RESEARCH

Economic Outlook

United States

Third Quarter 2012

Economic Analysis

- Global growth is under heightened pressures
- The ongoing U.S. recovery will remain lackluster
- Strongest regional growth supported by the energy boom
- Reducing policy uncertainty will boost economic performance
- Positive prospects for the recycling industry

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Closing Date: August 17, 2012

1. Editorial

In just over two months, voters will head to the polls in what could be one of the most important elections in several decades. It is imperative that the election outcome anchor a clear path toward structural reforms that will boost America's long-run competitiveness.

Back in 2009, we advised our readers that the pace of economic growth was going to be significantly lower than expansions during previous recoveries. Our forecast for average GDP growth during 2009-2011 was a meager 0.4% while the Administration was expecting 2.0%. Meanwhile, the CBO expected a more moderate pace of 1.2%, and the market consensus stood at a disappointing 1.0%. As it turned out, growth averaged 0.4% and our forecast proved to be correct. At that time, we also warned that potential GDP growth was going to edge down during the following decade to 2.3%, nearly one full percentage point lower than the average between 1992 and 2006. This rationale reflected both a decline in labor force participation and our analysis of structural weaknesses across the economy. Without a long-term fix for these structural weaknesses, we argued, the U.S. would experience a slowdown in investment and productivity.

This view was not shared by most analysts and policymakers. In fact, both private and public sector expectations for 10-year average GDP growth have remained slightly lower than 3% during the past couple of years. While we take no pride in adhering to our view of lower potential economic growth, it is vital to recognize that the financial crisis has had long-lasting consequences on potential GDP and the economy has accumulated significant structural imbalances. Fortunately, the growing intensity of the debate about structural reforms suggests a greater awareness of these serious impediments to progress.

Admitting and recognizing those challenges is a prerequisite to solve them and thus boost potential output. However, partisan bickering, political impasse and misaligned incentives weaken the prospects of deep reforms and constrain success. Therefore, if the next administration and Congress again fail to take bold actions to move the country in the right direction, we may resign ourselves to lower growth expectations.

What's at stake in this year's election?

At the crux of the election debate is the size and scope of government. Two broad issues are essential to resolve: fiscal sustainability and burdensome regulations. Outsized and seemingly permanent fiscal deficits compound an already high public debt burden. This spending pattern crowds out private investment and generates uncertainty, which both limit hiring and consumption. Therefore, setting a path for fiscal sustainability must be a top priority. To reach this path, policymakers must address two major challenges: an inefficient and overly complex tax system and unsustainable contingent liabilities. Neither challenge, however, has an easy one-size-fits-all solution.

During the past several decades, the U.S. tax code has evolved into one of the most cumbersome tax systems in the developed world with a significant bias toward consumption and leverage. Broadening the tax base, eliminating tax loopholes, keeping tax rates low, removing biases against capital formation and simplifying the system would improve global competitiveness and promote growth.

Secondly, spending on entitlement programs underlies long-term public sector liabilities that will grow exponentially if left unchecked. Without action, these entitlements will consume ever greater shares of spending and thus limit the available resources for other essential government functions such as national defense, education and R&D. These liabilities include retirement benefits for civil servants, social security, government-sponsored enterprises and most importantly healthcare. As the U.S. healthcare system is the most expensive among developed nations, a step toward fiscal sustainability must entail comprehensive healthcare reform that reduces inefficiencies to lower costs, expand coverage and enhance outcomes. Many of these entitlements, however, were initiated and expanded for short-term political gains with little regard for their long-term fiscal impact. Thus, making changes entails overcoming inertia and spending political capital – a difficult proposition for an individual politician.

Also at stake in this election, overregulation and excessive government intervention discourage investment and misallocate resources. Consequently, growth in technological progress edges lower. While choosing the right balance has never been easy, the focus of government should be to stand behind efficient measures that foster private entrepreneurship and safeguard society's values on the environment, consumer protection and foreign policy.

A commitment from elected officials to take the necessary steps to ensure fiscal sustainability and encourage entrepreneurship is a first step before tackling other issues that restrain our economic performance. Confronting these issues includes re-thinking energy policy, closing the infrastructure funding gap, enhancing the quality of public education, updating immigration laws to reflect reality, and modernizing elements of the political process to accelerate the implementation of reforms.

Although the current environment shares similarities with other post-crisis periods in which policymakers managed to safely navigate rough waters, currently there are numerous far-reaching challenges that make sailing in these iceberg-filled waters more delicate and complex. The stakes in the upcoming election are high, and voters must choose an agenda that recognizes the obstacles and delineates a clear, confident path. Subsequently, all voters must raise the bar and demand results so that elected officials deliver on their promises. With the right reforms, our potential GDP growth forecast could increase a couple of percentage points and thus reinvigorate the U.S. economic growth engine.

Sincerely,

Nathaniel Karp

BBVA U.S. Chief Economist

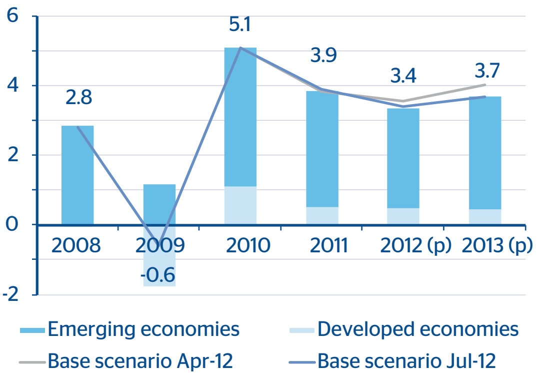
2. Global Outlook

What needs to happen for global growth to improve?

After the deterioration of global economic conditions during the first half of 2012, our current scenario still envisages a slight economic rebound in 2013. However, it is dependent on highly uncertain policy responses. Some of them have already been brought into force but need appropriate implementation, while others have been announced but not yet introduced. Our global GDP growth forecast stands at 3.5% in 2012-13, and relies on the assumption that policy measures are implemented to avoid financial turmoil in Europe, a sharp fiscal adjustment in the US, and boost growth rates in emerging economies. However, if economic policies fail to achieve these goals, the ongoing slowdown will intensify in the second half of 2012 and throughout 2013. In this scenario, global GDP growth in 2013 could be the weakest in 30 years, except for the 2009 recession.

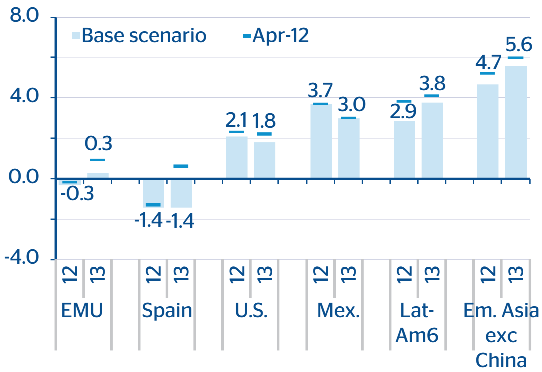
At a European summit in June, euro zone leaders reached agreements about single bank supervision, far-reaching plans covering banking and fiscal issues, and growth-supporting measures to reinforce the currency union. However, financial aid mechanisms that have been approved to ensure financial stability (i.e., EFSF&ESM) must be used to their full potential as soon as possible to avoid a financial "accident".[1] This is the only way to make sure that struggling economies have access to financial markets while implementing fiscal-consolidation plans and structural reforms. This must also include the involvement of the ECB.

Chart 1
Global GDP growth (%)



Source: BBVA Research

Chart 2
GDP growth by area (%)



Source: Datastream and BBVA Research

Meanwhile, in developing economies, the volatility of capital inflows could increase due to the ebb and flow of the euro zone crisis and the uncertainty surrounding monetary policy in the U.S. In economies that have room for policy stimulus, measures are needed to prop up domestic demand so that the effects of the external slowdown are mitigated.

Emerging economies are likely to be the main drivers behind the slight acceleration in global GDP in 2013. In Latin America, despite a generalised downward revision to our growth forecasts, estimates for Mexico remain unchanged at 3.7% for 2012 and 3.0% for 2013, thanks to upbeat activity data in 1H12, the continuation of favourable financing conditions in the domestic market, and competitiveness gains. In Brazil, growth forecasts have been significantly revised downwards to 2.2% from 3.3% in 2012, due to slower external demand, the slowdown in lending activity and weaker competitiveness. These trends warn us against the current growth model and its excessive focus on private consumption and credit expansion. However, activity is still expected to recover in coming quarters following unprecedented accommodative monetary policy conditions.

[1] The financial "accident" could take various forms, including for example the lack of demand for sovereign-bond issuances of peripheral economies.

In China, growth in the first half of the year slowed more than expected. As a result, we have revised down our projections for 2012-13. Nevertheless, monetary and fiscal measures should support growth and GDP growth will bounce back to 8.3% in 2013, a half percentage point higher than in 2012. Elsewhere in Asia, there is also room for policy stimulus to support growth. But there are downside risks including a severe worsening of external demand, exacerbated by ongoing domestic financial fragilities.

Governance is key for a Euro crisis resolution

The main uncertainty over the current economic scenario is whether the euro zone efforts to reinforce governance will be preceded by further financial deterioration. If this were the case, it would necessitate massive interventions aimed to assure financial stability. The decisions already taken, if implemented forcefully and quickly, could suffice. These measures include eliminating the risk from the sovereign-banking negative feedback loop in Spain and stabilizing financial markets across the euro zone with the active use of the EFSF and the ESM to purchase bonds in the primary and secondary market. Recent policy measures in Spain to reign in the fiscal deficit coupled with the strong supportive stance by the President of the ECB are helping to ease tensions.

Euro zone countries have to solve the liquidity squeeze in some markets. These constraints are a consequence of market participants assigning a non-zero probability of a euro break-up. As long as this situation persists, the risk of a euro break-up will fuel the fragmentation of financial flows across countries and impede access to wholesale funding markets in countries that have a debt position with respect to other European countries.. Thus, fast implementation of financial-aid mechanisms and their reinforcement in terms of size and access to ECB funding are key factors to eliminate the risk of a euro zone break up.

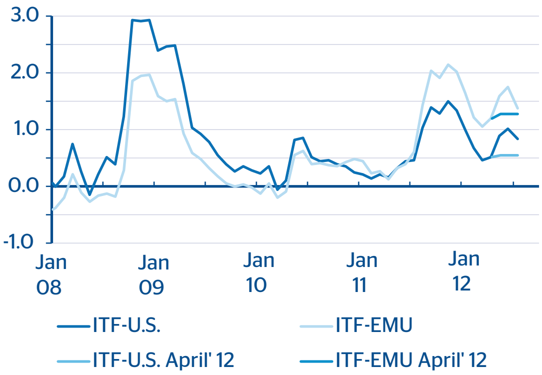
Although there is political will to reinforce European currency-union institutions and governance, the implementation of appropriate measures is lagging behind market expectations. Nonetheless, a euro break-up is a tail risk scenario and sooner or later, the measures needed to set up common institutions for banking supervision, deposit guarantee and banking resolution will be approved. These measures imply a transfer of national sovereignty to the European institutions and some form of liability sharing or debt mutualisation. If the challenges ahead are met satisfactorily, global growth could gradually gain traction during 2H12.

In summary, we have revised downwards our previous forecast due to continued financial stress stemming from the euro area crisis and ongoing deterioration in global economic confidence. This scenario implies a period of stagnation in the euro zone in 2012-13. Even after this revision, the balance of risks continues to be tilted to the downside, given the likelihood that approved measures are introduced too slowly due to domestic-policy considerations in some countries. If that were to happen, then the risk of a recession in Europe in 2013 would be relevant, particularly in peripheral countries such as Spain and Italy.

Global imbalances and risk aversion affect asset allocation

The outcome of the current economic problems is highly uncertain because there are political-economy considerations at stake that may not be consistent with the incentives to fix a supranational crisis. The risk scenario appears to be more focused on developed economies, particularly the euro zone. That is because emerging economies have more room to implement countercyclical policies than developed economies given lower accumulated imbalances. Not surprisingly, there have been increasing capital flows from Europe into the US and emerging markets. Since the end of May, when markets started pricing in that the US economy was running out of steam, US and German bond yields that are traditionally regarded as risk-free sovereign assets have fallen to historically low levels. Since the end of June, doubts surrounding the ability to reach a rapid solution to the euro crisis have been pressing in the same direction. Record foreign inflows are searching for returns in economies with lower contagion risk and with good macroeconomic policies and growth prospects. Peripheral sovereign bonds have been perceived as riskier alternatives, whereas yields on emerging-market bonds such as Mexico's and Colombia's have fallen to all-time lows.

Chart 3
Financial stress indicator, BBVA Research (*)



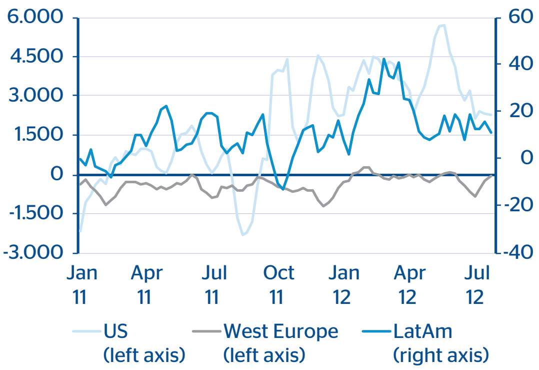
(*) Tracks the trend of a series of financial variables, including: stock market volatility; interest rates and exchange rates; sovereign, credit, and corporate risk; and liquidity tensions. Source: BBVA Research

Chart 4
Dollar-euro exchange rate and Spanish and Italian risk premiums. Simple average spread vs. 10Y Bund, bp; index 1 Jan 11=100

Source: BBVA Research and EPFR

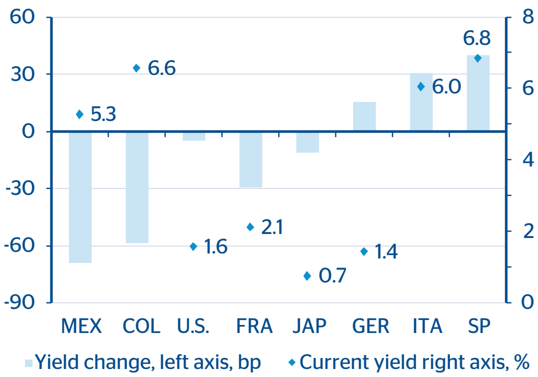
But there are risks to the sustainability of this scenario. Apart from changes to domestic inflation or the growth outlook that may cause rising yields, global factors, such as a systemic shock in the eurozone could wipe out all the safe-haven value recently gained by certain emerging-market assets. In a "Lehman-type" shock scenario, it remains to be seen whether domestic strengths would be preserved as only economies that have their own currency and a central bank that acts as the lender of last resort, and do not have any significant external imbalances, will be regarded as risk free. Moreover, additional expansion of the Fed balance sheet could encourage investors to move out of fixed income into equity markets, particularly if there are no clear signs of further monetary policy easing in these emerging markets.

Chart 5
Sovereign debt flows (USD bln)



Source: BBVA Research and EPFR

Chart 6
Long-term (10Y) bond yields, changes since the beginning of June (bp)



Source: BBVA Research

3. US Outlook

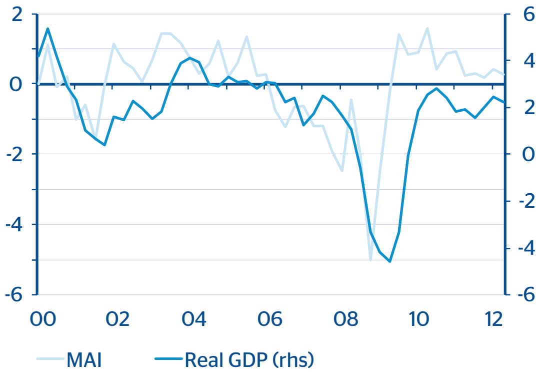
Weighing the Economic Risks for the Second Half of 2012

Economic news continues to disappoint in all sectors, and with half of the year under our belt, it is worthy to determine whether these trends will persist throughout the latter part of 2012. Momentum has clearly slowed since the beginning of the year according to the Bureau of Economic Analysis, which confirmed the economic slowdown in 2Q12 with the release of the advance GDP growth rate, coming in at 1.5% on a QoQ seasonally-adjusted annualized basis. This is slightly slower than growth in 1Q12, which was revised up from 1.9% to 2.0%. Second quarter slowing was due in large part to decelerating personal consumption expenditures (PCE), which fell to 1.5% from 2.4% in 1Q12, in addition to lower growth in residential and non-residential fixed investment. Nonresidential structures slowed significantly after jumping 12.9% in the first quarter, despite slightly stronger data on construction spending. Exports accelerated but not enough to offset the gain in imports for the quarter. Private inventory investment was stronger, with the change in real private inventories contributing 0.32pp to GDP following a 0.39pp negative contribution in 1Q12. If consumption does not increase enough to compensate for this inventory build, then we could see more sluggish production in the coming months.

In regards to the annual revisions, most of the data changed only slightly from prior estimates. Annual growth for 2009 was revised up from -3.5% to -3.1%, 2010 was revised down from 3.0% to 2.4%, and 2011 was revised up from 1.7% to 1.8%. The 2011 change mostly came from the second and fourth quarters, which were revised up significantly to 2.5% and 4.1%, respectively, as a result of upward revisions to PCE and inventory investment, though first quarter of 2011 was revised down further. Overall, the average revision was 0.7 percentage points over the 13 quarters from 2009 to present.

While second quarter growth came in slightly lower than expected, we are still on target in terms of our updated baseline scenario for the year. Our newly revised forecast for 2.1% real GDP growth allows for acceleration in the second half of the year, which we expect could be stronger once temporary factors fade. However, the most recent macroeconomic indicators depict a weak economic scenario for the current quarter, emphasizing the fact that there still exist downside risks to our baseline scenario for the second half of the year.

Chart 7
Real GDP Growth and BBVA Monthly Activity Index (4Q % Change)



Source: Bureau of Economic Analysis & BBVA Research

Table 1
BBVA U.S. Monthly Activity Index Trends

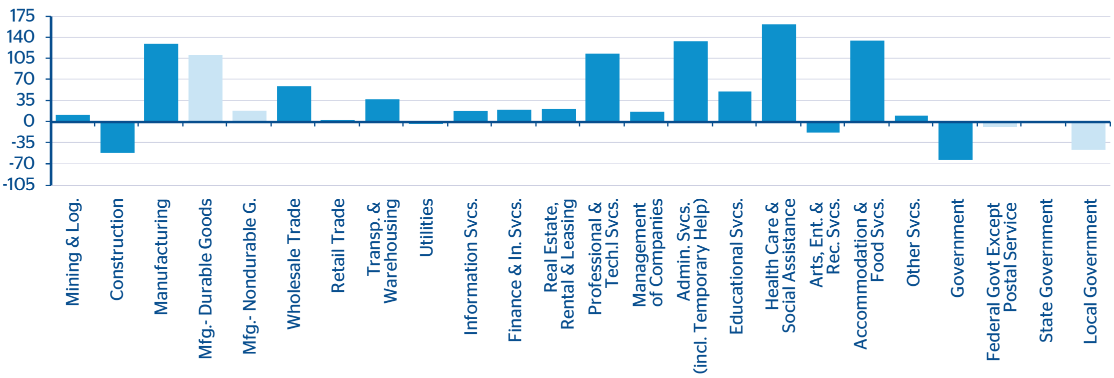
BBVA Index	Current	3 Months Ago	6 Months Ago	12 Months Ago
Monthly Activity Index*	0.22	0.33	0.41	0.43
Housing	2.61	2.07	-0.08	0.50
CRE	-0.52	0.26	1.41	-0.66
Employment	-0.57	-0.93	0.42	0.43
Economic Confidence	-0.31	-0.28	0.16	-0.29
Financial	-0.28	-0.19	0.27	-0.13
Spending	-0.45	0.21	0.47	0.02
Production	-0.47	-0.41	-0.12	-0.81
Prices	-1.21	-0.74	-1.23	-0.75
Trade	0.01	-0.89	-0.57	1.03
Banking	-0.72	-0.70	-1.39	-3.52

Source: BBVA Research

The second quarter was also characterized by deteriorating labor market conditions, with nonfarm payrolls increasing only 73K per month compared to 226K in the first quarter. Job growth appears to have rebounded to a healthier level in July, yet the rise in the unemployment rate back to 8.3% surely points to continued weakness in the labor market. Total nonfarm payrolls increased 163K in July, above consensus expectations for a 100K gain. June's estimate was revised down from 80K to 64K, resulting in an average monthly increase of only 73K for 2Q12. Within the total, private payrolls increased 172K, the largest jump since February, with manufacturing up a surprising 25K. While we were able to partially blame the weak 2Q12 employment growth on seasonality issues, the job report in July is more reflective of the latest economic activity. The data supports the ongoing argument that the warmer-than-usual winter shifted job growth to the first quarter that otherwise would have occurred in the second quarter. Given that job growth is lagged, we will likely see some slowing again later in the year that reflects the current weakness in production and demand conditions.

On the other hand, the JOLTS data for 2Q12 showed some improvements over 1Q12 and hinted at a more dynamic labor market than the payroll report would suggest. Despite the fact that economic growth lost momentum, the report noted acceleration in job openings and hires throughout the period. Job openings in June increased nearly 3% MoM to 3762K, closing out the second quarter with a 315K total gain over the three-month period compared to only 264K in the first quarter. Although uncertainties continue to weigh on business confidence and expectations, the data suggests at least some improvement in the demand outlook. Hires actually declined slightly in June but still reflected a 148K increase for the quarter, almost 65% more than in 1Q12. Not surprisingly, the construction sector contributed significantly to the increase in total hires, jumping more than 30% in May and June combined. Housing activity has continued to improve throughout the year, and in turn we have seen a significant spike in the number of hires per job opening in construction (also known as the vacancy yield). However, the sector's share of total vacancies remains very low, so it is unlikely that this will provide a significant boost to total employment growth in the short-term. Hiring in the manufacturing sector remains relatively constant, as expected given the recent slowdowns in the sector's activity. Overall, net employment continues to increase at a steady pace, totaling 1.8mn over the 12 months ending in June 2012. The somewhat bifurcated data seen in these various employment reports furthers our argument that labor market conditions will improve only gradually throughout the second half of 2012. In regards to unemployment, our baseline scenario assumes that the unemployment rate will be stable throughout the year and improve slightly in 2013.

Chart 8
Employment Growth by Industry, 2012 YTD (Accumulated Change in K)



Source: Bureau of Labor Statistics & BBVA Research

Throughout the coming months, inflationary pressures will continue to be limited, in line with our downwardly revised headline forecast for 2.0% in 2012 that reflects lower-than-expected commodity prices. Crude oil prices dropped significantly in 2Q12, however, other energy related issues have caused gas prices to rise again at the start of 3Q12, even with a slow growing economy. The closing of refineries in parts of the country as well as a jump in food prices have recently boosted gas prices. In addition to energy, rising food prices could continue to put upward pressure on headline inflation in the coming months. While food prices are not having an immediate impact on inflation (due to its lagged transmission mechanism), we expect to see added pressure from this component later in the year and in 2013 if this trend continues. Excluding these two more volatile components, core inflation remains stronger as a result of steady gains in medical care and shelter prices. We have revised up our core forecast to 2.1% for 2012, however, elevated economic slack should help contain labor and production costs. Significant downward pressures on inflation would create additional risk for the economy, and the Fed would be more likely to act if a deflationary environment threatened for 2013 and thereafter.

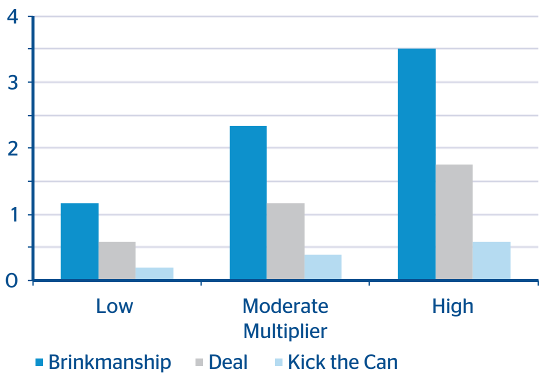
Table 2
Baseline Scenario, New vs. Previous, %

		2011	2012	2013	2014
GDP	new	1.7	2.1	1.8	2.3
	old		2.3	2.2	2.5
CPI	new	3.2	2.0	1.9	2.3
	old		2.5	2.2	2.4
Core	new	1.7	2.1	1.8	1.9
	old		1.9	1.8	1.9
Unemployment Rate	new	9.0	8.2	8.1	7.6
	old		8.2	7.8	7.4
Fed [eop]	new	0.25	0.25	0.25	0.50
	old		0.25	0.25	0.50
10-Year Treasury [eop]	new	2.0	2.1	2.6	3.0
	old		2.2	2.7	3.1

Source: BBVA Research

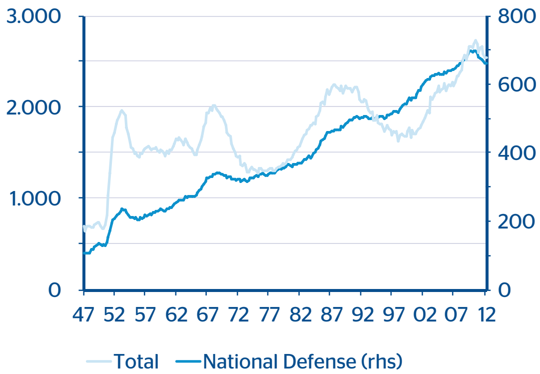
Looking forward, a relatively optimistic scenario is one in which economic weakness does not intensify, with growth stabilizing and minimal impact from policy uncertainty or deteriorating global conditions. With the fiscal cliff approaching and a pending agreement in Congress, the current situation seems all too familiar to the debt ceiling debacle of last summer. Our baseline scenario assumes modest fiscal austerity in 2013 so as to prevent an economic recession. Among the various components agreed upon in last year's debate, the expiration of income and estate tax provisions would have the largest impact on GDP. In the case of political brinkmanship, in which no compromise can be reached, the resulting impact would be near 3.9% of GDP. Although Congress does not have a great track record for making timely decisions, it is likely that they will at least make a deal on some provisions, while kicking the can further down the road on other issues.

Chart 9
Estimated Decline in Real GDP Growth from Fiscal Cliff (Annual %, 2013)



Source: CBO & BBVA Research

Chart 10
Government Consumption Expenditures (Real $ bn)



Source: Bureau of Economic Analysis & BBVA Research

Government spending is a key component of GDP that is expected to remain negative for quite some time. On a QoQ seasonally-adjusted annualized basis, government consumption has declined since the first quarter of 2010. National defense is a major cyclical element of total government consumption expenditures that has been winding down since mid-2010 but still remains much higher compared to historical trends. Excluding national defense, government spending has reached the lowest level since 2005. The share of national defense spending as a percentage of total GDP hit rock bottom in 2000 but is only slightly higher now near 5.0%. However, total government spending has already reached a new low at 18.25% of GDP. With the proposed plans for further cuts in defense spending, we are unlikely to see a significant contribution from the government to GDP growth in the upcoming year.

Given the latest ups and downs in economic data, it is no wonder why the Federal Reserve remains cautious about the sustainability of the recovery. The latest FOMC meeting announcement did not feature any additional monetary policy announcements but instead highlighted a weaker economic outlook, as recent data have shown. Throughout the intermeeting period, economic data have deteriorated but not quite enough to convince all committee members that further action is necessary. The fact that there were no significant changes to the meeting statement and the lack of policy action highlight the intense debate within the FOMC, and more time is needed for a majority agreement. This view is supported by July's stronger-than-expected employment report.

Most importantly, the Fed is waiting for Congress to address the looming fiscal cliff, and we foresee that QE3 will become more and more attractive as time passes by without any fiscal progress. Ultimately, we believe that the Fed is seriously considering further action but needs to see more data with additional time to discuss. We expect that the Fed will take action if economic conditions deteriorate further, with the most likely scenario being additional quantitative easing. Other options on the table are a change in the Fed's monetary policy guidance, a reduction in the interest rate on reserves, or a TALF-like program. The Fed could implement its options one at a time or in combination. However, these are not perfect substitutes and their impact on economic activity is highly uncertain.

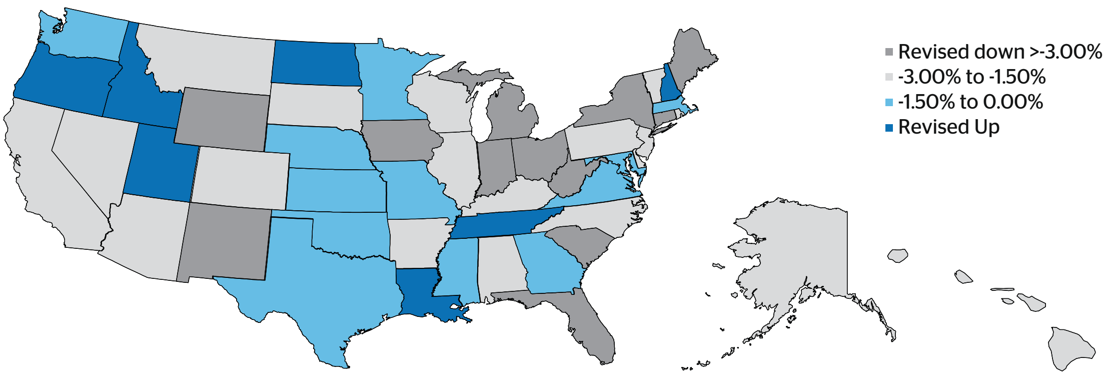
While we remain relatively optimistic that the recent trends hint at only slowing, not stalling, growth, downside risks remain prevalent. Our risk scenario assumes that weak trends persist throughout the year, with additional negative effects from policy uncertainty, deeper European crisis and financial stress, and sharper fiscal austerity. In the case that these risks intensify, the economy will likely slide into recession. This situation could be amplified by a deflationary environment which would result in aggressive incremental policy response with limited marginal impact. For the Fed, the scenario would present significant downward risks under a new untested crisis framework.

4. Regional Impact of Recession Now Clear

The release of 2011 state GDP figures this summer confirms both the recession's impact at the state level and our expectations of growth in the Sunbelt region. With this release, the Bureau of Economic Analysis revised state GDP estimates for 2008-2010 to align them with the national GDP estimates. Thus, it is now clear that the recession was more severe than previously thought, because over the three year period from 2008-2010, the cumulative change in GDP was revised downward in 43 states. West Virginia, Wyoming, Michigan, Connecticut and New Mexico experienced the largest negative revisions during this 3-year period of 7.1pp, 7.0pp, 6.6pp, 6.3pp and 6.2pp, respectively.

Although no clear pattern emerges from the widespread downward revisions apart from the fallout from the housing sector and the plunge in manufacturing activity and commodity prices, states that fared relatively better benefited from several key factors. Increased energy-related, specialized manufacturing and high-tech production underlie the recovery period after June 2009 and explain the strong upward revisions to seven states during this period. Utah, Indiana, Louisiana, North Dakota, and Oregon were revised upward by more than one percent, largely due to stronger than previously estimated growth in 2010. North Dakota is undergoing a rapid transformation into an energy producing state, and thus it is attracting thousands of workers and new investment. Hence, the state is growing rapidly. Oregon is benefiting from burgeoning international demand for technology products, and its many technology and processor design and manufacturing companies are creating wealth and jobs in the region.

Chart 11
Revisions to State GDP Estimates, Accumulated Difference 2008-2010, Percentage Points



Source: BBVA Research, BEA / Haver Analytics

Review of the Sunbelt

The revisions to 2008-2010 reveal that the BBVA Compass Sunbelt contracted more than previously anticipated, and the fallout of from the housing sector caused activity to contract severely in Arizona, California and Florida. The sum of the seven state GDP revisions totaled -9.7pp in 2008 and a whopping -14.6pp in 2009. In 2010, the cumulative upward revisions totaled 2.8 pp. The rebound in manufacturing activity (particularly auto production) helped propel Alabama slightly above expectations. The high-tech industry in the San Francisco, San Jose, Santa Clara and Sunnyvale metropolitan areas was responsible for nearly all of California's growth in 2010, and the slight upward revision to activity helped push Arizona higher in 2010 after a severe 8.2% contraction in the prior year.

Texas was one of the shining stars of the Sunbelt in 2010, as energy production boosted initial estimates by an additional 2.4 percentage points. Energy production and exploration activities were also responsible for the upturn in Colorado during 2010.

Perhaps the most disappointing results to 2009 and 2010 Sunbelt revisions were in New Mexico and Florida: their dramatic downward revisions to both years underlie their internal weaknesses that translated into lackluster performance last year.

Table 3

BBVA Compass Sunbelt Comparison of 2011 Real GDP Forecasts and Revised BEA Estimates

	BBVA Forecasts and Prior BEA Estimates			Current BEA Estimates		
State	**2011***	**2010**	**2009**	**2011p**	**2010**	**2009**
Alabama	1.3%	2.0%	-3.0%	-0.8%	2.3%	-5.0%
Arizona	1.6%	0.7%	-5.7%	1.5%	1.1%	-8.2%
California	1.9%	1.8%	-3.7%	2.0%	1.7%	-4.7%
Colorado	1.7%	1.4%	-0.5%	1.9%	2.4%	-2.8%
Florida	1.6%	1.4%	-3.7%	0.5%	0.9%	-5.4%
New Mexico	1.2%	1.7%	3.4%	0.2%	1.2%	0.7%
Texas	2.8%	2.8%	0.5%	3.3%	5.2%	-1.8%

*BBVA Forecasts at 4Q11
p BEA preliminary estimate, released June 2012, subject to revision in 2013
Source: BBVA Research, BEA / Haver Analytics

The Sunbelt in 2011

The Sunbelt continued to outperform the rest of the country, although regional weaknesses were more pronounced in 2011. Excluding Alabama, the Sunbelt grew at a comparatively better pace given the negative headwinds.

Texas continued its energy-led expansion, and grew 3.3% in 2011. Although this rate was down from 2010, new residents flocked to Texas as the state led the nation in job creation. The extreme drought conditions that occurred in the summer of 2011 are clearly responsible for the contraction in agricultural activity due to lost crop production and losses from the premature slaughter of livestock. Texas, saw agricultural output decline 21.9%, thus curtailing GDP growth. Certainly, Texas' experience last year is a forewarning for state GDP activity across the U.S. this year as drought conditions persist in more than half of U.S. counties. However, Texas' diverse industry mix buffered the decline in agriculture. For example, industries such as mining, manufacturing, trade, healthcare, and professional and technical services contributed 2.6pp to the state's overall growth in 2011. As Texas cruises along, we expect exports to remain elevated and growth above 3.0% to sustain during 2012.

Disappointment continued for Florida and New Mexico in 2011, as growth slowed to a crawl in these states at 0.5% and 0.2%, respectively. While we were expecting a slowdown in New Mexico, we still anticipated growth in excess of 1%. The lower-than-expected result reflects New Mexico's lagging economic cycle and the pullback in commodity prices in 2011. Also, cuts to state and local government budgets spread throughout the state economy. These cuts were not isolated to New Mexico, as cuts to local government also weighed on activity in Florida. Florida, however, is still struggling with a double-digit foreclosure rate and a high inventory of foreclosed and unsold homes. Thus, the construction industry continues to subtract from growth, and the industry that has been single largest detractor from growth during the past two years, is the real-estate and rental industry. The declines in this industry have reduced real GDP growth by 0.9pp in 2010 and 0.8pp in 2011. As the share of this industry in state GDP continues to decline, overall economic growth will remain tepid in 2012 and 2013.

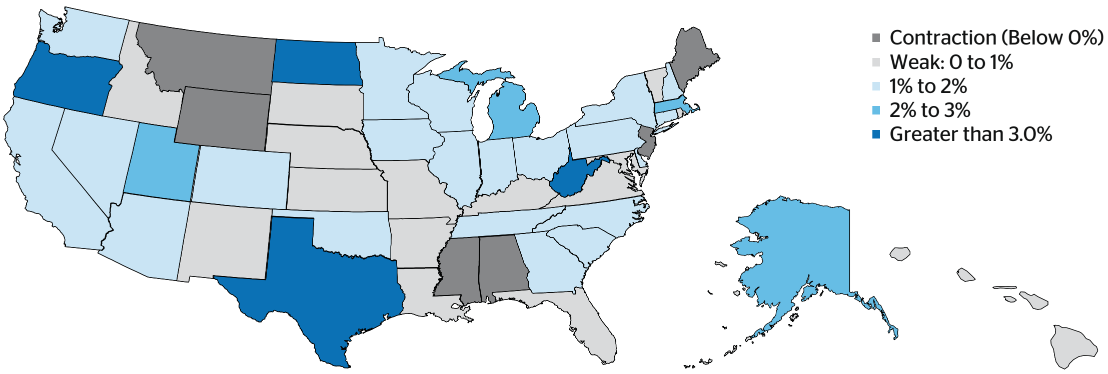
Temporary setbacks hit Alabama in 2011, and were largely responsible for its much worse-than-expected GDP contraction of -0.8%. In 2011, Alabama was the only Sunbelt state to contract, and only one of six states nationwide. To recap Alabama's setbacks, in March a Japanese earthquake hindered auto production as supplier networks were disrupted, and in the summer, tornadoes tore through metropolitan areas causing catastrophic damage and the loss of lives. The drought that impacted the Gulf Coast from Georgia to Texas in 2011 curtailed the state's agricultural activity. Furthermore, the lagging downturn in the state's housing sector pushed activity downward. Contractions in the agriculture, construction and real-estate industries subtracted a combined total of 1.3pp from GDP growth in 2011 – enough to push the state back into recession last year. Although last year brought little good news, we expect Alabama to emerge with positive growth this year as key manufacturing industries have rebounded and have announced expansion plans that include factories in the state.

In California, Arizona, and Colorado, 2011 growth was largely in line with our expectations. Unlike other areas of the country, which experienced uneven growth, these areas were able to take advantage of key strengths in a time of reduced demand. Specifically, mining, manufacturing, trade, and professional services were the standouts at the state level. The energy binge continues: real mining GDP in Arizona, California and Colorado grew 13.3%, 12.0% and 4.7%, respectively last year, adding 0.1 to 0.25 pp to GDP growth in these states. Much of the surge in activity is owed to new drilling techniques that have produced a technology shock within the oil and natural gas extraction industry. Essentially, oil that was previously uneconomical to extract can now be extracted at a significantly lower cost.

The contribution to growth from durable goods manufacturing remained strong in these states – adding between 0.4 and 0.6pp to growth, although it softened over 2010. Notably, however, the concentration of high-tech clusters and high-income earners was a strong influence on the states' performance. This surge in the high-tech industry is self-sustaining and reflects structural transformations that are leading to demand for programmers and computing technology specialists. Thus, the professional and technical services industries added 0.25, 0.6 and 0.4pp to growth in Arizona, California and Colorado. In Colorado, the largest contributor to growth in 2011 was the information industry, which includes the publishing and data hosting industries and is directly related to investment in high-tech.

Looking forward, Arizona's strong rebound as evidenced by job creation is a positive signal for the state in coming years. Colorado's internal strengths and unique industry profile are helping the state to succeed; however, the drought and wildfires will result in slower GDP expansion during 2012. California's GDP growth remains a tale of two cities: growth will surge in the coastal areas as they attract young technology workers and wealthy residents. The interior of California will continue to struggle with the possibility of further municipal bankruptcies, a high unemployment rate, weak job creation and a stock of unsold homes.

Chart 12
Real 2011 State GDP Estimates, Y-o-Y % Change



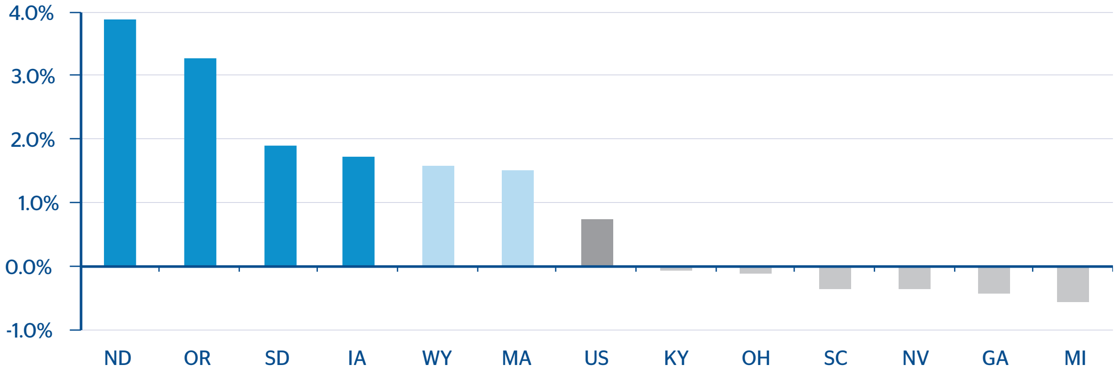
Source: BBVA Research, BEA / Haver Analytics

A National Review

The fact that overall growth in the US slowed in 2011 to 1.8%, down from 2.4% in 2010, suggests poor growth for some states, mediocre growth for others, and superlative growth for a handful. The overarching theme to US regional growth in 2011 was that key sectors at the state and regional level buoyed softening global and domestic demand and inconsistent employment growth. Moreover, the uncertainty that was generated from the U.S. fiscal situation in 3Q11 and the ongoing quagmire in Europe produced greater risk aversion thus lower growth in some states. Furthermore, drought conditions in a portion of the United States weighed on agricultural output.

Nevertheless, some promising signs emerged in 2011. For example, construction trended towards the positive, almost surpassing 0% growth threshold for the first time since 2003. In addition, the professional, scientific, and technical industry expanded throughout much of the country. Thus, constants, which materialized during the recovery, remain: contraction to state and local government budgets weigh on overall growth, high-wealth coastal areas continue to surpass the overall growth rate and oil and natural gas producing areas offset construction and real estate declines to buoy state expansion.

Chart 13
States with greatest and lowest growth in GDP-Per-Capita, 2000-2011, Average Annual Growth Rate



Source: BBVA Research, BEA / Haver Analytics

Overall GDP growth in 2011 was above 2.0% in eight states, between 1.0 and 2.0% in 21 states, between 0 and 1.0% in 16 states, and less than zero in six. Unlike 2010 which saw 45 states rebound to the positive, 2011 growth was dampened by weak domestic and international demand which reduced manufacturing activity. North Dakota, however, continues be a growth anomaly, expanding by 7.6% YoY, nearly double the second fasting growing state of Oregon. New shale and horizontal drilling technologies have catapulted mining activity in Bakken shale formation, pushing the state's mining industry GDP growth rate to 53.0% YoY. Average growth in the east coast was largely attributable to the aforementioned professional and technical services as mining declines and cutbacks to state and local government budgets eroded gains.

Other states struggled in 2011. In particular, Wyoming, Mississippi and Alabama declined 1.2%, 0.8% and 0.8%, respectively. These areas were disproportionately affected by large drops in agricultural output and construction, respectively. Some agriculturally dependent Midwestern states such as Nebraska, Missouri, and Kansas fared better (0.25, 0.0% and 0.5%, respectively) but were still well below 2010 growth rates. The negative agricultural trends could be the result of consecutive years of extreme heat and low precipitation level in addition to declining global demand.

Four Points of Growth and Ongoing Risks

The inauspicious signs of 2011 suggest tenuous growth 2012. First, the exceptional drought in Texas and the south last year has spread to much of the Midwest and Plains areas. This will definitely reduce real agricultural GDP activity in 2012 and possibly into 2013. Second, European growth is now contracting and emerging markets demand is softening. These trends suggest downside risks to manufacturing-dependent areas and a hit to the earnings of large companies with significant operations in these areas.

Third, the transformation of the U.S. into a net energy exporter is a boon for many states; however, this industry needs a wave of complementary investments. Natural gas markets continue to struggle with supply issues, as current distribution networks are constraining export potential. In addition, complementary production effects resulting from increased oil extraction suggest upward pressures on domestic oil supplies will persist. Although federal regulators are examining the impacts of hydraulic fracturing on the environment, at present, there appears to be little impetus for new regulations that may present a threat to drilling activity. Thus, in the near-term, we believe that this industry will continue to be a growth leader for the future.

5. Uncertainty Holds Back Growth as Policymakers Head Toward the Rubicon

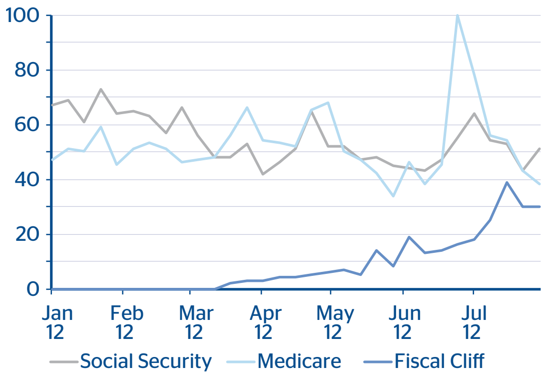
Uncertainty about future economic policy can have real consequences on jobs and growth, because a wavering legislative environment distorts capital investment decisions. The decision to invest in a long-term, irreversible capital project is bounded by the initial outlay and the project's net present value that incorporates its expected returns. However, abnormally high uncertainty ripples through the equation and can cause the real option value of forgoing the capital project to exceed its expected return. Thus, if uncertainty is severe, companies' risk aversion increases, which can lead to permanent effects on the long-run levels of aggregate investment. An example of severe uncertainty might include a government regime that can change leaders or policies on a whim. However, in the case of milder policy uncertainty, the effects are confined to the short-to-medium term.

The economic policy uncertainty stemming from the potential government shutdown and the debt-ceiling negotiations in 2011 are examples of perilous uncertainty. However, the resolutions agreed upon were temporary and the ongoing partisan tension in Washington has de-sensitized markets to any short-term patches. Currently, the U.S. economy is facing uncertain policy expectations, as a looming Fiscal Cliff scenario has left room for policymakers to waver over long-term solutions. Although the changes to current laws from the impending Fiscal Cliff are known and determined from prior policies, the Fiscal Cliff scenario contributes to the uncertainty discussion. New healthcare reforms, energy and financial regulations, and long-term fiscal sustainability also underlie current uncertainty. This lack of resolution on such issues and the lag time between multiple 2400+ page bills and their codification into the Code of Federal Regulations all feed into the aggregate level of market uncertainty. Nonetheless, if Congress unites to address the structural challenges of the country and thus reduces policy uncertainty, the economic recovery could gain traction and boost competitiveness.

Chart 14
Rolling Correlation with BBVA Uncertainty Index

Source: BBVA Research & Haver Analytics

Chart 15
Google Trends: Social Security and Medicare vs. Fiscal Cliff



Source: BBVA Research & Google

We have developed a model to quantify the effect of uncertainty. After modeling a time series of uncertainty we perform post-estimation tests to determine how uncertainty affects various aspects of the U.S. economy. Under a scenario similar to the debt-ceiling debate of 2011, in which markets are unable to formulate short-run expectations about the future path of policies, the consequences of reduced employment, growth and investment would be substantial. Going even further, an extended period of an uncompromising Congress and stop-gap legislating could have a longer-term dampening effect on market optimism. Heightened uncertainty, however, and thus the prospect of lower economic growth is not a foregone conclusion: the ability to reduce uncertainty is firmly in the control of policymakers.

Economic Policy Uncertainty: The Cost of Waiting

Uncertainty is defined within a broad spectrum. In the strictest sense, uncertainty is the inability to form solid expectations about the future. If economic agents can foresee a finite set of future outcomes, they can plan accordingly, but if they are presented with an infinite set of outcomes, it is impossible to plan for all cases. The strictest manifestation of uncertainty lacks tangibility, which means that it cannot be directly measured in markets or in the real economy. Consider, for example, the risk of government shutdown in the spring of 2011, the debt ceiling debate a couple of months later, and the failure of the Joint Select Committee on Deficit Reduction in November. As both sides engaged in political grandstanding in the prospect of a U.S. sovereign default, there was no way to predict how or when the negotiations would end and what would materialize from the conversations. Given that markets respond to data in today's information set, future expectations must be formed by placing a probability distribution over possible outcomes using the latest available information. Uncertainty, however, muddies this rational expectation framework because agents are unable to form a probability distribution over an infinite set of outcomes, and current data provides little to no clarity to update this distribution.

Uncertainty is also an iterative information gathering process. In most cases there are not enough stimuli for a single event to shift market expectations. Regime changes or revolutions are examples which could swiftly shift uncertainty to a point where firms choose to forgo investing. However, in the case of the U.S., this is not a concern. Conversely, uncertainty in the U.S. is a response to a multitude of repeatedly failed compromises. For example, during the debt-ceiling negotiation, successive failures to reach a compromise on an issue that should have been routine resulted in a crippling shock to the market's policy expectations. In this instance, there was no rapid shift and for the majority of the process, markets anticipated that a compromise would emerge. Nevertheless, when no compromise was reached, policy uncertainty surged. Once this occurs, the option value of waiting to make a decision becomes positive; for example, the opportunity cost of waiting another month for information and clarity before making a capital investment is greater than today's expected returns.

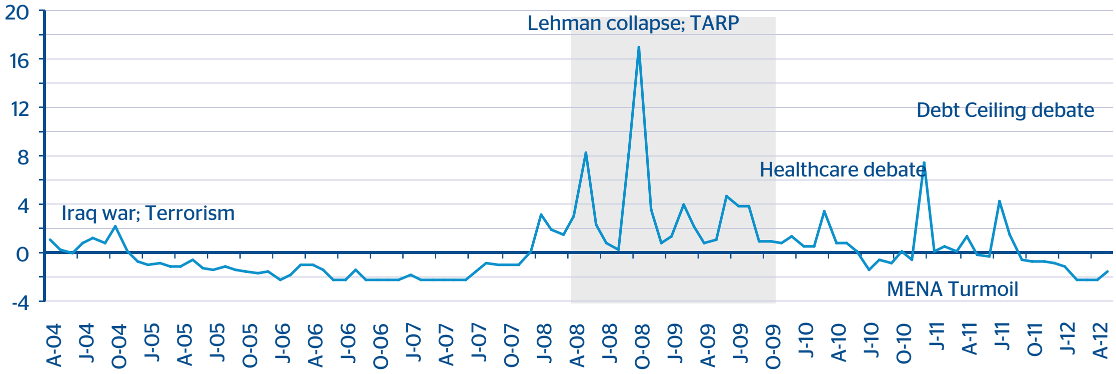
Depending on the size of the policy uncertainty shock, the effects can either be short-run flow effects on investment or medium-to-long run effects which can permanently reduce the economy's stock of capital. In its simplest form, short-run effects are comparable to a traditional business cycle in which a sufficient number of companies forgo investment and growth declines in the short-run. The rebound in the subsequent period returns the economy to its long-run potential. Generally, this reduction in investment is transitory and has negligible effects on the long-term stock of capital. Once the economy rebounds, companies respond to improving returns, better information and reduced policy uncertainty by increasing investment above long-run trend levels and thus make up for the short-duration reduction. This type of uncertainty can go unnoticed during the ebbs and flows of normal business cycles.

If, however, policy expectations remain depressed over the medium term and firms adjust to a new norm of undefined policies, long-run capital levels can decline. If uncertainty reaches this threshold, the long-run trend of investment will shift downward for an indefinite period. In this hyper risk-averse environment companies become de-sensitized to positive information and policy makers no longer have the tools to assuage market concerns without formal commitment. In this environment, economic agents only respond to negative stimuli, and this shift produces a self-propagating negative feedback loop that can have disastrous consequences on an economy's stock of capital.

Because we are unable to disentangle uncertainty shocks from conventional demand and supply shocks, periods of high uncertainty do not always equate to an observed decline in investment. For example, if today's profitability expectations rise due a demand shock, the net present value of an investment will rise, and thus the opportunity cost of waiting becomes too great to sit idle. In the case of continued strong emerging market demand, companies will continue to invest in projects in spite of moderate policy uncertainty. Yet, policy uncertainty can distort the pattern of investment: U.S. multinational companies may choose to hire workers and make investments abroad to tap growing global demand. Furthermore, at a time when the economy needs to attract capital from all sources, the flow of investment into the U.S. may decline if foreign companies perceive high uncertainty and do not have a clear picture about the rules of the game.

Uncertainty, down from 2011 highs

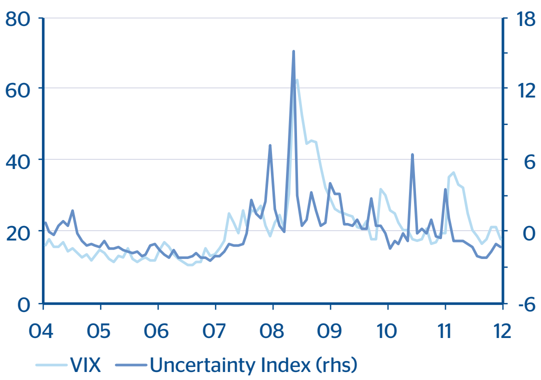
Chart 16
BBVA Uncertainty Index (recession=shaded)



Source: BBVA Research, Google & Haver Analytics

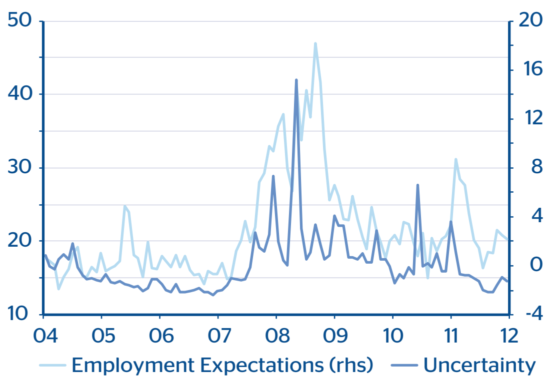
Considering that uncertainty could influence the business cycles in the short-to-medium term, we developed a metric that aggregates the number of searches for a given terms associated with economic policy uncertainty such as "tax" or "fiscal". Given that the fiscal malaise of the U.S. has been lumped into the fiscal cliff umbrella, we have added a search term for fiscal cliff rather than debt ceiling, even though there remain issues with debt-ceiling management. The fifteen term searches are compiled using Google Trends (Insights), and then we use principal component analysis to reduce the dimensionality of the problem into the components that explain the greatest share of the co-variation among the search terms. We then use the reduced set of factors as a measure of unobserved economic policy uncertainty. Although the sample is small —8 years— we believe that there is sufficient variation to distinguish between specious movements in search volumes and actual movements in uncertainty. However, there is a clear downside to these assumptions: we have to assume that movements in a given series are correlated with growing levels of uncertainty in the economy. In general though, as seen in chart 4, strong movements in our index coincide with periods that we characterize as more uncertain. Moreover, our results are consistent with our a priori intuition in regards to various economic indicators.

Chart 17
BBVA Uncertainty Index & VIX



Source: BBVA Research, Google & Haver Analytics

Chart 18
BBVA Uncertainty Index & Employment Expectations



Source: BBVA Research, Google & Haver Analytics

After compiling the information and applying a weighting matrix, we are left with a time-series index of US economic policy uncertainty (see chart 16) which spans from April 2004 to July 2012. It is important to note that our index also includes geo-political and financial uncertainty, but to a lesser degree. We include these factors to incorporate the contemporaneous effects of other major forms of uncertainty. The focus, however, remains economic policy uncertainty. Of note, our model suggests economic policy uncertainty is currently below its normalized average and the levels reached during the debt-ceiling debate. It is, however, up from April lows, which reflects the cumulative build-up of uncertainty in regards to the Fiscal Cliff. Chart 15 also suggests that the uncertainty regarding the Fiscal Cliff is increasing whereas other issues such as Medicaid and Social Security are declining in relative importance given that there have been little to no long-term resolutions in regards to their fiscal sustainability. In total, our model indicates that uncertainty remains at comparatively low levels, but continued partisan gridlock could tip the scale.

The New Faces of Uncertainty

The Fiscal Cliff, a holdover from the debt-ceiling debates of 2011, has become the embodiment of the fiscal mismanagement and lack of long-term debt planning that continues to weigh on market expectations. Basically the automatic spending reduction triggers that were agreed upon last summer are set to take effect on January 1. In addition, the Bush-era tax reductions are set to expire on December 31 after a series of stop-gap extensions and failed long-term compromises. There are other issues built into the Fiscal Cliff such as the Alternative Minimum Tax, the payroll tax-cut extension, and cuts to Medicare reimbursement rates – all of which relate to the uncertainty surrounding fiscal policy. However, we believe the fiscal cliff differs from the more general policy uncertainty because it is effectively provisioned for in current law. However, we also believe that markets have grown tired of Congress' paltry policy record and discord over the past two years. This intolerance will be tested during negotiations as markets will grow progressively unsure of the outcome.

There are other key policy areas which need clarity: healthcare remains at the top of the list. The accelerating cost of healthcare, non-competitive insurance markets, growing strains on the health system brought on by rising obesity levels and an aging population suggests that private markets have failed to provide costly effective care and thus some degree of government intervention will be required. The level of intervention is debatable yet there is no challenge to the ineffectiveness of partial regulation. The inefficiencies created by partial regulation have created a volatile mix of policy and regulatory uncertainty, which has been compounded by partisan rhetoric in regards to the Affordable Care Act. The combined uncertainties are more suggestive of long-run capital level effects rather than short-term cyclical declines. Given the current systemic weakness, the growing uncertainty could decrease capital flows and industry profits. Although the Supreme Court's ruling on the constitutionality of the Affordable Care Act provided much certainty about the future of healthcare policy, politicians' promises to attempt to repeal the law are decreasing market participant's ability to anticipate the future of the policy.

The energy, financial, and agricultural markets also suffer from an unclear policy future. The threat of new onerous regulations increases uncertainty. In the financial sector, proposed rules stemming from the Dodd-Frank Act will raise operating costs and lower returns for banks, thus limiting new investment in the sector and forcing some banks to close. Additionally, new drilling technologies in the oil and gas industry have been challenged by environmental groups as unsafe. Although there is no consensus as to whether these technologies are the direct cause of seismic activity or water contamination, the lack of a firm policy direction is creating a tepid investment environment in an industry that has played a key role during the recovery.

Apart from the industry challenges, the long-run fiscal sustainability of the U.S. remains the more influential input into the uncertainty equation. Bold, long-term fiscal policies that address the long-run fiscal sustainability of the U.S. should trickle down to all of the aforementioned areas. If not fixed, however, the likelihood of extreme policy swings will grow as rising public debt levels crowd out private investment and decrease the overall competitiveness of the U.S. In anticipation of increased corporate taxes and decreased domestic demand, firms reduce investment or specific types of investment given the uncertainty of after-tax profitability. The combination of weakness across key industries, lower demand expectations, and higher public debt suggests that global competeveness issues will only intensify.

Impact of Fording the Rubicon

Table 4
Policy Uncertainty Impacts

Months	10-year Treasury Yields (Constant Maturity, bp)	Corporate Profits ($bn)	Investment ($bn)	GDP ($bn)	VIX (bp)	Unemployment Rate (bp)
1	0.7	1.6	-1.0	-0.5	1.73	1.8
2	-5.1	1.9	-3.5	-2.6	2.07	7.2
3	-9.5	1.5	-6.2	-5.2	1.76	11.0
4	-11.7	0.8	-8.6	-7.5	1.43	13.0
5	-12.7	0.2	-10.6	-9.5	1.20	14.2
6	-13.0	-0.5	-12.4	-11.2	1.02	14.9
7	-13.0	-1.1	-13.9	-12.7	0.88	15.3
8	-12.9	-1.6	-15.2	-14.0	0.75	15.5
9	-12.7	-2.1	-16.3	-15.0	0.64	15.6
10	-12.4	-2.4	-17.1	-15.9	0.54	15.6
11	-12.1	-2.7	-17.7	-16.6	0.46	15.5
12	-11.8	-3.0	-18.1	-17.0	0.39	15.4
13	-11.5	-3.1	-18.3	-17.3	0.34	15.3
14	-11.2	-3.3	-18.3	-17.5	0.29	15.1
15	-10.9	-3.4	-18.1	-17.5	0.24	15.0
16	-10.6	-3.4	-17.8	-17.3	0.21	14.8
17	-10.4	-3.4	-17.3	-17.0	0.18	14.6
18	-10.1	-3.4	-16.7	-16.6	0.15	14.4
19	-9.8	-3.3	-15.9	-16.1	0.13	14.3
20	-9.6	-3.3	-15.1	-15.5	0.11	14.1
21	-9.3	-3.2	-14.1	-14.8	0.09	13.9
22	-9.1	-3.0	-13.1	-14.1	0.08	13.7
23	-8.9	-2.9	-12.1	-13.3	0.07	13.6
24	-8.6	-2.8	-11.0	-12.4	0.06	13.4

Source: BBVA Research, Google & Haver Analytics

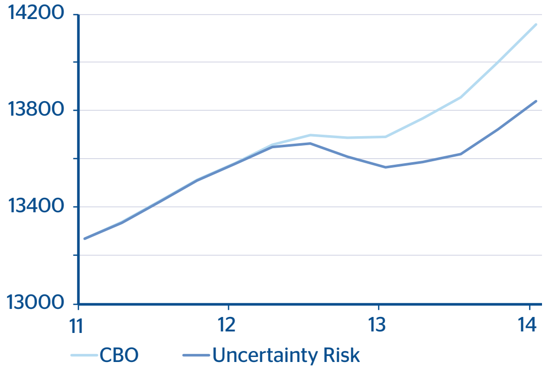
A lasting shock to uncertainty could produce a surge in unemployment. We estimate that the effects of a one standard deviation shock to uncertainty (approximately one half the uncertainty shock of the debt ceiling event) are over $328bn of reduced investment during a two year period. Our model also suggests that employment will decline by 3.3 million in the first year following an uncertainty shock and approximately 2.8 million in the second year, which is consistent with the intuition of rapid labor adjustments in the short-run and a more gradual response to investment during the medium-run. Unemployment in this scenario would increase by 1.5pp and 1.7pp in the two subsequent years. Certainly, a rise in uncertainty could derail the fragile recovery.

In terms of its impact on growth, an uncertainty shock could amplify an already precarious scenario. The CBO estimates that the Fiscal Cliff could result in a recession in 1H13 or 2H13 depending on the timing of Congressional action. It is hard to argue against the timing of the impacts, however the CBO's estimate of an annualized contraction of 2.9% in 1H13 could be an underestimate given the shock to economic policy uncertainty that Congressional action will generate. This persistent shock will reverberate through employment, investment and thus economic growth throughout the year. The combined effect during 2013 and 2014 could far exceed their current estimates and suggests the possibility of further downside risks to our baseline forecast for 1.8% growth in 2013. If, however, Congress can achieve a grand compromise, this commitment could boost certainty, and thereby offset the negative effects from fiscal consolidation. Providing markets with certainty could result in stronger economic performance.

Chart 19
Real GDP Growth Scenarios: BBVA Uncertainty Risk vs. CBO Baseline (YoY, %)

Source: BBVA Research, Google & Haver Analytics

Chart 20
Real GDP Scenarios: BBVA Uncertainty Risk vs. CBO Baseline ($bn, 2005)

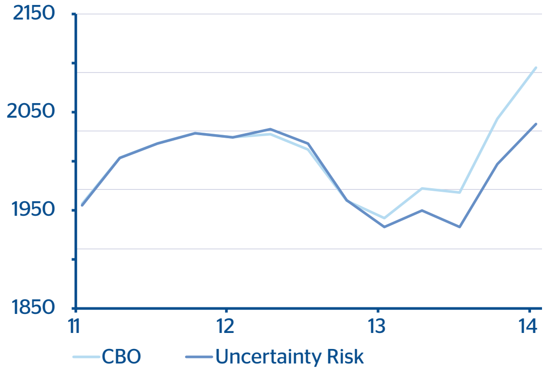


Source: BBVA Research, Google & Haver Analytics

Chart 21
Unemployment Rate Scenarios: BBVA Uncertainty Risk vs. CBO Baseline (%)

Source: BBVA Research, Google & Haver Analytics

Chart 22
Corporate Profits Scenarios: BBVA Uncertainty Risk vs. CBO Baseline ($bn)



Source: BBVA Research, Google & Haver Analytics

Bottom Line

In congressional speeches and through policy communications of the FOMC, Federal Reserve Chairman Ben Bernanke alluded that altering expectations through a fiscal resolution would likely reduce the probability of a double dip recession. However, his pleas to Congress to reach a compromise that addresses both the short and long-run fiscal concerns without sacrificing the fragility of the recovery will not come before 2013. Our model confirms the importance of reducing policy uncertainty as a way to boost the pace of economic growth through greater investment and hiring. The negative signal of inaction that results from an economic policy uncertainty shock has longer-lasting effects on growth. High levels of policy uncertainty in key industries such as finance, healthcare, oil and gas, and agriculture add to the growing pessimism. Ultimately, if Congress unites to ameliorate the structural challenges of the country and thus reduces policy uncertainty, the long-run competitiveness of the U.S. will improve.

6. Recycling Industries: Opportunities in the Green Economy

Introduction

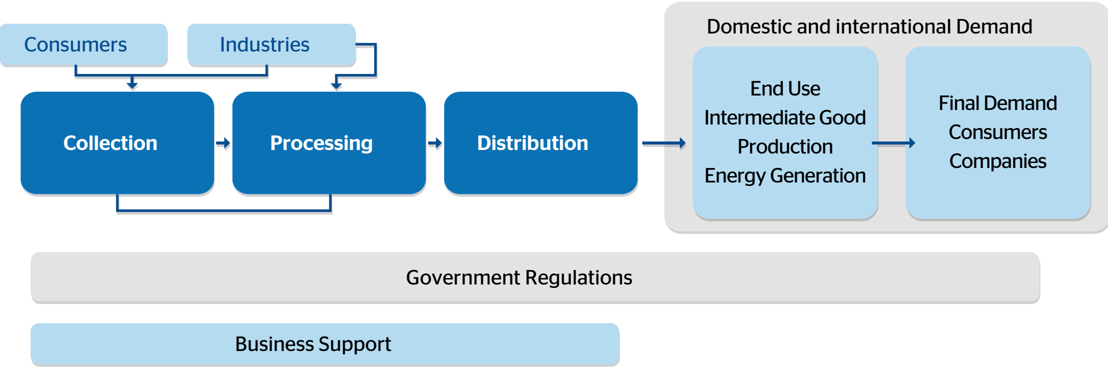
As the middle class expands rapidly worldwide, so does the demand for goods and services and the inputs to produce them. Consequently, there is fierce competition for a limited amount of natural resources that will only intensify with the rapid industrialization of China and other emerging economies. Increasing demand and scarcity are not only driving commodity prices up but are also increasing their vulnerability to unexpected shocks as well as political instability. As industrialization and population growth accelerates so do concerns about long-run environmental sustainability and its implications to businesses and individuals. Recycling is commonly perceived as an instrument to tackle environmental concerns and curb the risk of natural resource depletion. In addition to being an environmentally friendly industry, some recycling activities are also highly profitable.

In the recycling industry, the supply chain (Chart 23) begins with consumers and businesses whose everyday activities generate a significant amount of waste that can be recycled and re-used. These materials are collected, processed, and distributed before being sold as energy inputs, intermediate or final goods. Demand for recycled products is comprised by business and individuals. Companies seek to use recycled inputs as a way to reduce costs and/or attract customers who prefer products that have recycled content.

Federal, state and local governments play a significant role in both the demand and supply of recycled products. Governments have the capacity to establish mandates and stimulate the industry through incentives and subsidies. Furthermore, many municipal governments are responsible for waste collection from households and businesses. Governments also regulate aspects of the production process, most notably those that involve the location and characteristics of landfills as well as the disposal and handling of hazardous materials.

Chart 23

Recycling Industry Supply Chain

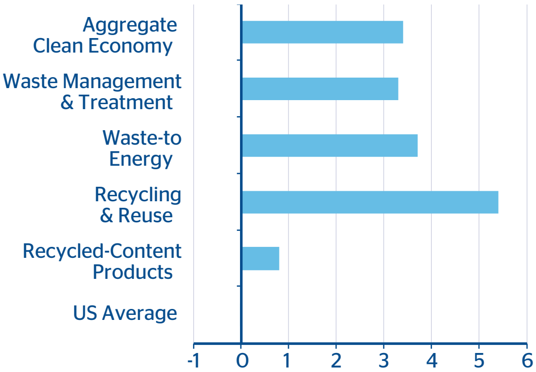


Source: BBVA Research

The broad economic impact of the recycling industry can be measured by its contribution to employment growth. Industries related with sustainability –better known as "clean industries"- are labor intensive, and their expansion is seen as a method to reduce the currently high unemployment rate. According to the Brookings Institution, the clean economy generated 565,337 jobs between 2003 and 2010 and grew by an average of 3.5% annually. In contrast, total non-farm payroll experienced virtually no growth during the same period[1] (Chart 24).

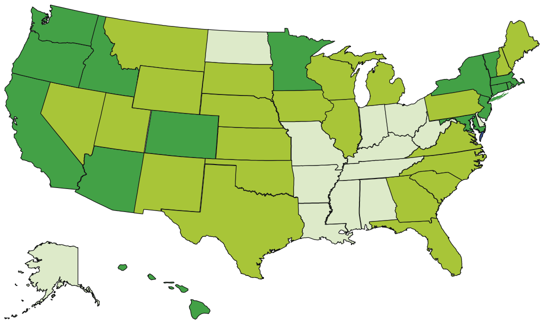
[1] The Brookings Institution (2011), "Sizing the Clean Economy: A National and Regional Green Jobs Assessment," available at http://www.brookings.edu/-/media/Series/resources/0713_clean_economy.pdf

Chart 24
Employment Growth in Selected Clean Industries



Source: The Brookings Institution with BLS data

Chart 25
America's Greenest States



*Based on Forbe's Ranking of America's Greenest States 2007. States were ranked based on six equally weighted categories: carbon footprint, air quality, water quality, hazardous waste management, policy initiatives and energy consumption. Source: Forbes

Despite the severity of the great recession, recycling businesses generated new jobs. Waste management and treatment created 79,401 jobs from 2003-2010, followed by recycling and reuse with 39,668. Given these figures, it is not surprising that governments at all levels promote initiatives that accelerate the growth of the recycling industry. States in the western U.S. and in the northeast are more likely to promote initiatives that benefit the recycling industry as residents and business tend to have a more positive attitude towards a "green economy" than the rest of the nation, as we can infer from Chart 24. California and New York, for example, are expected to increase their recycling targets from 50% to 70% in the following years.

Relative to other countries, however, the U.S. "green economy" scores poorly. Yale University's Environmental Performance Index ranks the U.S. 49th out of 132 countries, well below Switzerland (1st), Costa Rica (5th), and the Netherlands (16th). Nevertheless, this is likely to change in the near future. The eruption of new players in the global economic landscape –namely China, India, and Brazil- has intensified the competition for natural resources and increased the need for higher recycling rates in the U.S. Catching up with other developed countries represents an opportunity for the expansion of the recycling industry.

Evolving consumer sentiment, continued expansion in the U.S. and sustained population growth will drive demand for recycled goods

The market for recycled products is driven by four major elements: consumer spending, industrial production, consumer attitudes towards recycling and commodity prices. Consumer sentiment towards recycling is a major driver of the recycling industry. Environmentally conscious consumers tend to recycle more and pressure manufacturers to intensify the use of recycled materials. According to a study conducted by the safety science company UL,[2] 75% of consumers worldwide do not feel that manufacturers have taken adequate steps to ensure environmentally friendly procedures.

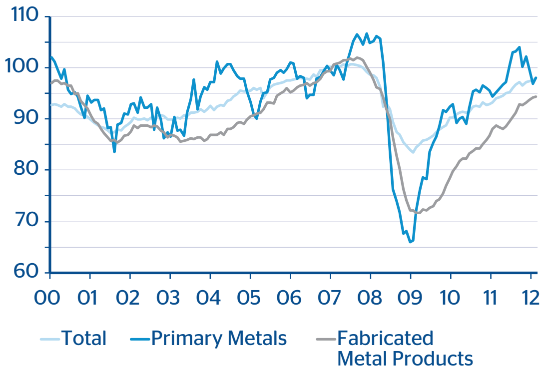
Today, companies cannot ignore consumer preferences for sustainable design, as the generation that grew up with cartoon advertisements and the elementary school campaign "Reduce, Reuse, Recycle" are now adult consumers.

The recycling industry is pro-cyclical meaning that supply and demand vary according to the level of economic activity (broadly measured by GDP). The logic is simple, in good economic times unemployment is low and consumer spending grows at a healthy pace while industries produce more and demand more inputs. Combined, these activities boost the generation of waste that can be recycled and re-used. For example, a window of opportunity is returning in the housing market as its recovery will boost the demand for recycled construction materials. Sustainable-building materials, some of which are manufactured with recycled inputs, have gained momentum in the minds of new home buyers.

[2] Underwriters Laboratories (2011) "Navigating the Product Mindset."Available at http://www.ul.com/global/eng/pages/corporate/aboutul/noteworthy/productmindset/

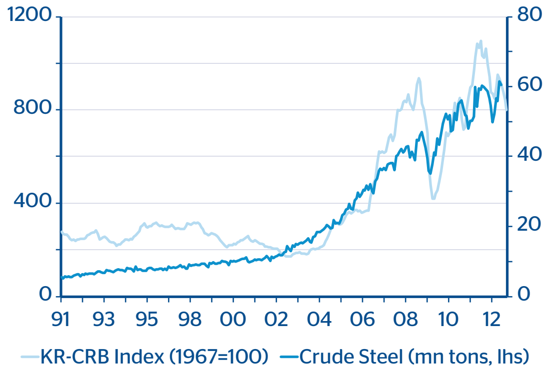
There is also a structural component in the demand for recycling products. In the United States, population growth and sustained improvements in the standard of living have accelerated waste production. Municipal solid waste (MSW) –excluding yard trimmings– has followed an upward trend since 1960 (Chart 28); this trend was only curbed by the Great Recession but it is expected to rebound as both consumer spending and industrial production continue to expand at a solid pace.

Chart 26
U.S. Industrial Production Index (SA, 2007=100)



Source: Haver Analytics

Chart 27
KR-CRB Metals Spot Price Index* vs. Chinese Production of Crude Steel (YoY, % change)

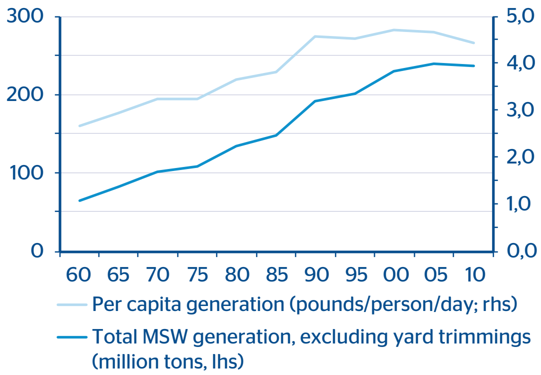


*Includes: Copper scrap, lead scrap, steel scrap, tin, and zinc.
Source: BBVA Research

Rising Consumer Waste Recycling Will Demand New Investment

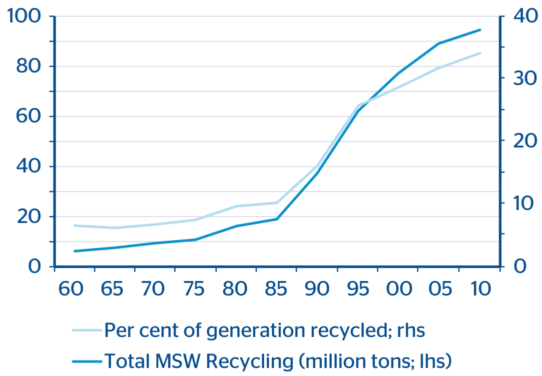
The Consumer Waste Recycling segment will benefit from structural and short-term economic trends. As recycling rates continue to increase (Chart 29), the need for new recycling facilities remains high. At the product segment level, opportunities for recycling facilities are strong in plastics and metals. Although paper and paperboard are the major components of MSW, the advent of electronic communications and the move of companies and individuals towards paperless environments are expected to downsize this niche.

Chart 28
Municipal Solid Waste Generation Rates, 1960-2010 (Individuals and businesses)



Source: Environmental Protection Administration

Chart 29
Municipal Solid Waste Recycling Rates, 1960-2010 (Individuals and businesses)



Source: Environmental Protection Administration

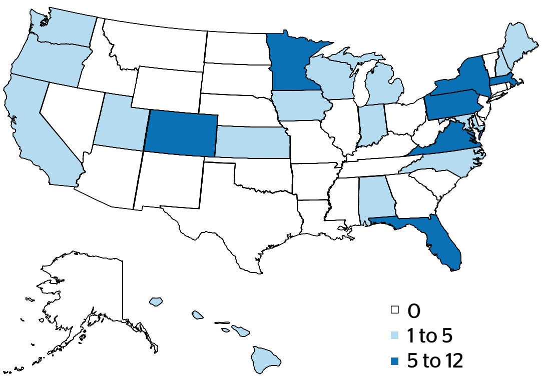
The expansion of recycling facilities will also benefit from state and local government regulations that mandate higher recycling rates. This kind of regulation not only increases but also stabilizes revenue growth in the industry. Opportunities for private companies come not only from potentially higher volumes of recycled materials but also from municipal government efforts to outsource costly recycling services, particularly in small urban areas. The expected need for new recycling facilities coupled with the implied costs of complying with recycling mandates and tougher landfill regulation has encouraged consolidation. Recycling facilities have become an attractive target for waste collection companies as they integrate recycling and distribution in their supply chains to increase total revenue.

Waste-to-Energy Plants: An Attractive Option to Diversify Revenue

Another aspect of waste recycling involves the use of garbage in the production of electricity. As of October 2010, there are 90 waste-to-energy (WTE) plants operating in the United States. Most of them are located in the Northeast and on the West Coast (Chart 30). In 2010, WTE plants burned around 29 million tons of MSW and produced 15.9 billion kwh of electricity, generating an estimated $638 million in revenues. The advantages offered by MSW go well beyond environmental benefits as they reduce the consumption of highly pollutant fuels like coal or diesel.

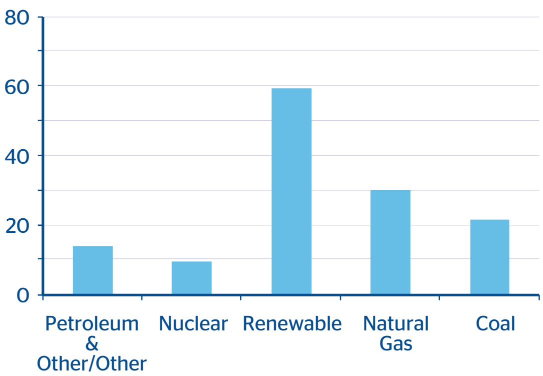
WTE plants qualify for subsidies and tax credits aimed at reducing CO2 emissions because producing electricity out of garbage is considered a renewable source of energy. WTE conversion has also become another way for large recycling and waste collection companies such as Waste Management to diversify revenue. However, WTE plants face strong competition from abundant and cheaper sources of energy such as coal and natural gas. Strained government budgets also threaten the subsidy gravy train. These factors combined with the relatively high initial investment needed to build a WTE plant partially explain the low number of WTE plants relative to their potential environmental benefits and seemingly unlimited source of fuel. Nevertheless, WTE conversion could gain momentum in the coming years as renewable sources of energy are expected to increase their share in the electricity mix (Chart 31) by an accumulated growth rate of 60% between 2011 and 2035 – primarily due to biomass generation.

Chart 30
WTE Plants in the U.S. by State (As of October 2010)



Source: TM, ERC

Chart 31
Projected Electricity Mix in 2035 (Accumulated growth 2011-2035, %)



Source: Energy Information Administration

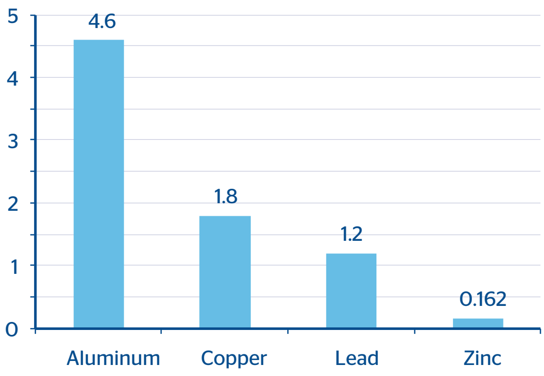
Global Economic Growth Supports the Demand for Scrap Metal

Commodity prices, which have a strong impact across the entire recycling industry, particularly affect the demand for scrap metal. The U.S. is currently the world's top producer of scrap metal which accounts for nearly 2/3 of all recycled materials, by volume. Within the scrap metal industry, the largest and most valuable segment is ferrous metals such as iron and steel. The U.S. is the primary exporter of scrap metal of which approximately one third is destined solely for China. World metal spot prices have largely been driven by economic growth in emerging markets during the last twelve years. In the same period, exports to China have increased exponentially as rapid industrialization and investments in public infrastructure demand steel and other metals. China is certainly not alone, and these worldwide developments have led to sustained increases in metal prices. Today, there are abundant domestic opportunities for companies engaged in the processing, distribution and export of scrap metal.

According to the Institute of Scrap Recycling Industries, the U.S. market of non-ferrous metal scrap (aluminum, copper, nickel, lead and zinc) was estimated at $40 billion with more than 8 million metric tons processed in 2010. In contrast, in the same year, U.S. companies processed more than 74 million metric tons of ferrous metal enough to build 25 Eiffel Towers every day of the year bringing the industry's value to $26.4 billion. Steel comprises the largest share in the ferrous metal segment. Roughly 60% of raw steel production is conducted in scrap-fed electric-arc furnaces (EAFs), which contrary to basic oxygen furnaces, allow the utilization of big quantities of scrap metal in the production of steel. EAFs have been growing in use and are perceived as cost-efficient ways to satisfy the increasing demand for steel, particularly in times when energy prices tend to be high. The distribution of scrap metal is such a lucrative business that vertical integration is a growing trend; in particular, large steel producers are integrating scrap recycling and distribution into the supply chain.

Chart 32

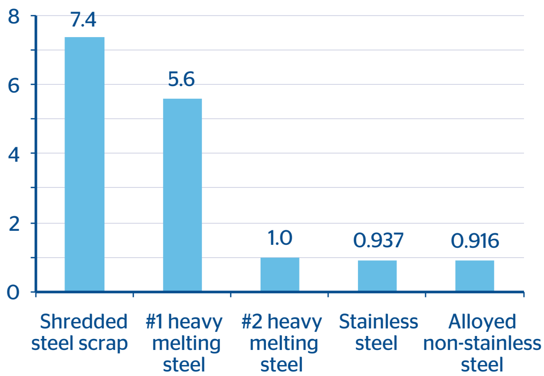
Non-ferrous Scrap Processed in 2010
(Exports plus domestic recycled, millions of metric tons)



Source: IBIS World and Institute of Scrap Recycling Industries

Chart 33

Iron & Steel Scrap Statistics
(Unit value, 1998$/metric ton)



Source: U.S. Geological Survey

Downward Risks from Slower Economic Growth and Political Uncertainty

Although prospects for the recycling industry are mostly favorable, it is exposed to both domestic and external risks. The principal risk stems from slow domestic and international economic growth. Slower growth results in reduced generation of waste domestically, and lowers global demand for recycled products. For example, declining public investment in infrastructure and housing construction in China will temper the demand for scrap metal. Although recycling mandates and government incentives have a positive impact on industry growth, the balance of power could shift towards political groups that are less willing to support the development of a clean economy. These groups may have different views on environmental risks or they may question the ability of the clean economy to create jobs. The relative domestic abundance of natural gas and coal has delayed the adoption of alternative sources of energy such as garbage. Low prices of these commodities discourage investment in waste-to-energy technologies. Furthermore, shocks to commodity prices and vulnerability to geopolitical risks could also weigh on the industry's profitability.

Bottom Line

Increasing environmental concerns, rapid growth overseas, the expanding U.S. economy, and competition for natural resources continue to drive the demand for recycled goods. Consumer waste recycling facilities are a vital component of the clean economy, and federal, state and local governments continue to back the industry through recycling mandates and fiscal largesse that encourage expansion. Our prospects for waste-to-energy conversion are less positive and limited by the abundance of cheaper sources of electricity production such as natural gas and coal. Nevertheless, WTE may remain an attractive option for waste management companies seeking to diversify revenue. Among the recycling industries, scrap metal processing and distribution facilities are expected to experience sustained revenue growth in the following years. This industry is less sensitive to government handouts as the rising prices of commodities and fervent global demand can adequately finance operations.

7. Factsheet

Table 5

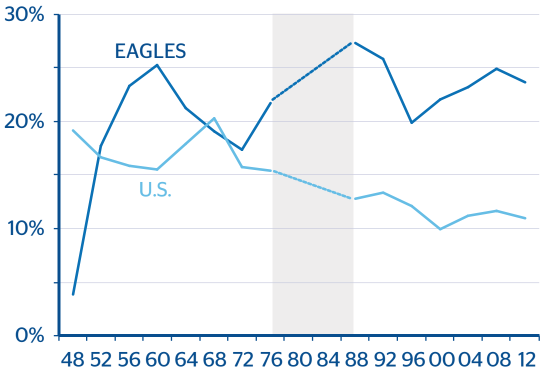
US, G7 and EAGLES* (Summer Olympics)

	U.S.	G7	EAGLES
Total Medals	1576	4050	2492
2012 Golds	46	113	80
Share of World GDP	9.6%	9.7%	61.1%
Share of World Pop	4.4%	4.7%	46.5%
2011 GDP Growth (PPP)	1.9%	1.5%	7.1%

*EAGLES Aggregate: China, India, Brazil, Indonesia, Korea, Russia, Turkey, Mexico & Taiwan
Source: BBVAResearch, Haver Analytics & FindData.org

Chart 34

US vs. EAGLES Historical Medal Share* (Summer Olympics)



*Shaded area omitted given consecutive boycotts by the US (1980) and Soviet Union (1984)
Source: BBVA Research & FindData.org

Table 6

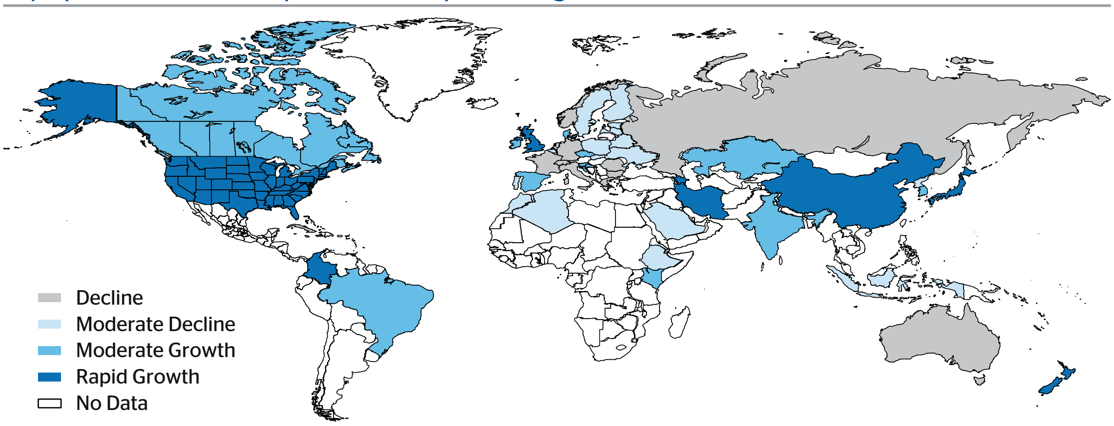
Olympic Factsheet

	US	UK	Spain	Germany	France	Portugal	Turkey	China	Russia	Brazil	Australia	Japan	India	Canada
Total Medals*	1576	430	126	683	390	20	85	473	1519	104	441	352	22	195
Most Golds in a Year	83	29	13	33	15	1	7	51	80	5	17	16	1	10
Consistency [1]	12	9	5	11	8	1	3	13	14	4	10	6	2	7
Efficiency [2]	10	6	8	7	1	3	9	13	5	11	2	12	14	4
Medals per Decade														
80's**	13.0%	4.0%	0.7%	**15.9%**	2.8%	0.2%	0.2%	2.9%	**15.9%**	0.9%	2.3%	2.2%	0.0%	2.6%
90's	**12.6%**	2.1%	2.4%	8.9%	4.0%	0.1%	0.7%	6.3%	3.8%	1.1%	4.1%	2.2%	0.1%	2.4%
2000's	**10.9%**	3.7%	1.7%	5.2%	4.0%	0.2%	0.8%	7.9%	9.0%	1.3%	5.5%	2.8%	0.2%	1.6%

*Post World War II era
**Statistics skewed by boycotts of both the United States and Russia in 1980 and 1984, respectively.
[1] Consistency: Standard Deviation of Event Medal Count
[2] Efficiency: Most medals per 1 million people per unit of 2005 Real GDP
Source: BBVAResearch, Haver Analytics & FindData.org

Chart 35

Olympic Medals Heat Map (Quartiles report change in share of overall medals from 1992-2012)



Source: BBVA Research

8. Economic Forecasts (YoY % Change)

Table 7

	2011	1Q12	2Q12	3Q12	4Q12	2012	2013
U.S.							
Real GDP	1.8	2.4	2.2	2.3	1.6	2.1	1.8
Nonfarm Employment	1.2	1.5	1.4	1.4	1.3	1.4	1.1
Nom. Personal Income	5.1	2.8	3.2	3.7	4.2	3.5	4.1
Home Price Index	-3.9	-1.9	-0.8	1.4	4.0	0.7	3.3
Home Sales	1.9	6.2	9.3	7.8	5.5	7.1	4.1
Arizona							
Real GDP	1.5	1.2	1.8	2.2	2.4	1.9	2.1
Nonfarm Employment	1.0	1.7	1.7	1.9	2.0	1.8	1.4
Real Personal Income	2.8	2.6	2.5	2.3	2.7	2.5	2.5
Home Price Index	-10.0	3.1	12.9	14.3	11.6	10.5	7.1
Colorado							
Real GDP	1.9	1.8	2.5	3.0	3.3	2.6	2.8
Nonfarm Employment	1.5	2.0	1.9	2.1	2.3	2.1	1.7
Real Personal Income	3.3	2.5	2.0	2.0	1.8	2.1	2.6
Home Price Index	-2.5	-0.1	4.8	5.0	6.1	4.0	4.0
New Mexico							
Real GDP	0.2	0.5	0.9	1.3	1.5	1.0	1.5
Nonfarm Employment	0.1	0.7	0.3	0.5	0.7	0.5	0.7
Real Personal Income	2.2	2.0	2.1	1.6	1.6	1.8	2.3
Home Price Index	-5.4	-1.3	2.9	3.5	5.5	2.7	3.1

	2011	1Q12	2Q12	3Q12	4Q12	2012	2013
Alabama							
Real GDP	-0.8	-0.2	0.6	1.3	1.7	0.8	1.7
Nonfarm Employment	-0.2	0.0	0.4	0.5	0.6	0.4	0.5
Real Personal Income	1.6	1.0	1.0	0.9	0.8	0.9	1.4
Home Price Index	-5.2	2.5	4.0	4.1	4.2	3.7	3.3
California							
Real GDP	2.0	1.7	2.3	2.7	2.8	2.4	2.0
Nonfarm Employment	1.0	1.1	1.4	2.1	1.6	1.6	1.2
Real Personal Income	3.2	2.8	2.6	2.4	2.3	2.5	2.3
Home Price Index	-7.1	-1.2	4.1	5.9	6.2	3.8	4.3
Florida							
Real GDP	0.5	0.8	1.4	1.9	2.1	1.5	1.6
Nonfarm Employment	1.1	1.1	0.8	1.0	0.6	0.8	0.8
Real Personal Income	2.4	1.9	1.5	1.2	1.1	1.4	2.7
Home Price Index	-6.2	4.4	7.4	7.5	8.3	6.9	4.8
Texas							
Real GDP	3.3	2.6	3.4	3.9	4.1	3.5	3.1
Nonfarm Employment	2.1	2.5	2.2	2.4	2.6	2.4	1.6
Real Personal Income	4.2	3.1	3.2	3.2	3.3	3.2	4.0
Home Price Index	-0.9	3.0	4.1	5.0	5.2	4.3	3.9

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

Table 8

Economic Structure

	U.S.	AL	AZ	CA	CO	FL	NM	TX
GDP (2011 $ Billions)	15,076	173	258	1,959	264	754	79	1,308
Population (2011 Thousands)	311,592	4,803	6,483	37,692	5,117	19,058	2,082	25,675
Labor Force (Jul '12 Thousands)	155,013	2,158	3,005	18,406	2,733	9,269	924	12,643
NonFarm Payroll (Jul '12 Thousands)	133,083	1,876	2,458	14,359	2,295	7,331	801	10,804
Unemployment Rate (Jul '12)	8.3	8.3	8.3	10.7	8.3	8.8	6.6	7.2
Total Building Permits, (YTD Jun '12)	259,041	4,083	8,367	13,376	6,174	20,463	1,949	41,290
Change in Building Permits (YTD YoY (%))	20.0	2.6	56.7	8.1	33.2	26.0	4.6	21.5
Home Ownership Rate (2Q12)	65.5	72.4	64.7	54.7	65.2	67.6	67.7	64.7
Housing Prices (2Q12 YoY Change (%))	3.0	4.0	12.9	4.1	4.8	7.4	2.9	4.1
Exports of Goods (2Q12 $ Billions)	391.6	5.2	4.7	42.1	2.0	16.9	0.8	66.0
Change in Exports (2Q12 YoY Change (%))	5.6	17.8	5.2	5.6	6.3	13.4	63.2	4.7

Source: BEA, BLS, Census, WiserTrade and FHFA

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