costs of inmates, and cost of undocumented immigrants -- added up to a total of $1.1 billion in 2004. This was compared to economic contributions of Mexican immigrants as consumers, as workers (producers of goods and services), and as visitors – all of which combined amounted to an estimated total of $31.6 billion to the state's economy. In the conclusion, the article suggested that monetary contributions to Arizona's economy substantially outweighed fiscal costs to Arizona's taxpayers.

The purpose of the present analysis is to provide some reasonable estimates of the Arizona border counties' share of the state's fiscal costs associated with immigrants from Mexico and compare those to measurable economic contributions of both immigrants and visitors from Mexico to local economies.

Border Counties' Share of Immigrants and Visitors from Mexico

Four Arizona border counties along the international boundary with Mexico – Yuma, Pima, Santa Cruz and Cochise – have a combined population of 1,354,220 or 21.3% of Arizona's total population. Of those, an estimated 152,000 are Mexican-born immigrants, which is 24.5% of Arizona's total Mexican-born population. In comparison, 60.9% of Arizona's total population and 68.5% of population born in Mexico live in centrally located Maricopa County. The remaining counties account for 17.8% of total population and only 7.0% of Mexican-born immigrants (Table 9).

Table 9
Total Population and Immigrants Born in Mexico (2006-08)

	Total Population	% of Arizona's Total	Born In Mexico*	% of Arizona's Born In MX
Border Counties:				
Cochise	127,882	2.0	12,182	2.0
Pima	994,244	15.7	81,010	13.1
Santa Cruz	42,412	0.7	16,839	2.7
Yuma	189,682	3.0	41,729	6.8
Border Counties Total	*1,354,220*	*21.3*	*151,761*	*24.6*
Rest of Arizona:				
Maricopa	3,862,036	60.9	422,795	68.5
Other Counties	1,127,696	17.8	42,970	7.0
Rest of Arizona Total	*4,989,732*	*78.7*	*465,765*	*75.4*
ARIZONA TOTAL	**6,343,952**	**100.0**	**617,526**	**100.0**

*Estimates for Yuma, Santa Cruz and Cochise by author based on shares of "Rest of Arizona" in 2000 Census data.
Source: 2006-2008 American Community Survey 3-Year

The number of Mexican visitors who cross the border in cars, on foot, or arrive by air, also varies among Arizona's counties. Based on a survey conducted for a recent study, *Mexican Visitors to Arizona: Characteristics and Economic Impacts,*[2] it was found that more than 90% of all visitors from Mexico, or more than 22 million in 2007-08, visited border cities and towns as their final destination. Close to 7% visited Phoenix or another city in Maricopa County, while less than 1% visited other locations in the rest of Arizona (Table 10).

1: Pavlakovich-Kochi, V., 2010; available at http://ebr.eller.arizona.edu
2: Pavlakovich-Kochi, V. and A.H. Charney, 2009; *Mexican Visitors to Arizona: Characteristics and Economic Impacts* available at http://ebr.arizona.edu

Although over the years Tucson and Phoenix metro areas have grown as destinations for increasing number of Mexican visitors, Arizona's border cities continue to be the primary destinations for a majority of visitors, most of whom cross the border for daily shopping, business or work. While shopping is still the most prevalent reason for visiting Arizona, the proximity is an important factor for border residents who shop in Arizona's border cities and towns. Availability of jobs, on the other hand, attracts majority of immigrants to Maricopa County.

Table 10
Mexican Visitors by Destination County, 2007-08

	Number of Visitors	Visitor Distribution (%)
Border Counties:		
Cochise	3,121,190	13.0
Pima	3,282,944	13.7
Santa Cruz	10,122,705	42.2
Yuma	5,855,781	24.4
Border Counties Total	*22,382,619*	*93.3*
Rest of Arizona:		
Maricopa	1,595,998	6.6
Other Counties	21,383	0.1
Rest of Arizona Total	*1,617,381*	*6.7*
ARIZONA TOTAL	**24,000,000**	**100.0**

Source: Pavlakovich-Kochi, V. and A.H. Charney, *Mexican Visitors to Arizona: Visitor Characteristics and Economic Impacts 2007-08*. University of Arizona, 2009. Prepared for Arizona Office of Tourism.

Method Used to Estimate Border Counties' Share of Costs and Benefits

Only two sets of data - costs of undocumented immigrants[3] and economic impacts of Mexican visitors[4] – are available for border counties in their respective original studies. All other costs and benefits for border counties have been calculated from estimates for the entire state[5] in proportion to their respective shares of immigrant population. For Maricopa, Pima and Pinal counties, the latest 2006-08 American Community Survey provides data on both naturalized and non-citizen immigrants; for all other counties only the total number of immigrants is available. Therefore, estimates for border counties (except Pima) are less precise, but are still considered useful as the best approximations until more detailed data are available.

Border Counties' Share of Fiscal Costs Associated With Mexican Immigrants

Among the most frequently raised questions in debates about immigrants from Mexico are those associated with real or perceived costs of health care, law enforcement and education for immigrant children. In the study, *Immigrants in Arizona: Fiscal and Economic Impacts,*[6] these costs were measured in the following way: health care costs were measured in terms of hospital uncompensated costs and costs incurred to Arizona's public health care system through the Arizona Health Care Cost Containment System (AHCCCS); enrollment in the English Language Learner (ELL) program was used as a direct measure of the fiscal impacts of immigrants' children in Arizona's public schools, while costs of law enforcement were obtained as costs incurred through the Arizona Department of Corrections.

Combined, the measurable fiscal costs associated with Mexican immigrants in Arizona - comprised of immigrants' children education, hospital uncompensated care costs, AHCCCS costs, costs of inmates and cost of undocumented immigrants[7] - added up to an estimated total of $1.1 billion for the entire state in 2004.

Table 11 shows that Arizona's border counties bear about 24% of state's total fiscal costs associated with Mexican immigrants. In comparison with their share of Mexican immigrant population (24.6%), border counties' share of educational costs is relatively lower (22%), but they bear a relatively higher share of costs of undocumented immigrants (28.9%).

3: Salant T., 2007; *Undocumented Immigrants in U.S.-Mexico Border Counties: The Costs of Law Enforcement and Criminal Justice Services* available at http://www.bordercounties.org
4: See endnote 2.
5: Pavlakovich-Kochi, referenced in endnote 1.
6: Gans, J. 2008; available at http://udallcenter.arizona.edu
7: Additional costs incurred by local police and sheriff's departments in the course of providing for public safety were added from T. Salant's study referenced in endnote 3.

Table 11

Fiscal Costs Associated With Mexican Immigrants, 2004 ($ 1,000)

	Education (ELL)	Hospital Uncompensated Care Costs	AHCCCS	Cost of Inmates	Cost of Undocumented Immigrants	Total Costs
Border Counties:						
Pima	49,777	13,568	57,655	8,312	14,033	143,344
Other Border Counties	41,568	11,500	50,154	6,964	10,991	121,177
Border Counties Total	*91,345*	*25,067*	*107,809*	*15,276*	*25,024*	*264,521*
Border Counties' Share of Arizona Costs (%)	22.0	22.8	24.3	22.2	28.9	23.5
Rest of Arizona:						
Maricopa	297,433	77,720	304,830	49,210	58,701	787,895
Other Counties	12,546	3,471	15,137	2,102	31	33,286
Rest of Arizona Total	*309,979*	*81,191*	*319,967*	*51,312*	*58,732*	*821,181*
ARIZONA TOTAL	**415,363**	**110,018**	**443,239**	**68,923**	**86,527**	**1,124,069**

Source: See endnote 8

Border Counties' Share of Economic Benefits Associated With Immigrants and Visitors from Mexico

Mexican immigrants contribute to Arizona's economy as workers and consumers. As workers, according to estimates for 2004, Mexican immigrants generated $29.2 billion in total output in Arizona. This represented 67%of the total output generated by all immigrant workforces in Arizona.

Border counties' share of the output in goods and services generated by Mexican immigrant workers is an estimated $5.6 billion or 24%or Arizona's total (Table 12).

Table 12

Economic Contributions Associated With Immigrants and Visitors from Mexico, 2004 ($ 1,000)

	Mexican Immigrants as Consumers	Mexican Immigrants as Workers	Mexican Visitors' Spending in Arizona
Border Counties:			
Pima	898,538	3,008,651	873,138
Other Border Counties	822,778	2,620,640	832,329
Border Counties Total	*1,721,316*	*5,629,291*	*1,705,467*
Border Counties' Share of Arizona Costs (%)	28.1	24.4	70.9
Rest of Arizona:			
Maricopa	3,937,993	15,840,330	620,737
Other Counties	473,003	1,596,550	78,035
Rest of Arizona Total	*4,410,995*	*17,436,879*	*698,773*
ARIZONA TOTAL	**6,132,311**	**23,066,170**	**2,404,240**

Source: See endnote 8

As consumers, immigrants from Mexico purchased an estimated $6 billion worth of goods and services in Arizona. Of that amount an estimated $1.7 billion or 28%or was spent in border counties (Table 12). Border counties receive a major share of the dollars that Mexican visitors spend in Arizona, an estimated $1.7 billion (in 2004 dollars) or 71%of total direct spending. However, this share is substantially lower than their share in the number of visitors. In comparison, Maricopa County receives more than 25% of total expenditures with only 7% of visitors. Obviously, while visitors to border counties are more numerous, their average purchasing power is lower than those who visit Maricopa County.

Do Border Counties Bear Larger Burden of Fiscal Costs Associated with Immigrants from Mexico than the Rest of Arizona?

To answer this question, the estimated fiscal costs are expressed as per capita costs. Indeed, as shown in Table 13, border counties bare relatively higher burden of the estimated fiscal costs associated with immigrants from Mexico, an average of $195 per capita compared to $165 for the rest of Arizona and $177 average for the state as a whole.

Table 13
Fiscal Costs and Economic Contributions per Capita, 2004

	Total Fiscal Costs ($ 1,000)	Fiscal Costs per Capita ($)	Immigrant Contribution ($ 1,000)	Immigrant Contribution per Capita ($)	Visitor Contribution ($ 1,000)	Visitor Contribution per Capita ($)
Border Counties:						
Pima	143,344	144	3,907,189	3,930	873,138	878
Other Border Counties	121,177	337	3,443,418	9,566	832,329	2,312
Border Counties Total	*264,521*	*195*	*7,350,607*	*5,428*	*1,705,467*	*1,259*
Rest of Arizona:						
Maricopa	787,895	204	19,778,322	5,121	620,737	161
Other Counties	33,286	30	2,069,552	1,835	78,035	69
Rest of Arizona Total	*821,181*	*165*	*21,847,874*	*4,379*	*698,773*	*140*
ARIZONA TOTAL	**1,124,069**	**177**	**29,198,481**	**4,603**	**2,404,240**	**379**

Source: See endnote 8

Do Border Counties Receive Relatively Larger Contributions to Their Economies from Immigrants and Visitors from Mexico?

Yes, in comparison to the rest of Arizona, border counties reap relatively larger contributions to their local economies from Mexican immigrants and visitors as suggested by per capita indicators shown in Table 13. Average per capita contribution associated with Mexican immigrants is $5,400 in border counties compared to $4,300 for the rest of Arizona. This reflects the fact that Mexican immigrants account for larger shares of the total population in border counties than in the rest of Arizona, and therefore play a larger role as consumers and participants in productive workforce.

The contribution from Mexican visitors is $1,200 per capita in border counties compared to $140 per capita in the rest of Arizona. As shown earlier, border counties are still the major destination for Mexican shoppers. In combination with relatively smaller economies (in comparison with Maricopa County and the sate as a whole), Mexican visitor spending plays a more important role in the economies of border counties.

Conclusions

First, this analysis has shown that Arizona's border counties bear a relatively heavier burden associated with immigrants from Mexico than the rest of the state, although in absolute terms (measured in dollars) it is Maricopa County that takes the lion's share of fiscal costs.

Second, this analysis has also shown that economic contributions to local economies associated with Mexican immigrants and visitors in Arizona's border counties substantially outweigh fiscal costs of immigrant population from Mexico (including undocumented immigrants). However, "fiscal costs" directly impact public funds (i.e. taxpayers' money) and thus are more visible. In contrast, "economic contributions" impact economies at large where it is more difficult to pinpoint exactly who the beneficiaries are.

8: Pavlakovich-Kochi V., *Costs and Contributions to Arizona's Economy* from "Border Effect" at http://ebr.eller.arizona.edu Tanis J. Salant, *Undocumented Immigrants in U.S.-Mexico Border Counties: The Costs of Law Enforcement and Criminal Justice Services*. The University of Arizona School of Public Administration and Policy, 2007. Report prepared for the United States/Mexico Border Counties Coalition. Judith Gans, *Immigrants in Arizona: Fiscal and Economic Impacts*, The University of Arizona Udall Center for Studies in Public Policy, 2008.

Colorado Economy Lagging the Nation

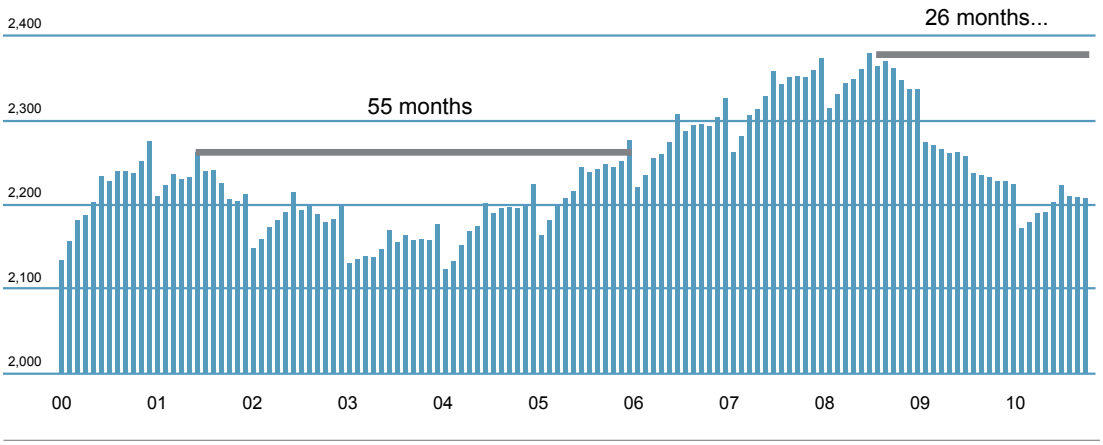
Richard Wobbekind, Executive Director, and Brian Lewandowski, Research Analyst, Business Research Division, Leeds School of Business, University of Colorado at Boulder

As the nation was entering the "Great Recession" more than two years ago, it was projected that Colorado would lag going into the recession and lead on the way out. Unfortunately for businesses, residents and governments, the state is experiencing a severe delay in exiting the recession. Colorado is anticipated to end 2010 ranked 49th in percentage of employment growth (decline). In fact, Colorado's total nonfarm employment is currently at a level similar to that in early 2000. Indeed, the "lost decade" moniker that is used so frequently to describe the past decade applies to Colorado as well. At the same time, Colorado remains an attractive place to live. Combined with the natural population growth, the state added nearly 819,000 people from 2000 to 2010, leaving many to wonder—what are all of these people doing? Both nationally and in Colorado, employment recovery to peak employment is expected to take longer than the last recession. As can be seen in the chart below, the recovery took 55 months in the last recession.

Colorado is often viewed as one of the more entrepreneurial-spirited, small business states in the country. Historically, this has led to a large number of business startups and a high ranking in venture capital investments when measured on a per capita basis. More than 64% of Colorado firms have fewer than five employees, which is higher than the national average. While this recession hit virtually all sectors of the economy, it seems to have affected the small business, entrepreneurial economy segment particularly hard, with its reliance on banking finance and venture capital—both of which have lagged in the national recovery. More importantly, this segment continues to trail the recovery of large and mid-sized businesses.

Chart 60

Total Nonfarm Employment Colorado

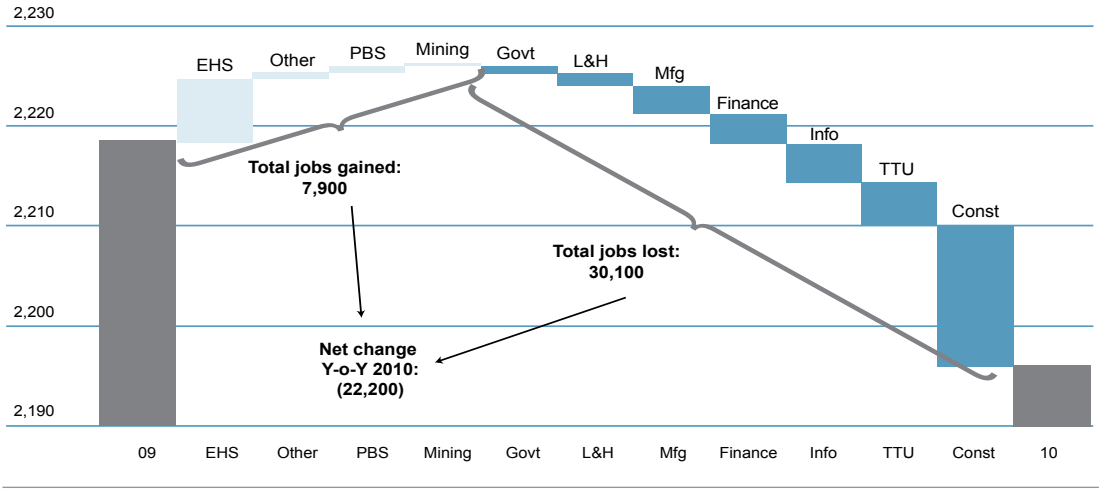


Source: Colorado Department of Labor and Employment (NSA).

Colorado will likely end 2010 down roughly 40,000 jobs from the start of the year, but the employment situation is improving. Looking at September employment 2010 compared to 2009, the seasonally adjusted figures show the state down 22,200 jobs. The majority of these were lost in the Construction sector, which has a large multiplier effect. Comparing September year-to-date total construction values in 2010 to 2006 (Colorado's market peak), values are down more than 56%, and the number of projects is down 69%. Comparing 2010 YTD to 2009, however, reveals a more promising story—the industry has reached bottom. Construction values slipped only 0.2%, and projects are up 10%, according to data from McGraw-Hill Construction Research and Analytics.

Chart 61

Change in Average Employment, September, Seasonally Adjusted, Y-o-Y



Source: Bureau of Labor Statistics, SA.

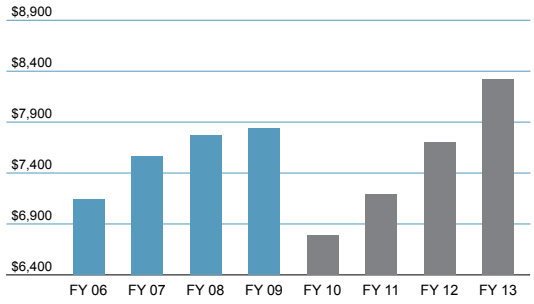
Government began shedding jobs Y-o-Y on a seasonally adjusted basis in August by the largest margin since March 2004. The Information and Manufacturing sectors, part of the advanced technology cluster, also showed continued job losses of, -3,800 and -2,700, respectively. Education and Health Services was the largest job creator (+6,300), Y-o-Y, while Other Services, Professional Business Services, and Mining collectively added a meager, albeit positive, 1,600 jobs. One doesn't have to look far for signs reflecting the negative effects of the recession. The unemployment rate is hovering around 8% after having been as low as 3.8% just over three years ago. Food stamp usage has skyrocketed as employment plunged in 2009.

Population growth, employment declines and household consumption changes have led to both increasing burdens and revenue declines for Colorado government. State government is financed primarily by income and sales tax. County level government and special districts rely on property taxes. Although local government depends on a mix of funding, the single-largest source for most cities is a retail sales tax. Unfortunately, all of these sources have taken a serious hit, leading to revenue shortfalls. While income and retail sales taxes will recover slowly along with the economy, property tax assessments will likely continue to decline, even with stabilization in the real estate market, because of the time lag in the assessment process.

The state's general fund growth trajectory fell short in FY2008 and FY2009, and turned sharply negative in FY2010 (-13.4%). Similar to other states, federal stimuli were used to backfill the budget, but not without pain—furlough days, budget cuts and hiring freezes became commonplace. As federal backfill dries up, the state must continue to take painful budget-balancing measures.

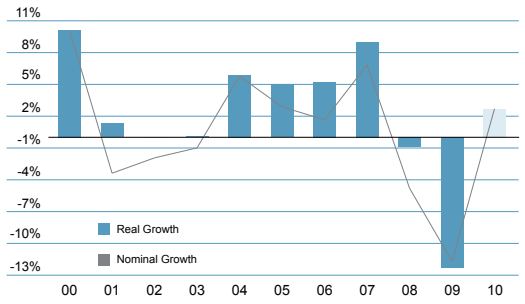
Roughly two-sevenths of Colorado's general fund is derived directly from sales taxes at a state rate of 2.9%. Retail trade sales dropped more than 12% in 2009 (mirroring 2005 levels). Due to the reliance of many local governments on sales taxes as their main source of income, considerable belt tightening has taken place in the past year, with employment reductions becoming more obvious recently.

Chart 62
Colorado General Fund



Source: Colorado Office of State Budgeting and Planning

Chart 63
Colorado Retail Trade Sales

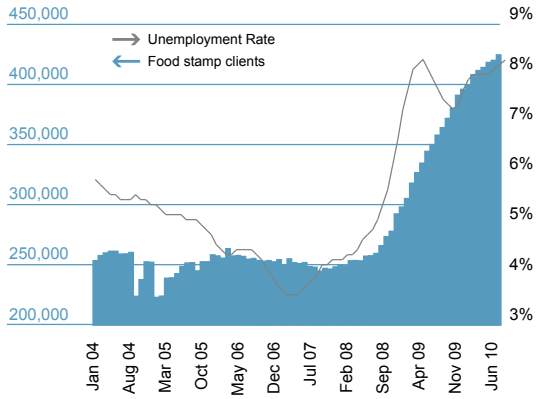


Source: Colorado Office of State Budgeting and Planning

Business leaders' confidence going into 4Q10 contracted for the first time since 1Q09, falling back below 50 after two consecutive quarters of growing optimism. The Leeds Business Confidence Index (LBCI) posted a reading of 48.6, down from 54.8 in 3Q10. Proportional retraction occurred across all metrics of the LBCI following a quarter of revised employment and GDP metrics indicating slower state and national economic growth.

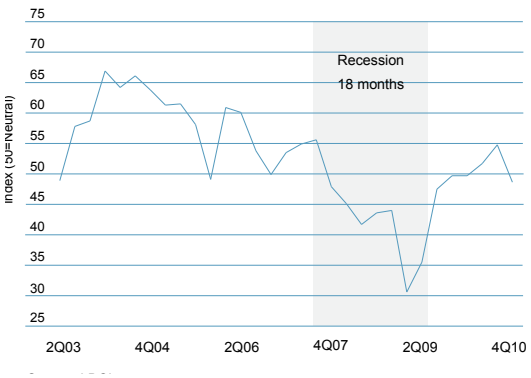
Overall, business leaders remained optimistic about industry sales, but expectations were nearly flat regarding profits, employment, capital expenditures, and expectations for state economic growth. Panelists were least optimistic about expectations for national growth.

Chart 64
Employment and Food Stamp Use in Colorado



Source: Bureau of Labor Statistics and Colorado Department of Human Services

Chart 65
Leeds Business Confidence Index 2Q03 - 4Q10



Source: LBCI

The Colorado economy appears to have entered the recession roughly nine months after the national economy. During 2009 job loss was severe, and Colorado "caught up" to the national recession, reflecting the national average in percentage job loss. This appears to have been driven by significant declines in the Mining, Construction, Manufacturing and the Leisure and Hospitality sectors. While Mining and Leisure and Hospitality have shown some improvement, the continued weakness in Construction and Manufacturing, along with the additional downward pressure of the Government sector, have kept Colorado economy (as measured by employment) in the doldrums. Employment growth in Colorado in 2010 continues to trail almost all of the country. However, LBCI panelists still feel better about the Colorado economy than the U.S. economy. Unfortunately, they are also saying that they don't expect to be hiring in the near term.

Notes

Fact Sheet

Residential Property Tax Rates for Largest City in Each State: 2007

	Effective tax rate per $100*			Effective tax rate per $100*	
City	Rank	Rate	Selected cities	Rank	Rate
Bridgeport, Connecticut	1	2.89	Atlanta, Georgia	16	1.67
Indianapolis, Indiana	2	2.75	Jacksonville, Florida	18	1.57
Philadelphia, Pennsylvania	3	2.64	Albuquerque, New Mexico	20	1.46
Houston, Texas	4	2.53	Las Vegas, Nevada	36	1.14
Baltimore, Maryland	5	2.44	Los Angeles, California	37	1.10
Providence, Rhode Island	6	2.28	Boston, Massachusetts	38	1.10
Milwaukee, Wisconsin	7	2.26	Portland, Oregon	39	1.07
Des Moines, Iowa	8	2.09	Phoenix, Arizona	41	0.97
Detroit, Michigan	9	2.03	Birmingham, Alabama	47	0.70
Fargo, North Dakota	10	2.03	Denver, Colorado	50	0.56

Source: U.S. Federal Highway Administration, Highway Statistics
*Effective tax rate is a function of nominal tax rate and the assessment percentage in each state

Homeschooling Data (Selected states)

	2009 Pop. Estimate Ages 5-17	Most recent state estimate of homeschoolers	Share of school-age population	State Regulation			
				No notice req'd	Low	Moderate	High
Alabama	797,000	N/A			✔		
Arizona	1,152,000	N/A			✔		
California	6,677,000	166,061	2.49%		✔		
Colorado	830,000	6,501	0.78%			✔	
Florida	2,858,000	60,913	2.13%			✔	
Georgia	1,751,000	39,233	2.24%			✔	
Kansas	500,000	21,000	4.20%		✔		
Michigan	1,823,000	1,122	0.06%	✔			
New Mexico	336,000	7,000	2.08%		✔		
New York	3,208,000	20,096	0.63%				✔
Ohio	1,999,000	24,791	1.24%			✔	
Texas	4,638,000	300,000	6.47%	✔			

Sources: U.S. Census, MSNBC, http://today.msnbc.msn.com/id/39177718/ns/today-parenting
Source for regulation information: HSLDA.org

Bankruptcy Filings (Y-o-Y % change of Jan.-Jun. YTD Totals)

	Business Bankruptcies			Non-Business Bankruptcies		
	2008	2009	2010	2008	2009	2010
Alabama	58%	64%	0%	17%	30%	-1%
Arizona	104%	84%	11%	68%	88%	40%
California	76%	57%	6%	81%	66%	35%
Colorado	38%	63%	14%	34%	36%	28%
Florida	84%	54%	5%	60%	56%	23%
New Mexico	81%	74%	-23%	34%	30%	20%
Texas	19%	65%	-6%	5%	18%	10%

Source: Administrative Office of the U.S. Courts/Haver Analytics

Forecast, Y-o-Y % change

	2009	1Q10	2Q10	3Q10	4Q10	2010	2011	2012
US								
Real GDP	-2.4	2.4	3.0	3.1	**2.4**	**2.7**	**2.3**	**2.4**
Nonfarm Employment	-4.3	-2.3	-0.5	0.2	**0.7**	**-0.5**	**1.1**	**1.5**
Nom. Personal Income	-1.7	2.1	2.2	3.0	**2.6**	**2.5**	**3.0**	**3.6**
Home Price Index	-4.6	-3.2	-1.6	**-1.7**	**0.3**	**-1.5**	**2.6**	**2.7**
Home Sales	2.5	8.3	13.0	-14.2	**6.5**	**3.1**	**6.3**	**6.4**
Arizona								
Real GDP	**-3.8**	**2.9**	**2.9**	**2.5**	**2.5**	**2.7**	**2.5**	**2.6**
Nonfarm Employment	-7.2	-4.2	-1.0	0.5	**1.2**	**-0.9**	**1.9**	**2.5**
Real Personal Income	-3.1	0.6	0.5	**0.7**	**0.4**	**0.5**	**0.4**	**1.5**
Home Price Index	-18.0	-13.2	-8.3	**-2.6**	**1.3**	**-5.9**	**3.4**	**2.1**
Existing Home Sales	31.4	10.4	4.5	**2.1**	**1.0**	**4.3**	**4.7**	**10.2**
Colorado								
Real GDP	**-0.7**	**2.3**	**2.2**	**2.0**	**2.0**	**2.1**	**2.2**	**2.6**
Nonfarm Employment	-4.5	-3.7	-2.0	-1.2	**-0.6**	**-1.9**	**1.0**	**1.3**
Real Personal Income	-3.0	0.8	1.8	**1.5**	**1.3**	**1.3**	**1.4**	**1.6**
Home Price Index	0.1	1.3	-0.2	**0.5**	**2.0**	**0.9**	**2.1**	**2.4**
Exisiting Home Sales	-9.8	5.3	14.4	**1.5**	**-3.1**	**4.1**	**0.9**	**1.5**
New Mexico								
Real GDP	**-2.0**	**2.1**	**1.8**	**1.9**	**1.9**	**1.9**	**2.2**	**2.4**
Nonfarm Employment	-4.0	-2.5	-1.5	-0.8	**-0.3**	**-1.3**	**1.3**	**2.2**
Real Personal Income	-0.9	2.9	3.2	**2.3**	**1.5**	**2.5**	**1.5**	**2.0**
Home Price Index	-4.6	-0.9	-5.0	**-0.4**	**1.1**	**-1.3**	**2.1**	**2.4**
Existing Home Sales	-3.0	19.1	21.9	**3.7**	**2.8**	**10.8**	**-0.2**	**4.5**

	2009	1Q10	2Q10	3Q10	4Q10	2010	2011	2012
Alabama								
Real GDP	**-2.5**	**2.6**	**2.2**	**2.0**	**1.9**	**2.2**	**2.0**	**2.2**
Nonfarm Employment	-5.3	-3.4	-1.2	0.7	**1.2**	**-0.7**	**1.5**	**1.2**
Real Personal Income	-1.9	1.8	1.1	**2.0**	**2.0**	**1.7**	**1.5**	**1.6**
Home Price Index	-0.9	-3.8	-4.8	**-2.6**	**-1.7**	**-3.2**	**2.4**	**2.5**
Exisiting Home Sales	-10.8	-26.1	17.5	**3.5**	**-3.4**	**4.3**	**-1.7**	**2.3**
California								
Real GDP	**-3.3**	**2.7**	**2.6**	**2.5**	**2.4**	**2.6**	**2.4**	**2.5**
Nonfarm Employment	-6.0	-4.0	-1.8	0.1	**1.0**	**-1.2**	**1.2**	**1.0**
Real Personal Income	-3.3	1.2	1.5	**2.5**	**2.2**	**1.8**	**1.2**	**1.3**
Home Price Index	-12.2	2.3	2.8	**0.4**	**2.2**	**1.9**	**2.8**	**2.6**
Existing Home Sales	15.5	-5.5	-0.6	**-3.0**	**-5.0**	**-3.6**	**2.6**	**1.1**
Florida								
Real GDP	**-2.4**	**3.1**	**2.2**	**2.8**	**2.7**	**2.7**	**2.5**	**2.7**
Nonfarm Employment	-6.2	-2.9	-0.7	0.5	**1.6**	**-0.4**	**2.5**	**2.0**
Real Personal Income	-3.2	0.7	0.6	**0.9**	**0.5**	**0.6**	**0.3**	**1.2**
Home Price Index	-15.8	-7.0	-5.9	**-2.2**	**-0.1**	**-3.9**	**2.0**	**2.3**
Exisiting Home Sales	35.8	35.0	23.8	**26.6**	**15.5**	**24.4**	**15.9**	**15.2**
Texas								
Real GDP	**-0.6**	**3.3**	**3.0**	**2.9**	**2.8**	**3.0**	**2.8**	**3.0**
Nonfarm Employment	-2.8	-2.0	0.4	1.7	**2.3**	**0.6**	**2.0**	**1.9**
Real Personal Income	-2.2	1.6	2.7	**2.5**	**2.1**	**2.2**	**1.2**	**2.2**
Home Price Index	0.2	0.5	1.5	**1.5**	**2.7**	**1.6**	**2.6**	**2.3**
Exisiting Home Sales	-6.8	5.7	14.8	**-0.5**	**-0.1**	**4.6**	**-2.4**	**2.2**

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

Economic Structure

	US	AL	AZ	CA	CO	FL	NM	TX
GDP (2008 (US, 2009) $ Billions)	14,449	170	249	1,847	249	744	80	1,224
Population (2009 Thousands)	307,007	4,709	6,596	36,962	5,025	18,538	2,010	24,782
Labor Force (3Q10 Thousands)	153,943	2,100	3,173	18,249	2,656	9,223	955	12,131
NonFarm Payroll (3Q10 Thousands)	136,939	1,873	2,400	13,845	2,199	7,236	800	10,373
Unemployment Rate (3Q10)	9.7	9.5	9.7	12.4	8.1	11.6	8.3	8.3
Total Building Permits, (YTD Jan-Aug 2010)	330,186	6,103	8,218	18,386	6,638	23,185	2,979	49,338
Change in Building Permits (YTD Jan-Aug Y-o-Y (%))	9.7	-2.3	-4.6	10.1	29.3	26.3	1.8	5.5
Home Ownership Rate (2009)	67.4	66.8	68.5	68.4	70.5	70.9	69.1	65.4
Housing Prices (2Q10 Y-o-Y Change (%))	-1.6	-4.8	-8.3	2.8	-0.2	-5.9	-5.0	1.5
Exports of Goods (2Q10 $ Billions)	314.6	3.8	3.9	35.5	1.7	13.9	0.4	50.7
Change in Exports (2Q10 Y-o-Y Change (%))	22.7	32.1	10.4	21.5	8.1	16.8	32.9	30.0

Source: BEA, BLS, Census, WiserTrade and FHFA

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