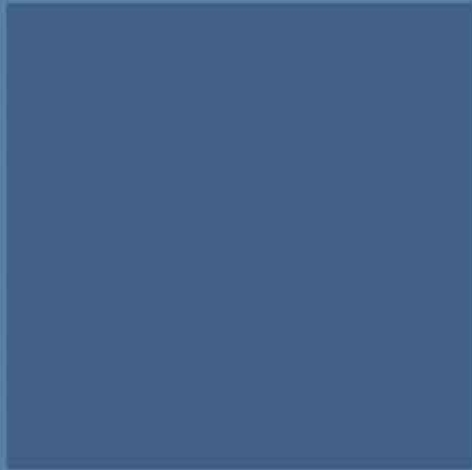

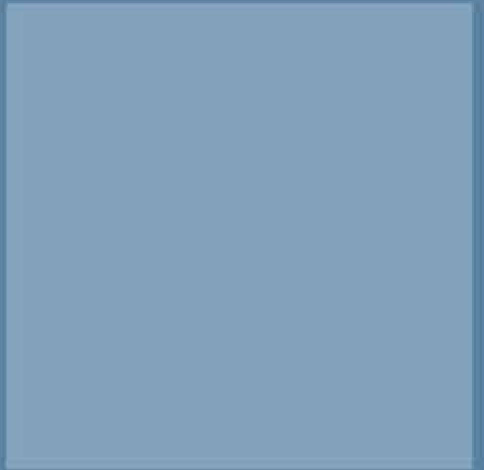

BEACONOMICS

A quarterly economic forecast for the U.S. and California
from Beacon Economics

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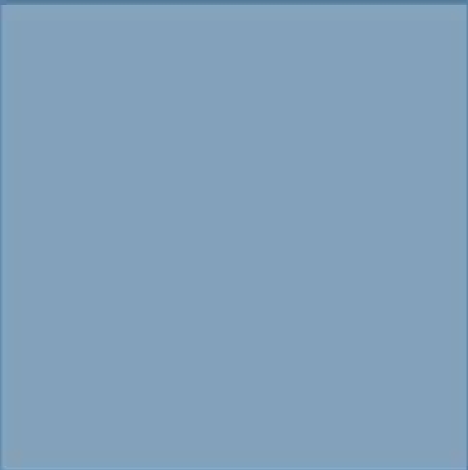
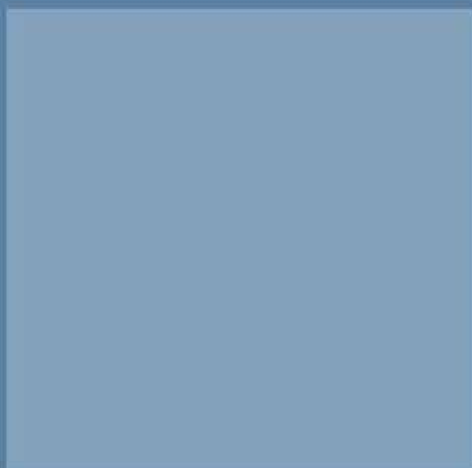
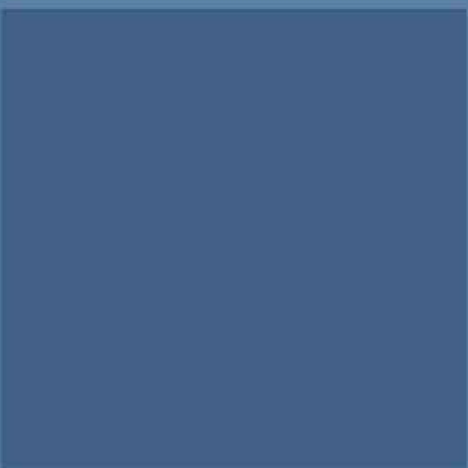
March 2010



U.S. Forecast

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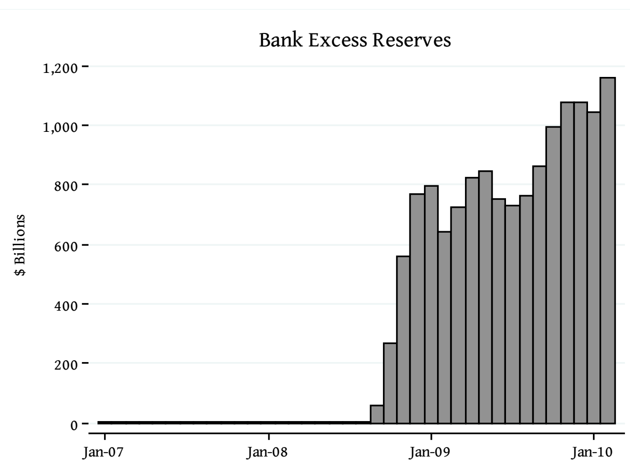
The Big Picture: Not out of the Woods Just Yet

Any discussion of the 2008–2009 recession will necessarily include a litany of "worst since the Second World War" caveats. The decline in real economic output, the decline in international trade flows, the proportionate and total losses of jobs and real income, the rise in the unemployment rate, and the decline in business spending all were at record levels. The best that can be said is that the more bearish predictions of a complete global economic meltdown did not come true. Whether this is due to the massive bailout of Wall Street banks (and bankers) as has been stated countless times by those behind the bailout plans or simply because the risk of such an event was overstated will never be known.

More important, the recession has come to an end. All signs point to it, from housing prices to labor markets, economic output, and, of course, the financial markets, which have been positively giddy over the past 12 months. And banks are starting to loosen their purse strings – recent figures from the Federal Reserve Lender Survey show banks loosening their credit standards and reducing the rate premiums they charge borrowers. The big question now is, how sustainable will the recovery be?

Our view on this has been changing in recent months. We are becoming more "optimistic" in the short run. Recovery is already underway, and much of the stimulus has yet to hit the economy. For example, the Federal Reserve has injected unprecedented amounts of liquidity into the economy, but much of this boost never made it to Main Street — in fact most has been absorbed by the banking sector in the form of excess reserves. With bank lending starting to flow again some of that $1.2 trillion could hit the economy this year. Let us not forget to mention all that stimulus spending that is still trying to find a project to fund. According to the website Propublica, less than half the stimulus money has been spent – $151 billion is in process right now, and another $321 billion will be spent this year. With this kind of boost, 2010 could end up being a very strong year.



Of course we used the word 'optimistic' in quotes, because a solid 2010 does not necessarily mean a good 2011 or 2012. Indeed, we are also becoming more pessimistic in the medium run. Although having growth return in the short run is clearly a good thing, it has not occurred because the U.S. economy has moved beyond the issues that plagued it at the start of the recession two years ago. Rather it is due primarily to fiscal and monetary policy.

The nation seems to be trading in its private bubble for a public one, swapping one set of unsustainable economic drivers for another.

While these actions have done what they were intended to do — namely, stabilize the economy — they come with a cost. First, the interventions are creating their own set of potential imbalances — an out-of-control Federal deficit and the potential for massive inflation. Second, these programs have slowed the closing of the imbalances in the economy that pushed us into the recession in the first place, and in some cases the problems are actually getting worse.

In short, the nation seems to be trading in its private bubble for a public one, swapping one set of unsustainable economic drivers for another. And as with all bubbles, the pop, when it occurs, will likely prove painful.

What are these ongoing imbalances? They include consumer spending, which is currently at an all-time high percentage of personal income. The recent rise in savings rates is an illusion created by the record tax cuts that were part of the stimulus package. The banks aren't out of the woods yet, either. The collapse in asset values has left banks with many underwater loans. This has been covered up by changes in the accounting rules — but the losses will still need to be accounted for eventually. Rising home prices mask the fact that over 6 million mortgages are currently nonperforming in the United States — a supply that will eventually need to be addressed.

Right now the economy is a forecaster's nightmare: it is in a place it has never been, with challenges ahead it has never seen before.

The rally in the equity markets seems to be occurring despite the fact that overall asset prices still seem too high given our long-run potential for growth. And the bounce in the asset markets overlooks the fact that overall the national deleveraging that needs to occur to shed off record levels of debt has yet to really get underway. It's clear that the economy is far from being on stable footing.

But if you are reading this report hoping for some clearer sense of what comes next, we apologize up front for not being able to deliver a clearer picture of the U.S. economy. Forecasting in normal times is a difficult challenge, true to the cliché that it is as much of an art as a science. And right now the economy is a forecaster's nightmare: it is in a place it has never been, with challenges ahead it has never seen before. Forecasters who think they have a clear vision of how it is all going to play out are either fools or frauds.

The best-case scenario is that the Federal Reserve and the Obama administration manage to draw down the public bubble slowly, a possibility that private bubbles typically don't share. In this situation, they manage to pull back on the stimulus slowly (The Fed gradually withdraws the excess liquidity, the Federal Government is able to close the budget deficit slowly, the FDIC manages bank failures on a gradual basis, etc) as the economy heals and meets the ongoing challenges. But this will require a delicate touch, to say the least — one unfortunately not normally associated with congressional politics. In such a scenario, the 2010 boom will be followed by a period of slow growth, perhaps for two years or more.

The worst-case scenario is that the bubble pops rapidly, putting the economy squarely back into another recession — the double dip. The potential sources of such a scenario come from many directions.

- The Federal Reserve might not be able to contain the beast it has unleashed, and the new liquidity-driven financial bubble could continue to grow despite efforts to slow it down, until it painfully pops of its own accord.
- Inflation could change from cold to hot quickly, forcing the Fed's hand. Rates could spike as a result, the dollar could drop in value, and the real cost of borrowing could hit very high levels.
- The global sovereign debt worries could affect the United States, causing the cost of borrowing to rise sharply and forcing the U.S. government to adopt some degree of rapid fiscal austerity.
- The financial markets could get hit by one or two large defaults — perhaps caused by a public debt default in Europe (read Greece) or from some other direction yet to be revealed. Or the stock market could crash and this time the Federal Reserve —

largely out of bullets — could do little about the consequences.

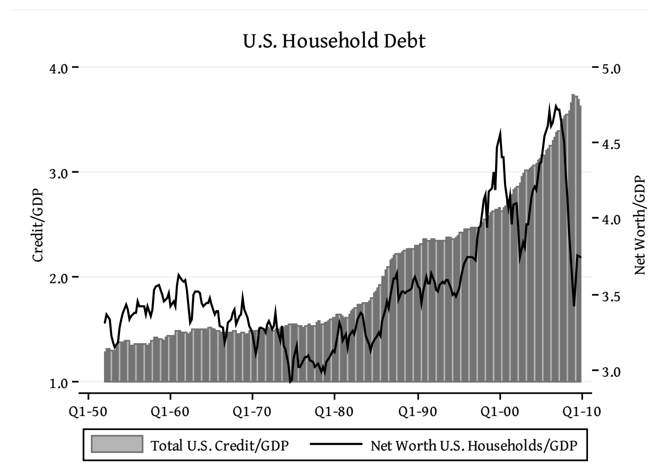
So enjoy 2010 — it should be a good year. But don't overextend. The one thing you can count on is that economic volatility will be the watchword for the next few years. The U.S. economy is surely in a better place than it was two years ago, but we are not yet in a position to enjoy another extended expansion. And this shouldn't be a surprise. The problems that put us here built up over more than a decade. It is going to take time to work our way out of them.

In the meantime, count your blessings — because even an unstable U.S. economy offers its citizens one of the highest standards of living in the world, something that Americans too often forget in uncertain times.

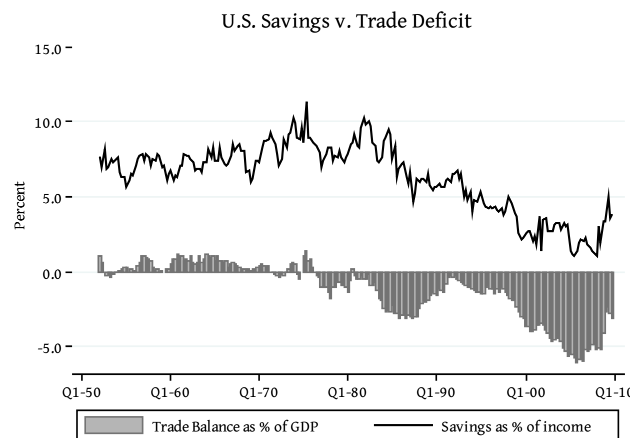
The 2010 Economic Rebound

To understand where the economy is today, we have to first understand how we ended up in this particular position in the first place. The roots of the recession began not with the failure of Lehman Brothers, but back in the mid-1990s. It was then that the great financial bubble began to form in the U.S. economy. Over the next 13 years, U.S. asset prices, for stocks, bonds, homes, commercial real estate, and so on, rose to levels that simply made no sense, given long-run productivity growth in our economy.

One way of seeing this is by considering the basic relationship between the net value of the U.S. economy (U.S. household net wealth) relative to U.S. GDP — our national P/E ratio. Given that the U.S. economy grows at a fairly stable rate (roughly 3% per year in real terms) the value of assets in our economy should be proportional to overall economic output over time.

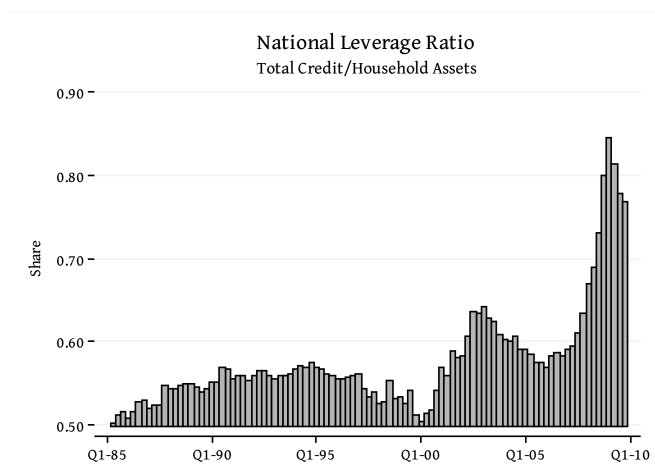


The P/E ratio for the U.S. economy, which had ranged between 3 and 3.5 since the statistic first started being measured after World War II, for whatever reason shot up to 4.7 between the mid-1990s and the start of the last recession. In other words, the market value of the U.S. economy was far too high given our true ability to meet those future claims. Indeed, it could be argued that the U.S. economy was "overvalued" by something on the order of $15 trillion to $20 trillion.



Along with this increase in asset values came an increased use of credit by banks, consumers, businesses, and everyone else. Overall, the gross amount of debt in the U.S. economy grew at twice the pace of the overall economy between 1995 and 2008, leaving the nation with record levels of debt. Indeed, this debt is still a large issue for the U.S. economy. Even though asset

price collapses have pushed the P/E ratio down to a figure with a closer resemblance to normalcy (though still high from a long-term perspective), overall debt levels remain quite high relative to GDP even now — consider the following graph that shows the total value of credit in the U.S. economy to the growth value of all assets held by consumers. This leverage ratio has come down some, but still has a ways to go. The process of deleveraging has yet to fully work its way through the system.



The problems haven't only been on the financial side of the ledger. American consumers, convinced that they were rich and getting richer at a record pace, began to save less and less of their income, and as a direct result the U.S. economy began to run a record large trade deficit. In other words, the U.S. economy developed a structural problem to go along with the accounting problems. Too many resources (capital and labor) were being devoted to real industries supporting consumer spending, home building, finance, and imports, which in turn were growing excessively due to the bubble. Too few resources were being devoted to exports and business investment.

What is perhaps most amazing about this past economic downturn isn't that it happened. The downturn was inevitable, and when the bubble popped, the financial havoc was going to be intense. It was inevitable that the U.S. economy (and therefore the world economy) was going to go through a painful period of recalibration as resources were reallocated to sustainable long-run uses. What is truly shocking is how many economists argued that the economy was fine even as late as the middle of 2008, even as things had already started to implode.

Now there are clear signs of growth in the economy. GDP growth in the fourth quarter hit nearly 6% in real terms. Admittedly, much of this growth was the end of the inventory runoff, but aggregate demand growth was still well into positive territory (albeit below its long-run average). Consumer spending has been on the rise, as is business spending on equipment. Furthermore, real exports rose faster than imports in the fourth quarter. This is one of the reasons that the industrial part of the economy is also doing well. Industrial production has increased and capacity utilization is rising sharply.

Contributions to Real GDP Growth by Sector (SAAR)

	87 to 07 Avg.	Recess.I Avg.	2009-IV
Gross domestic product	3.05	−2.40	5.90
Personal consumption	2.18	−0.86	1.23
Durable goods	0.47	−0.66	0.02
Nondurable goods	0.42	−0.31	0.64
Services	1.29	0.11	0.57
Gross private investment	0.66	−3.32	4.63
Structures	0.04	−0.41	−0.47
Equipment/software	0.51	−1.10	1.09
Residential	0.03	−0.87	0.13
Change in inventories	0.07	−0.94	3.88
Net exports	−0.12	1.23	0.30
Exports	0.67	−1.02	2.32
Imports	−0.80	2.24	−2.02
Government	0.34	0.54	−0.23
National Defense	0.02	0.38	−0.19
Nondefense	0.05	0.13	0.21
State and local	0.27	0.03	−0.25

Source: Bureau of Economic Analysis

Housing construction and the labor markets have not shown much of a rebound as yet, but even here the news is better. The labor markets have at least stabilized, and unemployment rates have fallen slightly. There are a number of signs that recovery in employment will be starting in the next few months. Weekly hours worked has been rising among employed workers, and temporary employment has seen sharp increases. Similarly, even though housing starts and permits continue to sit on the bottom, home prices have been rising as sales in some markets have been looking solid.

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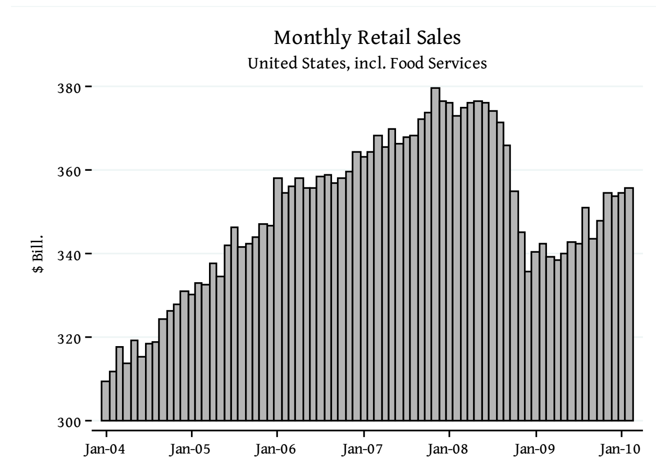
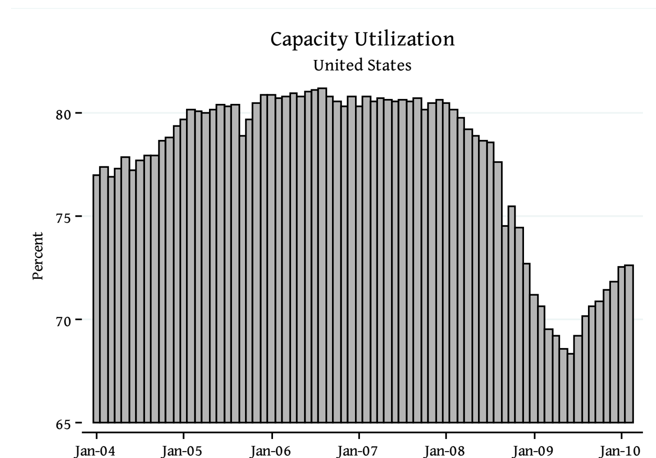
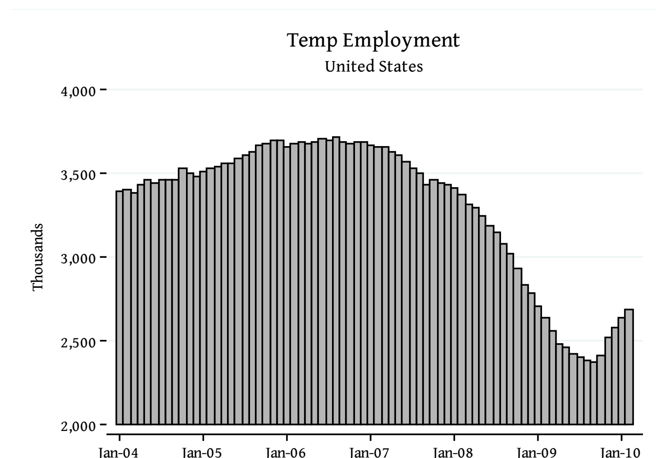


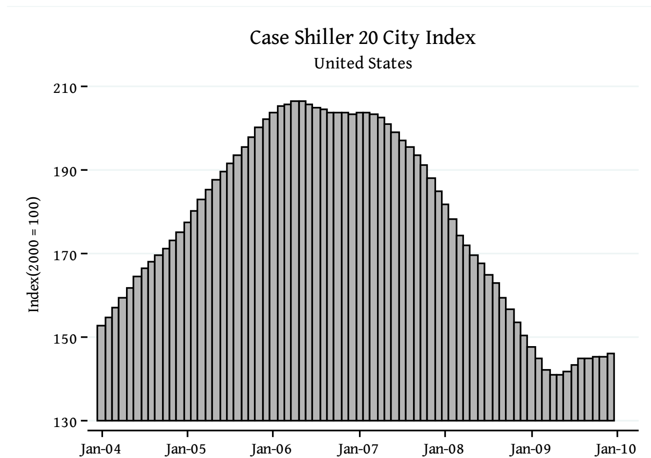
Perhaps most impressive is the rebound in the financial markets. Of course, the equity markets are way up from last year at this time, as has been widely reported in the press. But the bounce is deeper than seen in the major indexes. After hitting record high levels in the midst of the crisis in late 2008, risk premiums have come way down. The so-called TED spread[1] has dropped to almost nothing, as has the record spread between seasoned Baa and Aaa corporate bonds.

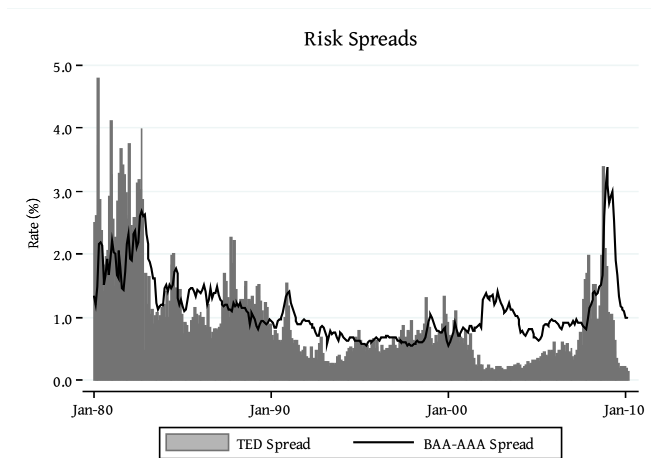


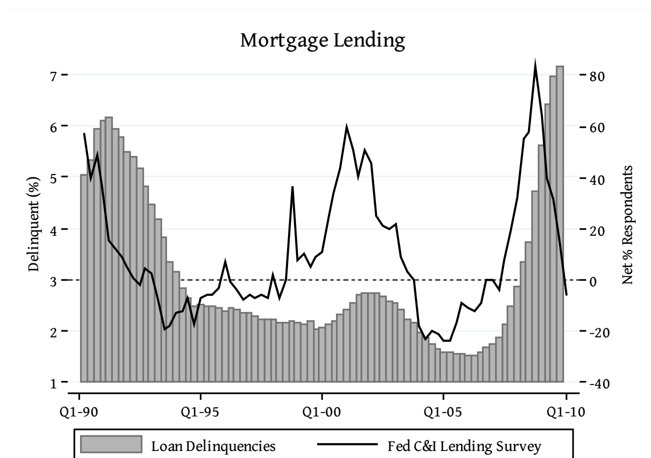
Companies in need of refinancing outstanding debt are finding the process easier than they thought. In the middle of 2009, as the economy swooned, many bond experts predicted that 2010 was going to be one of the worst years ever for corporate bond defaults. Instead, given the data on loan problems to date, this year may end up being a below-average year for defaults.



[1]The difference between the 3-month T-bill interest rate and the 3-month LIBOR interest rate.







The banking sector has also been a surprise. While Federal Reserve data shows that loan delinquencies continue to rise, the recently released data from the Senior Loan Officer Opinion Survey on Bank Lending Practices shows that lending terms on many sorts of loans have actually begun to ease. This is completely out of sync with past data that shows lending terms only loosening with a substantial decline in the rate of delinquency.

As noted, this rebound in the economy owes more to government policy than strong fundamentals. While we have all heard bits of information about the interventions, it may be worthwhile to put them into one place.

- The Federal Reserve has reduced short-run rates to near zero. The Fed has also embarked upon an aggressive plan to lower long-run rates through quantitative easing — a fancy term for printing money. The Fed has added almost $1.3 trillion to the monetary base — one of the most aggressive expansions on record.
- The Treasury has been involved in many direct support programs — from bailing out AIG and the GSEs (government-sponsored entities) to managing the spectacularly underperforming PPIP (the Legacy Securities Public-Private Investment Program) and of course TARP. It has also been running the HAMP programs that are designed to encourage the modification of mortgages for delinquent homeowners.
- Congress and the Obama administration have also been involved, with a nearly $1 trillion stimulus program that does everything from cut taxes to backfill state welfare systems, direct spending on various infrastructure projects, and provide a tax credit for home purchases. A controversial change in the FASB rules has also been passed, addressing how banks and other financial institutions value loans.
- The FHA, which after years of being more or less pushed out of the home lending market, has come

back with a vengeance, insuring home purchase mortgages at a record pace.

The potential consequences of these interventions are clear. Federal debt levels will rise to 70% of GDP within 5 years according to current estimates. It will likely get there more quickly, given that much of the bailout tab has yet to be fully recognized on the public books. In addition, there is the issue of the monetary base expanding by 150%. If the velocity is held constant, this implies that prices in the U.S. economy should also rise by 150% within the next five years — a rate of inflation that makes the 1970s look tame.

Of course, the challenges raised by these interventions are worth it if these actions get the economy moving again. But there's the rub. Even though the economy is currently expanding, the problems in our economy are still profound. As the stimulus is unwound, it remains to be seen whether the momentum of current growth will allow us to take these problems in stride. If not, the economy will quickly tumble back into a recession.

To illustrate the problems still entrenched in the economy we will first take a deeper look at two sectors: real estate and consumer spending. In each case, the positive signs on the surface mask problems underneath. Next, we will take a closer look at Federal Reserve policy and what it may mean for inflation.

Real Estate

Home prices started to bounce back in 2009 as sales began to heat up. While the national numbers are modest, some markets are positively hot. Cleveland, Memphis, the San Francisco Bay Area, Denver, and St. Louis all saw double-digit increases in median prices in 2009 according to the National Association of Realtors. The number of bank owned "REO" units has also been in decline.

Policy, not fundamentals, is driving the real estate market — a telling analogy for the force behind the U.S. economy overall.

The Case-Shiller Home Price Index offers additional evidence of price growth, with more accurate data broken down by market. The following table lays out the Case-Shiller estimates of price growth from June to December by tier of housing. While a few of the markets still lag, others have shown significant price gains — particularly at the low end of the market.

Case-Shiller Home Price Index
Price Growth by Tier, Jun-09 to Dec-09, (%, SA)

	Low	Middle	High
Las Vegas	−2.7	−4.3	−3.0
Tampa	0.0	−1.5	−2.3
New York	0.1	−0.1	−0.8
Seattle	1.1	−0.6	0.1
Miami	1.9	−1.2	3.2
Chicago	7.8	1.3	1.1
Denver	5.7	1.1	0.9
Portland	0.4	2.5	1.7
Atlanta	7.0	3.1	1.4
Boston	4.2	2.2	2.4
Washington, D.C.	7.4	5.5	3.6
Los Angeles	7.5	7.2	4.2
Phoenix	19.6	5.7	2.3
Minneapolis	22.4	6.5	5.1
San Diego	11.7	7.2	3.4
San Francisco	11.5	7.6	4.5

Policy, not fundamentals, is driving the real estate market — a telling analogy for the force behind the U.S. economy overall. In the real estate sector, policy has created a big demand push even as it has restricted supply. Buyers are enjoying record low interest rates due to the Fed's policy of "quantitative easing," where money is printed and used to buy debt being issued by Fannie Mae and Freddie Mac. Similarly, the FHA has vastly expanded its presence in the market over

the past two years, guaranteeing a record number of mortgages. And, of course, there is the homebuyer tax credit program (scheduled to end at the end of April). The original deadline for the program, November 30, 2009, drove a number of people into the market, leading to an uptick in sales; it remains to be seen if the new deadline will lift sales in March and April.

All of these programs have a limited lifespan. Fed Chairman Ben Bernanke has to worry about the inflationary pressures created by the expansion of the money supply. The FHA's portfolio is seeing record increases in delinquencies. In the very near future, the government will be reaching into its wallet to bail out this institution (as well as its banking counterpart, the FDIC) to the tune of hundreds of billions of dollars.

And even though the housing industry strongly pushed for and received an extension of the tax benefit, it is only the last two or three months of such programs that really create the desired result of expanding sales. It is the end of such programs that makes them work in the first place, as it forces people to get into the market before the program ends as opposed to sitting on the sidelines waiting for prices to fall further. Note how sales have been falling for the last three months after the initial deadline. The new deadline is already showing less of an impact. To extend them indefinitely takes away their very purpose.

The largest issue, however, is that of foreclosures. Although much has been made of the various homeowner rescue plans, they have had little to no impact on the pace of foreclosures, or on the eventuality that these problem mortgages will ultimately have to be taken over by the banks. Instead, they have only slowed the process down.

According to the Mortgage Bankers Association, almost 13% of all mortgages (on properties with 1 to 4 residential units) were nonperforming at the end of 2009 — this includes those that are seriously delinquent or somewhere in the foreclosure process (but not yet REO). For the MBA this implies that there are 5 million nonperforming loans out there. Of course, they only cover 80% of the market; hence we can estimate that nationally this number hits 6.2 million.

As with many policies, the HAMP loan modification plan is a policy designed to fight the last war, when it was interest rate resets that caused foreclosures. Today, the problem is that an enormous number of homes are underwater — the mortgage value is greater than the value of the home. Modifying loan payments will not solve this problem. To date, the HAMP program has only permanently modified 160,000 loans, with another 90,000 modifications close to being completed. This is a proverbial drop in the bucket relative to the scale of the problem.

Although much has been made of the various homeowner rescue plans, they have had little to no impact on the pace of foreclosures...

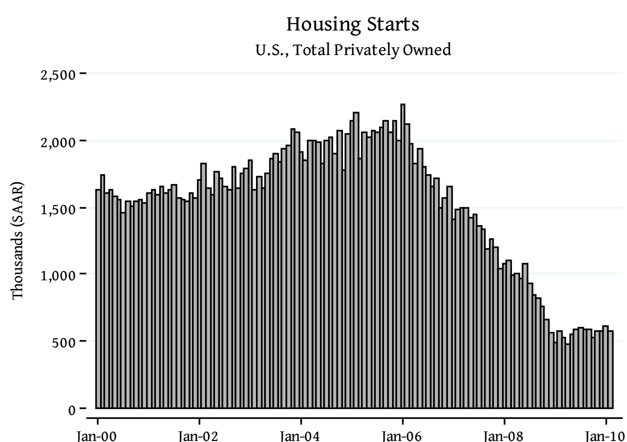
It might be hoped that rising prices would help the situation. But bear in mind that overall prices have fallen by 33% in the 20 metropolitan areas tracked by the Case-Shiller Home Price Index. In the areas hardest hit by mortgage problems, home price declines are closer to 45%, and for the big four (Nevada, Florida, California, and Arizona) the number is 55%. Home prices fell because they had reached unsustainably high levels during the course of the bubble. They will not reach these levels again under normal circumstances (read — normal inflation rates) for many, many years. Indeed in many markets prices have not even gotten back to 2000 levels relative to incomes — a time when prices seemed close to their long-run sustainable levels.

Nor can we expect much in the way of a recovery in housing construction. The last few years saw annual housing completions top 2 million units in a nation that needs perhaps half as many units to meet the demand of population expansion. The cumulative number of housing completions outstripped the number of

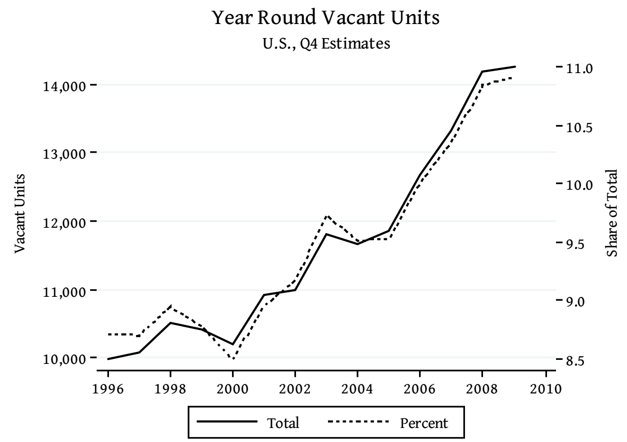
Mortgages 60+ Days Delinquent or in Foreclosure

	Q4-06		Q4-08		Q4-09	
	Share	Number	Share	Number	Share	Number
West North Central	3.05	83,550	5.59	158,294	7.35	203,228
West South Central	4.39	176,442	6.21	269,178	8.00	343,164
East South Central	4.49	90,383	7.01	151,487	9.25	197,198
New England	2.47	45,455	6.47	123,868	9.54	179,384
Mid Atlantic	3.11	146,819	6.76	330,800	10.14	490,646
Mountain	2.17	81,290	7.75	307,310	11.74	452,954
East North Central	5.11	306,374	8.88	555,175	12.08	723,905
Pacific	1.59	121,097	8.56	684,908	12.34	969,141
South Atlantic	2.83	272,027	9.74	998,105	14.00	1,401,471
Total		1,323,438		3,579,125		4,961,091

new households by more than 3 million over the past decade. The second quarter housing vacancy report from the census shows that the share of year-round empty units stands at 10.7%, or 1.7% above the rate it was at in 2002. This implies that there are still 2.5 million too many units in the system. Thus, while some areas will need quicker recoveries, many will not see substantial building for years.



The nonresidential construction market has been the one positive surprise in the system. Construction tanked in the first quarter of 2009 but started to stabilize in the second quarter. While spending on retail, office, and warehouse space, as well as on hotels, has dropped, spending elsewhere—on infrastructure (especially specialized structures such as schools, hospitals, and manufacturing plants)—has largely offset the declines. Further, the great wave of commercial delinquencies has yet to emerge, contrary to predictions and despite rising vacancy rates and falling rents. This is surprising, given that even optimistic experts in the industry recognize that prices have fallen at least 30% in the hardest-hit markets.



Once again, there is a worrisome backdrop to the story. Lenders have little incentive to be aggressive toward commercial property investors who are unable to meet balloon payments or fall short on loan covenants. Banks are already under substantial duress and the change in the Financial Accounting Standards Board (FASB) rules gives great leeway on how poten-

tially problematic loans are valued. Extend (the terms of the loan) and pretend (the loan is healthy) has become the rule of the day for banks' survival, despite the fact that this formula relies on deceiving investors about the true state of their loan portfolios. Combine this with low short-run rates that take some of the pressure off the borrowers with adjustable-rate loans, and we can see that the wave of commercial delinquencies is still in the offing, it has just been temporarily frozen in its path.

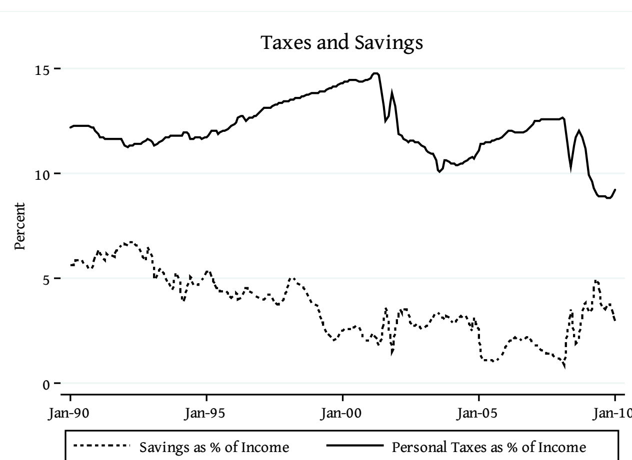
Consumer Spending and Public Deficits

As noted, consumer spending was clearly too high at the onset of the recession. With savings rates at near zero and debt levels at a record high of 120% of annual income (at the start of the decade this figure was roughly 80%) spending had to come down some. And it did, with the expected results for the economy. Now, personal savings rates are running slightly over 3% of income — still too low from a long-run perspective, but moving in the right direction. More important, consumer spending is on the rise as well, which is clearly good news for the economy in the short run.

But, the fact that it is rising should be raising warning flags. After all, real income was battered by the loss of jobs and has yet to recover at all. How can Americans be spending and saving more even as they earn the same amount? That good trick came via the record cut in taxes Americans received in 2009 as part of the stimulus program, as well as from the progressive nature of our tax system. Americans had been paying roughly 12% of their income in taxes at the start of the downturn. Last year that number was down to a record low 8.8%.

...the wave of commercial delinquencies is still in the offing, it has just been temporarily frozen in its path.

It may be the case that savings is larger than it appears — after all, as we saw in the last section, millions of households are enjoying housing services without bothering to pay the mortgage. Unfortunately, this income transfer does not appear in the BEA income statistics. But it can't be that much. If each of the 6 million nonperforming mortgages in the nation cost on average $1,500 per month and was not paid for a full year, this still would only add roughly 1% to consumer incomes. It simply isn't large enough to swing the statistics one way or the other. So what this means is that consumer spending as a share of income is currently at a record high — and rising. The consumer part of the problem has not been solved.

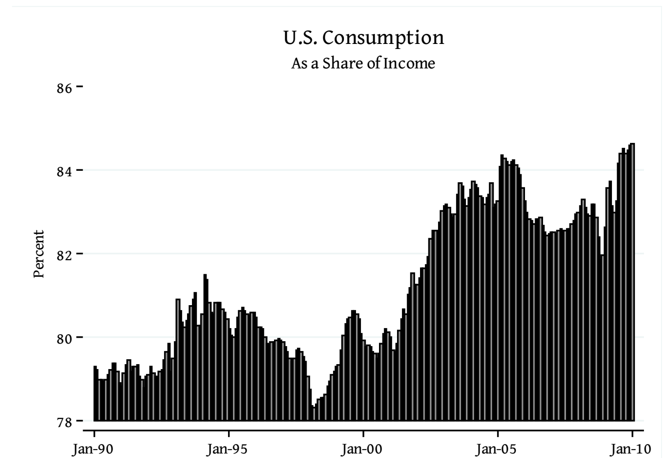


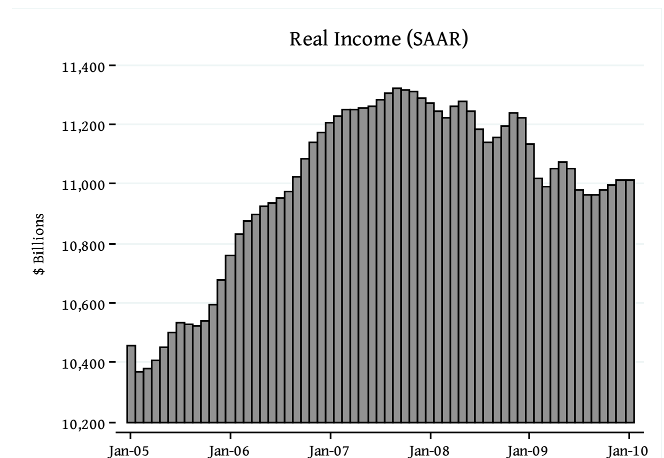
Of course, if the government makes the tax cuts permanent, this would solve the problem. Unfortunately, this is not a valid option. The U.S. government had serious debts coming into the recession. The Bush administration chose to fund its Middle East adventures not through tax increases but through borrowing. For a while the public sector needed to borrow an amount roughly equivalent to 6% of GDP — roughly the level of borrowing through much of the Reagan and George H.W. Bush administrations. But the bailout plans took this to a level not seen since World War II, with the current pace of borrowing reaching 11% of GDP — $170 million per hour, or $4 billion per day.

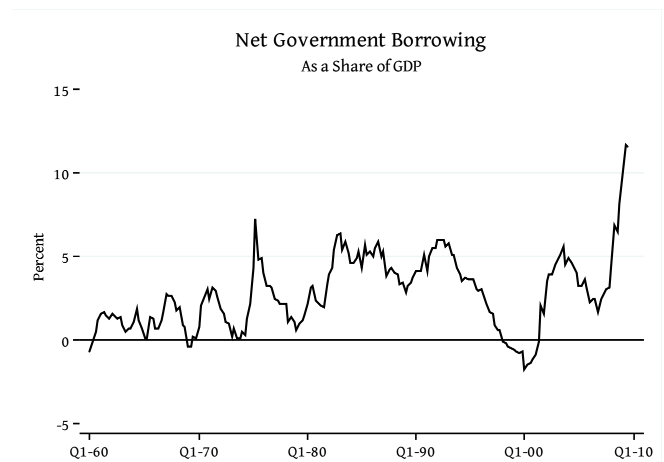
This puts us close to the Greek level of fiscal deficits. Fortunately, the world's lending community doesn't put us in the same category of risk — hence our government still pays relatively low rates on its debt. But how long we can continue on such a path is unclear, particularly if inflation starts to set in at any level. And is such an action ethical? Should the next generation of Americans be held financially responsible for this generation's inability to spend at a reasonable level?

Taxes will necessarily increase in the next two years, although the speed at which they will rise is yet to be determined. The current budget proposal on the part of the Obama administration includes some extensions of middle class tax cuts but allows tax rates to go up on higher-income households. This will clearly put consumers in the difficult position of having to reduce spending or savings. The first is bad for the short-term health of the U.S. economy, the second is bad for long-term health.

The only real hope for the administration is that income growth will return with enough speed to allow Americans to pay higher taxes without cutting back elsewhere. At this point in time, it seems unlikely to occur. The labor markets remain weak, and the last few recessions seem to indicate that the jobless recovery is a standard part of a modern recession. It may be even worse this time around. Because of the shift in economic drivers, away from housing and consumer spending, many laid off workers will need to be retrained in new fields before they become employable. This may be why job creation is such a top policy priority.

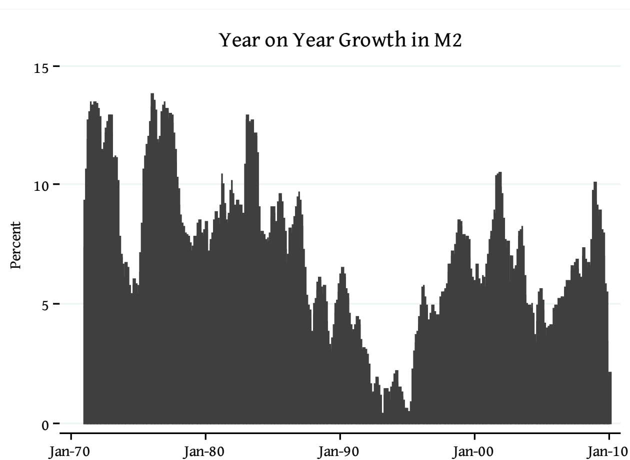






Inflation and the Federal Reserve

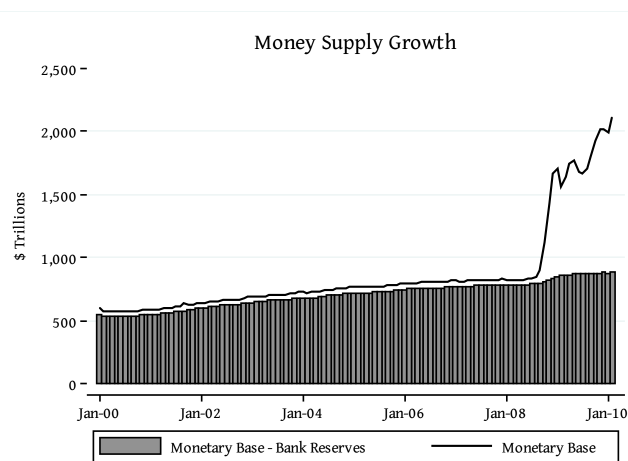
What about inflation? We have already noted that the Federal Reserve has been printing money in order to push down long-term interest rates. To date, they have expanded the monetary base by nearly $1.3 trillion dollars. Much of this has gone to purchasing Fannie Mae and Freddie Mac debt — but some has also been used to buy longer-term treasuries and some private label asset-backed securities. As noted, this has expanded the base money supply by 150%, which implies that there is the potential for 150% inflation in the next five years. With this level of risk, it seems astonishing that the bond markets have been so willing to continue to lend.



One reason for the continuation in lending is that there is no immediate risk of inflation. Much of the stimulus has landed in the banks in the form of excess reserves. Indeed, taking the growth of excess reserves out of the equation, the monetary base has grown by only 12.5%. And even here we are not seeing inflationary pressures. The increase in savings and lack of confidence has slowed the velocity down substantially. M2 — the best measure of broad money that corresponds to serious inflation — has actually decelerated in recent months. When the Fed states that it is willing to hold rates low for the foreseeable future, it has the confidence of knowing that it has 18 months before inflation can become an issue.

Still, the Fed has to begin to slow the expansion eventually — and to date they are planning to by the end of April. One might have expected to already see the impact on the debt markets — but not yet. The problems in Greece and the European Union have likely pushed a flight to security. Plus, with rates on high-risk debt coming down, there isn't much for the liquidity already in the market to do.

The real risk for the Federal Reserve starts not when they stop printing money, but when they need to mop up the liquidity. Much of the liquidity they injected into the economy has been sitting in the banks. Once the banks begin to lend again, excess reserves will start to fall. This hasn't happened yet, but with indications of loosening credit at banks and with firms starting to invest again in capital equipment and inventories, it will only be a matter of time. When excess reserves begin to fall, the Fed will have to start selling off assets to control inflation — or, in an equivalent move, they will have to raise the rate they are paying the banks on those excess reserves. In either case, rates will begin to rise and will pull some of the stimulative effects out of the economy.



Bear in mind that one of the largest failures of the Federal Reserve during the Great Depression was that it allowed the money supply to collapse, adding to the overall painful recession the nation was in as a result of the collapse of that asset bubble. Fed Chairman

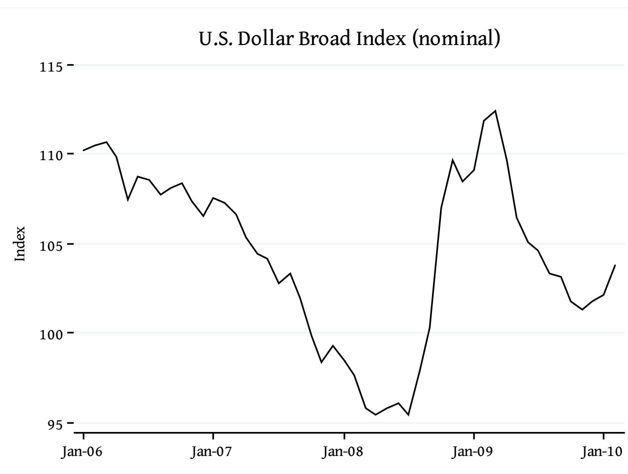
Bernanke was not going to let that happen. Currently, price levels are nearly flat despite the massive injection of liquidity. We might argue not that the Fed overdid it — but that they did just enough.

Of course, this assumes that the Fed is actually planning on fighting off inflation. As already discussed, the financial system is not out of the woods yet. The FDIC continues to take over banks at a record pace. But inflation poses a cheaper, simpler solution for the Federal Reserve — inflate the value of the assets above the value of the debt. While this is bad for the debt holders, it can go a long way to reducing the painful deleveraging process the nation is still working its way through. Inflation is now a realistic political option rather than a bad economic decision.

Are There Any Bright Spots?

With all the risks on the horizon, one might wonder if there are any bright spots. The answer, as always, is yes. In the short-to-medium run the export market may continue to shine. With the world economy starting to expand again (particularly the developing world), and with a weaker dollar, firms who sell products to these parts of the world may find themselves doing quite well. Of course troubles in Europe have put some upward pressure on the value of the dollar in the short run, but it still remains at a relatively low level. The one worry is that a deepening sovereign debt crisis could cause a worldwide flight to safety again. This would not be unlike what happened in the second half of 2008 when the export surge that occurred at the start of the year – and that somewhat offset the decline in domestic demand – was put to a quick end.

Another bright spot in the short term will continue to be business spending. Real net investment dropped to a near all-time low level during the downturn. The catch-up effect should keep growth in the sector decent if not spectacular. Similarly, a state and national policy push for alternative energy should create possibilities there.



In the longer term, the U.S. economy, once it works through its current issues, will be back on a solid growth path. Today's problems do not take away from the fact that the U.S. is still the center of the technological and financial world. While many worry that the U.S. economy is being undermined by trade with Asia (primarily China), in fact there is little direct competition between the two economies. Prior to this downturn industrial production in the U.S. economy was at a record high level. Incomes were rising at a solid pace for Americans — faster than in most of the developed world. These trends will return.

All of this does lead to one longer run worry having to do with the employment markets. An ongoing problem in the United States has been the widening gap between the skilled and the unskilled. This has to do fundamentally with changes that have allowed businesses to use information technology to replace many low skilled positions in the U.S. economy. The boom in housing and retail that was fueled by the massive financial bubble had masked the problem. As the economy returns to normal, these issues will reemerge. And they show how badly the nation needs to embark on a long run program of enhancing the educational opportunities available to the next generation — something at which we are clearly failing.

National Historical Table

United States	Q3-2007	Q4-2007	Q1-2008	Q2-2008	Q3-2008	Q4-2008	Q1-2009	Q2-2009	Q3-2009	Q4-2009
National Real GDP ($ Bill.,SAAR)	13,318.90	13,389.50	13,357.10	13,398.00	13,300.70	13,114.50	12,902.60	12,877.90	12,958.40	13,150.40
Growth (%,SAAR)	3.60	2.10	-0.70	1.50	-2.70	-5.40	-6.40	-0.70	2.20	5.90
Real Personal Consumption ($ Bill.,SAAR)	9,335.60	9,363.60	9,349.60	9,351.00	9,267.70	9,195.30	9,209.20	9,189.00	9,252.60	9,291.70
Real Investment ($ Bill.,SAAR)	2,166.50	2,123.40	2,082.90	2,026.50	1,990.70	1,857.70	1,558.50	1,456.70	1,474.40	1,628.70
Real Government Expend. ($ Bill.,SAAR)	2,458.90	2,468.70	2,484.70	2,506.90	2,536.60	2,544.00	2,527.20	2,568.60	2,585.50	2,577.90
Real Net Exports ($ Bill.,SAAR)	-638.40	-564.00	-550.90	-476.00	-479.20	-470.90	-386.50	-330.40	-357.40	-347.10
Total Nonfarm Empl. (Mill, SA)	137.66	137.86	137.90	137.49	136.70	135.02	132.81	131.09	130.08	129.63
Growth (%,SAAR)	0.11	0.60	0.10	-1.17	-2.28	-4.83	-6.38	-5.10	-3.05	-1.38
Unemployment Rate (%,SA)	4.63	4.80	4.97	5.30	6.03	6.97	8.17	9.27	9.63	10.03
Personal Income ($ Trill.)	11.95	12.10	12.14	12.29	12.29	12.23	11.95	12.05	12.01	12.11
Growth (%,SAAR)	4.20	5.28	1.39	5.06	-0.20	-1.72	-8.87	3.25	-1.44	3.68
Savings Rate (%)	1.42	1.27	1.04	3.05	1.92	3.34	3.37	4.94	3.59	3.76
Tax Rate (%)	12.56	12.58	12.62	10.79	11.70	11.72	9.93	8.99	8.92	8.79

Forecasts by Beacon Economics

National Forecast Table

United States	Q1-2010	Q2-2010	Q3-2010	Q4-2010	Q1-2011	Q2-2011	Q3-2011	Q4-2011	Q1-2012	Q2-2012
National Real GDP ($ Bill.,SAAR)	13,264.47	13,389.67	13,452.28	13,517.19	13,546.28	13,548.72	13,562.15	13,567.99	13,545.80	13,605.01
Growth (%,SAAR)	3.52	3.83	1.88	1.94	0.86	0.07	0.40	0.17	-0.65	1.76
Real Personal Consumption ($ Bill.,SAAR)	9,330.60	9,394.97	9,429.39	9,482.31	9,492.67	9,488.12	9,489.52	9,477.80	9,443.24	9,442.17
Real Investment ($ Bill.,SAAR)	1,677.84	1,723.65	1,754.64	1,774.07	1,793.53	1,805.46	1,819.80	1,836.67	1,844.55	1,896.79
Real Government Expend. ($ Bill.,SAAR)	2,602.93	2,620.60	2,624.14	2,619.82	2,611.14	2,595.34	2,582.75	2,571.96	2,563.42	2,560.99
Real Net Exports ($ Bill.,SAAR)	-346.90	-349.55	-355.88	-359.01	-351.06	-340.20	-329.94	-318.44	-305.41	-294.93
Total Nonfarm Empl. (Mill, SA)	129.64	129.89	130.20	130.60	131.05	131.42	131.75	132.06	132.32	132.62
Growth (%,SAAR)	0.05	0.76	0.97	1.24	1.38	1.13	1.00	0.96	0.77	0.90
Unemployment Rate (%,SA)	9.80	9.66	9.57	9.47	9.36	9.31	9.28	9.25	9.25	9.21
Personal Income ($ Trill.)	12.19	12.32	12.42	12.55	12.67	12.80	12.91	13.04	13.16	13.27
Growth (%,SAAR)	2.47	4.45	3.23	4.19	3.97	4.21	3.51	3.98	3.70	3.40
Savings Rate (%)	3.25	3.40	3.48	3.28	2.53	2.42	2.63	2.82	3.13	3.15
Tax Rate (%)	9.28	9.31	9.28	9.50	10.54	11.14	11.18	11.50	11.85	12.18

Forecasts by Beacon Economics

California Forecast

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State Overview

Despite the considerable pain being caused by the current cyclical fluctuation in the economy, California remains poised for long-term success once the imbalances that caused this downturn work their way through the system. In addition to great weather, scenic natural beauty in the form of oceans, mountains, and deserts, and just about all of the man made attractions a human being could possibly want, California is home to some of the finest universities in America, attracting the best students and researchers from across the nation and the world. Nearly 19% of the state's residents have bachelor's degrees compared with 17.5% in the United States overall, and 11% have graduate degrees compared with 10% nationwide. As a result, California remains an attractive place to locate a business—especially among the high-tech industries that now call the state home including information technology, biotech, and renewable energy. Unlike low-skilled manufacturing industries like textiles and apparel, these industries rely more on the quality and skills of their labor force than they do on the cheap price tag and relative abundance of low-skilled workers. If California can maintain this trend going forward, it will be well-positioned to continue attracting industries that will carry us into tomorrow.

This isn't to say that California does not face challenges in maintaining this position. Education, for example, is a critical issue. Because of the sheer magnitude of both K-12 and university education relative to the rest of California's General Fund revenue, it is often a prime target for spending cuts in times of fiscal turmoil. Although we have a greater concentration of highly educated residents compared with the country overall, we also have a larger concentration of residents who lack even a high school diploma. In 2008, it was estimated that nearly 20% of Californians over the age of 25 had less than a 12th grade education. Despite our skilled labor force and ability to attract high-tech businesses, adequately funding education is vital if we hope to maintain our position as a leader into the future.

California also serves as a hub for goods, services, and people coming into and going out of the United States. In terms of goods trade, roughly 13% of U.S. exports come from California's ports though this number has fallen slightly since the onset of the recession. In other words, California provides a crucial gateway for U.S. businesses to access overseas markets. The majority of what we export is emblematic of our high-tech businesses. In 2009, over 50% of the state's exports were in electrical machinery, industrial equipment and computers, optic, photo, and medical equipment, and aircraft. California is also a large exporter of services to the rest of the world. Predominantly, California provides professional and business services to foreign firms that include management and operational consulting. California also exports our intellectual property such as patents and trademarks, as well as entertainment licensing of movies and music. Tourism is also one of the state's strongest exports. And, as the value of the dollar declines, California is uniquely positioned to exploit the increased competitiveness of U.S. goods and services abroad.

California remains an attractive place to locate a business—especially among the high-tech industries that now call the state home including information technology, biotech, and renewable energy.

Just as critically, California is an important point of entry into the U.S. for foreign immigrants who come to study, work, and live. Nationwide, just over 12% of our residents were born overseas versus nearly 30% in California. This has brought vast diversity of cultures and ideas to the state and has made it a melting pot of peoples from all over the world. Indeed, California has much more racial diversity than the United States overall, with larger shares of black, His-

panic, and Asian residents and smaller shares of non-Hispanic whites.

These characteristics of the state's economy and demography have been a boon to our success, which is borne out in the statistics. At $61,000, median household income is almost $10,000 higher in California than it is nationwide where median household income was only $52,000 in 2008. In addition, nearly 19% of California's households earn at least $125,000, while only 13% of U.S. households earn as much.

The private equity markets seem to agree that California is still a good place to start and grow a business. Although venture capital investment across the country has taken a severe knock since the economic downturn began, California still receives a disproportionate share of these dollars. It is estimated that over 50% of the venture capital dollars invested nationwide in 2009 came to California.

Since the onset of the recession, California has seen turbulence across virtually all aspects of its economy.

This is not to say that California does not face real and significant challenges. Labor markets remain weak, and we have yet to see a rebound in employment across the state. New business formation, as measured by venture capital money, is down substantially from its 2007 peak, and remains well below the levels seen during the tech boom of the late 1990s. We have real policy challenges ahead as well. California's regulatory structure is unfriendly to businesses, and mandates such as pensions are in real trouble following the CalPERS fiasco. Budget problems abound in Sacramento, and little has been done to change a tax system that leaves the state vulnerable to the boom and bust revenue cycles that have plagued California for years—the state continues to levy relatively high taxes on relatively small tax bases. However, these challenges have yet to slow California down, and can be fixed if policymakers in Sacramento find the political will to do so.

Since the onset of the recession, California has seen turbulence across virtually all aspects of its economy. The consumer pulled back sharply in 2008 and 2009, and taxable sales in California fell dramatically. This was the result of a huge imbalance in consumer spending behavior, where savings had fallen to near-zero over the past 25 years, and debt levels steadily rose as credit became easier to access. The recession forced consumers to deal with this imbalance, and we have seen savings rates climb back up into the 5% territory. Although it has been painful for businesses and households, consumption levels have now fallen back to a level that is proportionate to incomes, where they are much more sustainable.

The housing market fell victim to some of the same trends, and has since taken a beating as well. Home prices began coming down precipitously in 2007, and there was a subsequent surge in defaults and foreclosures. As option-ARM (adjustable rate mortgages) reset to higher interest rates many people were unable to make their monthly payment and were forced into foreclosure. Others saw their property values decline so much that they entered into a negative equity situation where they owed far more on their mortgage than their home was worth. Many of these underwater homeowners made a decision to walk away from their home rather than make payments on an asset that was worth half of its original purchase price. Now that prices have fallen so dramatically, homes are returning to affordable levels across the state. Ultimately, it is a good thing for California to have home prices that are supported by incomes, and more households and families can consider investing in their first home.

While the residential real estate market appears to be leveling off and returning to fundamentals, the commercial real estate markets continue to be an area of concern. Across California, vacancy rates on commercial property continue to rise. Asking rents have con-

tinued to fall as well, and fewer units are being occupied each quarter than were vacated. California's hotels have also seen sustained reductions in both room occupancy and revenue per available room. Until these trends turn around, the nonresidential construction market will continue to be a drag on California's recovery.

> *...federal stimulus dollars are beginning to make their way into actual projects, and California should gain from this as well.*

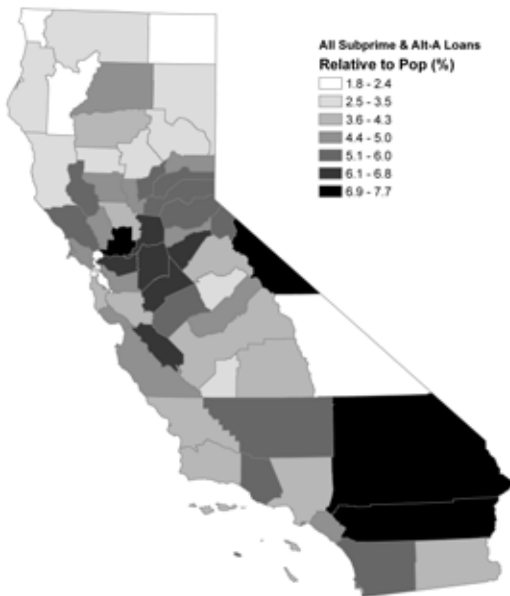
Encouragingly, recent evidence suggests that the economy is beginning to slowly turn around. The country saw strong economic growth in the second half of 2009. This was driven by consumer spending, which itself was the beneficiary of massive government intervention through federal incentive programs to buy homes and cars. Although these were temporary programs, which have since expired, they did appear to help the American consumer find some sort of a level footing. The strong growth in real GDP also came from one of the largest inventory burn-offs in recent history. During the recession, many firms shifted into a mode of depleting their shelves rather than making new orders, and industrial production stalled as a result. Now, we have seen inventories bottom-out in recent quarters and both production and new orders have seen a small uptick. This should be a positive indicator for the labor markets, which should benefit as plants across the country begin to switch back on. In addition, federal stimulus dollars are beginning to make their way into actual projects, and California should gain from this as well.

Down, but Not Out

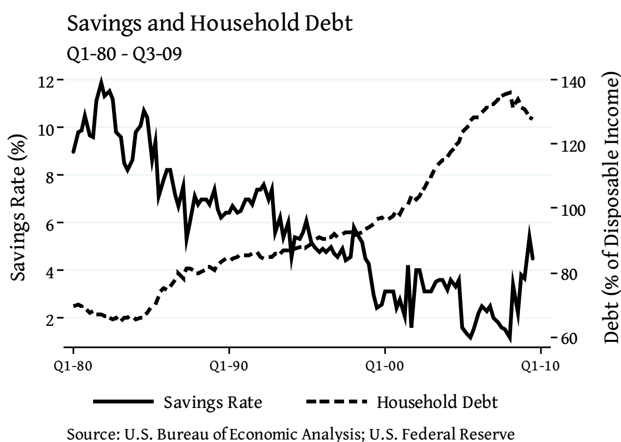
Looking back as we begin a new year, it is hard to deny 2009 was one of the worst years for California's economy in more than two decades. This cyclical fluctuation has hit California hard. Indeed, the state played a major role in the downturn we see nationwide. California was subject to the primary imbalances that drove the country into recession. For example, California took on a disproportionate share of the subprime and Alt-A loans relative to most other states. These loans were often structured as adjustable rate mortgages with an option for a lower payment for an initial period of 5 or 7 years.

Unfortunately, many buyers did not realize that their loans would reset to higher interest rates (and thus higher payments) long before they reached their 5-year option period. In many cases, buyers lacked the sophistication to fully understand the structure of their mortgages and failed to realize that their introductory payment amount would not cover all of the interest being amortized during those years. Typically, banks have a cap on the amount of negative amortization that can be accumulated before an adjustable rate mortgage recasts, so many people saw their payments rise dramatically well in advance of their introductory period actually ending. Others were speculating on continued price increases, and some were pro-

viding false information in order to secure a loan for a home they couldn't afford.



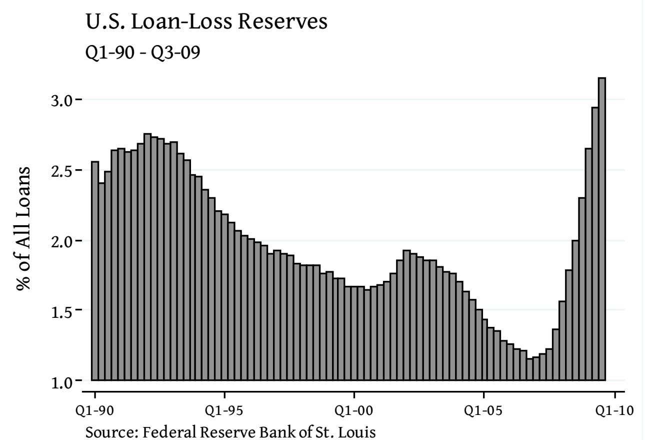
As a result of all of these factors, we were more vulnerable to the inevitable housing collapse that began in late 2006. Specifically, in December 2005, it is estimated California had roughly 19.5% of the outstanding subprime and Alt-A loans in the nation.



This is much higher than the state's share of the U.S. population, which averages roughly 12%. This shows that California had more than its fair share of these risky loans, and is one reason that we are feeling a large degree of the pain.

The unbalanced levels of savings and debt were not only the prime suspect in the widening U.S. trade deficit and national debt, they were clearly unsustainable.

Across California's counties, the subprime and Alt-A loans were highly concentrated in specific areas. Areas exposed to the largest number of risky lending practices relative to their population bases were both the Inland Empire, consisting of Riverside and San Bernardino Counties, and the East Bay region of the San Francisco Bay Area, including Contra Costa and Alameda Counties. Both regions—Inland Empire and East Bay—saw some of the largest run-ups in home prices as the subprime bubble grew. Subsequently, both regions have seen some of the largest declines in prices and the largest increases in defaults and foreclosures.



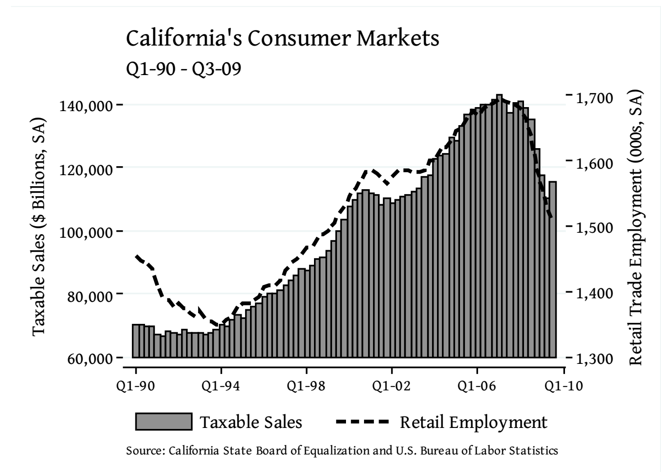
Additionally, the spending imbalances that built up over 20 years made the economy susceptible to a major consumer downturn. Savings rates, which historically have averaged over 7% of disposable income, be-

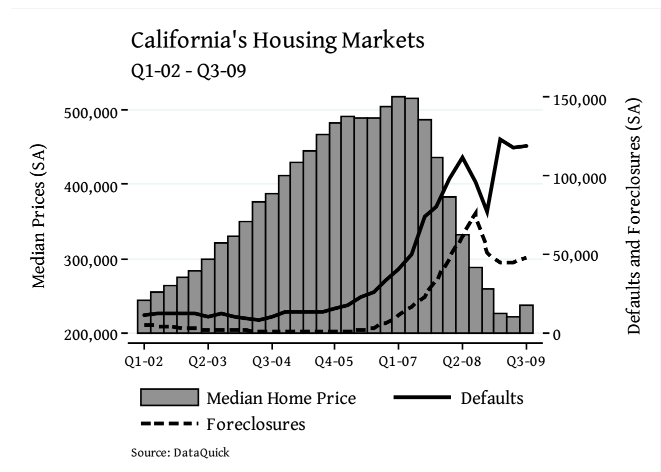
gan a downward trend in the early 1980s. By the first quarter of 2008, savings fell to just over 1% of income. At the same time, household debt as a percentage of disposable income went through the roof—rising from 69.7% of income in 1980 to 136% by the first quarter of 2008. This trend, coupled with a large share of consumption compared to the overall economy, created the perfect storm for a recession. The unbalanced levels of savings and debt were not only the prime suspect in the widening U.S. trade deficit and national debt, they were clearly unsustainable.

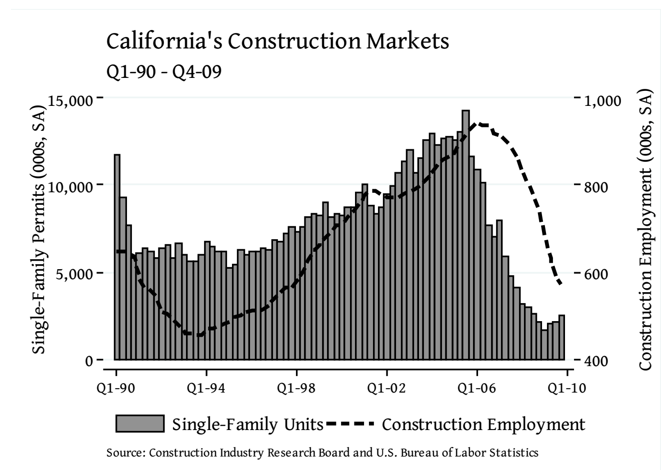
These bad habits eventually caught up with us. As banks started to suffer with under-performing loans and non-performing loans and asset prices appeared to be peaking in 2006, the spigot was essentially shut off. The easy credit driving this bubble evaporated. Indeed, we can see in the national numbers that once the real estate markets sustained losses and labor markets began to shed jobs in late 2007, the banks began reducing credit availability and pumping up their loan loss reserves. These reserves, which tend to go up in times of turmoil, rose from 1.16% of all loans in late 2006 to more than 3.15% of all loans by the third quarter of 2009.

Taking Stock

Since the collapse, California has been feeling pain across all aspects of its economy. The state's labor markets have been especially hard hit. In January 2010, the unemployment rate reached 12.5% on a seasonally adjusted basis and over 1.39 million total nonfarm jobs were shed by December 2009 from peak employment in July 2007. When asset prices fell and the labor market started losing jobs, consumers began to dramatically pull back. By the second quarter of 2009, taxable sales were off their peak levels by 22.9% and retail trade continued to trim workers—with over 212 thousand jobs lost from its peak level by December of 2009.





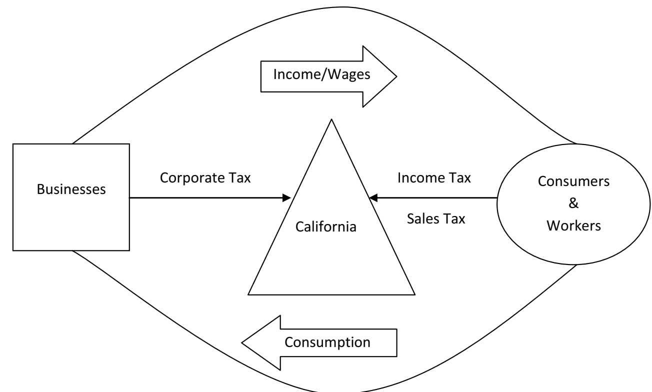


The real estate and housing markets have also taken a beating. After posting record gains between 2003 and 2006 home prices peaked. They began falling sharply in 2007, 2008, and 2009. At the same time defaults and foreclosures surged to decade highs. Residential building permits began to decline in late 2005 and by January 2009, with only 2,500 permits issued, they had fallen by 89% from their peak of more than 20,000 per month. Construction employment followed shortly after permits, and shed more than 379 thousand jobs, or 40% of its workforce by the end of 2009.

Commercial real estate came later to the game. In both the retail and office segments, vacancy rates did not begin to rise by any significant amount until late 2007 and early 2008. The slowdown in commercial real estate lagged the housing market and consumer pullback and highlights the extent to which businesses follow the consumer. Looking out at the commercial market, there are many ominous signs. In every type of property (office, retail, or industrial), and in every region across the state, the same trends hold true: cap rates are up, rents are down, and net absorption remains negative while vacancy rates keep climbing higher.

The economic turmoil borne by the state has created an enormous amount of stress on our fiscal position as well. Between 90% and 95% of the state's General Fund Revenues are derived from three major sources—the so-called "Big 3"—personal income tax, corporate tax, and sales and use tax. Unfortunately, these revenues are almost entirely determined by California's economic health. For example, higher unemployment leads to lower incomes, which in turn drives lower consumer spending, which then drives corporate profits down. Then, the whole process starts over again. These linkages create a vicious cycle for California's budget in times of economic downturn.

In January 2010, the unemployment rate reached 12.5% on a seasonally adjusted basis...



During the run-up in home prices, the decline in savings, and the increase in consumer spending, California began experiencing large increases in its General Fund Revenue. The state's revenue grew from roughly $70 billion in the 1999-2000 fiscal year to more than $95 billion by the 2006-07 fiscal year. This growth—which ranged from 6% to more than 13% per year (with the exception of the 2000-01 fiscal year which was hurt by the 2001 recession)—was very strong and could have been leveraged to get our fiscal house in order or to save for a rainy day. Unfortunately, it was not.

California General Fund Revenues ($000s)

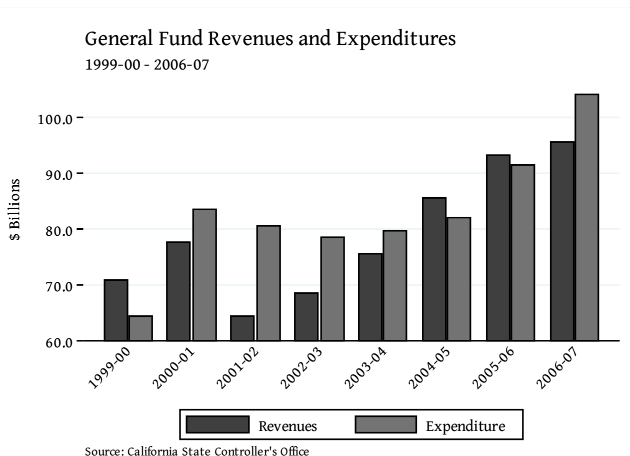
Source	2006-07	2001-02	1999-00
PIT	52,353,056	33,295,428	39,272,755
CORP	10,767,189	5,088,175	6,575,403
SALES	27,515,361	21,368,831	20,825,007
Big 3	90,635,606	59,752,434	66,673,165
TOTAL	95,665,223	64,341,833	70,771,088

Source: California State Controller's Office

Then, in 2009 it poured with the Big 3 revenues declining dramatically. But rather than putting the increased revenues into a war chest to use to smooth out the state's finances during an economic downturn, expenditures were steadily increased each year. Because of this, the state's went from a $2.7 billion budget surplus in June of 2006 to a year-to-date deficit of $12.9 billion as of December 31, 2009.

The economic turmoil borne by the state has created an enormous amount of stress on our fiscal position as well.

Now California policy makers are forced to make choices about which programs to cut, and which to trim, how to create new, better ways to increase revenues. We have already seen cuts to K-12 education, furloughs of State employees, and increases in sales tax and personal income tax rates as temporary fixes. However, a true recovery in California's fiscal position relies most importantly on a recovery in the State's economy. Additionally, while California does have more than $20 billion in outstanding debt (both internal and external borrowing), it represents only a small percentage of our gross state product. As consumer spending and employment return to growth, so will the state's three major sources of revenue.



A Bird's-Eye View

Looking at the nation from a bird's eye view, California clearly has been hard hit. With nearly 1.4 million jobs lost since employment peaked in July 2007, California has shed the largest number of jobs of any state. However, in other ways, this recession has affected some states even harder. For example, in terms of employment decline as a percentage of peak employment, California ranks 6th with a decline of 9.2%. Michigan ranks 1st, having shed 18% of its jobs from its peak, followed by Ohio and the states with subprime and Alt-A woes–Nevada, Florida, and Arizona, with declines of 13.8%, 11.5%, and 11.1%, respectively. Indeed, the number of jobs lost in the combined five states of Michigan, Ohio, Arizona, Nevada, and Florida are roughly twice as large as the number of jobs lost in California.

Similarly, California's labor markets began heading into decline relatively early in this recession, with employment peaking in July 2007. Of the 50 states and the District of Columbia, 16 did not begin to see employment contract until the second quarter of 2008. Yet, 10 states including Michigan, Florida, Nevada, and Ohio began eliminating nonfarm payroll positions before California, and another five including Arizona, saw employment peak by the end of 2007. The Golden State has the 5th highest unemployment rate in the nation with 12.5%, trailing Michigan (14.3%), Nevada (13.0%), Rhode Island (12.7%), and South Carolina (12.6%). In sum, while California is feeling the sting of this downturn more than most, there are a few places in the country that are struggling even more.

The Golden State has the 5th highest unemployment rate in the nation with 12.5%, trailing Michigan (14.3%), Nevada (13.0%), Rhode Island (12.7%), and South Carolina (12.6%).

The same is true for California's housing markets. A disproportionate share of subprime and Alt-A loans went to California before the market peaked, making it susceptible to a housing downturn. Since the bubble has collapsed, we have seen a wave of foreclosures

Comparative Labor Market Statistics

State	Peak Employment	Decline (000s)	Decline (%)	Unemp. Rate
California	Jul-07	−1,393.0	−9.2	12.5
Florida	Mar-07	−926.1	−11.5	11.9
Michigan	Jun-00	−845.9	−18.0	14.3
Ohio	May-00	−652.5	−11.6	10.8
Illinois	Jan-08	−437.1	−7.3	11.3
Texas	Aug-08	−431.3	−4.1	8.2
New York	Apr-08	−367.4	−4.2	8.8
Georgia	Feb-08	−341.3	−8.2	10.4
North Carolina	Feb-08	−305.0	−7.3	11.1
Arizona	Aug-07	−298.0	−11.1	9.2
Pennsylvania	Apr-08	−269.9	−4.6	8.8
New Jersey	Jan-08	−242.9	−5.9	9.9
Indiana	Jun-07	−235.1	−7.9	9.7
Tennessee	Feb-08	−221.2	−7.9	10.7
Washington	Mar-08	−199.7	−6.7	9.3
Wisconsin	Jun-07	−198.0	−6.8	8.7
Nevada	Feb-07	−179.4	−13.8	13.0
Virginia	Feb-08	−177.2	−4.7	6.9
Massachusetts	Mar-08	−166.7	−5.0	9.5
Alabama	Jan-08	−162.2	−8.1	11.1
Minnesota	Jun-07	−159.6	−5.8	7.3
Colorado	May-08	−156.5	−6.6	7.4
Missouri	Feb-08	−153.7	−5.5	9.5
Oregon	Feb-08	−148.6	−8.5	10.7
South Carolina	Sep-07	−145.7	−7.5	12.6
Maryland	Feb-08	−125.3	−4.8	7.5
Kentucky	Jun-07	−117.2	−6.3	10.7
Connecticut	Mar-08	−103.4	−6.0	9.0
Utah	Dec-07	−85.5	−6.8	6.8
Oklahoma	May-08	−79.0	−4.9	6.7
Mississippi	Feb-08	−76.0	−6.6	10.9
Kansas	Apr-08	−74.6	−5.3	6.4
Iowa	May-08	−71.2	−4.7	6.6
Louisiana	Aug-08	−69.4	−3.6	7.4
Idaho	Nov-07	−55.2	−8.4	9.3
Arkansas	Feb-08	−54.6	−4.5	7.6
New Mexico	Apr-08	−46.2	−5.4	8.5
Rhode Island	Jan-07	−44.6	−9.0	12.7
Hawaii	Dec-07	−43.0	−6.8	6.9
Maine	Jan-08	−33.6	−5.4	8.2
Nebraska	Oct-08	−32.9	−3.4	4.6
West Virginia	Oct-08	−32.8	−4.3	9.3
New Hampshire	Jan-08	−31.1	−4.8	7.0
Delaware	Feb-08	−30.9	−7.0	9.0
Montana	Mar-08	−26.4	−5.9	6.8
Wyoming	Oct-08	−21.2	−7.0	7.6
Vermont	Jun-07	−15.8	−5.1	6.7
South Dakota	Aug-08	−12.5	−3.0	4.8
District of Columbia	Aug-08	−9.4	−1.3	12.0
North Dakota	Nov-08	−5.7	−1.5	4.2
Alaska	Dec-08	−1.9	−0.6	8.5

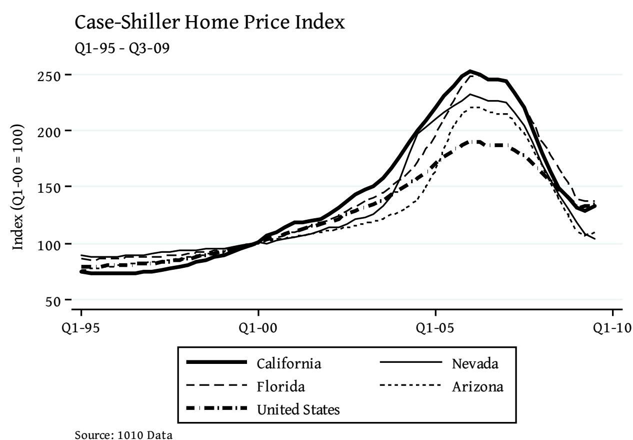
Source: U.S. Bureau of Labor Statistics

Mortgage Delinquencies and Foreclosures (% of All Loans)

State	30 Days Past Due	60 Days Past Due	90 Days Past Due	In Foreclosure
Florida	3.80	2.05	6.31	12.98
Nevada	3.69	2.27	8.16	9.78
Arizona	3.58	2.05	6.19	6.37
California	2.84	1.67	6.12	5.94
New Jersey	3.40	1.58	3.98	5.48
Illinois	3.66	1.76	4.75	5.28
Ohio	4.13	1.79	4.44	4.67
Michigan	4.29	2.10	5.90	4.52
Hawaii	2.33	1.20	3.23	4.31
Maine	3.73	1.64	3.38	4.22
Indiana	4.52	1.85	4.97	4.06
Rhode Island	3.78	1.81	4.47	4.04
New York	3.30	1.45	3.92	3.94
Maryland	3.62	1.73	4.46	3.79
Wisconsin	2.85	1.32	3.15	3.69
Connecticut	3.35	1.56	3.53	3.59
Idaho	3.06	1.46	3.32	3.54
Georgia	5.05	2.30	5.11	3.51
Minnesota	2.60	1.24	3.06	3.47
Massachusetts	3.43	1.47	4.14	3.41
South Carolina	4.19	1.72	3.72	3.31
Delaware	3.75	1.42	3.32	3.19
Utah	3.35	1.55	3.33	3.11
Kentucky	4.17	1.71	3.42	3.11
Louisiana	4.39	1.84	4.12	2.91
District of Columbia	2.91	1.31	3.11	2.91
Mississippi	5.84	2.50	5.47	2.90
New Mexico	3.46	1.39	2.71	2.89
Oregon	2.44	1.16	2.99	2.87
Colorado	2.65	1.20	2.70	2.87
Pennsylvania	3.88	1.63	3.42	2.73
Iowa	2.96	1.20	2.50	2.71
Oklahoma	3.81	1.44	2.80	2.70
New Hampshire	3.54	1.54	3.36	2.38
Vermont	2.58	0.98	1.96	2.37
Washington	2.42	1.19	3.26	2.30
Tennessee	4.63	1.92	4.22	2.30
Virginia	3.07	1.36	3.12	2.27
Kansas	3.27	1.32	2.72	2.24
West Virginia	4.84	1.88	3.33	2.19
North Carolina	4.07	1.70	3.57	2.09
Alabama	4.69	1.88	4.14	2.08
Missouri	3.90	1.68	3.57	2.08
Texas	4.25	1.78	3.44	2.00
Arkansas	4.07	1.49	3.07	1.93
Nebraska	2.85	1.12	2.22	1.91
South Dakota	2.00	0.78	1.55	1.65
Montana	2.35	0.96	1.85	1.60
Wyoming	2.52	1.01	1.77	1.49
Alaska	2.42	0.98	1.54	1.38
North Dakota	1.99	0.69	1.18	1.13

Source: Mortgage Banker's Association

and nonperforming mortgages. By the third quarter of 2009, 5.8% of all mortgages were in foreclosure in California, which is the highest in at least 30 years. Even more troubling are the number of loans that are nonperforming, but have yet to hit the foreclosure process. According to the Mortgage Bankers Association, an additional 10.5% of all mortgages in California are at least 30 days past due. Combine these, and 16.3% of California's mortgages are distressed – and will play a role in moderating the recent growth we have seen in home prices as the economy begins to recover. We also see a large percentage of California's homeowners who remain current on their mortgage, but who face the daunting prospect of being severely underwater. First American Corelogic currently estimates that 35% of all mortgages in California are in negative equity situations, and another 4% are within 5% of being underwater.



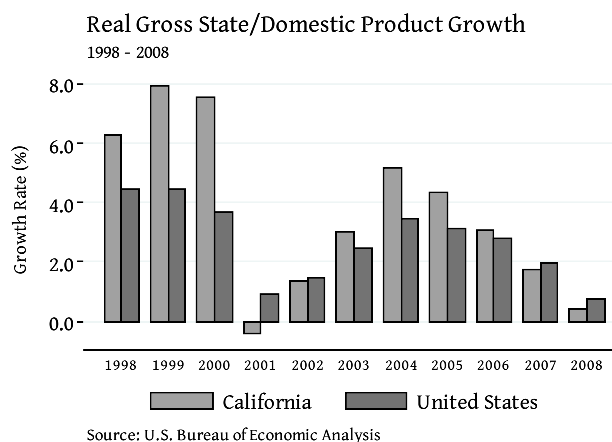
As bad as things are in California, other states were wrapped up in the housing bubble as well. Along with those in California, home prices in Florida, Arizona, and Nevada grew at an unsustainable rate during the first part of the decade. This growth surpassed that of the nation overall, and was completely out of line with income growth—which should be the primary driver of home values. Now, Florida, Nevada, and Arizona all have larger proportions of their existing mortgages in foreclosure relative to California at 13.0%, 9.8%, and 6.4%, respectively.

These states also have large shares of distressed mortgages that have yet to hit the foreclosure process. By the third quarter of last year, Nevada had the largest stock of 30-, 60-, and 90-day delinquencies at 14.1% of all loans. This was followed by Florida with 12.2% of all loans in delinquency. Arizona had slightly less delinquent mortgages with 11.8% of all loans at least 30 days past due. Thus, although California has battled with beleaguered housing markets, it has not been the hardest hit.

California is still a major growth engine in the U.S. economy. For the past 10 years, real economic growth in California has exceeded that in the United States overall.

These Boots Were Made for Walkin'

Despite the problems in California's housing, consumer and labor markets, it is important to keep the state's underlying economy in perspective in any economic outlook. When we zoom out from the cyclical volatility the state is currently facing and focus on long-run trends, it becomes clear that the future is bright for the Golden State.

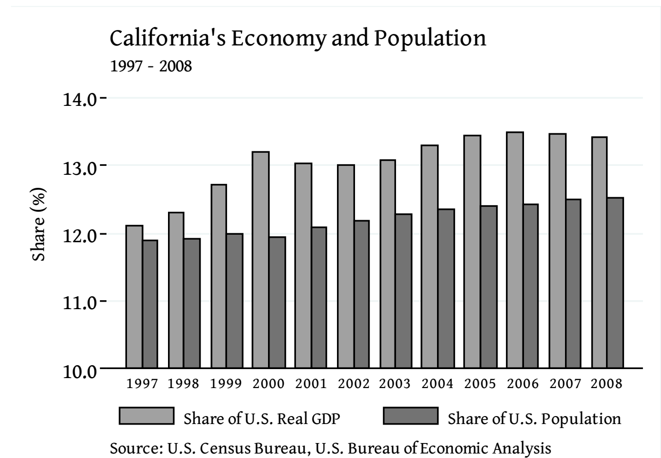


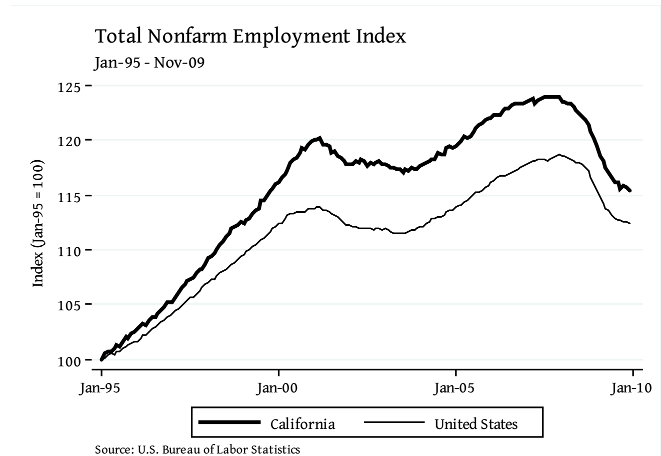
California is still a major growth engine in the U.S. economy. For the past 10 years, real economic growth

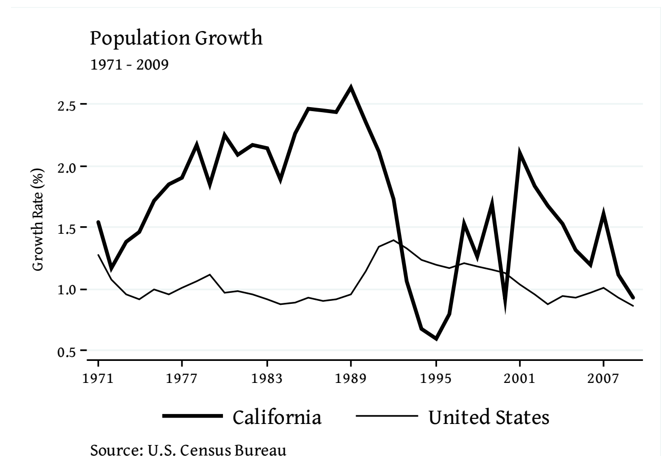
in California has exceeded that in the United States overall. During the past 10 years California has averaged an annual growth rate of 3.7% in its real gross state product, while the United States achieved average economic growth of only 2.7%. The exceptions to this trend are the 2001 downturn when growth was slower than that of the nation overall, and the current recession. This is unsurprising given that the pullback in California led the nation in this recession and illustrates the economic impact of California on the country. During growth periods California grows faster than the nation, but pulls back harder in times of recession.

The long-term strength in California's economy is also illustrated by comparing California's share of U.S. economic output relative to its share of the population. Since 1997, California has maintained between 11.9% and 12.5% of the nation's total population. Over the same period, the state had a larger share of the country's economic output, which ranged from 12.1% to 13.5%. This shows that California has had a significant influence on the national economy. Californians are adding more than their fair share to the nation's economy.

Other economic indicators point to a bright future for the Golden State as the recovery begins. For example, employment growth has outstripped that of the United States in the majority of the last 15 years. To illustrate, between January 1995 and peak employment in 2007, California's total nonfarm payrolls grew by almost 24%. During that same time the United States expanded its employment base by only 18.3%. So again, it is clear the state has been one of the key regions driving employment growth in the nation, in addition to driving its economic growth.



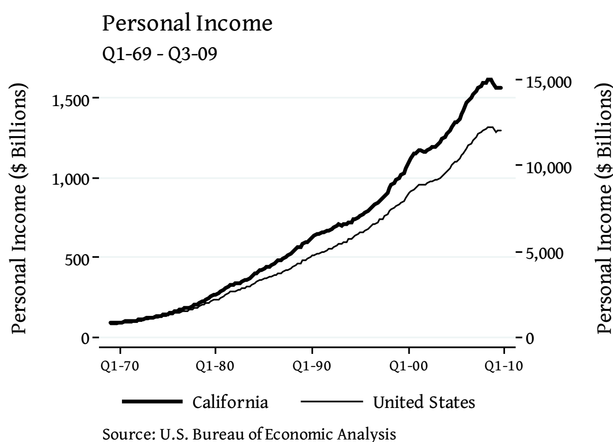




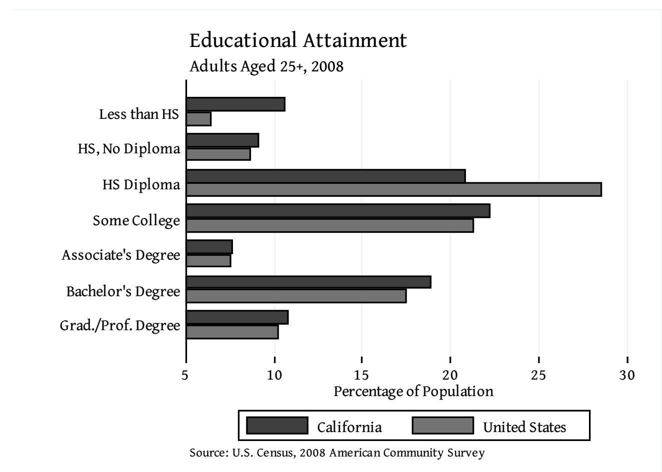
The state's demographic trends are a sunny spot for the future as well. With the exception of the mid-1990s, California's population has been growing faster than the nation overall. Part of this population growth is due to natural increase with more births than deaths occurring each year. However, another part of this population growth is from net migration of new residents from the rest of the U.S. and all over the world.

While our outlook for California's income is partly based on an expected increase in population growth, it is also founded on other demographic assets within the State

While population growth also presents challenges for the state, California's income growth, which has consistently outpaced the United States overall, is partly due to this strong population growth over the past 30 years. Although personal income in the state has contracted more sharply than the nation since the onset of this recession, it has also had its labor markets hit harder. As employment begins to increase, we expect a return to healthy income growth in both California and the United States.



While our outlook for California's income is partly based on an expected increase in population growth, it is also founded on other demographic assets within the state. The primary advantage California has moving forward is its highly educated population. In addition to being home to many top-tier public and private universities—including among others U.C. Berkeley, U.C.L.A, University of Southern California, and Stanford University—California has many highly educated residents.

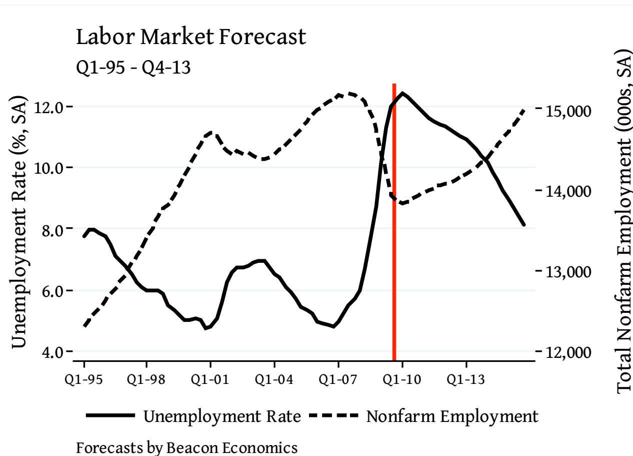


Compared to the United States overall, a larger share of California's residents have associate's degrees, bachelor's degree's, and graduate and professional degrees. This increases the ability for California to attract high-skilled businesses that need skilled workers to fill their jobs. Higher education levels also add to worker productivity, which will ultimately lead to higher wages and incomes for the state's population.

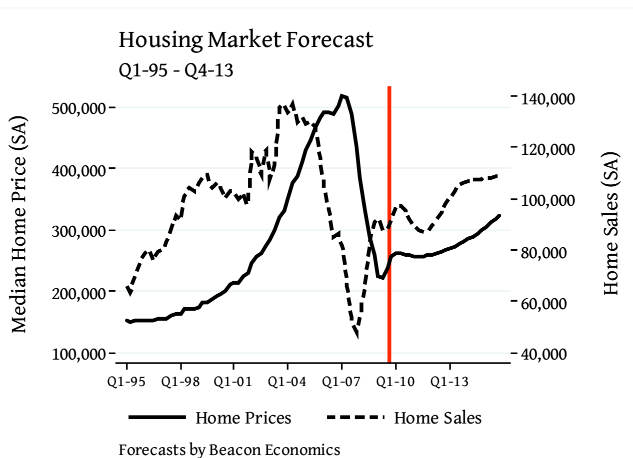
Forecasts

Based upon this analysis of California's economy, we forecast California's labor markets to begin turning around over the next few quarters. The state's unemployment rate was at or near its peak of 12.5% in the first quarter of 2010. Growth in nonfarm payrolls will resume in the first half of 2010, but the growth will be muted as housing and consumer markets struggle to regain a solid footing in 2010 and 2011 due to uncertainty about future growth. There is also uncertainty as to whether several key tax cuts at the state and na-

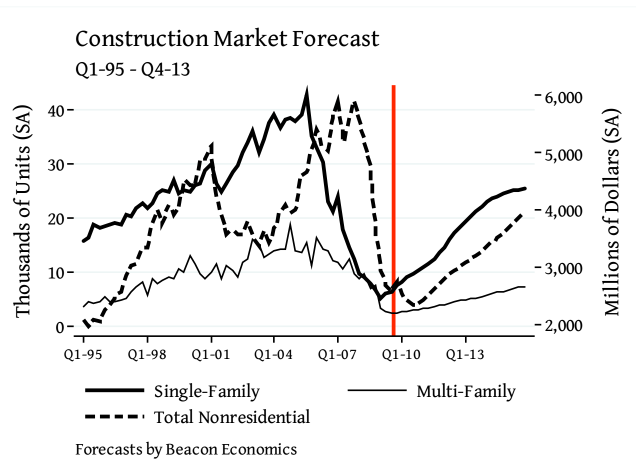
tional level will be allowed to expire or whether they will be extended or made permanent.



The housing market, which has taken a beating over the past three years, is also feeling for a bottom. While home prices in California have risen in recent quarters, there still exist a large number of nonperforming loans and mortgages in foreclosure that will make the rebound in home prices less steep than many expect. Also, as the tax credits for first-time home buyers expire, home prices rise, and the pool of eligible first-time buyers is absorbed, we expect to see home sales come down slightly in 2010, though they will remain above 80,000 per quarter over the next two years.



However, the pent-up demand for homes and the growing population—along with a real estate market nearing its bottom—should benefit the construction market. We have seen an uptick in residential building permits issued over the past six months in California, and we expect to see this trend continue over the next few years, though activity will not reach the peak levels seen in 2005 and 2006 for many years to come. Nonresidential construction, which has fallen to levels not seen since the mid-1990s, still has problems to work out. Nonresidential building permits will not return to growth until later in 2010 and will stay well below 2007 levels of permitting through 2015.



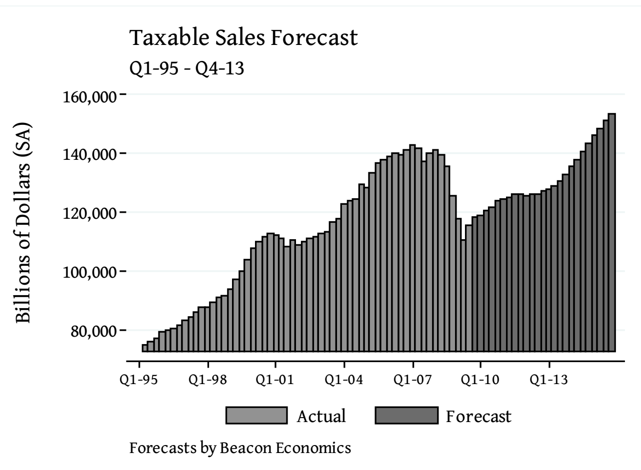
Unfortunately, the picture for commercial real estate is grimmer. In all of California's 8 major regions, cap rates are increasing—traditionally a positive sign. But, when we dig deeper into these numbers a different story emerges: cap rates are rising despite falling prices because rents are falling faster than prices. These trends do not point to a return to growth in nonresidential construction any time soon. In addition, as long as net absorption remains negative and vacancy rates rise, the commercial real estate market will be a drag on California's recovery.

...pent-up demand for homes and the growing population—along with a real estate market nearing its bottom—should benefit the construction market.

Taxable sales, which saw a strong bump in the third quarter of 2009 due to the Cash for Clunkers program and the first-time homebuyer tax credit, are expected to remain weak through 2010. They will likely rise above 2009 levels by roughly 1.3%. Part of this is due to slow projected growth in employment and part is due to the uncertainty over the expiration of the tax cuts and incentives discussed earlier. Consumer spending will also be affected by the increase in savings rates, as people shift toward replenishing their savings or become first time savers.

As the labor markets have been slowing their decline, we have seen personal income level off as well. We currently predict that 2010 will see a return to growth in personal income in the Golden State. As the labor markets continue to heal, we expect to see income trend upwards at a slower, but more healthy and sustainable pace of growth than we have seen over this past decade we expect to see income trend back upward at a slower, but more healthy and sustainable pace of growth than we have seen over this past decade.

Despite today's turmoil and the hard times we face in the immediate future, California's long term outlook is bright. While we need to address political challenges in order to overcome our troubled regulatory structure and fiscal situation, the state's fundamentals are sound. Among other things, we have a highly skilled labor force, continue to attract high-tech businesses and new investment, and our ports and airports remain a vital gateway for goods, services, and people into and out of the United States. We may be down, but the Golden State is surely not out.



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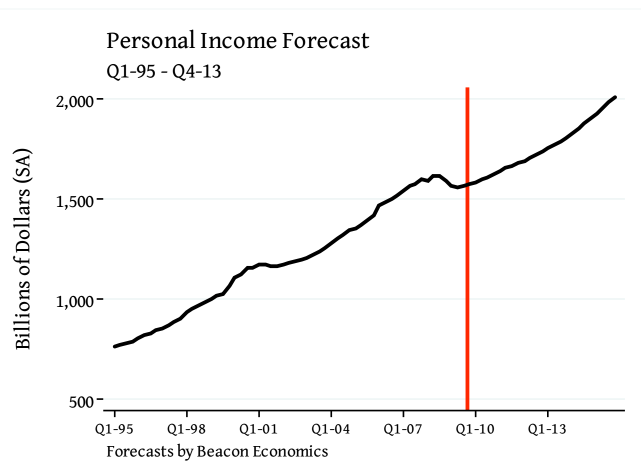

State Historical Table

California	Q3-2007	Q4-2007	Q1-2008	Q2-2008	Q3-2008	Q4-2008	Q1-2009	Q2-2009	Q3-2009	Q4-2009
Total Nonfarm Empl. (Mill, SA)	15.19	15.18	15.14	15.09	14.96	14.75	14.45	14.18	13.93	13.85
Growth (%,SAAR)	0.81	-0.31	-0.91	-1.45	-3.32	-5.45	-8.07	-7.26	-6.71	-2.40
Unemployment Rate (%,SA)	5.47	5.70	6.00	6.67	7.53	8.70	10.17	11.30	11.97	12.27
Personal Income ($ Bill)	1,577.54	1,600.47	1,591.69	1,613.95	1,615.23	1,595.58	1,566.08	1,562.65	1,566.09	1,576.42
Growth (%,SAAR)	3.36	5.94	-2.18	5.71	0.32	-4.78	-7.19	-0.87	0.88	2.66
Taxable Sales ($ Bill, SA)	136.99	139.96	140.85	139.28	135.33	125.70	117.63	110.61	115.45	118.17
Growth (%,SAAR)	-11.91	8.96	2.55	-4.38	-10.86	-25.57	-23.33	-21.82	18.70	9.78
Single-Family Home Prices ($ 000s, SA)	488.49	435.74	383.58	334.00	289.44	259.00	224.81	221.81	238.50	255.99
Growth (%,SAAR)	-19.81	-36.69	-39.95	-42.51	-43.60	-35.89	-43.24	-5.22	33.67	32.72
Single-Family Home Sales (000s, SA)	54.03	48.18	54.13	66.98	81.86	90.86	92.25	87.90	88.31	93.45
Growth (%,SAAR)	-55.89	-36.77	59.29	134.45	123.15	51.79	6.25	-17.57	1.89	25.39
Single-Family Permits (000s, SA)	14.44	12.43	9.54	9.00	7.72	6.56	5.12	6.14	6.46	7.59
Growth (%,SAAR)	-56.35	-45.18	-65.33	-20.67	-46.01	-47.72	-62.93	107.45	22.35	90.67
Multi-Family Permits (000s, SA)	12.51	9.68	8.62	9.73	7.09	7.59	3.36	2.61	2.53	2.43
Growth (%,SAAR)	88.75	-64.19	-37.05	61.84	-71.83	31.39	-96.16	-63.26	-12.81	-14.90
Nonresidential Permits ($ Bill, SA)	5.59	5.91	5.56	5.17	4.78	3.67	2.93	2.67	2.57	2.73
Growth (%,SAAR)	35.77	24.52	-21.29	-25.16	-27.40	-64.97	-59.65	-31.43	-13.30	26.69
Population (Mill)	37.79	37.91	38.02	38.13	38.24	38.33	38.42	38.49	38.55	38.60
Growth (%,SAAR)	1.24	1.24	1.23	1.18	1.10	1.00	0.88	0.72	0.62	0.53
Net Migration (000s)	32.22	33.51	32.51	29.20	23.58	15.67	5.45	-7.07	-15.23	-22.65
Natural Increase (000s)	83.67	83.54	83.09	82.35	81.29	79.93	78.26	76.29	74.87	73.76

Forecasts by Beacon Economics

State Forecast Table

California	Q1-2010	Q2-2010	Q3-2010	Q4-2010	Q1-2011	Q2-2011	Q3-2011	Q4-2011	Q1-2012	Q2-2012
Total Nonfarm Empl. (Mill, SA)	13.84	13.85	13.89	13.92	13.96	14.00	14.03	14.05	14.07	14.09
Growth (%,SAAR)	-0.28	0.48	0.89	1.10	1.17	0.95	0.81	0.72	0.55	0.62
Unemployment Rate (%,SA)	12.40	12.28	12.12	11.93	11.74	11.60	11.48	11.39	11.33	11.25
Personal Income ($ Bill)	1,583.41	1,598.66	1,610.04	1,625.21	1,639.93	1,655.20	1,667.82	1,682.32	1,695.69	1,708.13
Growth (%,SAAR)	1.79	3.91	2.88	3.82	3.67	3.78	3.08	3.52	3.22	2.97
Taxable Sales ($ Bill, SA)	118.82	120.36	121.68	123.59	124.60	125.10	125.78	125.94	125.50	125.87
Growth (%,SAAR)	2.21	5.28	4.45	6.44	3.31	1.61	2.21	0.50	-1.41	1.20
Single-Family Home Prices ($ 000s, SA)	261.53	261.94	260.50	259.08	258.05	257.47	257.55	258.36	259.79	261.73
Growth (%,SAAR)	8.93	0.63	-2.17	-2.16	-1.58	-0.90	0.13	1.25	2.24	3.02
Single-Family Home Sales (000s, SA)	97.58	97.34	95.33	92.52	89.67	87.69	87.01	87.66	89.48	92.12
Growth (%,SAAR)	18.86	-0.97	-8.02	-11.26	-11.77	-8.53	-3.10	3.03	8.57	12.32
Single-Family Permits (000s, SA)	8.20	8.94	9.66	10.24	10.83	11.59	12.50	13.48	14.57	15.88
Growth (%,SAAR)	35.87	41.57	35.94	26.24	25.31	31.33	35.17	35.43	36.14	41.35
Multi-Family Permits (000s, SA)	2.58	2.65	2.86	3.02	3.19	3.39	3.61	3.81	4.01	4.24
Growth (%,SAAR)	26.97	12.30	36.36	23.82	24.46	27.04	28.67	24.33	22.05	25.33
Nonresidential Permits ($ Bill, SA)	2.54	2.41	2.33	2.35	2.43	2.52	2.61	2.70	2.79	2.87
Growth (%,SAAR)	-24.76	-19.29	-12.35	3.95	13.65	15.42	15.77	14.64	13.47	11.49
Population (Mill)	38.64	38.68	38.72	38.75	38.78	38.81	38.84	38.87	38.90	38.93
Growth (%,SAAR)	0.46	0.41	0.36	0.33	0.31	0.30	0.30	0.31	0.32	0.34
Net Migration (000s)	-28.36	-33.32	-37.26	-40.27	-42.30	-43.43	-43.77	-43.41	-42.53	-41.19
Natural Increase (000s)	72.97	72.45	72.16	72.08	72.17	72.42	72.79	73.27	73.84	74.48

Forecasts by Beacon Economics

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