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VERMONT ECONOMIC OUTLOOK

The Forecast in Brief

- The November 2009 Vermont forecast for NEEP expects the Vermont economy to experience a “bottom” during the fourth quarter of calendar 2009. However, the pace of recovery will be slow and state labor markets will experience the lingering effects of the “Great Recession” through the third quarter of calendar 2010.
 - As in the May 2009 NEEP forecast update, more “normal” rates of growth for most of the state’s key macro-variables will not return until at least calendar year 2011, and as late as calendar year 2012 for some others, when the effects of the housing market downturn and the long process of global financial and household de-leveraging have fully run their course.
- Among the major macro-variables for the Vermont economy over the next 4+ calendar years, it is expected that:
 - Payroll jobs will decline for a total of 11 consecutive quarters, or through the second quarter of calendar year 2010.
 - The total decline will be 17,900 jobs from peak non-farm employment levels in the second quarter 2007 (an improvement from the NEEP forecast outlook of last May where deeper payroll job losses were expected), and the pace of recovery will be halting and insecure.
 - When the recession has run its full course, payroll job losses in Vermont will be larger in percentage terms than either of the payroll job losses experienced at the national and New England regional level in 2009. Since the pace of job recovery in Vermont is expected to be slow, the pace of recovery will also lag the U.S. and New England regional economies in calendar 2010, with the pace of recovery for Vermont jobs slower than the U.S. average through calendar year 2013, but slightly stronger than that at the New England regional level over the same out-year time frame.
 - The unemployment rate in Vermont will rise to levels not experienced since calendar year 1983, while both the U.S. and New England regional economies will likewise post 10 to 20 year unemployment rate highs.
 - However, despite the punishing recession and the relatively slow pace of the state’s recovery once it in fact begins, Vermont’s unemployment rate will continue to remain among the lowest in the New England region throughout the forecast period.

- The housing market downturn nationally, regionally, and in Vermont, is still underway, although the pace of house price declines has clearly slowed and by some measures some housing prices have even seen some increase. The existence of substantial inventory, the real possibility of additional foreclosures, and the near certainty of relatively tighter lending standards will likely continue to place downward pressure of prices. Indeed, the weak character of housing markets is a source of considerable downside forecast risk in this NEEP forecast revision.
 - It is expected that additional foreclosures and a substantial inventory of unsold units will continue to put downward pressure on house prices at the national level through the fourth quarter of calendar 2010.
 - So far, although delinquencies have risen substantially in Vermont, they have not risen to the levels where foreclosures and forced liquidation sales have pushed housing prices down significantly. Compared to other New England states and states in other regions, house prices in Vermont have fared relatively well with only modest declines.
 - The forecast expects housing prices in Vermont to decline to a lesser degree than those in the other New England states, and relative to the U.S. average overall, but they will not begin to recover until at least calendar year 2011.
- Oil prices have once again increased to above \$80 per barrel representing another source of downside risk in this revised NEEP forecast.
 - Vermont households and businesses enjoyed the relief provided by relatively low energy prices last Winter and Spring, however relatively high energy prices sustained at the current level could reduce other forms of household and business spending and slow down the rate of the expected historically slow rate of recovery.
 - Vermont is particularly sensitive to energy costs due to its rural nature, its dependence on vehicle-based tourism and visitor traffic from the northeastern region of the U.S., and the energy cost-intensive nature of its key manufacturing sectors. Therefore, the level and pace of any energy price increases over the forecast period are a point of considerable concern and potential downside risk.
- Overall Gross State Product, will decline in 2009 and 2010, and experience a bounce back in 2011 and 2012, and then resume a more normal rate of growth in 2013.
 - Real Personal Income in Vermont is expected to remain flat in 2009, decline in 2010 and 2011, and then resume an upward track in 2012 and beyond, with recovery in this variable lagging behind that of both the regional and national recoveries.

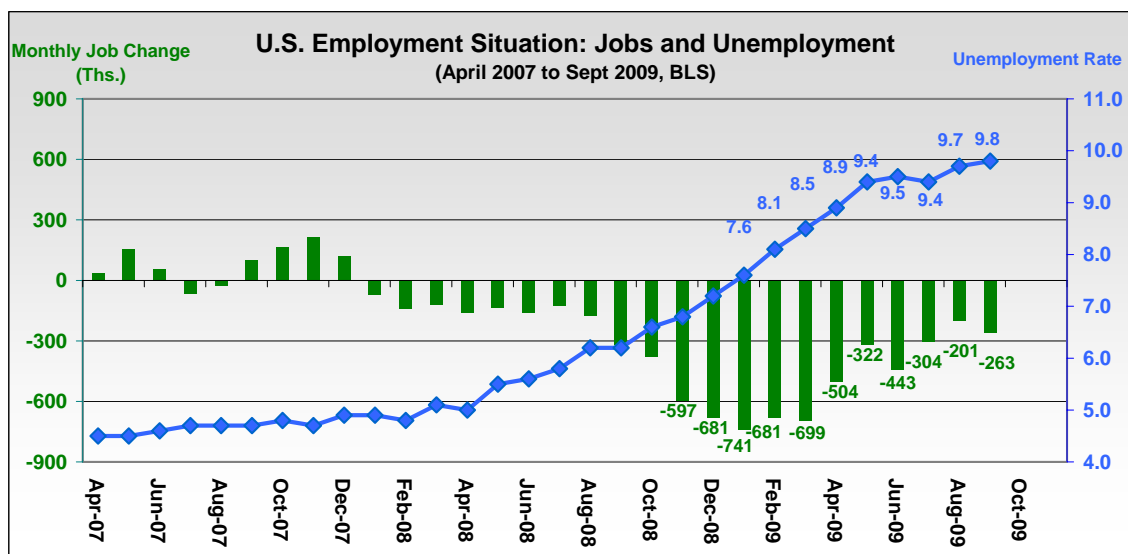
The Current U.S. Situation—A “Great Recession” Indeed...

a. Current Conditions: The November 2009 NEEP forecast for Vermont was completed in a time (September through mid-October) when there were somewhat mixed signals from

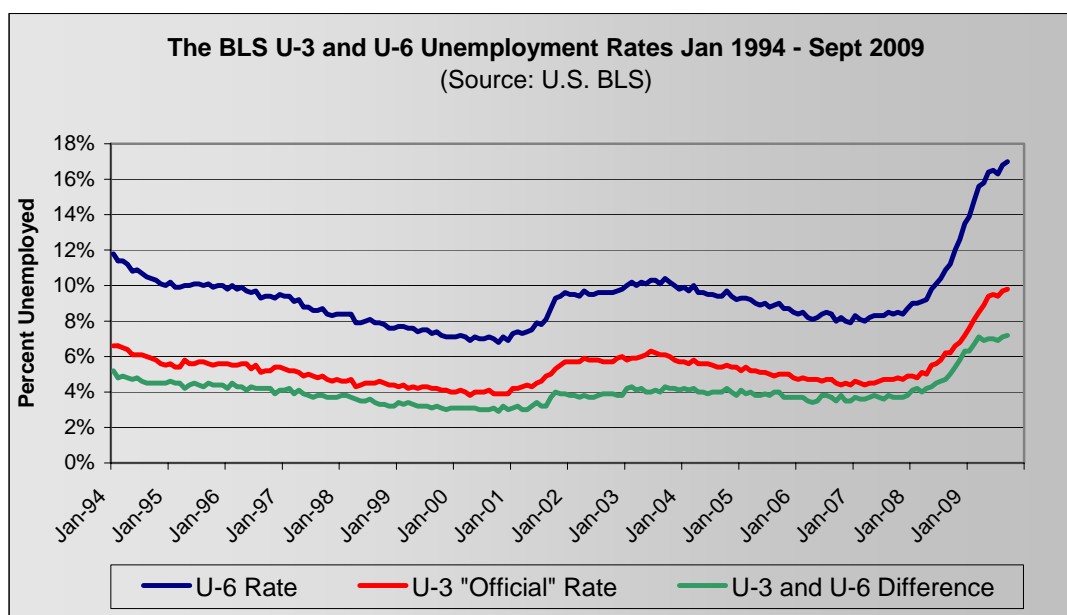
most key economic indicators. Despite their mixed nature, it appears that the preponderance of the data show the economy has pulled back from the precipice of a much more serious downturn and is at worst nearing what will be considered a “bottom” if it has not yet entered the initial stages of a modest turnaround (this will become clearer in the near future). The third and fourth quarter (so far) of calendar 2009 have seen encouraging movements in several key indicators, such as slowing declines in house prices, slowing jobs losses, and moves towards “normalization” in credit and financial markets. Once initial estimates for third quarter Gross Domestic Product are released, it is likely that U.S. inflation-adjusted output actually grew during that quarter simply because factors such as inventory liquidation have become markedly less negative.

However, despite these encouraging signs that the economy is in the process of bottoming, whether or not the U.S. economy has begun a turnaround is merely a technical argument for the economists. Given the depths to which the U.S. economy has fallen in many areas (e.g. housing consumer confidence, and many types of manufacturing—such as vehicles), there needs to be dramatic recovery (e.g. gains in excess of 25% to 50%) in many parts of the economy before economic conditions could once again be termed “normal”—much less “good.” In addition, there are several significant downside risks moving forward, including (although slowing) still hefty losses in the labor market, the likelihood of another spike in mortgage foreclosures, big trouble in commercial real estate markets, tepid consumer confidence and spending, and oil prices that have now crept back up to the \$80 per barrel level for crude oil.

b. An Especially Troubled Labor Market: Among the trouble spots for the economy, none is more evident than the U.S. labor market as shown in the chart below. From April 2007 through September 2009 conditions have deteriorated dramatically, and the unemployment rate has reached 9.8%, a 26 year high. The U.S. unemployment rate is expected to go higher, peaking at 10.1% in the second quarter of 2010. While monthly job losses have slowed over the last 6 to 8 months, to be this far into the current economic downturn with continuing losses over 200,000 jobs per month is unprecedented in post-war history. For the 22 months since the onset of recession, a total of 7.2 million non-farm jobs have been lost—or 5.2% of total non-farm employment peak in December of 2007. Similarly, the unemployment rate has jumped 4.8 percentage points over that same period.



The official unemployment rate of 9.8% for September does not reveal the entire labor market picture. The so-called “U-6” unemployment rate currently stands at a very high 17.0%. This measure is a more comprehensive picture of the state of labor markets in that it includes workers “marginally attached” to the labor force, individuals working part-time for economic reasons, and discouraged workers. The U-6 measure of unemployment is at a record high since the data series was first collected back in January 1994. Some analysts argue the U-6 rate is a better gauge of labor markets as it gives a more accurate feel for what is happening on the street, measuring those who would like to work but are not able to find positions or sufficient hours. The green line in the graph below is the difference between U-3 and U-6 rates. From 1994 to early 2009, the difference between the two rates was relatively stable. Since late 2008 and early 2009, the difference has increased significantly. This likely is a reflection of employers’ attempts to cut costs but retain workers (e.g. by moving workers from full-time to involuntary part-time work status). According to the chart below, this difference between the U-3 and U-6 unemployment rates appears to have reached a plateau in the past three months.



Even more disappointing is the preview of the benchmark employment numbers due out in February 2010. According to the BLS’ analysis of QCEW¹ data, the U.S. lost an additional 824,000 jobs over the twelve month period ending March 2009—a total above and beyond what has already been reported in the payroll jobs data. This would bring total job losses over that time period from 4.8 million to 5.6 million. An additional 824,000 job losses added to the current total job loss from peak nonfarm employment in December would equal 7.8 million jobs or a whopping total of 5.6% of payroll jobs from pre-recessionary peak job count levels.

¹ QCEW means Quarterly Census of Employment and Wages—which is a compulsory employment and wages paid report filed by each business in every state covered by state unemployment insurance laws. The QCEW data comes available about 5-8 months after the close of a calendar quarter depending on the state (Vermont reports five months after the close of the quarter).

In addition, the geographic breadth of the job losses are similarly breath-taking, with the number of states losing jobs on a year-over-year basis in most major sectors of the U.S. economy totaling above 40 states in all but two NAICS supersectors (see Table 1). Unlike previous economic downturns where the jobs losses were more geographically concentrated and more sector specific, there is no regional or sectorial “safe-haven” for this downturn. Workers cannot migrate to other regions or change jobs this recession as a solution to their unemployment. Quite simply, there is no place to go for unemployed workers and their families. Only in the Education and Health Services and Government industry super sectors, are fewer than 40 states reporting year-over-year job losses.

Table 1. Payroll Job Performance By NAICS Supersector Sept 2008 vs. Sept 2009

Industry Supersector	Highest Ranked New England State	# of States Reporting Job Losses
Total Nonfarm	NH (7th)	50
Total Private	NH (6th)	50
Construction	ME (22nd)	48
Manufacturing	MA (6th)	50
Information	MA (18th)	45
Financial Activities	NH (10th)	47
Trade, Transportation, Utilities	NH (2nd)	50
Leisure & Hospitality	MA (8th)	44
Education and Health Services	VT (10th)	6
Professional & Business Services	ME (3rd)	47
Government	NH (22nd)	30

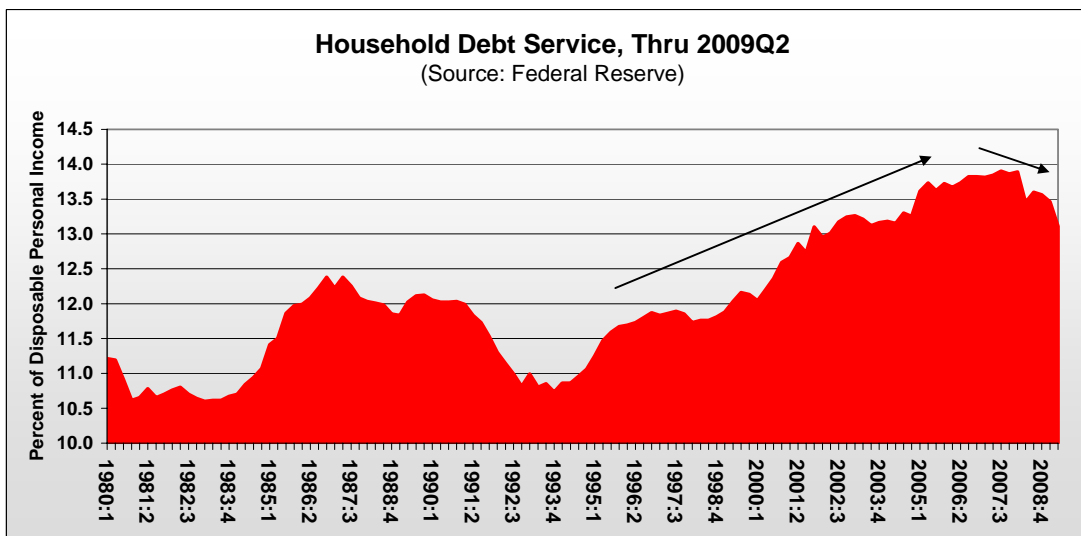
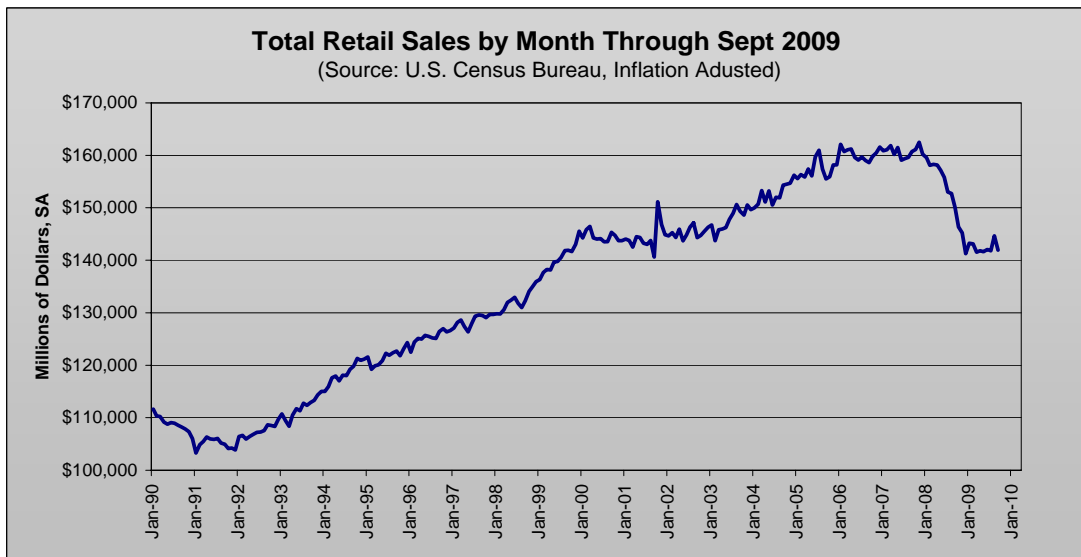
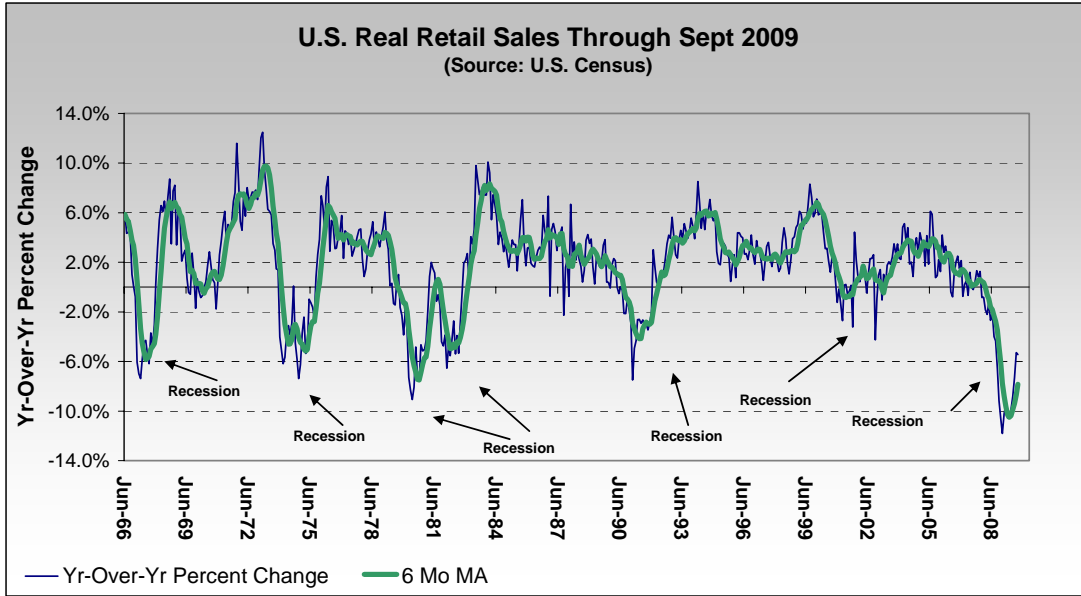
Notes:

NAICS means North American Industry Classification System

Source: U.S. Bureau of Labor Statistics

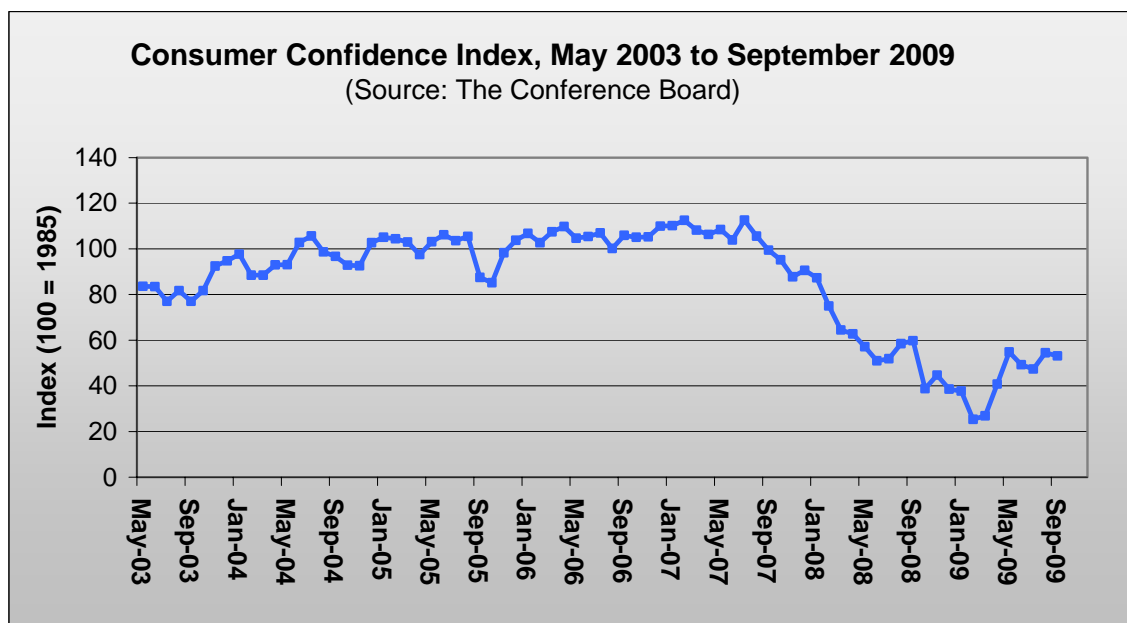
Prepared by: Economic & Policy Resources, Inc.

c. Declines in Consumption: Reflecting the severity of the current downturn and the widespread pain in labor markets, consumption indicators have shown that households have significantly reigned in their spending. The chart below shows real retail sales (adjusted for inflation) appear to have bottomed out at 11.8% below levels of the prior year. Over the past three months, inflation-adjusted retail sales have “regained some ground” to the point where they are “only” 5.8% below where they were at this time last year. The second chart below shows real retail spending levels, which have fallen to levels last seen in 2001. A strong recovery will be unlikely without American consumers propelling it forward. However, households still have significant levels of debt on their balance sheets and just how much of a contribution they will be able to make is still unclear. Progress has been made to bring down household debt, but there is still work to be done to get to a more reasonable level of debt (see the chart below), and this would suggest tepid spending looking forward.



Consumer sentiment is also an important factor affecting consumer spending. The Consumer Confidence Index has reached a somewhat of a plateau after coming off of the bottom earlier this Spring. However, Consumer Confidence readings over the last 6 months remain relatively weak when compared with “normal” readings (see the chart below). The Expectations Index subcomponent was essentially flat over the month, while the Present Situations Index subcomponent fell from 25.4 to 22.7. These historically low readings are indicative of on-going concern on the part of consumers over income and job security issues (e.g. they currently are only a bit less than “completely frightened”), especially in the context of continuing substantial job losses of greater than 200,000 per month over the last several months.²

It seems apparent that the American consumer still is not “sipping the recovery is imminent or underway Kool-Aid.” Moreover, even if that were the case, households may be “tapped out” and are simply not in the position to increase spending. Many households have lost a significant amount of wealth through equity market and house price declines and this is important to those who are already carrying a substantial amount of debt. The historically weak financial position of consumers and their lack of confidence suggests that there will be significant constraints on consumer spending as the U.S. economy begins its climb out of the current deep “recession hole.” Small improvements once the recovery gets moving are going to be viewed as technical in nature since the economy will need to improve significantly before it will begin to have the “feel” of recovery to many participants.



At least some of the recent encouraging news in spending has been driven by government incentive programs such as “Cash for Clunkers” or the first-time home buyer rebate of \$8,000—which ironically has apparently been claimed by some who neglected to actually purchase “a home.” The extent to which these incentives have a lasting impact is not yet clear, and there are real concerns that their effects may only be temporary. Cash for

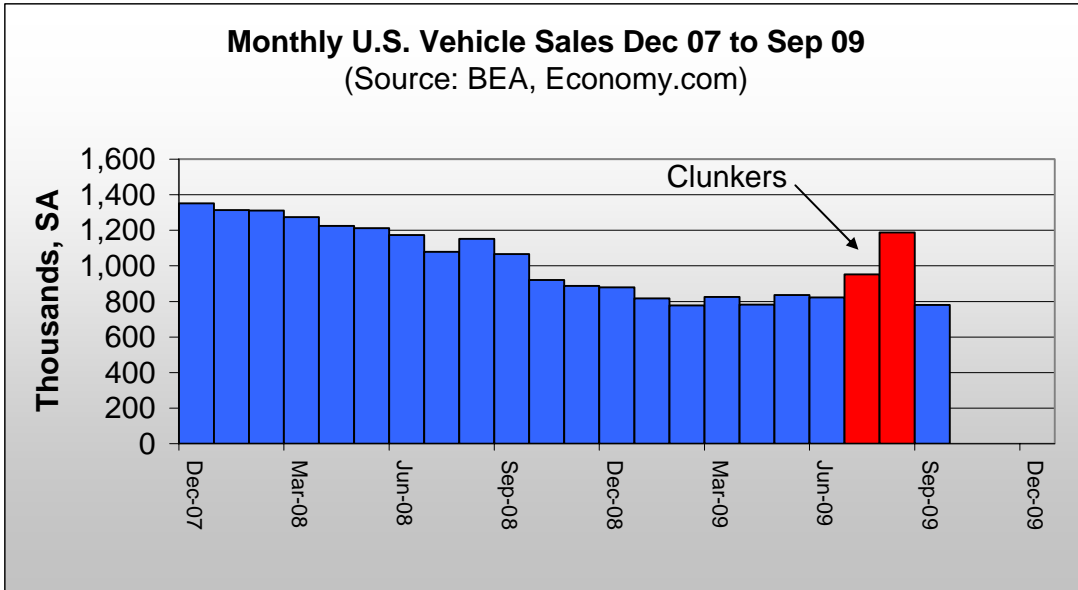
² As has been mentioned in the past, such 200,000+ job losses only look good against a background of job losses exceeding 500,000 per month that were experienced last Winter.

Clunkers, officially called the Car Allowance Rebate System (CARS), ran from July 1 to August 25th, with a strong consumer response. The original \$1 billion appropriation was supplemented with an additional \$2 billion after the program quickly exhausted the original budget. A total of 690,114 vehicles were traded-in and sold—corresponding to a total of \$2.9 billion in rebates for an average rebate of roughly \$4,200 per vehicle. All of the top ten vehicles traded in were trucks, SUVs or vans, and nine of the top ten vehicles purchased were cars. Overall, 84% of the trade-ins were trucks and 59% of new vehicles purchased were cars. The average trade-in achieved 15.8 miles per gallon, while the average mileage for new purchases was 24.9 miles per gallon, an increase in efficiency of 9.1 miles per gallon—a 58% improvement.

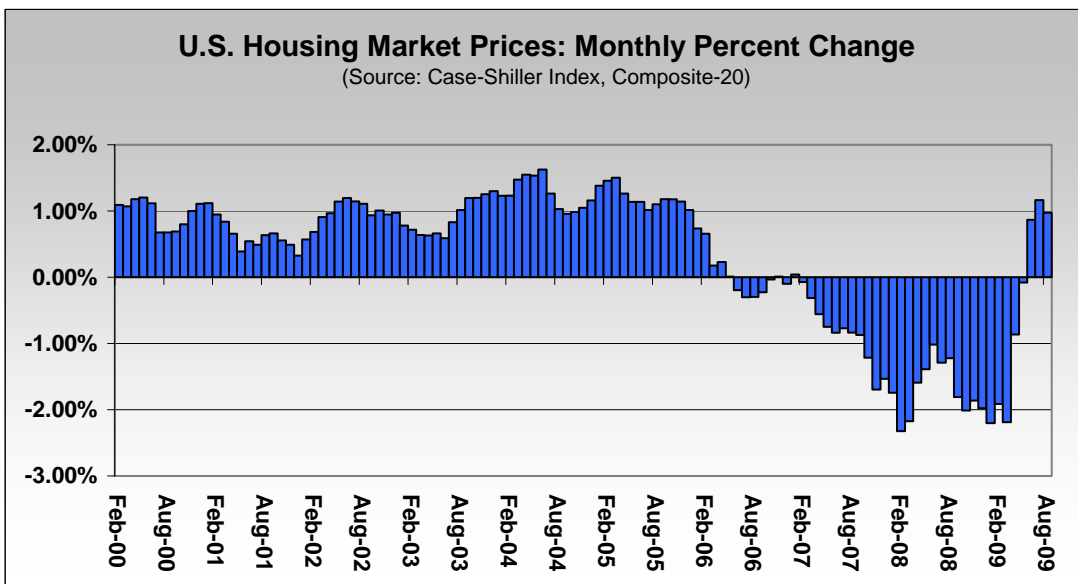
This shift to more fuel efficient vehicles was one of the stated goals of the program, and in this sense the program may have been somewhat effective. While the media and the government have been full of praise for the initiative and declared the cash for clunkers program “wildly successful”, there may be some still-undetermined effects. First, after the trade-in the old vehicles were required to be disabled and while some were dismantled for spare parts, many were destroyed. This will reduce the quantity of vehicles available in the used car market, and therefore is likely to push up prices in that market. The increased price for used-cars may make it cost prohibitive for some buyers—particularly those in the lower end of the household income scale and those with bad credit who likely were already priced out of the market for new cars.

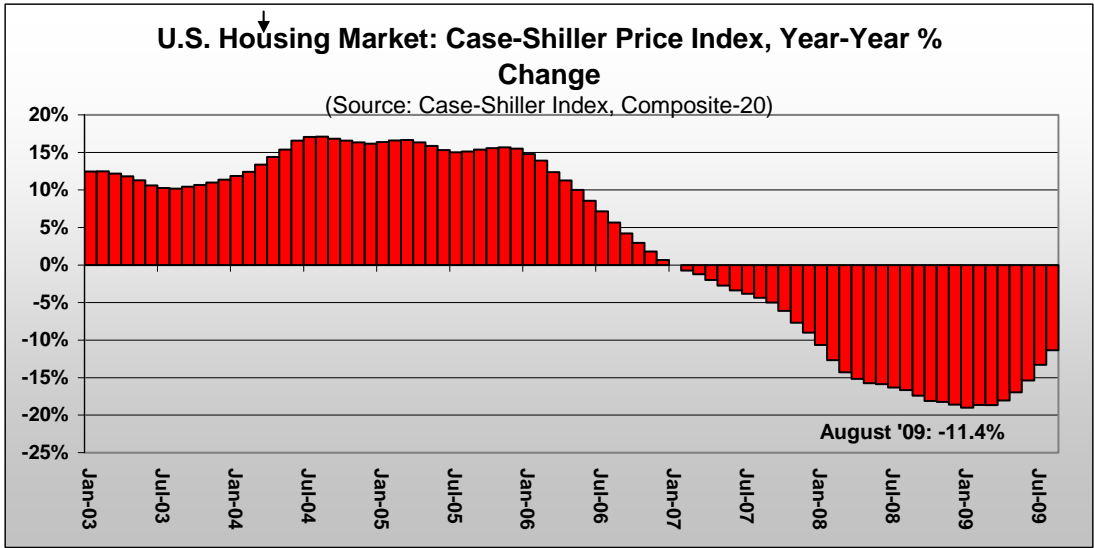
Second, the incentive to purchase a car during the program in the months of July and August may have simply encouraged consumers to change the timing of their purchase. Those that would have purchased in June may have simply waited amidst talk of the program “soon to be implemented,” and those that would have purchased in September and October may have actually done some forward-buying. If vehicle sales were simply concentrated in the two month period, essentially stealing consumption from the months before and after, there would be no “new demand”—just a change in the timing of demand. While September vehicle sales do appear to be relatively low, data on vehicle sales in the fall months will help test that conclusion.

Third, with many car dealers desperate to clear out their inventory, any additional sales generated by the program may have just served to reduce existing inventory. The real economic stimulus would come from an increase in orders to the auto manufacturers which would lead them to ramp up production, hire more workers and order more of the inputs that go into vehicle production. Simply drawing down existing inventory might help dealers reduce costs, but would not spark more production at the factory level. Therefore, despite the program’s apparent “success” there are concerns that any positive impact will be only temporary. Looking forward, the key question will be whether or not the government incentive will have any lasting impact on increased production. The chart below shows monthly vehicle sales through September.

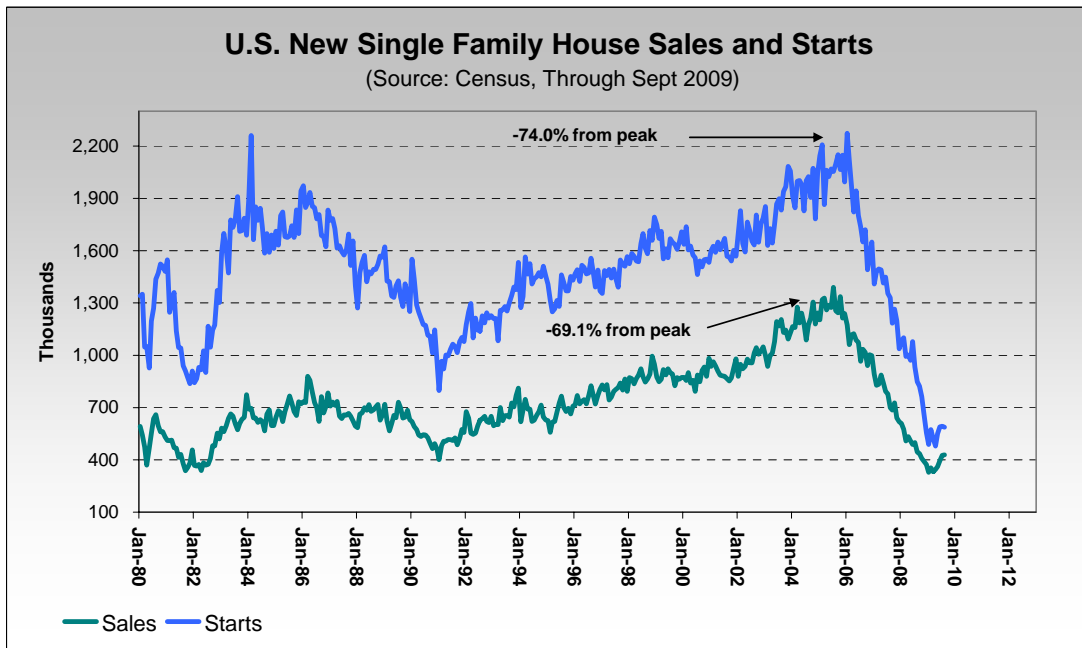


d. Housing Markets: Key indicators for U.S. housing markets suggest that price declines have begun to abate, and by some measures have even turned positive. In part helped by the first-time home buyer \$8,000 tax credit, these gains in housing are fragile and may depend on an extension of the incentive. The Case-Shiller Index for 20 major metropolitan markets has had positive movement for 3 consecutive months, as shown in the chart below. These monthly price increases came after 36 consecutive months of flat or negative changes in housing prices going back to June of 2006. Despite the month-to-month growth in prices, on a year-over-year basis, the index is still down by 11.4% as shown in the chart below.



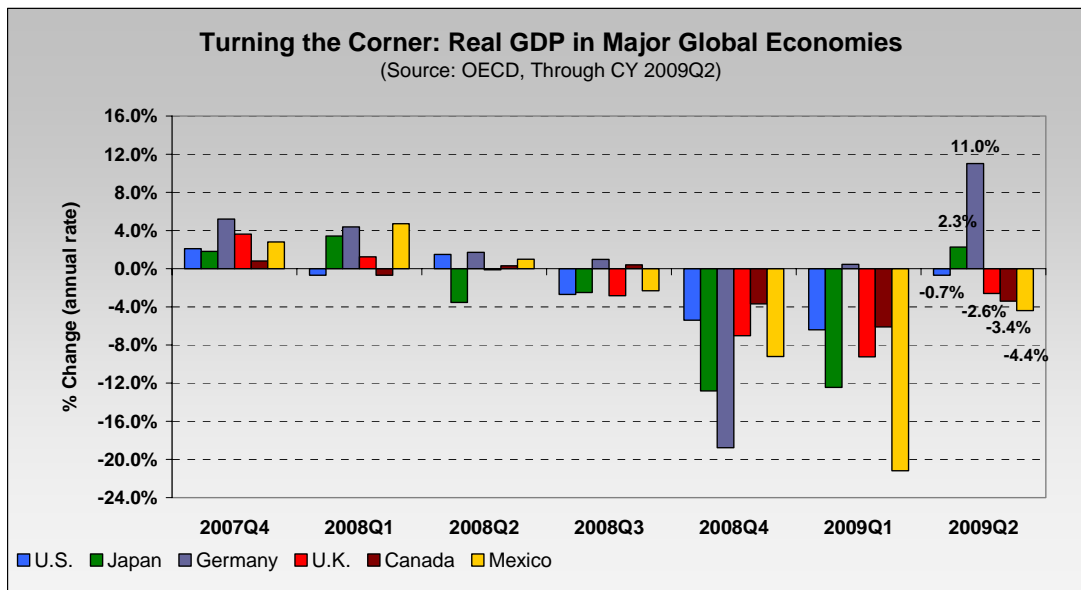


New single family housing is the most important segment of the housing market, and indicators for Single Family Sales and Starts also appear to have leveled off, and perhaps may have even begun the process of “turning the corner.” First time home buyers have likely been enticed into the market by attractive prices and the tax credit, and this activity has boosted sales. Developers appear to have taken cues from sales data as Single Family Starts have ticked up as well, but this may not necessarily be a good thing for the housing that is already struggling to work down excess inventory. With so much excess inventory, additional units added to supply may only serve to place continuing downward pressure on prices. If potential buyers expect prices to continue to slide, they may be encouraged to delay their return to the market—to the further detriment of prices.



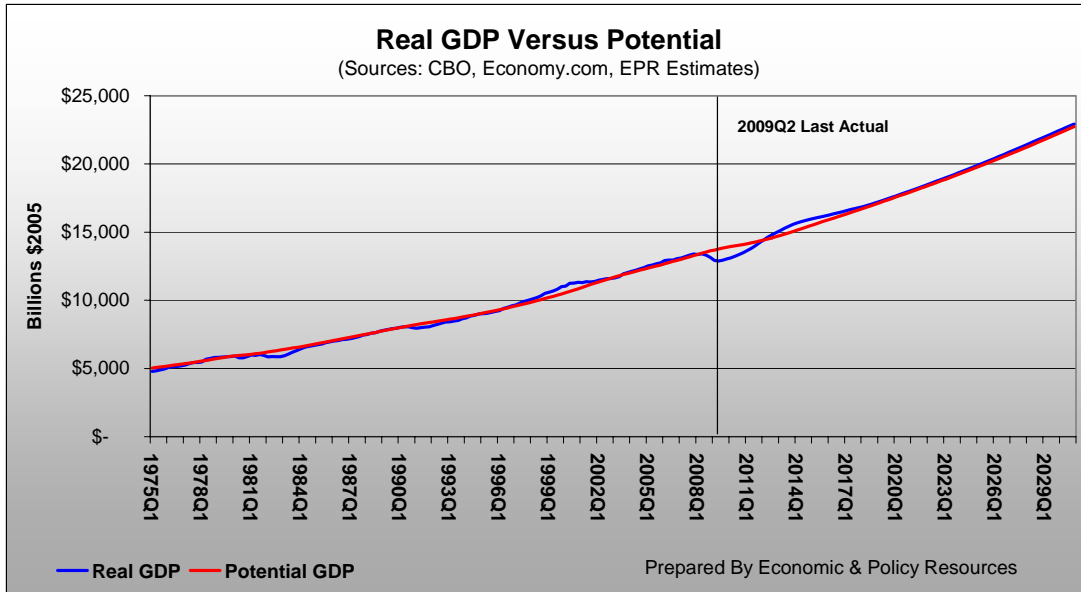
e. Are We There Yet?: In September, Federal Reserve Chairman Ben Bernanke stated that the recession was very likely over from a technical standpoint. The Organization for

Economic Co-operation and Development (OECD) also stated in September that the recession has ended with “clear signs of recovery” in the seven largest economies as well as the four important developing nations that make up BRIC (Brazil, Russia, India, and China). According to data through the second quarter of 2009, the contraction in real output of several of our key trading partners has slowed, and Japan and Germany have actually returned to expansion, as shown in the chart below. These indicators from other major economies are encouraging but also show that we are not quite “out of the woods.”



Looking forward for the U.S., although a positive GDP report seems likely third quarter of 2009, it is almost certain that labor markets will continue to struggle. Additional job losses are almost a certainty, and this latest NEEP forecast is for the U.S. unemployment rate to peak at 10.1% in 2010Q2 and come down only very slowly as the economy recovers.

In line with a bottoming/potential recovery in global economies, the Reserve Bank of Australia raised its key cash interest rate. This marks Australia as the first country of the G-20 to tighten in its monetary policy by raising key interest rates. It is important to note that the Australian economy has so far avoided a drop into recession. Fed Chair Ben Bernanke has suggested that states-side the Federal Reserve would keep the federal funds rate at or near its current level—which is at a record low—for an extended period of time. The European Central Bank decided to hold interest rates steady on Oct 8th, with little indication of raising rates until at least the middle of calendar year 2010. Given the prospects for only a slow, restrained turnaround in the U.S. economy and many of the economies of the western world, it is unlikely that there will be a tightening in U.S. monetary policy any time soon—perhaps as long a year to even a year and one-half. This is especially true given the huge amount of excess capacity currently in the U.S. economy—as measured by the historically large gap between current GDP levels (or production activity) and the non-inflationary level of potential GDP. In 2009Q2, actual output was 6.8% below estimated potential output, a slack in the economy not seen since 1982. This difference and a recovery scenario is shown in the chart the below.



f. Near-term Recovery Prospects: Many economists and analysts are in agreement that the U.S. economy has reached or will reach a bottom soon. Much less agreement surrounds predictions on the shape on the recovery--whether it is a “V,” “U,” or an “L” shaped recovery. A major concern going forward will be the timing and effects of the necessary monetary policy pullbacks and slowing of federal government spending.

The Federal Reserve has slowed its purchases of mortgage-backed securities, which will total \$1.25 trillion. This has had the effect of keeping mortgage rates low in an effort to ease the housing crisis. Other actions that the Federal Reserve will contemplate in the future are raising the federal funds interest rate, withdrawing debt guarantees, and offering interest on funds that banks hold in reserve at the Fed. The Fed will be forced to perform a delicate balancing act with regards to monetary policy over the next 1 to 4 years. It will need to soak up excess liquidity before substantial inflationary pressures take hold, yet at the same time the risk of tightening too soon and choking off the recovery exists, perhaps even leading to a second downturn—or the dreaded “W-shaped” recovery.

The beginnings of a recovery at the end of calendar year 2009 or in first half of 2010 is grounded in the belief that by that time;

- (1) The effects of the \$787 billion Stimulus Bill continues to have positive macroeconomic impacts;
- (2) Credit and financial markets continue to normalize without further volatility shocks;
- (3) The correction currently underway in housing markets will run its course, bottom and at least some regional real estate markets will begin to turn positive, and mortgage rates do not spike which would lead to additional downward price pressure;
- (4) Unemployment rate increases begin to abate;

- (5) Federal Reserve successfully completes its monetary policy balancing act, without plunging the economy back into recession or encouraging substantially higher rates of inflation.

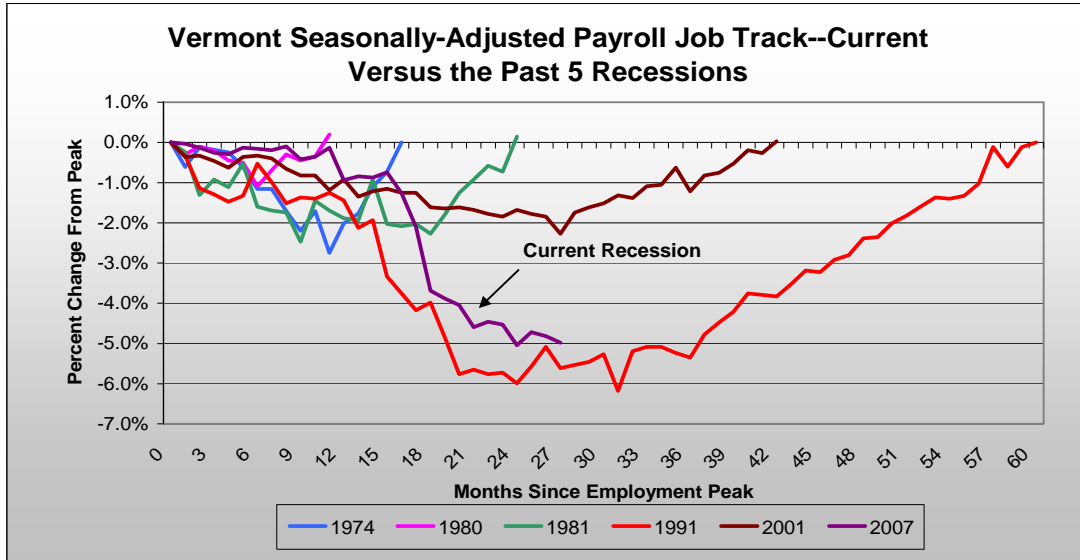
Indeed, looking forward just how the unprecedented intervention by both fiscal and monetary policy are withdrawn from the as the private sector recovers—and takes over—is one of the key unknowns in the U.S. economic outlook. We remain in uncharted territory, and a smooth transition to a self-sustaining economic recovery path will take deft execution of both monetary and fiscal policy against a backdrop of comprehensive health care reform, efforts for financial services reform, and the potential passage of a so-called “cap and trade” proposal regulating emissions.

The Vermont Situation

a. Current Conditions: Vermont economic conditions have followed the national trend—including thankfully an apparent slowing in the rate of economic decline in the state over the last 3 to 6 months. As at the national level, the NEEP forecast expects a turnaround in inflation adjusted output in 2009Q3, followed by a bottoming in labor markets (along with a peaking in the state’s unemployment rate) by the middle of calendar year 2010.

Looking at the state major indicators, the impact of the recession in Vermont has been most evident in the job market. So far during this recession, Vermont’s job losses have been high, but have not yet reached the just-over-6% decline in non-farm payroll jobs that occurred during the punishing 1990-1991 recession. That recession was a particularly harsh downturn for Vermont and the New England region as a whole, and in many respects represented the most severe economic and labor market downturn in Vermont dating back to the Great Depression of the 1930s. Currently, nonfarm payroll jobs have contracted by -5.0%. Job losses in Vermont have slowed over the Summer and through the Fall, and another sharp drop off appears unlikely. The Construction and Manufacturing sectors have been hit particularly hard, as second home construction has all but shutdown in the state, and the already difficult situation in Vermont’s manufacturing sector were made substantially worse by the recession and the continuing struggle the state has with elevated energy prices.

The chart below compares the decline from the peak in non-farm payroll jobs this recession versus the previous 5 recessions in percentage terms. Note the downturns of 1991 and 2001, which have been characterized as “Jobless Recoveries.” It took 60 and 42 months in 1991 and 2001, respectively, for the labor market recovery from those recessions to reach their respective pre-recession employment levels (e.g. the point of full recovery). Previous recessions were followed by much shorter periods of recovery. While this downturn has not yet resulted in job declines as harsh as the 1990-1991 downturn, the substantial job losses seen in the state in the last quarter of 2008 and beginning of 2009 far exceeded those of the relatively short and shallow 2001 economic downturn.



In terms of the year-over-year change in payroll jobs through the month of September 2009, the state ranks toward the bottom of the New England states. In total payroll jobs, Vermont is down 4.1% from one year ago, and ranks 4th out of the 6 New England states. The state ranks last in the region in Private Sector year-over-year job change, a decline of 4.9% percent. Although it is true that no other New England states are in positive job change territory, only the state of New Hampshire—with Total and Private Sector job declines of only 2.4% and 2.7%, respectively—cracks the “Top Ten” nationally in terms of its payroll job change performance.

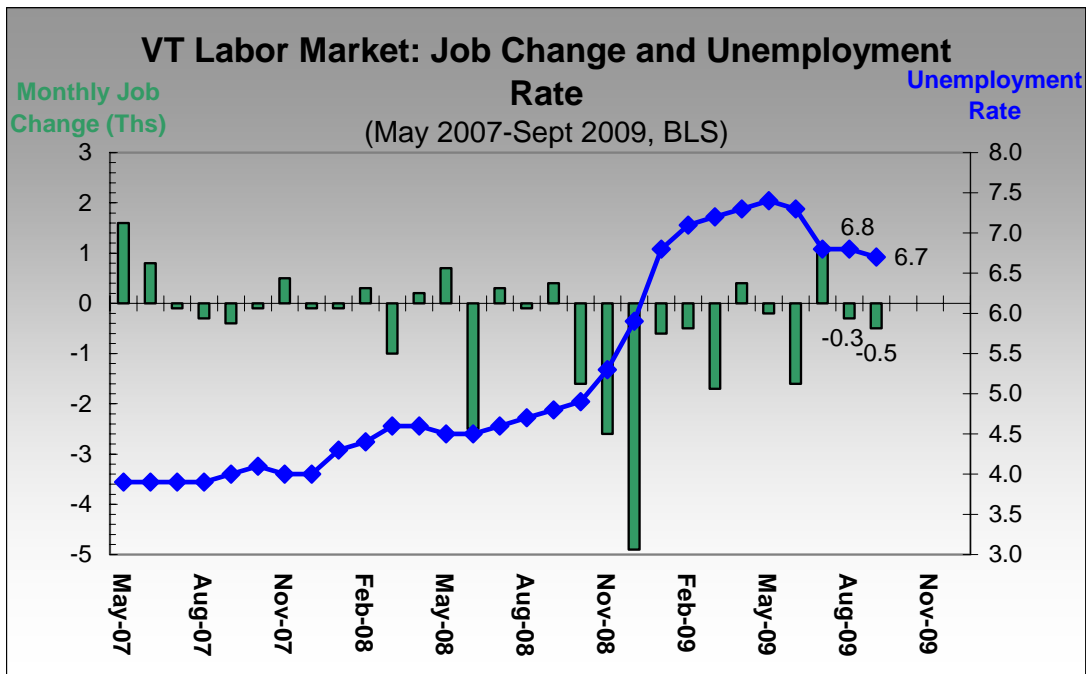
The unemployment rate in Vermont increased from 4.5% in May of 2008 to 7.4% in May of 2009, and has declined since then. The official rate sits at 6.7% as of September, although there are substantial concerns with this data that appear to suggest labor markets in the state have improved. As a small state, Vermont is always subject to the possibility of a small sample size affecting statistical estimates, which would only be revised at a later date. There are also seasonality adjustments that may over- or under- adjust the raw data, especially with a relatively small sample size. The decline in the unemployment rate could partially be due to changes in the labor force, however there is little data to support this notion. Data show the month of July saw a large increase in both jobs and employed Vermonters, although there is little to corroborate such job growth. Despite the recent decline in the official rate, the NEEP forecast expects unemployment to increase through 2010Q3.

Rank	State	% Change
1	North Dakota	-0.1%
2	Alaska	-0.6%
3	Louisiana	-1.0%
4	Montana	-1.4%
5	South Dakota	-1.9%
7	New Hampshire	-2.4%
9	New York	-2.7%
14	New Jersey	-3.0%
16	Massachusetts	-3.2%
19	Maine	-3.3%
27	Vermont	-4.1%
31	Connecticut	-4.3%
34	Rhode Island	-4.5%
46	Georgia	-5.8%
47	Oregon	-6.1%
48	Nevada	-6.1%
49	Michigan	-7.3%
50	Arizona	-7.5%

Source: U.S. Department of Labor, BLS

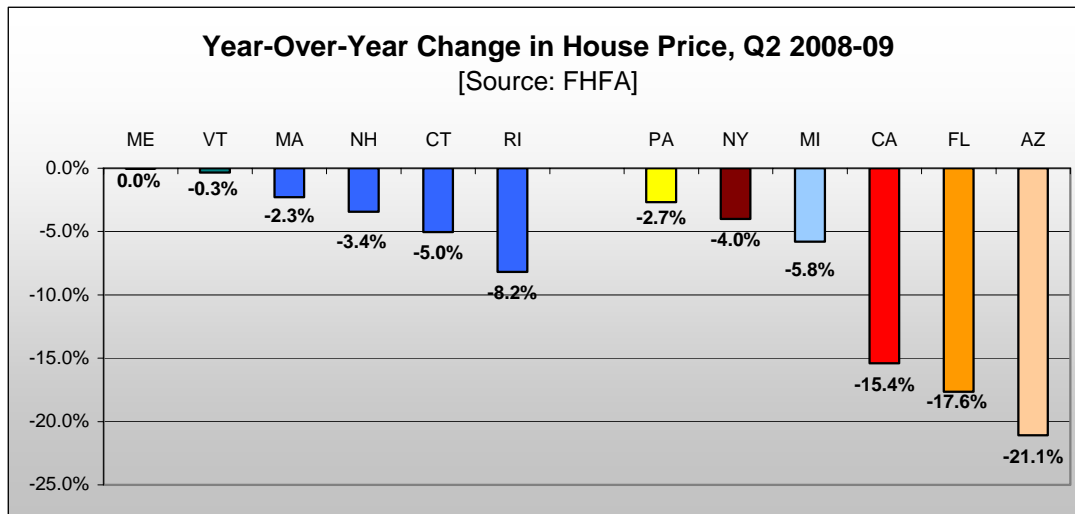
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3	Louisiana	-1.3%
4	Montana	-2.1%
5	South Dakota	-2.7%
6	New Hampshire	-2.7%
8	New York	-3.0%
10	Massachusetts	-3.3%
14	Maine	-3.6%
16	Pennsylvania	-3.8%
23	Connecticut	-4.6%
28	Rhode Island	-4.9%
29	Vermont	-4.9%
39	California	-5.6%
46	Georgia	-6.6%
47	Nevada	-6.7%
48	Oregon	-7.0%
49	Michigan	-8.2%
50	Arizona	-8.3%

Source: U.S. Department of Labor, BLS



b. Vermont's Housing Market: While Vermont has followed the national trends in labor markets, the housing market has had a very different experience. House prices in Vermont have declined but not anywhere near to the extent they have in many other states. On a year-

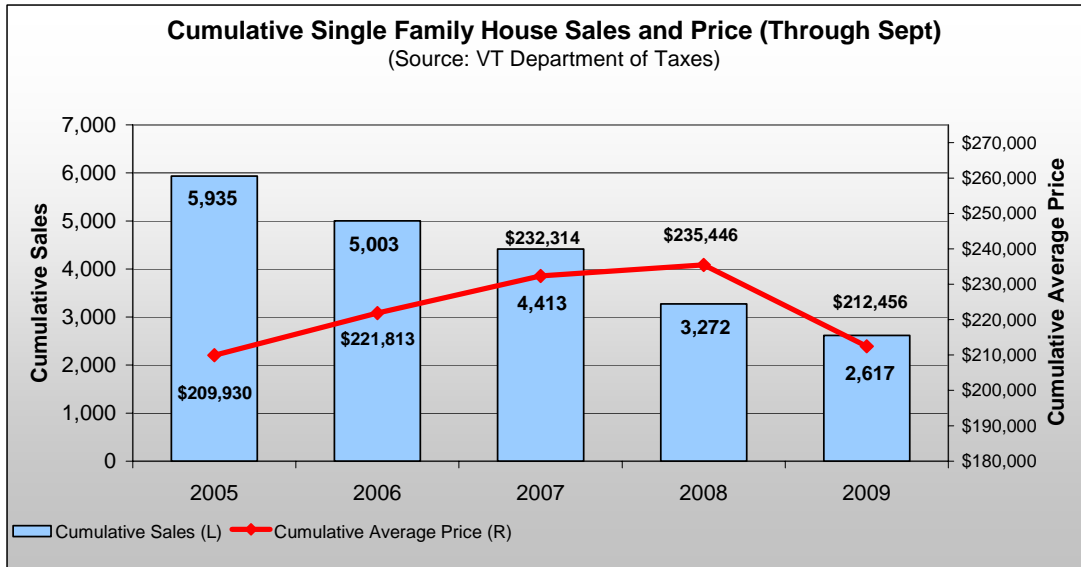
over-year basis, California, Florida and Arizona have experienced house price declines in excess of 15-20%. As prices declines started more than a year ago, from the peak prices declines in those states are even greater and approach 35-40%. The chart below compares Vermont and the other New England states with selected states in other regions using the FHFA Repeat House Purchase Price Index. Overall, with the exception of Rhode Island and Connecticut, the New England Region has fared relatively well when compared to other states.



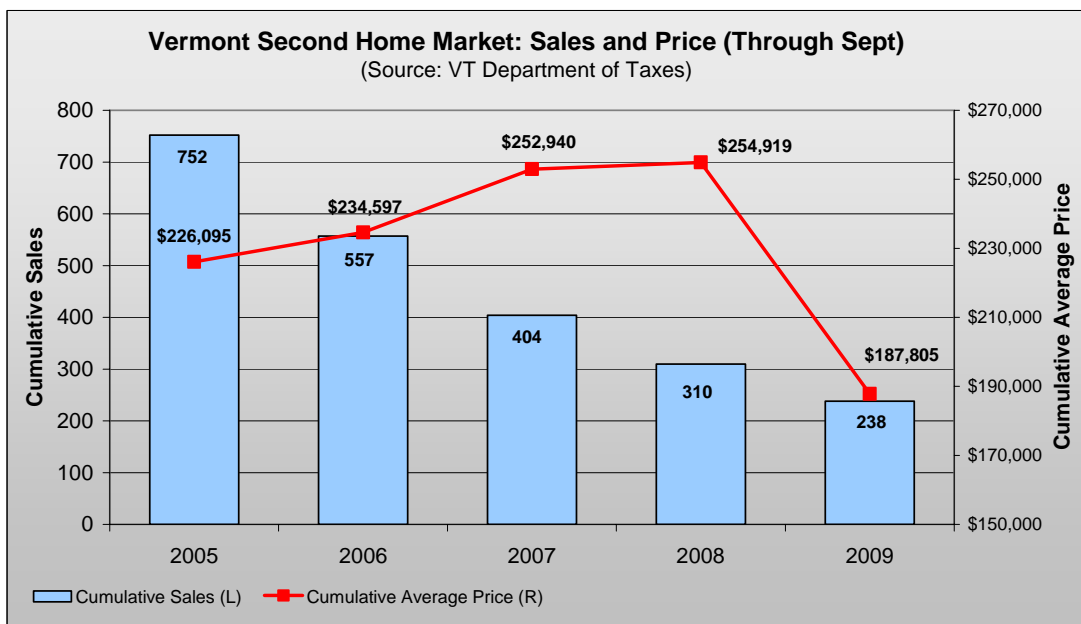
The year-over-year change in the FHFA's Housing Price Index for 2009Q2 shows a 0.3% decline for Vermont—while in Maine house prices have remained flat over the year. The foreclosure rate in Vermont has increased by 170% for the third quarter of 2009 compared to the same time period a year ago, yet the state still has the lowest foreclosure rate of all 50 states. This low level of foreclosures has certainly helped the state to avoid the devastating cycle of foreclosures—distressed sales—further price declines—further lost equity, and even more foreclosures.

Looking at housing price data from the Vermont Department of Taxes' Property Transfer Tax statistics,³ the year-to-date through September data show that cumulative average home prices have declined 9.8% from 2008's cumulative average (as the peak year in this data series). This comes in the aftermath of a 20.0% decline in sales volume in calendar 2009 to-date relative to the first nine months of calendar year 2008.

³ This data source is analogous to the National Association of Realtors house sales-price tracking concept.



The vacation home market, an important component to Vermont’s economy has similarly seen large declines in sales and prices. This is not surprising as a significant portion of the target market for second-home buyers are found among households employed in the financial sector of the Boston and New York money centers. As the financial sectors of those cities lost jobs and bonuses were reduced or lost, the second home market in Vermont has taken a substantial hit as evidenced by the chart below.



c. The Bottom Line on the U.S. and Vermont Economies

As we have seen over the last 3 to 4 months, most indicators continue to point to some degree of stabilization in the Vermont and U.S. economies. With slowing losses in labor and housing markets, there has clearly been a some degree of stabilization, and while these indicators suggest the free-fall in the economy is over, there has been little to no none in terms of true improvement in broad economic conditions. With the housing market likely

nearing a bottom, additional price declines are likely and pose a substantial downside risk to the recent “improvements” observed in starts and sales numbers. Overall, there is increasing evidence that a bottom in the economy is probably starting to form, and as we go through the process we should expect to see some volatility in the economic indicators as we move across the bottom, both in the positive and negative directions—essentially “bumping along the bottom” before any true recovery is firmly in place.

Overview of the Moody’s Economy.com National Economic Outlook

a. A Slight Upgrade: The last NEEP forecast released in May 2009 was a significant downgrade from the November 2008 forecast. The current recession—assuming it is not definitely over—is currently in its 22nd month, already the longest U.S. recession since the Great Depression.⁴ Most key economic indicators have not worsened significantly over the last quarter, and some have even shown some positive “signs of life.” The housing market, as the initial trigger of the U.S. recession, has shown slowing price declines and up ticks in sales and starts. However, there are concerns that “improvements” in housing maybe short lived, after the home-buyers tax credit expires and the impact of additional foreclosures takes hold.

Since last May’s NEEP forecast, the unemployment rate has continued to rise and foreclosures have hit record levels. Housing prices have seemed to reach some sort of stabilization, leaving as many as a quarter of mortgage holders underwater. Gross Domestic Product is expected to have some positive growth in the third quarter of 2009, the first positive quarter since 2008:Q2.

b. Moody’s Economy.com Forecast Detail: The Moody’s Economy.com forecast, which helped to form the basis for Vermont’s November NEEP forecast, accounts for the economic developments and government programs detailed above. The U.S. forecast now includes positive GDP growth starting in third quarter of 2009. The nation’s nonfarm employment forecast expects job losses from calendar 2009:Q3 through to calendar 2010:Q2. In total, the forecast anticipates over 7.5 million lost nonfarm payroll jobs from the peak to trough, corresponding to a decline of -5.5% relative to peak employment levels prior to the onset of recession. The Moody’s Economy.com U.S. forecast is more optimistic on GDP growth than employment. Moody’s Economy.com sees inflation adjusted gross domestic product (real GDP) contracting by 2.6% in calendar 2009, before growing 1.8% in calendar 2010 and averaging 4.3% annual growth over calendar years 2011 through 2013.

The Vermont Forecast Detail

a. Overview: As the fate of Vermont’s economy is tied to that of the U.S. economy, the Vermont forecast update adjusts principally to reflect changes in the U.S. outlook. The main questions the forecast update seeks to answer are: “How far will employment and output fall in Vermont?” and “How long will it be before a Vermont recovery begins?” The short answers to both questions are: Payroll jobs in Vermont are expected to decline for 11 consecutive quarters, losing 17,900 jobs or -5.8% of nonfarm jobs. The employment turnaround—since it is a lagging indicator—is likely to lag the turnaround in output and the economy in general. Therefore, while Gross State Product is expected to return to positive ground by calendar 2009:Q4, the forecast does not indicate a turning point for employment-

⁴ Even if the U.S. recession ended in August or September as some suspect this statement would still be true.

jobs or a peaking-then decline in the unemployment rate until the middle of calendar year 2010.

b. A Slight Forecast Upgrade Relative to Last Spring's NEEP Outlook: Table 4 below compares the November 2009 NEEP outlook update at the Vermont, New England, and national levels and summarizes the most important elements of the November 2009 forecast. Comparing the forecasts in this manner shows that the bottom and recovery in terms of real output, are expected in calendar 2009 and calendar 2010 respectively, for the U.S., the New England region, and Vermont. Growth in output is expected to be slower in Vermont, and the New England region, than at the national level. The labor market, measured by payroll jobs and the unemployment rate, is expected to bottom in early- to mid-calendar year 2010 and begin a genuine recovery in calendar 2011. Vermont and the New England region overall are expected to see unemployment peak below the national average unemployment rate peak of 10.2%.

Table 4: Historical Comparison of NEEP Forecasts for Vermont (November 2009)

Calendar Years	2004	2005	2006	2007	2008	2009	2010	2011	2012
Real Gross State Product					<History<	>Forecast>			
May 2007	3.9	3.2	3.3	1.4	3.1	2.9	2.8	2.5	
November 2007	4.1	2.5	2.8	-0.3	1.7	3.5	3.6	3.2	
May 2008	4.1	2.5	2.8	1.7	0.5	2.7	3.6	3.6	4.0
November 2008	3.4	2.0	1.2	1.5	1.3	0.1	2.8	3.3	3.2
May 2009	3.4	2.0	1.2	1.5	1.4	-3.9	0.3	3.8	4.7
November 2009	3.4	2.2	1.3	1.7	1.7	-3.1	0.0	4.2	5.7
Diff. Pct. Pts. 05/09-11/09	0.0	0.2	0.1	0.2	0.3	0.8	-0.4	0.4	1.0
Payroll Job Growth									
May 2007	1.3	0.9	0.6	0.6	0.7	1.0	0.9	0.8	
November 2007	1.3	0.9	0.6	0.6	0.3	0.7	0.9	0.7	
May 2008	1.3	0.9	0.7	0.0	-0.6	0.3	1.0	0.9	0.7
November 2008	1.3	0.9	0.7	0.0	-0.3	-1.7	-0.6	1.0	1.4
May 2009	1.3	0.9	0.7	0.2	-0.7	-4.5	-1.8	2.3	3.5
November 2009	1.3	0.9	0.7	0.2	-0.7	-3.8	-1.1	1.3	2.7
Diff. Pct. Pts. 05/09-11/09	0.0	0.0	0.0	0.0	0.0	0.7	0.7	-1.0	-0.8
Real Personal Income									
May 2007	1.7	1.3	1.6	3.2	3.1	2.8	2.5	2.3	
November 2007	1.6	1.3	1.9	3.0	2.7	2.5	2.4	2.2	
May 2008	2.8	0.0	3.4	2.4	0.1	2.2	2.4	2.3	2.3
November 2008	3.0	-0.4	4.7	3.9	-0.1	-0.4	1.6	2.6	2.5
May 2009	3.0	-0.4	4.7	3.9	0.2	-1.1	-1.7	1.8	3.1
November 2009	3.0	-0.5	4.7	3.9	0.9	0.5	-3.2	-1.5	0.8
Diff. Pct. Pts. 05/09-11/09	0.0	-0.1	0.0	0.0	0.7	1.6	-1.5	-3.3	-2.3

Source: New England Economic Partnership November 2009

Real Personal Income in Vermont is expected to bottom in calendar 2011 and begin to resume growth in calendar 2012. If that forecast holds, Vermont's performance will lag both the New England regional and national economy—both of which are expected to see growth in Real Personal Income one year earlier. Recovery in the housing market will be slow and insecure, and a resumption in upward movement in housing prices is not expected until calendar year 2010 in Vermont and in calendar 2011 at the region and national levels. However, Vermont is expected to experience significantly less severe housing price declines relative to the other five New England states and relative to many other parts of the nation. This is primarily due to more prudent lending practices overall (which have led to much lower foreclosure rates and forced liquidation house sales—including their 25%-30% price discounts) and the comparatively lower level of speculative activity in the state during the housing market boom of the early- to mid-2000s.

c. The Worst Recession for Vermont Since World War II: Even so, by the time the “Great Recession” ends in Vermont either later this calendar year (or by early-to-mid calendar year 2010), this downturn will almost assuredly be the longest, most difficult downturn for the Vermont economy dating back to the 1930s. Table 5 below compares the peak-to-trough change in selected indicators between the recession of the early 1990s and the current recession. The forecast for the current recession is worse in 7 of the 8 macro indicators listed in the table relative to the early 1990s downturn—which prior to the current downturn was the state’s most severe post-World War II recession. Only the relative level of Construction job loss—which still exceeds 1 of every 4 Construction sector that existed prior to that sector’s pre-recession peak⁵—is expected to be less severe (in this case “less severe” is used since it is hard to call such a circumstance “better”) than was the case during the harsh early 1990s economic downturn.

Table 5: "Peak to Trough" Change in Selected Indicators: This Versus the Early 1990s Recession

Variable	Early 1990s Recession	This Recession	Better/ Worse
Change in Gross State Product (\$2005 Bil.)	-\$0.64	-\$1.22	Worse
Percent Change	-4.7%	-5.6%	
Change in Payroll Jobs (Ths.)	-14.2	-17.8	Worse
Percent Change	-5.4%	-5.8%	
Change in Construction Jobs (Ths.)	-8.420	-4.463	Better
Percent Change	-43.2%	-25.6%	
Change in Single Family Housing Permits	-2,710	-2,346	Worse
Percent Change	-65.5%	-79.9%	
Change in Retail Jobs (Ths.)	-1.670	-3.585	Worse
Percent Change	-4.9%	-8.9%	
Change in Manufacturing Jobs (Ths.)	-5.080	-7.395	Worse
Percent Change	-11.4%	-19.9%	
Change in FHFA Index [1980=100] Index Points	-4.62	-24.20	Worse
Percent Change	-2.1%	-5.2%	
"Cyclical High" in Statewide Unemployment Rate	6.8%	8.2%	Worse
Change in Percentage Points	4.1	4.9	

Source: Adjusted May 2009 New England Economic Partnership Forecast

Conference Theme: The Green Economy

In an October speech at Boston’s Massachusetts Institute of Technology, President Obama suggested that the world is engaged in a “peaceful competition to determine the technologies that will power the 21st Century.” He further claimed that the nation that wins that competition will lead the global economy. The President’s speech highlighted the long term goal to seek alternate sources of energy and improve energy efficiency, and also reflects the belief that “Green” jobs will be key to the nation’s economy in the future. Depending on how the federal government supports Green Economy initiatives, Green Jobs could indeed provide a boost to the overall U.S. and New England regional economies. However, the greatest contribution to the economy from Green jobs is more likely to come over the longer

⁵ The early 1990s recession claimed nearly one of every two construction jobs during that downturn.

run time horizon, and Green jobs are not expected to be a major contributor to the forthcoming near-term economic recovery (e.g. or over the next 1-3 calendar years).

Several barriers exist to Green Jobs, or the Green Economy, playing a significant role in the near term economic recovery. First is the fact that the term itself is not clearly defined and may carry various meanings for different readers. Does “Green” mean completely carbon neutral or just more efficient, simply working toward awareness or actually providing some kind of service that promotes environmental stewardship, or perhaps all of the above? A recent report by the Pew Charitable Trust sizes up the “Clean Energy Economy” (assumed to be analogous to the Green Economy and used interchangeably here) and provides a reasonable and comprehensive definition, and it is this definition that is the basis for the rest of this section:

“A clean energy economy generates jobs, businesses and investments, while expanding clean energy production, increasing energy efficiency, reducing greenhouse gas emission, waste, pollution, and conserving water and other natural resources.”

a. A Question of Scale: Currently, Green jobs make up a very small portion of the nation’s job base, and will therefore have to grow significantly before they will have a significant impact on the strength or timing of economic conditions—much less the recovery moving forward. Based on Pew definition above, it is estimated that the nation’s Green Economy consists of 68,200 businesses and 770,000 jobs in the U.S. This represents less than 1% of total U.S. jobs. In Vermont, it is estimated that 311 businesses and 2,161 jobs are in the Green Economy, and this corresponds to a portion of less than 1% of total jobs on the state level as well. In 1998, there were an estimated 1,875 Green jobs in Vermont, implying growth rate of 15.3% over the 9 year period—the second fastest rate of job growth among the New England states. This rate of growth is almost twice that of growth in overall job growth rate in the state using nonfarm payroll job count data. However, it also means that the number of Green jobs would have to triple, before the entire Green Sector reaches a level that would equate to one year’s average payroll job growth for the state economy (at a 2.0% rate of payroll job growth). So it soon becomes clear that many more Green jobs are needed in Vermont before it can start to become a significant, much less a major factor in the state’s annual job change performance.

Table 6. Estimated Green Jobs New England and U.S.

	1998	2007	1998-07 Growth
U.S.	706,151	770,385	9.1%
New England	48,088	51,343	6.8%
CT	9,484	10,147	7.0%
MA	25,580	26,678	4.3%
ME	4,888	6,000	22.7%
NH	3,950	4,029	2.0%
RI	2,311	2,328	0.7%
VT	1,875	2,161	15.3%

Source: Pew Charitable Trusts, 2009

Prepared By Economic & Policy Resources

However, with significant federal government spending, growing Green jobs could provide a boost to the economy over the longer term. Of the \$787 billion in ARRA funds, roughly \$104 billion has been allocated for projects that could contribute to the Green Economy, such as clean water and environmental restoration, modernization of federal buildings and infrastructure, weatherization and retrofit for energy efficiency of homes and public housing, and transformation of and improvements to the nation's energy production, transmission and distribution system. This amount of government spending dwarfs the private investment capital raised in the Green Economy according the recent Pew report, which estimated capital raised in 2007 to be a mere \$12.6 billion. The impact of this government spending is likely to be spread out over the next several years, and once private sector spending is revived, there is real potential for strong job creation in the Green Economy that could make substantial contributions to overall economic growth over the next full business cycle.

b. Prospects for the Green Economy in Vermont: Potential for job creation through investment in the Green Economy is especially relevant for Vermont, which has made a conscious effort to brand itself as natural and clean, and a source of quality products made using environmentally friendly practices. The impact of investment in the Green Economy depends on the sector in which jobs are created. Table 7 below displays estimated job multipliers for selected job sectors related to the Green Economy. Sectors that are goods producing tend to have larger job multipliers due the inputs required and additional demand placed on other sectors.

For all the New England states, investment that would create jobs fitting into the manufacturing sectors 333 and 336 are estimated to have the greatest impact in terms of leading to indirect and induced jobs as displayed in the multipliers table. Investment that creates jobs in the Service sectors tend to result in lower multipliers, likely due to fewer inputs required from related industries, both inside and outside each respective state. Generally, Vermont, Maine and Connecticut appear to exhibit similar multipliers for the selected industries shown above. New Hampshire and Massachusetts tend to have stronger multipliers (this likely due to a greater concentration of manufacturing and technology related jobs). Finally, Rhode Island appears to exhibit relatively low multipliers for each of the selected sectors displayed.

c. There is No Free Lunch (except of course at Economy.com): The table displayed above should be followed with the caveat that creating "Green Jobs" may also come with costs. Production itself in the selected sectors would likely have some negative impact, or in the green sense of terms—externalities. Production would require the use of raw materials and significant amounts of energy inputs, and would also create some kind of waste. Therefore, any true impact of creating "Green Jobs" would take into account all of these costs as well as benefits in order to accurately determine how hard we should push for development of the Green Economy. In any case, the Green Economy is likely to be more of a factor in the long term horizon, and less so in the short term period that is most relevant to the recovery likely to play out over the next 1 to 2 calendar years.

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Table 7. Estimated Job Multipliers By Selected Sectors -- Indirect Jobs for Every Direct "GREEN" Job

3-Digit NAICS Sector	Description	VT	CT	NH	MA	ME	RI
Indirect to Direct Job Multipliers							
"Goods" Producing Sectors							
238	Solar Energy Contractor and Energy Mgmt Controls	0.50	0.36	0.52	0.94	0.39	0.23
333	Solar Heaters, Recycling Machinery, Sewer and Water Treatment Equipment	0.93	0.80	1.09	1.77	0.85	0.38
336	Solar Cells, Fuel Cells, Electric Car Assembly	1.29	1.00	1.52	2.31	0.85	0.34
"Service" Producing Sectors							
115	Reforestation Services	0.31	0.14	0.30	0.37	0.21	0.10
541	Energy Conservation Engineering, Pollution Control Testing, Energy Conservation Consultant	0.53	0.47	0.57	1.20	0.44	0.25

[1] "Green" Job Sectors defined by the PEW Charitable Trust Report "The Clean Energy Economy" of June 2009

[2] Job multipliers estimated by EPR using the REDYN Input-Output model

[3] Multipliers do not take into account competition or potential displacement impacts