



Just How Bad? Connecticut's Economy Slides

The Connecticut Economic Outlook: February 2009

Peter E Gunther, Senior Research Fellow

Connecticut Center of Economic Analysis

University of Connecticut

Employment Plummets; Output Shrinks

Recession

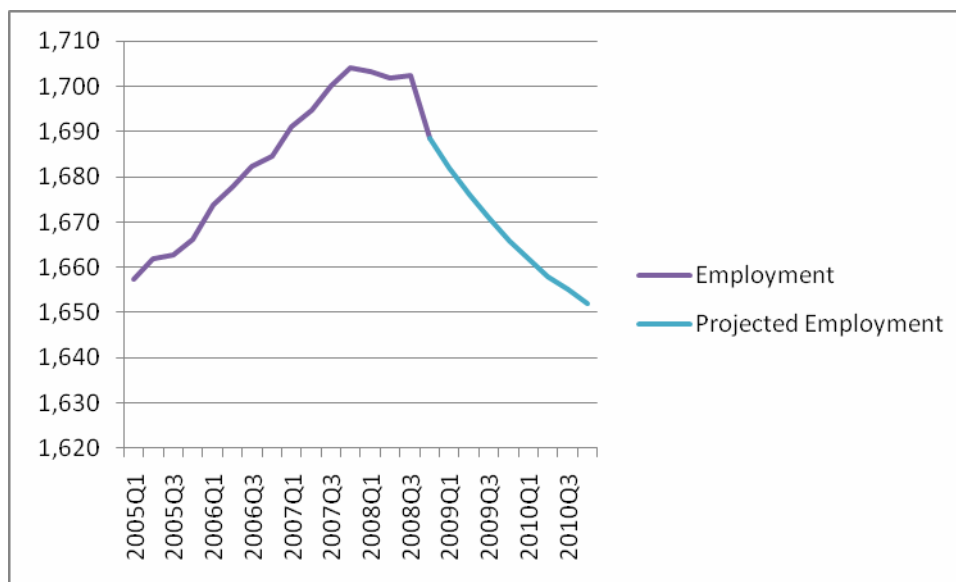
Just bad is it going to get? Global unemployment may hit 50 million in 2009; Europe is in its worse recession in 50 years; American business defaults and bankruptcies may this year equal the rates of 1930; consumer confidence is at historic lows; the American economy contracted officially at 3.8% in the last quarter, but by 5.1% when inventory buildup is excluded. Americans have dramatically reduced spending even on food. To what extent will Connecticut be drawn into this economic maelstrom? Connecticut has already seen a critical harbinger of where its economy may be headed in the dramatic fall in tax collections, pushing state budget deficits over three fiscal years close to \$10 billion.

Employment

Connecticut's economy slid into recession at the end of 2006, but until the fourth quarter of 2008, the contraction was mild, with modest job losses but maintenance of total output. But in the fourth quarter of 2008, the economy tightened quickly, with seasonally adjusted employment plummeting 14,000—the largest single quarter-to-quarter contraction since the third quarter of 1991—bringing state employment down to nearly 1.7 million.

There is little reason to think relief will come soon. Typically, with the onset of winter and slow retail sales, seasonally unadjusted employment normally falls by 40,000 in the first quarter of a year; this Outlook foresees a decline in 2009Q1 of 47,000 unadjusted, which translates to 7,000 jobs lost when adjusting for the typical seasonal variations. Without considering the impact of the federal stimulus package President Obama signed Tuesday, Chart 1 shows the scale of quarterly job losses would continue unabated; total seasonally adjusted job losses would reach 55,000 by the last quarter of 2010, eradicating all job gains of the last four years. It would put Connecticut employment back to its level of more than twenty years ago!

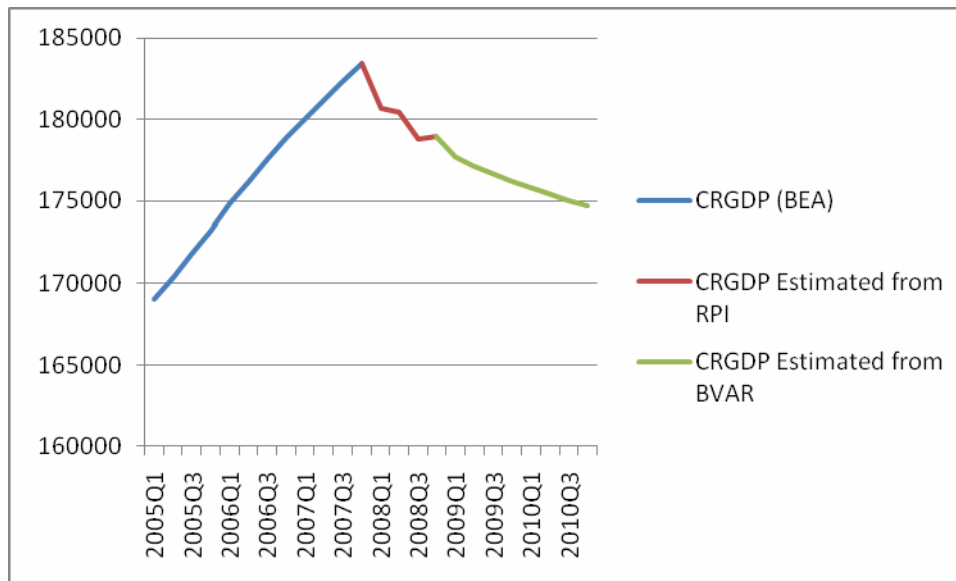
Chart 1: Employment Outlook (1,000s)



Output (CRGDP)

The impact on total output (Connecticut Real Gross Domestic Product-CRGDP)—without that federal stimulus package—would also be severe, but for Connecticut productivity gains embedded in plant, equipment, and knowledgeable workers translate into a contraction less severe than in employment, falling back to the level of early 2006. Chart 2 shows that, from its peak at the end of 2007 of \$183.5 billion, this forecast sees CRGDP declining to just under \$175 billion by the end of 2010 without outside help.

Chart 2: Connecticut Real Gross Domestic Product (Millions \$)



Declining employment and CRGDP plus credit tightness have driven down housing permits. Looming on the horizon for the last few years, the impact of declining private housing permits came into sharp relief in 2008. Chart 3 shows that Connecticut percentage declines were sharper this year than in either of the previous two years. Quarterly permits fell from 3142 in 2004Q1 to 1,196 in 2008Q4. Single family homes and 3-4 unit construction have been hardest hit, with just multiple units escaping the worse of the recession's ravages.

The percentage decline in the value of the permits was not as large as their numbers, but resulting increase in average value of new housing permits stands in sharp contrast to falling prices of existing homes. The average permit values rose 9.6% and 10.0% in 2006 and 2007, and by 1.8% in 2008; permit values for just single family homes 7.8%, 8.5% and 9.5% respectively. In contrast The Warner Group reports, "... the median price for resale of a single-family home retreated 9.2 % from 2007." Despite falling resale prices, Warren Group also reported that the resale market for Connecticut single family homes contracted 23.7%. It is highly unlikely there will be new residential construction until the inventory of houses on the market falls significantly.

Chart 3: Percentage Changes in the Number of Connecticut Housing Permits 2005-2008

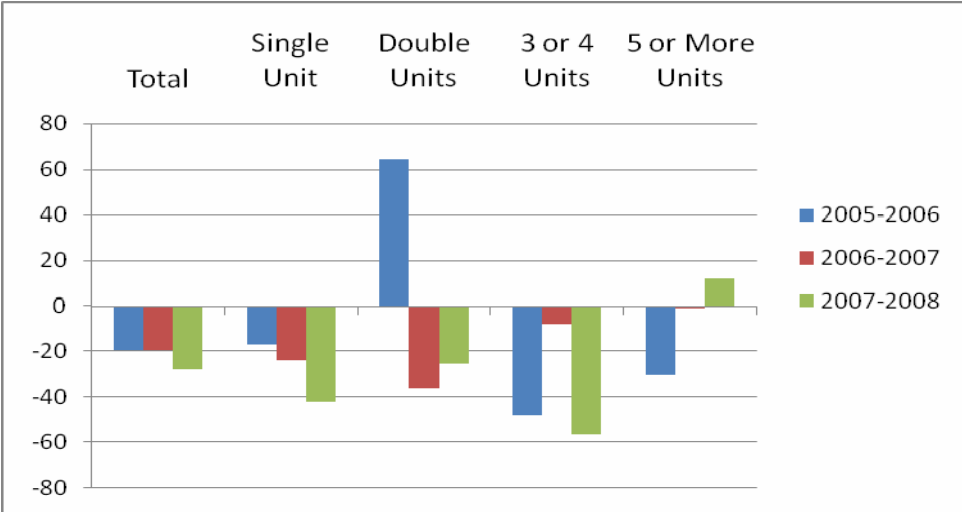
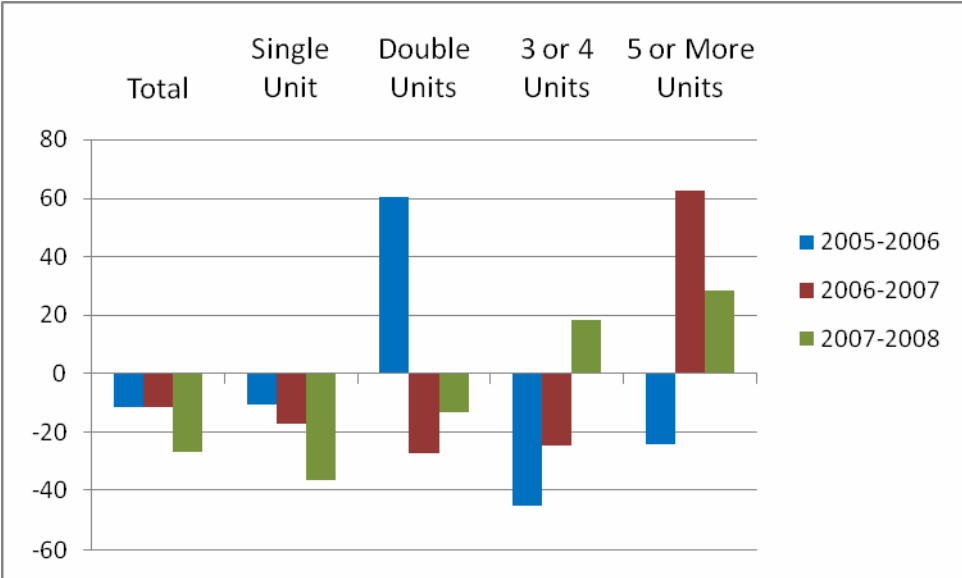
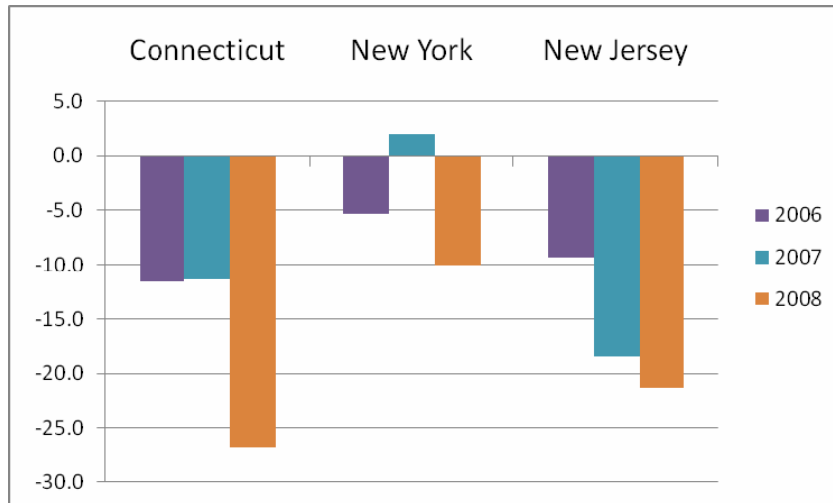


Chart 4: Percentage Changes in Value of Connecticut Housing Permits 2005-2008



Among the Tri-State jurisdictions, Connecticut has been particularly hard-pressed by the housing downturn. Chart 5 illustrates how Connecticut clearly fared worse than New York and New Jersey in 2008, though New Jersey was most severely impacted in 2007.

Chart 5: Percentage Changes in Value of Tri-State Housing Permits 2005-2008



Weakness in housing markets increases mortgagees' incentives to save in order to protect their home equity thereby partially undermining policies to stimulate the economy. Similarly those who have experienced significant losses in equity market may strive to rebuild assets, again working against general economic recovery.

The Federal Stimulus

President Obama's stimulus package seeks to overcome or mitigate this process and depends upon rapid implementation. The targeted level of activity is not as easy to achieve nor as feasible as it used to be. Environmental hearings related to any major project, such as large new electricity generation and transmission, grind on at snail's paces. Commercial and, particularly, numerous occupations and positions requires qualified personnel for operating heavy equipment, so that personnel are not all easily transferred or readily at-hand. In addition, traditional targets, such as road construction, have become increasingly capital intensive. Most replacement machinery and equipment, from trucks to earth moving equipment, that Connecticut uses, is manufactured out-of-state. Further, increasing trade among nations has increased import leakages and eroded multiplier effects for all regions, including Connecticut. It is why diplomatic agreements among most industrialized nations to stimulate simultaneously are important to achieve economic stimulation and recovery from this global contraction.

For Connecticut, the initial analysis of the federal stimulus package shows it generating 41,000 jobs in Connecticut through the end of 2011. It does not fully offset the forecast job losses of 55,000. And that forecast is likely to be optimistic, perhaps dramatically.

How Connecticut itself manages its own affairs will play a significant role in the shaping the economy's path over the next two years. For this forecast, CCEA offers two possible scenarios.

Two Potential Paths

This section considers two differing economic paths for Connecticut. The first builds from the legal requirement to balance the State's operating budget, using a rather Draconian approach to cutting annual salaries to public sector workers by a billion dollars below current levels. The second scenario evaluates the

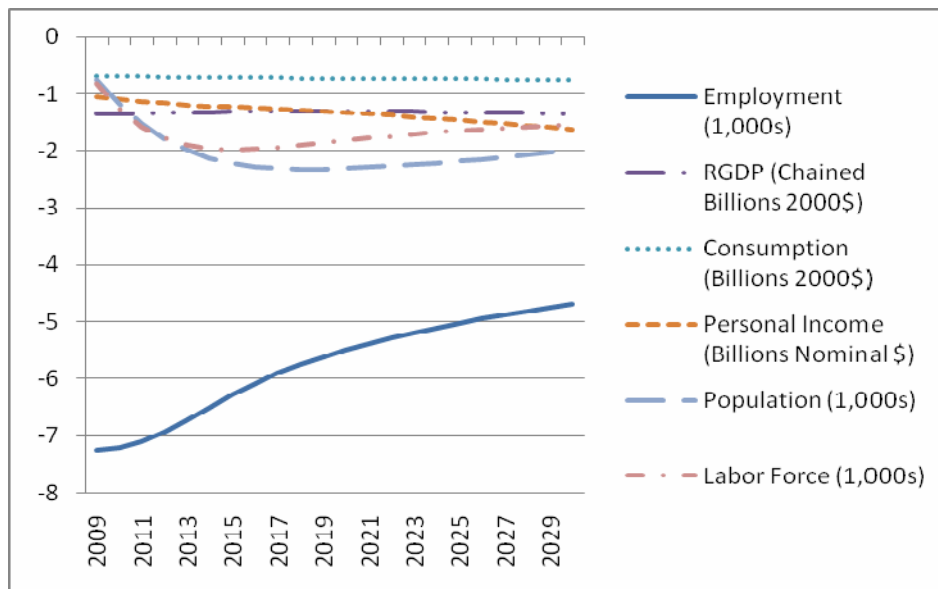
impact of expanded capital investments by the State to construct bio-generators to eliminate costly interruptible electricity charges and to establish generating capacity to facilitate the transition from gasoline to electric vehicles.

Scenario I: Cutting Public Sector Wages

The constitutional requirement of a balanced budget might be met by wage cuts imposed on public employees. Such cuts in income curtail consumer expenditures, and that in turn would worsen already serious unemployment among private sector employees. This analysis assumes only reducing wages; it does not evaluate the impact if the balanced budget is achieved through laying off employees and reducing state services; that approach would generate much larger negative impacts than shown below.

This scenario simply takes a billion dollars out of each year’s wages, salaries and benefits. This approach would cost Connecticut 7,000 jobs in the short term and reduces employment permanently by at least 5,000 annually into the 2020’s. Given that these cuts were modeled as being in remuneration, not public sector employment, 995 to 97% of these reductions are in private sector employment. These job losses lead to an exodus of population and labor force, commensurate with long-term declines CRGDP and personal income. In short, such an approach compounds the recession’s impacts and counteracts the Federal planned stimuli. The impact is as small as it is because so much of Connecticut’s household expenditures “leak out” of the state’s economy; the full impact would fall outside our borders. If this billion dollar reduction came through employee layoffs, the direct impact would approach 20,000 jobs and the total impact might reach twice that level.

Chart 6: Impacts of Permanently Cutting Public Employee Compensation by One Billion Dollars



The CCEA modeling (derived from a series of dynamic impact analyses) of a billion dollar reduction in consumption expenditures (or of direct layoffs) is linear; thus a two billion dollar “hit” would generate twice

the impact. If Connecticut were to set off the projected cumulative deficit of nearly \$10 billion just by curtailing incomes, job losses would reach 70,000, in addition to the forecast loss of 55,000. Even if the federal stimulus achieved its job creation targets, Connecticut would still suffer a recession worse than that of 2001-2003; if the budget deficit were met with layoffs, the recession would surpass the devastating contraction of the early 1990s.

Scenario II: Accelerating Adoption of Bio-Electric Generators

By requiring homes to be equipped with smart meters, Connecticut has already established infrastructure to vary electricity rates so as to reduce consumption during peak demand and to encourage it in off-peak periods. That rate-setting capacity, combined with peak and off-peak rates for generators feeding into the grid, could encourage the expansion of badly needed generating capacity and facilitate fueling of electric cars at night. This simulation looks only at the implications of building 375 MW of bio-generating capacity annually over five years and its subsequent operation. This additional bio-generating capacity creates immediate demands in construction and creates a new market for bio-fuels—much locally produced—as substitutes for oil and gas. This modeling does not evaluate the added advantages of facilitating the adoption of electric cars. Nor does it prejudge the adoption of bio-generators with competing green technologies such as solar and wind, each of which has its own idiosyncratic advantages and disadvantages.

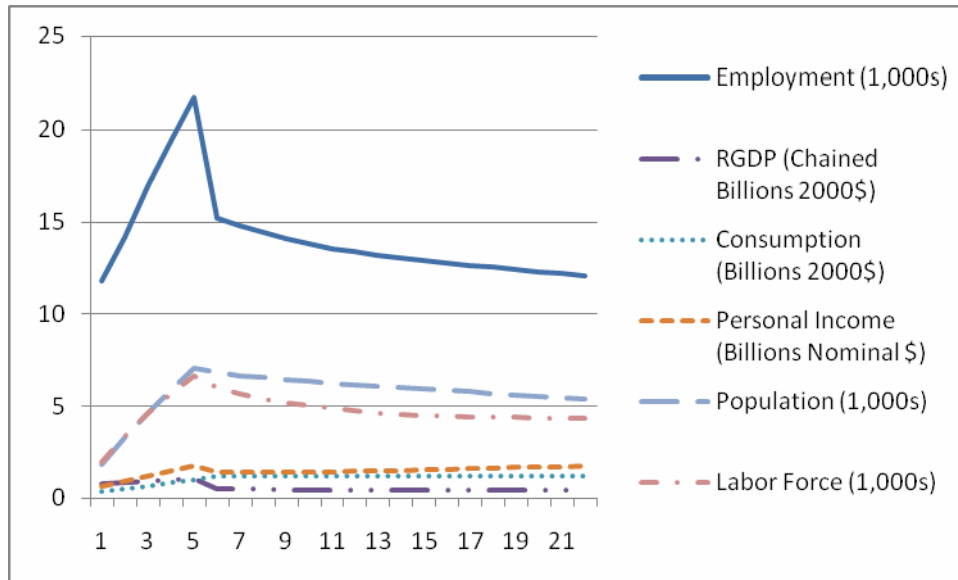
Vermont's experience from over a hundred installations of gasification units using wood chips as fuel shows that the cost is about a sixth of that of fuel oil. As a result, both increased demands for wood chips and agricultural fibrous material for chips or pellets translates into a cut in demand for fuel oil, measured as six times the value of the alternative fuels, with those savings ultimately being passed back to consumers; these savings are modeled as household spending. By expanding environmentally friendly sources of electricity—solar, wind and biotechnologies—Connecticut has the opportunity to reduce emissions of carbon dioxide equivalent gases and diesel particulates with all the resulting health improvements commensurate with cleaner air.

In contrast to the large negative impact of cutting household expenditures in the previous scenario, this one adds a billion dollars of capital expenditures by the State to leverage another three billion of private sector funds annually to construct bio-generators over each year 2009 to 2013. Multiple small units, broadly distributed throughout the State, will generate economies of scale, collapsing current construction time of 14 to 24 months to a year. The model implicitly assumes that in addition to electricity generation, the cogenerated hot water is used for industrial and central heating and cooling purposes, thereby saving six times the value of fuel oil as the value of chips and pellets consumed.

Chart 7 presents the resulting REMI impacts. Over the next five years, as construction occurs and operations ramp up, employment impacts rise steadily to peak at 21,700, before dropping back during the strictly operational phase. Employment impacts remain robust through that period due to new fuel demands from labor intensive forestry and agricultural operations. Those additional employment opportunities retain and attract population and labor force. The upshot is strong growth during construction that is sustained during the operational phase. Population growth peaks at 7000 in 2013 and labor force growth at 6600 in the same year.

All three measures of income growth appreciably improve over the period 2009-2030, as does consumption.

Chart 7: Impacts of Leveraging One Billion Dollars for Construction of Bio-Generators 2009-2013



Despite losses in fuel tax revenue, State government revenues increase throughout the period, but insufficiently to recover fully capital costs. This may not be a major issue since unaccounted for reduced charges for interruptible power could more than repay the government for its capital expenditures. For these reasons, this overview likely understates positive Connecticut impacts.

Conclusions

As the recession gains force, employment impacts clearly worsen. But given historically large declines in first quarter results compared to the previous one, care must be taken not to overreact to 2009Q1 seasonally unadjusted results.

Looking at two possible future paths for state policy, it is clear that cutting remuneration of public sector employees will not only increase unemployment and exacerbate declining incomes but also generate sustained emigration and shrinkage in Connecticut's labor force. The impacts of such a policy counteract Washington's multibillion dollar stimulus package.

Using capital funds to leverage building bio-generating capacity to reduce interruptible charges and lay a foundation for adoption of electric cars will have the reverse impacts. This is an example of those policies that generate higher employment and sustained population and labor force growth. It also increases rather than decreases incomes. Chosen carefully, such projects have the power to position Connecticut to build industries with new industry linkages and a cleaner and healthier environment for the future.