

# Current Conditions and Outlook for the U.S. and Connecticut Economies: 2009-2011



Connecticut  
Department of Labor  
**Office of Research**  
200 Folly Brook Blvd.  
Wethersfield, CT 06109

WRITTEN BY  
**DANIEL W. KENNEDY, Ph.D.**  
SENIOR ECONOMIST

DIRECTOR  
**Andrew Condon**  
ACTING COMMISSIONER  
**Linda L. Agnew**

August  
2010



Connecticut Department of Labor  
Labor Market Information  
[www.ctdol.state.ct.us/lmi](http://www.ctdol.state.ct.us/lmi)

**Current Conditions and Outlook for the  
U.S. and Connecticut Economies:  
2009-2011**

**August 2010**

**Prepared By: Daniel W. Kennedy, Ph.D., Senior Economist**

**Office of Research  
Connecticut Labor Department  
Director: Andrew Condon**

***Contributors:***

The author wishes to thank Sarah York and Matthew Krzyzek, Economists, Office of Research, for their assistance in research, preparation, and analysis of the economic and labor-market data critical to producing the Outlook.

## **A Note of Thanks to CERC**

The Office of Research would like to thank Jeff Blodgett and the Connecticut Economic Resource Center (CERC) for their generous offer to hold the Economists' Panel at CERC's facility at Rocky Hill.

### **And, Thank You to the Economists' Panel**

To critique and advise in setting the assumptions for the economic outlook and Connecticut's Short-Term Industry Employment forecasts, a panel of economists from the Office of Research, and from outside the agency, from business, academia, and the non-profit sector, convenes every year in the Spring to assess the current and near future conditions and prospects for the U.S. and Connecticut economies. The Office of Research thanks them for their time and effort in participating in this process. As always, any errors are the responsibility of the author of this outlook.

### **Economists Panel (April 2010 Participants)**

**MEMBERS-Office of Research:** Amy Drukenmiller, Economist; Patrick Flaherty, Economist; Dana Placzek, Research Analyst; and Daniel W. Kennedy, Ph.D, Senior Economist.

**MEMBERS-Outside Panelists:** Jeff Blodgett, VP-Research, CERC; Edward Deak, Ph.D., Professor of Economics, Fairfield University, CT. Model Manager, NEEP, and Governor's Economic Council; Steven Lanza, Ph.D., J.D., Executive Editor, *The Connecticut Economy*, University of Connecticut, and Governor's Economic Council.

## FOREWORD

What follows is the outlook for the U.S. and Connecticut economies for 2010 and 2011, which is prepared by the Office of Research, Connecticut Labor Department (CTDOL). After review by a panel of economists from academia, business, non-profits, and government, the U.S. and Connecticut outlooks are revised, updated, and then used as the basis for setting the assumptions for the next round of Short-Term Connecticut, Industry-Employment Forecasts, and is posted on the CTDOL Website. In addition, every year the U.S. and Connecticut outlooks are forwarded, as required, to the U.S. Labor Department.

As this is written, in June 2010, it is approaching three years since the collapse of the Asset-Backed Commercial Paper (ABCP) market in August 2007. This ushered in the financial panic of 2007 and 2008, which came on the heels of the collapse of the housing bubble between June 2006 (based on the Case-Shiller composite), and 2007Q2 (based on the Federal Housing Finance Agency's U.S. Index). This was the second asset bubble to pop in as many decades, and the first banking panic since the banking panics of the 1930's during the Great Depression. In many respects the current crisis is reminiscent of the Panic of 1907 in which a shadow banking system collapsed. In 1907, the bank-run was ushered in by the collapse of the Knickerbocker Trust Company; one century later, the collapse of the ABCP market would begin the 21<sup>st</sup> Century's version of the good old-fashioned bank run ushering in the collapse of another shadow banking system. The panic peaked in the last quarter of 2008 with the collapse of Lehman Brothers, followed by the nationalization of AIG. A quick, though ad hoc, response by the Fed and U.S. Treasury averted another Great Depression—so far. Though it did not prevent the unemployment rate from topping out above 10%, the *American Recovery and Reinvestment Act* (ARRA) of 2009 probably prevented it from getting any higher, and also probably contributed to the recovery in GDP in the last half of 2009, and the apparent jobs recovery in the final month of 2009. However, the question remains: in the wake of the Fed's withdrawing liquidity from the financial system, and the Federal government's fiscal stimulus winding down, can the economy generate a self-sustaining recovery—especially in light of the growing fiscal crisis in the states? Further, there are still some shoes that could drop with

regard to financial system. In 2010 and 2011, \$1 trillion in Adjustable-Rate Mortgages (ARM), including option ARM's, originated in 2005 and 2006 will re-set. Another shoe that could drop is that of the expected spike in the delinquency rate on Commercial Mortgage-Backed Securities (CMBS) in 2011, and some are warning of a private-equity debt crisis in 2011. And, of course, there is the sovereign debt crisis, centered around Greece in the EU. In other words, we are still not out of the proverbial woods.

Though the housing bubble and bust did not impact Connecticut to the extent it did other areas of the country, particularly the epicenter regions, such as Phoenix and Las Vegas, Connecticut was still affected, and in particular, certain regions of the state. However, Connecticut is still significantly exposed to the current crisis due to the large presence of the financial services industry in the state, particularly in Fairfield County. Further, Connecticut also faces large numbers of ARM re-sets in 2010 and 2011. And, the troubles in Europe and its cloudy growth prospects are of concern to Connecticut since, after Canada, France and Germany are the two largest destinations for the State's exports. Clearly, the next two years, which coincide with this outlook's forecast horizon, are going to be very critical in determining the fate of the Connecticut, U.S., and World economies for decades to come.

Both, the U.S. and Connecticut economic outlooks, which follow, and the critique and recommendations formulated in the Economists' Panel process set the assumptions for the Connecticut Short-Term Employment Forecasts.

## Table of Contents

### CURRENT CONDITIONS AND OUTLOOK FOR THE CONNECTICUT ECONOMY: 2009-2011

Executive Summary .....	1
I. Current Connecticut Economic Conditions: Spring 2010 .....	18
II. Bubble, Recession, and Panic:	
Assessing the Hit to the State's Economy .....	28
A. Connecticut's Labor Markets .....	29
B. Income and Spending .....	32
C. The State's Housing Markets .....	39
D. Connecticut's Financial Sector .....	48
III. The Changing Nature of Connecticut's Recoveries .....	52
IV. Where Does the State's Economy Go From Here?	
The Outlook for 2009-2011 and Beyond.....	58

**EXECUTIVE SUMMARY**  
**Current Conditions and Outlook for**  
**the Connecticut Economy:**  
**2009-2011**

**August 2010**

# **EXECUTIVE SUMMARY: Current Conditions and Outlook for the Connecticut Economy 2009-11**

**August 2010**

## **CURRENT CONNECTICUT ECONOMIC CONDITIONS: Spring 2010**

Connecticut seems to have done something over this cycle that it has not done before in the Post Cold War Era. Non-Farm Employment turned down going into the last recession after that of the U.S. The U.S. officially went into recession in December 2007, and employment turned down that same month. Yet Connecticut's Non-Farm Employment did not turn down until March 2008. Further, it appears that the U.S. and Connecticut employment cycles both bottomed in December 2009. If these turning points hold up in next year's benchmark, it would mean that Connecticut's recovery coincided with the U.S.—again, a first in the Post Cold War Era. On the other hand, while the U.S. had job declines of 3.0% per year on an annualized basis, over 24 months, Connecticut's employment contracted at a 3.5% per year annualized basis, over 21 months.

A STRONG COMEBACK?— Connecticut's job-growth has been stronger than U.S. job-growth from December 2009 through May 2010. Connecticut's Non-Farm Employment grew by 0.91%, while that for the U.S. grew by 0.76%. For both the U.S. and Connecticut economies, the jobs numbers have been boosted by the 2010 Census.

WHERE IS THE JOB-GROWTH COMING FROM?—Reflecting the hiring of temporary Census workers, U.S. Federal employment grew by 571,000, or 20.2%, and Connecticut's Federal employment grew by 6,200, or 33.3%. Census workers have accounted for a significant number of the jobs created both the U.S. and Connecticut since the recovery. Between December 2009 and May 2010, the hiring of temporary workers for the Census accounted for 50% of net, new U.S. job-growth and for 40% of Connecticut job-growth. So where is private-sector job-growth, and where is it coming from? The second largest contributor to job-growth, and largest private sector NAICS sector, is Accommodation and Food Services, which accounted for 36.1%, or 5,200 net,



new jobs. However, preliminary Unemployment Insurance (UI) tax data indicate that though there has certainly been robust job-growth in Accommodation and Food Services, it might not be quite as strong once the 2011 Benchmarking process has been completed.

It appears that the Food Services Industry accounted for much of the growth in the Accommodation and Food Services NAICS sector. Drilling down further, the growth in Foods Services jobs was nearly evenly split between Full-Service and Limited-Services restraints (and, it is this industry that may be particularly affected by next year's benchmarking, as discussed above). The next biggest contributor to job-growth was Retail, which accounted for 29%, or 4,100 net, new jobs between December 2009 and May 2010. The growth in Retail jobs seems to be broad-based, with particularly strong boosts in Building Materials and Motor Vehicles. Close behind Retail is Administration Support and Waste Management (hereafter Admin-Support), which contributed 4,000 net, new jobs, or 28% of the jobs added to Connecticut's Economy between December 2009 and May 2010. As for the U.S. Economy, a large driver of the job-growth and declines over the business cycle is Employment Services, particularly Temporary Help.

TEMPORARY HELP AND THE BUSINESS CYCLE— Unfortunately, Connecticut's Employment Services is not broken down by industries in the Establishment Survey, so Temporary Help cannot be isolated as it could for the discussion of the U.S. jobs market. Temporary Help accounted for about three-quarters of all U.S. Employment Services jobs. Assuming Connecticut's Employment Services Industry is similarly distributed, and that it follows the national pattern of more extensive use of temporary and contingent workers, reflected by the increasingly larger swings in the Year-to-Year (YTY) percent-change in employment in the Employment Services Industry over successive cycles since 1990. Over the recent crisis/panic, the 32.69% decline in Connecticut's Employment Services jobs in March 2009 (topping the 21% declines in the two previous Post Cold War recessions), on a YTY basis, is the largest over the range of available data. From that point on, the YTY growth-rate accelerated in an almost vertical climb, and in May 2010, the YTY growth-rate in Connecticut's Employment Services jobs was 14.62%. It is this



behavior of temporary help employment over the business cycle that has been the principal driver of the Admin-Support Sector.

TREND-DRIVEN SECTORS— Health Care and Social Assistance (HCSA) accounted for 23% of Connecticut’s job-creation between December 2009 and May 2010. However, HCSA and Education were the only two NAICS sectors adding jobs to Connecticut’s Economy over the recession and panic. Both HCSA, and Education (which accounted for 6.3% of the jobs added during the current recovery), are both driven by trend-dominated factors.

Manufacturing is being driven by both trend and cyclical forces. And, so far, Manufacturing jobs have actually increased over the current recovery, contributing a modest 200 jobs. The Professional, Technical, and Scientific Sector (hereafter Prof-Tech) accounted for 21%, or 3,000 jobs, created over the current recovery. Like Admin-Support, this too is a sector in which strong cyclically, dominated industries play a major role in driving its behavior over the cycle.

HOWEVER, Sectors Are Still Losing Jobs—Eight of Connecticut’s NAICS sectors continued to shed jobs over the current, apparent recovery. Three of those sectors accounted for one-third of the net job-losses between December 2009 and May 2010, and are directly connected to the epicenter of the recent housing bubble, recession, and financial panic. Finance and Insurance accounted for 17.4%, or 2,500, jobs lost, Construction had a net loss of 2,000 jobs, and accounted for 14% of jobs lost, and Real Estate had a net decline of 200 jobs, accounting for 1.39% of jobs lost. Three NAICS sectors contributed just under 14% to just over 15% to job-losses, and combined accounted for nearly 44% of net, job-losses. Transportation and Warehousing had a net loss of 2,200 jobs, Other Services shed 2,100 jobs, and Wholesale Trade had a net decline of 2,000. Information had a net-loss of 600 jobs, and Management of Companies and Enterprises



WHAT IS THE SIGNAL FROM WEEKLY UI CLAIMS?—Since Initial Claims for Unemployment Insurance (UI) are reported on a weekly basis they are the most, timely indicator of labor-market conditions. The most common way to assess and present UI Claims data is to use a Four-Week Moving Average (4-WMA).

The January 2010, the 4-WMA of Initial Claims was still above 10,000, which is still at recessionary levels. And, after Week-to-Week (WTW) declines in Initial Claims continued through February and March, they reversed direction in April, and the WTW change jumped as high as 10%, the week of April 24<sup>th</sup>, but continued to decline in May, for four consecutive weeks. In addition, the YTY percent-change in the 4-WMA of Connecticut's Initial Claims have experienced the largest declines since December 1993. Thus, the signals from the Initial Claims data are that a recovery is probably underway, and the jobs data discussed above, reinforces this reading on the current state of the Connecticut Economy. Of course, the sustainability of the current, apparent recovery, both at the national and state levels, is in question.

### **BUBBLE, RECESSION, AND PANIC: Assessing the Hit to the State's Economy**

There has not been a U.S. recession accompanied by a financial panic since The Great Depression. Consequently, looking to the historical record of the post-war recoveries will not be as informative as it was for understanding the dynamics of previous post-war recoveries. And, in fact, the historical reference, in many respects, must reach much further back in time to previous episodes of banking panics in the first third of the 20<sup>th</sup> Century, and even the last half of the 19<sup>th</sup> Century, as well as from cross-country studies.

The principal concern over what appears to be a recovery underway is: Can the economy sustain a recovery and propel itself on to the expansion phase once government supports are phased out? Recessions accompanied by financial panics are usually followed by weaker recoveries, especially on the heels of a popping asset bubble, due to the damage done to the economy's balance sheets, in conjunction with the disruption in the flow of credit. This section re-traces how the recession and panic impacted the major sectors of Connecticut's Economy and what it implies for a sustainable recovery.



CONNECTICUT'S LABOR MARKETS-- Nearly 20% (20,400 jobs) of all the jobs lost in Connecticut's Economy between March 2008 and December 2009 were in Manufacturing. The next biggest hit was Construction, which shed 15,400 jobs and accounted for 15% of jobs lost. Retail accounted for another nearly 15% of job-losses. Admin-Support and Professional-Technical each accounted for more than 10% of jobs lost, and Finance and Insurance, Government, and Wholesale Trade each contributed more than 5% of the jobs lost during the recession/panic.

The pattern of Connecticut's job-losses seems to be pretty close to that of the U.S. For both Connecticut and the U.S., Manufacturing accounted for the most jobs lost this was followed by Construction and Retail. Construction, of course, was directly impacted by the bursting of the housing bubble, and retail indirectly, as consumers funded their spending, at unsustainable levels, by using their homes as ATM's. As discussed above, Admin-Support is driven by the behavior of the Temporary Help Industry over the business cycle. But, Professional-Technical is also driven by a couple of cyclically sensitive industries, particularly, Engineering and Architectural, which is tied to the Construction Sector, and Computer Systems and Design, which is tied to the Financial Sector, particularly the Insurance Industry.

When ranking Connecticut's NAICS sectors by the steepness of their job contractions over the recent recession/panic, not surprisingly, Construction, is the most negatively impacted sector, it contracted by 23% between March 2008 and December 2009. This was followed by Admin-Support, again, driven by Temporary Help employment-losses, and Professional and Technical, also driven by cyclically sensitive industries, particularly, Engineering and Architectural, which is tied to the Construction Sector and Computer Systems and Design whose services are heavily targeted toward the financial sector. Manufacturing contracted by 10.83% and Information and Real Estate each contracted by between 9% and 10%. Retail and Wholesale Trade each contracted by between 8% and 9%.



IT IS AN ILL WIND THAT BLOWS NO GOOD—Even in the midst of the worst recession since the 1930's, there were sectors still adding jobs. Most net, new jobs, both nationally and in the State's Economy, were created in the Health Care and Social Assistance (HCSA) Sector. HCSA added 7,400 jobs to Connecticut's Economy between March 2008 and December 2009. That represents a 3.11% increase in the HCSA job-base. The other sector to add jobs over the recent recession/panic period was Education, which expanded by 2.63% that translates into an addition of 1,500 jobs over the 21-month recession period. Growth in HCSA and Education were driven by longer-term, demographic factors that muted any cyclical forces. However, HCSA job-growth in Connecticut may be muted by the losses in the Hospital Industry that began toward the end of 2008, and Education may be severely impacted by budget cuts due to the reduction in State aid to cities and towns resulting from the State's budget deficit.

INCOME AND SPENDING-- The level of consumer spending in the economy is based, not on total income, but on *disposable* income. That is, what consumers have to spend after their income is adjusted for any transfer payments received and any taxes taken out. Between 2008Q4 and 2009Q1 the decline in Personal Income (Net Transfers) was the largest, and only negative, component contributing to the QTQ change in Nominal DPI. Current Personal Transfer Payments made the largest positive contribution, with the reduction in Tax Payments the next largest contribution to CT. DPI growth. With the smaller decline over the 2009Q2-Q3 Period, again, PI (Net Transfers) was the biggest subtraction from Nominal DPI. However, over the current cycle, it appears that Connecticut Real DPI did not decline as steeply as Real QPI, Real CT DPI declined by 2.13% in 2009Q1, but Real QPI declined by 3.82%, CT Real DPI growth was barely positive again at 0.14% in 2009Q4.

NON-FARM EARNINGS AND EMPLOYMENT OVER THE RECESSION/PANIC--

Over the recent recession/panic (2008Q1 to 2009Q4), quarterly, Non-Farm Employment declined by 5.74%, while Real, Non-Farm Earnings declined by 4.64%. Looking at the response of Connecticut employment to a one-percent change in Connecticut, Real Non-Farm Earnings, over the recent recession, for every one-percent decline in Real Earnings,



Connecticut's employment contracted by 1.24%. Thus, there was a greater than proportional decline in jobs from a one-percent decline in real earnings. Connecticut's earnings declined more steeply than U.S. earnings. U.S. Real, Non-Farm Earnings declined by 3.77% over eight quarters (2007Q4 to 2009Q4), while Connecticut's Real Non-Farm Earnings declined by 4.64% over seven quarters (2008Q1 to 2009Q4). The difference appears to be in private versus public-sector earnings. U.S. Private Real, Non-Farm Earnings actually declined more steeply than Connecticut's Private, Real Non-Farm Earnings. However, U.S. real, public-sector earnings grew by 7.73% between 2007Q4 and 2009Q4, but, between 2008Q1 and 2009Q4, Connecticut's Real Earnings in the Government Sector grew by less than 1%.

THE STATE'S HOUSING MARKETS—One of the first signs of the impending bursting of the housing bubble was the abrupt decline in existing home sales after reaching unprecedented heights. This was true at both the national and the state level. In 2005Q1, Connecticut Existing Homes Sales turned down, one quarter before the downturn in national sales. By 2009Q1, Existing Home Sales had fallen by 53% from their peak. By the fourth quarter of 2009, the quarter of a possible turnaround in the State and National economies, Existing Home Sales recovered to 58,000, a 45% rebound. Though data for the second quarter of 2010 are not yet available at the time of writing, 2010Q1 Existing Home Sales numbers sent an ominous signal about the State's housing market. Existing Home Sales fell from a level of 58,000 in 2009Q4 to 49,600 in 2010Q1, a decline of 8,400, or 14.5%.

We Won't Get Fooled Again?--Housing permits did not begin their precipitous drop until after March 2006. And, it is housing permits that caused many economists, policymakers, commentators, and others to reject the idea that there was a housing bubble, especially in Connecticut. Many had argued that new household formation driven by demographics and immigration justified rising home values. But pressure on the demand for residential living space should have driven up the price of residential space, regardless of tenure (i.e., owner-occupied or rental). That is housing prices and rents should have been rising in tandem (see Volume 1: *U.S. Outlook*). But, that is not what was happening. The



following discussion explains why the disconnect between house prices and rents should have been a red flag. .

Over the recent bubble, the monthly level of Housing Permits in Connecticut never approached the levels of the early 1970's and the 1980's real estate bubble. It was Mark Twain who said that history doesn't repeat itself, but it rhymes. Each asset bubble throughout history seems to have a different twist lulling each new generation of participants into believing that "this time is different" [to use Rogot and Rienhart's (2009) expression, and title of their book] Thus. Many discounted any imbalances in the housing market by pointing to the low level of permits, and tight land-use regulation restricting the supply of housing, which argued against any possible oversupply of housing. However, oversupply, per se, was not at the heart of the recent housing bubble. The heart of the 2000's housing bubble was in a credit bubble fueled by the Federal Reserve and the trade deficit, the financing of home buying, a bubble psychology, and new "innovations" in the securitization of pools of mortgages, which resulted in riskier borrowers being given mortgages that were to re-set at higher, unsustainable payment-levels. Thus, this was a housing-finance crisis, and therefore, the indicators of impending trouble were not in housing permits, but in other indicators that were not widely considered. One of those indicators, the ratio of the Median House Price-to-the Median Rent was reaching very high levels by historical standards, and another, the ratio of the Median House Price-to-Median Household Income was also reaching very high levels, especially in Connecticut.

Current State of Connecticut's Housing Markets—As discussed above, Connecticut's Existing Home Sales declined by 8,400, or 14.48% between 2009Q1 and 2010Q1, the latest available data. After bouncing back from their low of 128 in January 2009, Total Housing Permits peaked at 294 in July 2009. From then on, they once again declined to a low of 207 in January 2010—a 47.46% decline. So far, since January, permits have increased every month of data in 2010 (February to April, and reached a level of 331, up 124 (+60%) from the January low. However, it should be noted that the last month of available data is also the last month of the \$8,000 First-Time Homebuyer's Tax Credit



program. Though homebuyers have until June 30<sup>th</sup> to close, the question remains as to whether or not the housing market will continue to recover after this program expires.

The last three quarters of available data from the Federal Housing Finance Agency (FHFA) show three consecutive quarters of QTQ declines in Connecticut house prices, but at a decelerating rate, and only a relatively small decline in 2010Q1 (-0.28%). On a YTY basis, the FHFA House Price Index (HPI) for Connecticut has been declining just under 5% per quarter since 2008Q4. YTY, it seems that there is a steady erosion of house values that is neither, accelerating or abating. Foreclosure data for 2010 seem to be sending mixed signals about the current state of Connecticut's housing markets. The April foreclosure numbers from The Warren Group showed that Connecticut had 451 foreclosures, down from 648 in March. That is a MTM decline of 30.4%. However, over the first one-third of 2010, there have been 2,620 foreclosures, compared to 1,839 for the first one-third of 2009, that represents a YTY, same-period increase of 42.5%. The numbers from RealtyTrac show that foreclosure filings fell from 2,915 in April to 2,088 in May. That represents a 30% MTM decline, but up 90% on a YTY basis—again, the data paint a mixed picture.

CONNECTICUT'S FINANCIAL SECTOR-- The Rise of Connecticut's Financial Sector over the last two decades has resulted in its increased importance to the State's Economy. While Finance and Insurance Earnings have increased their share of Total Non-Farm Earnings, Manufacturing's Earnings have declined. And, in 2001Q1, the share of Finance and Insurance pasted above that for Manufacturing. Even with the dip in Finance and Insurance Earnings share in 2009Q1, it still remained above Manufacturing, and has since, recovered much of its share. Further, while Connecticut's Manufacturing Sector employment has declined significantly since 1990Q1, employment in the Finance and Insurance Sector has pretty much maintained its share of Non-Farm Employment. As a consequence, manufacturing has been losing its stature in Connecticut, both in terms of earnings and jobs. At the same time, Finance and Insurance has gained in share of earnings and pretty much maintained its share of employment.



Connecticut's Financial Sector: Recession and Panic---By December 2007, the initial events signaling the impending financial crisis, including the collapse of the Asset-Backed Commercial Paper market (ABCP) in August had already unfolded. And, the National Bureau of Economic Research (NBER) had since declared December 2007 as the turning point ending the previous recovery/expansion. And, although Connecticut's Economy would not turn down until three months later in March 2008, this, nevertheless, seems to be the most appropriate point in which to take a snapshot of the distribution of employment in the U.S. and Connecticut Finance and Insurance sectors. There were significant differences in the distribution of jobs with the U.S. and Connecticut Finance and Insurance sectors. Connecticut's Finance and Insurance jobs were concentrated in the Insurance Industry, while the U.S. sector's jobs were concentrated in Credit Intermediation (and Monetary Authority), and Connecticut also had more employment concentrated in the Securities, Commodities, and Brokers Industry, as well as the smaller Funds and Trusts Industry. Given that the largest concentration of U.S. Finance and Insurance jobs was in Credit Intermediation in December 2007, it is no surprise that it also contributed the largest share of job-losses to the sector between December 2007 and December 2009. Nearly 59% of U.S. Finance and Insurance jobs lost were in Credit Intermediation, but 46.3% of jobs were in that industry. Thus, Credit Intermediation, job-losses were heavily concentrated, based on the December 2007 share. Nevertheless, the relative hit to Connecticut's Credit Intermediation Industry was much greater. Though this industry employed, just under, 25% of Connecticut's Finance and Insurance workers, its relative contribution to job-losses over the recent recession/panic was double (nearly 48%) that of its share of Connecticut's Finance and Insurance employment in December 2007. Both, Securities, Commodities, and Brokers and Insurance were under-represented in their contribution to job-losses, based on their shares of Finance and Insurance employment in December 2007. In fact, the Insurance Industry's relative contribution to employment losses was just over half its share of employment in December 2007. The only other over-represented industry, in terms of job-losses, was the smaller, Funds and Trusts Industry, which contributed twice as many jobs to losses as its share of employment in December 2007 (3.9% versus 8.5%).



The two steepest declines in employment for Connecticut's Finance and Insurance Sector were the 9.21% in Credit Intermediation, which was steeper than its U.S. counterpart, and the 10.42% contraction in Funds and Trusts, which was double the decline in the U.S. Funds and Trusts Industry. The U.S. employment declines in Securities, Commodities, and Brokers and Insurance were both steeper than their Connecticut counterparts. Connecticut's steepest declines were in those industries that had smaller shares of employment in December 2007 than their U.S. counterparts. The net result was that Connecticut's Finance and Insurance Sector lost 4.79% of its jobs between December 2007 and December 2009, while the U.S. Finance and Insurance Sector lost 6.16%.

Connecticut's Financial Sector In the Aftermath of Recession and Panic---After what appears to be a turnaround in jobs in December 2009, though Connecticut's Non-Farm Employment grew faster than the U.S. between December 2009 and May 2010, job-losses in the State's Finance and Insurance Sector actually began accelerating and were steeper than the job losses in the U.S. Finance and Insurance Sector, especially in Credit Intermediation.

## **THE ECONOMIC CRISIS AND THE STATE BUDGET**

On July 1, 2010, Connecticut Comptroller, Nancy Wyman, in her statement to the Governor on Connecticut's fiscal condition, stated that The General Fund budget for FY2010 has been balanced through the use of:

- \$1.278 billion in budget reserve funds,
- Over \$800 million in federal stimulus dollars, and
- Payment deferrals and one-time transfers.

Further, in the absence of these non-recurring revenues and expenditure reductions, the Fiscal Year (FY) 2010 General Fund operating budget deficit would exceed \$2.0 billion dollars. In FY 2009, the state issued \$947.6 million in Economic Recovery Notes to close that year's operating deficit. And, though the steep declines in General Fund tax revenues, observed in the first half of this FY, have abated, and in light of significant increases in income tax and corporation tax rates, General Fund net tax revenues are still



expected to be relatively flat as compared to last FY, and are expected to be \$1.8 billion below their FY 2008 level.

IMPACT OF ECONOMIC CRISIS ON STATE REVENUES--Though the length of decline in Connecticut's General Revenues and the Personal Income Tax were three and six months shorter over the recent recession/panic than they were during the 2001 Recession, they were steeper over the recent crisis. Further, the decline in Sales Tax Revenues was both longer, and steeper, over the recent recession/panic. The decline in revenues from the Corporate Income Tax was eight months longer over the recent recession/crisis, compared to the 2001, though not as steep. On a compounded, annualized basis, Connecticut General Revenues, Personal Income Tax, and Sales and Use Tax all had much steeper rates of decline over the recent recession/panic, compared to the 2001 Recession. Although, over the 2001 Recession, the Corporate Income Tax declined at a rate more than double that of the recent crisis, its decline lasted eight months longer over the recent crisis.

STATES GET A TEMPORARY REPRIEVE--A temporary reprieve was granted to the states when President Obama signed into law the *Education, Jobs, and Medicaid Assistance Act* on August 10, 2010. Connecticut is slated to get an estimated \$309 million to help stave off teacher layoffs and cuts to Medicaid, which translates into \$110 million for local schools and \$199 million for Medicaid.

HOWEVER, STATES STILL FACE BUDGET STRESS--Though the bill President Obama signed into law in August, will certainly go a long way toward cushioning states' budget shortfalls, the states will still face significant fiscal stress in FY2011, and beyond. Nationally, state and local employment accounted for 15.1% of U.S. Non-Farm Employment. According to Mark Zandi of Moody's Economy.Com, in his testimony before Congress, if states get no more fiscal relief, they will have to take steps to eliminate deficits for state FY2011. He estimates that those steps could shave nearly a full percentage point off of GDP. That, in turn, could cost the economy 900,000 jobs. Historically, the State and Local Sector has accounted for about 12% of GDP and have



added about ¼ of a percentage point to annual GDP on an ongoing basis. If the State and Local Government Sector slips back into negative territory, it could contribute to a reversal of this still-fragile recovery.

## **WHERE DOES THE STATE'S ECONOMY GO FROM HERE? The Outlook for 2009-2011 and Beyond**

THE CONNECTICUT ECONOMY: Outlook for 2009-2011---As noted in the introduction, Connecticut seems to have done something over this cycle that it has not done before in the Post Cold War Era. Non-Farm Employment turned down going into the last recession after that of the U.S. and the State's recovery in jobs coincided with that of the U.S. jobs recovery rather than lagging it. Further, Connecticut's job-growth since the December 2009 recovery has been stronger than that for the U.S. And, until May, so was Private-Sector job-growth. But, Connecticut's Private-Sector job-growth trajectory flattened out in May, indicating a possible slowing in private-sector job growth. The June numbers showed a significant deceleration in private job-growth for the U.S. Government job growth had been stronger for the U.S. than for Connecticut until May when both U.S. and Connecticut Government job-growth spiked due to the hiring of Census workers. Based on the U.S. drop in June, the State's Government jobs may drop in June as well. The question is: Will the current recovery continue? Will the recovery slow to a crawl turning into a Japan-style lost decade, or will there be a repeat of the 1980 and 1981-82 double-dip recessions? The possibility that it could accelerate seems unlikely at this point.

Forecast for Annual Job Growth: 2009-2011-- On an annual basis, it is expected that Connecticut's economy will recover from the steep losses of 2009, but still register a decline of 5,000 jobs in 2010 as a result of the current recovery's slowing momentum going into the second half of the year. Assuming that, even if the recovery slows over the last one-half of 2010, it will nevertheless, continue, annual job-growth will turn positive again in 2011, for the first time since 2008, and that Connecticut will recover 15,730 jobs.



Forecast for 4<sup>th</sup> Qtr-to-4<sup>th</sup> Qtr Job Growth: 2009-2011-- Turning to the fourth-quarter-to-fourth quarter forecast for Connecticut employment, The Goods-Producing sector is expected to continue losing jobs over the forecast period, on a fourth-quarter-to-fourth quarter basis. However, losses will decelerate from 40,831 between 2007Q4 and 2009Q4, to 4,467 jobs over the 2009Q4-2011Q4 Forecast Period. Though losses are expected to subside in the Construction Sector, due to the continued drag of housing on the economy, not much growth is expected. Manufacturing, after hemorrhaging 24,000 jobs between 2007Q4 and 2009Q4, is expected to return to trend-losses, with about 3,000 more lost jobs over the 2009Q4-2011Q4 Forecast Period, due to continued re-structuring, including downsizing and outsourcing. As a result, on a 4<sup>th</sup> Quarter-to-4<sup>th</sup> Quarter basis, it is expected that, after shedding 66,025 total Non-Farm jobs between 2009Q4 and 2009Q4, Connecticut's Economy will recover 20,150 Non-Farm jobs between 2009Q4 and 2011Q4.

Sectoral Detail--After losing 25,194 jobs over the 2007Q4-2009Q4 Period, the Services-Providing Sector is expected to return to job-growth over the forecast period, adding 24,617 jobs, modest growth compared to the 51,077 jobs created over the 2005Q4-2007Q4 Period, as the last expansion was coming to a close. Once again, Health Care and Social Assistance (HCSA) is projected to account for a significant portion of net-job gains over the forecast horizon. HCSA is expected to add 7,700 jobs between 2009Q4 and 2011Q4, and account for 39% of all the net job-gains in the Services-Providing Sector. However, the growth-rate is expected to slow from the 5.5% pace between 2007Q4 and 2009Q4, to 3.0% over the 2009Q4-2011Q4 Forecast Period. Another previously strong-growing sector, Education, may also be facing some severe headwinds going into the forecast period. Its pace has already slowed from a 7.7% rate (+12,700) between 2005-07, fourth-quarter-to-fourth-quarter, to 2.1% (+3,700) over 2007Q4-2009Q4. The growth-rate is expected to slip to 1.9% (+3,500) over the 2009Q4-2011Q4 Forecast Period. In fact, even the modest forecast for job-growth in the Education Sector may be overly optimistic.



After losing 13,700 over the 2007Q4-09Q4 Period, Admin and Support is expected to recover 5,000 jobs over the forecast period. It is expected that employers will rely very heavily on temporary and contingent workers over the coming recovery and beyond. Another sector with a large amplitude over the business cycle is Professional, Technical, and Scientific. This sector too is driven by a few industries that dominate the cyclical behavior of the sector. Particularly, Computer Systems and Design, which accounted for three-quarters of the sector's job-growth between 2005Q4 and 2007Q4, and for one-quarter of the sector's losses over 2007Q4-2009Q4. Also contributing 1,000 jobs each to the 7,700 jobs lost in Professional, Technical, and Scientific were Architectural and Engineering, which accounted for 26% of the job-losses, Advertising, which accounted for 16% of the losses, and Legal, which contributed 14% of the sector's job-losses. A good portion of the 2,900 projected job-gains for the Professional, Technical, and Scientific Sector between 2009Q4 and 2011Q4 will be in Computer Systems and Design. Last, but certainly not least, especially concerning Connecticut's Economy is the forecast for Finance and Insurance Sector. Though it accounted for 42% of Finance and Insurance jobs in 2007Q4, the Finance sub-sector contributed 55% to the job-losses in this sector between 2007Q4 and 2009Q4. The principal activity under this heading is Credit Intermediation. And, though it accounted for only 26% of jobs in this sector in 2007Q4, Non-Depository Institutions accounted for two-thirds of all job-losses between 2007Q4 and 2009Q4, in which employment was concentrated in Real Estate Credit and Sales Financing. Job-losses in Depository Institutions, Commercial Banks and Savings Institutions, began to accelerate in 2009. It is expected that losses in Depository Institutions, Real Estate Credit, and Sales Financing will continue, though the pace will slow from a 7% decline between 2007Q4 and 2009Q4, to a 2% decline over the forecast period. Insurance, though recovering from the 2,700-job decline between 2007Q4 and 2009Q4, is still expected to shed another 800 jobs over the forecast period.

**RISKS TO THE FORECAST: Very High**—The risks to the forecast are quite high, and tilt toward the negative side. Some major risks include:



- The European debt crisis is a potential threat to Connecticut's Economy, as the Eurozone has two of Connecticut's three largest export destinations, France and Germany.
- The \$8,000 first-time homebuyers' credit ended on April 30, 2010 and much of the Federal fiscal stimulus package (ARRA) spending ends in 2011. In addition, the Fed began withdrawing from its program of buying up Residential Mortgage-Backed Securities (RMBS).
- An ensuing fiscal crisis for most states that must balance their operating budgets by law could cut the tentative recovery short. Although, a temporary reprieve was granted to the states when President Obama signed into law the *Education, Jobs, and Medical Assistance Act* on August 10, 2010.
- The housing sector, with its consequent multiplier effects, will continue to act as a drag on the economy. In addition, Connecticut can expect another generation of ARMs to re-set in 2010 and 2011, which could bring about a new wave of foreclosures.

In the final analysis, the need for households to continue the long process of repairing their balance sheets, by working off excessive debt-loads, in the face of continued weak housing prices, will act as a significant drag, on both, the State and National economies over the entirety of the forecast horizon.

THE CONNECTICUT ECONOMY: Beyond 2011---With the end of the Cold War and the downsizing of the defense industry, in conjunction with the restructuring of the insurance industry, the Connecticut Economy's ability to create jobs has been severely effected. In the 1990's, Connecticut's job-creation rate fell to an anemic 0.5% per year. And, the first eight years of this century have seen a collapse in the job-creation ability of both the U.S. and the Connecticut economies. The U.S. added jobs at weak 0.6% per year rate between 2000 and 2008, and Connecticut for all practical purposes had no job growth, adding jobs at a rate of only 0.05% per year. Further, since the end of the Cold War, defense cutbacks, and the restructuring of the insurance industry, Connecticut has become more strongly tied to the fortunes of the U.S. Economy.

The changing fortunes of regional economies, driven by changes in competitive advantage, has resulted in a trend of firms' reconfiguring themselves through what is



termed “outsourcing”, or what economists call Vertical Disintegration, or Production Fragmentation. *Vertical Disintegration*, or outsourcing occurs when a firm contracts out to an external supplier to provide a function previously performed internally, within the firm, or spins off a division, at an earlier stage of its production process, to form a new firm. Whether or not the U.S. is a net beneficiary of offshore outsourcing, and how much is of the on-shore type is not critical for the affects it would have on Connecticut’s economy. Critical to Connecticut’s labor market, is whether or not outsourcing is out-of-state, regardless of whether or not it is onshore, or offshore with regard to the national economy.

In light of this trend, it appears that Connecticut’s muted GDP-growth and declining labor-market dynamics since 1997, may have not only been driven by higher productivity, compared to the U.S., but also by a faster than national pace, in the vertical disintegration of its industry structure resulting in GDP declining as a share of Gross Output (GO), in conjunction with growth in the importation of Intermediate Inputs from out of state. If these trends continue, then the long-term outlook appears to be one in which the State’s firms continue the process of vertical disintegration at a faster pace than the U.S., which, in turn, if most outsourcing is out-of-state, translates into slower growth in GDP (= Value Added), firm formation, and job creation.

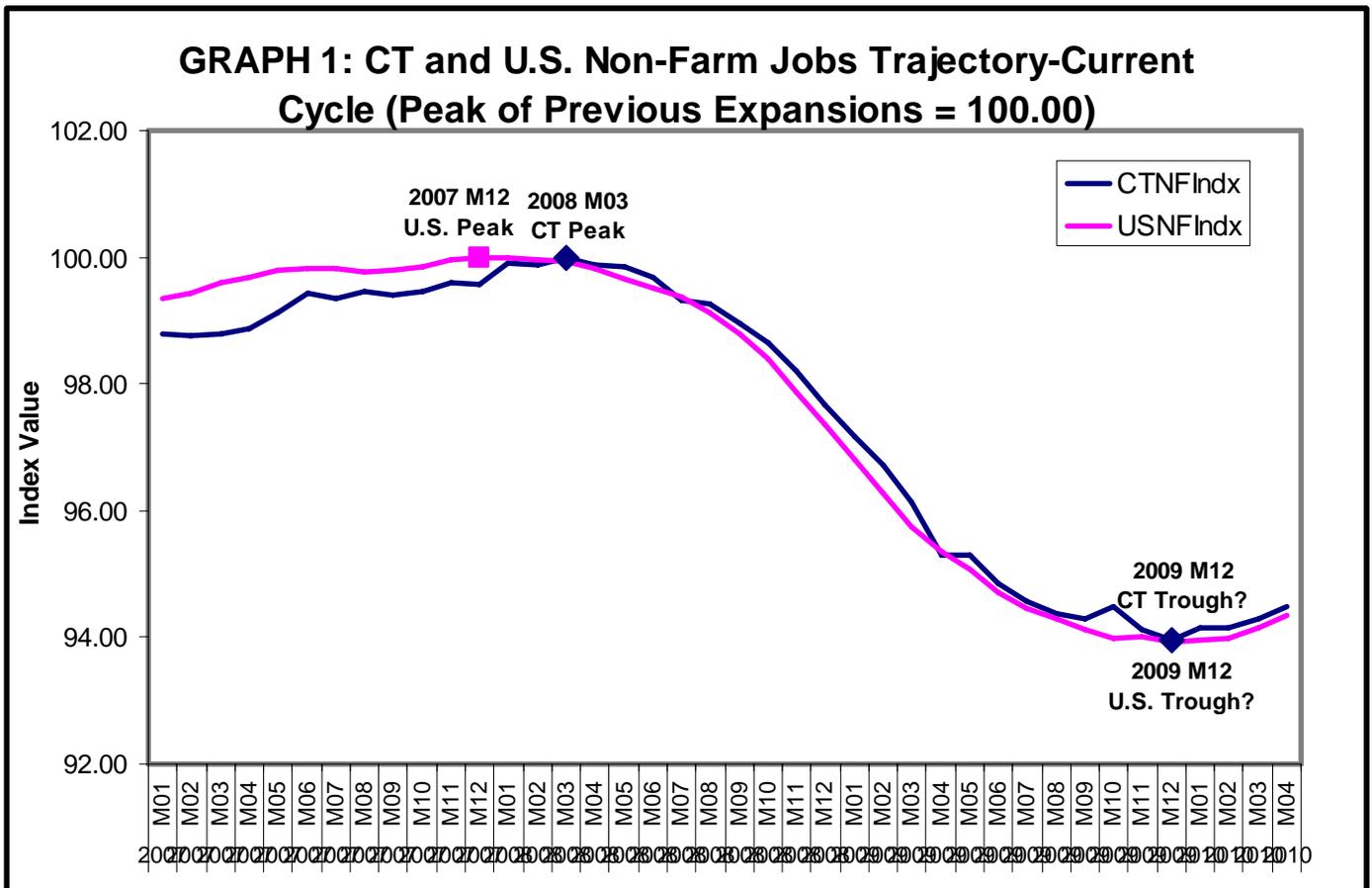


**Current Conditions and Outlook for  
the Connecticut Economy:  
2009-2011**

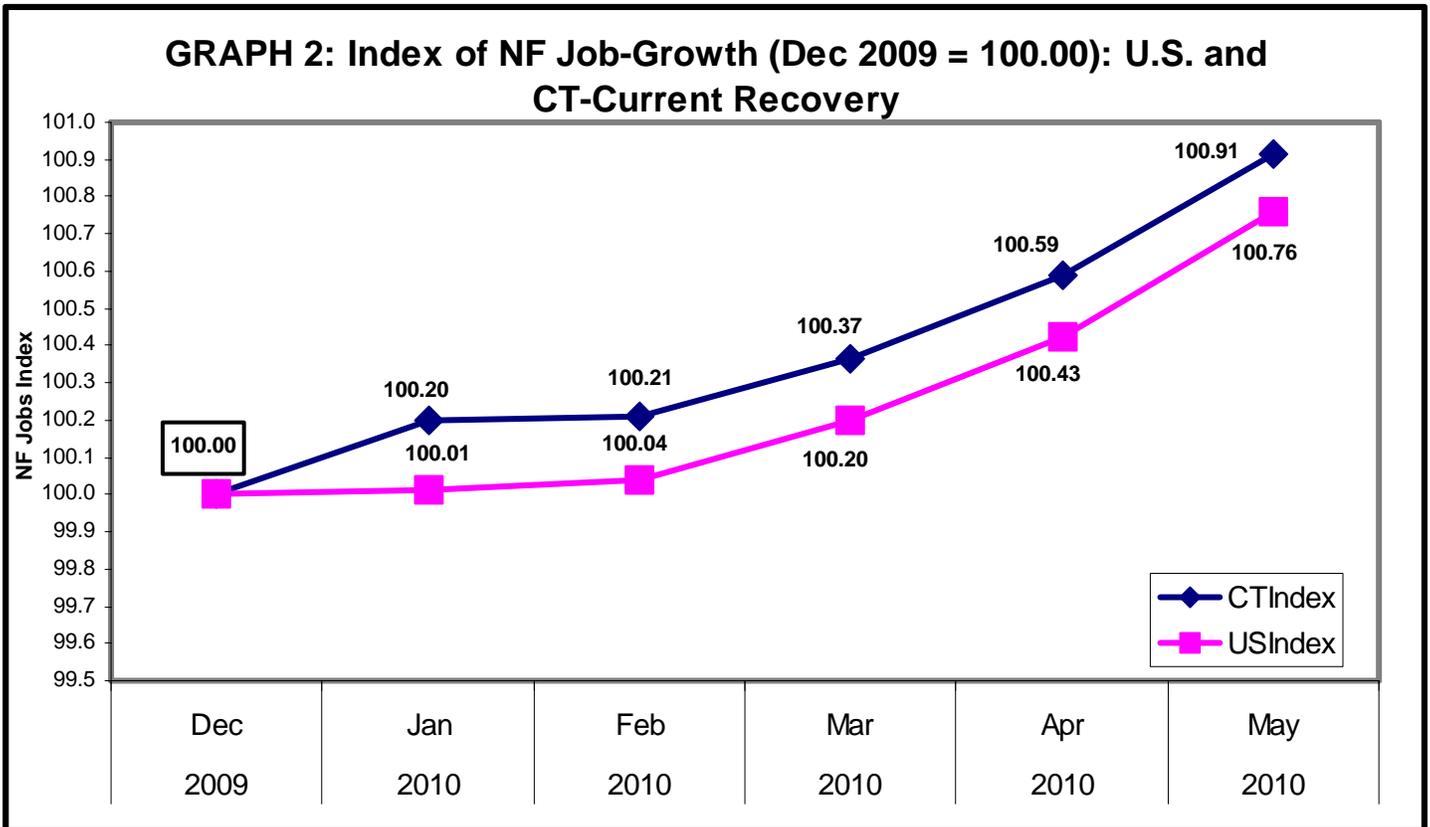
# VOLUME 2: The Connecticut Economy

## I. CURRENT CONNECTICUT ECONOMIC CONDITIONS: Spring 2010

Connecticut seems to have done something over this cycle that it has not previously done in the Post Cold War Era. Non-Farm Employment turned down in Connecticut going into the last recession after the U.S. Graph 1 presents an index of U.S. and Connecticut employment, with both index values equal to 100.00 at their respective peaks (indicated on Graph 1) in the last recovery/expansion. The U.S. officially went into recession in December 2007, and employment turned down that same month. Yet Connecticut's Non-Farm Employment did not turn down until March 2008. Further, it appears that the U.S. and Connecticut employment cycles both bottomed in December 2009. If these turning points hold up in next year's benchmark, it would mean that Connecticut's recovery coincided with the U.S.—again, a first in the Post Cold War Era. On the other hand, while the U.S. had job declines of 3.0% per year on an annualized basis, over 24 months, Connecticut's employment contracted at a 3.5% per year annualized basis, over 21 months.



A Stronger Comeback?—Graph 2 tracks the U.S. and Connecticut apparent recoveries beginning in December 2009 to May 2010, the last period of available Non-Farm Employment data. An index identical to the one constructed for Graph 1 traces the month-to-month growth in U.S. and Connecticut jobs, with December 2009 equal to 100.00.



SOURCE: U.S. BLS, CTDOL-Research and calculations by CTDOL-Research.

Where is the Job-Growth Coming From?—As noted above in the discussion on Graph 1, this is the first Post Cold War recession in which the U.S. went into recession before Connecticut, and in which Connecticut and U.S. jobs-growth turned up simultaneously, instead of Connecticut’s turnaround in jobs lagging behind that of the U.S. But, in addition, Connecticut’s job-growth has been stronger than U.S. job-growth from December 2009 through May 2010. Connecticut’s index value is above that for the U.S. over the entire period tracked in Graph 2. From December to May Connecticut’s Non-Farm Employment grew by 0.91%, while that for the U.S. grew by 0.76%. For both the



U.S. and Connecticut economies, the jobs numbers have been boosted by the 2010 Census. The hiring of temporary workers for the Census is summarized in Table 1.

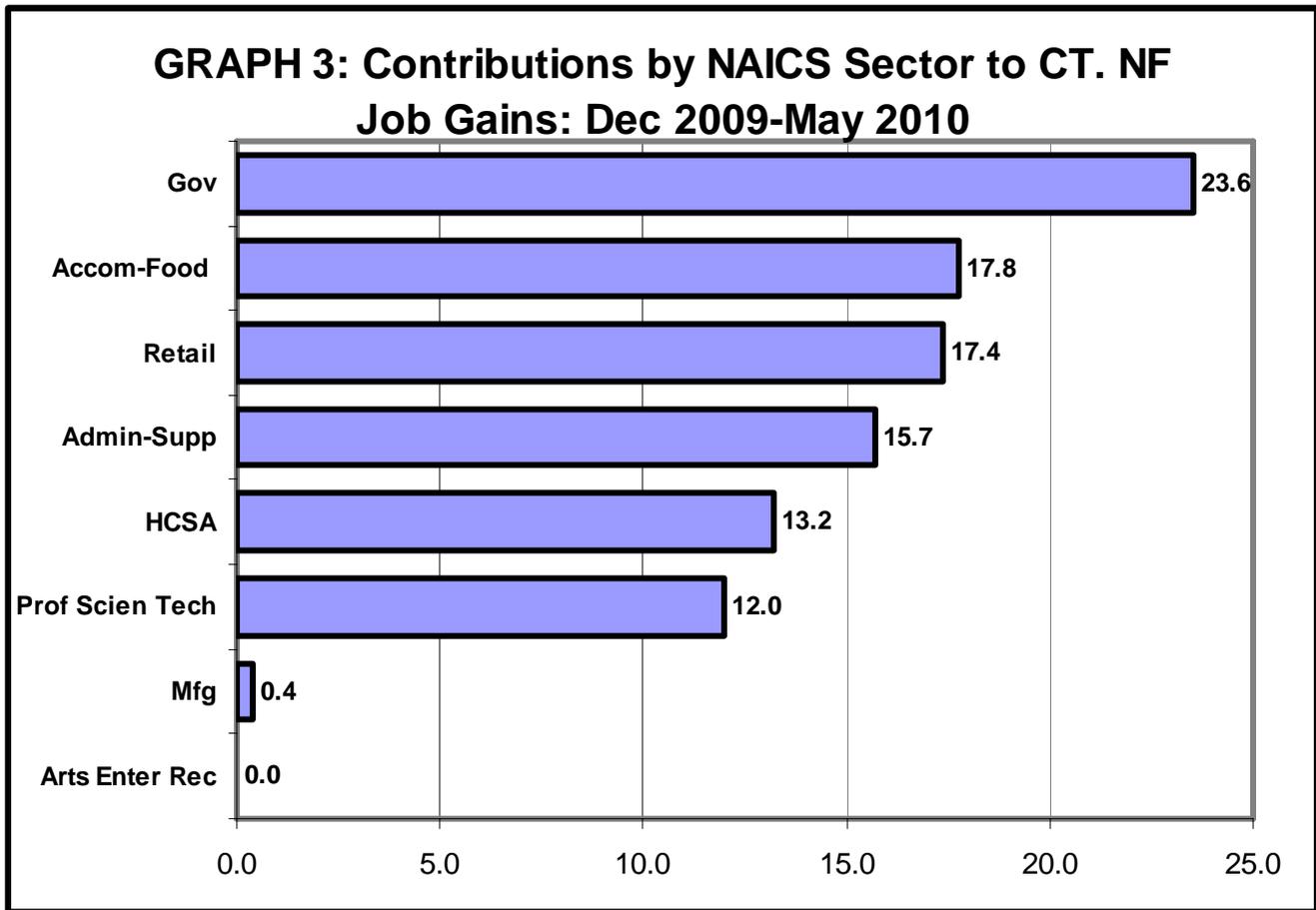
<b>TABLE 1: U.S. and CT. Government Job Growth</b>				
<b>PANEL A: U.S. Government Employment*</b>				
<b>GovLevel</b>	<b>Dec-09</b>	<b>May-10</b>	<b>CHANGE</b>	<b>%CHANGE</b>
<b>FEDERAL</b>	2,824	3,395	571	20.22
<b>STATE</b>	5,178	5,157	-21	-0.41
<b>LOCAL</b>	14,479	14,416	-63	-0.44
<b>TotGov</b>	22,481	22,968	487	2.17
<b>PANEL B: CT. Government Employment*</b>				
<b>GovLevel</b>	<b>Dec-09</b>	<b>May-10</b>	<b>CHANGE</b>	<b>%CHANGE</b>
<b>FEDERAL</b>	18.6	24.8	6.2	33.33
<b>STATE</b>	67.6	66.7	-0.9	-1.33
<b>LOCAL</b>	160.0	160.4	0.4	0.25
<b>TotGov</b>	246.2	251.9	5.7	2.32
<b>SOURCE: U.S. BLS</b>				
<b>*X 1000</b>				

Panel A presents the level of U.S. Federal, state, local, and total Government employment in December 2009, the month U.S. and Connecticut Non-Farm Employment declines ended, and May 2010, the last month of available data. The last two columns (left-to-right) present the change and the percent-change from December to May. Panel B depicts the same information for Connecticut. Reflecting the hiring of temporary Census workers, U.S. Federal employment grew by 571,000, or 20.2%, and Connecticut's Federal employment grew by 6,200, or 33.3%. Census workers have accounted for a significant number of the jobs created both the U.S. and Connecticut since the recovery, especially for the month of May. Between December 2009 and May 2010, the hiring of temporary workers for the Census accounted for 50% of net, new U.S. job-growth and for 40% of Connecticut job-growth.

So where is the private-sector job-growth coming from? Graph 3 presents the eight NAICS sectors that have added jobs between December 2009 and May 2010. The Public



Sector accounted for 5,700 net, new jobs added to Connecticut’s economy, which represents 40% of total net new jobs, and 24% of the jobs added by the eight NAICS sectors with job-growth. And, as discussed above, much of the hiring in the Public Sector was for the 2010 Census at the Federal level. But, where are the private jobs being created? As indicated on Graph 3, the second largest contributor to job-growth, and largest private sector NAICS sector, is Accommodation and Food Services, which accounted for 17.8%, or 4,300 net, new jobs generated by sectors with job growth.



SOURCE: U.S. BLS and calculations by CTDOL-Research.

Digging down below the sectoral level must be viewed with caution, as data are not available on a seasonally adjusted basis below the sectoral level of detail. Comparing the December 2009-May 2010 Period to that of December 2007-May 2008, on the eve of the recent recession, might offer some insights into the source of sectoral job growth. Based on this comparison, it appears that the Food Services Industry accounted for much of the



growth in the Accommodation and Food Services NAICS sector. Drilling down further, the growth in Foods Services jobs was nearly evenly split between Full-Service and Limited-Services restraints. The next biggest contributor to job-growth was Retail, which accounted for 17.4%, or 4,200 net, new jobs between December 2009 and May 2010. Again, looking at the seasonally unadjusted data for Retail industries below the sectoral level, it shows that the six Retail industries that provide detail from the Establishment Survey indicate that, even though all declined between December and May, due to seasonal factors, the declines over the December 2009-May 2010 Period were smaller for four of the six industries, and were positive for Motor Vehicles and Parts (which was negative over the December 2007-May 2008 Period), and for Building Materials and Supplies, which was positive, and stronger than the growth over the December 2007-May 2008 Period. Thus, the growth in Retail jobs seems to be broad-based, with particularly strong boosts in Building Materials and Motor Vehicles.

Close behind Retail is Administration Support and Waste Management (hereafter Admin-Support), which contributed 3,800 net, new jobs, or 15.7% of the jobs added to Connecticut's Economy between December 2009 and May 2010 (see Graph 3). As for the U.S. Economy, a large driver of the job-growth and declines over the business cycle is Employment Services, particularly Temporary Help. As discussed in *Volume 1: The U.S. Economy*<sup>1</sup>, temporary help has become a much more significant factor in the U.S. Labor Market, and this is also true of the Connecticut Labor Market.

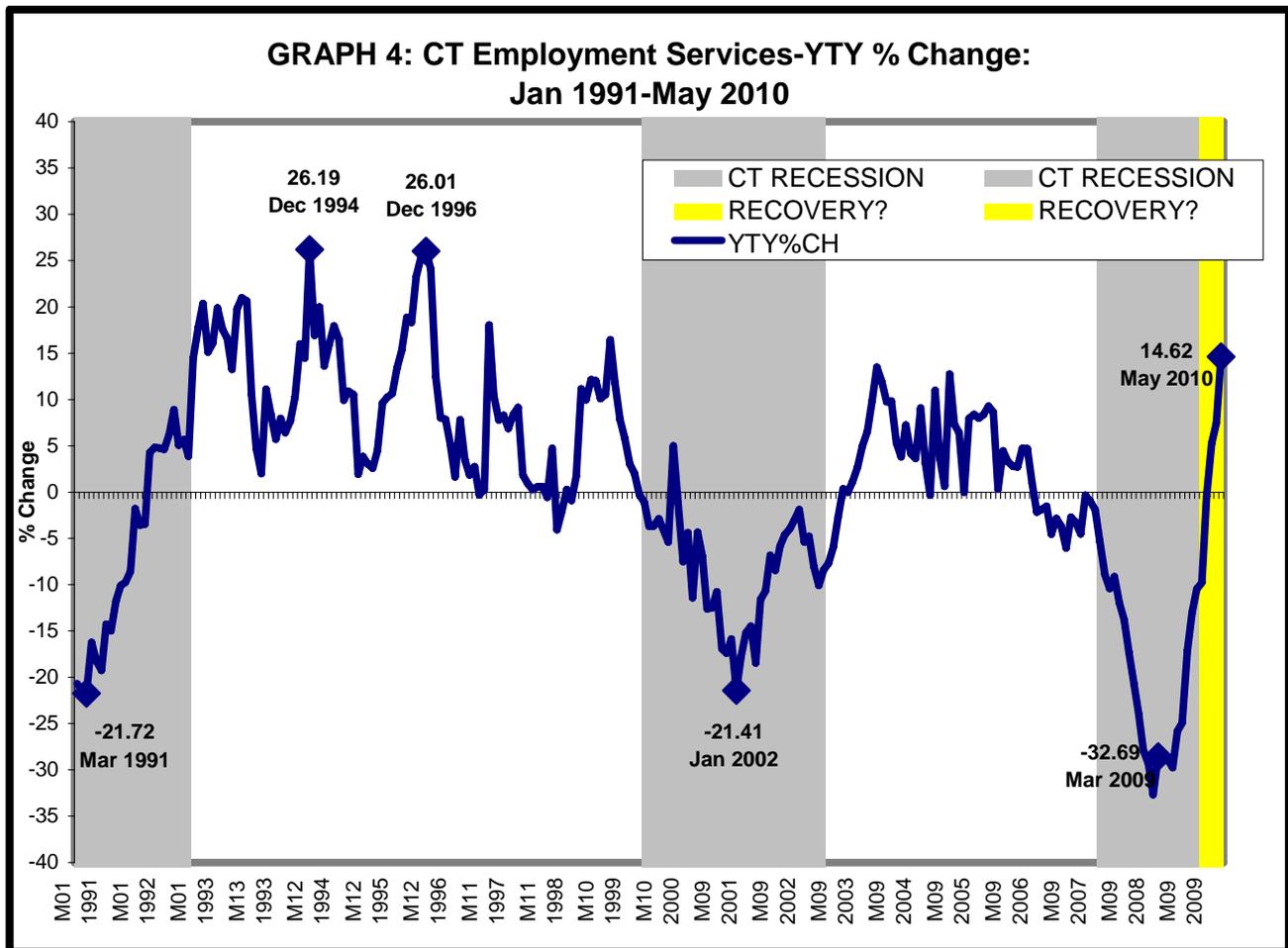
Graph 4 tracks the YTY percent-change in Connecticut Employment Services jobs from 1990 to 2010. Unfortunately, Connecticut's Employment Services is not broken down by industries so Temporary Help cannot be isolated as it could for the discussion of the U.S. jobs market. However, at the U.S. level, Temporary Help accounted for about three-quarters of all Employment Services jobs. Assuming Connecticut's Employment Services Industry is similarly distributed, Graph 4 shows that, like the U.S., the amplitude of the YTY percent-change in jobs over the business cycle is much greater than that for Total Non-Farm Employment. And, over the last expansion, also like the U.S., the share of

---

<sup>1</sup> See U.S. Outlook.



Employment Services, of Total Non-Farm Employment increased, but then fell as Connecticut entered recession and then panic. With recovery in jobs, the YTY change increased rapidly and dramatically. Again, this follows the national pattern. Outsourcing and the more extensive use of temporary and contingent workers is reflected by the increasingly larger swings in the YTY percent-change in employment in the Employment Services Industry over successive cycles since 1990. Again, this pattern is also observed in the U.S. data. Over the recent crisis/panic, the 32.69% decline in March 2009 (topping the 21% declines in the two previous Post Cold War recessions), on a YTY basis, is the largest over the range of available data. From that point on, the YTY growth-rate accelerated in an almost vertical climb, and in May 2010, the YTY growth-rate in Connecticut's Employment Services jobs was 14.62%. It is this behavior of temporary help employment over the business cycle that has been the principal driver of the Admin-Support Sector.



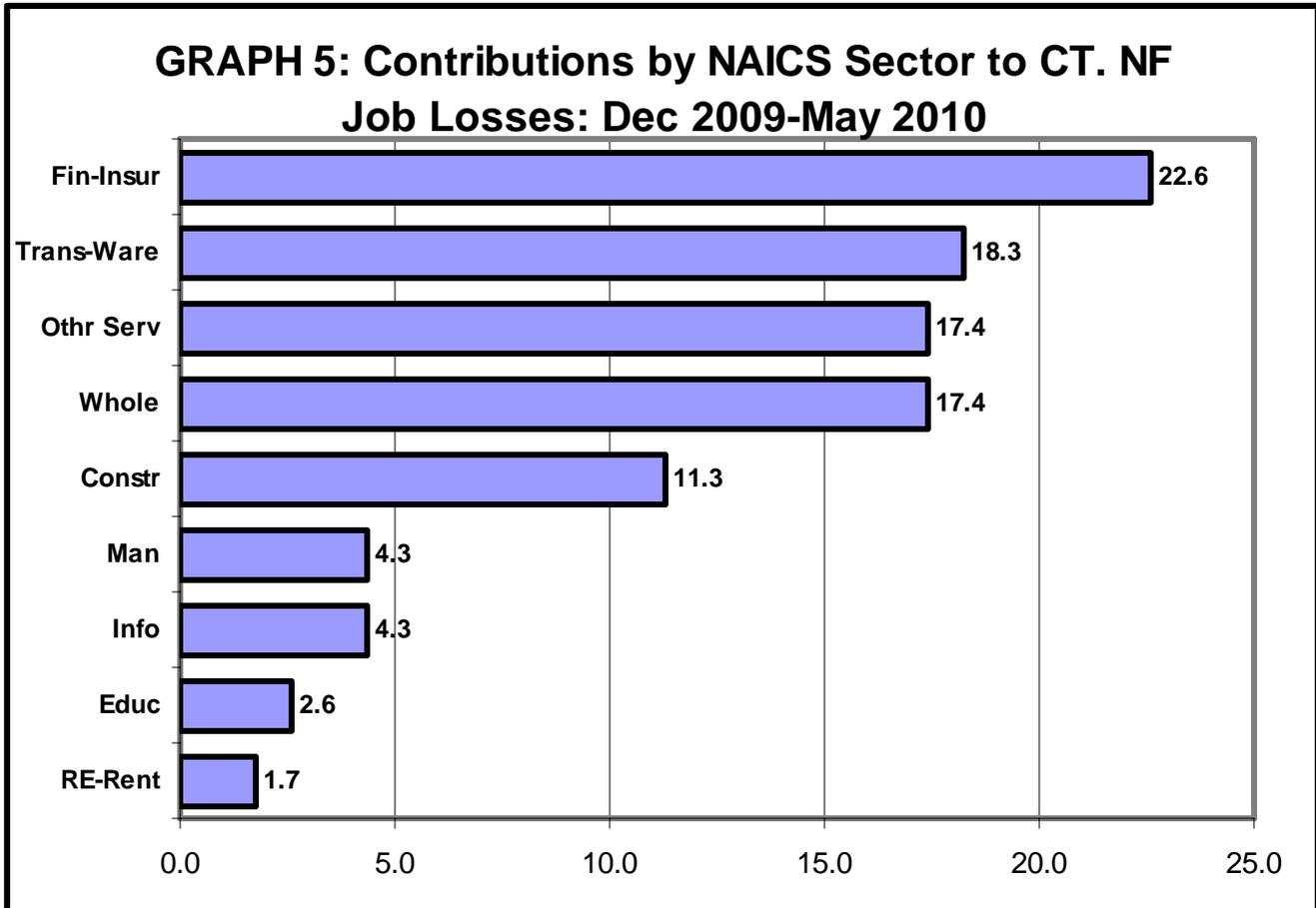
Trend-Driven Sectors-- Health Care and Social Assistance (HCSA) accounted for 13.2% of Connecticut's job-creation between December 2009 and May 2010. However, HCSA and Education were the only two NAICS sectors adding jobs to Connecticut's Economy over the recession and panic. Both HCSA, and Education (which accounted for 6.3% of the jobs added during the current recovery), are both driven by trend-dominated factors. However, Education is also subject to the fiscal health of especially local governments, and that is tied to the business cycle. Once the recent extension of Federal aid to the states winds down in 2011 the growth in Education employment will end. In fact, as shown in Graph 5, below, the revised jobs data shows that the State's Education Sector has actually lost 300 jobs. Thus, the demographic trends in education are being overwhelmed by the current economic crisis.

There are some sectors that are predominately, or completely, by cyclical factors and therefore experience large swings of growth and decline over the business cycle. Manufacturing, on the other hand, has been pulled by both, trend and cyclical, forces. And, so far, Manufacturing jobs have actually increased over the current recovery, contributing a modest 100 jobs, which accounts for 0.4% of net, new jobs between December and May. The Professional, Technical, and Scientific Sector (hereafter Prof-Tech) accounted for 12%, or 2,900 of the jobs, added by growth sectors over the current recovery. Like Admin-Support, this too is a sector in which strong cyclically, dominated industries play a major role in driving its behavior over the cycle. In addition, some important trend factors also drive this sector, particularly the trend toward firms, particularly in the Financial Services Sector, outsourcing intermediate inputs, such as purchased services (i.e., temporary help and contingent workers).

HOWEVER, Sectors Are Still Losing Jobs—As depicted in Graph 5, nine of Connecticut's NAICS sectors continued to shed jobs over the current, apparent recovery. Three of those sectors accounted for one-third of the net job-losses between December 2009 and May 2010, and are directly connected to the epicenter of the recent housing bubble, recession, and financial panic. Finance and Insurance accounted for 22.6%, or 2,600, jobs lost, Construction had a net loss of 1,300 jobs, and accounted for 11.3% of



jobs lost, and Real Estate had a net decline of 200 jobs, accounting for 1.70% of jobs lost. Three NAICS sectors each contributed 17% to 18% to job-losses, and combined accounted for nearly 54% of net, job-losses. Transportation and Warehousing had a net loss of 2,100 jobs, Other Services shed 2,000 jobs, and Wholesale Trade had a net decline of 2,000. Information had a net-loss of 500 jobs, Management of Companies and Enterprises declined by 500, and Education was down by 300 jobs.



SOURCE: U.S. BLS and calculations by CTDOL-Research.

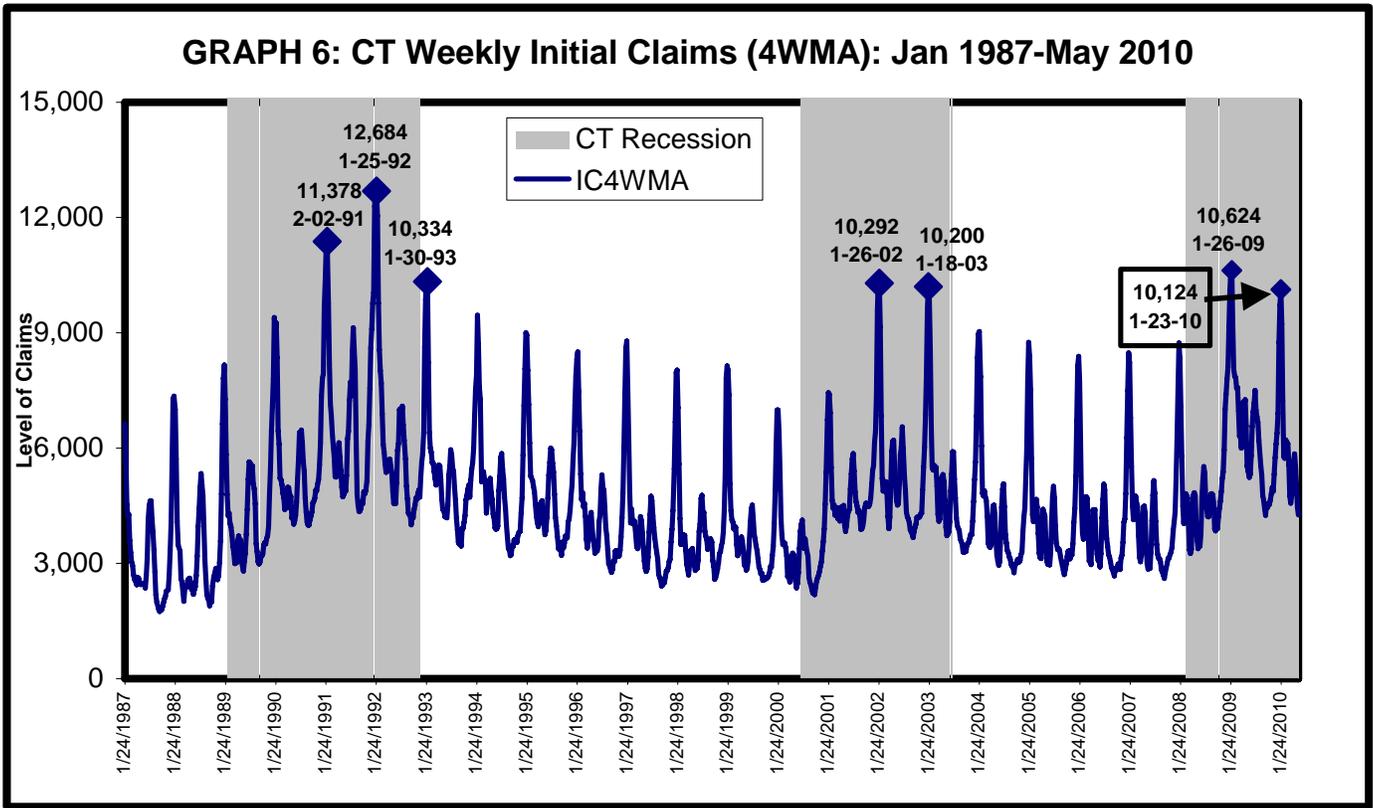
Connecticut seems to have made a strong showing, compared to the U.S., over what appears to be a recovery that began in December 2009. And, while both Connecticut and U.S. job-growth was boosted by the hiring of temporary Census workers by the Federal Government, it seems that that boost has had a larger affect on the U.S. numbers than on the Connecticut numbers. Connecticut seems to have created more private-sector jobs over the December 2009-May 2010 Period. But, is this job-creation, and economic



recovery in general, sustainable? To further explore where we might be going over the 2009-2011 outlook horizon, the next section recaps where we have been, and, in particular, how the State's Economy was impacted by the recent recession and panic, and what that implies for the near future economic prospects.

What is the Signal from Weekly UI Claims?—Initial Claims are an important indicator of the level of job-losses, at least by those eligible for Unemployment Insurance (UI). UI Claims are reported on a weekly basis making them the highest-frequency indicator of labor-market activity. Further, since they are reported on a weekly basis, they are the most, timely indicator of labor-market conditions. If Initial Claims are declining over an extended period, then that may indicate that conditions in the labor market are improving.

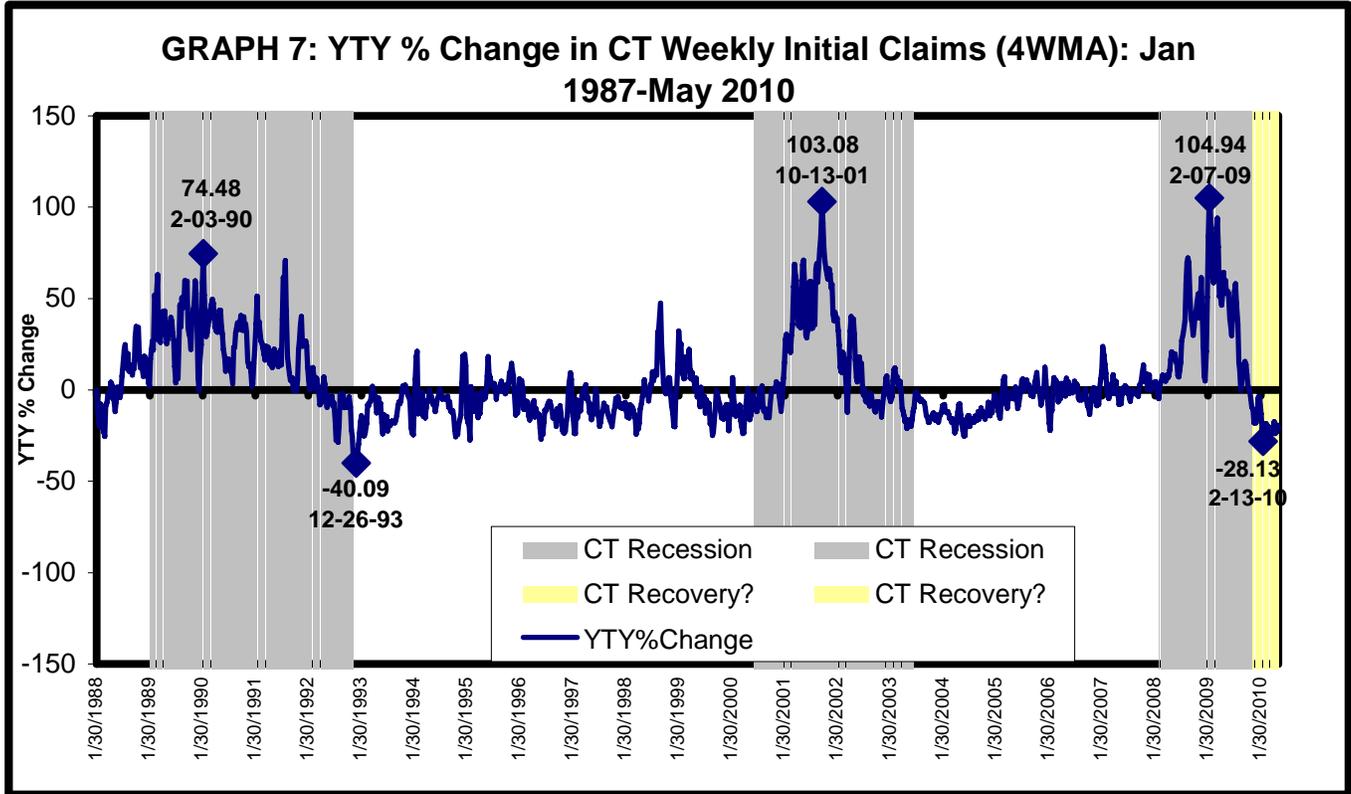
Graph 6 presents the Four-Week Moving Average (4-WMA) of Connecticut Initial Claims. As is apparent, even after applying the moving-average filter, there is still a lot of noise in the data, nevertheless, a clear-enough signal still comes through.



SOURCE: U.S. ETA and calculations by CTDOL-Research.



The January 2010 levels of Initial Claims were still above 10,000, which are still at recessionary levels, as made apparent by Graph 6. And, after Week-to-Week (WTW) declines in Initial Claims continued through February and March, they reversed direction in April, and the WTW change jumped as high as 10%, the week of April 24<sup>th</sup>. However, in the Month of May, Initial Claims, once again, declined for four consecutive weeks.



SOURCE: U.S. ETA and calculations by CTDOL-Research.

In addition, Graph 7 indicates the YTY percent-change in Connecticut's Initial Claims has experienced the largest drop since the December 1993 YTY decline in Initial Claims coming out of the 1989-92 Recession. Connecticut's Initial Claims dropped by 28.13% on a YTY basis during the week of February 13, 2010. This is the largest decline since the 40.09% YTY decline of the week of December 26, 1993. The weeks of February 20<sup>th</sup> and April 3<sup>rd</sup> each exceeded 27%, YTY. Thus, the signals from the Initial Claims data are that a recovery is probably underway, and the jobs data discussed above, reinforces this reading on the current state of the Connecticut Economy.



Of course, the sustainability of the current, apparent recovery, both at the national and state levels, is another question, which will be taken up below in the discussion of the outlook for Connecticut to 2011.

## **II. BUBBLE, RECESSION, AND PANIC: Assessing the Hit to the State's Economy**

The recent recession has been like no other in the Post World War II Era. There has not been a recession accompanied by a financial panic since The Great Depression. Consequently, looking to the historical record of the post-war recoveries will not be as informative as it was for understanding the dynamics of previous post-war recoveries. In many respects the historical reference must reach further back in time to previous episodes of banking panics that occurred during the first third of the 20<sup>th</sup> Century, and even the last half of the 19<sup>th</sup> Century for episodes of the sudden loss of confidence in the banking system. Examination of cross-country experience within the last 30 years offers further insights into the current economic environment/climate.

The principal concern over what appears to be an underway recovery is: Can the economy sustain a recovery and propel itself on to the expansion phase once government supports are phased out, or will the national and state economies sink into a double-dip like that of 1980 and 1981-82 back-to-back recessions, or worse? Recessions accompanied by financial panics are usually followed by weaker recoveries, especially on the heels of a popping asset bubble, due to the damage done to the economy's balance sheets, in conjunction with the disruption in the flow of credit. These factors may be playing a significant role in the economy's slowing activity as the \$8,000 first-time, homebuyers tax-credit has expired in conjunction with the Fed's withdrawing from the mortgage market.

To find out where the economy is going, it is first critical to find out where it has been, and therefore, in the process, discover how we got to where we are. This section re-traces



how the recession and panic impacted the major sectors of Connecticut's Economy and what it implies for a sustainable recovery. The major sectors and markets of the economy are each assessed beginning with Connecticut's Labor Market, then Income and Spending are looked at, followed by an assessment of the State's housing market after the housing bubble and sub-prime mess. Finally, Connecticut's Financial Sector, not just an important sector of the State's Economy, but one whose importance is also increasing, especially in terms of the State Economy's income and output.

## **A. CONNECTICUT'S LABOR MARKETS**

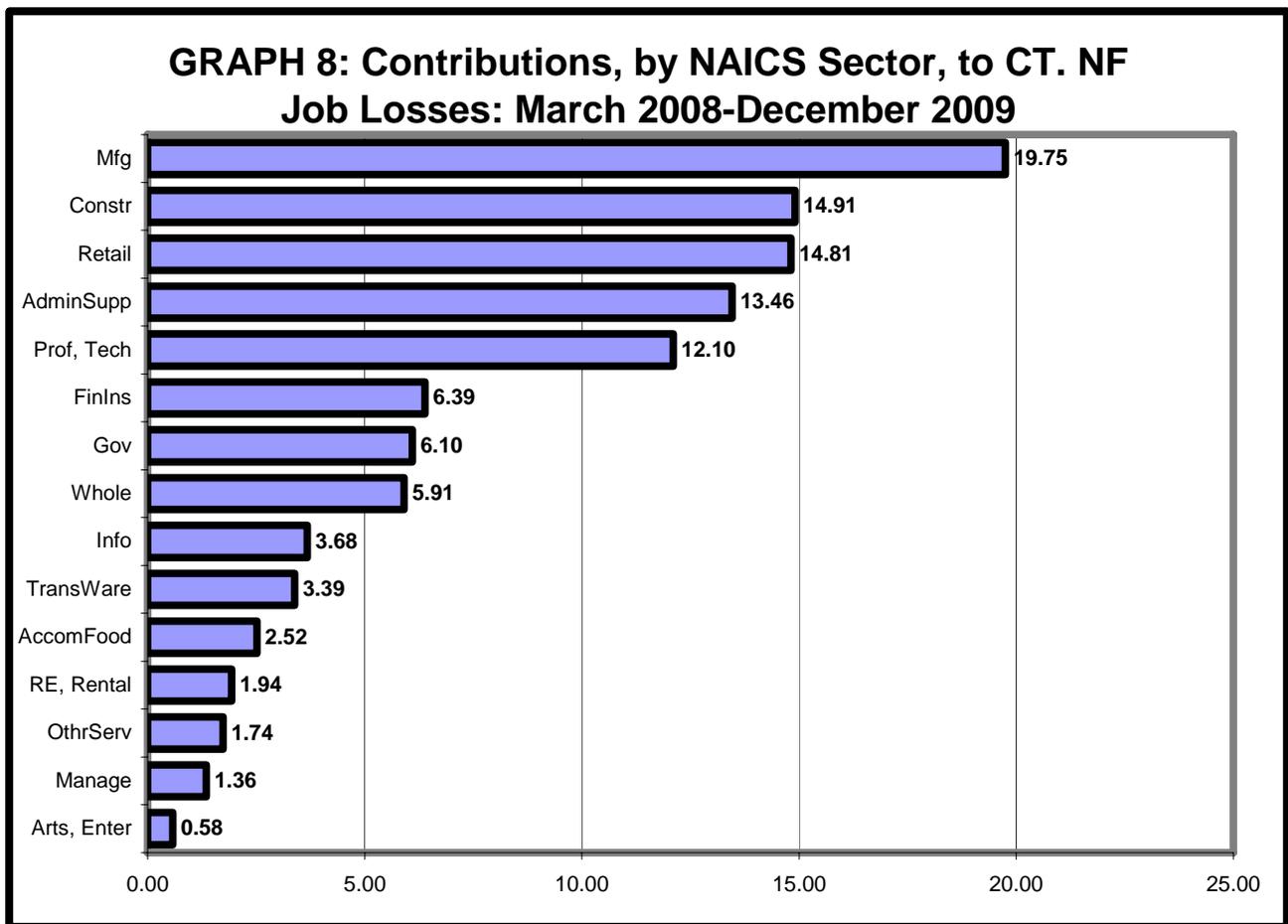
As pointed out in Section I, above, Connecticut went into recession after the U.S. in March 2008. Since both the U.S. and Connecticut turned around, in terms of job-growth, in December 2009, Connecticut's recession, based on Non-Farm Employment, lasted 21 months, compared to the U.S. with a length of 24 months (U.S. Non-Farm jobs turned down in December 2007, and then resumed growth after December 2009). Thus, at least, the jobs-recession was three months shorter in Connecticut, compared to that for the U.S. For the U.S., jobs declined by 8.4 million, or 6.06% over a 24-month period. For Connecticut, jobs declined by 103,400, or 6.04%, over a 21-month period. At first, it looks like the intensity was the same for both Connecticut and the U.S., but, since Connecticut's jobs-recession was shorter, when put on an annualized basis, it turns out that Connecticut's decline was steeper than that for the U.S. Connecticut lost jobs at a rate of 3.50% per year over 21 months, while the U.S. lost jobs at a rate of 3.08% per year over a 24-month period.

Graph 8 presents the contributions to the State Economy's job-losses by NAICS sector over the recession/panic, ranked in the order of their contribution. Nearly 20% (20,400 jobs) of all the jobs lost in Connecticut's Economy between March 2008 and December 2009 were in Manufacturing. The next biggest hit was Construction, which shed 15,400 jobs and accounted for 15% of jobs lost. Retail accounted for another nearly 15% of job-losses. Admin-Support and Professional-Technical each accounted for more than 10% of



jobs lost, and Finance and Insurance, Government, and Wholesale Trade each contributed more than 5% of the jobs lost during the recession/panic.

How does this compare to the contributions to U.S. job-losses? Based on the ranking of NAICS-sector contributions to U.S. job-losses in Graph 57 (see Part 1, *U.S. Outlook*), the pattern of Connecticut’s job-losses seems to be pretty close to that of the U.S. For both Connecticut and the U.S., Manufacturing accounted for the most jobs lost, this was followed by Construction and Retail. Construction, of course, was directly impacted by the bursting of the housing bubble, and retail indirectly, as consumers funded their

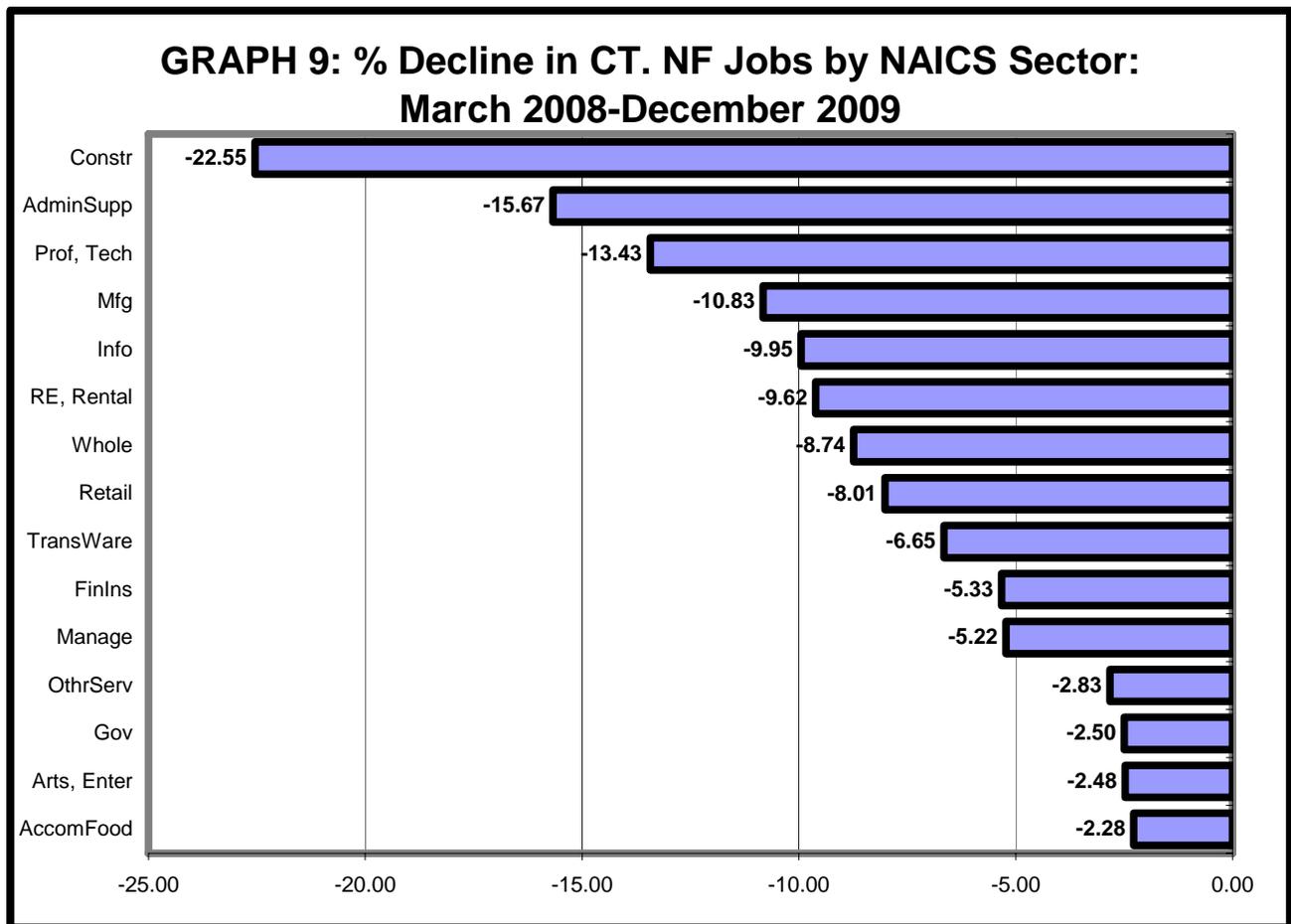


SOURCE: U.S. BLS and calculations by CTDOL-Research.

spending, at unsustainable levels, by tapping into house-price appreciation through Mortgage Equity Withdrawals (MEW). As discussed in Section I, above, Admin-Support is driven by the behavior of the Temporary Help Industry over the business cycle, both at



the state and national levels. The hiring of temps increases rapidly as the economy comes out of recession, but contracts rapidly as the economy slows. In addition, temporary and contingent workers have become larger shares of the workforce over the last three decades<sup>2</sup>. Professional-Technical is also driven by a couple of cyclically sensitive industries, particularly, Engineering and Architectural, which is tied to the Construction Sector, and Computer Systems and Design, which is tied to the Financial Sector, particularly the Insurance Industry.



SOURCE: U.S. BLS and calculations by CTDOL-Research.

Graph 9 ranks Connecticut’s NAICS sectors by the steepness of their job contractions over the recent recession/panic. Not surprisingly, Construction, the most negatively

<sup>2</sup> For instance, see Bureau of Labor Statistics, CONTINGENT AND ALTERNATIVE EMPLOYMENT ARRANGEMENTS (February 2005) U.S. Department of Labor: Washington and Dey, Mathew, Susan Houseman, and Anne Polivka, *What Do We Know about Contracting Out in the United States? Evidence from Household and Establishment Surveys* (September 2009) Upjohn Institute Staff Working Paper No. 09-157, Upjohn Institute: Kalamazoo, MI.



impacted sector, contracted by 23% between March 2008 and December 2009. This was followed by Admin-Support, again, driven by Temporary Help employment-losses, and Professional and Technical. This is another major sector driven by cyclically sensitive industries, particularly, Engineering and Architectural, which is tied to the Construction Sector and Computer Systems and Design whose services are heavily targeted toward the financial sector. Manufacturing contracted by 10.83% and Information and Real Estate each contracted by between 9% and 10%. Retail and Wholesale Trade each contracted by between 8% and 9%. It is, of course, no coincidence that the sectors with the steepest declines in employment also made the largest contributions to job losses.

It is an Ill Wind That Blows No Good—Even in the midst of the worst recession since the 1930’s, there were sectors that were still adding jobs through the whole crisis. Most net, new jobs, both nationally and in the State’s Economy, were created in the Health Care and Social Assistance (HCSA) Sector. HCSA added 7,400 jobs to Connecticut’s Economy between March 2008 and December 2009. That represents a 3.11% increase in the HCSA job-base. The other sector to add jobs over the recent recession/panic period was Education. Jobs in the Educational Services Sector expanded by 2.63%, which translates into an addition of 1,500 jobs over the 21-month recession period. The job-growth in both HCSA and Education was driven by longer-term, demographic factors that muted any cyclical forces operating to produce job-losses in other sectors. Although, HCSA job-growth in Connecticut may be muted by the losses in the Hospital Industry that began toward the end of 2008, and Education may be severely impacted by budget cuts due to the reduction in State aid to cities and towns from the State’s budget deficit.

## **B. INCOME AND SPENDING**

GRAPH 10 tracks Connecticut Real Quarterly Personal Income (QPI) and Real Disposable Personal Income (DPI) over the Business Cycle: from 1990Q1 to 2009Q4<sup>3</sup>.

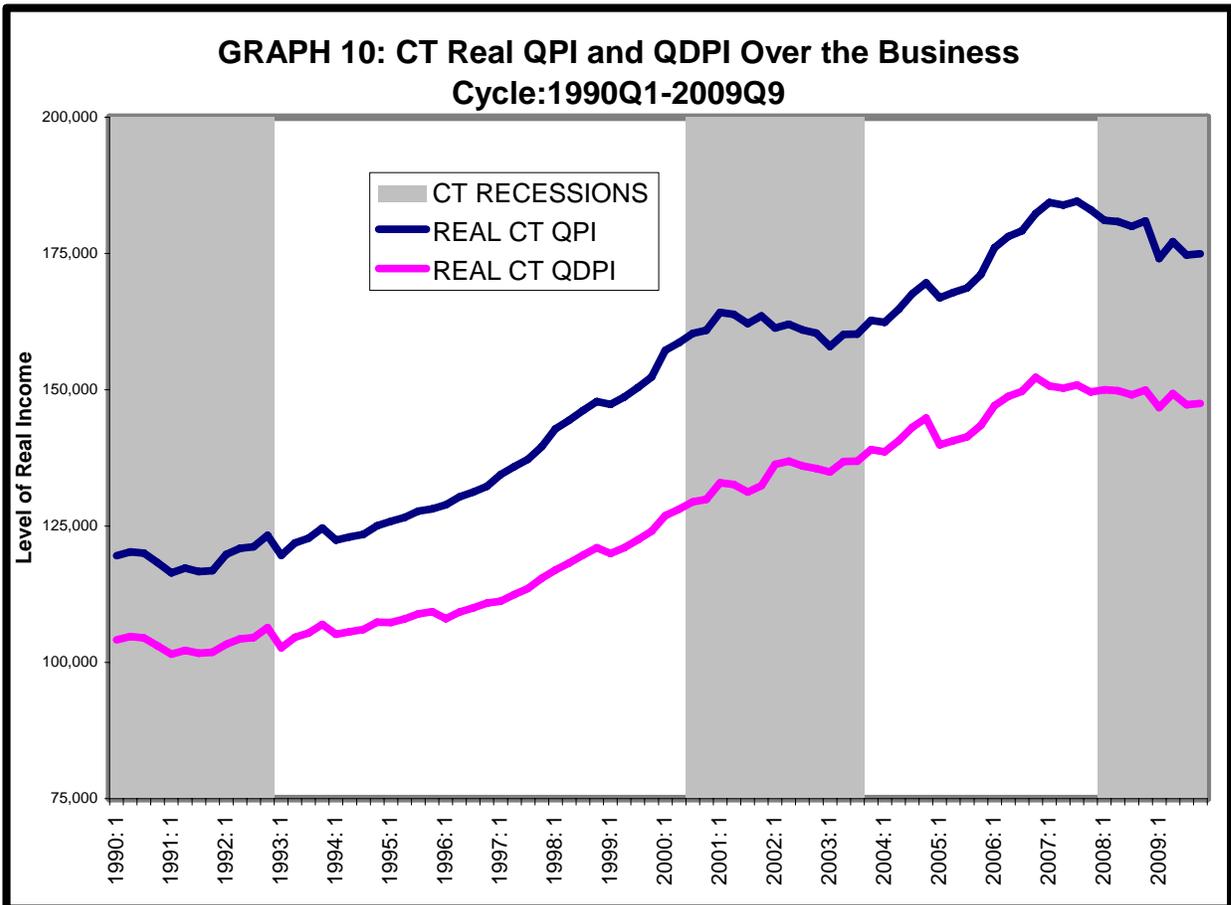
---

<sup>3</sup> As this was going to press, the U.S. BEA released 2010Q1 State Personal Income. The first-quarter estimate for Connecticut will be discussed below in Section VI *Where Does the State’s Economy Go From Here?*



Both nominal QPI and DPI were deflated by the Price Consumption Expenditures (PCE) Index to obtain Real QPI and Real DPI.

In observing the longer-term trend, it appears that the growth in Connecticut Real DPI has flattened somewhat compared to the longer-term trend in Real QPI. However, over the current cycle, it appears that Connecticut Real DPI did not decline as steeply as Real QPI, especially upon entering the recession in the beginning of 2008. This will be more closely examined below.

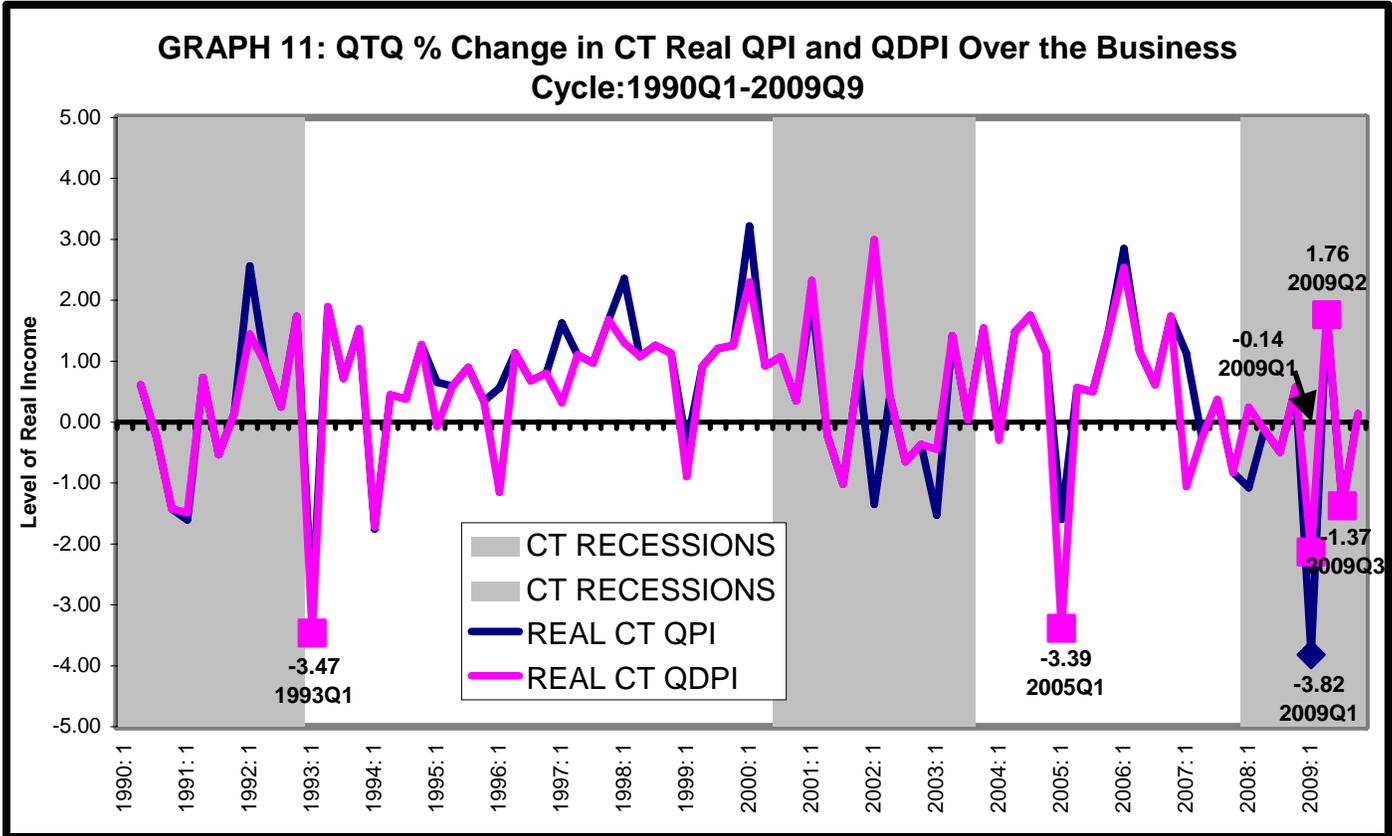


SOURCE: U.S. BEA and calculations by CTDOL-Research.

To look more closely at the behavior of Connecticut Real QPI and Real DPI over the business cycle, GRAPH 11: tracks the QTQ Percent Change from 1990Q1 to 2009Q4. As noted on Graph 11, Real CT DPI declined by 2.13% in 2009Q1, but Real QPI declined by 3.82%, which represented the steepest decline over the 1990Q1-2009Q4 Period.



Thus, Real DPI did not decline as steeply, relative to Real QPI, as it did in 2005Q1 (-3.39%) and 1993Q1 (-3.47%, see Graph 11) when Real DPI declined more steeply than Real QPI. By 2009Q4, after bouncing back to a 1.76% QTQ growth-rate in 2009Q2, then declining again by 1.37% in 2009Q3, CT Real DPI growth was barely positive again at 0.14% in 2009Q4. Over the last three quarters of 2009, the QTQ growth-rate of Real CT QPI has pretty much tracked the growth-rate of CT Real DPI.



SOURCE: U.S. BEA and calculations by CTDOL-Research.

Why the focus on DPI? Because, the level of consumer spending, in the economy is based, not on total income, but on *disposable* income. That is, what consumers have to spend after their income is adjusted for any transfer payments received and any taxes taken out. That is, Disposable Personal Income is equal to income plus transfers minus taxes. This relationship is expressed as:



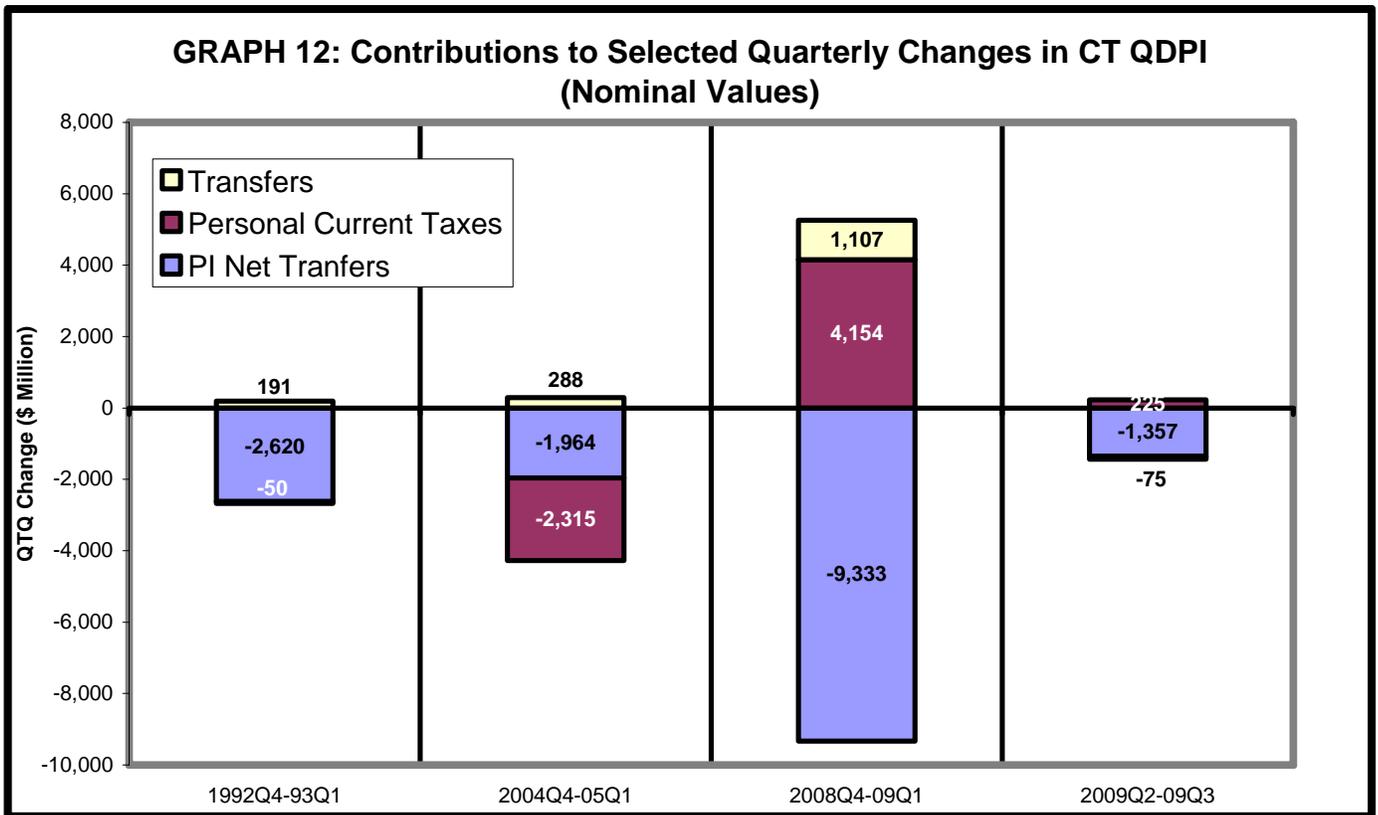
$$\text{DPI} = \text{PI} + \text{TRNS} - \text{TX} \quad (1.)$$

Where: DPI = Disposable Personal Income

TRNS = Transfer Payments

TX = Taxes

To further understand the behavior of Connecticut DPI over the business cycle, and how it is affecting consumer spending, it will be helpful to investigate the behavior of the components of DPI. Graph 12 breaks out the contributions of each one of the three components of DPI to the Three Declines in Nominal Connecticut DPI Between 1990Q1-2009Q4. Nominal, rather than Real DPI is used for the analysis in Graph 12 because of the adding-up problem when using chained-dollar, or real values of GDP and Personal Income.



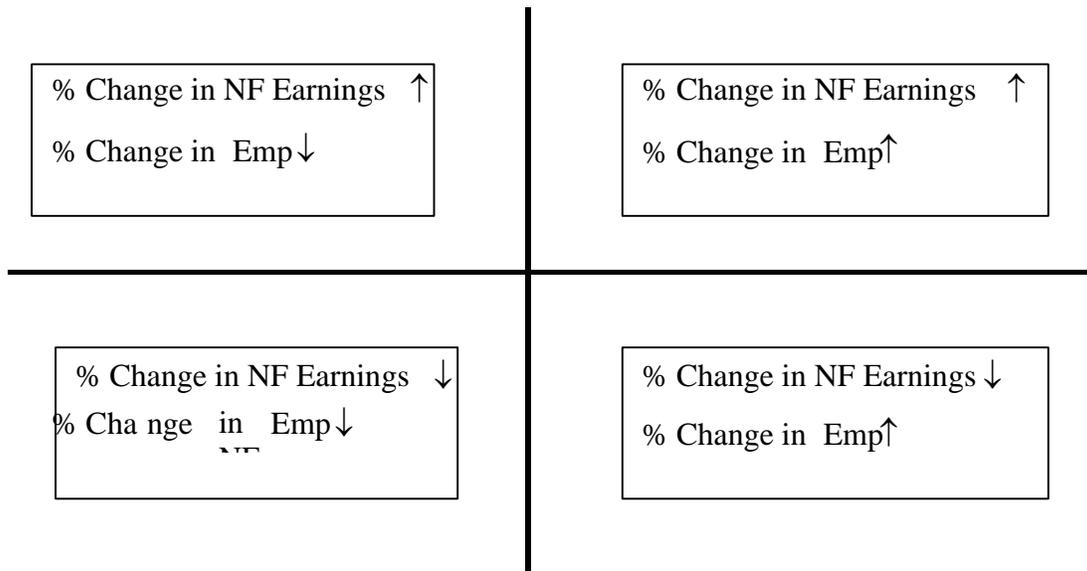
SOURCE: U.S. BEA and calculations by CTDOL-Research.

From Graph 12, between 2008Q4 and 2009Q1 the decline in Personal Income (Net Transfers) was the largest, and only negative, component contributing to the QTQ change



in Nominal DPI. Current Personal Transfer Payments made the largest positive contribution, with the reduction in Tax Payments the next largest contribution to CT. DPI growth. With the smaller decline over the 2009Q2-Q3 Period, again, PI (Net Transfers) was the biggest subtraction from Nominal DPI.

**TEMPLATE 1: Template for Percent Change in Earnings vs. Employment**

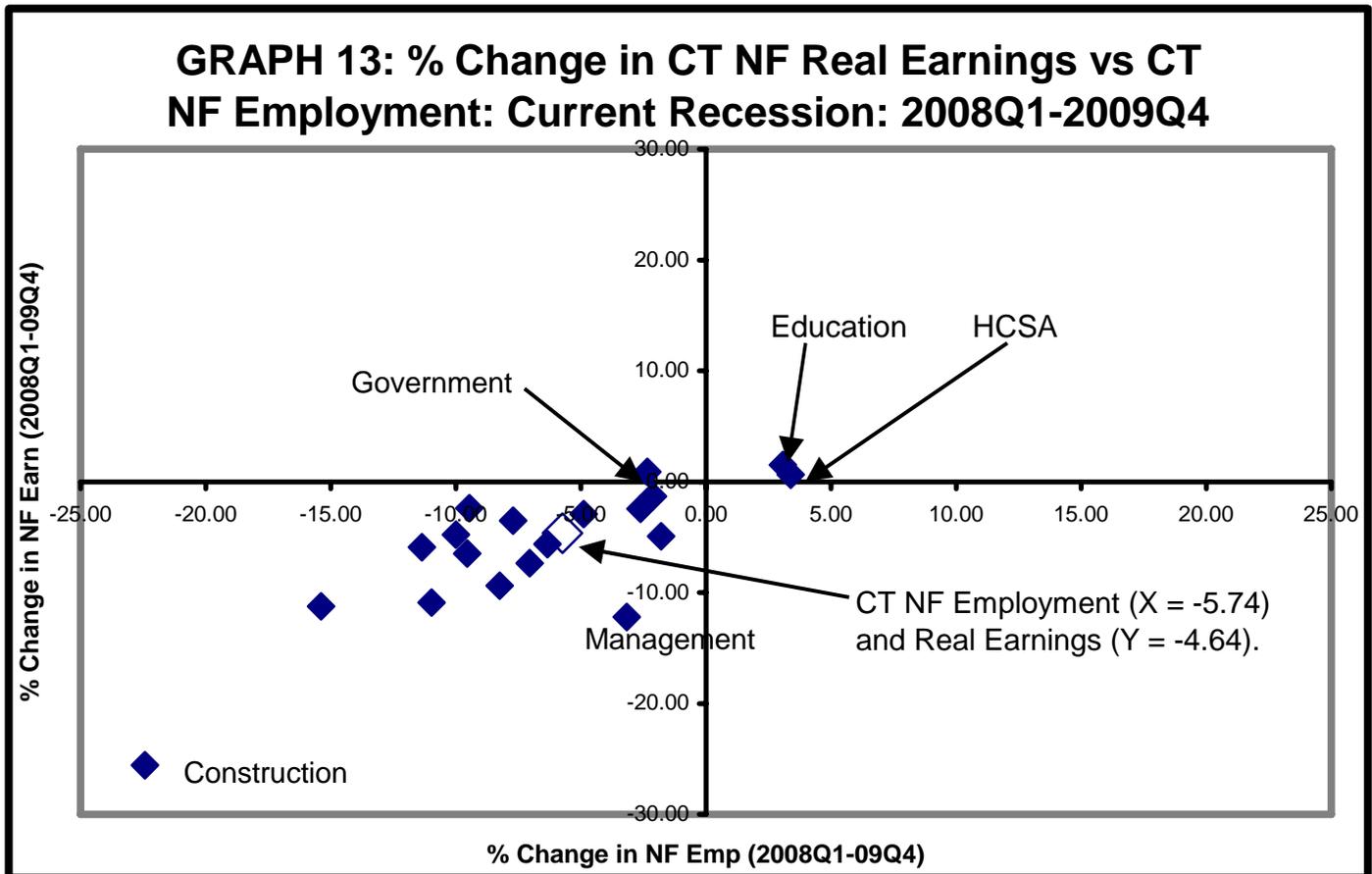


Template 1 serves as an aid to reading the comparisons presented in Graph 13. Graph 13 presents the percent Change in CT Real Earnings, by NAICS Sector, vs. Corresponding NAICS Sector’s Percent-Change in NF Employment: Current Recession. Since income generated by output produced represents the income side of the GDP identity, Real Non-Farm Earnings can be used as a proxy for the State’s Real Non-Farm output (i.e., Non-Farm State GDP). This, in turn, allows a comparison to be made between changes in Connecticut’s output over the recession and changes in employment over the recession.

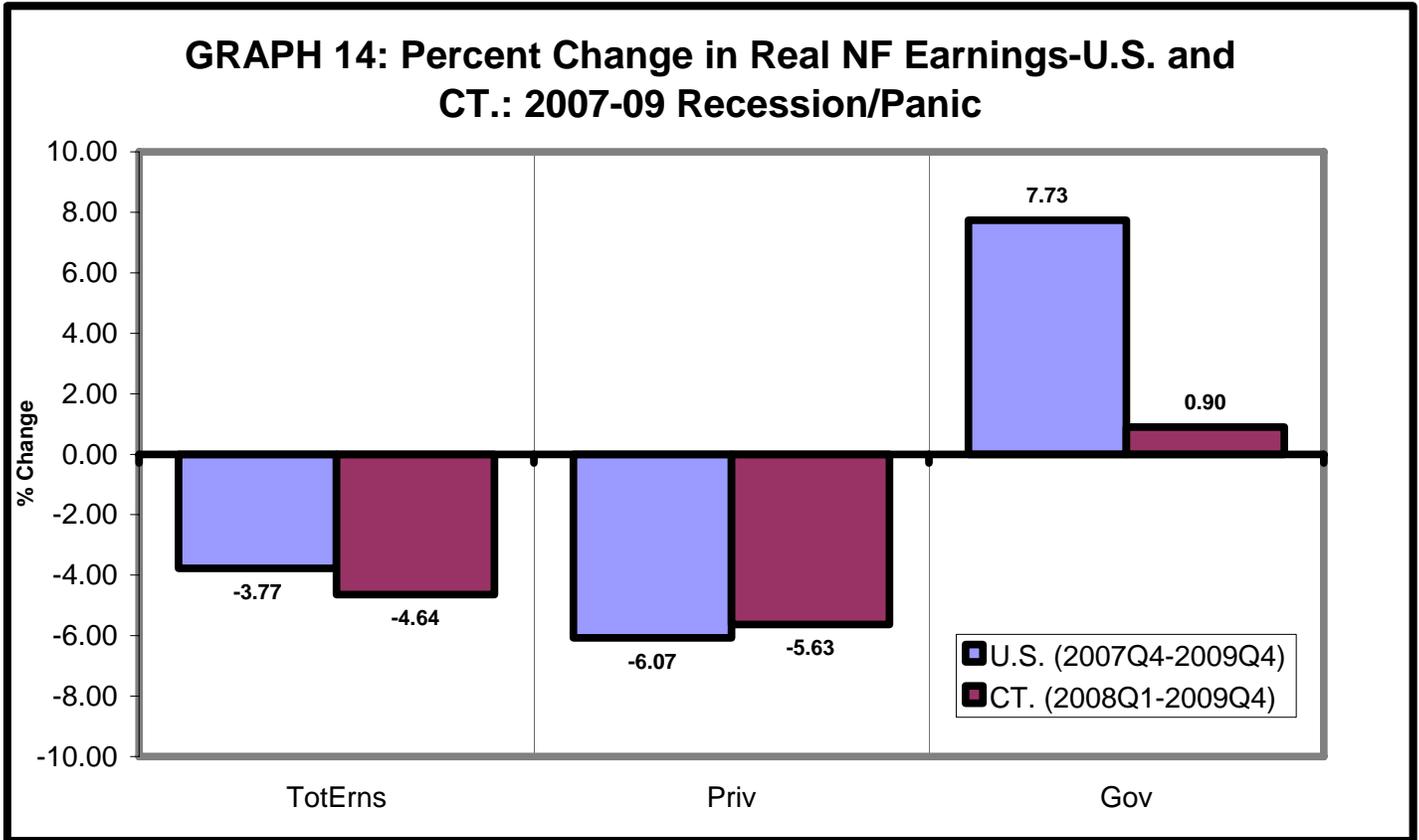
As would be expected over a recessionary period, most of the NAICS sectors fall in the southwest quadrant of the graph. The larger diamond with no fill represents the decline in



Connecticut average quarterly Non-Farm Employment, and Connecticut quarterly, Real Non-Farm Earnings by Industry over the recent recession/panic (2008Q1 to 2009Q4). It shows that quarterly, Non-Farm Employment declined by 5.74% over the recent recession, while Real, Non-Farm Earnings declined by 4.64%.



14 breaks out the percent-change in Real Non-Farm Earnings over the recession/panic period by private versus public-sector earnings for the U.S. and Connecticut. U.S. Private Real, Non-Farm Earnings actually declined more steeply than Connecticut's Private, Real



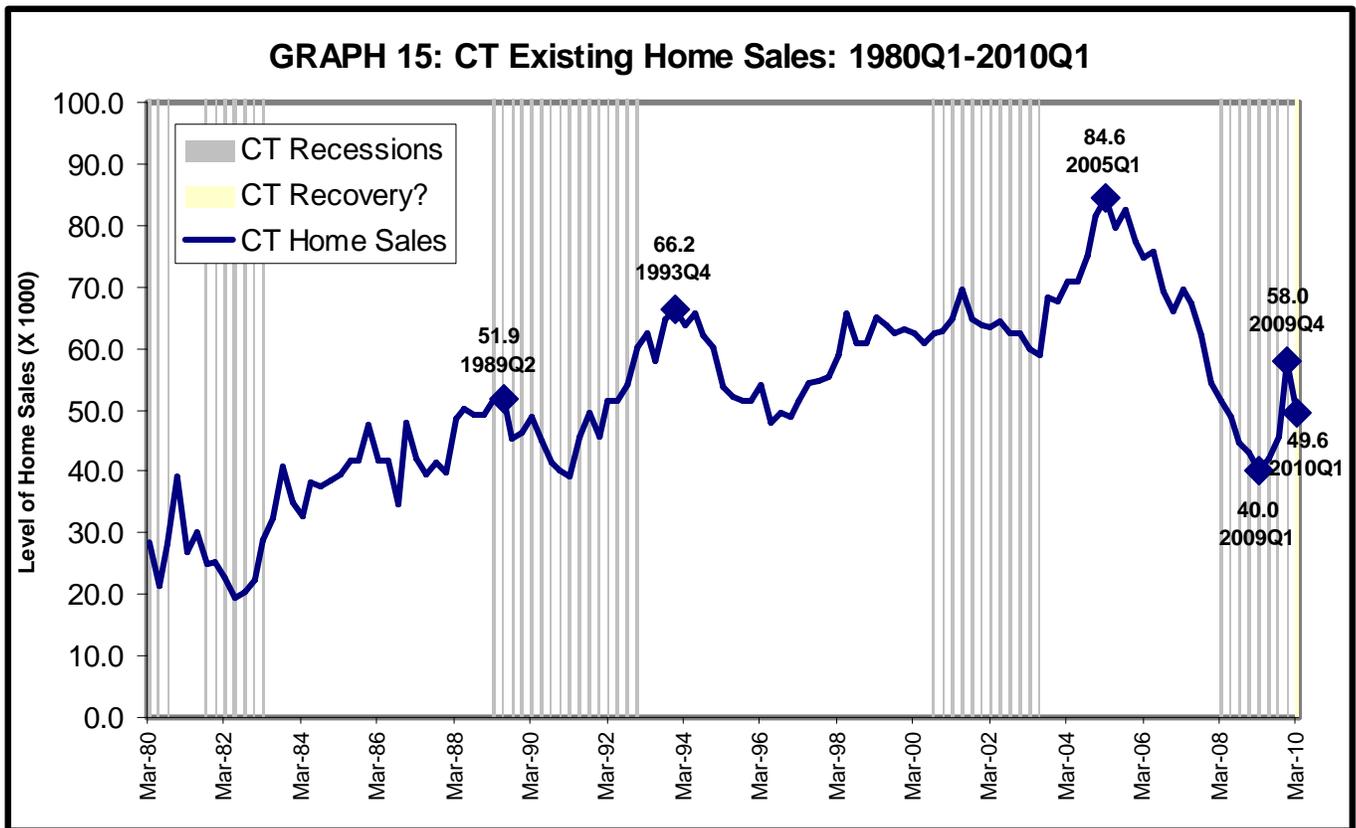
SOURCE: U.S. BEA and calculations by CTDOL-Research.

Non-Farm Earnings. However, the critical difference is in the growth of Government Real, Non-Farm Earnings. U.S. real, public-sector earnings grew by 7.73% between 2007Q4 and 2009Q4, but, between 2008Q1 and 2009Q4, Connecticut's Real Earnings in the Government Sector grew by less than 1%. The net result is that Connecticut's Real, Non-Farm Earnings declined more steeply than U.S. earnings over the recent recession/panic.



## C. THE STATE'S HOUSING MARKETS

At the same time that housing permits declined, and before the decline in house prices, or residential construction contract awards, one of the first signs of the impending bursting of the housing bubble was the abrupt decline in existing home sales after reaching unprecedented heights. This was true at both the national and the state level. As it turned out, it was home sales that were a leading indicator of the impending bursting of the housing bubble. Graph 15 tracks Existing Home Sales activity in Connecticut from 1980Q1 to 2010Q1.

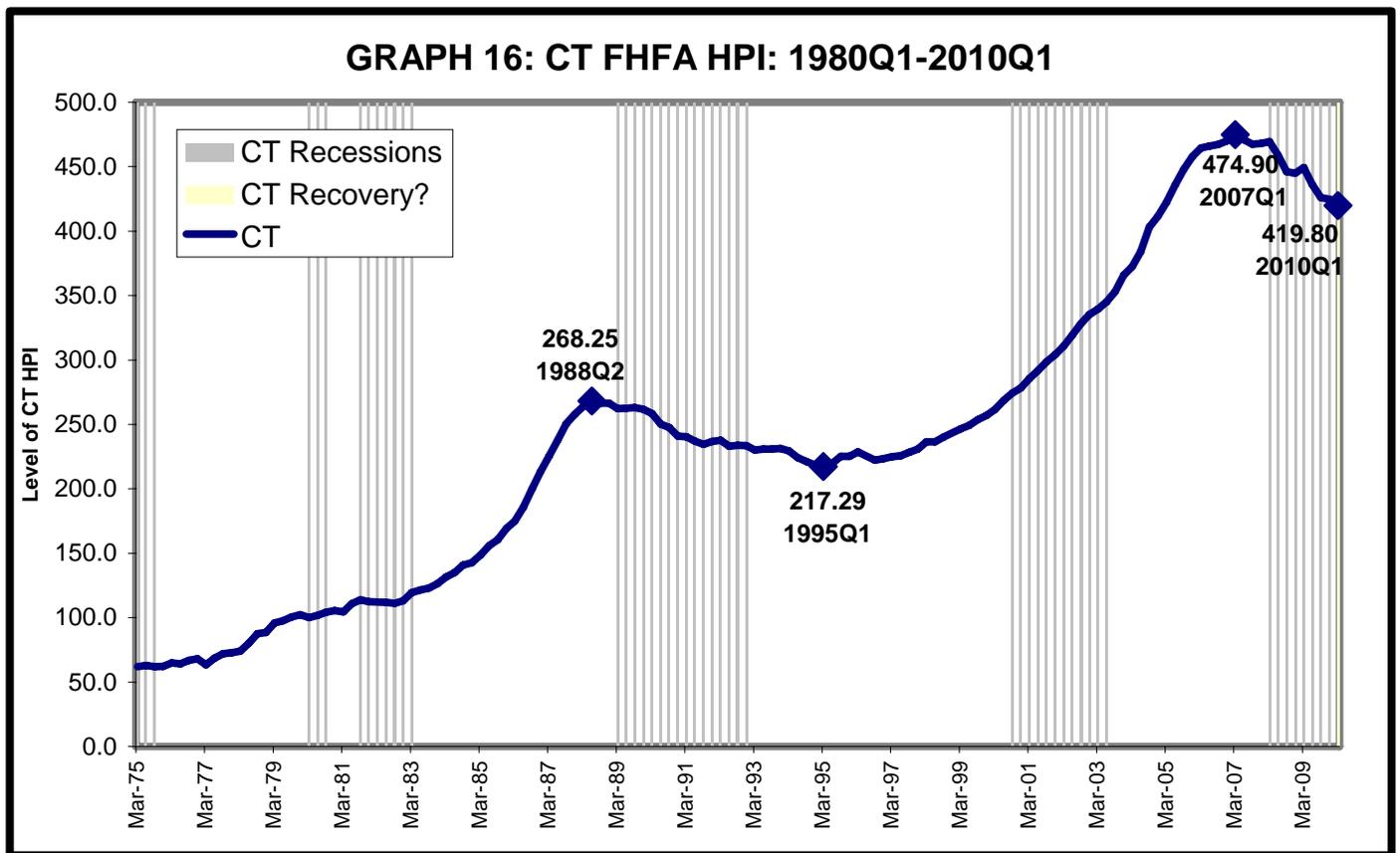


SOURCE: Boston Federal Reserve Bank, New England Economic Indicators.

In 2005Q1, Connecticut Existing Homes Sales turned down, one quarter before the turndown in national sales. The level of sales at 84,600 far surpassed the 51,900 reached at the peak of the 1980's real estate bubble, or the 1993Q4-peak of 66,200. By 2009Q1, Existing Home Sales had fallen to 40,000, a 53% drop in the turnover of existing homes over four years of virtual continuous decline. This is double the rate of the 24.3% decline



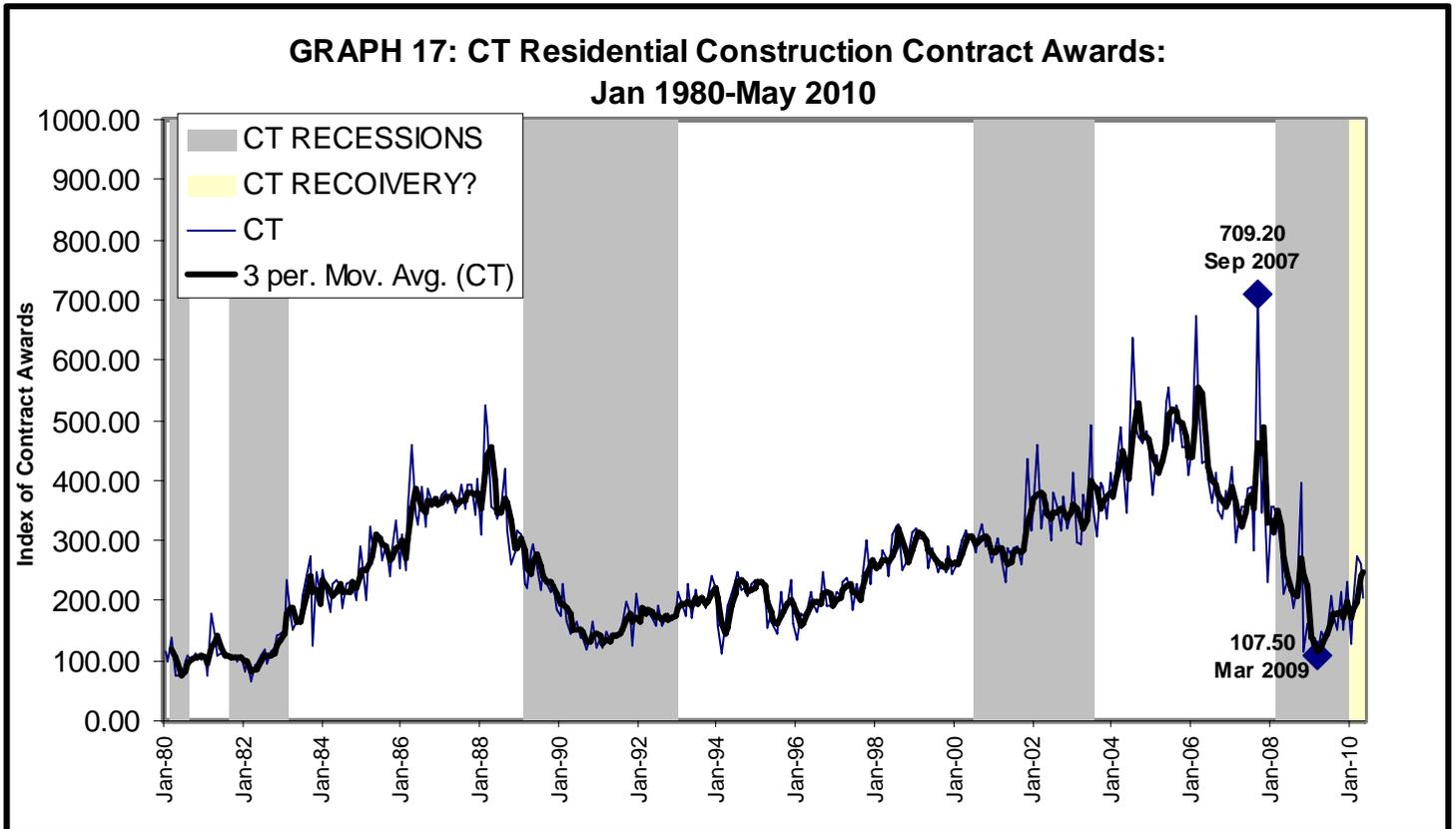
in existing home sales between 1989Q2 and 1991Q1, during Connecticut's Real Estate Bust of the late 1980's. By the fourth quarter of 2009, the quarter of a possible turnaround in the State and National economies, Existing Home Sales recovered to 58,000, a 45% rebound. Though data for the second quarter of 2010 are not yet available at the time of writing, 2010Q1 Existing Home Sales numbers sent an ominous signal about the State's housing market. Existing Home Sales declined by 8,400, or 14.5%, falling from a level of 58,000 in 2009Q4 to 49,600 in 2010Q1. Over the same period one year earlier, 2008Q4-2009Q1, which coincided with the financial panic, Existing Home Sales fell by 3,700, or 4.2%. This was only one-third the decline of 2009Q4-10Q1. Other housing activity indicators did not start showing signs of deterioration until the end of 2006, and into 2007. As shown on Graph 16, housing prices in Connecticut, as measured by the Federal Housing Finance Agency's Housing Price Index (HPI) did not decline until 2007Q1.



SOURCE: Boston Federal Reserve Bank, New England Economic Indicators.



Likewise, as shown in Graph 17, Residential Construction Contract Awards also peaked in 2007. In September, the index value reached a data-range high of 709.20. By the low point of March 2009, residential contract awards had declined by 84.84% from their peak.



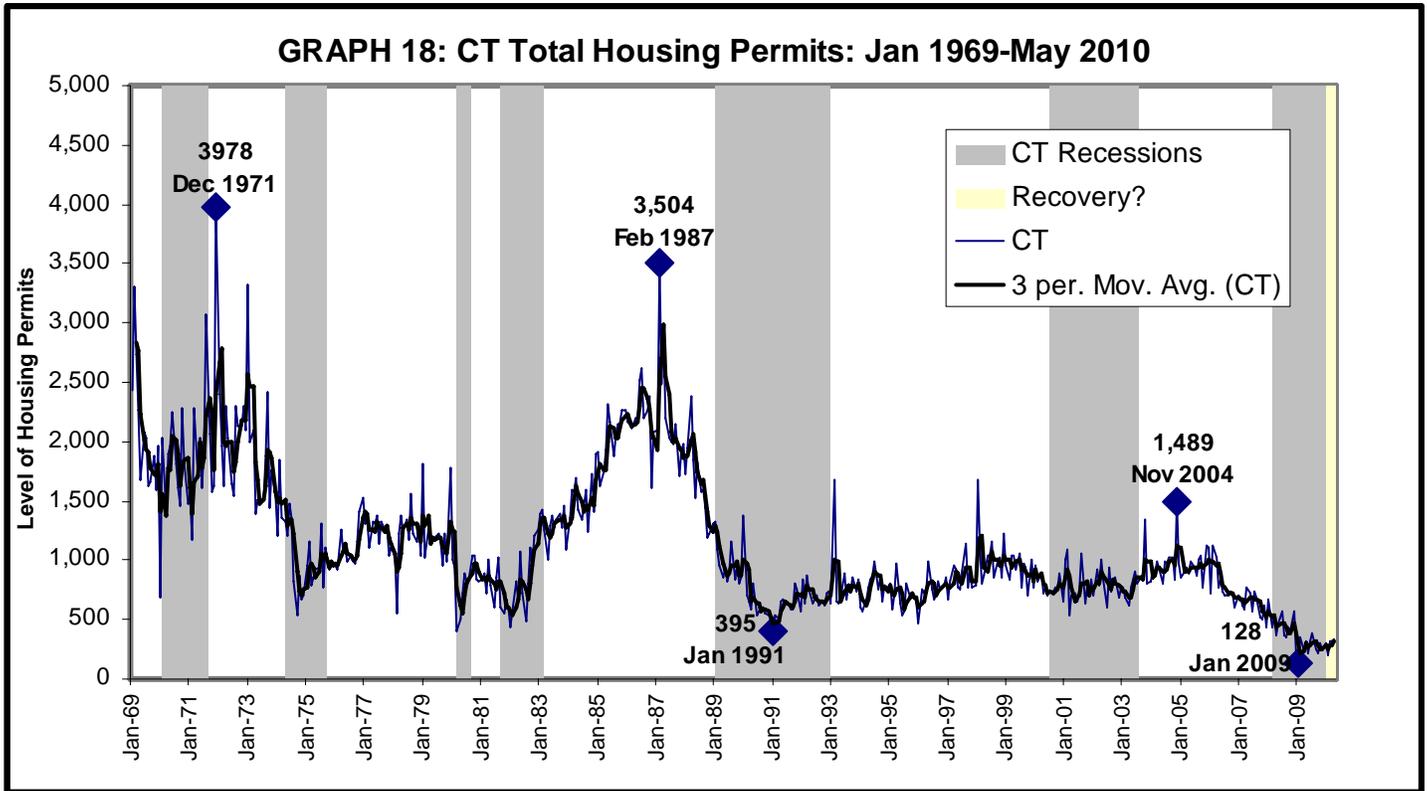
SOURCE: Boston Federal Reserve Bank, New England Economic Indicators.

Housing permits did not begin their precipitous drop until after March 2006. And, it is housing permits that caused many economists, policymakers, commentators, and others to reject the idea that there was a housing bubble, especially in Connecticut.

Many had argued that new household formation driven by demographics and immigration justified rising home values. But pressure on the demand for residential living space should have driven up the price of residential space, regardless of tenure (i.e., owner-occupied or rental). That is housing prices and rents should have been rising in tandem (see Volume 1: U.S. Outlook, above). But, that is not what was happening. The



following discussion explains why this disconnect between house prices and rents should have been a red flag. .



SOURCE: Boston Federal Reserve Bank of Boston-New England Economic Indicators.

We Won't Get Fooled Again?--From Graph 18 it can be seen that the monthly level of Housing Permits in Connecticut never approached the levels of the early 1970's and the 1980's real estate bubble. It was Mark Twain who said that history doesn't repeat itself, but it rhymes. Each asset bubble throughout history seems to have a different twist lulling each new generation<sup>4</sup> of participants into believing that "this time is different."<sup>5</sup> Thus, many discounted any imbalances in the housing market by pointing to the low level of permits, and tight land-use regulation restricting the supply of housing, which argued against any possible oversupply of housing. However, oversupply, per se, was not at the

<sup>4</sup> Although, over the last two decades the same generation has lived through two back-to-back asset bubbles.

<sup>5</sup> Which, aptly enough, is the title of a recent book by Rhienshart and Rogot (2009) on the history of financial crises.



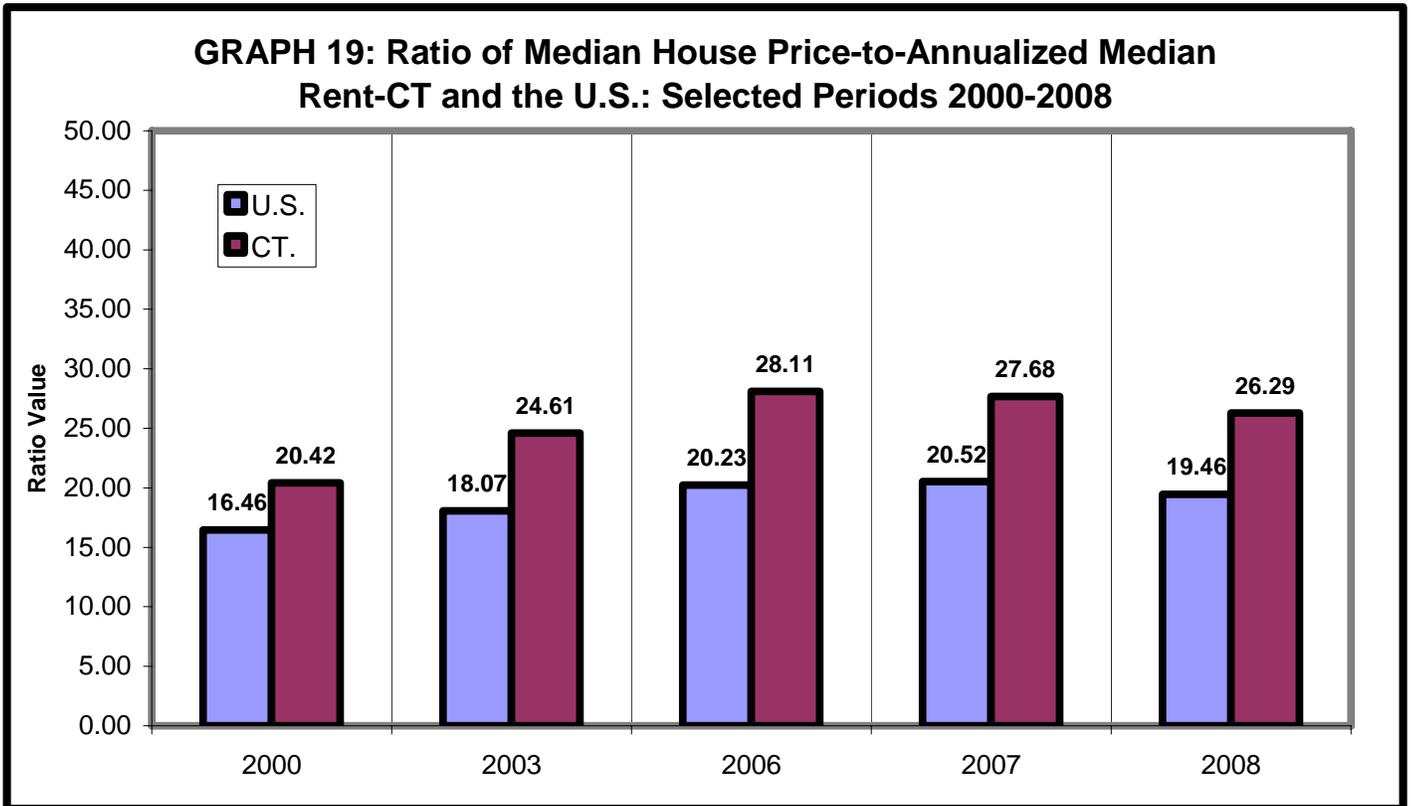
heart of the recent housing bubble. The heart of the 2000's housing bubble was in the financing of home buying, a bubble psychology, and new "innovations" in the securitization of mortgage-pools, which resulted in riskier borrowers being given mortgages that were to re-set at higher, unsustainable payment-levels. Thus, this was a housing-finance crisis, and therefore, the indicators of impending trouble were not in housing permits, but in other indicators that were not widely considered. One of those indicators, the ratio of the Median House Price-to-the Median Rent was reaching very high levels by historical standards, and another, the ratio of the Median House Price-to-Median Household Income was also reaching very high levels, especially in Connecticut.

Graph 19 shows the growth in the Median House Price-to-Median Monthly Rent (annualized) for selected periods between 2000 and 2008 (the last year of available data from the American Community Survey). From 2000 to 2007, the U.S. house price-to-rent ratio increased by 4.06 percentage points leaving it 1.25 times higher than its 2000 value. From 2007 to 2008 it declined somewhat to 19.46. The rise in this ratio, and therefore the rise in this disconnect between rents and house prices for Connecticut was even greater, and Connecticut's ratio peaked sooner. Between 2000 and 2006, the house price-to-rent ratio increased by 7.26 percentage points, resulting in its value being 1.38 times its 2000 level. By 2008 the ratio was at 26.29, down 1.82 percentage points from its 2006 peak of 28.11, but still 5.87 percentage points above its 2000 level of 20.42.

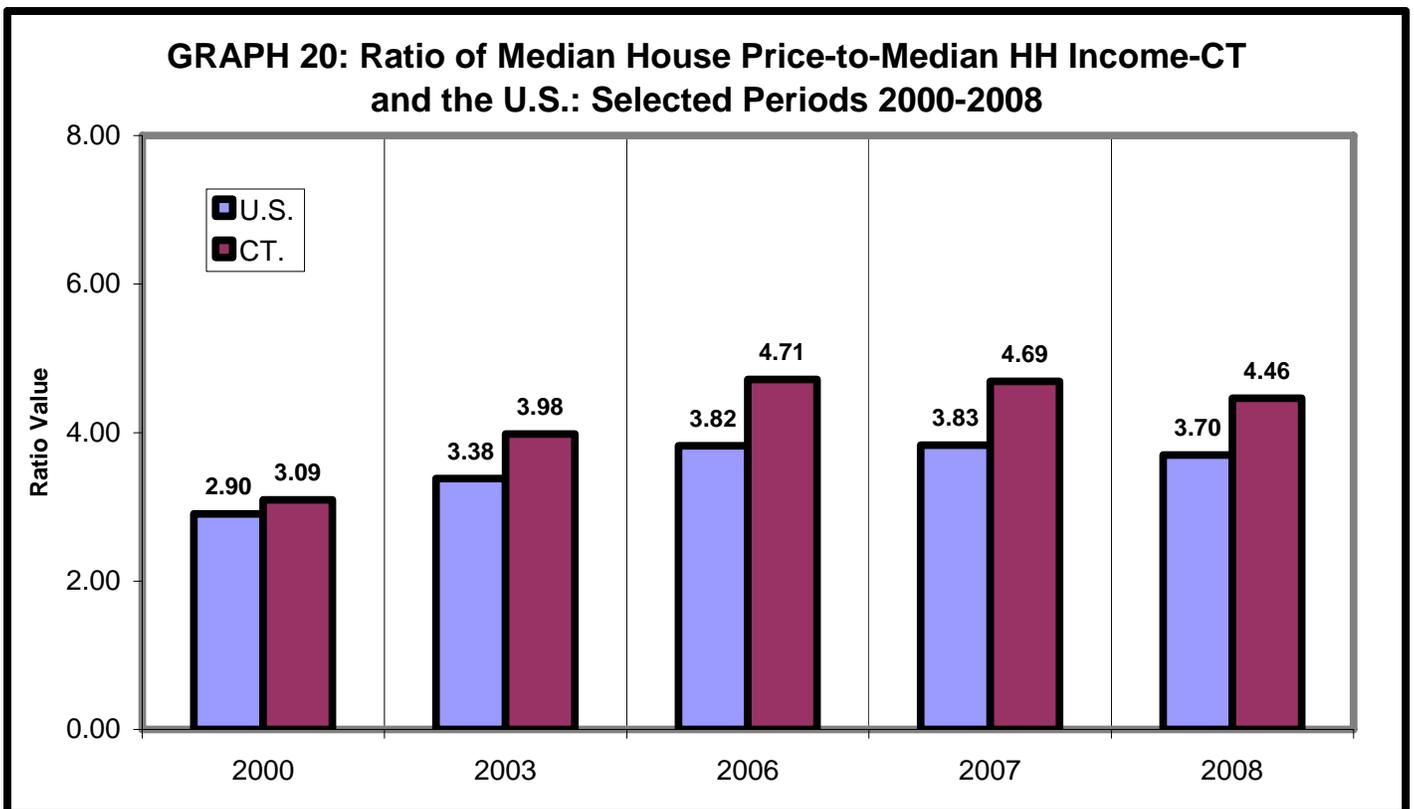
The same trends are apparent in Graph 20, which presents the ratio of the Median House Price-to-Median Household Income for Connecticut and the U.S. over the same selected periods as presented in Graph 19. And, the story is basically the same. Between 2000 and 2007, the U.S. Median House Price-to-Household Median Income ratio increased from 2.90 to 3.83, an increase of 0.93 percentage points. Connecticut's ratio peaked in 2006, increasing from 3.09 in 2000 to 4.71 in 2006, an increase of 1.62 percentage points. The U.S. ratio declined to 3.70 by 2008, while Connecticut's ratio declined to 4.46. Nevertheless, Connecticut's ratio was 1.21 times higher than that for the U.S. in 2008, compared to 1.07 times higher in 2000. The same relationship holds for the Median



House Price-to-Median Rent ratio discussed above. Connecticut's ratio was 1.24 times that of the U.S. in 2000, but by 2008, it was 1.35 times higher than that for the U.S.



SOURCE: U.S. Census Bureau and calculations by CTDOL-Research.



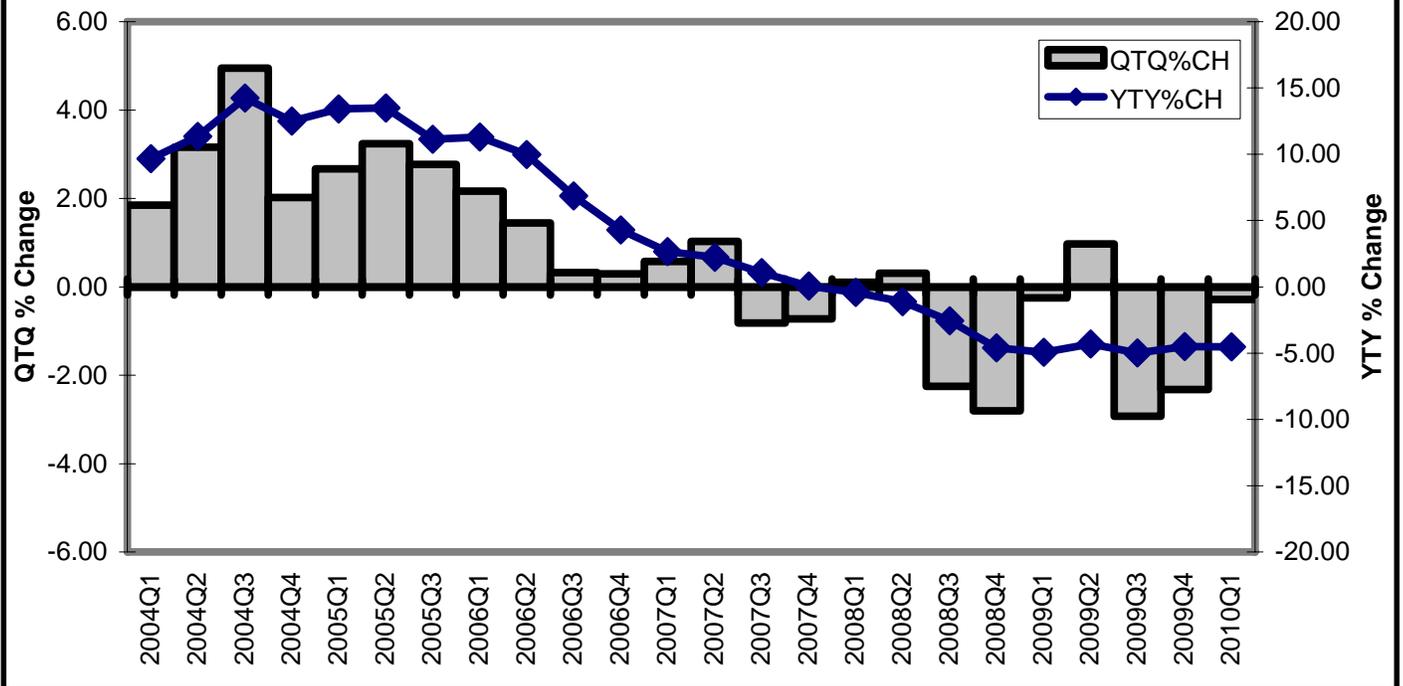
Of course, the aggregate U.S. values mask the fact that those ratios were much higher for areas at the epicenter of the housing bubble such as parts of California, Nevada, Arizona, and South Florida. Nevertheless, these numbers reveal Connecticut's vulnerability to the housing bubble/bust, and to the missed signs that Connecticut would not be left unscathed from the 21 Century's first asset bubble.

Current State of Connecticut's Housing Markets—As discussed above, Connecticut's Existing Home Sales declined by 8,400, or 14.48% between 2009Q1 and 2010Q1, the latest available data. After bouncing back from their low of 128 in January 2009, Total Housing Permits peaked at 294 in July 2009, an increase of 207.81%. From then on, they once again declined to a low of 207 in January 2010—a 47.46% decline. So far, since January, permits have increased every month of data in 2010 (February to April, and reached a level of 331, up 124 (+60%) from the January low. However, it should be noted that the last month of available data is also the last month of the \$8,000 First-Time Homebuyer's Tax Credit program. Though homebuyers have until June 30<sup>th</sup> to close, the questions remains as to whether or not the housing market will continue to recover after this program expires. Thus, permit-gains in the first four months of 2010 could be reversed over the remainder of the year. Ultimately, the key to the turnaround in the housing market is the end of asset-deflation. And, that will end when house-prices begin to increase again.

Graph 21 focuses on the period covering 2004Q1 and 2010Q1. The QTQ percent change in the Federal Housing Finance Agency's House Price Index (HPI) for Connecticut is measured on the left-hand vertical axis, and the YTY percent change is measured on the right-hand vertical axis. As is apparent, the last three quarters of available data show three consecutive quarters of QTQ declines in Connecticut house prices, but at a decelerating rate, and only a relatively small decline in 2010Q1 (-0.28%). On a YTY basis, the HPI for Connecticut has been declining just under 5% per quarter since 2008Q4. YTY, it seems that there is a steady erosion of house values that is neither, accelerating or abating.



**GRAPH 21: QTQ and YTY % Change in CT HPI:  
2004Q1-2010Q1**



SOURCE: Boston Federal Reserve Bank-New England Economic Indicators.

Foreclosure data for 2010 seem to be sending mixed signals about the current state of Connecticut’s housing markets. The April foreclosure numbers from The Warren Group showed that the level of Connecticut’s foreclosures was 451, down from 648 in March. That is a MTM decline of 30.4%. However, over the first one-third of 2010, there have been 2,620 foreclosures, compared to 1,839 for the first one-third of 2009, that represents a YTY, same-period increase of 42.5%<sup>6</sup>.

The numbers from RealtyTrac show that foreclosure filings fell from 2,915 in April to 2,088 in May. That represents a 30% decline from April, but foreclosure filings are up 90% from May 2009<sup>7</sup>—again, the data paint a mixed picture.

<sup>6</sup> Howard, Lee, *Foreclosures up in Connecticut*, THE DAY (May 29, 2010) < <http://www.theday.com/article/20100529/BIZ04/305299927/1044>> Accessed on June 14, 2010.

<sup>7</sup> Gosselin, Kenneth R., *Connecticut Foreclosure Filings Decline In May*, HARTFORD COURANT (June 10, 2010) < [www.courant.com/business/hc-foreclosures-connecticut-may-0611-20100610.0.3612412.story](http://www.courant.com/business/hc-foreclosures-connecticut-may-0611-20100610.0.3612412.story)> Accessed on June 30, 2010)



Critical to the recovery in the State's housing market, as well as the national housing market, is reversing price declines. This is predicated on a couple of factors including where the State's job-market goes in the second half of 2010, in terms of job-growth and bringing down the unemployment rate, and how Connecticut is affected by the expected re-sets of Adjustable-Rate Mortgages (ARM) and Option-ARM's, originated in 2005 and 2006, and scheduled to re-set in 2010 and 2011. Nationally, \$1 trillion in ARM's and Option-ARM's are expected to re-set over the 2010-11 Period. Apart from the possibility of a significant slowing of economic recovery, or even a double-dip recession, this factor alone could bring about a new wave of foreclosures.

The State does have some programs to ameliorate the foreclosure problem, such as the Mandatory Mediation Program administered by the Judicial Branch. From the program's beginning in 2008 to April 30, 2010, 60% of the 6,413 cases have resulted in the homeowner staying in their home, with 44% resulting in loan modification.<sup>8</sup> The Connecticut Fair Housing Center, a non-profit, operates a program in which they argue clients' cases with banks and lenders. In March 2010, the Obama Administration announced a new anti-foreclosure effort aimed at helping homeowners who are unemployed or whose homes are underwater. Lenders are required to lower monthly payments for a minimum of three months for homeowners who are receiving unemployment benefits, and are asked to "consider" reducing the principal of loans for those behind on their payments. However, banks and other lenders are not required to participate in the Federal program, and banks and lenders may choose to foreclose anyway<sup>9</sup>.

The most ominous sign from the State's housing markets is the significant decline in existing home sales in 2010Q1 (see Graph 15, above). Recall from the above discussion that it was the abrupt drop in existing home sales, in 2005 that was one of the first signals of the popping the housing bubble.

---

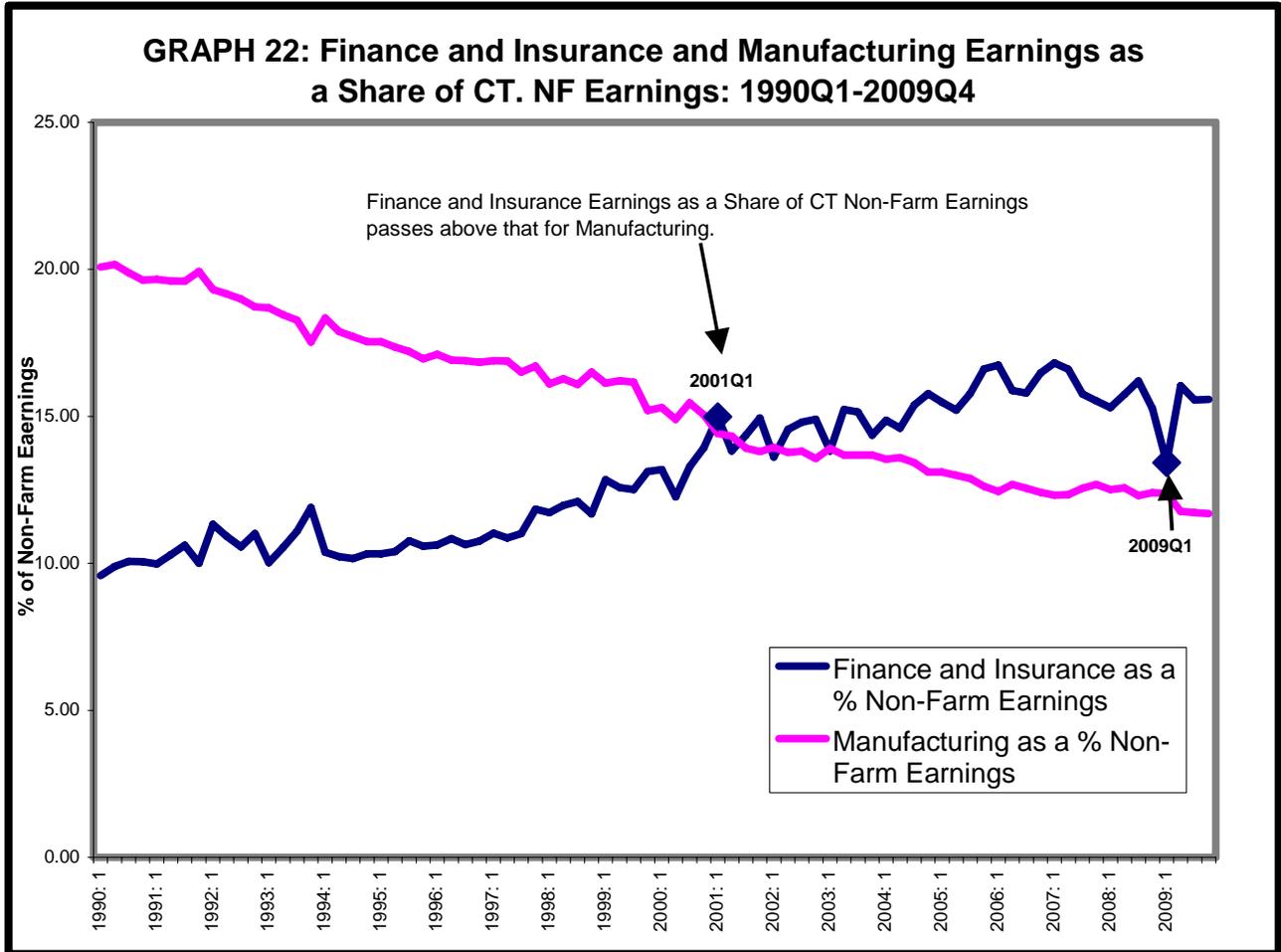
<sup>8</sup> State of Connecticut, Judicial Branch, *Foreclosure Mediation Program (FMP) Results As of April 30, 2010* (April 30, 2010).

<sup>9</sup> Connor, Tom, *The Next Wave*, CONNECTICUT MAGAZINE (June 2010) <<http://www.connecticutmag.com/Connecticut-Magazine/June-2010/The-Next-Wave/>> Accessed on June 29, 2010.



## D. CONNECTICUT'S FINANCIAL SECTOR

The Rise of Connecticut's Financial Sector---Over the last two decades the financial sector has increased in its importance to the Connecticut Economy. Graph 22 tracks the changes in the earnings in the State's Finance and Insurance and Manufacturing sectors as a share of Total Non-Farm Earnings from 1990Q1 to 2009Q4.

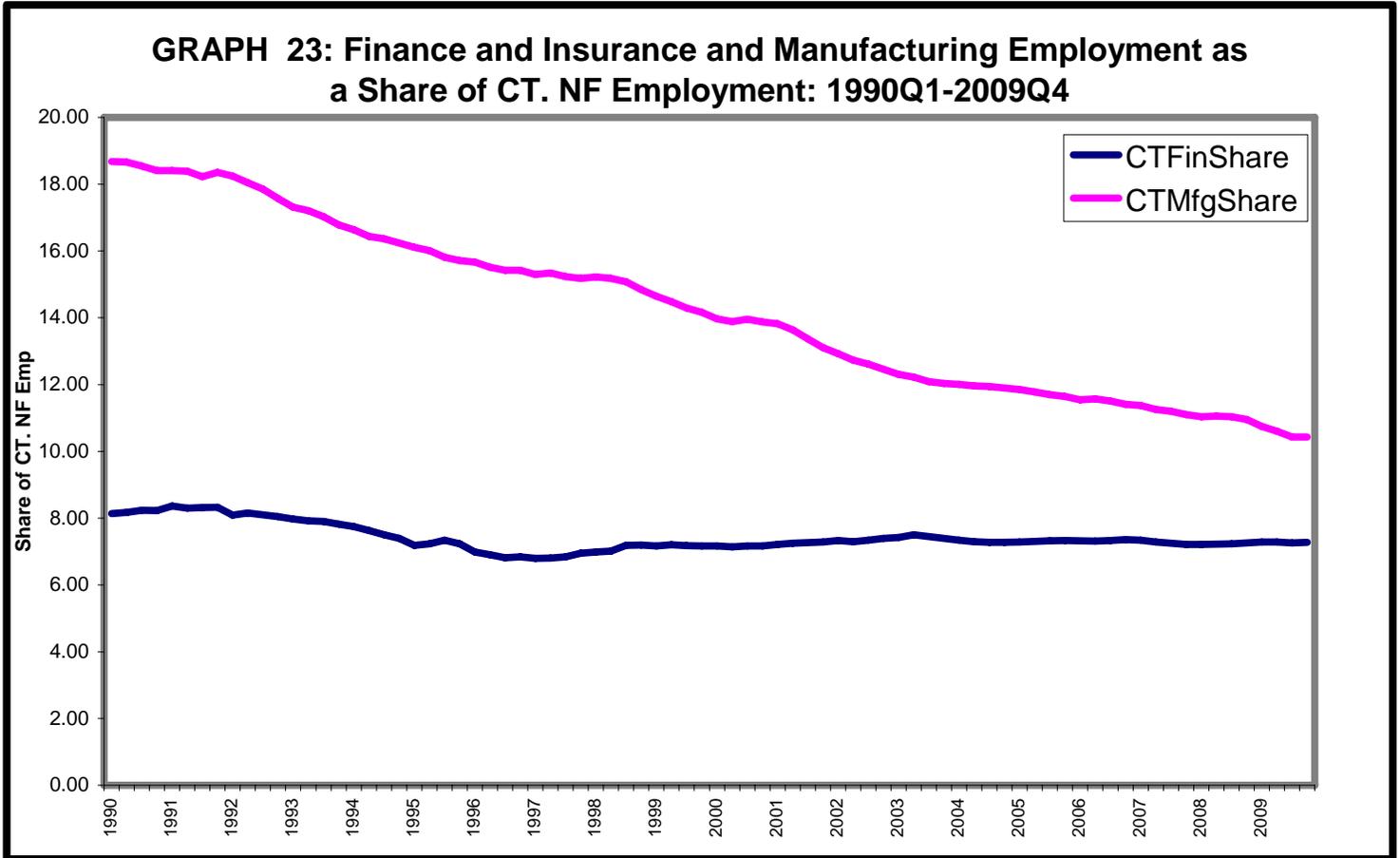


SOURCE: U.S. BEA and calculations by CTDOL-Research.

As depicted in Graph 22, while Finance and Insurance Earnings have increased their share of Total Non-Farm Earnings, Manufacturing's Earnings have declined. And, in 2001Q1, the share of Finance and Insurance pasted above that for Manufacturing. Even with the dip in Finance and Insurance Earnings share in 2009Q1, it still remained above Manufacturing, and has since, recovered much of its share. Further, as depicted in Graph 23, while Connecticut's Manufacturing Sector employment has declined significantly



since 1990Q1, employment in the Finance and Insurance Sector has pretty much maintained its share of Non-Farm Employment. As a consequence, manufacturing has been losing its stature in Connecticut, both in terms of earnings and jobs. At the same time, Finance and Insurance has gained in share of earnings and pretty much maintained its share of employment.



SOURCE: U.S. BEA and calculations by CTDOL-Research.

Connecticut's Financial Sector: Recession and Panic---By December 2007, the initial events signaling the impending financial crisis, including the collapse of the Asset-Backed Commercial Paper market (ABCP) in August had already unfolded. And, the National Bureau of Economic Research (NBER) had since declared December 2007 as the turning point ending the previous recovery/expansion. And, although Connecticut's Economy would not turn down until three months later in March 2008, this, nevertheless, seems to be the most appropriate point in which to take a snapshot of the distribution of



employment in the U.S. and Connecticut Finance and Insurance sectors. There were significant differences in the distribution of jobs with the U.S. and Connecticut Finance and Insurance sectors. Connecticut's Finance and Insurance jobs were concentrated in the Insurance Industry, while the U.S. sector's jobs were concentrated in Credit Intermediation (and Monetary Authority). Connecticut also had more employment concentrated in the Securities, Commodities, and Brokers Industry, as well as the smaller Funds and Trusts Industry. Given that the largest concentration of U.S. Finance and Insurance jobs was in Credit Intermediation in December 2007, it is no surprise that it also contributed the largest share of job-losses to the sector between December 2007 and December 2009<sup>10</sup>. Nearly 59% of U.S. Finance and Insurance jobs lost were in Credit Intermediation, but 46.3% of jobs were in that industry. Losses are over-represented, based on the December 2007 share. Nevertheless, the relative hit to Connecticut's Credit Intermediation Industry was much greater. Though this industry employed, just under, 25% of Connecticut's Finance and Insurance workers, its relative contribution to job-losses over the recent recession/panic was double (nearly 48%) that of its share of Connecticut's Finance and Insurance employment in December 2007. Both, Securities, Commodities, and Brokers and Insurance were under-represented in their contribution to job-losses, based on their shares of Finance and Insurance employment in December 2007. In fact, the Insurance Industry's relative contribution to employment losses was just over half its share of employment in December 2007. The only other over-represented industry, in terms of job-losses, was the smaller, Funds and Trusts Industry, which contributed twice as many jobs to losses as its share of employment in December 2007 (3.9% versus 8.5%).

In addition to the relative contribution to job-losses, the steepness of the employment decline is another critical perspective on the State's hit from the recent crisis on its Finance and Insurance Sector. It will also shed some light on why some sub-sectors were

---

<sup>10</sup>To get the needed detail, especially at the state level, unseasonalized, Current Employment Statistics (CES) data are tracked for both the U.S. and Connecticut from December 2007 to December 2009. Analyzing the data from December-to-December should mitigate any seasonality problems, and, in addition, it pretty much tracks the recent recession and panic (assuming both Connecticut and the U.S. turned the corner in December 2009), although Connecticut did not actually go into recession until March 2008 (based on the Non-Farm Employment series)



over-represented in their contributions to job-losses, and why some were under-represented.

The two steepest declines in employment for Connecticut's Finance and Insurance Sector were the 9.21% in Credit Intermediation, which was steeper than its U.S. counterpart, and the 10.42% contraction in Funds and Trusts, which was double the decline in the U.S. Funds and Trusts Industry. The U.S. employment declines in Securities, Commodities, and Brokers (-6.73%) and Insurance (-4.05%) were both steeper than their Connecticut counterparts. Connecticut's steepest declines were in those industries that had smaller shares of employment in December 2007 than their U.S. counterparts. The net result was that Connecticut's Finance and Insurance Sector lost 4.79% of its jobs between December 2007 and December 2009, while the U.S. Finance and Insurance Sector lost 6.16%.

Connecticut's Financial Sector In the Aftermath of Recession and Panic---After what appears to be a turnaround in jobs in December 2009, though Connecticut's Non-Farm Employment grew faster than the U.S. between December 2009 and May 2010, job-losses in the State's Finance and Insurance Sector actually began accelerating and were steeper than the job losses in the U.S. Finance and Insurance Sector, especially in Credit Intermediation.

At the time of writing, Wall Street is apparently beginning to re-hire workers, even as Main Street still languishes in recession. Employment in the Securities Industry in New York was at 160,400 in May, up from the trough of 158,500 in February, but still well below its peak of 188,900 in January 2008<sup>11</sup>. This trend could particularly have positive spillover effects for Fairfield County, especially Greenwich and Stamford, due to its concentration of Securities, Commodities, and Brokers jobs, as well as its proximity to New York City.

---

<sup>11</sup>. Scharwtz, Nelson D., *Wall St. Hiring in Anticipation of an Economic Recovery* (July 10, 2010) NEW YORK TIMES < [http://www.nytimes.com/2010/07/11/business/11rebound.html?\\_r=1&th&emc=th](http://www.nytimes.com/2010/07/11/business/11rebound.html?_r=1&th&emc=th) > Accessed on July 12, 2010.



### III. THE ECONOMIC CRISIS AND THE STATE BUDGET

On July 1, 2010, Connecticut Comptroller, Nancy Wyman, in her statement to the Governor on Connecticut's fiscal condition stated that:

The Office of Policy and Management has projected a Fiscal Year 2010 General Fund budget surplus of \$242.9 million. The Transportation Fund is estimated to end Fiscal Year 2010 with a fund balance of \$98.5 million. I am in general agreement with the trends that OPM has identified<sup>12</sup>.

The reasons for the budget surplus were stated to be the following:

The largest single change from last month is a \$30 million increase in anticipated sales tax receipts. After months of decline, in March 2010 receipts from the sales tax showed modest gains. Even with the recent improvement in receipts, the sales tax is estimated to generate 5.5 percent less revenue than last fiscal year and is \$446.2 million below its Fiscal Year 2008 level.<sup>13</sup>

The General Fund budget for Fiscal Year (FY) 2010 has been balanced through the use of:

- \$1.278 billion in budget reserve funds,
- Over \$800 million in federal stimulus dollars, and
- Payment deferrals and one-time transfers.

Further, in the absence of these non-recurring revenues and expenditure reductions, the FY 2010 General Fund operating budget deficit would exceed \$2.0 billion dollars. In FY 2009, the state issued \$947.6 million in Economic Recovery Notes to close that year's operating deficit<sup>14</sup>.

However, this good news was tempered with the warning that even though the steep declines in General Fund tax revenues, observed in the first half of this FY, have abated,

---

<sup>12</sup> Wyman, Nancy, Letter to Governor Rell on General and Transportation Fund Statements for FY2010, July 1, 2010.

<sup>13</sup> *ibid.*

<sup>14</sup> *ibid.*



and in light of significant increases in income tax and corporation tax rates, General Fund net tax revenues are still expected to be relatively flat as compared to last FY, and are expected to be \$1.8 billion below their FY 2008 level.

Table 2 compares the declines in Connecticut’s General Revenues, and three major tax sources: the Personal Income Tax, the Sales and Use Tax, and the Corporate Income Tax. From left-to-right, the “%Decline” column shows the percent decline in a given revenue source, the “No of Mo” column presents the number of consecutive months that State Revenues from this source declined, and the third column, “AnnDecline” gives the compounded, annualized percent decline in the given revenue source. This is to put declines of different lengths on the same footing to make meaningful comparisons.

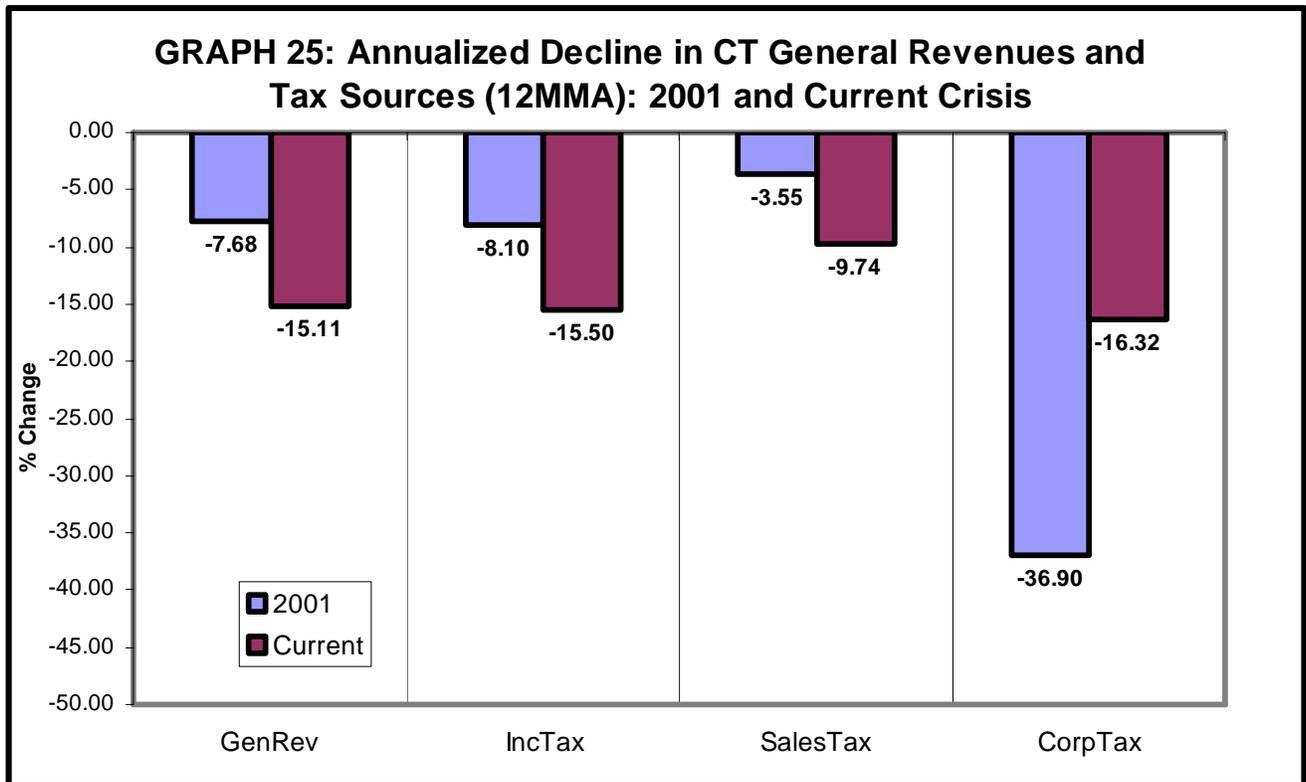
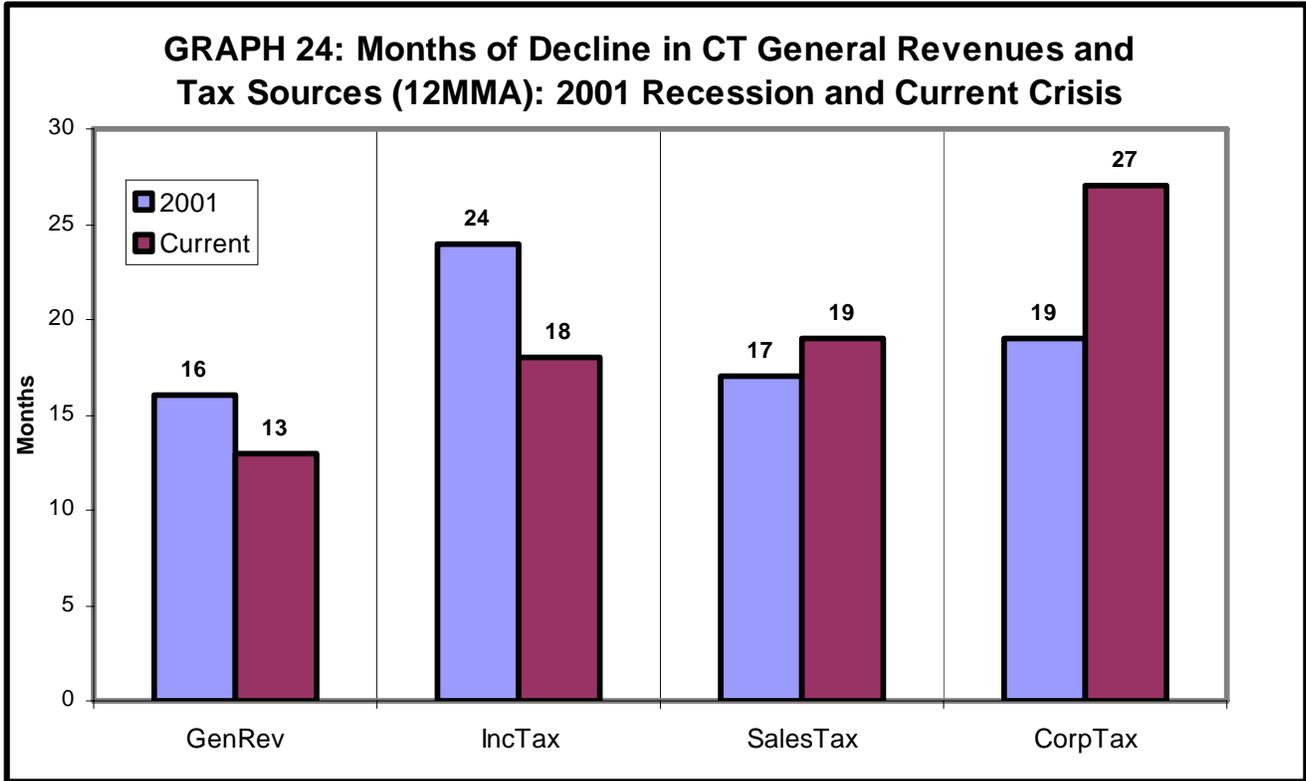
	2001 Recession Decline			Current Recess/Panic Decline		
TaxRev	%Decline	No of Mo	AnnDecline	%Decline	No of Mo	AnnDecline
<b>GenRev</b>	10.11%	16	-7.68	16.26%	13	-15.11
<b>IncTax</b>	15.55%	24	-8.10	22.32%	18	-15.50
<b>SalesTax</b>	4.99%	17	-3.55	14.98%	19	-9.74
<b>CorpTax</b>	51.77%	19	-36.90	33.03%	27	-16.32

SOURCE: Boston Federal Reserve Bank: New England Economic Indicators.

Though the length of decline in General Revenues and the Personal Income Tax were three and six months shorter over the recent recession/panic than they were during the 2001 Recession, they were steeper over the recent crisis. The decline in Sales Tax Revenues was both longer, and steeper, over the recent recession/panic. The decline in revenues from the Corporate Income Tax was eight months longer over the recent recession/crisis, compared to the 2001 Recession, but it was not as steep.

Graph 24 visually summarizes the number of months that State-Government Revenues declined, by major source over the 2001 Recession and the recent recession/panic. Since, as depicted in Graph 24, different revenue sources declined for different lengths of time, not only across the two recessions, but, even over the same recession, employment declines were converted to compounded, annualized rates of decline to put all comparisons on the same footing.

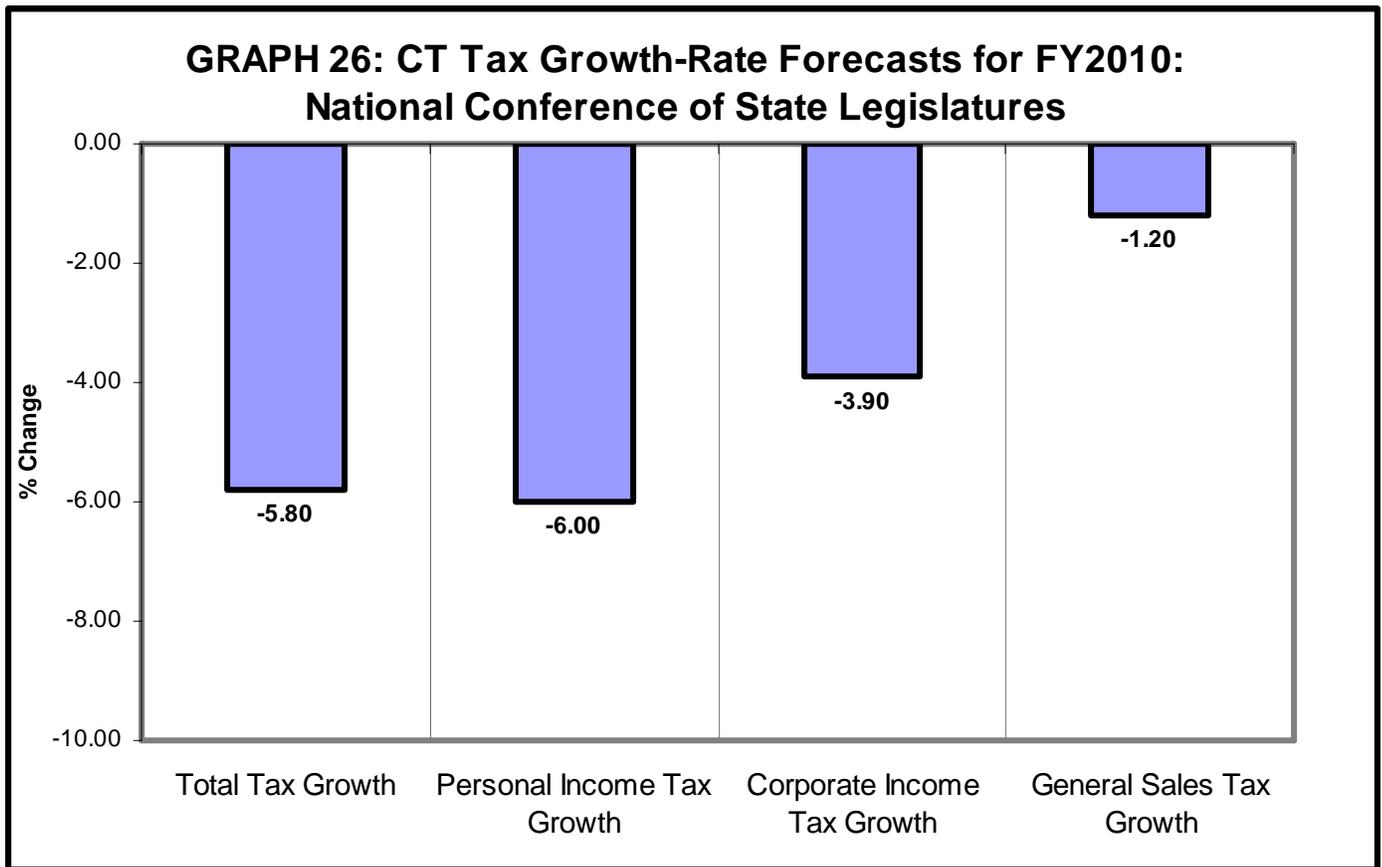




SOURCE: Boston Federal Reserve Bank, New England Economic Indicators.



From Graph 25, on a compounded, annualized basis, Connecticut General Revenues, Personal Income Tax, and Sales and Use Tax all had a much steeper rate of decline over the recent recession/panic, compared to the 2001 Recession. However, over the 2001 Recession, the Corporate Income Tax declined a rate more than double the rate of decline during the recent crisis. However, the length of the decline in Corporate Income Tax Revenue was eight months longer over the recent crisis, compared to the 2001 Recession (see Graph 24). FY2010 is projected to be another period of declining tax revenues. Graph 26 presents the forecasts by the National Conference of State Legislatures for the growth in the major sources of tax revenues for Connecticut in FY2010. Total tax revenues, including all major sources, are expected to decline in FY2010 for Connecticut.



SOURCE: National Conference of State Legislatures.



Save the Corporate Income Tax, the rate of decline in Connecticut's tax revenues has been much steeper over the recent crisis, as compared to the 2001 Recession. Especially the income and sales taxes have declined at much steeper rates over the recent crisis compared to the 2001 Recession. This reflects the much higher unemployment rate during the current period, resulting in the decline in income-tax revenues, and the unsustainable levels of consumer spending, which was driven by a credit bubble, which, when it popped, resulted in steep declines in sales-tax revenues.

Further, Connecticut, along with other states, could face intensifying fiscal stress going into 2011. Counting both initial and mid-year shortfalls, 48 states have addressed or still face budget shortfalls for FY 2010, totaling \$200 billion or 30% of state budgets. These are the largest gaps on record<sup>15</sup>. States' fiscal problems are expected to continue into the next fiscal year, and, in fact, beyond FY2011. Including both budget gaps addressed, and those still open, total \$112 billion or 17% of budgets in 46 states<sup>16</sup>. This total is likely to grow as revenues continue to deteriorate, and may well exceed \$180 billion, and states will also face large gaps that could total \$120 billion in FY2012. These numbers suggest that states will face total budget shortfalls of some \$260 billion for FY's 2011 and 2012<sup>17</sup>.

*American Recovery and Reinvestment Act* has provided some support to the states mitigating cuts in services and minimizing tax increases. But the aid is now winding down and only about \$40 billion remains to help with 2011 fiscal problems. The Federal Government could avert deep additional budget cuts that would further harm the economy by extending assistance over the period during which state fiscal distress is expected to continue rather than allowing the aid to phase out before the states have recovered their fiscal footing<sup>18</sup>.

---

<sup>15</sup> McNichol, Elizabeth and Nicholas Johnson, *Recession Continues to Batter State Budgets; State Responses Could Slow Recovery* (Updated May 27, 2010) Center on Budget and Policy Priorities: Washington, p. 1.

<sup>16</sup> *ibid*, p. 1.

<sup>17</sup> *ibid*, p. 1.

<sup>18</sup> *ibid*, p. 1.



And, the ARRA has played a significant role in Connecticut's rosier budget outlook for FY2010, compared to the original forecasts. State Comptroller, Nancy Wyman, cautioned that a \$500 million deficit that was projected for most of the current fiscal year was mainly eliminated not by revenue gains, but by deficit-mitigation measures that included Federal stimulus dollars, deferral of payments to the state pension fund and one-time transfers of money from accounts including the Rainy Day Fund<sup>19</sup>. Most of this money is in the form of increased Medicaid funding and a "State Fiscal Stabilization Fund." But it now appears likely the federal assistance will end before state budget gaps have abated. The Medicaid funds are scheduled to expire in December 2010, which is just halfway through the 2011 fiscal year in most states<sup>20</sup>. Another critical part of ARRA support to states is the education grants provided to prevent large cuts in teaching staff, and to even add more teachers where necessary. According to the Connecticut Department of Education, as of December 31, 2009, the ARRA created or retained 5,388 jobs in the State<sup>21</sup>.

Nationally, state and local employment accounted for 15.1% of U.S. Non-Farm Employment<sup>22</sup>. A sizable reduction with its multiplier effects could inflict a significant hit on the economy, even possibly causing a double-dip recession. From a macroeconomic perspective, almost all state and local governments are required to adopt balanced budgets. Tax revenues, which are generated by economic activity, tend to move pro-cyclically; as a result, budget balancing by state and local governments tends to amplify national business cycle swings<sup>23</sup>. According to Mark Zandi of MoodysEconomy.Com, in his testimony before Congress, if states get no more fiscal relief, they will have to take steps to eliminate deficits for state FY2011. He estimates that those steps could shave nearly a full percentage point off of GDP. That, in turn,

---

<sup>19</sup> Wyman, Nancy, WYMAN SAYS SURPLUS RISES TO \$166.9 MILLION BASED ON MODEST UPSWING IN JOBS, INCOME TAX COLLECTION (June 1, 2010) State of Connecticut, Office of the Comptroller.

<sup>20</sup> McNichol and Johnson (May 27, 2010), p. 7.

<sup>21</sup> *The American Recovery and Reinvestment Act of 2009 (ARRA) Federal Quarterly Report Summary Period Ending December 31, 2009*, Connecticut Department of Education.

<sup>22</sup> Carroll, Daniel, *Recession Shrinks State and Local Governments* (July 7, 2010) ECONOMIC TRENDS, Federal Reserve Bank of Cleveland.

<sup>23</sup> Bradbury, Katharine, *State Government Budgets and the Recovery Act* (February 17, 2010) PUBLIC POLICY BRIEFS, Federal Reserve Bank of Boston, p. 3..



could cost the economy 900,000 jobs. Historically, the State and Local Sector has accounted for about 12% of GDP and have added about ¼ of a percentage point to annual GDP on an ongoing basis. If the State and Local Government Sector slips back into negative territory, especially if it begins to take hold this summer, it could contribute to a reversal of this still-fragile recovery (i.e., a possible double-dip recession)<sup>24</sup>.

#### **IV. WHERE DOES THE STATE'S ECONOMY GO FROM HERE? The Outlook for 2009-2011 and Beyond**

THE CONNECTICUT ECONOMY: Outlook for 2009-2011---As noted in the introduction to the Connecticut Outlook (see page 1 above), Connecticut seems to have done something over this cycle that it has not done before in the Post Cold War Era. Non-Farm Employment turned down going into the last recession after that of the U.S. and the State's recovery in jobs coincided with that of the U.S. jobs recovery rather than lagging behind it. Graph 27 expands on Graph 2, which tracked the U.S. and Connecticut apparent recoveries beginning in December 2009 to May 2010, the last period of available Non-Farm Employment data. An index identical to the one constructed for Graph 1 traces the month-to-month growth in U.S. and Connecticut jobs, with December 2009 equal to 100.00. But, Graph 27 takes Graph 2 a couple of steps further by not only tracking Non-Farm Employment (Panel A), but also by two major sub-categories: Private Employment (Panel B) and Government Employment (Panel C). From Panel A (and Graph 2), Connecticut's job-growth since the December 2009 recovery has been stronger than that for the U.S. And, until May, so was Private-Sector job-growth. But, as depicted in Panel B, Connecticut's Private-Sector job-growth trajectory flattened out in May, indicating a possible slowing in private job growth. The June numbers showed a significant deceleration in private job-growth for the U.S. From Panel C, Government job growth had been stronger for the U.S. than for Connecticut until May when both U.S. and Connecticut Government job-growth spiked due to the hiring of Census workers. Based on the U.S. drop in June, the State's Government jobs may drop in June as well.

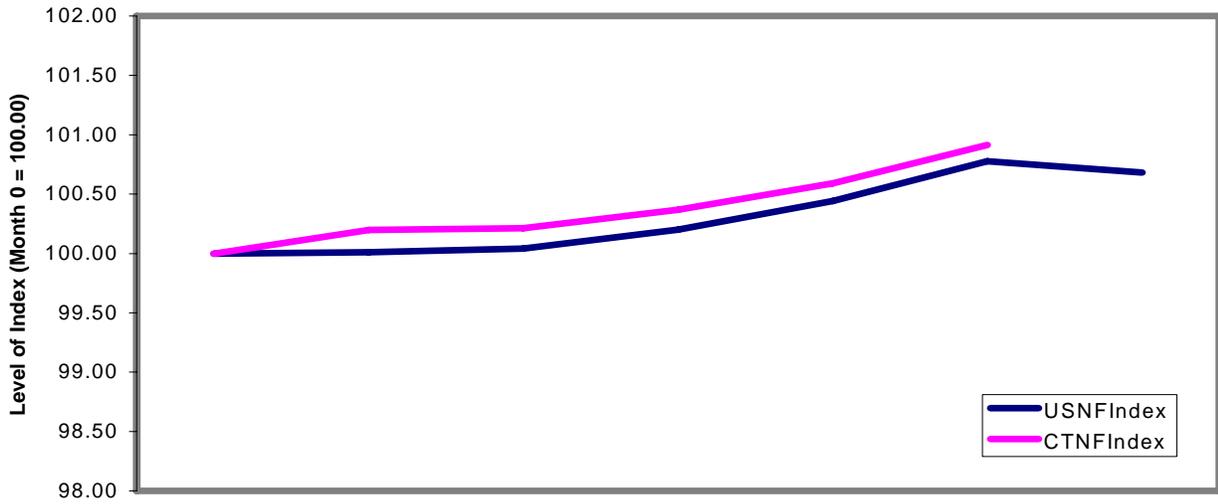
---

<sup>24</sup> See *ibid*, p. 10.

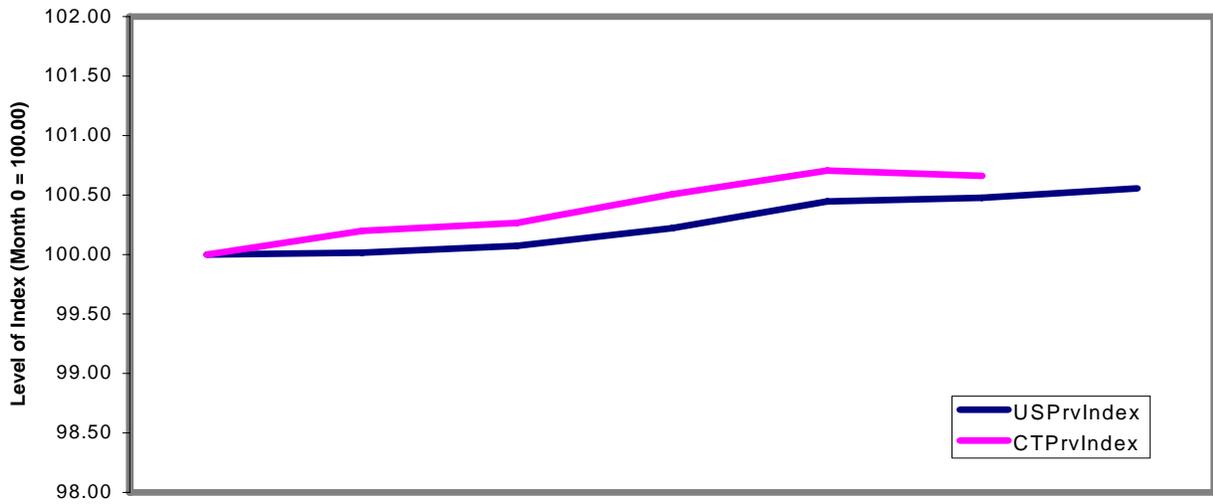


# GRAPH 27: CT vs. U.S. Jobs Recovery-Current Tentative Recovery

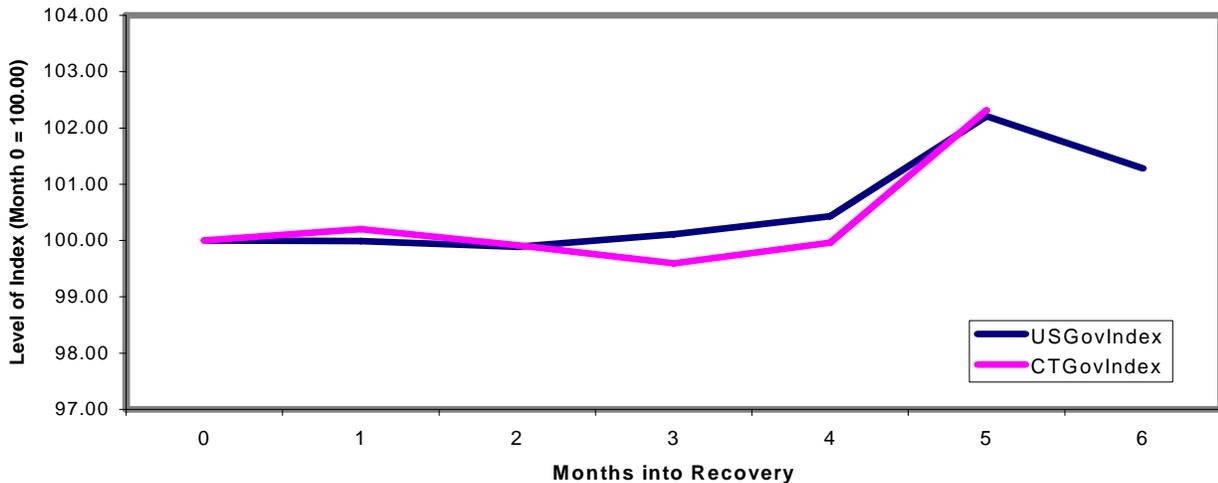
## PANEL A: CT vs. U.S. NF Emp: Current Recovery



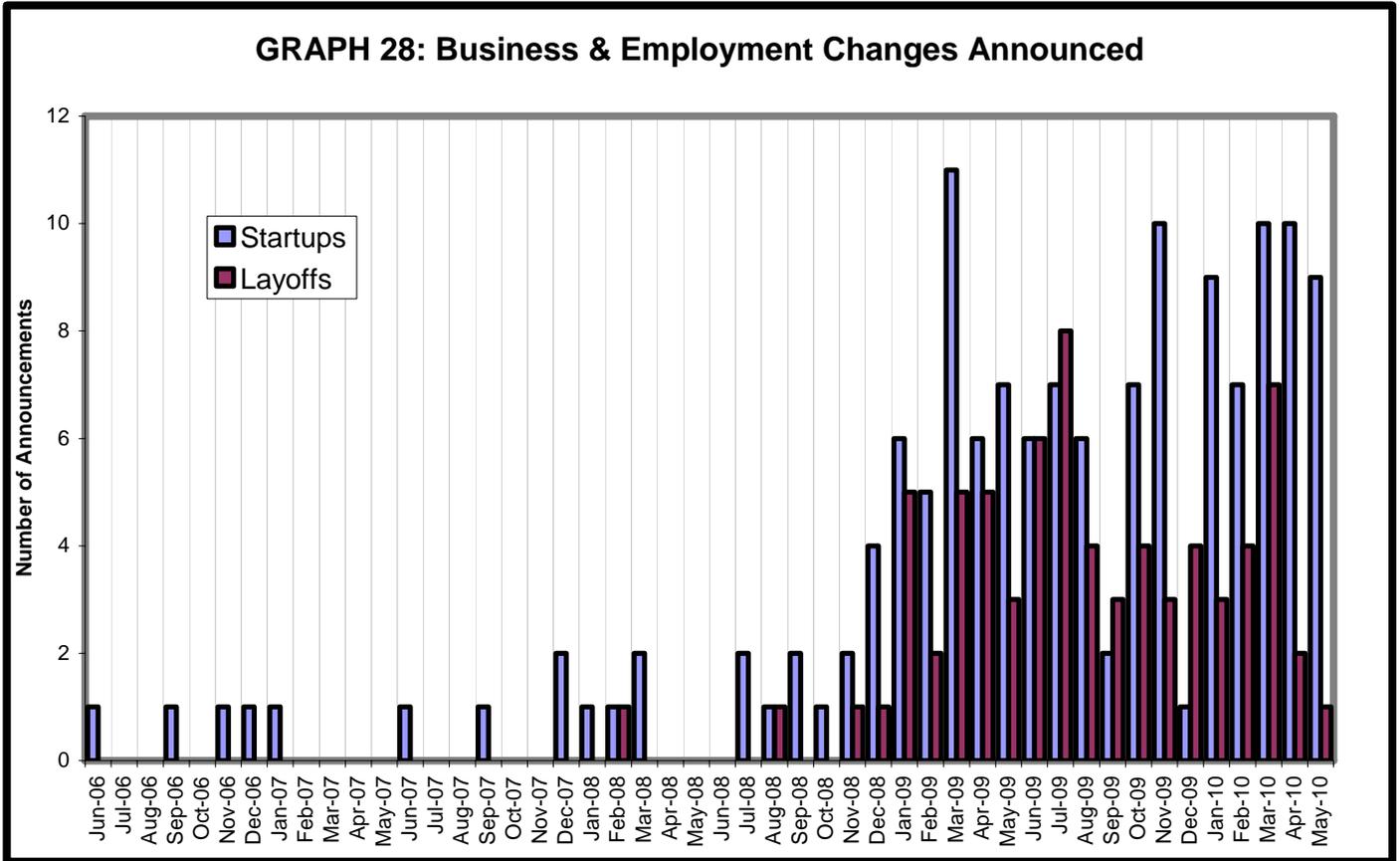
## PANEL B: CT vs. U.S. Priv Emp: Current Recovery



## PANEL B: CT vs. U.S. Gov Emp: Current Recovery



The question is: Will the current recovery continue? Will the recovery slow to a crawl turning into a Japan-style lost decade, or will there be a repeat of the 1980 and 1981-82 double-dip recessions? The possibility that it could accelerate seems unlikely at this point. Graph 28 tracks the jobs announcements for Connecticut from various media announcements. It follows the number of job-expansion announcements and the number of job-reduction announcement from June 2006 to May 2010.

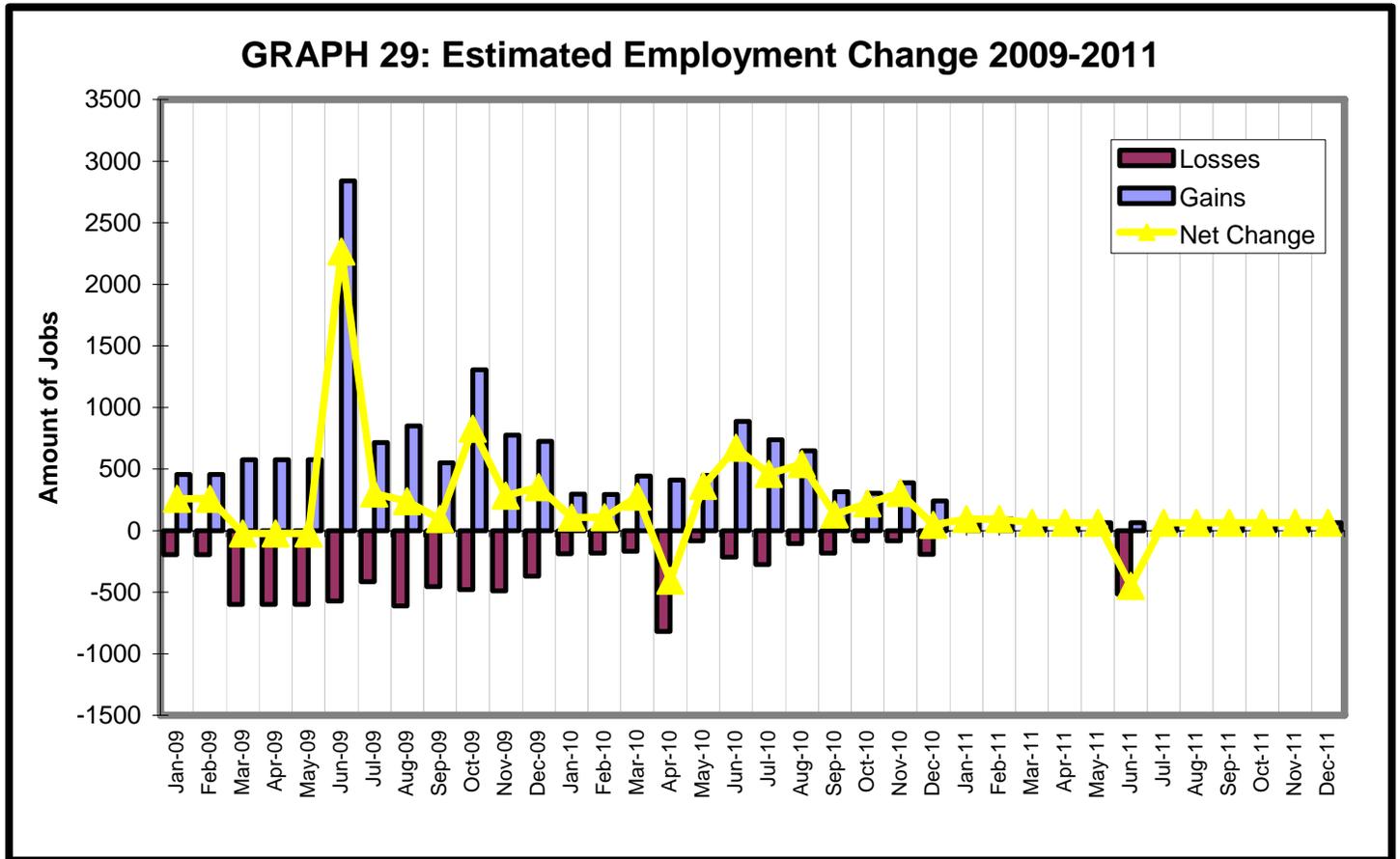


DATA SOURCE: Slepski, Joseph, Business and Employment Changes Announced in the News Media (April 2010) CTDOL-Research  
 GRAPH DRAWN BY: Sarah York and Matt Krzyzek, Economists, CTDOL-Research

Job announcement activity actually picked up the last quarter of 2008 as the U.S. and World economies were going into financial crisis. Further, the number of announcements of job additions exceeded that of job eliminations. However, when tracking the actual number of job additions and subtractions in each announcement, Graph 29 shows that from January 2009 through December 2011, a period that coincides with the forecast



horizon (see below), After a spike in June 2009, the number of jobs announced (blue bars) has trailed off to flat. And, though the number of announced jobs eliminated has appeared to be smaller than the number job expansions (red bars), save a projected spike in jobs eliminated in June 2011, they too flatten out going into 2011. The net number of jobs announced (the yellow line) essentially flatlines after January 2011 (again, except for June).

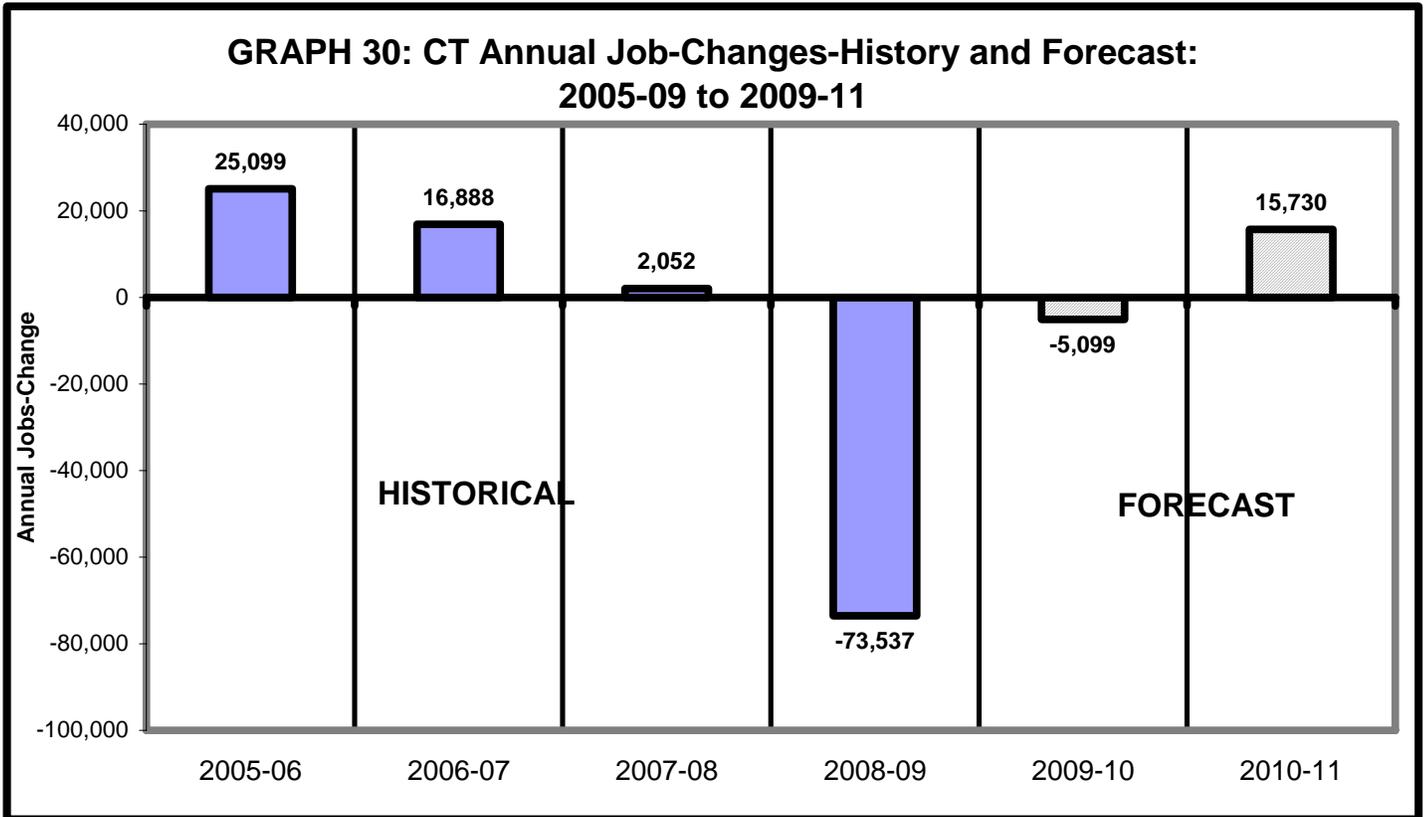


DATA SOURCE: Slepski, Joseph, *Business and Employment Changes Announced in the News Media* (April 2010) CTDOL-Research  
 GRAPH DRAWN BY: Matt Krzyzek and Sarah York, Economists, CTDOL-Research

Graph 30 summarizes the annualized job-changes over the 2005 to 2009 historical years and the expected annual job-changes over the two forecast years: 2010 and 2011. On an annual basis, it is expected that Connecticut’s economy will recover from the steep losses of 2009, but still register a decline of 5,000 jobs in 2010 as a result of the current recovery’s slowing momentum going into the second half of the year. Assuming that,



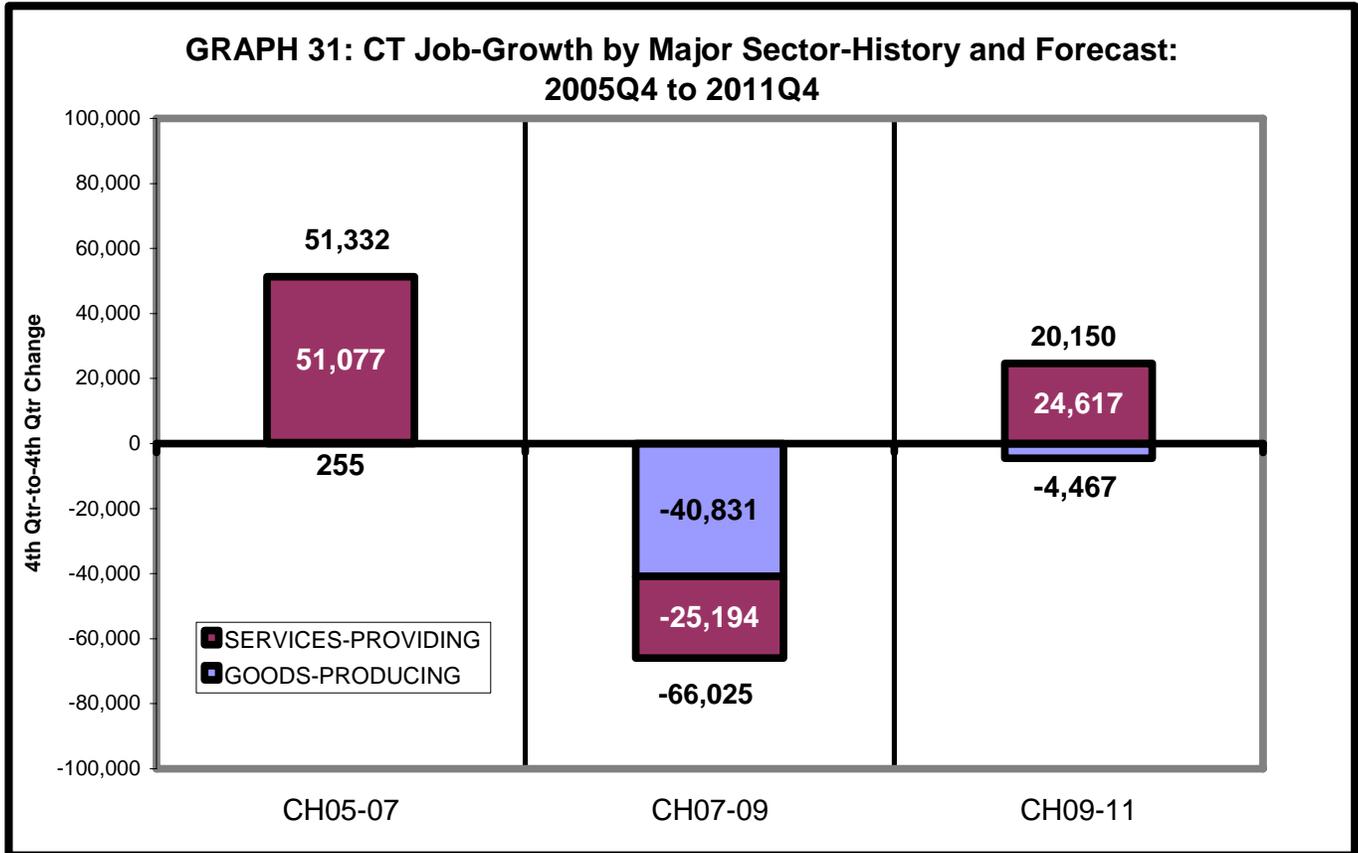
even if the recovery slows over the last one-half of 2010, it will nevertheless, continue, annual job-growth will turn positive again in 2011, for the first time since 2008, and that the State's economy will recover 15,730 jobs. This would represent a net-gain of 11,800 jobs over the two-year forecast period, on an annual basis.



Turning to the fourth-quarter-to-fourth quarter changes in jobs for Connecticut employment, the following section highlights the 2005Q4-07Q4 and 2007Q4-09Q4 historical periods and the 2009Q4-2011Q4 Forecast Period. The Goods-Producing sector is expected to continue losing jobs over the forecast period, on a fourth-quarter-to-fourth quarter basis. However, from Graph 31, losses will decelerate from 40,831 between 2007Q4 and 2009Q4, to 4,467 jobs over the 2009Q4-2011Q4 Forecast Period. Though losses are expected to subside in the Construction Sector (see Table 3), due to the continued drag of housing on the economy, not much growth is expected. Manufacturing, after hemorrhaging 24,000 jobs between 2007Q4 and 2009Q4, is expected to return to



trend-losses. About 3,000 more job-losses are expected over the 2009Q4-2011Q4 Forecast Period, as the manufacturing sector continues to re-structure, including downsizing and outsourcing.



SOURCE: U.S. BLS, CT DOL-Research, and Research calculations

After losing 25,194 jobs over the 2007Q4-2009Q4 Period, the Services-Providing Sector is expected to return to job-growth over the forecast period, adding 24,617 jobs. Though a turn-around from the recession period, the projected job growth in services is quite modest compared to the 51,077 jobs created over the 2005Q4-2007Q4 Period, as the last expansion was coming to a close. Once again, Health Care and Social Assistance (HCSA) is projected to account for a significant portion of net-job gains over the forecast horizon as it has over the historical periods depicted in Table 3. HCSA is expected to add 7,700 jobs between 2009Q4 and 2011Q4, and account for 39% of all the net job-gains in the Services-Providing Sector. However, the growth-rate is expected to slow from the



5.5% pace between 2007Q4 and 2009Q4, to 3.0% over the 2009Q4-2011Q4 Forecast Period. The chief culprit affecting the slowdown in growth is the Hospital sub-sector. Year-to-Year (YTY), job-growth at Connecticut's hospitals began slowing after the middle of 2008, and by the end of 2009, it was actually negative. It is expected that this drag on HCSA job-growth will persist over the forecast horizon.

Another previously strong-growing sector, Education, may also be facing some severe headwinds going into the forecast period. Its pace has already slowed from a 7.7% rate (+12,700) between 2005-07, fourth-quarter-to-fourth-quarter, to 2.1% (+3,700) over 2007Q4-2009Q4. The growth-rate is expected to slip to 1.9% (+3,500) over the 2009Q4-2011Q4 Forecast Period. Though the student demand, especially at the community colleges is high, as many take advantage of the downturn to change careers, or improve their skills, budget cuts at the State level are restraining the response to the increase in demand. Further, given the State's budget deficit, and consequent cuts to local government aid, education budgets are being slashed, and some are being cut deeply. Thus, even the modest forecast for job-growth in the Education Sector may be overly optimistic.

After losing 13,700 over the 2007Q4-09Q4 Period, Admin and Support is expected to add nearly 5,000 jobs over the forecast period. Driving the ups and downs in this sector is, as previously mentioned, is Employment Services. It is expected that employers will rely very heavily on temporary and contingent workers over the coming recovery and beyond. That is, this represents an on-going and permanent structural change, not just in manufacturing, but in the services sector as well. It is becoming an important indicator of changes in the direction of the business cycle. Another sector with a large amplitude over the business cycle is Professional, Technical, and Scientific. This sector too is driven by a few industries that dominate the cyclical behavior of the sector.



**TABLE 3: Connecticut Non-Agricultural Employment: History and Forecast**

INDUSTRY	HISTORICAL			FORECAST	NUMERICAL CHANGES			PERCENT CHANGES		
	2005:Q4	2007:Q4	2009:Q4	2011:Q4	CH05-07	CH07-07	CH09-11	%CH05-07	%CH07-09	%CH09-11
TOTAL	1,649,936	1,692,218	1,624,730	1,646,119	42,283	-67,489	21,390	2.56	-3.99	1.32
<b>GOODS PRODUCING</b>	<b>261,598</b>	<b>261,853</b>	<b>221,022</b>	<b>216,554</b>	<b>255</b>	<b>-40,831</b>	<b>-4,467</b>	<b>0.10</b>	<b>-15.59</b>	<b>-2.02</b>
Mining.....	749	749	609	685	0	-139	75	-0.04	-18.61	12.38
Construction.....	66,446	70,464	53,854	53,553	4,018	-16,609	-302	6.05	-23.57	-0.56
Manufacturing.....	194,403	190,641	166,558	162,317	-3,763	-24,083	-4,241	-1.94	-12.63	-2.55
<b>SERVICE PROVIDING</b>	<b>1,363,869</b>	<b>1,414,946</b>	<b>1,389,752</b>	<b>1,414,369</b>	<b>51,077</b>	<b>-25,194</b>	<b>24,617</b>	<b>3.74</b>	<b>-1.78</b>	<b>1.77</b>
Wholesale Trade.....	66,951	68,279	63,853	65,087	1,328	-4,425	1,234	1.98	-6.48	1.93
Retail Trade.....	197,475	197,521	183,095	183,041	46	-14,426	-54	0.02	-7.30	-0.03
Transportation and Warehousing.....	53,347	53,951	49,464	51,500	604	-4,487	2,036	1.13	-8.32	4.12
Utilities.....	8,478	6,685	6,590	6,697	-1,793	-95	107	-21.15	-1.42	1.63
Information.....	37,629	38,153	34,009	33,158	524	-4,144	-851	1.39	-10.86	-2.50
Finance and Insurance.....	118,479	123,339	116,694	114,933	4,860	-6,645	-1,761	4.10	-5.39	-1.51
Real Estate and Rental and Leasing.....	20,946	20,937	18,977	18,498	-9	-1,960	-479	-0.04	-9.36	-2.52
Professional, Scientific, and Technical Services....	89,442	93,827	85,392	88,961	4,385	-8,435	3,570	4.90	-8.99	4.18
Management of Companies and Enterprises.....	24,923	27,076	27,160	27,838	2,153	84	678	8.64	0.31	2.50
Admin and Support/Waste Manage/Remediation..	89,456	91,785	76,656	80,716	2,330	-15,129	4,060	2.60	-16.48	5.30
Educational Services.....	164,730	177,404	177,556	184,632	12,675	151	7,076	7.69	0.09	3.99
Health Care and Social Assistance.....	229,756	241,328	251,895	261,282	11,572	10,567	9,387	5.04	4.38	3.73
Arts, Entertainment, and Recreation.....	43,437	42,540	40,638	41,637	-896	-1,902	999	-2.06	-4.47	2.46
Accommodation and Food Services.....	105,336	113,137	110,158	111,366	7,801	-2,979	1,208	7.41	-2.63	1.10
Other Services.....	56,494	58,747	56,523	58,284	2,254	-2,225	1,762	3.99	-3.79	3.12
Government**.....	56,991	60,235	91,093	86,738	3,244	30,858	-4,355	5.69	51.23	-4.78

SOURCE: Connecticut Department of Labor, Office of Research      NOTE: Data not seasonally adjusted

\*\*State and local-government employment did not actually increase by 29,769 between 2007Q4 and 2009Q4. Reporting requirements changed, which caused a jump in jobs reported by the State and local governments.



Particularly, Computer Systems and Design, which accounted for three-quarters of the sector's job-growth between 2005Q4 and 2007Q4, and for one-quarter of the sectoral losses over 2007Q4-2009Q4. Also contributing 1,000 jobs each to the 7,700 jobs lost in Professional, Technical, and Scientific were Architectural and Engineering, which accounted for 26% of the job-losses, Advertising, which accounted for 16% of the losses, and Legal, which contributed to 14% of the sector's job-losses. A good portion of the 2,900 jobs expected to be added to the Professional, Technical, and Scientific Sector between 2009Q4 and 2011Q4 will be in Computer Systems and Design. Jobs in this industry are tied to other sectors, including the Financial Services Sector, which we not turn to.

Last, but certainly not least, especially concerning Connecticut's Economy, is the forecast for Finance and Insurance Sector employment. Though this sector's share of the State's employment, at first declined, and then recovered, its share of output and earnings have steadily grown over the last two decades, and by 2009, in spite of the financial crisis, Finance and Insure now accounts for a larger share of Connecticut's economy than Manufacturing, which has been steadily declining as a share of the State's Economy.

Though it accounted for 42% of Finance and Insurance jobs in 2007Q4, the Finance sub-sector contributed 55% to the job-losses in this sector between 2007Q4 and 2009Q4. The principal activity under this heading is Credit Intermediation. And, though it accounted for only 26% of jobs in this sector in 2007Q4, Non-Depository Institutions accounted for two-thirds of all job-losses between 2007Q4 and 2009Q4. In turn, employment was concentrated in Real Estate Credit and Sales Financing. Losses in Depository Institutions, Commercial Banks and Savings Institutions, began to accelerate in 2009. Again, driven by the continued weakness in the housing market, and the persistence of foreclosures, it is expected that losses in Depository Institutions, Real Estate Credit, and Sales Financing will continue, though the pace will slow from a 7% decline between 2007Q4 and 2009Q4, to a 2% decline over the forecast period. Insurance, though recovering from the 2,700-job decline between 2007Q4 and 2009Q4, it is still expected that another 800 jobs will be shed over the forecast period.



RISKS TO THE FORECAST: Very High---A major risk on the downside is posed by the current sovereign debt crisis unfolding in Europe, centered around Greece, but also Portugal and Spain, and possibly others. After the U.S.'s two NAFTA partners, Canada and Mexico, Europe is the most important U.S. export market. And, U.S. exports are hurt by the sliding Euro and simultaneous appreciating dollar. This is particularly relevant to Connecticut, as two of the State's three largest export destinations, France and Germany, are members of the Eurozone. Two other financial shoes that could drop are centered on the toxic assets in the commercial real estate market, which imploded in 2007, and some have warned of an impending private-equity debt crisis in 2011 and 2012. Last, the Fed and other central banks must walk a tightrope in their efforts to withdraw liquidity from the World's economies. The \$8,000 first-time homebuyers' credit ended on April 30, 2010<sup>25</sup> and much of the fiscal stimulus package spending ends in 2011. In particular, Federal aid under the ARRA, to the states will wind down halfway through FY2011. An ensuing fiscal crisis for most states that must balance their operating budgets by law could cut the tentative recovery short. In addition, the Fed began withdrawing from its program of buying up Residential Mortgage-Backed Securities (RMBS). The Treasury has said that it will step in to continue to support low mortgage rates.

From the real side of the economy the housing sector, with its consequent multiplier effects, will continue to act as a drag on the economy. In addition, Connecticut can expect another generation of ARMs to re-set in 2010 and into 2011, which could result in a new wave of foreclosures. Further, the impacts of the withdrawal of the government's stimulus to the economy will depend on whether or not the economy can achieve self-sustaining growth if life supports are removed. Further, discussions about cutting spending to address the Federal deficit resulting in spending-reductions that are too soon and too aggressive could, in the words of Paul Krugman, be reminiscent of 1937, when FDR suddenly got the "old fashioned religion", because it appeared that the economy had recovered from the Depression, and decided to balance the Federal Budget, which, in conjunction with some other factors, sent the U.S. Economy back into the Great Depression.

---

<sup>25</sup> Though first-time homebuyers had until June 30<sup>th</sup> to close.



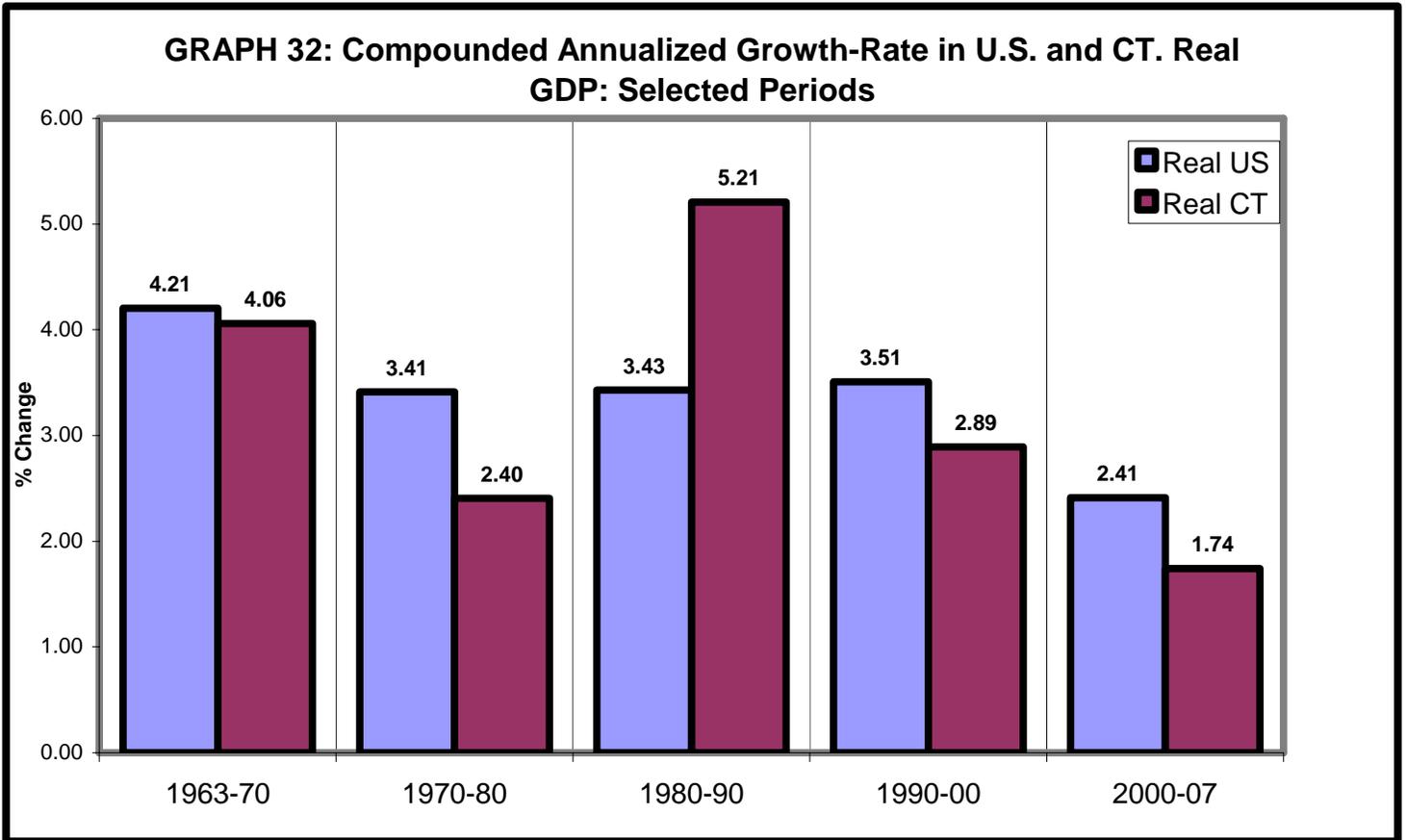
In the final analysis, the need for households to continue the long process of repairing their balance sheets, by working off the accumulation of excessive debt-loads, in the face of the popping of an asset bubble, the continued weakness in housing (including further price declines), and the consequent, persistently high unemployment, will act as significant drags, on both, the State and national economies over the entirety of the forecast horizon.

THE CONNECTICUT ECONOMY: Beyond 2011---What can be expected for the State's Economy beyond 2011? To get a sense of the longer-term forces acting on the State's Economy, the following discussion focuses on some trends in the national and Connecticut economies that have been unfolding over the Post World War II Era.

Graph 32 looks at the growth-rates of U.S. and Connecticut GDP over the last four decades of the 20<sup>th</sup> Century and the first decade of this century. Since the two end periods analyzed in Graph 30 are seven years, where the middle three periods are each full decades, the compounded, annualized growth-rate is presented to put all five periods on the same basis. The first observation about Graph 30 is that the growth-rate in Real U.S. GDP has not matched its performance in the 1960's. After growing at a compounded 4.2% annualized growth-rate, the U.S. Economy has never duplicated that in subsequent decades. After hitting a growth-plateau of between 3.4-3.5% per-year growth over the last three decades of the 20th Century, the growth-rate in Real U.S. GDP has slowed to a 2.4% annualized growth-rate over the first seven years of the 21st Century, on the eve of the recent crisis. Connecticut's performance came close to matching U.S. Real GDP growth in the 1960's. However, Connecticut's Economy grew at a full percentage-point lower than that for the U.S. in the 1970's (at 2.4% per year). With the Reagan defense buildup, and with Connecticut strategically positioned with a strong defense-industry oriented economic base, the State's Economy boomed as the defense budget grew. While the national economy grew at 3.4% per year, Connecticut's growth surged to 5.2% per year. The State's Economy has never matched that performance since. While the growth in the U.S. Economy had a slight up-tick to 3.5% per year in the 1990's, Connecticut's



growth-rate fell to under 3%. Though the growth-rate fell for both the U.S. and Connecticut economies between 2000 and 2007, while the U.S. growth-rate dropped a percentage point to 2.4% per year, Connecticut's growth-rate came to a virtual standstill at 1.7% per year<sup>26</sup>.



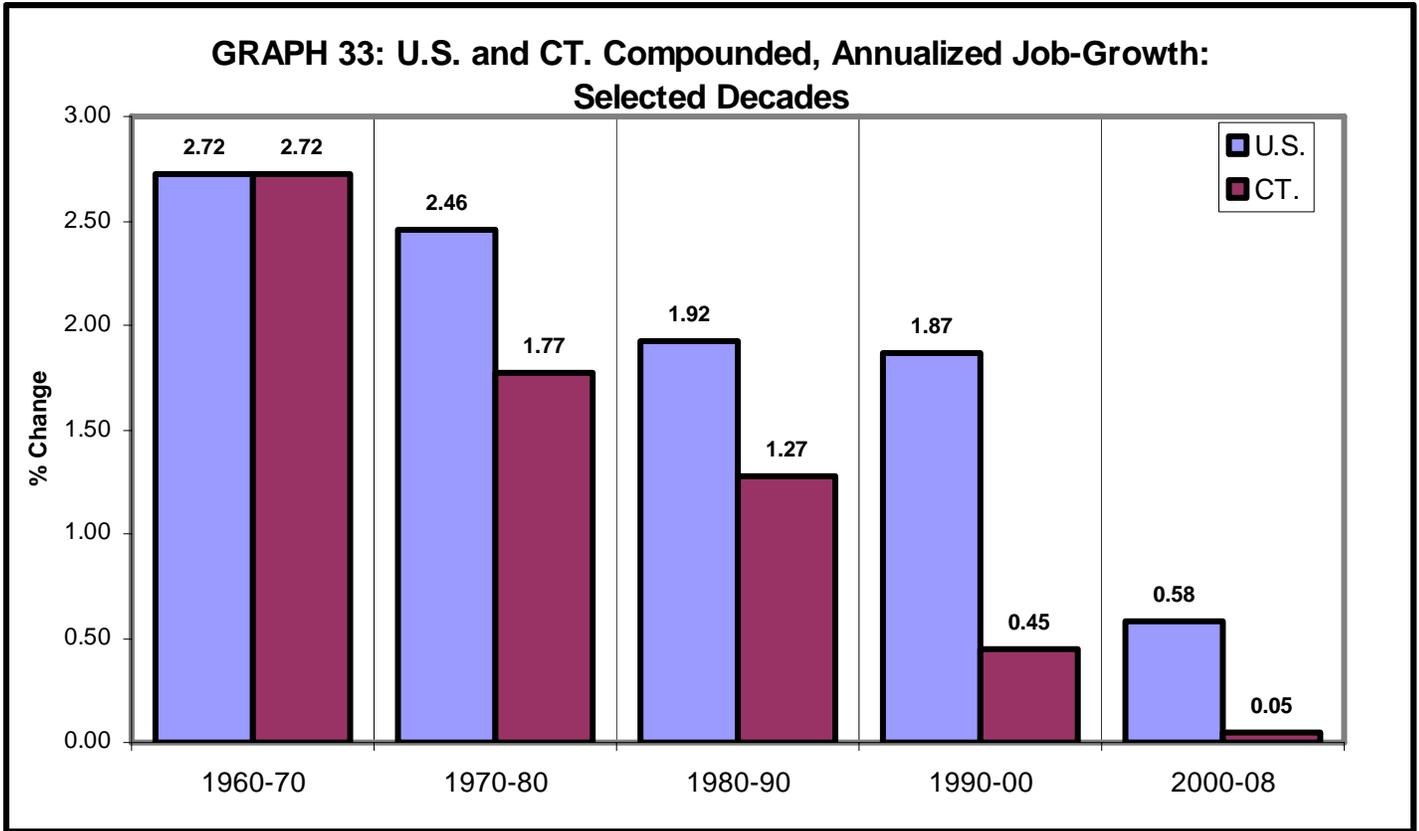
SOURCE: U.S. BEA and calculations by CTDOL-Research.

Turning to Graph 33, employment-growth in the U.S. and Connecticut is tracked for the last four decades of the 20th Century, and the first eight years of the 21st. Since the last period of analysis is eight years, not a full decade, as in Graph 30, Graph 31 presents the compounded, annualized growth-rates for each period. For both the U.S. and Connecticut, the growth-rate in employment has never matched the performance of the 1960's in subsequent decades. In the 1960's, both the U.S. and Connecticut, were adding

<sup>26</sup> See Kennedy, Daniel W., *Structural Change in the U.S. and Connecticut Economies* (2008) Office of Research, Connecticut Department of Labor: Wethersfield, CT.



jobs at a rate of 2.7% per year. As U.S. job-growth performance slipped in each subsequent decade, Connecticut's performance slipped by even more. While the U.S. added jobs at a rate of 2.5% per year in the 1970's, the Connecticut rate fell to 1.8%. Even in the 1980's, when Connecticut's GDP-growth far outpaced that of the U.S., the State's Economy added jobs at a rate of 1.3% per year, compared to 1.9% for the U.S.



SOURCE: U.S. BLS and calculations by CTDOL-Research.

With the end of the Cold War and the downsizing of the defense industry, in conjunction with the restructuring of the insurance industry, the Connecticut Economy's ability to create jobs has been severely effected. While the U.S. Economy reproduced the, less than stellar, 1.9% per-year job creation rate of the 1980's again in the 1990's, Connecticut's job-creation rate fell to an anemic 0.5% per year. The first eight years of this century have seen a collapse in the job-creation ability of both the U.S. and the Connecticut economies. Both put in the most dismal performances of the Post-1960 Era. The U.S. added jobs at weak 0.6% per year rate between 2000 and 2008, and Connecticut for all



practical purposes had no job growth. Over the 2000-2008 Period, the State's Economy added jobs at a rate of only 0.05% per year.

Though the last year of the current period certainly includes the recent financial and economic crisis, the worst since the Great Depression, the 1970's, 1980's, and the 1990's have all had their turbulence, which effected economic growth in each of the decades. Even the 1960's started and ended with a recession, punctuated by a financial crisis in 1966. Thus, the decade-by-decade comparisons seem to be a valid exercise. Given that, it appears to be clear that both the U.S. and Connecticut economies are in the midst of a long-term decline in the ability to generate job-growth. And, since the end of the Cold War, defense cutbacks, and the restructuring of the insurance industry, Connecticut has become more strongly tied to the fortunes of the U.S. Economy. Among other factors, Rogoff and Rhienshart (2010)<sup>27</sup> found that output began to decline in those countries that were in a run-up to a financial crisis. Finance has played an ever-larger role in the U.S. Economy since the advent of financial deregulation beginning with the *Monetary Decontrol Act of 1980*. As discussed above (see Graph 22), finance has become an increasing share of Connecticut's Economy over the last two decades. These factors may have played a role in the decline of output and job growth, particularly in Connecticut. But, changing areas of competitive advantage, particularly in terms of geography, may have also played a role in declines in output and job growth, but also in the role of the rise of finance. This may be particularly true for Connecticut.

The changing fortunes of regional economies, driven by changes in competitive advantage, has focused attention on the trend of firms' reconfiguring themselves through what is termed "outsourcing". Over the last two decades there has been a debate over the effects of outsourcing, particularly, offshore outsourcing<sup>28</sup>. The phenomenon of

---

<sup>27</sup> Rogoff and Rhienshart, THIS TIME IS DIFFERENT (2009)

<sup>28</sup> For instance, see Bhagwati, Jagdish, Arvind Panagariya, and T.N. Srinivasan, *The Muddles over Outsourcing*, JOURNAL OF ECONOMIC PERSPECTIVES (Forthcoming), Houseman., Susan N, *Outsourcing and Offshoring: Problems for Price and Productivity Measurement* (June 2008) UPJOHN INSTITUTE: Kalamazoo, Greene, William, *Growth in Services Outsourcing to India: Propellant or Drain on the U.S. Economy?* (January 2006) OFFICE OF ECONOMICS WORKING PAPER, U.S. International Trade Commission: Washington, and Amiti, Mary and Shang-Jin Wei *Fear of Service*



“outsourcing” is what economists call *Vertical Disintegration*, or *Production Fragmentation*. Vertical Disintegration, or outsourcing occurs when a firm contracts out to an external supplier to provide a function previously performed internally, within the firm, or spins off a division, at an earlier stage of its production process, to form a new firm. This converts a vertically integrated process into a *supply chain*. Whether or not the U.S. is a net beneficiary of offshore outsourcing, or how much outsourcing is of the on-shore type is not critical for the affects it would have on Connecticut’s economy—particularly, its labor market. Critical to Connecticut’s labor market, is whether or not outsourcing is out-of-state, regardless of whether or not it is onshore, or offshore with regard to the national economy.

But, to explore the effects of outsourcing on the State’s Economy, restricting the discussion to GDP, or Final Demand, is not seeing the whole picture, especially as it affects the demand for labor and the implications for labor-market dynamics, especially with regard to vertical disintegration. Labor is required, not just to produce goods and services to meet final demand, but also to produce goods and services to meet intermediate demand by the processing sectors. That is: *Gross Output (GO)*, which includes Final Demand (= GDP) plus intermediate-inputs demand, is the critical measure of output. Further, the affects of “outsourcing” or vertical disintegration, can only be assessed by including, not just GDP, but also Intermediate Inputs and the changing shares of each as a component of GO.

Data on *Gross Output (GO)*, the expanded concept of economic output may be found in the KLEMS data first released by the U.S. Bureau of Economic Analysis in 2005. The KLEMS data aggregates the detail underlying the industry estimates of *Intermediate Inputs* into three cost categories—Energy, Materials, and Purchased Services<sup>29</sup>. These estimates are prepared by applying a KLEMS (K-Capital, L-Labor, E-Energy, M-Materials, and S-Purchased Services) production framework to BEA’s estimates of

---

*Outsourcing: Is It Justified?* (October 2004) IMF WORKING PAPER, International Monetary Fund: Washington.

<sup>29</sup> Strassner, Erich H, Gabriel W. Medeiros, and George M. Smith, Annual Industry Accounts: Introducing KLEMS Input Estimates for 1997–2003 (September 2005) SURVEY OF CURRENT BUSINESS, U.S. Bureau of Economic Analysis: Washington, p. 31



industry production based on the North American Industry Classification System. Unfortunately, KLEMS data are not produced at the state level. Thus, some of the methodology used by BEA in producing state GDP estimates was used to estimate state-level Gross Output and its components for Connecticut. Specifically, a share-allocation procedure was used to allocate the national share to the state's industry for each of the KLEMS components to obtain total Intermediate Inputs.

The first clue to the trends observed in Connecticut's Economy is the growth-rate of Gross Output (GO) and its two major components, VA (= GDP) and Intermediate Puts over the 1997-2007 Period. Intermediate Inputs, as a share of U.S. GO, increased from 45.15% to 46.50%, or by 1.35 percentage-points (not shown), between 1997 and 2007. In 1997, Intermediate Inputs represented 43.02% of Connecticut's Total GO, but by 2007 Connecticut's Intermediate-Inputs share had grown to 46.03% of Total GO, which represented a 2.66 percentage-point increase. This rapid growth in Connecticut's share of Intermediate Inputs over the 1997-2007 Period represents a significant shift in the State's industrial structure, and it could go a long way toward explaining the decline in the State's labor-market dynamics.

The top five contributors to Connecticut's growth in Intermediate Inputs are close to the top five contributors to the growth in Value Added (= GDP)—save one exception, Health Care (a top-five contributor to GDP growth) is replaced by Information. Connecticut's Finance and Insurance Sector tops the list, contributing nearly 29% of the growth in Intermediate-Input demand between 1997 and 2007. Manufacturing contributed another 15% to the growth in Connecticut Intermediate Inputs. Within Connecticut's Finance and Insurance Sector, the Securities, Commodities, and Brokers and Insurance industries, were the largest contributors to growth. Focusing on Securities, Commodities, and Brokers, what is striking is the dramatic growth in Intermediate Inputs, especially between 2002 and 2007, roughly, the last expansion. Intermediate Inputs grew by 111%—double the rate of VA (or GDP). The result: Intermediate Inputs increased as a share of GO by 7.58 percentage points, which was necessarily at the expense of VA.



Critical for job-creation in a state, regional, or local economy is the *Regional Purchase Coefficient* (RPC), the share of Intermediate Inputs actually purchased in the local economy. It follows that one minus the RPC represents the share of commodity inputs purchased outside the local economy (i.e., imports). According to analysis using IMPLAN, the RPC for Connecticut's Securities, Commodities, and Brokers Industry has remained stable at 0.4527 between 2002 and 2007. Thus, 45.27% of this industry's commodity purchases are in Connecticut, however, it also implies that 54.73% of Intermediate Inputs are imported from out-of-state (i.e., the portion that "leaks" out of the state). Given the growth in the share of Intermediate Inputs, given the RPC, imports for this industry increased by 101%. Even though the second biggest contributor to Connecticut's growth in Finance and Insurance output, Insurance Carriers, has an RPC of 0.6688, (i.e., one-third of its Intermediate Inputs are imported), imports increased by 60% between 2002 and 2007, driven by the increased share of Intermediate Inputs.

To summarize, it appears that Connecticut's muted GDP-growth and declining labor-market dynamics since 1997, may have not only been driven by higher productivity, compared to the U.S., but also by a faster than national pace, in the vertical disintegration of its industry structure resulting in GDP declining as a share of GO, in conjunction with the growth in the importation of Intermediate Inputs from out of state. If these trends continue, then the long-term outlook appears to be one in which the State's firms continue the process of vertical disintegration faster than that in the U.S., which, in turn, if most of the outsourcing is out-of-state outsourcing, translates into slower growth in GDP (= Value Added), firm formation, and job creation<sup>30</sup>.

---

<sup>30</sup> For the longer study on this issue, see Kennedy, Daniel W., *OUTSOURCING AND THE DECLINE IN CONNECTICUT'S LABOR-MARKET DYNAMICS: Is There a Connection? Some Clues from KLEMS* (November 2009) OCCASSIONAL PAPER: Connecticut Department of Labor: Wethersfield, CT., for a condensed version, see Kennedy, Daniel W., *CONNECTICUT'S LABOR-MARKET DYNAMICS: Clues from KLEMS?* (November 2009) CONNECTICUT ECONOMIC DIGEST: Connecticut Department of Labor and Connecticut Department of Economic and Community Development: Wethersfield and Hartford, CT.

