2015: "BREAKING BAD" OR "BREAKING FREE"?

ECONOMIC OUTLOOK AND FORECASTS:

The Nation, Southern California and Orange County

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U.S. ECONOMIC OUTLOOK AND FORECASTS

"Breaking Bad" or "Breaking Free"?

"Where is the rest of me?" – is perhaps the most harrowing line of Ronald Reagan's acting career, famously pronounced in "Kings Row" (1942) when his character realizes in shock and horror that both his legs were amputated (unnecessarily) by a sadistic surgeon (the line was also used as the title of Reagan's 1965 autobiography). After five years of lumbering along at an underwhelming pace, wedged in a narrow range of modest to moderate, coming close to near-missed-double-dips and much-hoped-for-lift-offs, after all dashed expectations and unfulfilled wishes, the time has come for all of us to finally ask: "Where is the rest of it?" Where is the rest of this recovery? Will the economy "break bad" or "break free" over the balance of this decade, the beginning of which most of us wish to quickly outdistance and blissfully forget?

The path forward is certainly not obvious. A growing chorus of analysts forecast a stronger, more robust recovery with above-trend growth, improving labor markets and a general multi-sector pickup – in short, a mature expansion that will entrench further over the stage of the business cycle. Others dole out more dour predictions which, on balance, hinge on the prognosis that America's best days are behind us, and the economy's potential is suffering from long-term structural damage, which may never fully be repaired. A third camp straddles the two themes, proclaiming that the ills of the U.S. economy can be attributed to "secular stagnation" – a delightfully ambiguous buzzword, which seems to imply both a long-run structural supply-side issue and a cyclical demand shortfall.

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Our view is that the outlook for the economy is neither as cheery as the demand-side proclaims nor as gloomy as the supply-siders believe it to be. We expect the economy to perform quite admirably over the next three years, growing above its long-term average growth rate with noted improvement in virtually every sector. In fact, the next three years could be the best of this decade as the economy enters the more mature phase of the recovery and stages a genuine and robust expansion.

This undoubtedly constitutes good news. Nonetheless, we caution against excessive optimism, especially in the long term. Our brighter near-term outlook derives mostly from the fact that the depth of the recession was so vast and the shallowness of the recovery so entrenched that there

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is ample pent-up demand sloshing around in the system in virtually all sectors: pent-up demand for housing, cars, capital investment, labor, infrastructure, services and everything else you care to throw in. Recently, we even learned of “pent-up wage deflation” – an obscure and unfamiliar concept first coined by the researchers at the San Francisco Fed and later popularized by the ever-cautious Janet Yellen, the Fed’s newly minted chair.

The “pent-up-everything” growth model will only get us so far. Sure, it will buy above-trend growth for a few years and help repair much of the damage wreaked by the recession. But supply-side issues cannot be ignored either, particularly over the long term: The labor force participation rate is at its lowest since the late-1970s (before women began to enter the labor market en masse); the employment-to-population ratio has barely budged from a three-decade low; investment in capital stock (plant, equipment, information technology and intellectual property) is significantly below pre-crisis trend levels; and productivity growth appears to have shifted into a lower gear for quite some time now (save for a short technology-related burst between 1997 and 2004).

Some of this was inevitable and due to secular demographic forces: The economy would have had to contend with an ageing population and retirement of baby boomers even if the crisis never happened. However, as we have cautioned in the past, it is becoming more and more evident that the recession may have left permanent scars: A prolonged slump may throttle investment, and long-term unemployment erodes skills and motivation creating a vast shadow-class of permanently displaced workers.

It is also possible that the demand shortfall due to the recession may not fully recover. The “pent-up” demand for housing that should sustain above-trend construction in the near term is most certainly due to the vast under-investment in residential structures over the past six years. Longer term, however, a lower inventory of housing starts may be more in line with slower population growth and ageing demographics. The “pent-up” demand for labor may never fully materialize in manufacturing and construction sectors given the secular structural changes these industries are undergoing. And lower demand for capital investment may be more permanent than would have been possible a few years ago given the changing character of production activity (The level of capital investment for today’s tech firms is several orders of magnitude below the capital investments required to sustain GE or Sony.).

There is one potentially game-changing factor in all this: a technological revolution in the energy sector. The economic impact of this energy boom is far-reaching. By the end of the decade, the energy sector is estimated to add a total of $416 billion to U.S. GDP, supporting an estimated three million jobs. Capital expenditures related to exploration activities are expected to reach $172 billion by 2020, while the various levels of government should receive an additional $110 billion in tax revenues.

In sum, our outlook for the economy is a mixed bag: much brighter and above-trend in the short- and medium term, but more challenged in the longer term. A number of risks also cloud the outlook, particularly on the international front. An escalation of the conflict in Ukraine may lead to additional rounds of sanctions and counter-sanctions, which may adversely impact Eurozone economies given their dependence on Russian gas exports. A further escalation of the war in the Middle East may put upward pressure on global oil prices. The Chinese economy seems vulnerable to excessive financial leverage, which could significantly dampen growth should it turn into a debt crisis. Other emerging markets also appear to be limping along and will add little to global growth over the next few years. On the domestic front, the biggest risk stems from the timing and path of interest-rate hikes and the strength of housing construction.

Our baseline outlook assumes that these worst-case scenarios will not come to materialize over the forecast horizon; geopolitical risks continue to simmer but with minimum global supply disruptions, and the Federal Reserve manages to normalize rates without causing significant damage to the expansion.

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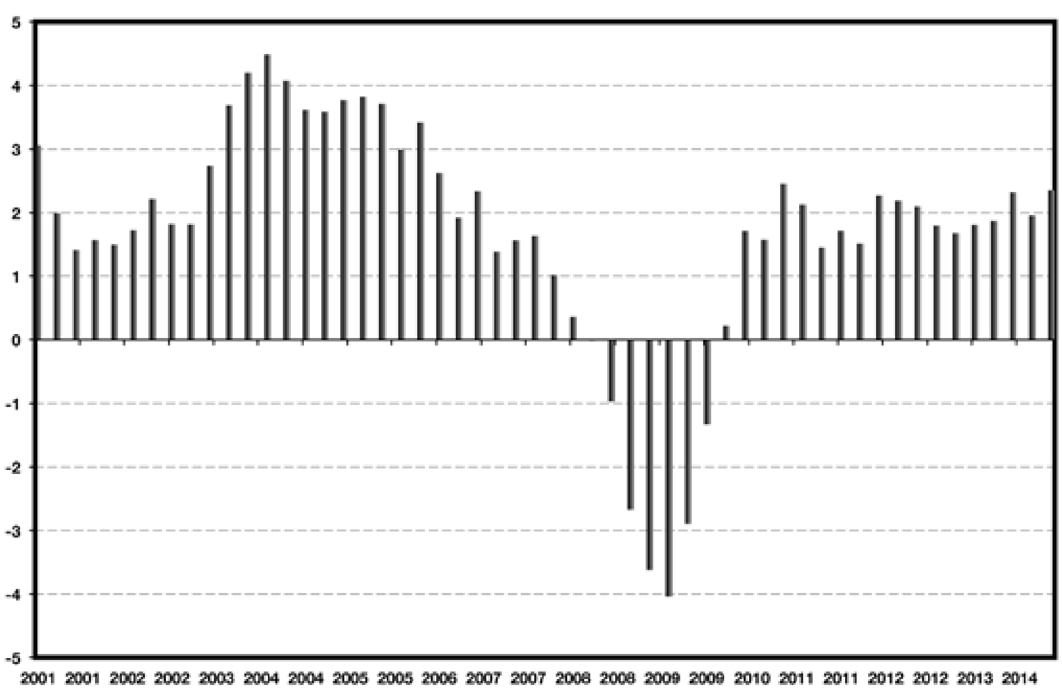
Through a Glass Darkly: Murky Data

There was much fretting over the economy's dismal performance in the first quarter of the year: Economic activity fell by an annualized pace of -2.1% – the second (and the largest) negative quarter since the end of the recession (Q1 2013 also ended up at -1.5%). More confounding was the fact that the final estimate was revised a grand total of four times by the Bureau of Economic Analysis: The first was an estimated (nearly) flat growth of 0.1%, which was subsequently revised down to -1.0%, with a further downgrade to an abysmal -2.9% to a current (and final) -2.1%. And because this was the first quarter of the year, it affected the overall projected growth rates for the entire year; forecasters across the spectrum were busy downgrading full-year projections based on that first quarter alone.

The first-quarter slump was largely due to temporary factors: Unusually cold temperatures in the Midwest and Northeast adversely impacted consumer spending, home sales, construction and production, while a severe drought in the west reduced agricultural production and bolstered crop prices. In addition, the inventory cycle and international trade lopped off a sizable chunk from growth: The drawdown in inventories subtracted -1.16 percentage points to real GDP growth, while net exports chopped off an additional -1.66. The unusually frequent revisions were also partly due to the introduction of the Affordable Care Act: Initial estimates by the BEA assumed a much higher pace of expenditures in health care services than what ultimately occurred (some of it had to do with the botched roll-out of the plan).

Our own forecasts tend to strip short-term, temporary noise from the data (such as inventory cycle and international trade) and focus instead on the underlying momentum and fundamental strength of the economy. To this end, real final sales to domestic purchases are a much more reliable indicator of economic activity. Indeed, based on real final sales, the recovery appears to be steady if unspectacular: Real final sales have averaged roughly 2% per year since 2013 – below the 2.8% average pace set in 2003 through 2007, though less volatile than real GDP numbers (Figure 1).

FIGURE 1
Real Final Sales: A Better Indicator of Economic Activity (real final sales, y-o-y percent change)



The U.S. economy is not simply suffering from enfeebled demand brought forth by the crisis but also by structural (potentially) permanent supply-side deficiencies that were further exacerbated by the recession and weak recovery.

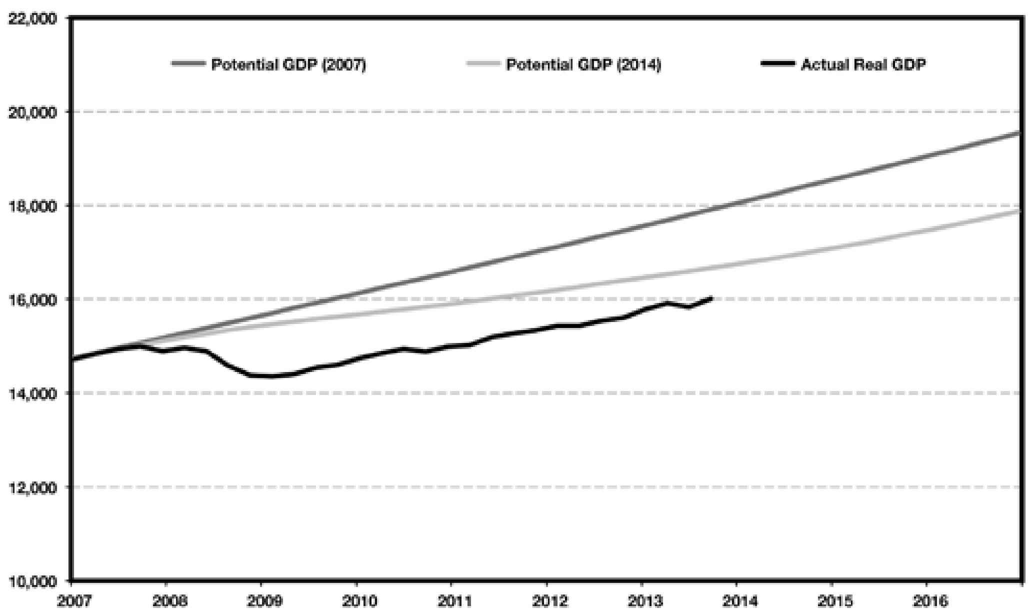
GDP growth should pickup robustly in the second half of the year with the momentum continuing in 2015 and 2016. Indeed, the second-quarter estimate of real GDP came at a robust 4.6%, more than reversing the drop in the first quarter and reinforcing the view that first-quarter results were an abnormality. We expect the pace to strengthen for the remainder of the year and beyond, growing by 3% in the second half of 2014, by 2.8% in 2015 and by 3.0% in 2016.

What Is Your Potential?

Perhaps the most troubling aspect of the deep recession and the snail-paced recovery is the concern that both may have caused lasting damage to the economy's growth potential. This means that the U.S. economy is not simply suffering from enfeebled demand brought forth by the crisis but also by structural (potentially permanent) supply-side deficiencies that were further exacerbated by the recession and weak recovery. Supply-side issues matter greatly in the long term; a country's living standards depend on its (supply-driven) growth potential, which in turn is a function of three factors: the size of the labor force, the size of capital investments and how productive the two inputs (labor and capital) are.

The last few years have been quite disastrous when viewed from this perspective: In what has now become an all-too-familiar and depressing routine, the Congressional Budget Office has sharply revised downward the economy's potential in every single year since 2007. Potential GDP in 2014 is a full $1.3 trillion dollars below what in 2007 was thought its potential would be in 2014. The gap between actual real GDP and the 2014 potential estimated in 2007 is even wider: We are now nearly $2 trillion below where we could have been had the crisis never happened (Figure 2). Taken together, these numbers paint a worrisome and somewhat complex picture: Compared to our 2014 potential estimated prior to the crisis, economic slack is a jaw-dropping 10.5%. However, if potential GDP has indeed been dented by the recession and is now 7% below prior estimates, then slack is not that large and economic growth falls short of its current potential only by 3.5%. This matters greatly for monetary policy: If indeed the cyclical shortfall is only 3.5%, there is much less room for policy maneuvering before the economy hits capacity constraints and inflation begins to pick up.

FIGURE 2
Slump in Potential GDP: Economic Slack is Smaller than Previouly Estimated (billions of dollars, adjusted for inflation, level)



The yawning gap between the pre-crisis trend and actual GDP is partly due to cyclical forces, partly to structural ones and partly to factors that began as cyclical but have become entrenched and are likely to remain permanent scars given the sluggishness of the recovery. The same is true for the drop in potential GDP; some of it is due to slow-moving long-term secular trends and some from the unrepaired damage inflicted by the recession. The long-term secular forces are nowhere more evident than in payrolls jobs and hours worked; Figure 3 shows deviations of these two indicators from their long-term trend. While both rebounded sharply after the 1990s recession, they remained firmly below trend during the mid-2000 recovery. This is quite telling, especially since that period marked the high-point during the last business cycle. Not surprisingly, despite recent improvements, they are currently both woefully below-trend.

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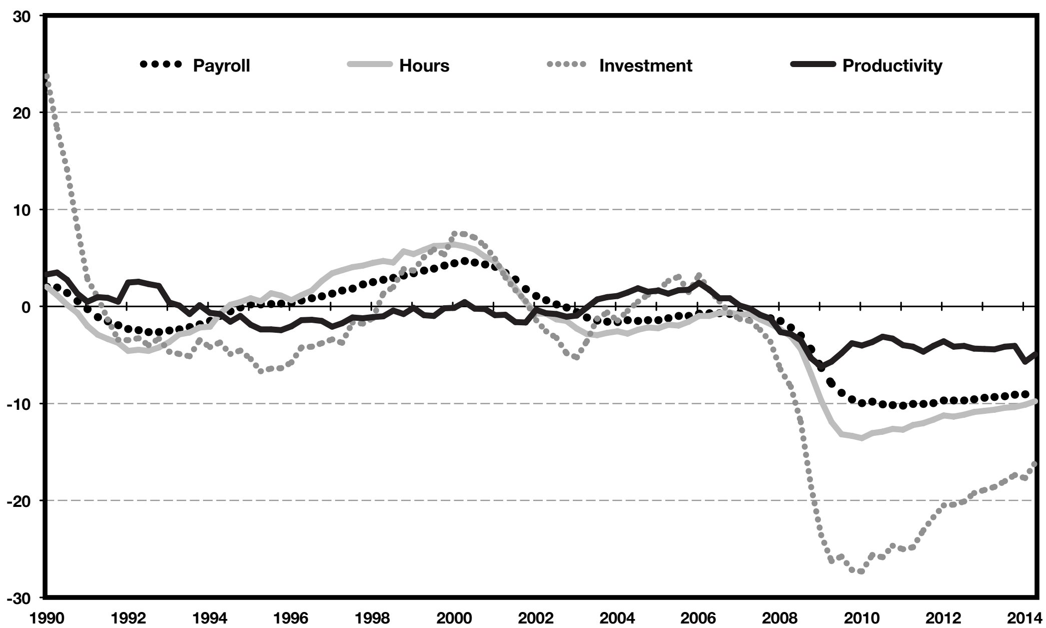
FIGURE 3
Yawning Gaps: Payroll, Hours, Investment and Productivity Below Trend (percent deviation from historical trend)



Another reason for the drop in potential GDP is a persistent underinvestment in capital stock: Business investments are currently an astounding 16% below pre-crisis trend (Figure 3). Low rates of capital accumulation, if persistent, may lead to weak productivity growth – in fact as seen in Figure 3, total factor productivity (a measure of multi-sector productivity, or technological dynamism) is also below pre-crisis trend (more precisely, it is below the 1998-2003 productivity burst related to information technology).

Part of the drop in payroll and hours worked has to do with demographics: The ageing of the population and the mass-retirement of the baby boomers, as we explain in more detail below, is expected to have an adverse impact on labor supply. Some is due to a cyclical demand shortfall, which should be reversed over time as the employment outlook improves. But some is due to permanently displaced workers who were jobless for too long thanks to the shallowness of the recovery and have exited the labor market.

Labor Markets: Healing Amidst a Variety of Pathologies

This year has seen remarkable progress in the labor market: Job gains have averaged a healthy 212,000 per month, and the improvement is broad-based across all sectors and pay scales. To find news this good, you would have to go back to the late-1990s when the pace of job formation averaged a robust 235,000 to 284,000 jobs per month. Another piece of good news came in May

Recent data seem to point to an accelerated pace in hiring: The rate of job openings is at its highest level in more than 12 years – higher in fact than during the 2004-2007 economic boom.

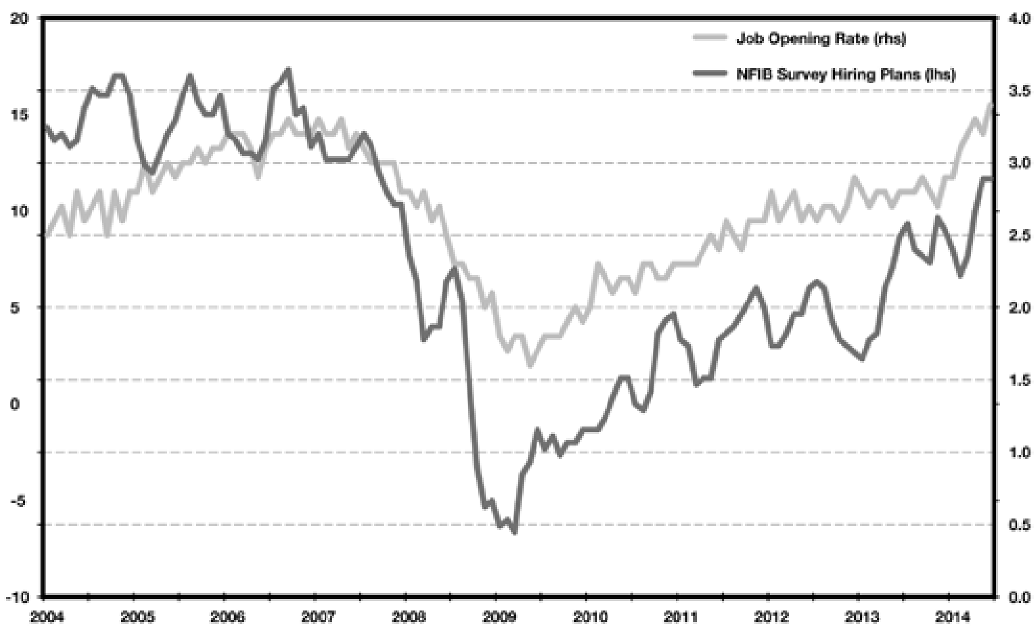
when the economy finally clawed back all the jobs lost during the recession: After six long years, payroll employment levels were finally back to their January 2008 level.

Overall, the economy has added a total of 2.1 million jobs over the first nine months of this year – just a hair below the total number of jobs it added in 2012 and 2013. More encouragingly, the pace of gains has improved markedly over the years: Payroll employment grew by an average of 176,000 jobs per month in 2011, 184,000 in 2012 and 205,000 in 2013.

Recent employment gains appear to be increasingly more broad-based and less-lopsided than in the past with sizable improvement in long-suffering sectors (construction) and in higher-income sectors (Professional and Business Services). Other details are equally reassuring: The average hourly workweek edged up from 34.5 to 34.6 (the equivalent of roughly 320,000 jobs); the unemployment rate fell to 5.9% (the lowest level since 2008); and job numbers for the slightly more anemic months of July and August were also revised upward by a total of 69,000 jobs.

All this adds up to a much improved employment outlook and a growing perception that 2014 is indeed the year that marks a much-anticipated turnaround in the labor market. And there are reasons to be optimistic: There is a large "pent-up" demand for labor as most businesses have managed to operate with a significantly shrunken labor force since the end of the recession. They may be nearing the realization that further increases in profits can no longer be attained by cutting costs but instead through bold moves and risk-taking: by funding new ideas, expanding into new markets and introducing new products.

FIGURE 4
Brighter Employment Outlook
(hiring plans NFIB net percent "increase" minus "decrease", job opening rate)



For this to happen, firms need to further expand their employment rolls; the productivity of the existing workforce has downshifted significantly over the past year after a post-recession jump, which means that more output will require more workers. Recent data seem to point to an accelerated pace in hiring: The rate of job openings is at its highest level in more than 12 years – higher in fact than during the 2004-2007 economic boom. Likewise, the National Federation of Independent Businesses (NFIB) survey shows that small businesses are expected to increase hiring over the next few months, which bodes well for the outlook of the labor market (Figure 4).

But while the near term future of the labor market seems bright, a number of pathologies continue to plague it in the long term, which will likely arrest a full-fledged recovery. For starters, because the recession was so deep and the recovery so slow, it has become harder to assess the amount of slack in the labor market. The short term unemployment rate (people out of a job for less than 27 weeks) is now back to its historical average, which means that, according to this measure, there is no labor market slack. Based on the headline unemployment rate, the job shortfall hovers at around 0.7%. However, if we look at the employment-to-population ratio, the labor market slack is a jaw-dropping 4%. Adding up the marginally attached, workers working part-time for economic reasons and the unemployed, the labor market slack appears to be roughly 2%. Our view is that there is some cyclical slack in the economy – likely around 1.7% – higher than what the current rate of unemployment seems to indicate but lower than what the employment-to-population ratio implies.

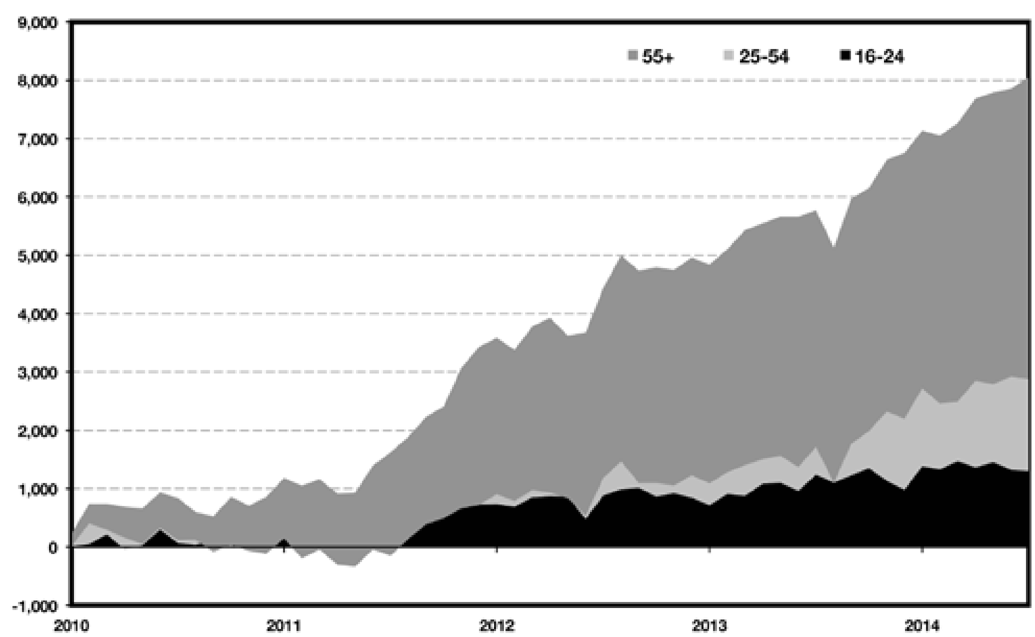
A number of other disturbing trends are also plaguing the labor market, some reinforcing long-term secular trends and some that appear to have sprung up since the recession. America's labor market has lost some of its fabled dynamism since the recession: Labor market "churn" – the normal business of hiring, quitting, firing and retiring – appears to have settled at a lower gear; despite near-historic highs of job openings, the rate of hiring is still depressed compared to historical levels as is the rate of quits. This could be due to the fact that fewer new businesses – a large source of job growth – are being born. It is also likely that employees still feel unsure about the strength of the labor market, so they continue to hold on to current jobs rather than quit in order to look for other prospects that better match their skills and aspirations.

The new jobs created since the end of the recession are highly uneven when broken down by demographic groups: The lion's share of employment gains has gone to older workers with prime-aged workers (those between 24 and 55 years) lagging substantially behind.

The mix of jobs has also been rather disappointing. Though employment rolls finally caught up with pre-recession levels, there are now 2.5 million fewer full-time jobs than in 2008. Though recent data point to a more robust pickup in full-time employment, it is evident that the composition of the job market appears to have changed since the end of the recession with more and more individuals ending up in part-time, temporary or freelance positions than the historical norm.

Moreover, the new jobs created since the end of the recession are highly uneven when broken down by demographic groups: The lion's share of employment gains has gone to older workers with prime-aged workers (those between 24 and 55 years) lagging substantially behind. Of the roughly nine million jobs that were created since the end of the recession, only 28% went to the prime-aged workers despite the fact that this demographic accounts for around two-thirds of the labor force. Older workers (55-plus), who comprise a fifth of the labor force, accounted for a disproportionate 55% of all newly created jobs, while young workers (aged 16 to 24) accounted for 17% of new employment – roughly in line with its overall share of the labor force (currently around 14%) (Figure 5). Overall, prime-aged employment has grown by a feeble 1.4% since 2010, below the 8.5% job growth for younger workers and vastly underperforming the 18.2% growth in employment for older workers.

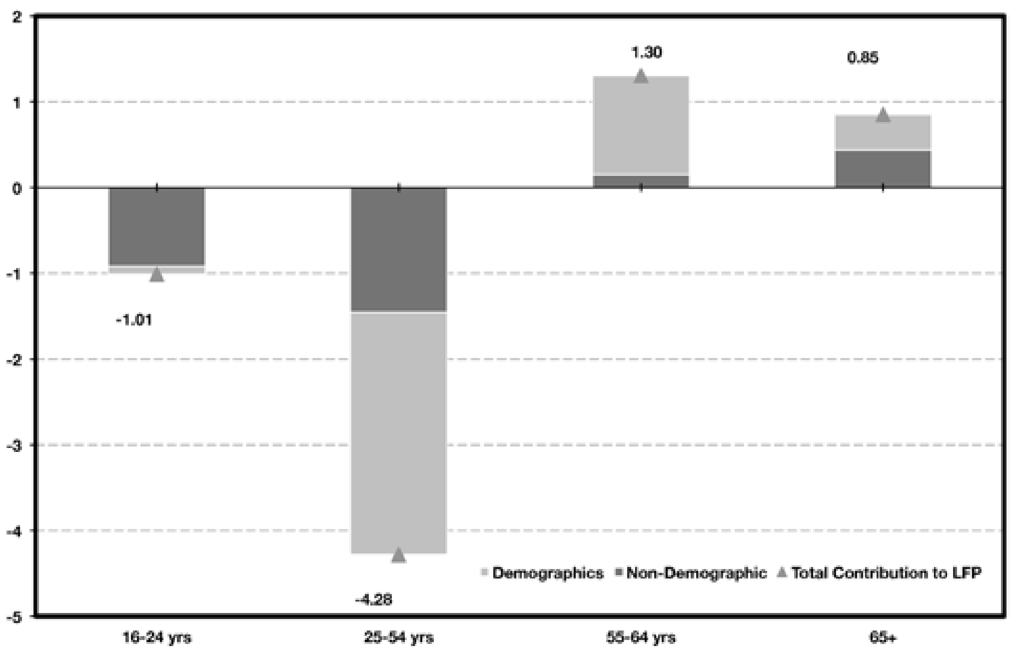
FIGURE 5
The Disappearing "Prime-Aged" Worker
(thousand of employees, level)



In addition, the overall labor force participation (LFP) rate has taken a nosedive since the start of the recession with what appears to be no end in sight. Prime-aged workers account for the bulk of this decline (prime-aged men, in particular) having left the labor force in droves faced with discouraging job prospects and anemic wage gains. More specifically, from 2007 to 2014, the total labor force participation rate fell by an astounding 3.1%. Breaking this down by age cohort (adjusted for population changes), we find that the contribution of prime-aged workers to the overall drop in LFP rate was a jaw-dropping -4.3%. Young workers also contributed an additional -1% decline – bringing up the total drop due to these two age cohorts to -5.3%. This was partially reversed by an increase in LFP rate by older-aged cohorts: The 55- to 64-year-olds contributed a positive 1.3%, while those 65-plus contributed an additional 0.9%. In other words, had it not been for increased participation from older workers, which partially reversed these negative trends, the participation rate would have been much more dismal than the current level (Figure 6).

What's ailing our prime demographic? Clearly, some of the issues are due to ageing: The number of people over 54 is growing more rapidly than the 25 to 54 group. In fact, when breaking down the participation rate by demographic (population changes) and non-demographic factors (other factors), we find that two-thirds of the decline in participation among the prime-aged workers is due to the fact that their numbers are shrinking. In contrast, younger workers seem to have left the labor force for non-demographic reasons: going back to school, extending formal education, etc. The increase in participation rates among 55- to 64-year-olds is largely due to demographic factors (they command a larger share of the population), while participation among those 65-plus seem to be evenly split between demographic and non-demographic factors.

FIGURE 6
Contributions to Labor Force Participation Rate by Age Group (percentage points)



But demographics alone do not explain everything. The drop in participation also reflects the difficulty that prime-aged workers – especially men with low-education and low-skill levels – have in finding jobs. The decline in manufacturing (a long-term secular trend) and construction employment (after the bursting of the housing bubble) has permanently displaced a large class of low-education/low-skill workers. Though there has been a mini-recovery in these sectors since the end of the recession, there are still around 1.5 million fewer employed workers in these industries than prior to the crisis.

The nature of production has also changed, and businesses are increasingly looking for highly educated and highly skilled workers having used labor-saving technologies to replace routine labor. This has created a vast imbalance in the market for low-education/low-skill jobs with supply (number of unemployed workers) vastly outstripping demand. There are roughly 17 unemployed people for one job opening in farming, fishing and forestry occupations, seven unemployed for every job opening in construction and roughly five unemployed persons for every job opening in personal care and services. The opposite is true for high-skilled work; indeed here, demand runs much higher than the number of unemployed, particularly in architecture and engineering, health care practitioners and technicians, and computer and mathematical.

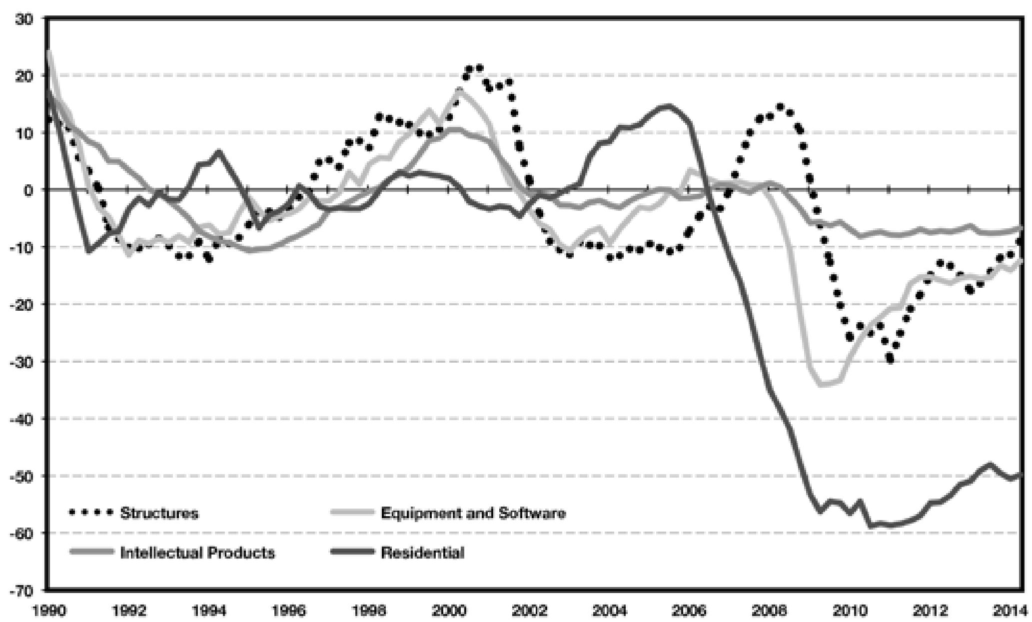
Real business investments have grown at a snail's pace over the five-year recovery period having surpassed their pre-recession peak only in the second quarter of this year. Of its components, only investments in equipment and software is above pre-crisis levels (up 18% from prior peak) having picked up robustly after the end of the recession.

Business Outlook: Opportunities for Expansion after an Investment Drought

One of the most worrisome developments brought on by the recession is the slump and subsequent disappointing pickup in investment spending. Real business investments have grown at a snail's pace over the five-year recovery period having surpassed their pre-recession peak only in the second quarter of this year. Of its components, only investments in equipment and software is above pre-crisis levels (up 18% from prior peak) having picked up robustly after the end of the recession. Other categories have yet to emerge from the recession's plunge: Investment in plants is a whopping 16% below pre-crisis levels, while real residential investment remains 8% below despite recent robust growth in this sector.

Perhaps pre-crisis levels are not the right point of reference given the substantial over-investment in construction that occurred during the run-up of the housing crisis. But even when compared to historical trends, business investments fall woefully short in almost all categories. Much of this is due to the yawning gap in residential investment, which fell precipitously during the housing crisis and is only now ramping up. But investments in structures, equipment and intellectual property have also fallen short of prior trend: Investment in intellectual property is currently 6% below pre-crisis trend, followed by investment in structures (with a shortfall of 8%) and equipment and software (12% below trend) (Figure 7).

FIGURE 7
A Dearth of Investment: Deviation from Trend (percentage points)



Years of under-investments have resulted in a shrunken capital stock, which is currently running at an astounding 13% below pre-crisis trend. This matters greatly in the long run since it hampers productivity growth and limits the productive capacity of the economy. In fact, investment in technology (information-processing equipment) – a key driver of productivity – fell more during this recession than it did during the bursting of the tech bubble, and its subsequent recovery has been weaker than in any other recovery since World War II. Investments in the technology sector affect productivity with long lags (five or more years), which means that low investments in this sector today will weigh on productivity a few years down the line, as we come toward the end of this decade.

The good news is that all this is about to change. Years of under-investment are likely to be followed by a productive catch-up period.

Some of the business reluctance to expand is understandable given the wreckage of the recession and the devastatingly slow recovery. Weak economic outlook coupled with domestic policy uncertainty and international crises, excessive regulations and a byzantine tax system, have all conspired to sap away business confidence and initiative to expand, introduce new products, invest in new markets and undertake long-term projects. Instead, the corporate sector has been content with consolidating its balance sheet: cutting costs and embarking on large-scale share buybacks. Not surprisingly, sales per share are barely higher than they were six years ago (up only by 5%), while earnings per share have skyrocketed compared to 2007 (up 60%). U.S. firms announced buy-backs worth $671 billion (roughly 4% of GDP) last year and have made plans for an additional $300 billion this year (2% of GDP).

The good news is that all this is about to change. Years of under-investment are likely to be followed by a productive catch-up period, during which we expect to see more robust investments in the long-suffering sectors: information technology, intellectual property and construction (both in non-residential structures and housing). This is evident from a number of metrics: New orders and shipments of non-defense capital goods are at their highest going back to 2000, and capital expenditure plans from the NFIB small business survey have also increased appreciably. In addition, capacity utilization recently reached its highest level since 2006, and high levels of cash remain on corporate balance sheets, which means that businesses will be more likely to increase capital expenditures than at any point during this business cycle.

Production should also pickup: The ISM Indices for both manufacturing and services sectors have extended further into expansion territory and are currently running at the same pace as during the 2004-2007 boom. And there is evidence that the share buy-back enthusiasm has begun to wane, while investment optimism has resurged: A survey of fund managers by Bank of America found that the overall sentiment was that firms needed to invest more in productive ventures rather than maximize cash returns.

Marching On: Outlook for Consumption Spending

The U.S. consumers have not had news this good for roughly seven (long) biblical years: The employment outlook is improving at a rapid clip; home prices have firmed up; falling gasoline prices are bolstering purchasing power; and even income and wage growth has ticked up modestly from overly depressed levels. After a blip in first-quarter purchases, consumer spending grew by a solid 2.5% in the second quarter. Excluding winter months, motor vehicle sales have averaged an annualized pace of 16.6 million this year, the highest since 2006. And spending appears to have picked up additional momentum recently: August retail sales came in stronger than expected, and July data were revised significantly higher. Consumer confidence is at a post-crisis, all-time high, even though the Conference Board Consumer Index slumped in September spurred primarily by gloomier news on global weakness and geopolitical concerns.

Languishing wages are partly due to the fact that early in the recovery, job gains occurred primarily in lower-income occupations and partly from the reluctance of firms to raise wages during the recovery so far, having been unable to slash them during the recession.

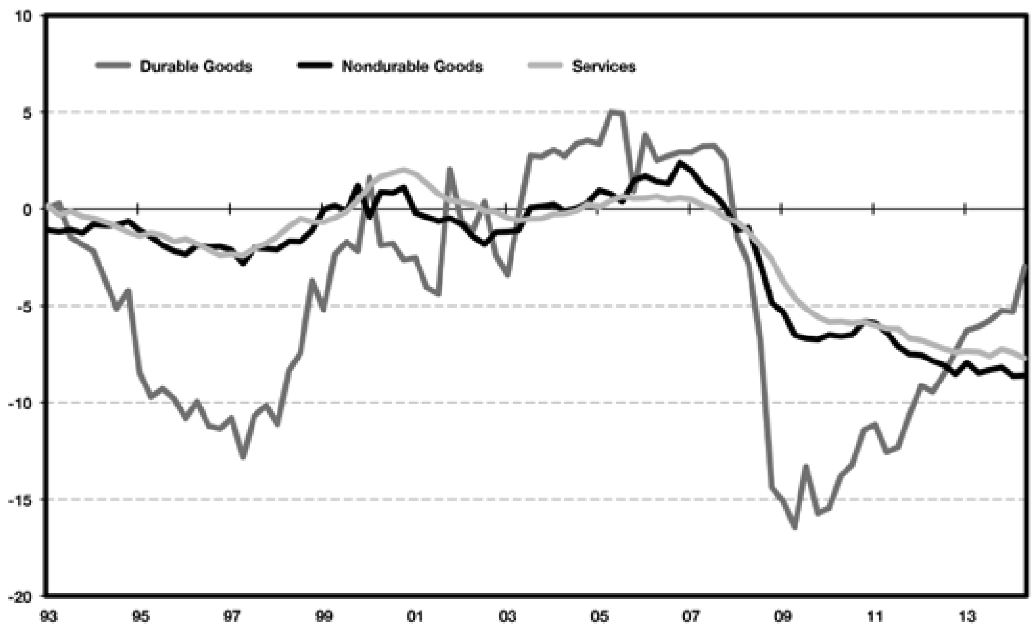
Much of this is due to robust gains in employment. However, wages and income have been rather stagnant during the recovery: Wage growth is currently running at around 2.5% on a year-over-year basis, significantly below the pace of prior recoveries. At this stage of the labor market expansion following a recession, average hourly wages were rising by 3.8% in the recovery of the mid-2000s and by nearly 4% in the mid-1990s. In addition, real median household income is now still around 6% below its January 2008 peak when it reached $57,700. Languishing wages are partly due to the fact that early in the recovery, job gains occurred primarily in lower-income occupations and partly from the reluctance of firms to raise wages during the recovery so far, having been unable to slash them during the recession.

Fortunately, there are incipient signs that the tide is turning for the better for wage and income growth. Wage pressures should be building up as unemployment falls and labor market slack diminishes. The survey conducted by the National Federation of Independent Businesses (NFIB) shows a considerable uptick in the percentage of businesses planning to raise compensation over the next few months. Historically, the index has been a good indicator of broader wage growth pickup in previous cycles, and though the index is still below the rates recorded during the labor market recovery in 1990s and 2000s, the evidence points to modest acceleration in wage growth over the forecast horizon.

More important for our outlook, there appears to be quite a lot of consumer pent-up demand, which should fuel the economic activity over the forecast horizon.

More broadly, consumer finances are in the best shape since the start of the recession. Household net worth is now $13 trillion higher than in 2007. Most of this has come from financial wealth thanks to the five-year bull run in the equity market. But homeowner equity has also clawed back some of its losses during the recession: Of the roughly $7 trillion losses in homeowner equity, roughly $4.6 trillion has been recovered. Though home equity gains tend to benefit a broad spectrum of the population (in contrast to financial gains, which benefit mostly the well-to-do), continued improvement in household wealth bodes well for consumption spending going forward.

FIGURE 8
Lots of Pent-Up Demand: Consumption Spending Below Trend (percent deviation from historical trend)

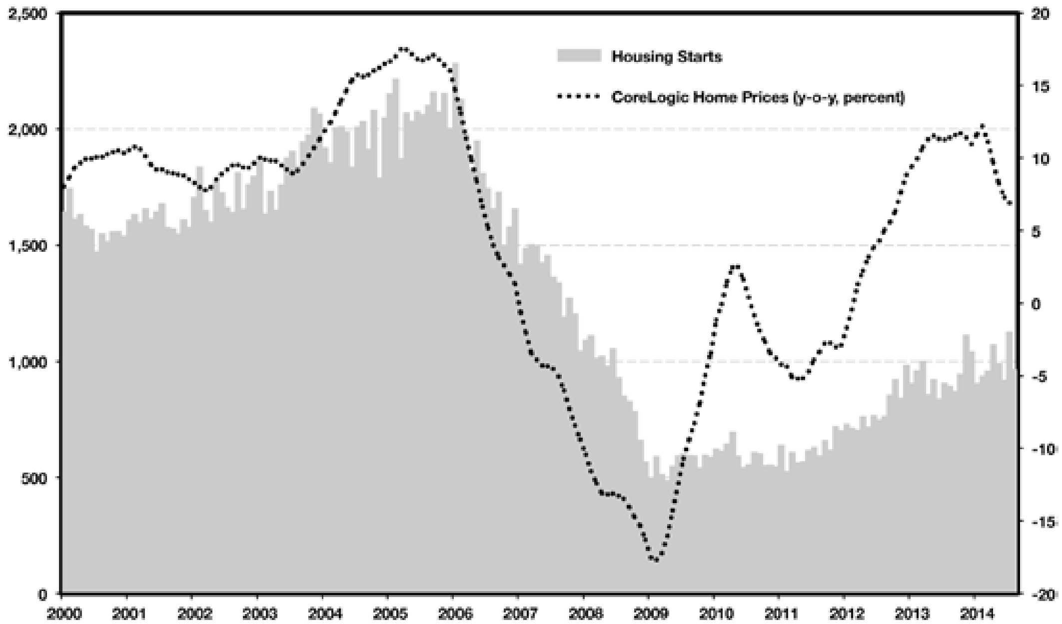


More important for our outlook, there appears to be quite a lot of consumer pent-up demand, which should fuel the economic activity over the forecast horizon. With stronger balance sheets and more robust income growth, consumers feel more confident about spending. Indeed, we expect a noticeable pickup in consumption spending particularly for consumer non-durables and services, which are both below trend (Figure 8). Durable goods seem to have caught up with trend, and we don't foresee it adding much more to consumption spending over the next few quarters given the sizable pickup in auto sales over the past year. But there is plenty of room for improvement in services, particularly in housing and utilities, financial services and insurance, and transportation services.

AWOL: Waiting for the Housing Turnaround

This year and the next few were supposed to mark the much-awaited turnaround in the housing market. After six long years in darkness, housing was finally primed for "prime-time" with loads of pent-up demand, tighter inventories and improved household finances. Alas, that did not happen.

FIGURE 9
Housing Recovery Stumbles
(housing starts, levels, thousands of units; home price, y-o-y percent change)



Winter blues appear to have frozen the housing recovery on its track; construction sputtered, sales slumped, and home prices took a step back from the double-digit appreciation witnessed last year (Figure 9).

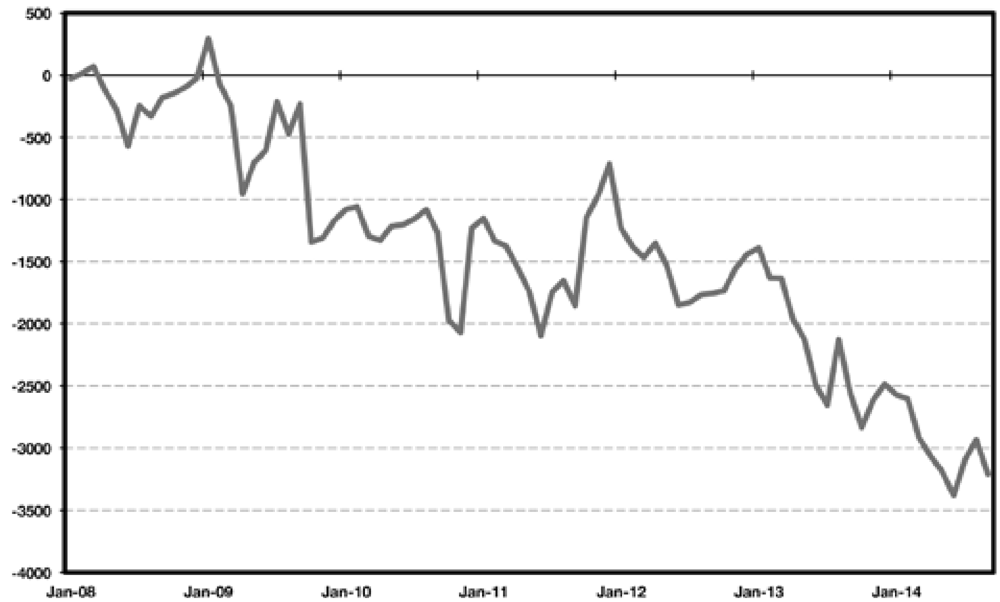
Issues run deeper than the bad winter weather, however. It is becoming more apparent that the housing sector is having a hard time shaking off the epic bust of the last decade. The sizable jump in home prices in 2013 was largely due to an unprecedented investor demand: Spurred by bargain deals, rock-bottom interest rates and excess cash reserves, investors scooped up properties of all types, fixed them up and turned them into rental units. Obviously, this was not a lasting solution to the housing crisis. For a sustained healthy rebound, traditional buyers needed to step in. They held back. First-time home buyers – who traditionally account for about 40% of home sales – barely account for 30% of the market at present. Homeownership among young adults has taken a nosedive from a historical average of 40% to a current 36%. Tough financial conditions for people in their 20s and early 30s have certainly much to do with this: Student-debt levels, a weak job market and slow income growth have forced many young adults to delay important life decisions such as marriage and homeownership.

Our outlook for housing can be separated in two parts: the near term, which calls for a robust pickup in the housing sector, and the long term, which is less sanguine.

Home building also appears to have stumbled. Total housing starts have averaged an annual pace of 970,000 so far this year. Most of that has come from multifamily homes, which are currently at about the same levels as during the housing boom. Single family starts have also risen from the abyss of the recession, but at a 625,000 annual pace, they are roughly half the levels that prevailed from 1995 to 2003 (pre-boom). Some of this is due to supply constraints: The cost of construction is rising faster than CPI, and builders report a skilled-labor shortage in construction work. However, the main reason has been slow rates of household formation.

Our outlook for housing can be separated in two parts: the near term, which calls for a robust pickup in the housing sector, and the long term, which is less sanguine. First, the good news: We expect the housing sector to outgrow recent doldrums and improve substantially over the next few years, fuelling growth. The "pent-up" demand is nowhere as apparent as in the housing sector: Household formation was around 1.2 million to 1.3 million per year prior to the recession, and it has collapsed since then to barely half that pace. In fact, if the number of adults per household are kept at their historical average rates, we find that there are now 3.2 million households missing in the economy

FIGURE 10
Among the Missing: 3.2 Million Households
(difference between actual and predicted household, level, thousands)



(Figure 10). As employment and income outlook improves, we expect at least some of these households to be formed; though it will take some time. The number of young adults who are unemployed or out of the labor force and live with their parents is still around 1.5 million above its December 2007 levels, but the trend is positive having dropped from a cycle high of 2 million in 2012. As labor market conditions improve, these young adults will move on their own increasing demand for homes.

The outlook is also brighter on the supply-side. The National Association of Home Builders' Index took a tumble earlier this year but is now running at the highest level since early 2006, the heyday of the housing market. Housing has gone from being vastly overbuilt during the boom to near under-supplied since the crash: housing inventory is the lowest since 2007; vacancies are shrinking fast; and a month's supply of homes is in line with the historical average. Pent-up demand and supply shortages will certainly fuel construction over the next few years; we expect housing starts to average around 980,000 this year, 1.25 million in 2015 and 1.38 million in 2016.

Longer term, however, the housing outlook appears more challenged. Demographics dictate here as slower population growth will certainly weigh on housing demand. Population growth has averaged around 1.5% per year over the past five decades – consistent with around 1.5 million housing starts. Projected population growth will slow to around 1% over the next few decades. This necessarily implies a decline in housing starts – from a historical average of around 1.5 million to around 1.2 million.

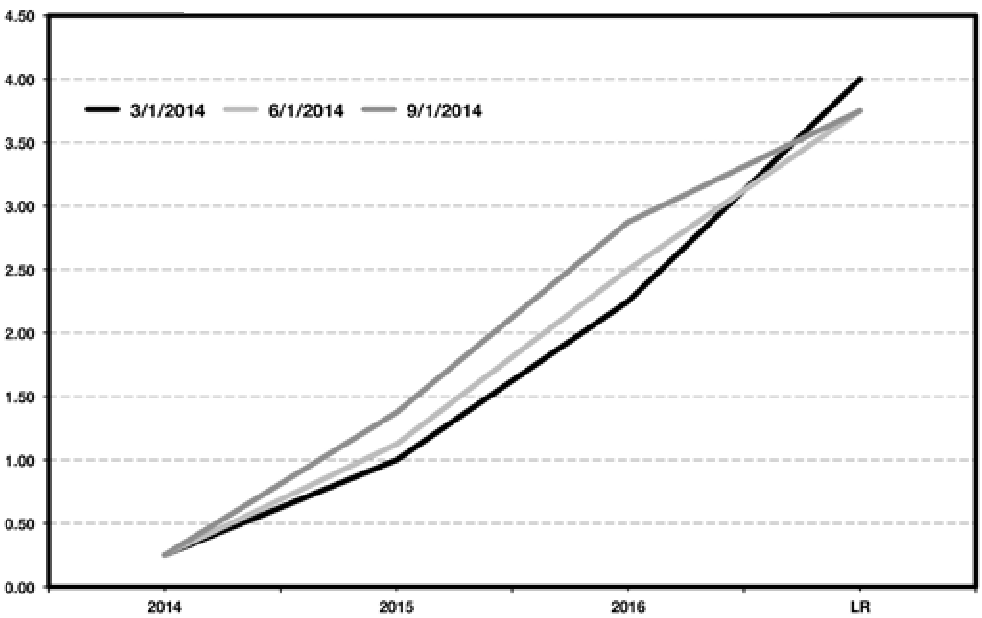
Immaculate Exit: The Fed and the Great Normalization

Here we go again: another fall, another round of uncertainty about monetary policy. Last year, the topic du jour was the dreaded "tapering" of large-scale asset purchases by the Fed. Now that this is behind us (with relatively few hiccups, one might add), a new obsession has begun having to do with the timing and the path of the next cycle of interest-rate hikes. Here, things have gotten even more complex than before, and much like the "taper tantrum" of last summer, the start of the rate-hike cycle is marred by plenty of uncertainty.

The problem is that for a self-proclaimed data-dependent Fed, the news this year has provided plenty of fodder for both the doves and the hawks at the Federal Reserve. The hawks point to an improving economy, a significant decline in the unemployment rate and a buoyed sentiment from the business sector as evidence that rates should be raised sooner rather than later. For the doves, the slack in the economy still looms large: There are plenty of part-time workers unable to find full-time employment, large numbers of discouraged workers who have left the labor market but may return once wages pickup, and inflation is still running below the Fed's target.

Low wage inflation seems to shape some of the thinking of the FOMC members. The Fed has taken for granted that quiescent nominal wages are an indication that the slack in the labor market is more persistent than what the headline unemployment number seems to suggest. However, its new chair, Janet Yellen, advanced another theory recently, one that hinges on a fairly obscure concept of "pent-up wage deflation." According to this view, the observed weakness in wages may be deceptive: Wages were "frozen," so to speak, during the downturn for those workers who held on to their jobs, since employees tend to resist nominal wage cuts more strongly than the erosion that occurs by inflation. Now that economic activity is picking up, employers are resisting wage increases for their workforce in order to compensate for the wage rigidity during the downturn. This means that labor markets may tighten substantially without any apparent pickup in wage inflation.

FIGURE 11
Connecting the Fed Dots
(interest rate forecasts, FOMC members, median tendency)



True to form, the Fed's message amidst conflicting data has been to sow even more confusion. It now communicates the path of interest-rate hikes in a Morse-code fashion, in what has come to be known as the Fed dots. The "dots" and the tone of the FOMC statement do not always square up. For example, in its September meeting, the Fed decided to leave the "considerable period" language – referring to the timing of interest-rate hikes – but the path of rate increases implied by the dots had a decidedly more hawkish tilt (Figure 11). Back in June, Chairwoman Yellen dismissed outright an outsized jump in inflation, categorizing data as noisy. A couple of months later, however, it advanced the "pent-up wage deflation" theory, which certainly advocates for an earlier start of the hiking cycle.

Our outlook for monetary policy is shaped by two main considerations: On the first point, our view for some time has been that the Fed has done far too much, and it is now time to slowly but steadily apply the brakes.

Our outlook for monetary policy is shaped by two main considerations: What the Fed should do and what it will end up doing. On the first point, our view for some time has been that the Fed has done far too much, and it is now time to slowly but steadily apply the brakes. As we have argued for a while, much progress has been made and labor markets and overall economic activity are now in the strongest footing since the end of the recession. Moreover, economic slack is smaller than what the current level of interest rates imply. This means that the economy is closer to capacity constraints, and inflation may tick up sooner than anticipated. But the biggest worry about prolonged low interest rates has to do with excessive risk-taking and asset price misalignments; if persistent, these may sow the seeds for the next financial bubble.

Despite these concerns, the Fed does not seem in a hurry to raise interest rates. Even when it has tentatively hinted on rate hikes sooner than anticipated, it has spent considerable time and effort in walking back those comments. Admittedly, inflation seems tame; commodity prices are subdued, and recent weakness in the global economy have all combined to extend the timeframe of an eventual rise in interest rates. Past behavior also indicates that the Fed will likely err on the side of caution. We see the first interest-rate hike occurring in September 2015, a few months later than the consensus. We also see interest rates topping off at around the 3% to 3.5% range – consistent with a downshift in potential growth – below the 4% rate that Fed officials and the consensus see as consistent with long-term growth.

Global Economy: Arrested Development

As disappointing as the U.S. recovery has been, it is nothing short of robust when compared to the stunningly weak showing of the global economy. The slowdown is widespread: Emerging economies seem to have lost the luster of the previous decades, while developed countries are contending with an array of problems, some a legacy of the recession and some due to long-term secular trends. The latest IMF forecasts for the world economy are gloomier compared to the ones released earlier in the year. Even so, as the Fund recognizes, its projections have not been gloomy enough, fast enough and have overshot actual activity by around half a percentage point over the last four years. This is certainly worrisome, and it underscores the reality that the world economy is indeed having a hard time shaking off the legacy of the Great Recession.

As disappointing as the U.S. recovery has been, it is nothing short of robust when compared to the stunningly weak showing of the global economy.

In the developed world, Eurozone tops the charts on the list of worries. Economic activity – sluggish to begin with since the death-brush with the sovereign crisis – has essentially stalled this year. Deflationary pressures are mounting as the Eurozone CPI grew by an annualized pace of 0.3% this August. The markets have long discounted the performance of troubled nations such as Italy and Spain, but the stall this time comes from France and – more worryingly – Germany, which has been the engine of growth for the single-currency market. Dismal growth has spurred the ECB to act by taking bold moves: It cut its policy rate in September sending its deposit rate further into negative territory, and it announced that it will begin purchasing asset-backed securities.

The Japanese economy plunged by 7.1% in the second quarter as the consumption tax hike took effect. This more than offset the first-quarter gains – up by 6.9% – which was also largely spurred by the anticipation of the consumption tax hike. Overall, the general euphoria that came with "Abenomics" – the three-pronged governmental push to revive the economy from its two-decade slump – has waned a bit now after fiscal support and easy monetary policy have largely run their course. The hardest part of the plan – structural reform – has yet to be rolled out in a meaningful way, so the outlook for the Japanese economy, while improved compared to previous years, still remains cautious.

Some developed economies are marching forward: The economies of the U.K. and Canada are certainly on a much stronger footing now and are expected to grow further over the forecast horizon. The Scottish referendum on independence provided some headwinds for the U.K. economy, but they dissipated quickly once the result came firmly on the side of the union. Despite its solid performance, it is rather telling for the long-run potential of the U.K. economy (and other advanced economies, for that matter), when Mark Carney, the governor of the Bank of England, suggests that even if there is no slack left in the U.K. economy, the appropriate level of its policy rate would not be too far from the 0.5% it is today.

Hard as it is to believe, the performance of the emerging economies has been even more disappointing. Brazil's economy has posted two quarters of back-to-back negative growth, which means it is technically in a recession. Argentina is also contracting, having (again) defaulted on its debt payment, and growth in other Latin American countries, while positive, has downshifted significantly. Of all emerging economies, the largest worries emanate from China – there are strong indications that its economy is settling at the low end of 7% growth, far below the rate posted over the past decade. The downshift is occurring as policymakers re-calibrate the economy away from relying primarily on investment spending and toward a more balanced and sustained growth path.

We expect the global economy to continue to expand over the forecast horizon, growing by 3.3% this year and by 3.7% in 2015 and 2016 (at its historical average).

The global slowdown and heightened geopolitical tensions constitute the largest downside risks to our outlook. If the Ukrainian-Russian conflict escalates, it will have the most adverse impact on global growth as a cycle of sanctions and counter-sanctions between the West and Russia could ultimately lead the latter to temporarily curtail its energy exports. This would plunge many economies in Western Europe in a deep recession given their sizable dependencies on Russian energy exports (Russian gas imports make up roughly 30% of domestic demand in Germany and 25% in Italy). Escalation in the Middle East may cause instability in financial markets. Another cause for concern is the increased financial leverage in China, which has risen from roughly 125% of GDP prior to the recession to a current 200%.

These concerns notwithstanding, we expect the global economy to continue to expand over the forecast horizon, growing by 3.3% this year and by 3.7% in 2015 and 2016 (at its historical average). Our baseline forecast assumes the worst-case scenarios listed above do not materialize: There are no gas supply interruptions from the Ukraine-Russia crisis, instability in the Middle East does not spread beyond that region, and that financial leverage in China does not turn into a full-blown debt crisis.

ORANGE COUNTY AND SOUTHERN CALIFORNIA

After five long years since the official end of the Great Recession, much like the national economy, the economies of the state of California, Orange County and the wider Southern California region, have improved substantially compared to the darkest days of the crisis. Improvements are wide-spread: The pace of job formation has picked up; economic activity is progressing at a brisk rate; and the housing sector has steadily turned a corner. Though the recovery has been uneven, sluggish, prolonged and generally below trend, there are solid indications that much progress has been made, and the region is quickly out-distancing the wreckage of the recession. The positive momentum should sustain the regional economies over the next few years, with the pace of the expansion accelerating as the recovery enters a more mature phase.

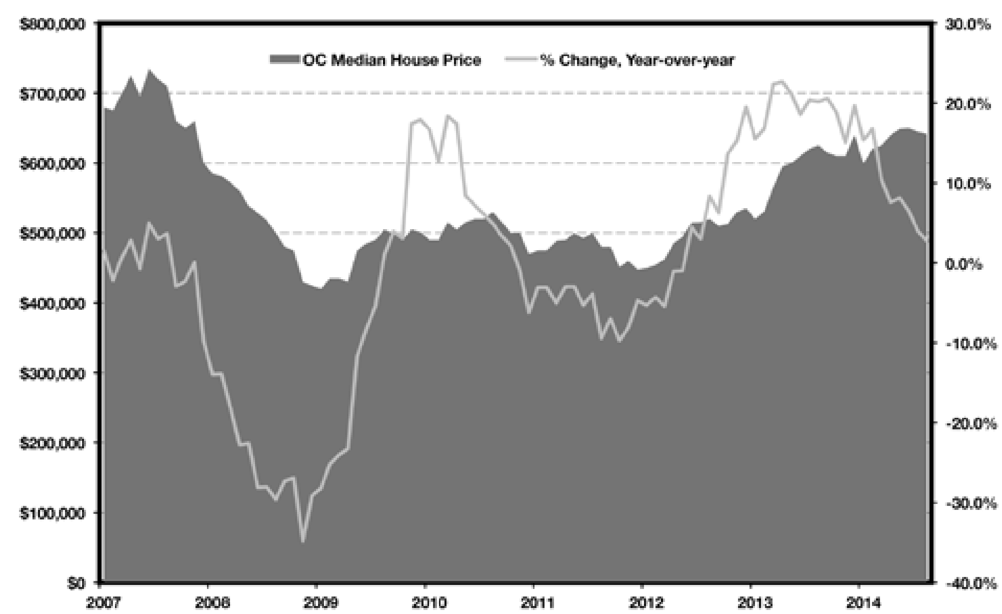
Improvements are wide-spread: The positive momentum should sustain the regional economies over the next few years, with the pace of the expansion accelerating as the recovery enters a more mature phase.

Housing and Construction

One of the notable positive developments in Orange County, the broader Southern California region and the state of California is the remarkable improvement in home values over the past two years. The median single-family home price in Orange County was $642,000 in August 2014 compared to a low of $425,000 in December 2008 in the depth of the Great Recession. Though this is still around 11% below the peak of $720,000 recorded in July 2007, the turnaround has been quite spectacular by all accounts. As things stand now, the current median home value for Orange County is at the same level as in May 2005, which arguably marks the beginning of the housing-market bubble nearly a decade ago.

Not surprisingly, a jump of 50% in home prices over a stretch of a couple of years can only occur if valuations are ramping up fast. In fact, from mid-2012 to early-2014, home prices in Los Angeles, Orange and Riverside counties grew by an average annualized pace of 20% to 30%, matching and even exceeding the growth observed during the height of the housing boom. However, as we cautioned in our previous report, the frenzied pace is slowing down, particularly in Orange County, where home prices during the recession fell by less than the neighboring counties even at the depth of the recession (Figure 12).

FIGURE 12
Orange County Median Home Prices (level and percent change)

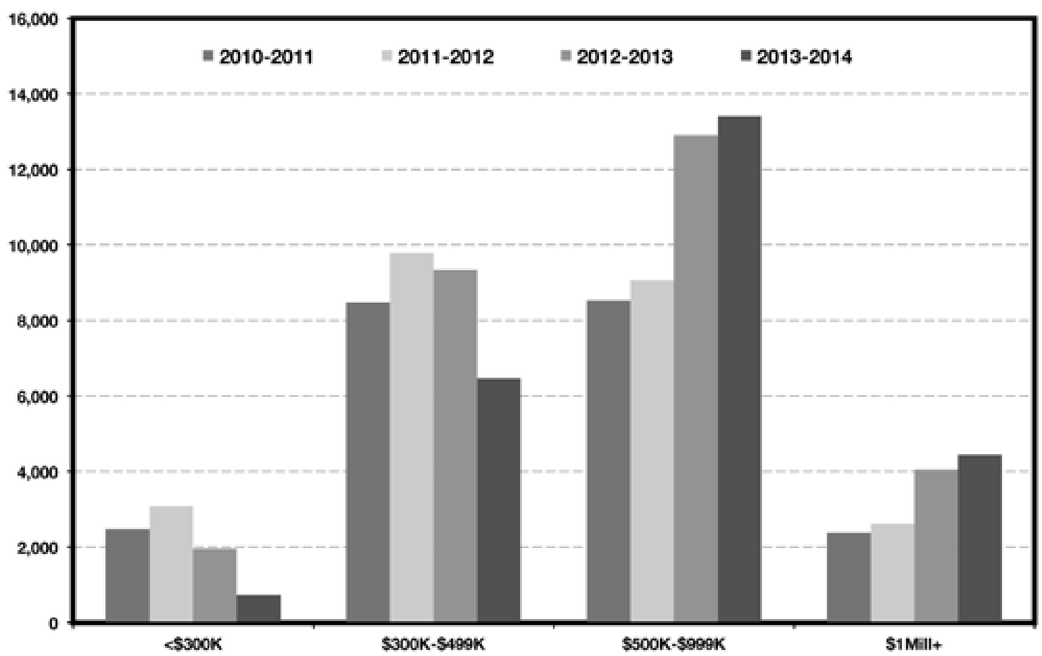


One of the notable positive developments in Orange County, the broader Southern California region and the state of California is the remarkable improvement in home values over the past two years.

Some of the downshift in the pace of growth has to do with the end of the speculative buying after a large inventory of distressed homes flooded the market. Roughly half of transactions over the past few years were fueled by investor demand; now that prices have increased appreciably, there are fewer bargain deals, which has caused investor interest to wane. Traditional buyers, unfortunately, have not entered the market at the robust rates that they were expected to. There are a number of reasons for this: Tighter lending standards, weak labor market, languishing income growth, an overall snail-paced recovery and a general sense of less-than-usual optimism have restrained traditional buyers from actively participating in the recovery in the housing market. It is also the case that during the early phase of the recovery, investor demand was so large and the upside correction in home prices so significant, that now home purchasing is less appealing than it was just a couple of years ago.

The slowdown in home-price growth appears to be persistent at least in the short term: In the last three months, the median home price compared to a year ago has risen by 4.4% in Orange County, 8.9% in Los Angeles and 11.7% in Riverside. The pace of home-price increase in Orange County has, in fact, been slowing since March 2013 relative to its surrounding counties. The rate of home-price increases in Orange County is currently roughly half of the rate in surrounding counties. This is expected given the dramatic collapse in home values in the Inland Empire and even part of Los Angeles. But part of the reason may have to do with the types of homes that are being sold: In Orange County, homes are significantly more expensive than in the neighboring counties. For example and as shown in Figure 13, during the last 12 months, homes valued more than $500,000 made up a hefty 71% of the total housing inventory sold in Orange County in contrast with 45% in Los Angeles and 10% in Riverside County.

FIGURE 13
Orange County Home Sales: Composition by Value
(annual homes sold, level, July previous year–August next year)



The strong recovery in home prices since 2010 has provided an important boost to household wealth and thus to household spending, which is critical to the growth of the overall economy. However, meaningful further improvements in home values going forward will more likely be driven by the fundamental factors that usually drive the housing demand: growth of income, employment and household formation.

Financial conditions such as credit availability and mortgage rates also importantly influence the housing sector. The lending requirements continue to be stringent, and as the economy improves, mortgage rates are likely to increase. Therefore, while we expect continued improvement in the housing markets, gains in home prices are expected to be below 10% through the end of 2015 and approximately 8% in 2016.

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Construction in residential and non-residential sectors is also picking up robustly from the rock-bottom levels of the recession. In fact, construction is humming along quite nicely all across the Southern California region. Housing permits rose in 2013 at an annual rate of 45% in Orange County and 52% each in Los Angeles, Riverside and San Bernardino counties. Though still below the levels reached before the recession, expenditure on residential and non-residential construction showed similar improvements. The broader six-county Southern California region showed an increase of 50% in housing permits, a 42% increase in residential expenditures and a sizable jump of 62% in non-residential expenditures.

We expect continued improvement in all these measures as the economic expansion continues to gain traction and financial conditions improve. Our forecast calls for an increase of 14% in Orange County housing permits in 2014 and an additional 12% in 2015. After coming to a near-screeching halt during the deep recession and the weak recovery, the construction in the Inland Empire should pickup significantly over the forecast horizon. Housing permits for the broader Southern California region are expected to increase by 17.6% in 2014 and 14.4% in 2015 with commensurate increases in residential and non-residential expenditures.

The Labor Market: Overview and Forecasts

As expected, the outlook for the labor market has also improved dramatically for the region and the state over the past year. The metric that stands out the most is the unemployment rate; the headline unemployment rate for the state of California, for example, has fallen from an average of 10.4% in 2012 to 7.4% in August 2014. A similar trajectory can also be gleaned for Orange County, where the unemployment rate fell from a cyclical high of 7.6% recorded in 2012 to 5.4% in August 2014. For the six-county Southern California region (Orange, Los Angeles, Riverside, San Bernardino, Ventura and Imperial), the average rate has declined from a high of 10.6% to 8% over the same period.

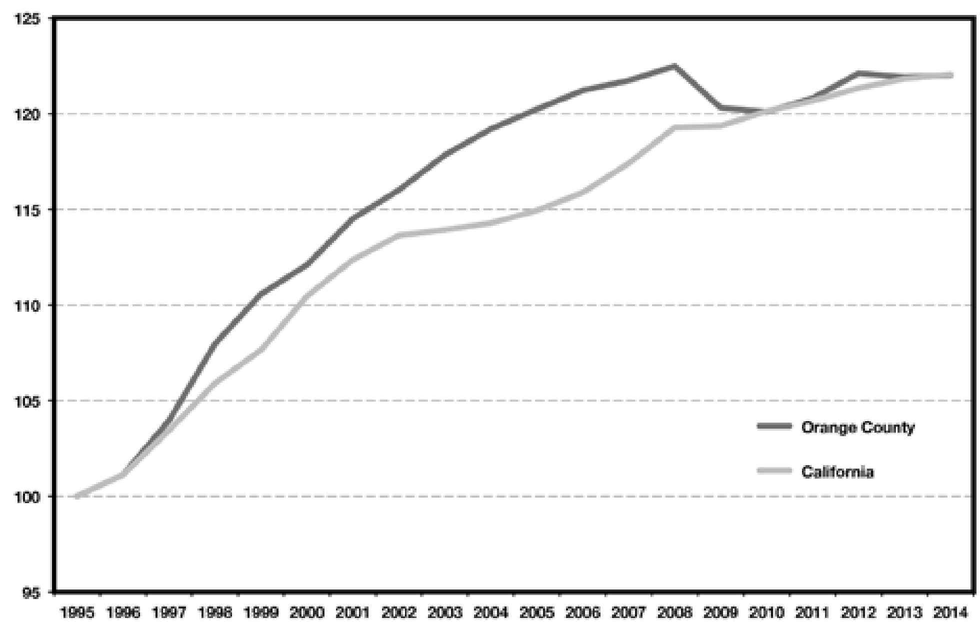
TABLE 1
Changes in Orange County Labor Force and Unemployment Rate

	2010-2011	2011-2012	2012-2013	2013-2014	2010-2014	
					Level	Percent
Civilian Labor Force	9,225	17442	-2,667	1,396	25,396	1.60%
Civilian Employment	20,833	34,792	18,992	13,417	88,033	6.10%
Civilian Unemployment	-11,583	-17,350	-21,675	-12,025	-62,633	-41.50%
Civilian Unemployment Rate	9.10%	8.20%	6.80%	5.80%	-3.30%	-36.26%

A lot fewer people are choosing to join the labor force in Orange County despite the fact that the employment picture is much improved compared to just a couple of years ago.

However, as in the national case, the headline unemployment numbers may overstate the strength of the labor market recovery. Digging deeper into household employment data (from which the unemployment rate is derived), it appears that some darker forces may be at play. For example, the growth of the labor force in Orange County appears to trail behind the state's. This is a fairly recent development; in fact, as Figure 14 illustrates, Orange County's labor force was growing at a faster rate than that of the state from around mid-1990 until the start of the Great Recession. The rate of labor force growth for the county has been quite muted since then, and though the labor force increases at the state level have also underperformed the historical trend, the results are more striking for Orange County. And this cannot be boiled down to population changes; population growth in the county has matched fairly well with that at the state level. This means that a lot fewer people are choosing to join the labor force in Orange County despite the fact that the employment picture is much improved compared to just a couple of years ago. Much of this is a legacy of the deep recession and feeble recovery. Low participation rates tend to accompany recessions. What is unusual this time around is that we are still contending with a lack of participation so far out in the recovery cycle.

FIGURE 14
Labor Force Dynamics: Orange County vs. California
(index, 1995=100)



Job creation among the Southern California counties has varied. In particular, the employment-to-population ratio has displayed different patterns over the past few decades across Southern California counties. During 1993 to 2013, the ratio for Orange County was 0.53 job-per-person. During that period, the comparable figure for Los Angeles County and the Inland Empire was 0.3 (Table 2). In fact, over that decade, Orange County's population grew by 585,000 and payroll employment by 337,000. Los Angeles County population for that decade increased by 924,000, while its payroll jobs grew by 388,000. That period also constitutes the beginning of the boom for the Inland Empire: The two-county region outperformed coastal neighbors during that time adding a total of 1.5 million in population and nearly half a million in payrolls.

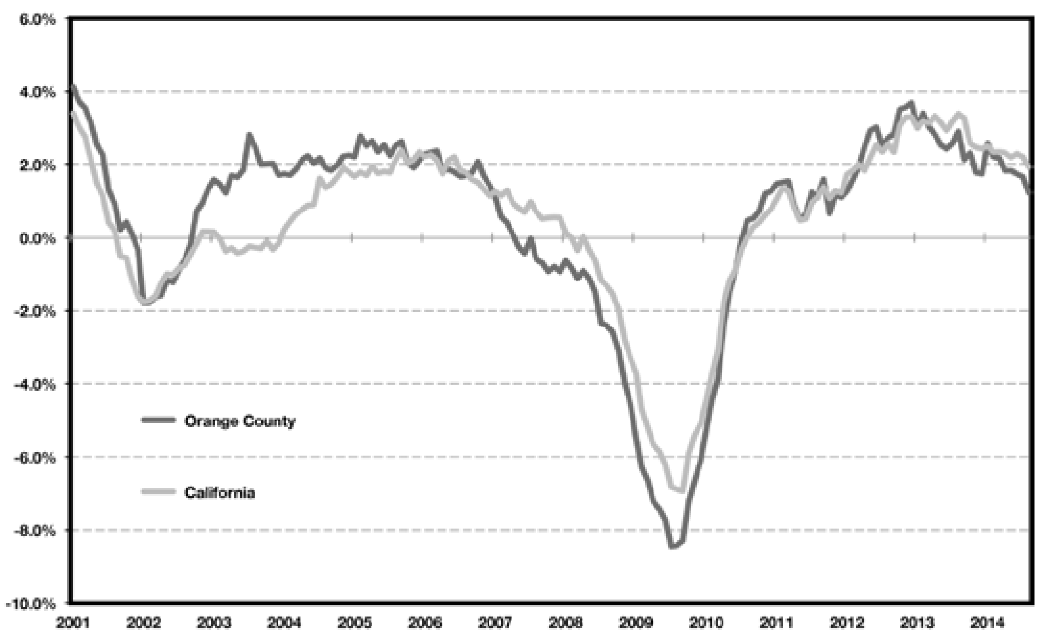
In the last 10 years, 2003 to 2013, these dynamics have changed dramatically reflecting first and foremost the lasting impact of the Great Recession, especially on employment and employment-to-population ratio. During this period, the ratio of job creation to population in Orange County fell from 0.53 to 0.23, for Los Angeles from 0.3 to .08 and for the Inland Empire from 0.3 to 0.1.

TABLE 2
Demographic and Employment Changes Over Two Decades
Orange County, Los Angeles and the Inland Empire

	ORANGE COUNTY		LOS ANGELES		INLAND EMPIRE	
	1993-2013	2003-2013	1993-2013	2003-2013	1993-2013	2003-2013
Avg. Annual Emp Change	15,551	4,376	13,832	2,405	23,450	13,987
Avg. Annual Pop Change	29,529	18,989	46,118	28,908	77,502	87,449
Ratio of Emp to Pop	0.53	0.23	0.3	0.08	0.3	0.16

The other measure of the employment situation are payroll jobs. Orange County's performance has also been underwhelming on that score during the recovery years. Prior to the Great Recession, payroll employment in Orange County typically grew at a faster rate than the state as a whole; during 2001 through 2007, the average annual growth in Orange County's payroll employment was approximately 1.24%, while California's growth rate was 0.79%. During the crisis years (2007 to 2010), employment fell more in Orange County than for the state – payrolls declined by an average annualized pace of -2.7% in Orange County, while the overall drop for the state was a more muted -1.8%. Since then, the pace of job gains has been roughly equal: Payroll employment has grown at an annualized pace of 2.2% for the county and 2.1% for the state (Figure 15).

FIGURE 15
Employment Growth: Orange County vs. California
(y-o-y percent change)



The pace of improvement has been uneven however, and a closer look at the data reveals that momentum for Orange County may have ebbed a bit, lagging behind improvements at the state level.

The pace of improvement has been uneven however, and a closer look at the data reveals that momentum for Orange County may have ebbed a bit, lagging behind improvements at the state level. For example, the state of California added a total of 348,000 jobs (or 2.4% of the total) in 2012, 441,000 in 2013 (or 3% of the total) and 238,000 through August of 2014 (or 1.6% of the total). Orange County's gains during this period were 37,000 in 2012 (or 2.7% of the total), 36,000 in 2013 (2.6% of the total) and 18,000 through August 2014 (1.3% of the total). So while job formation has picked up over the years for the state, Orange County is adding employment at a slower rate over the past three years.

Further analysis of the state versus the county employment patterns reveals that the employment growth gap varies by sector (Table 3). The largest percentage gap is for the Transportation, Warehousing and Utilities sector where the state employment growth has exceeded that in the county by more than 3% in the last two years. In the Professions and Business Services sector, the state's gap over the county is approximately two percentage points, which is significant given that this is the largest sector of employment. Similarly, Education and Health Care employment has grown faster at the state level relative to the county by the same margin. And though the Financial Services sector had been growing at a faster clip in the county, it appears that the rest of the state is catching up.

TABLE 3
Orange County and the State of California: Difference in Employment Growth (California growth minus Orange County growth)

	2011	2012	2013	AUG-14
Total Nonfarm	-0.07%	-0.25%	0.45%	1.71%
Mining and Logging	7.27%	6.02%	0.22%	-2.28%
Construction	-1.47%	1.96%	-0.52%	0.79%
Manufacturing	-2.02%	-2.29%	0.13%	0.18%
Durable Goods	-2.92%	-2.99%	-0.41%	-0.67%
Nondurable Goods	0.55%	-0.49%	1.57%	3.11%
Trade, Transportation and Utilities	1.37%	1.37%	0.86%	2.46%
Wholesale Trade	2.94%	2.78%	0.25%	2.55%
Retail Trade	1.02%	0.72%	0.57%	2.22%
Transportation, Warehousing and Utilities	-1.09%	0.75%	3.90%	3.35%
Information	4.21%	-0.89%	-0.90%	1.36%
Financial Activities	-0.96%	-1.84%	-2.80%	3.96%
Professional and Business Services	1.69%	-0.05%	2.37%	1.92%
Educational and Health Services	-0.20%	0.80%	1.56%	3.49%
Leisure and Hospitality	-0.92%	0.31%	0.54%	2.61%
Other Services	-0.72%	-0.94%	0.10%	-1.90%
Government	0.20%	-0.24%	-0.55%	-0.55%

Looking at the employment gains by sector for the county over the last few years, employment gains are led by four major sectors: Professional and Business Services, Leisure and Hospitality, Education and Health Care and the Construction sector, in that order. Further improvement over the forecast horizon is also expected in these sectors given the recent pickup in annual growth rates (Table 4). The Government sector is the only area where the four-year growth is negative, albeit the last two years have shown a slight improvement. This is not surprising and is not unique to Orange County; government rolls have declined over the past few years, especially at the state and local levels given the fiscal challenges faced by state and local governments.

TABLE 4
Orange County Employment by Sector

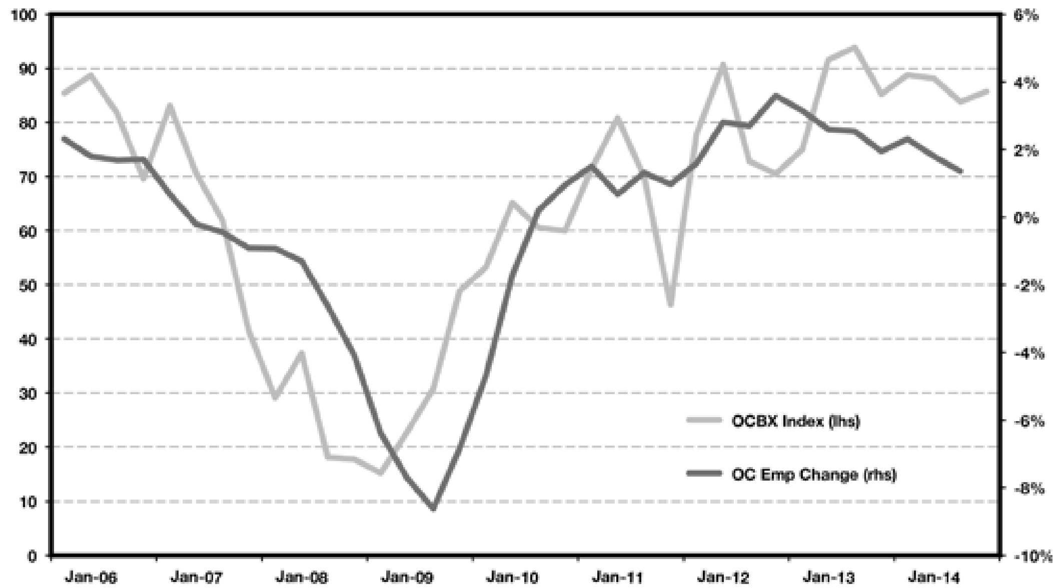
	2010-2011	2011-2012	2012-2013	2012-2013	2010- 2014	
					Level	Percent
Total Nonfarm	15,208	36,942	36,142	18,808	107,100	7.80%
Construction	1,175	2,175	5,967	5,454	14,771	21.70%
Manufacturing	3,775	4,058	-358	-713	6,763	4.50%
Trade, Transportation and Utilities	1,408	1,808	3,975	-4	7,188	2.90%
Wholesale Trade	-600	-67	2,283	529	2,146	2.80%
Retail Trade	1,250	1,350	1,842	-538	3,904	2.80%
Transportation, Warehousing and Utilities	750	550	-150	4	1,154	4.30%
Information	-950	458	1,075	550	1,133	4.60%
Financial Activities	1,225	3,525	4,258	-3,175	5,833	5.60%
Professional and Business Services	2,600	12,592	4,600	5,863	25,654	10.50%
Educational and Health Services	2,567	5,767	8,092	4,954	21,379	12.90%
Leisure and Hospitality	5,400	6,583	7,225	3,633	22,842	13.50%
Government	-3,017	-1,425	425	425	-3,592	-2.40%

Going forward, a possible concern is that the actual low unemployment rate in the county (currently at 5.4%) may indicate a tightening labor market which could lead to wage inflation, especially if the labor force grows at the sub-par rates witnessed over the past few years. It is too early to tell whether an improving job market will be able to draw a larger pool of potential workers currently sitting on the sidelines.

Looking ahead, while the national labor market seems to be gaining momentum as shown by more recent data, the employment picture for Orange County has tended to be below expectations since the start of this year, based on the data released by the state Employment Development Department (EDD). However, the Orange County Business Expectations survey, OCBX (conducted by the Cal State Fullerton's Center for Economic Analysis and Forecasting), in its latest reading completed in late

September, has shown an upward trend (Figure 16).The overall value of the OCBX index, a weighted average of several survey questions, moved up to 85.7 in the fourth quarter of 2014 from 83.8 the previous quarter. A reading above 50 indicates continued growth. The index has fluctuated within a narrow range of three points of its current value for the last three quarters and has proven accurate in the past in predicting future job changes in Orange County.

FIGURE 16
Orange County OCBX Index and Employment Change (index level, employment y-o-y percent change)



We believe that the currently reported EDD data for Orange County – a payroll employment gain of 1.3% (annualized) through August 2014, is under-reporting job gains in the county.

Related data and anecdotal evidence also indicate an increasingly healthier economy. The EDD data are not seasonally adjusted and are often revised in January/February to benchmark with the national statistics. We believe that the currently reported EDD data for Orange County – a payroll employment gain of 1.3% (annualized) through August 2014, is under-reporting job gains in the county and the benchmark revision early next year will show a better performing economy.

We base our forecasts on the data we have, however imprecisely they are measured and regardless of the (sometimes) significant revisions by the EDD. Based on the available data, we expect Orange County's average annual unemployment rate to decline from 6.2% in 2013 to 5.3% in 2014, 4.8% in 2015 and 4.5% in 2016. The county's economy is expected to add 29,700 payroll jobs in 2014 (2% of the total), 32,100 jobs in 2015 (2.2% of total) and 36,200 (2.4% of the total). The comparable figures for the six-county Southern California region are 176,000 in 2014 (2.5% of the total), 189,400 in 2015 (2.6% of the total) and 204,600 in 2016 (2.7% of the total). Details for all the counties are given in the attached tables.

Robert Giuliano provided expert research assistance in preparation of the Southern California and Orange County forecasts, but any errors are the authors' responsibility.