

# New Jersey Economic Insights

Dr. Charles Steindel,  
Chief Economist



## Outlook New Jersey

### Growing Signs of Recovery Should Overcome Recent Shocks in the Middle East and Japan

#### New Jersey

The State's job count fell in both December and January, but started to grow again in February. Private-sector employment fell by 14,900 jobs over December and January before growing by 6,800 in February. Harsh weather appears to have been the main culprit for the two weak months. December and January were very cold relative to 1971-2000 averages. A series of snowstorms of extraordinary intensity and frequency that began immediately after Christmas curtailed consumer buying. Still, income tax collections remained strong, suggesting that Garden State household income is rising at a steady pace.

U.S. Bureau of Economic Analysis numbers show that the aggregate personal income of New Jersey residents set a new record high in the fourth quarter of 2010. With more money in the pockets of consumers, the prognosis is for a healthier economy and continuing job growth. Business surveys such as the Federal Reserve Bank of Philadelphia's read on area manufacturing—which hit an extraordinary level of 45.3 in March (a 27-year high)—and the Bank's December 2010 survey of South Jersey businesses, have been quite upbeat, suggesting that companies sense the expansion is on solid ground and will continue. Our preliminary estimate of the Garden State Activity Index shows a modest increase in January.

It's reasonable to conclude that the extraordinary wave of storms temporarily held back household spending and overall hiring, despite the extra work and overtime earnings that snowplow drivers enjoyed during the period. To be sure, many key hiring and economic statistics are "seasonally adjusted." That is, they are

reported after correcting for normal variations linked to the calendar, such as the sharp rise in retail sales that always occurs from October to December. (Because it happens every year, economists find little value in confirming that, yet again, department store sales rose in December and fell in January, so the effect of that sales increase is factored out of many widely circulated economic benchmarks.)

However, the typical statistical analysis used to seasonally adjust economic data can't account properly for the effects of winters like the one we've just experienced—especially the impact of a once-in-a-lifetime confluence of East

Coast snowstorms. This year, even taking into account the recent floods in some parts of the state, the weather has moderated since January, and the increase in jobs in February suggests some payback for the losses experienced in the worst of the winter, and hopefully sets the stage for more solid improvement going forward. The level of private employment last month was 17,200 higher than in February 2010, which is the largest such gain since early 2008. New Jersey's unemployment rate did move up to 9.2% in February, but the rise was due to growth in the labor force—it's possible that more people are starting to look for work again (and so are counted as formally "unemployed"), which just might be a sign that the prospects of finding a job have edged up.

**“The level of private employment last month was 17,200 higher than in February 2010, which is the largest such gain since early 2008.”**

*(Continued on page 2)*

## United States

The statistics used to calculate the national Gross Domestic Product (GDP) showed strong gains in consumer spending and a solid rise in capital spending during the fourth quarter of 2010. Residential and non-residential construction both rose—a very reassuring development after the long real estate slump. Such

**“Cuts in federal spending being discussed in Washington don’t seem large enough to seriously hinder national expansion.”**

increases partly reflect the stimulus created by the aggressive intervention of the Federal Reserve, along with increases in federal spending and tax cuts. Signs of stabilization in the labor and stock markets are convincing more consumers to buy big ticket items such as cars, though plenty of pent-up demand remains.

The labor market numbers through February indicate that unemployment is moving down modestly and job gains aren’t slowing or retreating. (The national job figures for January did show some short-lived negative effects caused by the storms). Cuts in federal spending being discussed in Washington don’t seem large enough to seriously hinder national expansion. With the unemployment rate still very high and measures of underlying inflation at or

near 50-year lows, the Federal Reserve has indicated it will keep short-term interest rates near zero, and complete its bond purchase program.

The visible risks for the economy come from the recent surge in oil prices and, possibly, aftereffects of the Japanese disaster. The oil price rise seems to owe a lot to the political turmoil in the Middle East, particularly in Libya. Some resolution could result in an unwinding of at least part of the recent run-up at the pump. In any event, there is no threshold increase in fuel prices beyond which the U.S. economy will go into reverse. Higher energy prices certainly have the potential to drain consumer purchasing power, but are only one of many factors affecting the economy. As to Japan, it is hard now to look past the staggering human toll of the disaster. There is speculation, though, that the disruption to that nation’s economy, particularly its electricity output, could have serious worldwide consequences. Past experience with disasters of this type—including the very large earthquake in Kobe, Japan, as well as Hurricane Katrina—suggests that the ill effects on the economy from the Japanese disaster will be much less than initially feared. While both the Libyan and Japanese situations raise concerns, at this time they do not appear to be sufficiently large to derail the expansions in New Jersey and other parts of the United States.

## Industry Spotlight

### New Jersey's Pharma/Biotech Sector

Two widely cited characterizations of our state's economy are that

- New Jersey is a national and world leader in the pharmaceutical/biotechnology sector, and
- Our position in this critical, expanding industry has been slipping.

The first statement is undoubtedly true. The second doesn't adequately describe what's really the trend in the industry.

While New Jersey's "market share" of some types of pharma and biotech production has fallen in recent years, the state is maintaining its leadership in other important areas that are expected to generate the biggest growth in this lucrative and expanding industry.

As I view it, transformation, rather than contraction, is the correct characterization of the trend in New Jersey pharma/biotech sector. While the number of jobs in lower value-added production has ebbed, the number of high-paying positions in R&D and management remains very high, and that should keep pharma/biotech as a bedrock of New Jersey's economy.

The confusion about the state of the industry is partly the result of the difficulty of defining what constitutes a "pharma" or a "biotech" company. Specifically, the data gathered doesn't really give a clear picture of the state's vibrant pharma and biotech economy. Here's why:

The simplest measures of the industry look only at factory production. The most recent data available from the U.S. and New Jersey Departments of Labor shows that in 2009 New Jersey firms employed about 45,000 workers in two key industries that are part of the pharma and biotech sector—pharmaceutical and medicine manufacturing and medical equipment and supplies. Roughly 7.5 percent of national jobs in these industries are located here in the Garden State and they employ more than 1 percent of the

state's workers. In 2009, New Jersey workers in these industries earned more than \$4.5 billion, more than 2 percent of all private wages earned in the state. New Jerseyans' earnings were more than 10 percent of the national total in these sectors. Since the wage share was so much higher than the employment share, it's clear that New Jersey is also a center for the sector's high-wage jobs. (New Jersey wages per employee in this sector were around \$100,000.)

That is the full half of the glass. The empty half is the pronounced and rapid drop in total New Jersey

employment in this area. In 2007, New Jersey employment in the two industries was more than 50,000 so the total number of jobs in the industry dropped 10 percent in two years. In contrast, industry employment outside New Jersey was stable or grew in that period. The divergence in employment trends between New Jersey and the rest of the nation in these industries has understandably raised concerns about the future of a sector that has been a pillar of the state's economy.

The concerns are real, but positive signs abound. The job figures quoted in this article are determined largely by employment at manufacturing plants. But the pharma/biotech sector has a considerably broader footprint in New Jersey than just production factories. Most significantly, private research firms, a group which includes most startups, are not included in these figures because they are categorized in the research sector, not the pharma/biotech manufacturing sectors. It's also likely that the statistics miss some employment that is labeled as "corporate headquarters" but should be attributed to the sector.

**“As I view it, transformation, rather than contraction, is the correct characterization of the trend in New Jersey pharma/biotech sector”**

*(Continued on page 4)*

Unfortunately, no separate statistics are collected that focus solely on employment and earnings at biotech research firms and headquarters, but other data show that New Jersey maintains a robust presence in this vital and high-paying sector:

- Private research and development firms in New Jersey employ about 30,000 workers, accounting for about 5.5 percent of national employment in this area. These workers earned \$3.9 billion in 2009, more than 7 percent of the national total. It's likely a high portion of New Jersey economic activity by private research and development firms is generated by pharma/biotech activity.
- Roughly 75,000 New Jersey workers are employed at establishments involved in the management of business enterprises, earning about \$9.5 billion in wages in 2009. Most of these firms probably are not in pharma/biotech, but certainly some of these high-wage workers are working in that sector. New Jersey accounts for about 4 percent of national employment in the business management sector and about 5.5 percent of wages earned in that sector.

In general, despite a dip in 2010, both the research and development and corporate headquarters sectors have

been growing parts of the economic picture of New Jersey.

Some of the expansion in these sectors may be connected to pharma/biotech growth. Thus, just looking at the manufacturing end gives a misleading picture of the strength of the sector. Indeed, industry sources suggest that New Jersey employment in pharma/biotech is around

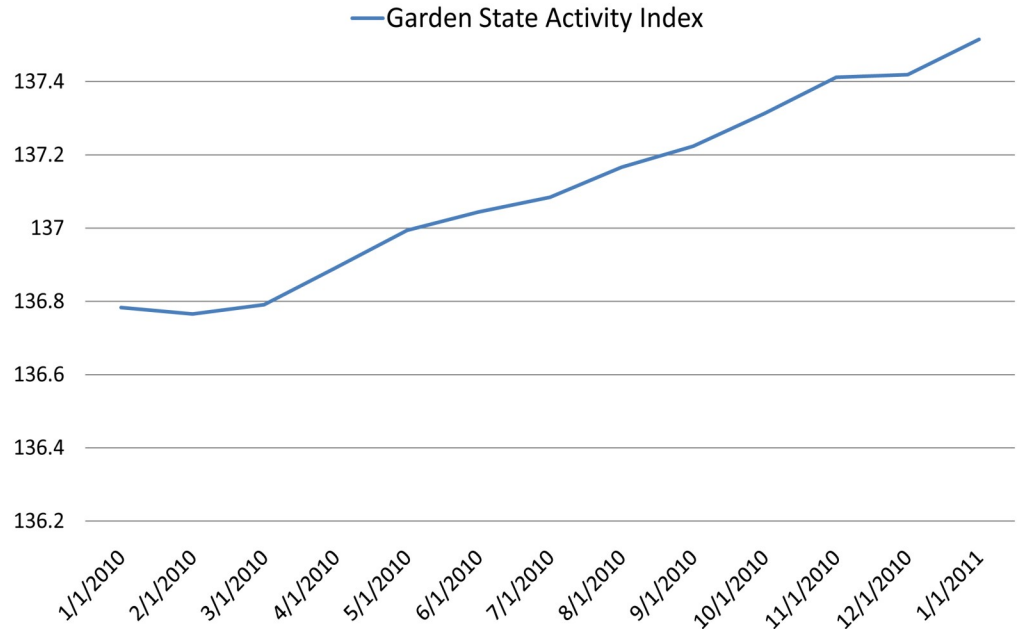
70,000—well above the numbers employed solely in manufacturing facilities.

To be sure, the variant, negative trends in different parts of the industry shouldn't be shrugged off. Workers displaced from pharmaceutical production can't readily take up jobs in start-up R&D firms, nor can shuttered plants immediately be converted for other uses that will boost manufacturing employment. Still, the traditional view that pharma/biotech is and will remain a major driver of the state's economy, remains not just defensible, but clearly the view most supported by the available facts.

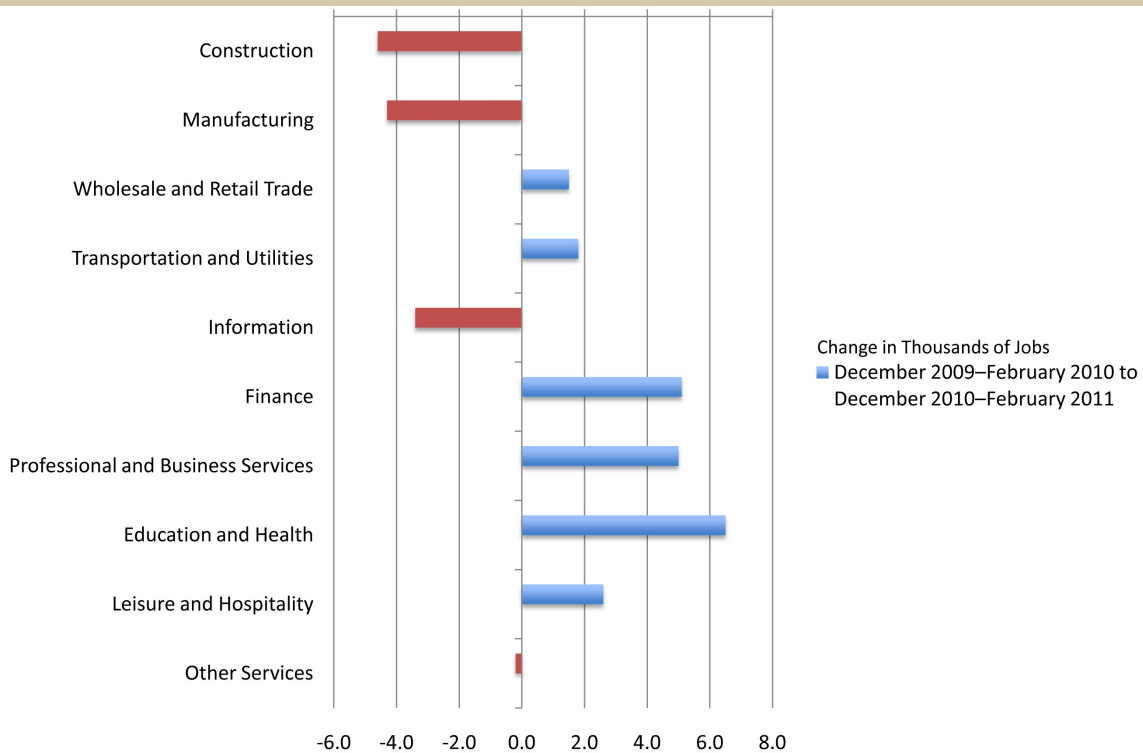
**“Indeed, industry sources suggest that New Jersey employment in pharma/biotech is around 70,000 — well above the numbers employed solely in manufacturing facilities.”**

## Garden State Activity Index

The *Garden State Activity Index* is a measure designed to provide a broad indicator of monthly economic activity in New Jersey. The index is an average of three other measures: the coincident economic indexes for the state produced by the Federal Reserve Banks of New York and Philadelphia, and a measure derived from the Philadelphia Bank's South Jersey Business Survey. The latest reading shows that the index rose modestly from December to January to a level about .5% above that of January 2010.

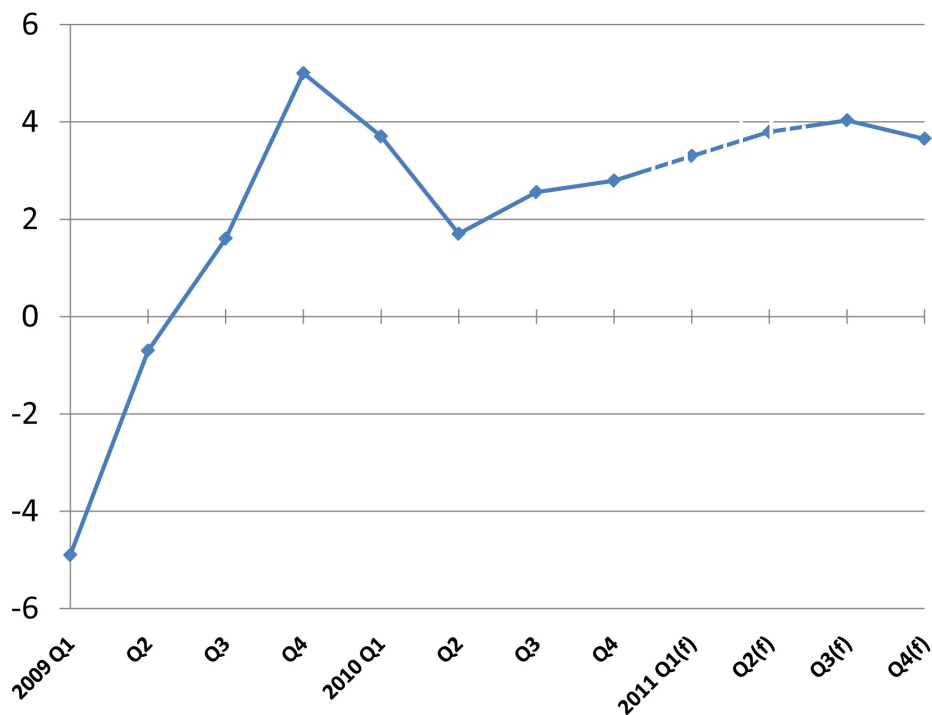


## Private Industry Employment Trends



Data source: New Jersey Department of Labor

## Real U.S. GDP Growth (Percent change, compound annual rate)



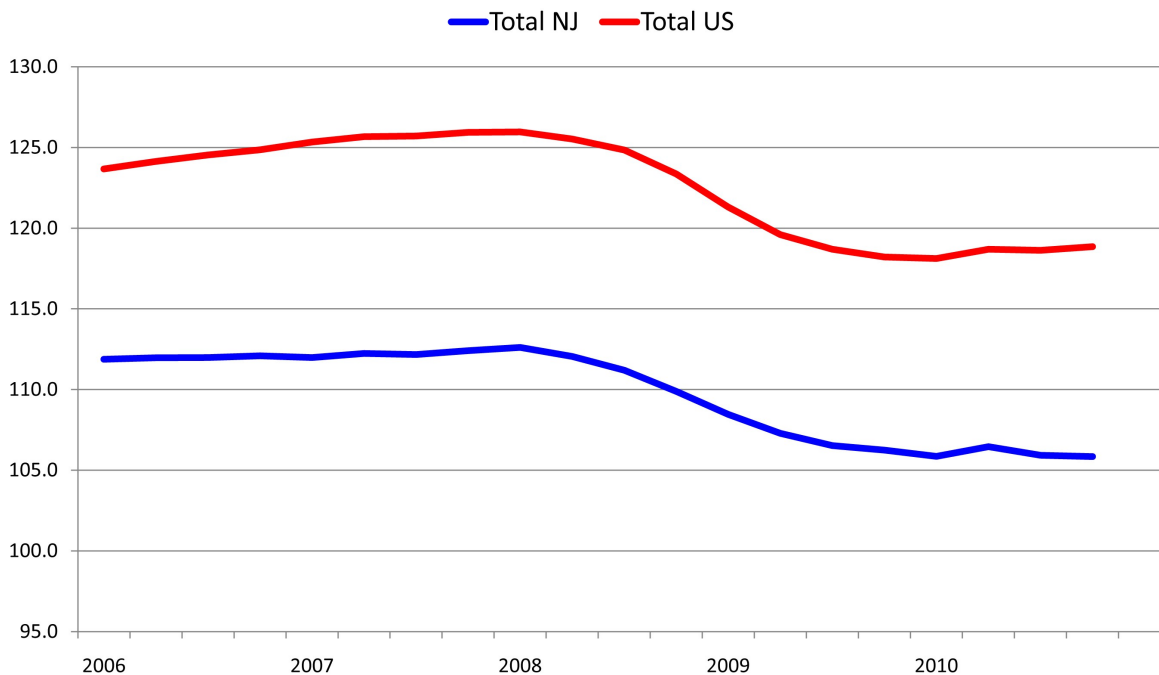
(f) - forecast

Data source: U.S. Bureau of Economic Analysis

## State & National Job Trends

### Total Employment (Relative Employment 1990=100)

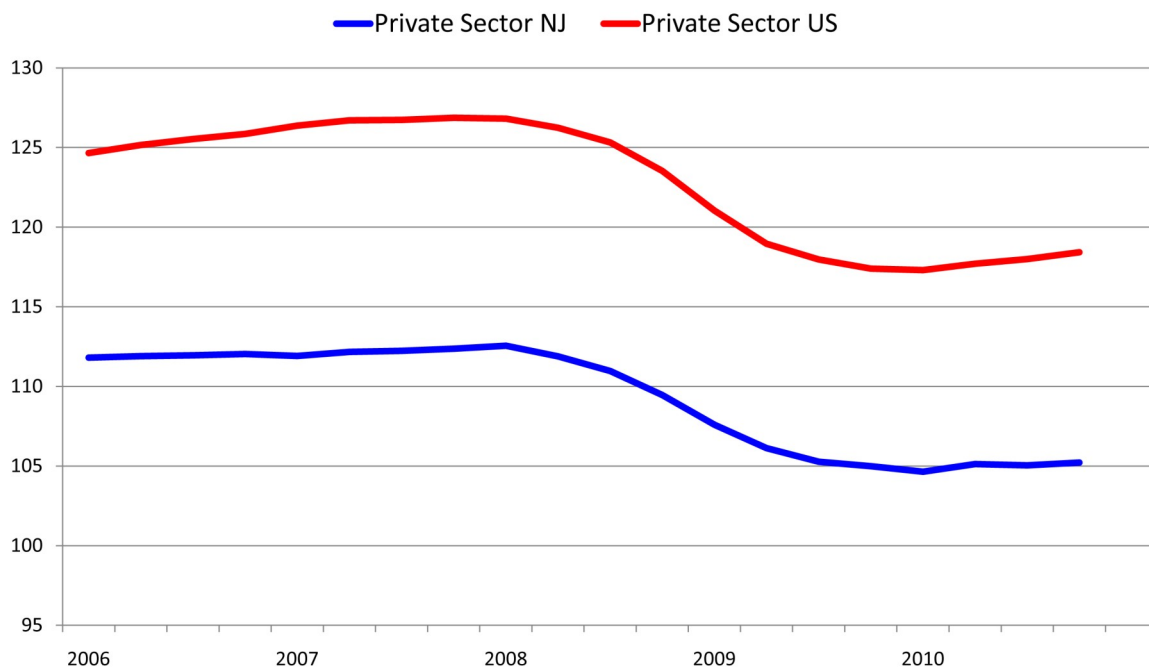
This chart compares the number of employed workers to the base year of 1990. The number 100 represents employment in 1990.



## State & National Job Trends

### Private Sector Jobs *(Relative Employment 1990=100)*

This chart compares the number of employed workers to the base year of 1990. The number 100 represents employment in 1990.



**Data source:** U.S. Bureau of Labor Statistics, New Jersey Department of Labor

**Explanatory note:** These charts track trends in total and private sector employment in New Jersey and compare them with those of the nation as whole measured against a 1990 baseline.

#### **Disclaimer**

*This communication is for informational purposes only and is not an offer, solicitation or recommendation regarding the purchase of any security of the State of New Jersey or any governmental authority of the State of New Jersey. The views expressed herein are solely those of Dr. Steindel and do not necessarily represent the views of the State Treasurer or any other official of the State of New Jersey.*