

THE ASSEMBLY STATE OF NEW YORK ALBANY

February 29, 2012

Dear Colleagues:

I am pleased to provide you with the New York State Assembly Ways and Means Committee's Economic Report for 2012. This report continues our commitment to providing clear and accurate information to the public by offering complete and detailed assessments of the national and State economies.

The Ways and Means Committee staff's assessments and projections are reviewed by an independent panel of economists. Assembly Speaker Sheldon Silver and I would like to express our deep appreciation to the members of this Board of Economic Advisors. Their dedication and expert judgment continue to be invaluable in helping to refine and improve our forecasts. However, while they have served to help make the work of our staff the best in the State, they are not responsible for the numbers or views expressed in this document.

I wish to also acknowledge the dedicated and talented staff of the Assembly Ways and Means Committee and the many hours of work that went into producing this report. They play a vital role in our State's budget process.

As we continue our efforts toward enacting an on-time budget that is fair and equitable for all New Yorkers, I look forward to working with each of you.

Sincerely,

Herman D. Farrell, Jr. Chairman

NEW YORK STATE

ECONOMIC REPORT

February 2012

Sheldon Silver Speaker New York State Assembly

Herman D. Farrell, Jr. Chairman Assembly Ways and Means Committee

Prepared by the Assembly Ways and Means Committee Staff

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EXECUTIVE SUMMARY

United States

- U.S. Gross Domestic Product (GDP) growth, adjusted for inflation, slowed to an estimated 1.7 percent in 2011 from 3.0 percent in 2010. Natural disasters at home and abroad, political instabilities in the Middle East, and the continued fiscal crisis in Europe all contributed to the cautious behavior of consumers and investors as well as the resulting slowdown in economic growth in 2011.
- The NYS Assembly Ways and Means Committee staff's forecast for overall national economic growth in 2012 is 2.2 percent. This forecast is equal to the Division of the Budget and Blue Chip Consensus forecasts. The staff forecast is 0.4 percentage point below Moody's Economy.com, and 0.1 percentage point below Macroeconomic Advisers. The staff's forecast is 0.1 percentage point above IHS Global Insight.

| (Percent Change) | | | | |
|------------------------|----------------|------------------|------------------|------------------|
| | Actual 2010 | Estimate 2011 | Forecast 2012 | Forecast 2013 |
| Ways and Means | 3.0 | 1.7 | 2.2 | 2.6 |
| Division of the Budget | 3.0 | 1.7 | 2.2 | 3.0 |
| Blue Chip Consensus | 3.0 | 1.7 | 2.2 | 2.6 |
| Moody's Economy.com | 3.0 | 1.7 | 2.6 | 3.1 |
| Macroeconomic Advisers | 3.0 | 1.7 | 2.3 | 2.9 |
| IHS Global Insight | 3.0 | 1.7 | 2.1 | 2.3 |

Executive Budget Financial Plan, February 2012; Blue Chip Economic Indicators, February 2012; Moody's Economy.com, February 2012; Macroeconomic Advisers LLC, February 2012; IHS Global Insight, February 2012.

The current forecast calls for the U.S. economy to continue to recover from the "Great Recession." But the pace of **recovery** is likely to be below the trend growth rate. Excesses still remain in the housing market and home prices are likely to fall further. Housing demand remains weak despite record low mortgage interest rates. Also, the outlook for resolution of the European sovereign debt crisis is still unclear. Faced with slow income growth, a lean employment outlook, and depressed household wealth, weary consumers are cautious of spending. Unsure how the future course of the economy will play out, businesses are reluctant to hire more aggressively.

- The current forecast assumes that the "Bush tax cuts" will expire on January 1, 2013. As incentives exist to take advantage of tax differences arising from the **tax law changes**, some economic activity is expected to shift from 2013 to 2012.
- Personal consumption spending, adjusted for inflation, is estimated to have increased by 2.2 percent in 2011, after rising 2.0 percent in 2010. This weak growth was due to higher prices that eroded consumer purchasing power, high unemployment, slow income growth, and falling home prices. Growth in consumer spending is forecast to persist below pre-crisis rates as consumers will continue to be plagued by a weak labor market, lackluster wage growth, and depressed household wealth.
- Total business spending is estimated to have increased 4.7 percent in 2011 as gains in spending on equipment and software, and nonresidential structures outweighed losses in spending on residential construction. As construction activities strengthen and spending on equipment and software remains healthy, business spending growth is expected to accelerate to 7.8 percent in 2012 and 7.7 percent in 2013.
- With the federal government under pressure to reduce spending and state and local governments facing the loss of funds from the American Recovery and Reinvestment Act of 2009 (ARRA) as well as statutory obligations to balance their budgets, total government spending, adjusted for inflation, fell an estimated 2.1 percent in 2011 after increasing 0.7 percent in 2010. As spending cuts persist at all levels of government, total government spending is forecast to decline 1.7 percent in 2012 and another 2.1 percent in 2013.
- The weak U.S. dollar and global economic recovery led to an increase in U.S. trade in 2010 and 2011. U.S. imports increased an estimated 4.9 percent in 2011. Similarly, **exports** increased an estimated 6.8 percent. With global economic growth expected to soften in 2012, U.S. export growth is forecast to slow to 3.6 percent in 2012, before picking up to 6.9 percent in 2013. U.S. **imports** are expected to increase by 2.8 percent in 2012 and 4.5 percent in 2013. Thus, U.S. trade will be less of a drag on GDP.
- Only 3.2 million of the 8.8 million jobs lost during the recent recession have been regained. The possibility remains that a portion of the jobs still lost may be gone permanently due to structural changes in the economy. Total **national payroll employment** declined sharply by 4.4 percent in 2009, and then dropped another 0.7 percent in 2010. Employment grew 1.2 percent in 2011. Payroll employment growth is forecast to remain slow at 1.4 percent in 2012, reflecting the expected

slow pace of the economic recovery and the hesitancy businesses are displaying in hiring employees. In 2013, employment is expected to increase by 1.5 percent.

- Personal income grew an estimated 4.7 percent in 2011. Personal income was positively affected by the reduction in payroll tax where the employees' share of the social security tax went from 6.2 percent to 4.2 percent in 2011. However, a drastic slowdown in transfer payment growth curtailed personal income growth in 2011. In 2012, personal income is forecast to grow 3.5 percent as all components of personal income, except interest income and employers' contributions for employee pension and insurance funds, slow. In 2013, personal income is expected to grow 3.8 percent as wage and salary growth accelerates, outweighing the impact of the payroll tax cuts and unemployment benefits extensions that are set to expire at the end of 2012.
- The Consumer Price Index increased 1.6 percent in 2010, well below the increases observed in the years leading up to the recent recession. Consumer prices grew an estimated 3.1 percent in 2011, driven by higher energy and other commodity prices in early 2011. In 2012 and 2013 consumer prices are expected to rise, but at a slower rate than in 2011 as energy pricing pressures stabilize and slow economic growth keeps pricing pressure in check.
- Despite general economic weakness, corporate profits have performed well over the past few years, with both non-financial and financial firms performing strongly along with profits from the rest of the world. Corporate profits growth slowed to an estimated 7.7 percent in 2011, after surpassing its pre-recession peak and growing 32.2 percent in 2010. As corporate profits growth has been strong while wages and salaries have been weak, corporate profits' proportion of national income grew to an estimated 14.5 percent in 2011, making up its largest percentage of national income since the 1950s. Corporate profits growth is forecast to slow to 3.0 percent in 2012 and 1.4 percent in 2013 as profits at financial firms turn negative and global growth decelerates. Despite slower growth in the forecast period, corporate profits as a percentage of national income is expected to remain elevated.
- The federal funds rate, which averaged 0.2 percent in 2010, averaged 0.1 percent in 2011. As the economic recovery is anticipated to continue to be slow, the federal funds rate is expected to remain low in 2012. The federal funds rate is forecast to average 0.1 percent in 2012, before rising to an average of 0.2 percent in 2013. The three-month Treasury bill is forecast to average 0.1 percent in 2013.
- As the economy improved, the Standard & Poor's 500 Composite Stock Price Index (S&P 500) averaged 1,268.9 points in 2011, an increase of 11.4 percent from

2010. Despite record high corporate profits, the stock market outlook remains somewhat subdued, as it has become more evident that the European sovereign debt crisis is deeper and more complex and will be more difficult to resolve than originally thought. The S&P 500 is expected to grow 5.7 percent in 2012, and is forecast to grow further by 6.7 percent in 2013 as the economies and as debt situations in both European countries and the U.S. are expected to improve.

Serious risks to the economic outlook of the nation remain. Volatility in the stock market and government regulations have created considerable uncertainty in the financial markets. Limited access to credit continues to pose a significant risk going forward. Many global issues add uncertainty to the outlook, including the war in Afghanistan, unrest in the Middle East, volatility in oil prices, and other geo-political issues. The European sovereign debt crisis and the overall health of the eurozone remain a significant risk to the global recovery, as the extent of the problem and its impact on the rest of the world still remain unclear. In addition, the lack of recovery in the housing market remains a concern. If these areas fail to improve, the impact on the outlook would be substantial.

New York State

The NYS Assembly Ways and Means Committee staff's forecast for total nonfarm payroll employment growth in the State in 2012 is 1.0 percent. This forecast is 0.1 percentage point above the Division of the Budget. The staff's forecast for State wages in 2012 is 2.6 percent. This forecast is 0.6 percentage point above the Division of the Budget.

| New York State Forecast Comparison (Percent Change) | | | | | |
|--|---|---|--|--|--|
| Actual Estimate Forecast Forecast | | | | | |
| 2010 | 2011 | 2012 | 2013 | | |
| | | | | | |
| 0.1 | 1.2 | 1.0 | 1.2 | | |
| 0.1 | 1.1 | 0.9 | 1.0 | | |
| | | | | | |
| 4.3 | 4.7 | 2.6 | 4.4 | | |
| 4.4 | 4.1 | 2.0 | 5.0 | | |
| | | | | | |
| 5.4 | 1.6 | 4.5 | 5.0 | | |
| 5.4 | 0.7 | 4.6 | 5.1 | | |
| | (Percent Actual 2010 0.1 0.1 4.3 4.4 5.4 5.4 5.4 | Actual Estimate 2010 2011 0.1 1.2 0.1 1.1 4.3 4.7 4.4 4.1 5.4 1.6 5.4 0.7 | ActualEstimateForecast2010201120120.11.21.00.11.10.94.34.72.64.44.12.05.41.64.55.40.74.6 | | |

Note: For state fiscal year basis: 2012 represents SFY 2012-13, 2013 represents SFY 2013-14, etc. Sources: NYS Assembly Ways and Means Committee staff; NYS Division of the Budget, FY 2013 Executive Budget Financial Plan, February 2012.

- New York State employment performed better than the nation's during the recent recession. One of the reasons for the State's performance was that New York's housing market fared better than that of the nation. In 2010, nonfarm employment in the State grew 0.1 percent, compared to a decline of 0.7 percent in the nation. As the economy began to slowly recover, State employment is estimated to have grown 1.2 percent in 2011. Since the nation lost a substantially higher percentage of jobs than the State (on an annual basis New York State lost 3.1 percent of total payroll jobs from peak to trough compared to 5.6 percent for the nation), the speed of the nation's employment recovery is expected to accelerate more than the State's as employment in the sectors that were hardest hit during the recession post stronger gains. Total nonfarm employment in the State is forecast to grow at 1.0 percent in 2012 before growing 1.2 percent in 2013, compared to national employment growth of 1.4 percent and 1.5 percent in 2012 and 2013, respectively.
- During the recent recession, upstate employment was hit harder than downstate employment, due to a larger decline or slower growth in major sectors such as education and health, government, retail trade, and other services. Between the second quarter of 2008 and the second quarter of 2010, upstate lost 3.2 percent of its employment or 85,600 jobs, while downstate lost 2.7 percent or 154,600 jobs. Employment recovery in upstate has lagged that of downstate due to a slower recovery in all sectors. From the second quarter of 2010 to the second quarter of 2011, upstate gained no jobs, while downstate gained 1.3 percent of its nonfarm jobs.
- After declining 7.2 percent in 2009, wages in New York State started to recover in 2010, when base wages grew 1.8 percent and variable wages rebounded 26.7 percent. In 2011, wages continued to recover, although not at rates close to the rates achieved before the recent recession. In 2012, total wages will continue to grow. Base wages will rise slowly, as firms continue to be cautious about hiring workers. Variable wages will decline 5.1 percent in 2012, as bonus payments in the first quarter of 2012 decline compared to 2011. In addition, the assumed expiration of "Bush tax cuts" may shift some bonus payments from 2013 to 2012, making 2012 slightly less negative than otherwise.
- As the economy shows signs of weakness and financial firms are faced with sluggish economic growth and an uncertain environment (including regulatory changes), the outlook for bonus payments is extremely uncertain and less positive. How these regulations may change the concept of variable wages as we know it are unclear. Furthermore, the timing of bonus income has become less clear as companies change payment allocation between cash and stock options, and defer cash portions of

bonuses. In addition, employees' choices regarding whether or not to exercise options remains unclear. The Assembly Ways and Means Committee staff estimates that **total variable wages** will decline in State Fiscal Year (SFY) 2011-12 as firms that faced a difficult revenue environment in the second half of 2011 adjust bonus payments in the first quarter of 2012 accordingly. In SFY 2012-13, as the economic environment improves, variable compensation (both overall and in the securities industry) should improve, although not at the strong rates experienced leading up to the recent recession.

- Securities industry employment in the State declined two consecutive years in 2009 and 2010, falling 9.7 percent and 1.9 percent, respectively. As of December 2011, securities industry employment in the State accounted for almost 24 percent of the nation's securities industry employment, employing almost 190,000 workers in the State, many of whom are located in New York City. Securities employment in the State is estimated to have grown by 2.4 percent in 2011, but is forecast to fall slightly in 2012 and 2013 as risks to the global recovery rise and financial firms trim their staff as a result of a difficult revenue environment.
- Taxable capital gains are estimated to increase 20.2 percent in 2011 to \$53.3 billion as equity markets continued to perform better. Furthermore, investors who bought lower priced stocks at the bottom of the market realized gains as stock prices inched up. The highly volatile stock market in 2011 created significant uncertainties that pose downside risks to capital gains. Capital gains are expected to grow to \$78.7 billion in 2012, partly attributed to gains being shifted from 2013 to 2012 as a result of the expected increase in capital gains taxes in 2013. Historical data suggests that investors are inclined to realize gains when faced with future higher tax rates. Consequently, capital gains are forecast to fall by 25.2 percent to \$58.9 billion in 2013 because of the shift.
- The current global and national economic climate presents particular challenges and risks to the New York State forecast. Highly volatile financial markets, responding to several factors including the European sovereign debt crisis, an overall weak economic climate, and low business and investor confidence have a direct negative impact on Wall Street. Furthermore, the extent to which the Wall Street landscape has permanently changed continues to unfold, hence there is great ambiguity surrounding the State outlook. The financial sector plays a central role in the State economy, and drastic cuts to or changes in the composition of Wall Street compensation (including bonuses) have critical implications for the economic health of the State.

UNITED STATES FORECAST

With the help of aggressive policy actions by the federal government and monetary authorities, the U.S. economy grew 3.0 percent in 2010 after declining 3.5 percent during 2009. However, during 2011 the performance of the private sector failed to gain firm traction out of those stimulus programs. Also, natural disasters at home and abroad, political instabilities in the Middle East, and the continued fiscal crisis in Europe all contributed to increasing uncertainties and the resulting cautious behavior of consumers and investors. As a result, on an annual average basis, U.S. real Gross Domestic Product (GDP) growth slowed to an estimated 1.7 percent in 2011.

Although the current forecast calls for the U.S. economy to continue to recover from the "Great Recession," the pace of recovery is likely to be below the trend growth rate. The unemployment rate still remains elevated at 8.3 percent with 12.8 million workers unemployed (see Figure 1). The pace of payroll job creation has been painfully slow with 5.6 million jobs still remaining to be recouped to reach the pre-recession peak level.



Figure 1

Also, excesses still remain in the housing market. The housing market has sagged since tax credit programs for first-time homebuyers expired. The overall trend in home sales has been flat since April 2010. Housing demand remains weak despite record low mortgage interest rates. Gains in housing starts have been almost anemic (see Figure 2). Based on the S&P/Case-Shiller U.S. National Home Price Index, home prices have gained little after declining by more than 30 percent from the peak level of April 2006. Also, the outlook for resolution of the European sovereign debt crisis is still unclear. Faced with slow income growth, a lean employment outlook, and depressed household wealth, weary consumers are cautious of spending. Unsure how the future course of the economy will play out, businesses are reluctant to hire more aggressively.





Furthermore, policy options are somewhat limited. The Fed's quantitative easing appears to have failed to stimulate private demand and its "promise" to keep the short-term rate close to zero percent for another two years could make consumers and businesses postpone, rather than accelerate, spending. The Fed's more recent initiative, "Operation Twist," which involves selling \$400 billion of short-term Treasury securities and purchasing the same dollar amount of long-term Treasury securities in an effort to bring down long-term interest rates further, is not likely to have more than marginal effects on private spending. The borrowing costs are just one of many factors that enter private spending decisions, whether investment or consumption. In terms of fiscal policy, deliberations continue at the national level over how best to meet short-term needs while achieving long-term goals.

Against this backdrop, U.S. GDP, adjusted for inflation, is forecast to grow 2.2 percent in 2012 after slowing to an estimated 1.7 percent in 2011. This is well below the post-World War II average performance during the early phase of recovery: on average, the U.S. economy grew 4.7 percent per year during the first two years after nine post-World War II recessions. With excesses in the housing market expected to be worked off and consumer demand expected to strengthen, national economic growth is forecast to recover to a near trend growth rate of 2.6 percent in 2013 (see Table 1).

| U.S. Economic Outlook | | | | | |
|-------------------------------|--------|--------|----------|----------|----------|
| (Percent Change) | | | | | |
| | Actual | Actual | Estimate | Forecast | Forecast |
| | 2009 | 2010 | 2011 | 2012 | 2013 |
| Real GDP | (3.5) | 3.0 | 1.7 | 2.2 | 2.6 |
| Consumption | (1.9) | 2.0 | 2.2 | 2.0 | 2.3 |
| Investment | (25.0) | 17.9 | 4.7 | 7.8 | 7.7 |
| Exports | (9.4) | 11.3 | 6.8 | 3.6 | 6.9 |
| Imports | (13.6) | 12.5 | 4.9 | 2.8 | 4.5 |
| Government | 1.7 | 0.7 | (2.1) | (1.7) | (2.1) |
| Federal | 6.0 | 4.5 | (2.0) | (1.9) | (3.6) |
| State and Local | (0.9) | (1.8) | (2.3) | (1.6) | (0.9) |
| Personal Income | (4.3) | 3.7 | 4.7 | 3.5 | 3.8 |
| Wages & Salaries | (4.3) | 2.2 | 3.6 | 3.7 | 4.6 |
| Corporate Profits | 9.1 | 32.2 | 7.7 | 3.0 | 1.4 |
| Productivity | 2.3 | 4.1 | 0.8 | 1.1 | 1.7 |
| Employment | (4.4) | (0.7) | 1.2 | 1.4 | 1.5 |
| Unemployment Rate* | 9.3 | 9.6 | 9.0 | 8.2 | 8.0 |
| CPI-Urban | (0.3) | 1.6 | 3.1 | 2.2 | 2.1 |
| S&P 500 Stock Price | (22.5) | 20.3 | 11.4 | 5.7 | 6.7 |
| Treasury Bill Rate (3-month)* | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 |
| Treasury Note Rate (10-year)* | 3.3 | 3.2 | 2.8 | 2.2 | 2.8 |
| * Annual average rate. | | | | | |

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|---|----|---|-----|---|
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Note: Personal income and corporate profits are nominal.

Sources: U.S. Bureau of Economic Analysis; U.S. Bureau of Labor Statistics; Federal Reserve; Standard & Poor's; NYS Assembly Ways and Means Committee staff.

After shedding 8.8 million jobs from the payroll during the "Great Recession," U.S. firms have been cautious of restoring most of those jobs. Faced with the intensifying global forces of competition, U.S. firms have been looking for ways to economize on production costs. The fact that business spending on equipment and software has increased strongly since the end of the recent recession may reflect their efforts to substitute capital input for labor input in production processes. Given this cost-saving trend, the pace of recovery in

U.S. payroll employment is likely to remain relatively slow. On net, just 1.9 million jobs are estimated to be created from the fourth quarter of 2011 to the fourth quarter of 2012 and another 2.1 million jobs during 2013. Even with an average monthly net gain of 174,000 jobs expected during 2013, the U.S. economy will still have 1.8 million fewer jobs at the end of 2013 compared to the peak level in January 2008.

Although there is some evidence of elevated energy and commodity prices being passed through to retailers and consumers, recent trends in productivity and unit labor costs indicate that inflationary pressures from the labor market are minimal. Also, the rising dollar value in the midst of global uncertainties will help to neutralize some of the worries related to the potential inflationary effects of the monetization of the U.S. national debt. These inflation-stabilizing forces will largely remain in place in the next two years, helping to keep inflationary pressures in check. The Consumer Price Index is forecast to advance 2.2 percent in 2012 and another 2.1 percent in 2013.

The current forecast assumes that the "Bush tax cuts" will expire on January 1, 2013. As incentives exist to take advantage of tax differences arising from the tax law changes, some economic activity is expected to shift from 2013 to 2012.

Gross Domestic Product

The U.S. economy, as measured by real GDP, recovered 3.0 percent in 2010 after declining 3.5 percent in 2009 (see Figure 3). Expenditures by every sector of the U.S. economy recovered with business equipment spending, consumer spending, and foreign demand for U.S. exports leading the way (see Figure 4). Replenishing business inventories was also an important contributor to the overall recovery in 2010. Without the business inventory rebuilding, U.S. real GDP would have grown a mere 1.4 percent in 2010. Also buried in the overall picture is the continued bleakness in the construction sector. In 2010, business construction activity declined 15.8 percent year-over-year after declining 21.2 percent in 2009. Worse yet, despite homebuyer tax credit programs, residential construction spending continued its fifth consecutive yearly decline in 2010.







Figure 4

Although the overall picture remained positive, the slower pace of recovery that had started in the second half of 2010 became anemic in the first half of 2011. Natural disasters at home and abroad, political instabilities in the Middle East, and the continued fiscal crisis in Europe all contributed to increasing uncertainties and the resulting cautious behavior of consumers and investors. As a result, U.S. real GDP grew a mere 0.4 percent in the first quarter, followed by another tepid 1.3 percent in the second quarter. On an annual

average basis, U.S. real GDP growth slowed to an estimated 1.7 percent in 2011 from the 3.0 percent growth in 2010.

With the temporary stimulus measures receding and the private sector failing to gain firm traction, the pace of recovery is likely to remain relatively slow during most of the current forecast period. Recovery in personal consumption spending is expected to continue in the coming months. However, consumer spending growth will likely be at a measured pace as hiring remains relatively weak, energy prices remain elevated, and depressed home prices add to household wealth losses. As businesses have strong cash flow from healthy earnings and are keen to remain competitive in global markets, business capital spending on equipment and software will likely continue but slow down somewhat in the coming months after two years of strong recovery. With mortgage interest rates at record low levels, activity in the housing market is expected to turn around somewhat in 2012. Given weak demand and still sizable excesses in the market, however, the pace of the housing recovery is likely to be slow, compared to historical standards. As the federal government stimulus programs expire and state and local governments are strained by budget shortfalls, the public sector will be a drag to overall economic growth during 2012. Overall, the U.S. economy will likely remain on an expansion path during 2012 but at a sub-par rate of 2.2 percent before returning to a near trend rate of 2.6 percent growth in 2013.

Consumption

Personal consumption spending, adjusted for inflation, increased by an estimated 2.2 percent in 2011, after rising 2.0 percent in 2010 and falling 1.9 percent in 2009 (see Figure 5). The slow pace of consumer spending recovery is expected to persist over the forecast period as households are still plagued by relatively high debt burdens, sluggish income and employment growth, reduced wealth, tight credit, and fragile confidence. As the housing market continues to struggle, funds from home refinancing that households tapped into prior to 2008 to support spending have dramatically diminished. Furthermore, households face the loss of government financial support such as unemployment insurance benefits. As a result, personal consumption spending, which accounts for more than two-thirds of overall economic growth, is unlikely to be the driving force behind U.S. economic growth.



Figure 5

From the fourth quarter of 2010 into the first quarter of 2011, consumers appear to have released some pent-up demand leading to strong growth in spending on durable goods. However, consumer spending slowed significantly in the second quarter of 2011, in part due to the tsunami in Japan that disrupted the supply chain of motor vehicles and parts. Some inflationary pressures, particularly from energy and food prices, eroded the purchasing power of consumers as well as mitigated the impact of the fiscal stimulus from the reduction in the social security payroll tax. Though consumer spending in the second half of 2011 fared better than in the first half, a barrage of dire economic news weighed on consumer spending, contributing to the modest growth in 2011.

Consumer spending growth is forecast to remain below pre-crisis growth rates in 2012 and 2013 as spending on durable goods slows and expenditures on non-durable goods and services remain weak. Households will still have to cope with a weak labor market and lackluster income growth. The weak growth in consumption spending may provide evidence of the possibility that consumers have permanently changed their spending patterns. However, households recouping losses in wealth, the expectation of higher wages and salaries, and an improving labor market should continue to help the outlook of consumer spending.

Disposable personal income, adjusted for inflation, grew by an estimated 0.9 percent in 2011 after growing 1.8 percent in 2010 (see Figure 6), partly because higher prices on some goods and services diminished the purchasing power of consumers. On average, real hourly wages were lower in 2011 than in 2010, negatively affecting real disposable income. Though the expiration of some unemployment benefits will restrain income in 2012, higher wages and salaries will lead to a forecasted 1.6 percent increase in real disposable income. Factors that continue to improve real disposable personal income growth in turn will positively affect consumer spending.



Figure 6

By the first quarter of 2011, households had regained \$9.5 trillion of the \$16.3 trillion in net worth lost between the second quarter of 2007 and the first quarter of 2009 (see Figure 7). Most of the gains came from financial assets, such as corporate equity, pension fund reserves, and mutual fund shares; while non-financial assets such as real estate continued to struggle because of the weak housing market. Since then, high volatility in financial markets has fostered significant uncertainties leading to lower equity prices that led to a loss in net worth of \$2.5 trillion from the first quarter of 2011 through the third quarter of 2011. Households' balance sheets remain precarious as depressed housing prices and heightened uncertainties in the stock markets persist. However, with financial markets anticipated to improve, positively affecting household balance sheets, that could manifest into higher consumer spending.



Figure 7

Household leverage increased consistently between the early 1980s and the third quarter of 2007. At its peak, household debt was 35.0 percent higher than disposable income. The ratio of household debt to disposable income fell to 119.0 in the third quarter of 2011 (see Figure 8). This recent decline in debt burdens can help enhance personal consumption spending as the funds once used to make debt payments become available to make purchases. On the other hand, consumer spending may be hampered as some households continue to deleverage in an effort to bolster their financial future.





Indices that measure the current situation and future expectations of consumers about the economy continue to be below pre-recession levels. In August 2011, the Reuters/Michigan Consumer Sentiment Index was at its lowest level since May 1980. In October 2011, the Conference Board Consumer Confidence Index was at its lowest level since March 2009 (see Figure 9). Consumers had grown increasingly pessimistic about their short-term outlook of the job market and the weakening economic recovery. The national debt ceiling debacle in the summer of 2011 that led to a downgrade of the U.S. Treasury credit rating by Standard and Poor's also took a toll on confidence.¹ Even though consumers' confidence is still fragile, the indices suggest that consumers are more optimistic about their economic situation in recent months.



Figure 9

New orders for consumer goods, a leading indicator of personal consumption spending, began improving at a gradual pace in April 2009 after falling from its peak in July 2008. This reflected a better overall outlook for consumption spending. However, since April 2011 new orders for consumer goods have been showing some signs of weakening (see Figure 10). This pattern suggests that consumers continue to reevaluate their spending and make adjustments accordingly.

¹ In October 2011, the Conference Board's Present Situation Index fell 20.8 percent from the prior month, its lowest level since November 2010, while its Expectation Index fell to its lowest level since March 2009 in August 2011. In August 2011, the Reuters/University of Michigan Current Situation Index fell 8.6 percent to its lowest level since November 2009 and in October 2011 its Expectation Index fell to its lowest level since the data has been collected.



Figure 10

Between the second quarter of 2007 and the fourth quarter of 2008, banks' willingness to make loans to consumers plunged. Banks' tightened credit requirements and consumers' demand for loans nose-dived. While banks appear to be more willing to make consumer loans since this period (see Figure 11), consumers deemed creditworthy are



more likely to secure financing than those with dubious credit histories. In other words, though the demand for consumer loans has risen, not all will receive financing because of more stringent credit standards. Nonetheless, any further easing of credit conditions by banks that promotes higher demand for loans should help support consumer spending.

As home prices rose leading up to the recent recession, consumers had been heavily financing their purchases through home equity withdrawals. Total home equity withdrawals peaked at \$83.7 billion in the second quarter of 2006 (see Figure 12). As real estate prices declined, home refinancing by households fell to \$12.1 billion in the fourth quarter of 2008. Cash-out volume remains low as home prices continue to be depressed. In fact, a large number of homeowners have chosen to "cash-in" by paying additional money when refinancing to reduce the size of their mortgage. In the fourth quarter of 2011, an estimated 15 percent of borrowers who refinanced their first lien mortgage increased their loan balance by at least 5 percent, the lowest percentage in twenty-six years. The other homeowners who refinanced either kept their loan amount the same, 37 percent, or reduced their principal, 49 percent. In the fourth quarter of 2011, home equity withdrawals will likely remain lower than pre-recession levels given the lackluster outlook of the housing market. Hence, home equity withdrawals will not provide much boost to consumption spending.



² In the fourth quarter of 2011, home equity cashed out was an estimated \$5.5 billion compared to \$9.9 billion a year earlier. Freddie Mac, "85 Percent of Refinancing Homeowners Maintain or Reduce Mortgage Debt in Fourth Quarter: 26-Year High," *Freddie Mac/PRNewswire*, (McLean, VA) February 2, 2012, http://freddiemac .mediaroom.com/index.php?s = 12329&item = 120959.

All three consumption components, durable goods, nondurable goods, and services, fell in 2009 but started to recover during 2010. However, the growth in spending on services and nondurable goods has been slow compared to previous recoveries (see Figure 13). Spending on services is the largest component of consumption spending, thus the current growth path suggests weakness in overall consumer spending. Spending on housing, which accounts for approximately 15 percent of spending on services, has been especially anemic given the beleaguered housing market. Subsequently, spending on services grew only 1.4 percent in 2011 and is anticipated to grow 1.4 percent in 2012, and then 1.8 percent in 2013.

Spending on durable goods, the most volatile component of consumer spending over the business cycle, has surpassed its pre-recession peak as a result of robust growth in every quarter except the second quarter in 2011. Despite a fall of 5.3 percent in the second quarter of 2011, partly due to the earthquake in Japan, spending on durable goods grew an estimated 8.1 percent for 2011. Growth is projected to slow to 6.2 percent in 2012 as consumers pull back especially on motor vehicle spending. While spending on durable goods will somewhat bolster overall consumption spending, spending on services and nondurable goods will moderate that positive impact. Furthermore, recent increases, especially in spending on durable goods have been fostered by the use of credit and savings. The utilization of credit and savings by households is unsustainable as mechanisms to boost consumer spending.



Certainly, the sluggish pace of the recovery in personal consumption spending is bothersome. The recent recession was deeper and longer than those in the past few decades. More importantly, the recent recession has led consumers to change spending patterns and focus on paying down debts to more sustainable levels. Meanwhile, cash sources that were readily available pre-crisis have all but disappeared for many households. Structural changes in employment have contributed to a labor market where job gains have been disappointing. In addition, wage growth has been weak. Since stronger job growth and wage growth are necessary for stronger consumer spending growth, the forecast for consumer spending is consistent with restrained growth.

Investment

Business spending helped to support the economy coming out of the recession and, though growing at a less rapid pace, continues to be a bright spot in the forecast period. Total business spending grew 17.9 percent in 2010 before slowing to an estimated 4.7 percent in 2011 (see Figure 14). Gains in 2010 came from the rebuilding of inventories



Figure 14

after several years of rundowns and from a rebound in spending on equipment and software.³ As the rebuilding cycle has ended, the contribution of changes in inventories to

³ Equipment and software accounted for approximately 60.0 percent of total investment spending in 2011. See U.S. Bureau of Economic Analysis, *United States: GDP (Advanced Estimates), fourth quarter 2011*, Table 5.3.5, www.bea.gov.

overall economic growth is expected to be relatively small. Spending on equipment and software is expected to remain strong, but will grow at a slower pace than was experienced in 2010 and 2011 (see Figure 15). Construction activity is anticipated to improve during the forecast period as the economy progresses and demand for both business space and new homes improves. As construction spending strengthens and business spending on equipment and software remains healthy, total business spending growth is expected to accelerate to 7.8 percent in 2012 and 7.7 percent in 2013.



Figure 15

Spending on equipment and software has been at the foundation of the recovery and remains an important driver of business spending and GDP growth. During the recent recession, businesses skimped on spending on updates to equipment and software as they worked to scale back operations. Consequently, as both domestic and global demand for U.S. goods and services improved coming out of the recession, businesses were in need of equipment replacements and software updates.

Relatively low prices of new investment goods, low interest rates, business tax credits, and the high cost of labor have encouraged companies to continue to invest in equipment and software, instead of hiring new employees, as a way of increasing output. The shift has contributed to slow job growth in several industries and has been particularly strong among manufacturers, who have increasingly relied on technological investment

rather than employment to expand production (see Figure 16). Since the recent recession ended, manufacturing employment has risen just 3.5 percent from its trough, while manufacturing output has risen 17.7 percent. A similar trend can be seen overall by comparing total employment growth to growth in spending on equipment and software during periods of recovery over the past forty years. The growth in spending on capital goods has increasingly outpaced employment growth over the last three recessions. In the 1970 and 1980 recessions, the ratio of growth in spending on equipment and software to employment growth was less than 5 to 1. Following the recessions that ended in 1991 and 2003, that ratio rose above 6 to 1. The shift in concentration towards improving output through spending on capital is evident following the most recent recession, in which the ratio of growth in spending on equipment and software to 13.2 to 1. The ever expanding role of technology in the economy signals that there has likely been a structural shift in employment favoring high-skilled workers and continued focus on increased production through investment on equipment and software during times of expansion.



Figure 16

Steady profits, low interest rates, easing credit markets for commercial and industrial loans, and the need to remain competitive in the global market will continue to drive business spending on equipment and software, which is estimated to have surpassed its

pre-recession peak in 2011. The sector is forecast to grow 7.7 percent in 2012, following estimated growth of 10.3 percent in 2011 and 14.6 percent in 2010. The slower pace in spending is due to declining replacement needs and decelerated growth in the global economy.

Spending on nonresidential structures is estimated to have increased 4.3 percent in 2011, following two years of double digit-declines. Gains are mostly due to increased spending on mining, and oil and gas wells, which improved 21.9 percent in 2011 following an increase of 16.6 percent in 2010. Spending on mining, and oil and gas wells has grown strongly during the recovery, as high oil prices and technological advances have increased profitability and access to oil supplies (see Figure 17). Spending on power and communication structures also had a strong performance in 2011, gaining 6.9 percent. However, spending on power and communication structures is likely to slow in 2012 as a glut in natural gas has significantly reduced the price of gas and electricity, effectively shrinking profit margins. Lower potential earnings will likely discourage investment in natural gas, electricity, and alternative power sources in the short-term.



Figure 17

Absent the energy industries, spending on nonresidential structures would have declined for a third consecutive year in 2011. Uncertainties in both the national and global economies have stunted company spending on new buildings, as has an increased focus on working capital efficiencies through outsourcing and e-commerce. In 2009, orders

related to e-commerce made up 42.0 percent of manufacturing sales, compared to 18.1 percent of sales in 1999.⁴ Weakness in consumer spending, the increased use of e-commerce in sales, and the financial benefits of outsourcing low value-added production and service operations to low-wage laborers abroad are likely contributing to the weakness in commercial real estate. Property prices for commercial buildings have fallen to 2004 levels and vacancy rates have remained high.⁵ Further discouraging businesses from spending on space is banks' unwillingness to make commercial real estate loans, especially at the development level.⁶ In the forecast period, excesses in the commercial real estate market will continue to be worked off, business investment in industrial properties will improve, and spending in the energy industries will moderate. As such, spending on nonresidential structures is forecast to grow at mediocre rates of 3.7 percent in 2012 and 3.6 percent in 2013.

Residential construction spending on new homes and home improvements is estimated to have fallen 1.3 percent in 2011, marking its sixth consecutive annual decline. The sector is suffering from many of the same afflictions as spending on commercial real estate, including painfully slow job growth and high credit standards. The situation has been exacerbated by years of poor loan practices, which drove home prices to unsustainable levels, leaving millions of household mortgages underwater and forcing many homeowners into foreclosure. The overhang of vacant and foreclosed homes is weighing heavily on the housing market, holding housing starts in a prolonged trough. The sector has had some quarterly growth, but increases have been due to spending on home improvements and realtors' commissions, rather than the building of new homes.

During the housing peak, spending on single- and multi-family housing made up 65 percent of residential spending, with the remaining 35 percent accounted for by other construction, which consists of manufactured homes, home improvements, dormitories, net purchases of used structures, and brokers' commissions on the sale of residential structures. As of the second quarter of 2011, roles had reversed and spending on other construction made up approximately 65 percent of spending in the residential sector. Roles reversed not because of increases in other residential structures spending, but because of significant decreases in the amount spent on the creation of new single-family housing (see Figure 18).

⁴ U.S. Census Bureau, *E-Stats*, May 26, 2011.

⁵ Moody's Investor Service, *Moody's Real Commercial Property Price Index*, November 2011.

⁶ Board of Governors of the Federal Reserve System, Senior Loan Officer Opinion Survey on Bank Lending Practices, January 2012.



Figure 18

As distressed homes are worked off the market and employment improves, spending on new and multi-family homes is forecast to strengthen, driving residential spending up 8.1 percent in 2012 to \$352.8 billion and 13.2 percent in 2013 to \$399.4 billion. At its 2005 peak, annual spending on residential construction was \$775.0 billion, making the 2013 level forecast about half the size of spending experienced before the housing bubble burst in 2006.

Housing Market

The housing market was the cornerstone of the "Great Recession." Fueled by lower mortgage interest rates (relative to the 1990s), higher income, and lax credit standards, demand for housing rose significantly. These demands pushed home prices and construction to a level higher than what economic and demographic factors could explain, which created higher home price expectations among homebuyers and speculators. As a result, home prices rapidly increased in the early 2000s to an unsustainable level before starting to plunge in late 2006.

Housing accounts for the largest portion of household wealth. As home prices appreciated rapidly from the end of the 2001 recession to mid-2006, household real estate assets grew 86.5 percent from \$12.2 trillion in 2000 to its peak of \$22.7 trillion in 2006. After the 2006 peak, the S&P/Case-Shiller Composite 20 Index declined dramatically. The

Index dropped by over 30 percent from the second quarter of 2006 to the second quarter of 2009, with the highest depreciation rates in the areas that experienced the fastest growth during the boom period. As a result, household real estate assets dropped by 25.4 percent during this period. Both the S&P/Case-Shiller and the Federal Housing Finance Agency (FHFA) home price indices began to stabilize in early 2009 but are still suffering small losses. Home prices are now at 2003-04 levels (see Figure 19).



Figure 19

Although several assistance programs have been created at both national and state levels to assist homeowners and help support the housing market, the results seemed to boost the market only temporarily. Activity in the housing market declined sharply following the expiration of the two first-time homebuyer tax credits. Similarly, almost half of those mortgage holders who tried to get their mortgage modified through the Home Affordable Modification Program (HAMP) had withdrawn through December 2011.⁷

Sharp declines in home prices have led to high foreclosure and delinquency rates. Foreclosure filings continuously increased from early 2005 through the end of 2010, when documentation issues arose. The continued entry of distressed homes (foreclosed, short sales, or bank-owned) into the market is daunting for home builders and home sellers, as it encourages home-buyers to bargain shop for foreclosed homes instead of purchasing non-

⁷ U.S. Department of Treasury, *Making Home Affordable, Program Performance Report through December* 2011, February 6, 2012.

distressed or new homes. Nationally, distressed homes accounted for 32 percent of all U.S. existing home sales in December 2011. The average sales price of a home that was in foreclosure (or bank owned) was 22 percent below the average sales price of a home not in foreclosure in December 2011.⁸ The availability of distressed homes will likely continue to put downward pressure on home prices and housing starts. Further, increases in foreclosures make banks more cautious in lending, which in turn makes taking out a loan to purchase a home more difficult and perhaps undesirable for potential buyers.

Even with record low housing starts and new homes available for sale, total home inventory remains high due to distressed homes. Since its peak of 572,000 in July 2006, the inventory of new homes has declined over 70 percent. The stock of new single-family homes is now hovering near historical lows at 157,000 (see Figure 20).⁹ The inventory of existing homes has dropped rapidly since the end of 2010, due to a slowdown in foreclosures as a result of documentation and legal issues. As a result, total home inventory has declined to a near long-term average level. However, there are signs that lenders have corrected the problem. Thus, it is expected that foreclosure activities will increase to a higher level in 2012 than that of 2011.



⁸ National Association of Realtors, December Existing Home Sales Show Uptrend, January 2012.

⁹ U.S. Census Bureau, New Residential Sales, January 26, 2012.

Due to declining home values, as of the third quarter of 2011 it was estimated that almost eleven million mortgages or 22.1 percent of all mortgage holders owed more on their mortgage than their properties were worth (in negative equity), with another 2.4 million mortgages approaching negative equity.¹⁰ This imposes a significant downside risk to the housing market as it could create an incentive for homeowners to default on their mortgages.

Despite record high affordability as a result of low home prices and low mortgage interest rates, home sales remain weak as concerns over the pace of economic recovery and weak employment growth have caused potential buyers to remain wary. Further hurting sales, lending standards at banks remain tight, as banks continue to be cautious in the mortgage market. Concerns over weak home values and the absence of credit worthy borrowers continue to be reflected in the Senior Loan Officer Opinion Survey, which has reported continued tightness among lenders for home mortgage loans and low expectations for mortgage originations.

Cautiousness by banks to make loans is partly in response to extremely elevated delinquency rates on residential mortgages. Before the recession, delinquency rates on single-family residential mortgages averaged less than 3.0 percent; as of the third quarter of 2011 that number stood at 9.9 percent.¹¹ Foreclosures are ongoing and are expected to continue as the foreclosure suspension that resulted from document issues (the "robo-signing" scandal) is lifted, putting further downward pressure on home prices. While tightened standards for loans is one side of the housing story, slack in consumer demand due to the weak labor market, loss of wealth, and low consumer confidence is the other. As foreclosures drag on and consumers remain unwilling or unable to purchase homes, builder sentiment has remained extremely anemic.

Moving into 2012, housing demand as well as credit problems should improve as the economy continues to recover. However, as the economic recovery and employment growth are likely to improve only at a slow pace, homebuyers will likely continue to be cautious. As a result, home prices are likely to improve slowly in 2012, while housing starts are expected to remain low as weak demand and an overabundance of distressed homes will continue to keep home builders on the fence. As the overall economy

¹⁰ CoreLogic's data report is based on over 48 million properties that have a first and/or second mortgage, which account for over 90 percent of all mortgages in the U.S. See CoreLogic, "Third Quarter 2011 Negative Equity Data Shows Slight Decline but Remains Elevated," *CoreLogic*, November 29, 2011.

¹¹ Board of Governors of the Federal Reserve System, Charge-off and Delinquency Rates on Loans and Leases at Commercial Banks, February 17, 2012.

continues to improve in 2013, activities in the housing market as well as home prices are likely to improve at a faster pace.

Government Spending

With the federal government under pressure to reduce spending and state and local governments facing the loss of funds from the American Recovery and Reinvestment Act of 2009 (ARRA) as well as statutory obligations to balance their budgets, total government spending, adjusted for inflation, fell an estimated 2.1 percent in 2011 after increasing 0.7 percent in 2010. As spending cuts persist at all levels of government, total government spending is forecast to decline 1.7 percent in 2012 and 2.1 percent in 2013 (see Figure 21).



Figure 21

Expenditures related to disaster preparedness such as flood insurance, disaster relief, and agricultural programs remain a constant risk to the government spending forecasts. At the national level, pressure to control spending could limit resources available for natural disaster funding. Consequently, state and local governments that are already strained need to reallocate resources to assist their citizenry affected by these disasters while meeting mandated budgetary requirements.

Federal Government Spending

After growing 6.0 percent in 2009 and 4.5 percent in 2010, federal government spending, adjusted for inflation, is estimated to have fallen 2.0 percent in 2011 as both defense and nondefense expenditures declined (see Figure 22). In particular, the federal government has reduced the size of its workforce, resulting in dramatically slower growth in expenditures on compensation. From December 2010 to December 2011, total federal employment decreased by 36,000 employees.¹² In addition, federal non-compensatory spending has been reined in as pressure to cut spending has escalated. Outlays on public investment have been drastically curtailed as funds from the ARRA are depleted and policymakers seek cuts in defense and other discretionary spending.¹³



Figure 22

The debt ceiling agreement signed into law in August 2011 guarantees further pull back in federal government spending for the next ten years beginning in 2012. Immediate actions of the initial \$917 billion in cuts include spending caps that should reduce outlays

¹² The number is based on seasonally adjusted data. See U.S. Department of Labor, Bureau of Labor Statistics, "Employment Situation," *Economic News Release*, December 2011, http://www.bls.gov/news.release/archives/ empsit 01062012.htm.

¹³ Specifically, lower non-compensatory spending in defense includes research and development and the servicing of missiles, vehicles, and electronics. Defense investment spending has slowed in structures and equipment and software. Also, nondefense spending has slowed for goods and services and on structures.
by \$741 billion and achieve \$156 billion in savings on debt servicing over ten years. The impact of the cuts in 2012 is expected to be small compared to subsequent years as only \$20 billion in mandatory spending is slated to be cut. However, from 2013 the spending reductions will likely be substantially larger. Another \$1.2 trillion to \$1.5 trillion in spending cuts is expected over federal fiscal years 2013 through 2021.¹⁴ Further pressures to reduce spending can be expected as negotiations proceed for the impending federal budgets for fiscal years 2012 and 2013. Outlays for overseas contingency operations have fallen and are expected to decline further in 2012 and 2013.¹⁵ Hence, federal government spending is forecast to fall by 1.9 percent in 2012 and an additional 3.6 percent in 2013.

In 2001, after the September 11th attacks, outlays on defense spending began to soar after falling dramatically in the 1990s (see Figure 23). Defense spending increased from \$393.0 billion in 2001 to \$824.9 billion in 2011. With the war in Iraq over and the war in Afghanistan winding down, defense spending is expected to bear a considerable burden in the national government's effort to restrain spending. Federal defense spending will be particularly affected by the debt ceiling agreement as \$350 billion of the initial \$917 billion in total cuts are attributed to defense. Furthermore, defense spending is slated for additional reductions over the next ten years beginning in 2012 due to supplementary requirements in the Budget Control Act of 2011.

¹⁴ Part of the debt ceiling agreement was the creation of a "Supercommittee," or the Joint Select Committee of Congress, that included six democrats and six republicans from the House and Senate. The committee was charged with reducing the deficit by \$1.2 trillion to \$1.5 trillion by November 23, 2011. The committee failed to agree to a deficit reduction by the deadline; hence, automatic spending cuts were triggered totaling \$1.2 trillion split evenly between defense and nondefense spending. Cuts in spending for nondefense are mostly limited to discretionary spending, though reductions to specific parts of Medicare are possible. However, the current forecast assumes that an automatic sequestration will be avoided as a new package will be agreed to by the president and Congress before the cuts are scheduled to take place. See *The Budget Control Act of 2011*, Public Law 112-25, 112th Congress, August 2, 2011.

¹⁵ Total discretionary overseas contingency operations expenditures are estimated to fall 20.6 percent in 2012 and by another 23.6 percent in 2013. In particular, outlays for Operation Iraqi Freedom/Operation New Dawn fell 25.8 percent in 2011 to \$45.0 billion, and are estimated to fall by 78.7 percent to \$9.6 billion in 2012 and 70.2 percent to \$2.9 billion in 2013. However, spending for Operation Enduring Freedom in Afghanistan rose to \$114.0 billion in 2011, though it is expected to decline 7.2 percent to \$105.7 billion in 2012, and then to \$85.6 billion in 2013. While spending on combat missions in Iraq is falling, expenditures on the diplomatic side are anticipated to increase \$4.8 billion in 2012 and by \$4.0 billion in 2013. Outlays for Department of State and U.S. Agency for International Development (USAID) are expected to fall slightly for Afghanistan and Pakistan in 2013. See Executive Office of the President, Office of Management and Budget, *Federal Year 2013 Budget of the United States Government*, February 2012, http://www.whitehouse.gov/sites/default/files/omb/ budget/ fy2013/assets/overseas.pdf.



Figure 23

The federal budget deficit for fiscal year 2011 was \$1.299 trillion or 8.7 percent of GDP compared to \$1.294 trillion or 9.0 percent of GDP in fiscal year 2010 (see Figure 24). The higher gap mainly reflects some payments that were shifted from fiscal year 2012 to fiscal year 2011 because October 1, 2011, fell on a weekend.¹⁶ In addition, lower costs associated with the Troubled Asset Relief Program (TARP) and higher payments that were required of banks to the Federal Deposit Insurance in 2010 contributed to the higher shortfall in 2011.¹⁷ Otherwise, the deficit would have been less than that posted in fiscal year 2010. Revenues increased by 6.5 percent or \$141 billion due primarily to a 21.5 percent increase in individual income taxes; while outlays by the government rose by 4.2 percent from the prior fiscal year. The rise in government spending in fiscal year 2011 was attributed mainly to higher outlays in defense, unemployment insurance benefits, Medicare and social security benefits, and a higher federal share of Medicaid benefits

¹⁶ Military active duty pay, veterans' benefits supplemental security income payments, and Medicare payments to health maintenance organizations for October 1, 2011, were accelerated to September 30, 2011. See U.S. Department of Treasury, Financial Management Service, *Final Monthly Treasury Statement of Receipts and Outlays of the United States Government for Fiscal Year 2011 through September 30, 2011, and Other Periods*, October 2011, http://fms.treas.gov/mts/mts0911.pdf.

¹⁷ Banks were required to make deposit insurance premiums that generally would have been spread over three years, which reduced net outlays by \$37 billion in fiscal year 2010 and increased them by \$13 billion in fiscal year 2011. Estimated costs for TARP were revised downward by \$115 billion in 2010 and by \$51 billion in 2011. Recall, TARP, part of the Economic Stimulus Act of 2008, allowed the U.S. Department of Treasury to purchase "troubled assets" from financial institutions associated with the sub-prime mortgage crisis. See U.S. Congressional Budget Office, *Monthly Budget Review, Fiscal Year 2011*, November 7, 2011.

associated with the ARRA. In fiscal year 2012, the budget deficit is projected to be 7.0 percent of GDP.¹⁸ For the first four months of fiscal year 2012, the federal budget deficit was \$349.1 billion, \$69.6 billion below the same period in fiscal year 2011.¹⁹



Figure 24

State and Local Government Spending

State and local government spending, adjusted for inflation, fell 1.8 percent in 2010 as states and their localities continued to be plagued by spending demands that outpaced incoming revenues. Though states received significant fiscal assistance from the federal government, these funds were insufficient to stave off deficits. Since most states have statutory balanced budget requirements, many states and local governments took measures that either reined in spending, raised taxes, or tapped into reserve funds. In some cases, states implemented all of the above to close budget gaps. Spending restraints included

¹⁸ See U.S. Congressional Budget Office, Budget and Economic Outlook: Fiscal Years 2012 to 2022, January 2012.

¹⁹ See U.S. Department of Treasury, Financial Management Services, Monthly Treasury Statement of Receipts and Outlays of the United States Government for Fiscal Year 2012 through January 31, 2012, and Other Periods, February 2012, http://fms.treas.gov/mts/mts0112.pdf.

reducing the state and local government labor force;²⁰ canceling or delaying capital projects; renegotiating debt, pension, and health benefits; cutting public safety and human services; and across-the-board cuts.

Generally, state and local government spending continues to fall even after recessions have ended. After the 2001 recession, state and local government spending fell for three consecutive years before rebounding in 2006 (see Figure 22). The falloff in state and local government spending was primarily due to a significant drop in income tax collections, which meant states and localities had to make necessary adjustments to meet budgetary requirements even with fiscal relief from Congress.²¹ More than two years after the recent recession ended, state and local governments are still struggling to cope. The recent recession was deeper and longer than the 2001 recession. Given a much slower economic recovery, the outlook for state and local government spending is dismal over the forecast period.

In 2011, state and local government spending fell an estimated 2.3 percent and is forecast to fall by another 1.6 percent in 2012 as states and localities make even deeper spending cuts. The pain is exacerbated as funds from the ARRA have diminished. Furthermore, problems linger from the recent recession: revenues have been improving but still remain below peak levels, though they are now above pre-recession levels;²² high unemployment adversely affects personal income tax collections, and also lowers sales tax collections since less income is available to make purchases; and low home prices reduce property tax collections. Some of these same forces have contributed to higher demands for unemployment insurance benefits, public assistance benefits, Medicaid, housing assistance, and other social services, putting more pressure on governments' coffers.

²⁰ From its peak in August 2008 to its trough in July 2011, state government employment fell by 153,000 jobs. Local government employment fell by 515,000 jobs from its peak in August 2008 to January 2012, http://www.bls.gov/data/#employment.

²¹ The fiscal relief package included \$10 billion for Medicaid assistance and \$10 billion in grants based on state populations. See *The Jobs and Growth Tax Relief Act Reconciliation Act of 2003*, Public Law 108-27, 108th Congress, May 28, 2003.

²² In the third quarter of 2011, state tax collection rose 6.1 percent from a year earlier, but was 1.2 percent lower than in the third quarter of 2008 and 1.5 percent higher than the same period in 2007. Personal and corporate income taxes rose 10.1 percent and 2.3 percent, respectively, while sales taxes rose 10.1 percent. See Lucy Dadayan, "Tax Revenue Keeps Rising, but Growth Again Ticks Downward," *State Revenue Report*, The Nelson Rockefeller Institute of Government, University of Albany, January 2012, no. 86, http://www.rockinst.org/pdf/government_finance/state_revenue_report/2012-01-26-SRR_86.pdf.

States are expected to face budget gaps into fiscal year 2013, though the gaps are much smaller than in the prior few years.²³ Although tax collection is anticipated to improve further, spending cuts will hamper state and local government spending. As a result, state and local government spending is forecast to decline again by 0.9 percent in 2013.

Exports and Imports

After growing for six years in a row, U.S. exports declined sharply in 2009 as the world slipped into recession. That year, U.S. exports declined 9.4 percent, while imports plunged 13.6 percent. Similarly, world trade, as measured by exports, fell over 20 percent in 2009, the largest drop in sixty years (see Figure 25).



Figure 25

The weak U.S. dollar and global economic recovery led to an increase in U.S. trade in 2010. Exports increased 11.3 percent in 2010, while imports rose at a slightly faster rate of 12.5 percent—strong growth coming after a sharp decline in 2009. The global economy is estimated to have grown modestly in 2011. As a result, world trade as well as U.S. trade

²³ Preliminary findings suggest states' budget shortfalls for fiscal year 2013 to be \$44 billion. See Elizabeth McNichol, Phil Oliff, and Nicholas Johnson, "States Continue to Feel Recession's Impact," Center of Budget and Policy Priorities, updated January 9, 2012, http://www.cbpp.org/files/9-8-08sfp.pdf.

growth slowed. U.S. imports are estimated to have increased by 4.9 percent in 2011, while exports are estimated to have increased by 6.8 percent.

Despite issues in the European economy, the world economy is expected to continue to grow modestly in 2012 and 2013, while the U.S. dollar is expected to remain weak. As world GDP is anticipated to grow faster than the U.S. throughout the forecast period, driven by growth in developing countries, exports are expected to grow faster than imports in 2012 and 2013. Exports are forecast to grow by 3.6 percent in 2012, and then by 6.9 percent in 2013. Imports are expected to increase by 2.8 percent in 2012 and 4.5 percent in 2013 (see Figure 26). Thus, U.S. trade will be less of a drag on GDP.



Figure 26

As the problems in the financial markets intensified during the recession, systemic risk in global financial markets arose. The dollar appreciated sharply in 2009, as investors moved money towards the safe-haven currency. Although the debt problem in Greece and several other European countries that emerged in early 2010 led to a big depreciation of the euro against the dollar, downward pressure from increasing worries over mounting U.S. debt and the concern about the pace of U.S. recovery caused the dollar to depreciate in 2010 and 2011. The dollar depreciated 4.7 percent in 2010 and is estimated to have depreciated further by 5.1 percent in 2011. A prolonged European debt crisis and a slow U.S. recovery will likely cause the dollar's value to appreciate throughout the forecast

period. The dollar's value is forecast to appreciate 3.1 percent in 2012 before gaining another 1.2 percent in 2013 (see Figure 27).



Figure 27

In 2011, industrial supplies and high value-added capital goods such as aircraft and computers accounted for 67 percent of U.S. exports (see Figure 28). The U.S. had a trade surplus of \$76.4 billion in capital goods and industrial supplies (excluding petroleum) in 2011, compared to \$87.5 billion in 2010, while overall trade was in deficit. The U.S. has recorded trade surpluses in these investment goods and production inputs for twelve out of the past seventeen years, while overall trade has been in deficit every year since 1995. Trade of these goods and supplies appears to be relatively less sensitive to the changes in the value of the U.S. dollar.





The world economy entered recession in 2009. The International Monetary Fund (IMF) estimated that the economic growth rates of almost 100 countries, including most developed countries, were negative.²⁴ As the U.S. and the world economies emerged from the recession, most countries experienced much stronger growth in 2010 than in 2009. However, there were several shocks to the world economy in 2011. European problems reemerged, sending panic across the globe. Natural disasters in Japan and Thailand caused significant supply disruptions. In addition, the U.S. recovery has been weak. As a result, many countries experienced slower growth in 2011.

After declining for two consecutive years in 2008 and 2009, the Japanese economy grew 4.4 percent in 2010, the strongest growth since 1990.²⁵ Japan's economy, however, is estimated to have declined 0.8 percent in 2011, due mainly to the earthquake and tsunami that caused many factories to shut down for more than a month. Growth is forecast to rebound in 2012.

²⁴ International Monetary Fund, World Economic Outlook Database, September 2011, http://www.imf.org/ external/pubs/ft/weo/2011/02/weodata/index.aspx.
²⁵ Ibid.

The Canadian economy, the largest trade partner for the United States (see Figure 29), grew 3.2 percent in 2010 after declining 2.8 percent in 2009. It is estimated to have grown 2.4 percent in 2011 and is forecast to grow further by 2.0 percent in 2012. Hit with a debt crisis in several member countries, the eurozone economy grew at a mere 1.9 percent in 2010, after declining 4.1 percent in 2009. As the debt crisis in Europe intensifies, the eurozone economy is estimated to have grown 1.6 percent in 2011. It is forecast that the eurozone will slip into a mild recession in 2012.



Figure 29

China, the largest U.S. trading partner in Asia and the largest developing economy, grew 10.4 percent in 2010 and is estimated to have grown 9.2 percent in 2011. It is forecast that China's economic growth will slow to 8.2 percent in 2012. Many countries in South America also experienced slower growth in 2011. The Brazilian economy, the largest economy in South America, grew 7.5 percent in 2010 and is estimated to have grown 3.1 percent in 2011.²⁶ With their strong economic performance and robust domestic demand, emerging economies play an important role in the global recovery. It is estimated that domestic demand in developing countries accounted for almost half of the global

²⁶ All growth rates for other countries cited in this section are from Blue Chip International Consensus Forecasts, *Blue Chip Economic Indicators*, vol. 37, no. 2, February 10, 2012.

growth in 2010.²⁷ Despite slower growth, developing countries are expected to continue to lead the world recovery in 2012. The global recovery is facing a major risk: the European debt crisis. The debt crisis in Europe could have a significant impact on other countries as well as the global financial system through exports and banks' exposure to those countries debt.

Employment

Despite the potential for stronger growth, employment has continued to struggle. Although the large losses of the recent recession have abated, employment gains have been weak. Only 3.2 million of the 8.8 million jobs lost during the recent recession have been regained. Four years after the last employment peak in January 2008, employment has not returned to its peak level, and is currently 5.6 million below the peak (see Figure 30). In most previous recessions, employment returned to its prior peak much sooner. Comparatively, employment after the 2001 recession had reached its previous peak level in 48 months. Employment is not forecast to reach its previous peak during the forecast period as the millions of jobs to be made up require that firms start to hire new employees on a more consistent basis.



Figure 30

²⁷ The World Bank, *Global Economic Prospects 2011 - Navigating Strong Current,* Volume 2, January 2011, the International Bank for Reconstruction and Development / the World Bank (Washington, DC), January 12, 2011.

The January 2012 unemployment rate of 8.3 percent translates into almost 12.8 million people unemployed. Since the recent recession, large numbers of these people have been unemployed for long durations. Currently, 42.9 percent of the unemployed have been out of work for 27 weeks or longer and the average duration of unemployment is 40.1 weeks. Before the recent recession, the highest this figure had ever been since 1948 was 21.2 weeks, a level reached after the 1981 recession. The average weeks unemployed have steadily increased after the end of the recent recession (see Figure 31).²⁸ Even with the various extensions that have been implemented since 2008, many people have exhausted their unemployment benefits.²⁹



Figure 31

Total national payroll employment declined sharply by 4.4 percent in 2009, and then dropped again by 0.7 percent in 2010. Employment grew 1.2 percent in 2011 (see Figure 32). In 2012, payroll employment is expected to grow only 1.4 percent, reflecting the expected slow pace of the economic recovery and the hesitancy businesses are displaying in hiring. The possibility remains that a portion of the jobs lost during the recent recession may be permanently lost due to structural changes in the economy.

²⁸ U.S. Department of Labor, Bureau of Labor Statistics, *State and Metro Area Employment, Hours, & Earnings,* www.bls.gov/sae/ (accessed February 22, 2012).

²⁹ As of January 28, 2012, almost 7.7 million people were claiming unemployment benefits either through regular or extended programs. See U.S. Department of Labor, Office of Public Affairs, *News Release*, February 16, 2012, http://workforcesecurity.doleta.gov/press/2012/021612.asp.





Businesses remain hesitant to hire new employees given the weak economic climate. In addition, businesses have undergone changes as a result of the recent recession. Faced with ever more unfavorable market conditions in the depths of the recession, firms increasingly shied away from hiring new employees and instead concentrated on increasing productivity, often substituting capital for labor as evidenced by strong investment spending on software and equipment. Businesses have also been affected over the years by structural changes in the economy and increasing global competition that led producers to find ways to cut labor costs, sometimes by outsourcing jobs overseas. Also, some evidence exists that there is a mismatch between the skills possessed by the pool of unemployed workers and the skills required for the available jobs at some firms that are hiring.³⁰

Unemployment remains near historical highs after reaching 10.0 percent in October 2009. In addition, the rate of those unemployed and marginally attached to the labor force remains at a level not experienced since the 1981-82 recession (see Figure 33). As the

³⁰ Justin Lahart and Ben Casselman, "Seeking to Match Skills and Jobs," *Wall Street Journal*, October 3, 2011, p. A2; and Jeffrey M. Lacker, "Is Joblessness Now a Skills Problem?" *President's Message*, Federal Reserve Bank of Richmond, *Region Focus*, Third Quarter, 2011, http://www.richmondfed.org/publications/research/ region_focus/2011/q3/pdf/presidents_message.pdf; and Wells Fargo Securities Economics Group, "Skills Disconnect at the State Level: Disparities of Education and Structural Unemployment," *Special Commentary*, February 13, 2012, http://www.fxstreet.com/fundamental/analysis-reports/special-commentary/2012/02/14/.

recovery progresses and the unemployed assess their chances of finding a job, trends of flows in and out of the labor market may be unclear. However, the unemployment rate is expected to decrease only slowly during the forecast period, as the pace of hiring is not sufficient to facilitate a faster drop. In addition, discouraged workers that had dropped out of the labor force may reenter as the hiring outlook strengthens. Weekly initial claims for unemployment insurance remain elevated but have fallen below the benchmark of 400,000, indicating that people are being laid off at a lower rate than in 2010 and 2011.





In terms of employment growth by sector, it is unclear which sectors may help lead the employment recovery. Of the sectors that lost employment during the recent recession, only a few sectors have returned to their previous peak. Among the sectors that have surpassed their previous peak are natural resources and mining, professional and technical services, accommodation and food services, and management of companies and enterprises. Goods-producing employment has historically taken a long time to return to a previous employment peak level following a recession, and never returned to its peak after the 2001 recession. Forty-eight months after the most recent peak, goods-producing employment is still 3.7 million jobs below the peak. Service-providing employment also remains 1.9 million jobs below the previous peak, which is a difference from the previous three recessions, when within four years service-providing employment had surpassed the previous peak by millions of jobs (see Figure 34).³¹



Figure 34

While most sectors are not expected to continue to lose jobs in 2012, none will experience strong growth (see Table 2). Therefore, it will take a while for most sectors to return to their previous employment peak, and some sectors may never regain that level.

Total government employment fell for the second year in a row in 2011, a phenomena somewhat unique to the recent recession when compared to the previous two recessions. As all levels of government continue to face limited growth in revenues coupled with rising obligations for programs that require additional spending in times of economic difficulties, cutting staff is one way governments can trim budgets. Opportunities for governments to find new revenues or enhance existing ones will be difficult as the economy will not rebound quickly. Therefore, cutbacks in staff for all levels of government are expected to continue throughout the forecast period.

³¹ Although goods-producing employment has been weighed down by the almost continual decline in manufacturing employment, the decline in construction employment during and after the recent recession has contributed to the low level of goods-producing employment at magnitudes far above those encountered in previous recessions. While declines in government employment have been more of a drag on service employment during this recovery compared to previous recoveries, private service employment remains 1.5 million jobs below the previous peak.

| U.S. Employment by Sector | | | | | | | | |
|-----------------------------------|--------|--------|----------|----------|----------|--|--|--|
| (Percent Change) | | | | | | | | |
| | Actual | Actual | Estimate | Forecast | Forecast | | | |
| | 2009 | 2010 | 2011 | 2012 | 2013 | | | |
| Total | (4.4) | (0.7) | 1.2 | 1.4 | 1.5 | | | |
| Education and Health ¹ | 1.9 | 1.8 | 1.8 | 2.0 | 1.9 | | | |
| Government | 0.2 | (0.3) | (1.7) | (1.1) | (0.6) | | | |
| Federal | 2.5 | 5.1 | (4.0) | (1.4) | (2.1) | | | |
| State and Local | (0.1) | (1.1) | (1.4) | (1.0) | (0.4) | | | |
| Mgmt. of Companies | (2.0) | 0.3 | 2.3 | 2.3 | 2.2 | | | |
| Leisure & Hospitality | (2.7) | (0.2) | 2.1 | 2.4 | 2.1 | | | |
| Professional Services | (3.7) | (0.9) | 3.4 | 3.5 | 3.3 | | | |
| Finance & Insurance | (4.0) | (1.0) | 0.6 | (0.1) | (0.3) | | | |
| Retail Trade | (5.0) | (0.5) | 1.4 | 1.1 | 0.9 | | | |
| Transp. & Utilities ² | (5.3) | (1.2) | 2.2 | 2.1 | 2.0 | | | |
| Wholesale Trade | (6.0) | (2.4) | 1.4 | 1.8 | 1.8 | | | |
| Information | (6.0) | (3.4) | (1.8) | (1.4) | (0.8) | | | |
| Real Estate, Rental, & Leasing | (6.3) | (3.0) | (0.3) | 1.4 | 1.2 | | | |
| Other Services ³ | (7.3) | 1.4 | 2.6 | 2.5 | 2.3 | | | |
| Construction | (8.2) | (8.2) | (0.2) | 2.6 | 4.0 | | | |
| Manufacturing ⁴ | (11.5) | (2.5) | 2.4 | 2.3 | 2.0 | | | |

Table 2

¹ Includes private employment. Public education and health employment is included in the government sector.

² Transportation, Warehousing, and Utilities.

³ Including Administrative, Support, and Waste Management Services.

⁴ Including Mining and Logging.

Sources: U.S. Bureau of Labor Statistics, Current Employment Statistics (CES); NYS Assembly Ways and Means Committee staff.

Finance and insurance employment fell from 2007 to 2010. It is estimated to have grown in 2011 as the first half of the year showed strength off of the low 2010 base. However, as the strength from early 2011 has faded and firms continue to face fallout from the recent financial crisis, sector employment is forecast to continue to fall in 2012 and 2013. Reports have surfaced that many companies have already or plan to cut back on staff in response to mixed quarterly results in revenues and profits. In addition, the uncertainty in the industry regarding factors such as slow economic recovery both domestically and abroad, regulations, the European debt crisis, and volatility in the stock market may make it hard for these firms to make plans for hiring.

Construction employment is forecast to grow 2.6 percent in 2012 as the industry stabilizes after enduring catastrophic losses during and after the recent recession.

Unfortunately, although the construction industry led the job losses during and after the recession, the sector is not expected to lead the recovery in the labor market. While the sector may help contribute to the recovery, a stronger housing market recovery is necessary for the sector to start regaining jobs at a meaningful rate. As the housing market still appears anemic, substantial gains in construction employment may be some time away.

Services employment is expected to lend some help to the fragile recovery in the labor market, as education and health continue to grow and professional and temporary service jobs return as businesses expand. The return of some service industry jobs will be predicated on the behavior of the consumer, especially those jobs in the leisure and hospitality and retail sales sectors. The outlook presented in this report is one of weak consumer spending, though should consumers begin to spend more these sectors could benefit and start to hire more workers than called for in this forecast.

Overall, the dismal performance of the labor market continues to add additional strain on the economic recovery from the recent recession. In particular, consumers who have been out of work for years face issues such as losing basic needs like shelter and the ability to support themselves. Consumer confidence remains near record lows, and the sluggish performance of the labor market does not help. When businesses hire on a steady basis, it will certainly help consumers who had been unemployed be able to spend and feel comfortable making some larger purchases, thereby helping to support economic growth.

Personal Income

Personal income grew a modest 3.7 percent in 2010, after a decline of 4.3 percent in 2009, driven by strong growth in proprietors', rental, and dividend incomes. However, growth in personal income was below pre-recession rates. The slow pace of job growth weighed on wages and salaries contributing to docile personal income growth. Furthermore, transfer payment growth, crucial to minimizing the fall in personal income in 2009, slowed as some fiscal stimuli associated with the American Recovery and Reinvestment Act of 2009 (ARRA) tapered off.

Personal income grew by an estimated 4.7 percent in 2011 due to modest growth in wages and salaries; however, growth is still below pre-crisis rates (see Figure 35). Part of the gain in personal income was due to the reduction in payroll tax where the employees'

share of the social security tax went from 6.2 percent to 4.2 percent in 2011.³² Proprietors' and dividend incomes contributed to growth, though at a slower rate than in 2010. Strong growth in rental income also boosted personal income. However, a drastic slowdown in transfer payment growth curtailed personal income growth in 2011 as federal extensions of unemployment benefits expired. In addition, many recipients and programs under the ARRA such as Consolidated Omnibus Budget Reconciliation Act (COBRA) premium reduction benefits and tax credits wound down. Personal income would have increased an estimated 5.3 percent excluding transfer income in 2011.





In 2012, personal income is forecast to grow only 3.5 percent. Growth in all components of personal income, except interest income and employers' contributions for pension and insurance funds, is forecast to slow. The continued falloff in transfer payment, as a result the exhaustion of unemployment benefits and other fiscal stimuli, and the overall slow economic recovery, are also partly responsible for the lackluster growth of personal income. Personal income is forecast to grow by 3.8 percent in 2013 due to higher growth in wages and salaries, proprietor's income, employers' contribution to pension and insurance funds, and interest income, being partly mitigated by the impact of the expiration of the payroll tax cut and slower growth in dividend income and rental income.

³² See, The Tax Relief, Unemployment Insurance Reauthorization and Job Creation Act of 2010 (2010 Tax Relief Act); Public Law 111-312, 111th Congress, December 17, 2010.

Wages and salaries, the largest component of personal income, grew an estimated 3.6 percent in 2011 after an increase of 2.2 percent in 2010 (see Figure 36). The limited growth in wages and salaries stems from a weak job recovery. As the slack in the job market persists into 2012 and 2013, wage and salary growth will continue below prerecession rates. Wage and salary growth is forecast to increase to 3.7 percent in 2012. With an unusually large pool of unemployed workers from which to choose, employers have little pressure to increase wages. By 2013, wages and salaries are projected to grow by 4.6 percent with an improved economic outlook and better job gains expectations.



Figure 36

Transfer income growth has been facilitated by social benefit payments associated with government programs that allocated billions of dollars in funds to households. Personal transfer income growth slowed to 6.7 percent in 2010 from 13.8 percent in 2009 mainly due to a significant falloff in the growth of unemployment insurance benefits and the direct one time federal payments authorized by the ARRA. As unemployment insurance benefits were exhausted and other government social benefits such as Medicare, Medicaid, and veteran's benefits decelerated in 2011, personal transfer income slowed to an estimated 2.4 percent. In 2012, transfer income is forecast to further slow by 2.1 percent as the 3.6 percent cost of living adjustments to social security benefits are tempered by falloff in other government social benefits. Personal transfer income growth is forecast to increase to 2.5 percent in 2013.

As the economy recovered from the recession in 2010, firms became more profitable, and dividend income grew 19.9 percent in 2010 after falling 23.6 percent in 2009. Since then, business confidence has waned as the recovery slowed cutting into business activities and thus profits. In particular, many companies have boosted profits by reducing their labor force while keeping wage growth to a minimum. As a result, dividend income grew an estimated 10.5 percent in 2011. However, new regulations in the financial industry, U.S. banks' exposure to European countries' debt, other global uncertainties, a slowdown in productivity at nonfinancial companies, and weak economic growth will weigh on corporate profits in 2012 and 2013. Consequently, dividend income is forecast to slow to 5.7 percent in 2012 and 4.7 percent in 2013.

As interest rates were kept low, personal interest income declined 19.8 percent in 2009 and fell another 9.5 percent in 2010. However, though interest rates remained low in 2011, the higher volume of bonds in investors' portfolios led to higher interest receipts. Furthermore, interest income also benefited from higher risk premiums as investors sought higher returns from municipal bonds and foreign sovereign bonds. As a result, interest income only fell by an estimated 0.6 percent in 2011, and is forecast to increase 0.5 percent in 2012. The Federal Reserve has also announced "Operation Twist," which could suppress long-term interest rates and hence interest income.³³ In 2013, long-term interest rates are expected to edge higher, though restrained somewhat by the Fed's action, leading to a forecast increase of 6.5 percent in interest income.

Prices

For the first time since 1955, the Consumer Price Index (CPI) declined on an annual average basis in 2009. The Index fell 0.3 percent, mainly as a result of declining energy prices (see Table 3). However, as energy prices rebounded, overall consumer prices have increased since 2009. In 2010, prices increased by 1.6 percent, and in 2011 consumer prices increased an estimated 3.1 percent. Much of the increase in consumer prices in 2010 and 2011 were due to increases in energy prices, which grew 9.5 percent in 2010 and 15.2 percent in 2011. Energy price increases also led to almost 10 percent growth in 2011 in the transportation category of the CPI.

³³ The idea behind "Operation Twist" is that the Federal Reserve buys long-term bonds and sells short-term (up to three-year) Treasuries, driving down long-term interest rates. In this case, the Fed will sell \$400 billion in short-term Treasuries and buy an equal amount in long-term Treasuries, beginning in October 2011 and ending in June 2012. The short-term Treasury securities will have maturities of three years or less, while the long-term Treasury securities have maturities of six years or more. Investors holding long-term bonds will see their interest income dip. Board of Governors of the Federal Reserve System, *Press Release*, September 21, 2011, http://www.federalreserve.gov/newsevents/press/monetary/20110921a.htm.

In 2012 and 2013 consumer prices are expected to grow, but at a somewhat slower rate as pressures from energy prices remain stable and slow economic growth keeps pricing pressure in check (see Figure 37). In addition, relatively slow productivity growth and slow growth in unit labor costs will help keep growth in prices relatively lower.

| U.S. Consumer Price Index (CPI) by Category (Percent Change) | | | | | | |
|---|-------|-------|-------|--------|-------|------|
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| All Items | 3.2 | 2.9 | 3.8 | (0.3) | 1.6 | 3.1 |
| Services | 3.8 | 3.3 | 3.5 | 1.4 | 0.8 | 1.7 |
| Food & Beverages | 2.3 | 3.9 | 5.4 | 1.9 | 0.8 | 3.6 |
| Energy | 11.0 | 5.7 | 13.7 | (18.1) | 9.5 | 15.2 |
| Housing | 3.8 | 3.2 | 3.2 | 0.4 | (0.4) | 1.3 |
| Apparel | (0.1) | (0.4) | (0.1) | 1.0 | (0.5) | 2.2 |
| Transportation | 3.9 | 2.2 | 5.7 | (8.2) | 7.9 | 9.7 |
| Medical Care | 4.0 | 4.4 | 3.7 | 3.2 | 3.4 | 3.0 |
| Recreation | 1.4 | 0.5 | 1.6 | 0.9 | (0.8) | 0.0 |
| Education and Communication | 2.7 | 2.4 | 3.4 | 3.0 | 2.0 | 1.2 |
| Other Goods and Services | 2.7 | 3.6 | 3.6 | 6.7 | 3.4 | 1.6 |
| All Items Less Food & Energy (Core) | 2.5 | 2.3 | 2.3 | 1.7 | 1.0 | 1.7 |
| Source: U.S. Bureau of Labor Statistics. | | | | | | |

Table 3



Figure 37

Despite increases since the recent recession, advancement in core prices (excluding food and energy) have remained relatively tame compared to the years leading up to the recent recession. Core prices grew 1.0 percent in 2010 and 1.7 percent in 2011. Some of the volatility in core prices during 2011 came from apparel, as cotton prices hit a record high in March following supply shortages due to weather related effects.³⁴ In addition, the weak dollar value has caused import prices to be relatively higher, adding upwards pressure to categories that are heavily influenced by imported goods such as apparel.

Productivity growth accelerated in 2009 to 2.3 percent from 0.6 percent in 2008. Productivity also increased in 2010 by 4.1 percent, as businesses strove to produce more with less workers. Unit labor costs for the U.S. nonfarm business sector fell by 0.7 percent in 2009 and 2.0 percent in 2010. This helped put downward pressure on consumer prices as businesses did not face an increase in labor costs, which account for a major portion of most firms' production costs. In 2011, productivity growth slowed and unit labor costs increased. Productivity and unit labor costs are expected to continue to increase slightly as businesses continue to hire at a sluggish rate and wage pressures continue to be tepid.

Energy Prices

One of the main drivers of recent price increases has been energy. Energy prices have been volatile, and energy price spikes continue to have the potential to cause disruptions to economic growth, especially as the economy is in a fragile state.

The effect of energy price spikes on consumers is almost immediate given the automatic climb of prices at the gas pump. Volatile energy prices also add to the uncertainty that businesses and consumers feel and may foster hesitancy in purchasing other goods, as a larger part of disposable income is taken up by energy-related costs, especially for many low and middle income households.

After a sharp increase in 2008, oil prices dropped sharply to levels more in line with the 2007 levels seen before the recent recession. Since reaching their most recent low in February 2009, oil prices climbed steadily as the world economy started to recover. Prices

³⁴ Annalyn Censky, "Gas, Food and Clothing Prices Are on the Rise," *CNN Money*, August 18, 2011, http:// money.cnn.com/2011/08/18/news/economy/inflation_cpi/index.htm; and Brenda Cronin, "Vital Signs: Cotton Prices Climb," *Wall Street Journal*, August 23, 2011, p. A1.

reached over \$100 per barrel (nominal) in early 2011.³⁵ The climb in oil prices created concern that oil prices could derail the already fragile economic recovery (see Figure 38).



Figure 38

The future path of energy prices is, as always, unclear. The outlook for slow economic growth domestically and internationally should help keep pressure from demand to a minimum short-term, helping prices to stay somewhat stable. However, the potential for supply-side disruptions (from factors including weather and geopolitical issues) to outweigh macroeconomic fundamentals introduces an element of upside risk that may come into play at any time, causing oil prices to increase.

³⁵ This refers to monthly data on the U.S. Refiner Acquisition Cost of Oil (RAC), a volume weighted average price of imported oils. For the purposes of this report and the forecast contained within, the RAC is utilized due to the fact that it is generally thought to be less volatile than other spot prices. News stories referring to volatile spikes in crude oil prices on a daily or intra-day basis of several dollars or more are usually referring to WTI daily spot prices or futures prices of other various oil price measures. Historically, the RAC was generally less than the West Texas Intermediate (WTI) price commonly reported in the media. However, WTI prices have recently been discounted compared to other U.S. and world oil price benchmarks. See U.S. Energy Information Administration, *Short-term Energy Outlook*, September 7, 2011, http://www.eia.gov/steo/archives/sap11.pdf.

Corporate Profits

Despite general economic weakness, corporate profits have performed well over the past few years, as non-financial firms, financial firms, and U.S. corporations abroad have had strong profit growth (see Figure 39). Gains in these sectors helped boost corporate profits growth 32.2 percent to \$1.8 trillion in 2010. This level is higher than the pre-recession peak of \$1.6 trillion in 2006. In 2010, non-financial firms benefited from increased output and productivity through cuts in wages and employment, while financial firms benefited from several factors including strong gains in trading, increased demand for underwriting and M&A, and decreased interest expenses. Increased demand for U.S. exports and expanding global operations also assisted corporate profits growth coming out of the recession.



Figure 39

Corporate profits growth slowed to 7.7 percent in 2011 as weakened economic growth, global uncertainty, and new financial regulations forcing changes in business models and activities turned profits at financial firms negative.³⁶ Profits at non-financial firms and at U.S. firms abroad slowed from the 2010 growth rate but remained strong in

³⁶ Profits at financial firms turned negative in 2011 following two years of strong growth in 2009 and 2010. Profits rose more than 200 percent in 2009 as the financial sector benefited from higher net interest income, gains on asset sales, increased trade revenues, higher servicing fees, and appreciation in security values and other investments. As a result, 2009 profits rose to \$359.5 billion from \$86.8 billion in 2008. The extreme gain in 2009 is the first of its kind in the series, which dates back to 2001. Despite the drastic increase in the rate of growth, the level of profits at financial firms remained below its pre-recession peak of \$427.6 billion in 2006.

2011 due to continued productivity growth and strong demand in emerging economies. Corporate profits growth is forecast to decelerate to 3.0 percent in 2012 as financial markets remain weak and the global economy slows. Corporate profits growth will remain below trend in 2013, increasing 1.4 percent (see Figure 40).



Figure 40

Over the past three years, the share of corporate profits in national income has risen significantly, as corporate profits have strengthened and wage pressures have remained weak. This share rose to 14.7 percent in the third quarter of 2011, after dropping to 7.9 percent during the recent recession (see Figure 41). At the current level, corporate profits stand at its highest percentage of national income since the 1950s. The share of corporate profits in national income is expected to remain elevated throughout the forecast period as continued weakness in the labor market keeps wage pressures low and growth in corporate profits remains positive.



Figure 41

Interest Rates

In an attempt to fight the recent recession, the Federal Reserve has held the federal funds rate at 0.0 to 0.25 percent since December 16, 2008, the lowest level on record. Recent indicators signify that the recession was deeper and the recovery has been slower than anticipated. Economic growth has been sluggish, which has led to weak job creation. Thus, it is likely that the Federal Reserve will maintain the federal funds rate at the current level for a while longer.

Other than the federal fund rates, the Fed has implemented various monetary policies during the recent recession in order to help support economic activities.³⁷ Although credit conditions in financial markets have improved, economic activities remain weak. As a result, the Federal Reserve is taking more action to support growth, which includes selling \$400 billion of Treasury securities with remaining maturities of three years or less and buying an equal amount of Treasury securities with remaining maturities of six to thirty years in order to keep long-term rates low. In addition, the Federal Reserve will reinvest revenue from its debts and mortgage-backed securities into mortgage-backed securities in order to support mortgage markets.

³⁷ Among those policies are the first quantitative easing (QE1) and second quantitative easing (QE2). Under QE1 the Federal Reserve increased liquidity in the market by purchasing toxic assets such as mortgagebacked securities; while under QE2 the Fed increased liquidity in the market by purchasing \$600 billion in long-term Treasuries.

As the U.S. economy and the labor market are forecast to recover only slowly, and oil prices are expected to remain stable, inflation is forecast to stay in check. The current forecast assumes that the Fed will maintain the rate within the current target range through the end of 2013 (see Figure 42).



Figure 42

The federal funds rate, which averaged 0.2 percent in 2010, averaged 0.1 percent in 2011. As economic recovery is expected to be slow, the federal funds rate is expected to remain low in 2012. The federal funds rate is forecast to average 0.1 percent in 2012, before rising to an average of 0.2 percent in 2013. The three-month Treasury bill yield is forecast to average 0.1 percent in 2012 and 2013.

During the recession, the bond market became more attractive for investors who sought safer investments. Investors shifted their funds from stocks to Treasury bonds for safety and liquidity. The purchase of U.S. Treasury bonds by foreign investors significantly increased from less than \$200 billion in 2007 to over \$700 billion in 2010. On the contrary, net purchases of U.S. corporate stocks by foreigners dropped drastically from almost \$200 billion in 2007 to just over \$100 billion in 2010, while net purchases of U.S. corporate and other bonds by foreigners dropped from \$393.4 billion in 2007 to a net sale (instead of purchase) of \$13.2 billion in 2010.³⁸

³⁸ U.S. Department of the Treasury, "Securities (b), Special Data Series," *Resource Center*, http://www .treasury.gov/resource-center/data-chart-center/tic/pages/ticsec2.aspx#ussecs (accessed February 16, 2012).

Demand for U.S. corporate stocks gained in 2009 as investors regained confidence in the economy and sought higher returns. The debt crisis in Europe that emerged in early 2010 caused investors to become more risk averse and shift their investments back to Treasury securities once again in mid-2010. As a result, the Treasury securities yield dropped to its lowest level in a year. In the third quarter of 2010, the 10-year Treasury note yield averaged 2.8 percent, almost a percentage point lower than it was in the first quarter of 2010.

As the concern over U.S. public debt as well as the ongoing European debt crisis mounted, investors have moved away from U.S. assets and started pouring money into commodities, especially precious metals such as gold. Net purchases of all types of U.S. assets by foreign investors declined in 2011, while high demand for gold pushed its price up more than 25 percent from an average of less than \$1,300 per ounce in 2010 to an average of almost \$1,600 per ounce in 2011 (see Figure 43).



Figure 43

Even with additional domestic demand for the intermediate to long-term U.S. Treasuries under the QE2 program, signs of slow economic growth and weak foreign demand pushed the bond yield up in the first quarter of 2011. The 10-year Treasury note yield rose from an average of 2.9 percent in the last quarter of 2010 to 3.5 percent in the first quarter of 2011, before falling to 3.2 percent in the second quarter of 2011 due to the European debt crisis. Increasing demand for Treasury securities in the second half of 2011

put downward pressure on their yields as well as other long-term interest rates that are usually tied to U.S. Treasury rates. Lower yields on long-term bonds have led to record low mortgage interest rates, which are typically set relative to long-term bond yields.

As extra demand for bonds, a result of quantitative easing policies, dissipates, bond yields are likely to rise. The 10-year Treasury rate is expected to increase from an average of 2.0 percent in the fourth quarter of 2011 to 2.5 percent in the fourth quarter of 2012. On an annual average basis, however, the 10-year Treasury note rate is expected to be lower in 2012 than 2011 as the rate dropped sharply in the second half of 2011. The 10-year Treasury note rate averaged 2.8 percent in 2011 and is forecast to average 2.2 percent in 2012 before rising to an average of 2.8 percent in 2013.

Stock Market

The stock market gained rapidly after hitting its lowest level in more than twelve years in March 2009. By the end of 2009, the Standard & Poor's 500 Composite Stock Price Index (S&P 500) gained almost 50 percent. Since April 2010, however, the stock market has gone through several corrections. The emergence of fiscal problems in several European countries in mid-2010 spilled over into the global financial market, causing nervousness among investors. In response, equity markets worldwide started to rattle, and the S&P 500 lost 10 percent in the three month period from April to July 2010. The S&P 500 rose rapidly in the first quarter of 2011 as the European debt crisis seemed to subside and investors became more positive.

The stock market was volatile during 2011 as it was hit with several events that raised uncertainty. Unrest in the Middle East and North Africa and a natural disaster in Japan that occurred in the second quarter of 2011 created fears that the global economic recovery could stall. The lingering European debt crisis, weak economic indicators, and the U.S. debt problem also raised market risks in the third quarter of 2011. As a result, the stock market has become more erratic and more sensitive to news. In August and September of 2011, out of 44 trading days, there were 18 trading days that the S&P 500 changed by more than 2 percent as investors reacted strongly to news, compared to just three days for the first seven months of 2011 and 22 days in 2010. On a monthly average basis, the S&P 500 dropped more than 10 percent from July to August, and remained flat in September before rebounding in the last quarter of 2011. Rising uncertainty in the market led investors to increase their allocation to precious metals, particularly gold, platinum, and palladium.

On an annual average basis, the S&P 500 averaged 1,268.9 points in 2011, an increase of 11.4 percent from 2010. Despite record high corporate profits, the stock market outlook remains modest, as it has become more evident that the European debt crisis is deeper, more complex, and will be more difficult to resolve than originally thought. The European crisis could also have a far-reaching impact on the global financial system through banks' exposure to those countries' debt as well as weak demand for exports. Moreover, as the U.S. economic recovery has become weaker than initially anticipated and the federal debt reduction program has yet to be finalized, investors will likely continue to be cautious. These factors will likely hinder the recovery in the stock market; as a result, the stock market is expected to improve only slowly in 2012 (see Figure 44).



Figure 44

The S&P 500 is forecast to grow 5.7 percent in 2012, before growing further by 6.7 percent to an annual average of 1,431.7 points in 2013 as the economy as well as debt situations in both European countries and the U.S. are expected to improve.

United States Forecast Comparison

The NYS Assembly Ways and Means Committee staff's forecast for overall national economic growth in 2012 is 2.2 percent (see Table 4). This forecast is equal to the Division of the Budget and Blue Chip Consensus forecasts. The staff forecast is 0.4 percentage point

below Moody's Economy.com, and 0.1 percentage point below Macroeconomic Advisers. The staff's forecast is 0.1 percentage point above IHS Global Insight.

| U.S. Real GDP Forecast Comparison (Percent Change) | | | | | | | |
|---|----------------|------------------|------------------|------------------|--|--|--|
| | Actual 2010 | Estimate 2011 | Forecast 2012 | Forecast 2013 | | | |
| Ways and Means | 3.0 | 1.7 | 2.2 | 2.6 | | | |
| Division of the Budget | 3.0 | 1.7 | 2.2 | 3.0 | | | |
| Blue Chip Consensus | 3.0 | 1.7 | 2.2 | 2.6 | | | |
| Moody's Economy.com | 3.0 | 1.7 | 2.6 | 3.1 | | | |
| Macroeconomic Advisers | 3.0 | 1.7 | 2.3 | 2.9 | | | |
| IHS Global Insight | 3.0 | 1.7 | 2.1 | 2.3 | | | |
| Sources: NYS Assembly Ways and Means Committee staff; NYS Division of the Budget, FY 2013 | | | | | | | |
| Executive Budget Financial Plan, February 17, 2012; Blue Chip Economic Indicators, February 2012; | | | | | | | |
| Moody's Economy.com, February 2012; Macroeconomic Advisers LLC, February 2012; IHS Global | | | | | | | |
| Insight, February 2012. | | | | | | | |

Table 4

The Assembly Ways and Means Committee staff's forecast for overall national economic growth in 2013 is 2.6 percent. This forecast is lower than the Division of the Budget by 0.4 percentage point, Moody's Economy.com by 0.5 percentage point, and Macroeconomic Advisers by 0.3 percentage point. The staff's forecast is 0.3 percentage point above IHS Global Insight, and is equal to the Blue Chip Consensus.

NEW YORK STATE FORECAST

The economy in New York State was dramatically affected by the recent recession and, while recovering, is still feeling the effects of the downturn and the reforms and regulations that followed, especially in the financial sector. New York did not falter as badly as some other states during the recent recession, for reasons such as a milder downturn in the State's housing market. New York State is expected to continue to recover from the recession, although possibly at a slower growth rate than some other states. Downside risks to the United States economic outlook can have potential downside effects on New York State.

The NYS Assembly Ways and Means Committee staff estimates that in 2011 nonfarm payroll employment in the State increased 1.2 percent, wages increased an estimated 4.7 percent, and personal income grew 4.9 percent. In 2012, employment will continue to recover, growing at an annual average rate of 1.0 percent. Personal income is forecast to gain 3.0 percent (see Table 5). As discussed further in the Variable Compensation section on page 70, variable compensation is forecast to grow in State Fiscal Year (SFY) 2012-13 and 2013-14, but may be negatively impacted in calendar year 2013 by tax law changes.³⁹

Both employment and wages are expected to recover throughout the forecast period (see Figure 45). However, while employment will grow, the return to the level reached during the years leading up to the recent recession will be slow, especially given the slow pace of hiring in the labor market. Wages are expected to recover during the forecast period, although they will grow at rates lower than pre-recession rates. The wage growth in 2012 might be slower if companies do not shift any wage or bonus payments from 2013 to 2012 as a result of the assumed expiration of "Bush tax cuts." As discussed later in this report, the wage outlook for the State remains highly susceptible to the performance of the financial sector.

³⁹ Data is based on NYS Assembly Ways and Means Committee staff estimates. Variable compensation consists primarily of cash bonuses and exercised stock options. There is no known series of data for state or national variable compensation. The Committee staff estimates variable compensation based on seasonal variations in wage patterns. These seasonal patterns are analyzed at the NAICS three-digit level. The growth in this variation over time is also accounted for in the estimate. Since this estimate is based on seasonal variation, it may underestimate bonuses and commissions that come at frequent intervals throughout the year. It also may underestimate stock options to the extent that they are exercised throughout the year. On the other hand, in some cases non-variable pay may be included in variable compensation if there are regular seasonal patterns (e.g., if overtime regularly occurs in a certain quarter). Therefore, variable compensation contains high uncertainty—even in terms of the data history.

| New York State Economic Outlook (Percent Change) | | | | | | | |
|---|------------------|----------------|------------------|-------------------|-------------------|--|--|
| | Actual 2009 | Actual 2010 | Estimate 2011 | Forecast 2012 | Forecast 2013 | | |
| Employment | (3.1) | 0.1 | 1.2 | 1.0 | 1.2 | | |
| Personal Income | (5.1) | 4.1 | 4.9 | 3.0 | 3.7 | | |
| Total Wages [calendar year basis] | (7.2) | 4.3 | 4.7 | 2.6 | 4.4 | | |
| Base Wages | (3.1) | 1.8 | 4.5 | 3.7 | 4.4 | | |
| Variable Compensation | (32.7) | 26.7 | 6.3 | (5.1) | 3.7 | | |
| Total Wages [fiscal year basis] | (1.5) | 5.4 | 1.6 | 4.5 | 5.0 | | |
| Base Wages | (2.3) | 3.0 | 3.9 | 4.0 | 4.5 | | |
| Variable Compensation | 5.2 | 24.7 | (13.5) | 8.4 | 8.4 | | |
| New York Area CPI | 0.4 | 1.7 | 2.8 | 2.0 | 1.9 | | |
| Note: Base wages and variable compensation are | estimated by the | NYS Assembly | Ways and Mean | s Committee staff | f and sum to tota | | |

| Та | ble | e 5 |
|----|-----|-----|
| | ~ . | |

Labor Statistics. For fiscal year variables, 2009 represents SFY 2009-10. Sources: U.S. Bureau of Economic Analysis; NYS Department of Labor, QCEW; U.S. Bureau of Labor Statistics; NYS Assembly Ways and Means Committee staff.





While the State economy outperformed that of the nation during the recession, its population growth fell further behind. Results from the 2010 U.S. Census show that New York's population reached 19,378,102 in 2010, a gain of 401,645 residents or 2.1 percent since 2000. The population of the U.S. as a whole grew 9.7 percent. Over two-thirds of New Yorkers are concentrated in the lower eastern part of the State, including New York City, Long Island, and the Mid-Hudson regions. About 6.1 million people, 31 percent of the population, reside upstate. The population has grown unevenly across New York's regions during the decade. Growth was limited to the lower and eastern parts of the State, particularly the Mid-Hudson and Capital regions.⁴⁰

Employment

Total nonfarm payroll employment growth in New York State nearly always lagged that of the nation prior to the recent recession. During the twenty-two years from 1985 to 2006, State employment grew faster than the nation in only two years. Since 2006, however, State nonfarm employment growth outperformed the nation four years in a row from 2007 to 2010. As the economy recovered State employment grew an estimated 1.2 percent in 2011, the same rate as the nation.

As the nation lost a substantially higher percentage of jobs than the State, the speed of the nation's employment recovery is expected to accelerate, since employment in the sectors that were hardest hit during the recession will post stronger gains. Total nonfarm employment in the State is forecast to grow at 1.0 percent in 2012 before growing 1.2 percent in 2013, compared to national employment growth of 1.4 percent and 1.5 percent in 2012 and 2013, respectively.

New York State employment performed better than that of the nation during the recent recession. The State entered the recent downturn one quarter after the nation. New York State lost 3.1 percent of total payroll jobs from peak to trough compared to 5.6 percent for the nation (annual numbers). As the New York housing market fared better than that of the nation, the percentage of employment loss in the construction sector was much less than the national construction job loss. In contrast, New York lost 2.9 percent of employment from peak to trough (annual numbers), compared to a 1.4 percent loss for the nation during the 2001 recession. Since employment bottomed out in the fourth quarter of 2009, the rate of employment recovery in the State has been comparable to that of the nation (see Figure 46).

⁴⁰ U.S. Census Bureau, 2010 Census, State & County QuickFacts, http://quickfacts.census.gov/qfd/index.html.



Figure 46

New York also performed better than most states, including other large states, during the recent recession. After ranking fortieth among fifty states and the District of Columbia in employment growth in 2006, New York State employment growth ranked twentieth in 2007, thirteenth in 2008, and continued to improve to eighth in 2009, when the State surpassed all other large states. This is due in part to a more stable construction sector in New York State (see Table 6).

| Employment Growth by State 2008-2010 | | | | | | | |
|--|-------------------|-------------|---------------|------------|---------------|-------------|--|
| | Employment Growth | | | | | | |
| Geography | 2008 | | 2009 | 2009 | | 2010 | |
| | Growth | Rank | Growth | Rank | Growth | Rank | |
| United States | (0.6) | - | (4.4) | - | (0.7) | - | |
| Top Five | | | | | | | |
| North Dakota | 2.5 | 2 | (0.2) | 2 | 2.4 | 1 | |
| Texas | 2.0 | 3 | (2.8) | 9 | 0.3 | 4 | |
| Utah | (0.0) | 23 | (4.8) | 36 | (0.6) | 27 | |
| Oklahoma | 1.5 | 4 | (3.4) | 18 | (1.0) | 37 | |
| Wyoming | 3.2 | 1 | (3.9) | 23 | (1.3) | 43 | |
| New York | 0.7 | 13 | (2.7) | 8 | 0.0 | 11 | |
| Bottom Five | | | | | | | |
| Indiana | (1.0) | 43 | (5.7) | 44 | 0.3 | 5 | |
| Alabama | (0.7) | 35 | (5.3) | 39 | (0.9) | 35 | |
| Kansas | 0.8 | 12 | (3.3) | 14 | (1.5) | 48 | |
| Delaware | (0.5) | 33 | (4.6) | 34 | (0.9) | 34 | |
| Georgia | (1.0) | 44 | (5.5) | 41 | (1.3) | 45 | |
| Other Large States | | | | | | | |
| California | (1.3) | 46 | (6.0) | 46 | (1.3) | 44 | |
| Florida | (3.5) | 51 | (6.2) | 48 | (1.0) | 36 | |
| Illinois | (0.5) | 34 | (4.9) | 37 | (0.8) | 30 | |
| Note: The growth rates and rankings are based on Current Employment Statistics (CES) | | | | | | | |
| employment data. This data may differ from QCEW data usually used by the NYS Assembly Ways | | | | | | | |
| and Means Committee s | taff. The CES | 6 data is n | nore timely l | out subjec | t to possible | significant | |
| revision. Rankings are based on two decimal places. | | | | | | | |

Table 6

Source: U.S. Bureau of Labor Statistics, CES.

New York State employment also performed better during the recent recession than the previous two recessions. The State lost less total nonfarm employment during the recent recession than during the previous two recessions. Although nonfarm employment loss was higher during the recent recession than during the 2001 recession, employment recovery was much faster during the recent recession (see Figure 47). Forty-four months after the employment peak, the State has regained 1.8 percent of its nonfarm employment, after losing 3.8 percent during the recent recession. On the contrary, the State had regained only 1.0 percent of its nonfarm employment 44 months after employment peaked in the 1990-91 recession after losing 7.0 percent, and 1.1 percent after losing 3.5 percent in the 2001-02 recession.





Sectoral Employment

Historically, most sectors lose jobs during recessions, with the exception of the education and health sector, which steadily increases even during recessions. This sector is the only sector that showed a gain in employment in 2009, and remained amongst the strongest growth in 2010 (see Table 7). This sector is expected to continue to post moderate growth in 2011 and 2012 as aging baby boomers will likely create more demand for healthcare services. The education and health sector is estimated to have grown 1.8 percent in 2011, and is forecast to grow at a similar rate throughout the forecast period. As the education and health sector continued to grow while others contracted during recessions, the sector's share of total nonfarm payroll employment in New York State has continued to grow. The sector's share of total nonfarm employment grew from 12.6 percent in 1990 to 19.0 percent in 2010, and is expected to increase to 19.4 percent by 2013.

Unlike the health and education sector, the manufacturing sector has been losing jobs for the past few decades due to a structural shift in the economy and other economic factors. The sector lost 10.9 percent of its jobs in 2009, and continued to lose an additional 3.9 percent in 2010. From 2008 to 2010, the manufacturing sector lost the largest number of jobs among all sectors in the State, totaling approximately 80,000 jobs, which accounted
for more than 25 percent of total State nonfarm job loss. Manufacturing sector employment is estimated to have gained 0.2 percent in 2011. Manufacturing employment is expected to grow 0.1 percent in 2012 before declining 0.1 percent in 2013.

| New York St | ate Nonfai (Percer | rm Emplo nt Change | yment by S e) | Sector | |
|---|---|-------------------------------|----------------------------|---------------|-----------|
| | Actual | Actual | Estimate | Forecast | Forecast |
| | 2009 | 2010 | 2011 | 2012 | 2013 |
| Total | (3.1) | 0.1 | 1.2 | 1.0 | 1.2 |
| Leisure & Hospitality | (0.9) | 3.3 | 4.2 | 3.0 | 2.8 |
| Professional Services | (4.3) | (1.5) | 3.3 | 2.9 | 2.9 |
| Other Services ¹ | (5.0) | 1.3 | 2.7 | 1.9 | 1.8 |
| Education & Health | 1.7 | 2.0 | 1.8 | 1.7 | 1.8 |
| Retail Trade | (3.8) | 1.5 | 1.8 | 1.3 | 1.0 |
| Wholesale Trade | (6.3) | (1.3) | 1.7 | 1.1 | 0.9 |
| Finance & Insurance | (7.2) | (1.8) | 1.7 | (0.5) | (0.5) |
| Management of Companies | (0.7) | 0.7 | 1.2 | 2.0 | 1.8 |
| Transp. & Utilities ² | (4.2) | (1.9) | 1.1 | 1.2 | 1.1 |
| Real Estate, Rental, & Leasing | (3.8) | (1.3) | 0.5 | 0.8 | 0.8 |
| Information | (4.0) | (0.1) | 0.3 | (0.7) | (0.6) |
| Manufacturing ³ | (10.9) | (3.9) | 0.2 | 0.1 | (0.1) |
| Construction | (10.0) | (5.4) | (0.4) | 1.5 | 3.1 |
| Government | (0.2) | (0.5) | (2.9) | (1.4) | (0.3) |
| Note: Industries are ranked by 2010 ¹ Including Administrative, Support, a ² Transportation, Warehousing, and | employment g ind Waste Man Utilities. | jrowth; rankin agement Ser | igs are based o rvices. | on two decima | I places. |

Table 7

³ Including Mining.

Sources: NYS Department of Labor, QCEW; NYS Assembly Ways and Means Committee staff.

Continuing budget problems at all levels have put pressure on government employment. State and local governments have been cutting jobs in order to cut costs. As a result, government employment declined three years in a row from 2009 to 2011 and is expected to continue to decline in 2012 and 2013. Government employment is estimated to have declined 2.9 percent in 2011 and is forecast to further decline by 1.4 percent in 2012 as the budget situation remains tight.

Two sectors that grew robustly coming out of the recent recession are the leisure and hospitality sector and the other services sector. Leisure and hospitality is a main beneficiary of the weak dollar, which attracts more international tourists to the State. Total international visitors to New York City increased 12.8 percent from 8.6 million in 2009 to 9.7 million in 2010. As a result, leisure and hospitality employment grew 3.3 percent in 2010, the strongest among all sectors. As the value of the dollar remained low while the global economy slowly improved, leisure and hospitality employment growth is estimated to have remained strong, growing 4.2 percent in 2011. The sector is forecast to grow further at 3.0 percent in 2012 and 2.8 percent in 2013.

The other services sector, which includes temporary workers, is estimated to have grown 2.7 percent in 2011 as employers continued to hire temporary rather than permanent workers due to numerous risks and uncertainties in the recovery. As the economy continues on a more sustainable recovery path, firms are likely to start hiring for full-time positions. As a result, job growth in this sector is expected to slow to 1.9 percent in 2012 and 1.8 percent in 2013.

New York State has seen significant change in its sectoral employment during the past several decades. While many sectors remain relatively stable throughout decades, some sectors have been declining, and others have been growing. The most notable sectors are the education and health sector and the manufacturing sector. Education and health employment has been steadily increasing even during recessions. As a result, the share of private education and health employment in total nonfarm State employment has doubled from 1980 to 2010. In 1980, education and health employment ranked fourth among all sectors in the State and accounted for less than 10 percent; this employment share jumped to 19.0 percent and ranked first in 2010 (see Table 8). Both upstate and downstate shared equally in this gain as the employment share of education and health in downstate grew from 9.7 percent in 1980 (ranked fourth) to 19.7 percent in 2010 (ranked first). Similarly, this employment share in upstate grew from 10.0 percent in 1980 (ranked fourth) to 18.1 percent in 2010 (ranked second behind the government sector).

Manufacturing has also gone through a drastic change. In 1980, the manufacturing sector accounted for 17.1 percent of total New York State employment, the second largest employment share in the State, behind the government sector (see Table 8). In 2010, this sector dropped to eighth in rank, with employment share dropping to 5.5 percent. This was due to a structural shift in the economy and other economic factors. The manufacturing sector has become less vital in the downstate than upstate economy, in terms of both number of jobs and share of total employment. In 1980, manufacturing was the second largest sector in downstate, accounting for 14.0 percent of total employment. In 2010, the sector ranked tenth and accounted for less than 4.0 percent of total employment in downstate. Likewise,

manufacturing was the largest sector upstate in 1980, accounting for 24.6 percent of total employment, this share dropped to 10.2 percent in 2010 and ranked fourth.

As sectoral shares of total employment changed, contributions to total State wages also changed. For most sectors, their share of total wages changed in the same direction as employment shares. For example, the education and health sector share of total employment increased from 9.6 percent in 1980 to 19.0 percent in 2010, while the sector's share of wages rose from 7.9 percent to 14.2 percent. Conversely, manufacturing's share of employment declined from 17.1 percent in 1980 to 5.5 percent in 2010, its wages share dropped from 19.2 percent to 5.5 percent. One sector that stood out was finance and insurance. While employment share of this sector fell from 6.8 percent in 1980 to 5.9 percent in 2010, its wage share rose from 8.6 percent to 18.8 percent. This is due to the sector's high wage growth over this period (see Table 8).

| N Share | ew York S e of Total N | tate Empl Ionfarm E | oyment and mploymen | d Wages t and Wag | jes | |
|---|--|---|--|---|--|---|
| | | 1980 - 2 | 2010 | | | |
| | 198 | 30 | 199 | 90 | 20 1 | 0 |
| | Share of Total State Employment (%) | Share of Total State Wages (%) | Share of Total State Employment (%) | Share of Total State Wages (%) | Share of Total State Employment (%) | Share of Total State Wages (%) |
| Education & Health | 9.6 | 7.9 | 12.6 | 10.5 | 19.0 | 14.2 |
| Government | 17.7 | 17.5 | 17.5 | 18.3 | 17.2 | 15.5 |
| Retail Trade | 10.4 | 6.6 | 10.6 | 6.1 | 10.5 | 5.1 |
| Other Services ¹ | 7.1 | 4.7 | 7.8 | 5.2 | 8.8 | 5.7 |
| Leisure & Hospitality | 6.1 | 3.1 | 7.1 | 3.3 | 8.8 | 3.9 |
| Professional Services | 4.5 | 5.9 | 5.4 | 7.7 | 6.6 | 10.0 |
| Finance & Insurance | 6.8 | 8.6 | 7.3 | 12.3 | 5.9 | 18.8 |
| Manufacturing ² | 17.1 | 19.2 | 11.9 | 12.5 | 5.5 | 5.5 |
| Wholesale Trade | 5.4 | 7.1 | 5.0 | 6.3 | 3.9 | 4.6 |
| Construction | 3.0 | 3.5 | 3.9 | 4.3 | 3.7 | 3.7 |
| Transportation & Utilities ³ | 3.6 | 4.9 | 3.5 | 3.7 | 3.0 | 2.6 |
| Information | 3.8 | 5.0 | 3.4 | 4.6 | 3.0 | 4.5 |
| Real Estate, Rental & Leasing | 1.8 | 1.5 | 2.0 | 1.9 | 2.1 | 1.9 |
| Management of Companies | 1.7 | 3.1 | 1.6 | 2.9 | 1.6 | 3.7 |

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Note: New York State total does not include unclassified data.

Including Administrative, Support, and Waste Management Services.

² Including Mining.

³ Transportation, Warehousing, and Utilities.

Source: NYS Department of Labor, QCEW.

Regional Employment

In 2010, the largest region by employment in the State was New York City, with employment of more than 3.5 million, accounting for over 40 percent of total State nonfarm employment. The smallest employment region was the North Country, which had 147,500 jobs. The two largest sectors in all regions were the education and health sector and the government sector, while in most regions the smallest sectors were the management of companies sector and the real estate, rental, and leasing sector (see Table 9).

| | | Ne Total | w York Nonfa | state S rm Empl | ectora loyme | al Shar nt by F | e of Region | | | |
|----------------------------------|-------------------------|-----------------------|----------------------|----------------------------|------------------------|--------------------|----------------------------|-------------------------|-------------------------|-------------------------|
| | | | | 20 1 | 0 | | | | | |
| | New York City (%) | Long Island (%) | Mid Hudson (%) | Western New York (%) | Finger Lakes (%) | Capital (%) | Central New York (%) | Southern Tier (%) | Mohawk Valley (%) | North Country (%) |
| Education & Health | 19.9 | 18.8 | 20.0 | 16.4 | 19.8 | 17.8 | 16.9 | 21.3 | 19.8 | 17.0 |
| Government | 15.3 | 16.0 | 18.7 | 18.6 | 17.1 | 24.0 | 19.1 | 21.1 | 25.5 | 30.5 |
| Other Services ¹ | 9.0 | 9.2 | 8.8 | 9.2 | 8.4 | 7.2 | 8.2 | 6.3 | 5.4 | 5.3 |
| Leisure & Hospitality | 8.8 | 8.4 | 8.6 | 10.0 | 8.7 | 9.0 | 9.5 | 8.9 | 7.9 | 9.7 |
| Professional Services | 8.7 | 5.9 | 4.8 | 4.6 | 4.3 | 6.1 | 4.7 | 3.5 | 2.7 | 1.9 |
| Financial & Insurance | 8.5 | 4.4 | 3.5 | 4.2 | 2.8 | 4.3 | 4.0 | 3.0 | 4.2 | 1.7 |
| Retail Trade | 8.4 | 12.9 | 12.9 | 11.9 | 11.7 | 11.6 | 11.9 | 11.8 | 11.7 | 14.5 |
| Information | 4.2 | 2.0 | 2.2 | 1.4 | 1.8 | 2.0 | 1.5 | 1.4 | 1.7 | 1.3 |
| Wholesale Trade | 3.6 | 5.2 | 3.5 | 3.5 | 3.3 | 2.9 | 4.4 | 2.5 | 2.4 | 1.9 |
| Real Estate, Rental, | | | | | | | | | | |
| & Leasing | 3.2 | 1.4 | 1.7 | 1.2 | 1.3 | 1.1 | 1.2 | 0.9 | 0.7 | 0.9 |
| Transp. & Utilities ² | 3.2 | 2.9 | 3.2 | 2.8 | 2.1 | 2.6 | 4.0 | 2.1 | 4.7 | 2.9 |
| Construction | 3.0 | 5.0 | 4.6 | 3.4 | 3.4 | 3.9 | 3.9 | 3.0 | 2.7 | 4.0 |
| Manufacturing ³ | 2.1 | 6.1 | 5.8 | 10.8 | 12.8 | 5.9 | 9.7 | 13.3 | 9.9 | 7.7 |
| Mgmt. of Companies | 1.7 | 1.4 | 1.5 | 2.0 | 2.3 | 1.4 | 0.9 | 0.8 | 0.6 | 0.7 |

Table 9

Note: Bolded numbers represent the low est and highest shares in each region.

¹ Including Administrative, Support, and Waste Management Services.

² Transportation, Warehousing, and Utilities.

³ Including Mining.

Sources: NYS Department of Labor, QCEW.

During the recent recession, upstate was hit harder than downstate, due to a larger decline or slower growth in large sectors such as education and health, government, retail trade, and other services. From the second quarter of 2008 to the second quarter of 2010, upstate employment lost more (or grew slower) than downstate in nine of fourteen sectors (see Table 10). Upstate lost 3.2 percent of its employment or 85,600 jobs during this period, while downstate lost 2.7 percent or 154,600 jobs. The sectors that suffered most in

both upstate and downstate were manufacturing and construction; however, manufacturing accounted for a larger proportion of total upstate employment than that of downstate.⁴¹

Employment recovery in upstate has lagged that of downstate due to slower recovery in almost all sectors. From the second quarter of 2010 to the second quarter of 2011, upstate gained no jobs, while downstate gained 1.3 percent of its nonfarm jobs driven by strong growth in the leisure and hospitality sector (see Table 10).

| N | lew York S 20 (1 | State Emplo 008:Q2 to 20 Percent Ch | oyment ()11:Q2 ange) | Change | | |
|---|------------------------|---|-----------------------------|-------------------|--------------|---------|
| | 200 | 8:Q2-2010:Q2 | | 2010 |):Q2-2011:Q2 | 2 |
| | New York State | Downstate | Upstate | New York State | Downstate | Upstate |
| Total Nonfarm | (2.9) | (2.7) | (3.2) | 0.9 | 1.3 | (0.1) |
| Education & Health | 4.1 | 4.6 | 3.0 | 1.6 | 1.8 | 0.7 |
| Leisure & Hospitality | 1.9 | 2.4 | 1.6 | 4.0 | 5.0 | 1.4 |
| Government | 1.3 | 1.7 | 0.7 | (4.4) | (4.7) | (4.0) |
| Management of Companies | (0.2) | (0.6) | (1.0) | 0.8 | 0.4 | 1.9 |
| Retail Trade | (2.4) | (1.8) | (3.4) | 1.5 | 2.1 | 0.2 |
| Other Services ¹ | (4.4) | (3.9) | (6.2) | 2.9 | 3.2 | 2.0 |
| Information | (4.6) | (5.7) | (8.9) | 2.1 | 3.9 | (2.1) |
| Real Estate, Rental, & Leasing | (5.3) | (4.0) | (8.3) | 0.4 | 0.5 | (1.3) |
| Professional Services | (6.0) | (6.3) | (2.7) | 3.3 | 3.5 | 0.9 |
| Transportation & Utilities ² | (6.6) | (6.2) | (7.7) | 1.1 | 1.3 | 0.2 |
| Wholesale Trade | (8.1) | (8.0) | (7.8) | 1.7 | 1.3 | 2.6 |
| Finance & Insurance | (9.7) | (10.4) | (6.1) | 2.2 | 3.2 | 1.0 |
| Construction | (14.7) | (17.1) | (9.3) | (0.8) | (1.4) | (0.8) |
| Manufacturing ³ | (14.9) | (15.2) | (14.6) | 0.2 | (1.8) | 1.8 |
| Note: New York State total inc | cludes unclass | ified data. | | | | |
| ¹ Including Administrative, Su | pport, and Was | te Manageme | nt | | | |
| ² Transportation, Warehousin | g, and Utilities | | | | | |
| ³ Including Mining. | | | | | | |
| Source: NYS Department of I | abor. QCEW. | | | | | |

Table 10

⁴¹ As of the fourth quarter of 2010, manufacturing employment made up 10.1 percent of upstate nonfarm employment, 3.5 percent of downstate nonfarm employment, and 5.5 percent of total State nonfarm employment.

On an annual basis, the regions hardest hit in the recent recession were the Mid-Hudson and Long Island regions, which respectively lost 3.6 percent and 3.4 percent of its nonfarm employment from 2008 to 2009 (see Table 11). While downstate lost a larger percentage of jobs than upstate between 2008 and 2009, it has recovered faster than upstate. From 2009 to 2010, downstate gained 0.5 percent in nonfarm jobs, with only the Mid-Hudson region still losing jobs. On the contrary, all upstate regions continued to lose jobs during this period. The Capital region lost the most jobs in terms of level and percentage in 2010 due to a large employment decline in the government sector.

| | N | ew York | State No | onfarm En 2008-201 | nploymen 0 | nt by Reg | jion | | |
|------------------|---------------------------|--|--|---------------------------|--|--|---------------------------|--|--|
| | | 2008 | | | 2009 | | | 2010 | |
| | Employment (Thousands) | Share of Total State Employment (%) | Employment Change 1980-2008 (%) | Employment (Thousands) | Share of Total State Employment (%) | Employment Change 2008-2009 (%) | Employment (Thousands) | Share of Total State Employment (%) | Employment Change 2009-2010 (%) |
| New York State | 8,573.7 | 100.0 | 20.8 | 8,312.0 | 100.0 | (3.1) | 8,318.7 | 100.0 | 0.1 |
| Downstate | 5,783.4 | 67.5 | 20.1 | 5,600.9 | 67.4 | (3.2) | 5,627.6 | 67.6 | 0.5 |
| New York City | 3,672.6 | 42.8 | 13.3 | 3,563.6 | 42.9 | (3.0) | 3,590.6 | 43.2 | 0.8 |
| Long Island | 1,221.0 | 14.2 | 36.3 | 1,179.3 | 14.2 | (3.4) | 1,182.9 | 14.2 | 0.3 |
| Mid-Hudson | 889.8 | 10.4 | 31.1 | 858.0 | 10.3 | (3.6) | 854.1 | 10.3 | (0.5) |
| Upstate | 2,652.7 | 30.9 | 20.5 | 2,577.5 | 31.0 | (2.8) | 2,564.5 | 30.8 | (0.5) |
| Western New York | 629.1 | 7.3 | 9.1 | 610.9 | 7.4 | (2.9) | 610.2 | 7.3 | (0.1) |
| Finger Lakes | 542.9 | 6.3 | 20.2 | 527.1 | 6.3 | (2.9) | 526.9 | 6.3 | (0.0) |
| Capital | 507.6 | 5.9 | 36.8 | 495.6 | 6.0 | (2.4) | 490.2 | 5.9 | (1.1) |
| Central New York | 348.8 | 4.1 | 22.0 | 337.7 | 4.1 | (3.2) | 334.3 | 4.0 | (1.0) |
| Southern Tier | 298.1 | 3.5 | 16.2 | 288.0 | 3.5 | (3.4) | 286.2 | 3.4 | (0.6) |
| Mohawk Valley | 174.2 | 2.0 | 16.0 | 169.9 | 2.0 | (2.5) | 169.1 | 2.0 | (0.5) |
| North Country | 152.0 | 1.8 | 39.4 | 148.2 | 1.8 | (2.5) | 147.5 | 1.8 | (0.4) |

Table 11

Prior to the recent recession, the Long Island region had the lowest unemployment rate in the State at below 4 percent, while the North Country region had the highest unemployment rate at over 5.6 percent (see Table 12). Since the downturn began, all regions lost jobs, leading to an increase in the unemployment rate in all regions. From 2007 to 2010, the unemployment rate in the New York City region rose almost five percentage points, the largest percentage point increase among all regions, due to large job losses in the financial sector. The labor market in all regions stabilized in 2010, as

unemployment remained steady. In 2011, the unemployment rate in all regions edged down from 2010, signaling continued improvement in the labor market.

| | | ate Onemp (| %) | | gion | |
|------------------|------|----------------|------|------|------|------|
| | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| New York State | 4.62 | 4.53 | 5.33 | 8.40 | 8.56 | 8.01 |
| Long Island | 3.93 | 3.83 | 4.86 | 7.28 | 7.39 | 7.01 |
| Mid-Hudson | 4.01 | 3.98 | 4.98 | 7.49 | 7.58 | 7.06 |
| Capital | 4.02 | 4.07 | 4.98 | 7.22 | 7.48 | 7.16 |
| Finger Lakes | 4.58 | 4.57 | 5.56 | 8.09 | 8.08 | 7.41 |
| Southern Tier | 4.62 | 4.52 | 5.45 | 8.34 | 8.39 | 7.82 |
| Western New York | 5.08 | 4.89 | 5.88 | 8.54 | 8.49 | 7.83 |
| Central New York | 4.74 | 4.53 | 5.58 | 8.37 | 8.53 | 7.92 |
| Mohawk Valley | 4.83 | 4.83 | 5.93 | 8.21 | 8.43 | 8.33 |
| New York City | 4.96 | 4.89 | 5.42 | 9.25 | 9.46 | 8.81 |
| North Country | 5.63 | 5.68 | 6.80 | 9.35 | 9.83 | 9.57 |

Table 12

Note: The definition of the following regions: Mohawk Valley, North Country, and Southern Tier, differ slightly from the QCEW data used by the NYS Assembly Ways and Means Committee staff in this report. *Source: New York State Department of Labor.*

Wages

The growth of wages in New York State remains a central issue in the State economic outlook and revenue forecasts. The State has typically been helped by strong growth in variable wages (bonuses) in the financial sector; however, this usual source of income declined during the recent recession leading to adverse effects on the State economy and revenues. Although wages grew in 2010 and 2011, the strength of the future outlook is somewhat unclear as financial firms continue to face an uncertain environment and base wages are constrained by firms not hiring new staff, laying off workers, or not granting raises to existing staff.

Total wages in New York State suffered greatly during the recent recession. Total wages dropped 7.2 percent in 2009, by far the largest yearly drop since the data series started in 1975 (see Figure 48). While variable wages are more volatile and have declined by double-digit percentages previously, the drop in 2009 variable wages of 32.7 percent or \$23.5 billion was unprecedented. Base wages also struggled in 2009, as employment dropped and inflation remained low. Base wages fell 3.1 percent in 2009, also unprecedented.



Figure 48

In 2010, wages in New York State started to recover, with base wages growing 1.8 percent and variable wages rebounding 26.7 percent (see Table 13). However, this growth was off the low 2009 base. In 2011, it is estimated that wages continued to recover, although growth did not reach the levels seen right before the recent recession. In 2012, wage growth is forecast to slow. Base wages are projected to grow slowly, as firms continue to be cautious about hiring workers. Variable wages are forecast to decline, a result of lower bonus payments in the first quarter of 2012 compared to 2011.

The sector with the largest average wage in the State is the financial activities sector. Historically, this has not always been the sector with the highest average wage. In 1990, management of companies had an average wage higher than the financial activities sector. Between 1990 and 2010, wage growth in the financial activities sector far outpaced the wage growth in other sectors. Employment growth was low relative to the other sectors, leading to a large increase in the financial activities' average wage (see Table 14).

| | | Table 13 | \$ | | | |
|-----------------------|-----------------------|-----------------------|--------------------|------------------|--------------------|------------------|
| | Personal Ir N | ncome, W ew York S | ages, and State | d CPI | | |
| | | Actual 2009 | Actual 2010 | Estimate 2011 | Forecast 2012 | Forecast 2013 |
| Personal Income | <i>Percent Change</i> | (5.1) | 4.1 | 4.9 | 3.0 | 3.7 |
| | Level | 885.4 | 922.0 | 966.9 | 996.3 | 1,033.5 |
| Total Wages | <i>Percent Change</i> | <mark>(7.2)</mark> | 4.3 | 4.7 | 2.6 | 4.4 |
| | Level | 481.1 | 502.0 | 525.6 | 539.3 | 562.9 |
| Base Wages | <i>Percent Change</i> | <mark>(3.1)</mark> | 1.8 | 4.5 | 3.7 | 4.4 |
| | Level | 432.6 | 440.6 | 460.3 | 477.4 | 498.6 |
| Variable Compensation | <i>Percent Change</i> | <mark>(32.7)</mark> | 26.7 | 6.3 | <mark>(5.1)</mark> | 3.7 |
| | Level | 48.5 | 61.5 | 65.3 | 62.0 | 64.3 |
| New York Area CPI | Percent Change | 0.4 | 1.7 | 2.8 | 2.0 | 1.9 |

Note: Levels are in billions of dollars. New York area CPI is based on the New York-Nothern NJ-Long Island, NY-NJ-CT-PA CPI-U series from the U.S. Bureau of Labor Statistics.

Sources: U.S. Bureau of Economic Analysis; NYS Department of Labor, QCEW; U.S. Bureau of Labor Statistics; NYS Assembly Ways and Means Committee staff.

| New York Sta | ate Average Wage (\$) | s By Sector | |
|---|--------------------------|-------------|---------|
| | 1990 | 2000 | 2010 |
| Total Nonfarm | 28,896 | 45,422 | 60,348 |
| Government | 30,158 | 40,973 | 54,198 |
| Education & Health | 24,092 | 32,365 | 45,150 |
| Retail Trade | 16,545 | 23,404 | 29,582 |
| Other Services ¹ | 19,245 | 27,148 | 39,107 |
| Financial Activities ² | 43,587 | 108,997 | 157,132 |
| Manufacturing ³ | 30,348 | 42,915 | 59,430 |
| Leisure & Hospitality | 13,526 | 20,636 | 26,557 |
| Professional Services | 41,598 | 67,077 | 90,886 |
| Wholesale Trade | 36,571 | 54,171 | 71,700 |
| Construction | 32,206 | 44,161 | 60,268 |
| Information | 39,535 | 65,434 | 90,896 |
| Transportation & Utilities ⁴ | 30,963 | 39,860 | 52,035 |
| Management of Companies | 54,284 | 107,628 | 140,145 |
| Note: Total includes unclassified data. | | | |

Table 14

¹ Including Administrative, Support, and Waste Management Services.

²Including Finance, Insurance, Real Estate, Rental & Leasing.

³ Including Mining.

⁴Transportation, Warehousing, and Utilities.

Source: New York State Department of Labor, QCEW.

Variable Compensation

Variable compensation is the most volatile component of New York wages and the outlook for such wages plays an important role in the forecasting of State wages. Even though the share of variable compensation in total wages is small compared to base wages, its impact on changes in total compensation cannot be ignored. The changes in variable compensation are difficult to predict, given the inherently uncertain nature of bonus payments coupled with the current economic climate where firms face great uncertainty in terms of the prospects for future demand. Therefore, while bonuses for current employees have the potential to increase should firms do well in terms of profits and revenues, layoffs may lead to a lower number of employees actually getting bonuses, meaning the overall level of bonuses may not be as great.

As noted in last year's *New York State Assembly Ways and Means Committee Economic Report*, since the recent financial crisis, bonus season payments are proving particularly tricky to forecast. Although some facets of the financial sector are doing well, overall annual revenue and profit results have been mixed—especially in the third quarter of 2011. Fourth quarter results indicate that activity picked up at some firms. However, only some investment firms reported an increased amount of compensation set aside for 2011 compared to 2010. In addition, as financial firms faced harsh public criticism and changing regulations, they implemented changes to their compensation structures, with some banks raising base pay and reducing bonus payments. Others changed the division of bonuses between stock options and cash, awarding more stock and less cash. However, the exact breakout between stock and cash is not available, nor is information on how much cash may be deferred. Although timing and the amount of gains realized are not clear, some of these stock options have possibly been exercised, helping to increase overall wages.⁴² In addition, there are uncertainties for the bonus outlook as a result of regulatory actions pertaining to revenue generation and salaries and bonuses in the financial sector.

Variable compensation accounted for an estimated average of 12.3 percent of total State compensation from 2004 to 2008, increasing from around 5 percent in the 1970s. The share reached a high of 14.5 percent in 2007. In 2009, however, this percentage fell to 10.0 percent as financial firms drastically cut back on bonus payouts in the face of billions of dollars in losses. By 2010, variable compensation had returned to 12.3 percent of total compensation as financial firm bonuses regained footing and the overall economy started

⁴² Carol E. Moylan, "Employee Stock Options and the National Economic Accounts," U.S. Bureau of Economic Analysis, *BEA Briefing*, February 2008, www.bea.gov/scb/pdf/2008/02%20February/0208_stockoption.pdf.

to improve. However, the percentage of variable compensation is not expected to return to 2007 levels in the forecast period as financial firms are faced with sagging revenues and profits, uncertain impacts of regulations, volatile stock markets, and overall weak global economic growth.

On a State Fiscal Year (SFY) basis, the Assembly Ways and Means Committee staff estimates that total variable wages will decline by 13.5 percent in SFY 2011-12. Securities industry variable compensation will fall 29.6 percent as firms faced a difficult revenue environment in the second half of 2011 and will likely adjust bonus payments in the first quarter of 2012 accordingly. In SFY 2012-13, as the economic environment improves, variable compensation (both overall and in the securities industry) should also improve, although not at the strong rates experienced leading up to the recession (see Figure 49).





Finance and Insurance Sector

The finance and insurance sector is important to the overall health of the New York State economy, especially downstate as the sector's employment is heavily concentrated in New York City. While the sector accounted for less than 6 percent of total State nonfarm payroll employment in 2011, the industry comprised almost 20 percent of total State nonfarm payroll wages. As a result, the performance of the finance and insurance sector has a considerable impact on State tax revenues.

Finance and insurance variable compensation accounted for almost half of total State variable wages in 2011. It is the most volatile component of State nonfarm payroll wages and as such is a major risk to the New York State forecast. Finance and insurance bonuses are mainly related to securities industry revenues and profits. During the recent recession, industry revenues and profits declined sharply due to asset degradation, huge write-downs by many firms, and the closure of financial institutions. There are uncertainties for the bonus outlook as the result of regulatory actions pertaining to salaries and bonuses in the financial sector; and how these regulations may change the concept of variable wages as we know it are unclear.

On a fiscal year basis, finance and insurance variable compensation in New York State fell sharply during the recession. Finance and insurance variable compensation fell by 42.8 percent in SFY 2008-09 to \$24.9 billion, while total variable compensation fell 31.7 percent. As the national economy came out of recession in the second half of 2009, financial firms paid higher bonuses. As a result, finance and insurance variable compensation rose by 14.2 percent to \$28.4 billion in SFY 2009-10, before rising further to an estimated \$34.4 billion in SFY 2010-11 as the overall economy continued to improve.

Wall Street activities rebounded steadily following the recession. After slowing markedly in 2008, mergers and acquisitions (M&A) activity began to improve in 2010. Global M&A volume increased 22.9 percent in 2010 to over \$2.4 trillion. However, as many M&A activities were taking place in emerging markets, U.S. M&A volume increased by only 14.2 percent during this period.⁴³ Although there was still uncertainty in the market—easing credit conditions, low interest rates, high cash on corporate balance sheets, and an improving economy help support M&A activity to gain strength in the first half of 2011. U.S. M&A volume totaled \$617 billion during the first half of 2011, an increase of almost 70 percent from the same period a year ago. As the risk rose due to the European and U.S. debt situations, U.S. M&A volume dropped sharply in the third quarter of 2011. Announced M&A volume dropped 18 percent in the third quarter of 2011 to \$214.8 billion, but remained 21 percent above that of the third quarter of 2010. Even with

⁴³ Thomson Reuters: "Mergers & Acquisitions Review," *Financial Advisors*, Fourth Quarter 2010.



the declines, U.S. M&A volume for 2011 totaled \$1.0 trillion, an increase of 28.9 percent from 2010 (see Figure 50).⁴⁴

Figure 50

Initial public offering (IPO) activities, another area that can be very lucrative for securities industry firms, were also curtailed during the recent recession but have recovered strongly since. The global IPO volume rebounded in 2009, growing more than 20 percent from 2008. IPO activities continued to rebound strongly in 2010, with global IPO volume totaling \$269.4 billion, more than double the 2009 volume.⁴⁵ As the economy further improved, global IPO activities continued to rise in the first half of 2011, growing 17.6 percent over the previous year. As in the case of M&A, rising global risk caused IPO activities to slow in the second half of 2011. Global IPO volume totaled \$163.8 billion in 2011, a decrease of 39.5 percent from 2010.

Since the financial crisis started, a record number of banks have gone bankrupt. In 2009, 140 banks failed, and in 2010, 157 additional banks failed, the highest since 1992. The number of banks that failed in 2011 declined to 92.⁴⁶ In 2010, troubled banks accounted for more than 10 percent of all banking institutions.⁴⁷ There were 884 problem

⁴⁴ Thomson Reuters: "Mergers & Acquisitions Review," Financial Advisors, Fourth Quarter 2011.

⁴⁵ Thomson Reuters: "Equity Capital Markets Review," Managing Underwriters, Fourth Quarter 2011.

⁴⁶ Federal Deposit Insurance Corporation (FDIC), Failed Bank List, (accessed and last updated 1/20/2012), www.fdic.gov /bank/individual/failed/banklist.html.

⁴⁷ Federal regulators assign a composite rating to each financial institution based upon an evaluation of financial and operational criteria. The rating is based on a scale of 1 to 5 in ascending order of supervisory concern. "Problem" institutions are those institutions with financial, operational, or managerial weaknesses

banks as of the fourth quarter of 2010, with total assets of \$390 billion, compared to only 76 problem banks in the second quarter of 2007, prior to the recession.⁴⁸ This placed enormous strain on the Federal Deposit Insurance Company (FDIC), which raised the assessment rate on banks in order to keep the fund liquid.⁴⁹ This problem has seen relief recently, as total problem banks fell to 865 at the end of June 2011, the first decline since the third quarter of 2006, and continued to decline in the third quarter of 2011.⁵⁰

The financial sector was one of the sectors that got hit the hardest in the recent recession. As a result, the sector lost a significant number of jobs due to massive lay-offs in order to reduce costs. From its peak in 2007 to its trough at the end of 2010, the finance and insurance sector in New York State lost about 57,000 jobs or 10.5 percent of the overall employment. This is higher than the rate of sector employment lost during the last employment downturn. The finance and insurance sector lost 8.4 percent of its jobs from 2000 to 2003. Industry employment had been growing since the sharp declines in 2002 and 2003. The industry started to rebound in 2011; however, as the recovery became weaker, the European sovereign debt crisis intensified, and market volatility increased, many firms announced more lay-offs. It is likely that financial firms will refrain from hiring; as a result, employment in this sector is expected to decline slightly in 2012 and 2013.

Within the finance and insurance sector, the securities industry was particularly hard hit by the recent recession and continues to be troubled by the problems in the financial system. Securities industry employment reached a record high of 871,200 jobs nationally in the second quarter of 2008, before falling 8.4 percent to its trough in the first quarter of 2010. As a result, securities employment in the State declined in 2009 and 2010, falling 9.7 and 1.9 percent, respectively. As of December 2011, securities industry employment in the State accounted for almost 24 percent of the nation's securities industry employment. The industry currently employs almost 190,000 workers in the State, many of whom are located in New York City.⁵¹ Securities employment in the State is estimated to have grown by 2.4 percent in 2011. It is forecast to fall 1.3 percent in 2012 and 0.3 percent in 2013 (see Figure 51).

that threaten their continued financial viability. Depending upon the degree of risk and supervisory concern, they are rated either a "4" or "5."

⁴⁸ Federal Deposit Insurance Corporation (FDIC), *Quarterly Banking Profile, Fourth Quarter 2010,* vol. 4, no. 4, December 31, 2010.

⁴⁹ Assessment rate is a fee that the FDIC assesses based on risks and then charges bank members in order to back the deposit insurance fund, which in turn guarantees the safety of the depositors' funds.

⁵⁰ Federal Deposit Insurance Corporation (FDIC), *Quarterly Banking Profile, Third Quarter 2011*, vol. 5, no. 4, September 30, 2011.

⁵¹ U.S. Department of Labor, Bureau of Labor Statistics, *Labor Force Statistics from the Current Population Survey*, www.bls.gov/cps/cpsatabs.htm (accessed February 22, 2012).



Figure 51

While revenues on Wall Street had been somewhat resilient after the financial crisis, they have been showing sensitivity to the uncertain environment and other factors such as the banning of lucrative sources of income, like proprietary trading. Recent trends suggest that securities industry total wages declined 9.8 percent in SFY 2011-12 after rising 11.4 percent in SFY 2010-11. Wages are estimated to have moved in tandem with revenues again in SFY 2011-12, after diverging in SFY 2010-11. Forecasting compensation growth in the securities industry has become increasingly difficult as changes in regulations that may not directly tie to revenue growth could also affect the relationship between bonuses and revenues.⁵² A shift towards higher base wages could mean that securities employment will be more severely affected by changes in revenue as companies are left with less room to maneuver during periods of poor performance.

⁵² In early 2010, Congress passed the Financial Reform Bill, which requires large banks to increase the amount of capital they hold in reserve. The bill also increases federal oversight and regulation over the sector's operations that were not previously under monitoring such as hedge funds, private equity firms, and the derivatives market. Additionally, in September 2010, the Basel Committee on Banking Supervision announced new international capital requirements for banks worldwide regardless of size, starting January 2013. Among the requirements is to increase the minimum equity requirement from 2.0 percent to 4.5 percent by 2019. In addition, banks will be required to hold a capital conservation buffer of 2.5 percent. Furthermore, banks must raise their Tier 1 capital ratio from 3.5 percent to 6.0 percent by 2019. See Basel Committee on Banking Supervision, "Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems," December 2010 (revised June 2011), http://www.bis.org/publ/bcbs189.pdf.





New York State Exports

Of all sectors in the State, the manufacturing sector produces a significant share of goods exported by the State. In 2010, over three-quarters of total State exports were from goods produced in the manufacturing sectors (see Table 15). This share increased to almost 83 percent in 2011.

As for the nation, Canada is the largest export destination for New York's goods. In 2011, New York exported over \$14 billion of goods (about 17 percent of total exports) to Canada. Europe comprises a larger share of the export market for New York State than it does for the nation. New York State exported \$20.0 billion of goods, almost one-quarter of total State exports, to the European Union in 2011, compared to 18 percent nationally (see Table 16). However, as exports accounted for a smaller proportion of State gross domestic product than the nation, the State has similar trade exposure to Europe at about 2 percent of gross State product in 2010.

| Nev | v York | State Ex (\$ in Mill | kports b ions) | у Туре | | | |
|------------------------------------|--------|-------------------------|-------------------|--------|--------|--------|--------|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| Total | 51,841 | 59,132 | 71,116 | 81,386 | 58,743 | 69,696 | 82,894 |
| Manufacturing | 43,239 | 48,147 | 57,440 | 64,971 | 45,608 | 55,005 | 68,488 |
| Computer and Electrical Products | 2,405 | 4,061 | 7,416 | 9,527 | 2,744 | 4,953 | 8,294 |
| Machinery (Except Electrical) | 4,634 | 4,823 | 5,352 | 5,086 | 4,938 | 5,848 | 7,554 |
| Chemicals | 7,208 | 7,620 | 7,597 | 7,726 | 6,344 | 6,420 | 6,950 |
| Transportation Equipments | 5,503 | 5,583 | 6,135 | 7,265 | 5,023 | 5,321 | 6,133 |
| Primary Metal Manufacturing | 3,426 | 4,606 | 5,579 | 6,586 | 5,403 | 5,385 | 6,018 |
| All Other Manufacturing | 20,062 | 21,453 | 25,361 | 28,781 | 21,155 | 27,078 | 33,539 |
| Agriculture and Livestock Products | 378 | 388 | 549 | 543 | 520 | 694 | 607 |
| Waste and Scrap | 1,256 | 1,953 | 2,977 | 4,510 | 3,011 | 3,754 | 4,584 |
| Publisher's Commodities | 16 | 19 | 23 | 26 | 10 | 9 | 6 |
| Other | 6,952 | 8,624 | 10,127 | 11,336 | 9,594 | 10,233 | 9,209 |

Table 15

Table 16

| | New Y | ork State (\$ | Exports in Million | by Desti s) | nation | | |
|---------------------|--------|------------------|-----------------------|----------------|--------|--------|--------|
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| Total | 51,841 | 59,132 | 71,116 | 81,386 | 58,743 | 69,696 | 82,894 |
| Top 10 Destinations | | | | | | | |
| Canada | 12,153 | 13,983 | 15,038 | 16,306 | 12,576 | 14,693 | 14,114 |
| Hong Kong | 2,181 | 2,606 | 3,405 | 3,697 | 2,957 | 4,488 | 8,121 |
| United Kingdom | 2,895 | 4,221 | 6,014 | 5,502 | 4,532 | 4,738 | 6,553 |
| Israel | 4,377 | 4,561 | 4,859 | 5,726 | 3,686 | 4,184 | 5,150 |
| Switzerland | 2,214 | 3,641 | 5,862 | 7,931 | 3,317 | 4,232 | 5,019 |
| China | 2,068 | 2,179 | 2,505 | 2,815 | 2,441 | 3,368 | 4,451 |
| Belgium | 2,028 | 2,266 | 2,595 | 3,130 | 1,751 | 2,429 | 2,890 |
| Germany | 2,228 | 2,446 | 2,728 | 3,081 | 2,377 | 2,754 | 2,879 |
| India | 1,039 | 1,242 | 1,697 | 1,832 | 1,516 | 2,035 | 2,741 |
| Mexico | 2,308 | 2,425 | 2,162 | 2,340 | 1,764 | 2,212 | 2,602 |
| European Union | 12,883 | 14,736 | 17,718 | 19,799 | 15,228 | 16,845 | 20,028 |

Note: The European Union covers 27 countries: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, and U.K. Source: U.S. Department of Commerce.

State Housing Market

The New York State housing market performed better than the nation during both the housing boom and the correction. As such, it remains one of the nation's healthiest markets based on foreclosures as well as the percentage of mortgage holders who owe more than the house is worth (negative equity).

As of December 2011, 1,811 New York State properties were in foreclosure: a rate of one in 4,427 housing units compared to the rate of one in about 634 housing units for the nation.⁵³ New York had the lowest percentage of mortgage holders in negative equity at 6.3 percent in the third quarter of 2011, compared to 22.1 percent nationwide. It was estimated that approximately 118,800 of the State's mortgages were in negative equity, with another 43,300 mortgages in danger of entering negative equity.⁵⁴ Nassau-Suffolk Core Based Statistical Area (CBSA) had the lowest percentage of mortgage holders in negative equity among the fifty CBSAs included in the report, at 5.4 percent, while the New York-White Plains-Wayne CBSA ranked sixth lowest in the second quarter of 2011.⁵⁵

Home prices in the State and the nation increased rapidly leading up to the recent recession, especially in downstate New York. Overall home prices in the State rose 64.2 percent from the third quarter of 2001 to the third quarter of 2007, compared to 47.5 percent for the nation. Home prices in New York State were driven largely by downstate, which inflated significantly during the housing boom before depreciating sharply during the housing downturn.

From the third quarter of 2007 to the third quarter of 2010, home prices in the State fell 7.0 percent, compared to 11.1 percent for the nation. The two metros that had the largest home price depreciation were Nassau-Suffolk and New York City areas. Upstate home prices were less affected by the real estate cycle than downstate, with the exception of Albany-Schenectady-Troy. Prices in Buffalo-Niagara Falls, Syracuse, and Rochester continued to appreciate during the housing downturn. The decline in home prices in the State and the nation has continued in the recent year (see Table 17).

⁵³ RealtyTrac staff, "2011 Year-end Foreclosure Report : Foreclosures on the Retreat," *RealtyTrac*, January 9, 2012.

⁵⁴ Corelogic, Corelogic's Negative Equity Data Updates, Corelogic, (as of November 29, 2011).

⁵⁵ Corelogic, Corelogic's Negative Equity Data Updates, *Corelogic*, (as of September 13, 2011).

| Table 17 |
|----------|
|----------|

| Home Price Change by New York State Metropolitan Area 2001:Q3 to 2011:Q3 (Percent Change) | | | | | | |
|---|-------------------------|---------------------------|---------------------------|--|--|--|
| | 2001:Q3-2007:Q3 | 2007:Q3-2010:Q3 | 2010:Q3-2011:Q3 | | | |
| Buffalo-Niagara Falls | 28.0 | 5.5 | (0.3) | | | |
| Rochester | 21.4 | 3.1 | (0.7) | | | |
| Syracuse | 37.6 | 2.6 | (1.5) | | | |
| Albany-Schenectady-Troy | 70.7 | (0.7) | (1.9) | | | |
| New York-White Plains | 76.5 | (11.9) | (2.9) | | | |
| Nassau-Suffolk | 77.1 | (11.8) | (5.0) | | | |
| New York State | 64.2 | (7.0) | (3.5) | | | |
| U.S. | 47.5 | (11.1) | (4.3) | | | |
| Note: Data is not seasonally adjusted. | The FHFA index presente | d herein may show differe | nt price changes from the | | | |

S&P/Case-Shiller Index. This is because the two indices use different data. The FHFA index is based on homes with conforming loans, which have a loan limit of \$417,000 for single-family homes. Therefore, the FHFA index does not reflect price changes for more expensive homes. The FHFA index also includes both sales and appraisal data. Source: Federal Housing Finance Agency (FHFA).

Activities in the housing market declined sharply after the expiration of the homebuyer tax credit. Sales of existing single-family homes in the State fell 28.5 percent in the second quarter of 2011 from a year earlier. Home sales during the second quarter of 2010 were unusually high as homebuyers tried to take advantage of the first-time homebuyer tax credit, which required buyers to sign a contract by April 30, 2010. Distressed homes accounted for about 8.3 percent of total home sales in the State as of April 2011, compared to 30.1 percent for the nation.⁵⁶ In 2011, existing single-family home sales in the State dropped 3.9 percent from 2010, while home prices fell by 0.7 percent.⁵⁷

Although the housing market in the State has outperformed the nation thus far, the market remains fragile. While New York State has the lowest negative equity rate in the nation, the State has a higher percentage of mortgages that are at least 90 days late as of the third quarter of 2011 at almost 9.0 percent compared to about 7.0 percent for the nation.⁵⁸ Additionally, as the average length of the foreclosure process in New York is more than one year, the State housing market may not be fully impacted by these recent foreclosures. This imposes a downside risk on the New York State housing market.

⁵⁶ CoreLogic, "U.S. Housing and Mortgage Trends," CoreLogic, July 2011.

⁵⁷ New York State Association of Realtors, January 20, 2012 (accessed February 17, 2012).

⁵⁸ CoreLogic, "U.S. Housing and Mortgage Trends," *CoreLogic*, November 29, 2011; Federal Reserve Bank of New York, *Quarterly Report on Household Debt and Credit*, November 2011.

As home prices have fallen faster than income, and mortgage interest rates have remained at record lows, housing affordability has improved. The National Association of Home Builders/Wells Fargo Housing Opportunity Index (HOI) indicates that housing affordability jumped from 53.8 percent in the first quarter of 2008 to 72.5 percent in the first quarter of 2009. The Index remained above 70 percent, and reached a record high in the first quarter of 2011, with 74.6 percent of homes sold affordable to families earning the national median income. The index remained above 70 percent in the fourth quarter of 2011.⁵⁹

Regionally, housing in upstate New York has long been more affordable than that of downstate. Despite the improvement in housing affordability, a large disparity still exists in the State. In 2010, downstate residents faced a much higher housing cost burden than those upstate, especially those who rent. The housing burden was highest in Long Island, where 43.9 percent of homeowners and 54.9 percent of renters paid more than 30 percent of their income on housing (see Table 18). On the contrary, only 14.7 percent of homeowners and 45.3 percent of renters in Elmira paid more than 30 percent of their income on housing. In the State as a whole, 34.5 percent of all New York homeowners paid more than 30 percent of their income on housing in 2010, while about half of all renters paid more than 30 percent of their income on housing.

As of the fourth quarter of 2011, out of 225 metros nationwide, four of the nine upstate metros ranked in the top fifty most affordable metros, while two of the four downstate metros ranked in the bottom fifty (least affordable). Although affordability more than doubled in the last three years, New York-White Plains-Wayne was the least affordable metro in the country, with 29 percent of homes sold affordable to families earning the area median income in the fourth quarter of 2011.⁶⁰

⁵⁹ The Housing Opportunity Index is defined as the share of homes sold in the area that would have been affordable to a family earning the median income (i.e., the total monthly payment is less than 28 percent of the monthly median household income).

⁶⁰ National Association of Home Builders, *NAHB/Wells Fargo Housing Opportunity Index (HOI)*, February 16, 2012.

| Housing Cost Burden by New York State Metropolitan Area 2010 | | | | | | | |
|---|--|---|---|---|--|--|--|
| | Ow | ner | Re | nter | | | |
| | Owner- Occupied Housing Units Total | Percent with Housing Costs Over 30% of Household Income | Renter- Occupied Housing Units Total | Percent with Housing Costs Over 30% of Household Income | - Housing Opportunities Index 2011:Q4 | | |
| Metropolitian Statistical Area | | | | | | | |
| Long Island (Nassau-Suffolk) | 748,884 | 43.9 | 190,111 | 54.9 | 63.0 | | |
| New York City | 976,294 | 41.1 | 2,063,173 | 50.9 | 29.0 | | |
| Kingston | 47,567 | 40.5 | 21,014 | 54.2 | 78.2 | | |
| Poughkeepsie-Newburgh- | | | | | | | |
| Middletown | 161,651 | 40.5 | 69,910 | 51.7 | 78.1 | | |
| Glens Falls | 38,155 | 27.1 | 14,819 | 44.6 | 80.1 | | |
| Albany-Schenectady-Troy | 225,850 | 25.9 | 122,784 | 47.3 | 77.8 | | |
| Rochester | 283,738 | 24.9 | 130,358 | 50.2 | 85.0 | | |
| Syracuse | 171,972 | 24.6 | 83,640 | 46.7 | 88.1 | | |
| Buffalo-Niagara Falls | 304,382 | 23.3 | 160,199 | 48.3 | 88.8 | | |
| Binghamton | 70,807 | 22.4 | 30,023 | 48.0 | 90.0 | | |
| Ithaca | 21,183 | 22.4 | 16,629 | 48.5 | 79.8 | | |
| Utica-Rome | 81,674 | 21.2 | 34,182 | 42.4 | 87.2 | | |
| Elmira | 23,848 | 14.7 | 11,686 | 45.3 | NA | | |
| New York State | 3,904,123 | 34.5 | 3,292,304 | 50.2 | NA | | |
| United States | 74,873,372 | 30.5 | 39,694,047 | 48.9 | 75.9 | | |

| Table | 18 |
|-------|----|
|-------|----|

Note: The Housing Opportunity Index for New York City was the Index for New York-White Plains-Wayne, NY-NJ. Housing costs for homeowners include mortgage payment, real estate taxes, fire hazard and flood insurance, utilities, and fuels. The housing cost for renters is gross rent.

The Housing Opportunity Index is defined as the share of homes sold in the area that would have been affordable to a family earning the median income (i.e., the total monthly payment is less than 28 percent of the monthly median household income).

Sources: U.S. Census Bureau, 2010 American Community Survey; National Association of Home Builders.

Commercial real estate activities in the State have recovered quite well after deteriorating in 2008 and 2009. In Manhattan, slow demand due to layoffs caused leasing activity to drop by almost 45 percent in the second quarter of 2009 compared to the same period in 2008. However, activity has since increased sharply. Total leasing activity in the city increased almost 40 percent in the first half of 2011, compared to the first half of 2010. New leasing activities totaled 10.3 million square feet in the second quarter of 2011, the highest since the third quarter of 1999. As a result, the overall vacancy rate in Manhattan dropped from 10.8 percent in the second quarter of 2010 to 9.4 percent in the second quarter of 2011. Furthermore, direct asking rents rose from \$56.06 per square foot per year

to \$56.27 per square foot per year.⁶¹ Leasing activity remained strong in the fourth quarter of 2011, with a 14.4 percent increase from the fourth quarter of 2010. Overall vacancy rates dropped from 10.5 percent in the fourth quarter of 2010 to 9.1 percent in the fourth quarter of 2011.⁶² Looking forward, the office market will likely continue to improve in 2012 as employment in the key office-using industries such as professional services are expected to recover slowly.

Capital Gains

The performance of financial markets, particularly the equity and real estate markets, is an important indicator of capital gains realizations. Turmoil in the financial markets, sparked by the distressed housing market, led to the stock markets falling significantly in the fourth quarter of 2007 which led to significant declines in the value of assets in 2008 (see Figure 53). The housing market started showing signs of weakness in 2006 when home prices in the U.S. grew only 5.8 percent after double-digit gains in the previous two years. Home prices decreased by 1.4 percent in 2007, 9.3 percent in 2008, an additional 8.3 percent in 2009, and by another 2.6 percent in 2010. Overall, U.S. home prices fell 20.1 percent from 2006 to 2010. The prolonged contraction of the housing market also resulted in the decline of housing prices in the State by 0.5 percent in 2007, 2.3 percent in 2008, 5.1 percent in 2009, and 0.3 percent in 2010.⁶³ Home prices fell 8.1 percent between 2006 and 2010. Accordingly, these disturbances have had a significant adverse effect on capital gains realizations in New York State.

Since capital gains are only realized when the sale price of assets exceeds the purchase price of assets, the disparity between current year asset prices and prior years' asset prices has important implications for capital gains realizations in current and future years.⁶⁴ If an investor purchased stocks in 2004 and sold them in 2007, capital gains were most likely realized since, on average, equity prices were much higher in 2007 than 2004, based on the Standard & Poor's 500 Composite Stock Price Index (S&P 500). On the other hand, if investors made purchases in 2007 and sold in 2009, the probability is higher that they suffered losses because average equity prices were lower in 2009 than in 2007 (see Figure 55). Losses on assets sold reduce taxable capital gains.

⁶¹ Cushman & Wakefield, "Manhattan Office Report 2Q11," MarketBeat, Second Quarter 2011.

⁶² Cushman & Wakefield, "Manhattan Office Report 4Q11," MarketBeat, Fourth Quarter 2011.

⁶³ Home prices are based on Freddie Mac House Price Index (FMHPI), http://www.freddiemac.com/finance/ fmhpi.

⁶⁴ Assets include corporate stocks; bonds; put and call options; futures contracts; real estate; mutual funds; partnerships, S corporations, and estate or trust interests; livestock; timber; depreciable business real and personal property; passthrough gains and losses; and capital gain distributions.



Figure 53

Taxable gains peaked for both the U.S. and New York State in 2007. Of all asset types, corporate stock accounted for 24.9 percent of total taxable capital gains at the national level, while passthrough gains represented the largest share of net gains of 40.1 percent. Real estate and capital gain distributions from the sale of mutual funds comprised 8.8 percent and 9.4 percent, respectively. In comparison, in 1999 corporate stock represented the largest share of taxable capital gains of 42.4 percent, passthrough gains accounted for 25.3 percent, real estate share was 10.0 percent, and capital gain distributions comprised 11.5 percent (see Figure 54).⁶⁵ Passthrough gains are capital gains associated with the sale of capital assets by a partnership, S corporation, estate or trusts, shareholder, or beneficiary level that are reported on individuals' income tax returns.⁶⁶

 ⁶⁵ Internal Revenue Service, *Short-term and Long-term Capital Gains and Losses*, SOI Tax Stats for 1999 and 2007, Table 1a from each issue, http://www.irs.gov/taxstats/indtaxstats/article/0,,id = 96649,00.html.
⁶⁶ Janette Wilson and Pearson Liddell, "Sales of Capital Assets Reported on Individual Tax Returns, 2007,"

Statistics of Income Bulletin, winter 2010; http://www.irs.gov/pub/irs-soi/10winbulcapitalassets.pdf.



Figure 54

Despite improvements in the stock market beginning in mid-2009, taxable capital gains fell an additional 44.4 percent in 2009 to \$29.7 billion after falling by \$63.0 billion in 2008 as home prices continued to decline and investors faced stock prices that were lower than in prior years. Taxable capital gains rose by 49.3 percent to \$44.3 billion in 2010 (see Figure 55). The expected increase in net gains is largely reflective of an increase in the financial markets since the housing market remained depressed.



Figure 55

Taxable capital gains increased an estimated 20.2 percent in 2011 to \$53.3 billion as the performance of equity markets managed to improve further despite volatility in financial markets. Furthermore, investors who had bought lower priced stocks at the bottom of the market realized gains as stock prices inched up. As the housing market continues to struggle, realizations through home sales are expected to comprise a smaller portion of capital gains than stock transaction gains. Capital gains are expected to grow to \$78.7 billion or 47.8 percent in 2012, mostly attributed to gains being shifted from 2013 to 2012 as a result of the expected increase in capital gains taxes in 2013.⁶⁷ Historical data suggests that investors are inclined to realize gains when anticipating higher tax rates in the future. Consequently, capital gains are forecast to fall by 25.2 percent to \$58.9 billion in 2013 because of the shift.

New York State Forecast Comparison

The NYS Assembly Ways and Means Committee staff's forecast for total nonfarm payroll employment growth in the State in 2012 is 1.0 percent (see Table 19). This forecast is 0.1 percentage point above the Division of the Budget forecast. The staff's forecast for State wages in 2012 is 2.6 percent. This forecast is 0.6 percentage point above the Division of the Budget. On a state fiscal year basis, the Assembly Ways and Means Committee staff's wage forecast is 0.1 percentage point below the Division of the Budget's wage forecast for SFY 2012-13.

The Assembly Ways and Means Committee staff's forecast for total nonfarm payroll employment growth in the State in 2013 is 1.2 percent. This forecast is 0.2 percentage point above the Division of the Budget. The staff's forecast for State wages in 2013 is 4.4 percent. This is 0.6 percentage points below the Division of the Budget. On a State fiscal year basis, the Assembly Ways and Means Committee staff's forecast is 0.1 percentage point below the Division of the Budget's wage forecast for SFY 2013-14.

⁶⁷ The expiration of current tax cuts and a tax on unearned income as part of the healthcare package will result in higher tax rates on realized capital gains. See *The Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010, Public Law 111-312, 111th Congress, December 17, 2010.*

| (Percent Change) | | | | | | | |
|---|--|---|---|--------------------------------|--|--|--|
| | Actual | Estimate | Forecast | Forecast | | | |
| | 2010 | 2011 | 2012 | 2013 | | | |
| Employment | | | | | | | |
| Ways and Means | 0.1 | 1.2 | 1.0 | 1.2 | | | |
| Division of the Budget | 0.1 | 1.1 | 0.9 | 1.0 | | | |
| Wages (Calendar Year basis) | | | | | | | |
| Ways and Means | 4.3 | 4.7 | 2.6 | 4.4 | | | |
| Division of the Budget | 4.4 | 4.1 | 2.0 | 5.0 | | | |
| Wages (State Fiscal Year basis) |) | | | | | | |
| Ways and Means | 5.4 | 1.6 | 4.5 | 5.0 | | | |
| Division of the Budget | 5.4 | 0.7 | 4.6 | 5.1 | | | |
| Note: For state fiscal year basis: 20 Sources: NYS Assembly Ways and Budget Financial Plan, February 12 |)12 represents SFY <i>Means Committee</i> 7, 2012. | 2012-13, 2013 re staff; NYS Division | presents SFY 201 n of the Budget, F` | 3-14, etc. Y 2013 Executive | | | |

| I able I J |
|------------|
|------------|

RISKS TO THE FORECAST

Serious risks to the economic outlook of the nation and New York State remain. Within the U.S., problems that were central to the recent recession continue, particularly weaknesses in both the labor market and the housing market. Furthermore, a highly volatile stock market and government regulations have created considerable uncertainty in the financial markets. Limited access to credit continues to pose a significant risk going forward. If these areas fail to improve, the impact on the outlook would be substantial. Weakness in the economic recovery has persisted as the fiscal policies implemented to spur growth failed to generate firm traction. As a result, the outlook presented in this report could prove to be overly optimistic.

The health of the global economy is also a concern. If global economic growth should continue to slow, the ability of the United States economy to grow would be negatively impacted. Many global issues add uncertainty to the outlook, including the war in Afghanistan, unrest in the Middle East, and volatility in oil prices. The European debt crisis and the overall health of the eurozone remain a significant risk to the global recovery, as the extent of the problem and its impact on the rest of the world still remain unclear. If many of the issues mentioned above prove to be worse than anticipated, the U.S. economic outlook would be less optimistic than presented.

The current global and national economic climate presents particular challenges and risks to the New York State forecast. The European sovereign debt crisis and the associated European banking sector turmoil may roil financial markets again, having direct negative impacts on Wall Street. Furthermore, the extent to which the Wall Street landscape has permanently changed continues to unfold, hence there is great ambiguity surrounding the State outlook. Wall Street and the financial markets play a central role in the State economy, and drastic cuts to or changes in the composition of Wall Street compensation (including bonuses) have critical implications for the economic health of the State. In addition, the extent to which the Dodd-Frank Wall Street Reform Act and the Consumer Protection Act fosters continued hesitation or inaction on the part of financial firms could infuse more uncertainty into the forecast.

APPENDICES

APPENDIX A

| U.S. Recessions Since World War II (Based on Series-Specific Turning Points) | | | | | | |
|---|------------------------|---------------------|---|------------------------|---------------------|--|
| (| GDP | | Emp | loyment | | |
| Peak to Trough | Duration (Quarters) | Depth | Peak to Trough | Duration (Quarters) | Depth | |
| 1948:Q4-1949:Q4 | 4 | (1.6%) (\$29.5) | 1948:Q3-1949:Q4 | 5 | (4.4%) (1,973.0) | |
| 1953:Q2-1954:Q1 | 3 | (2.7%) (\$62.7) | 1953:Q2-1954:Q3 | 5 | (3.2%) (1,635.0) | |
| 1957:Q3-1958:Q1 | 2 | (3.7%) (\$97.6) | 1957:Q2-1958:Q2 | 4 | (4.1%) (2,200.7) | |
| 1960:Q1-1960:Q4 | 3 | (1.6%) (\$45.1) | 1960:Q2-1961:Q1 | 3 | (1.7%) (910.0) | |
| 1969:Q3-1970:Q4 | 5 | (0.6%) (\$26.7) | 1970:Q1-1970:Q4 | 3 | (1.0%) | |
| 1973:Q4-1975:Q1 | 5 | (3.2%) | 1974:Q3-1975:Q2 | 3 | (2.7%) | |
| 1980:Q1-1980:Q3 | 2 | (2.2%) | 1980:Q1-1980:Q3 | 2 | (0.9%) (847.0) | |
| 1981:Q3-1982:Q3 | 4 | (2.7%) | 1981:Q3-1982:Q4 | 5 | (3.0%) | |
| Average over All Previous Recessions | 3.5 | (2.3%) (\$89.3) | Average over All Previous Recessions | 3.8 | (2.6%) (1,640.6) | |
| 1990:Q2-1991:Q1 | 3 | (1.4%) (\$109.3) | 1990:Q2-1991:Q3 | 5 | (1.4%) (1,497.7) | |
| 2000:Q4-2001:Q3 | 3 | 0.0% \$5.4 | 2001:Q1-2003:Q2 | 9 | (2.0%) (2,655.7) | |
| 2007:Q4-2009:Q2 | 6 | (5.1%) (\$684.6) | 2008:Q1-2010:Q1 | 8 | (6.2%) | |
| Note: Depth is defined | as the level cha | ange from the | e peak level to the trough l | evel. GDP is in | billions of | |

chained 2005 dollars. Employment is non-farm total in thousands. The percentages are the depth divided by the peak level

Sources: U.S. Bureau of Economic Analysis; U.S. Bureau of Labor Statistics, CES; NYS Assembly Ways and Means Committee staff.

| APPEN | DIX B |
|-------|-------|
|-------|-------|

| U.S. Recessions Since World War II (Based on Series-Specific Turning Points) | | | | | | |
|---|------------------------|---------------------|---|------------------------|----------------------|--|
| Cons | sumption | | Inve | estment | | |
| Peak to Trough | Duration (Quarters) | Depth | Peak to Trough | Duration (Quarters) | Depth | |
| 1948:Q4-1949:Q4 | No Decline | 3.4% 40.4 | 1948:Q3-1949:Q2 | 3 | (31.0%) (\$75.0) | |
| 1953:Q2-1953:Q4 | 2 | (0.9%) (\$12.6) | 1953:Q2-1954:Q2 | 4 | (11.1%) (\$27.5) | |
| 1957:Q4-1958:Q1 | 1 | (1.4%) (\$22.2) | 1957:Q3-1958:Q2 | 3 | (17.2%) (\$47.5) | |
| 1960:Q2-1960:Q3 | 1 | (0.4%) (\$7.1) | 1960:Q1-1960:Q4 | 3 | (21.7%) (\$71.7) | |
| 1970:Q3-1970:Q4 | 1 | (0.3%) (\$7.5) | 1969:Q3-1970:Q1 | 2 | (8.4%) (\$43.3) | |
| 1973:Q3-1974:Q1 | 2 | (1.2%) (\$37.0) | 1973:Q4-1975:Q2 | 6 | (29.4%) (\$197.4) | |
| 1979:Q4-1980:Q2 | 2 | (2.4%) (\$92.8) | 1978:Q4-1980:Q3 | 7 | (19.9%) (\$162.6) | |
| 1981:Q3-1981:Q4 | 1 | (0.8%) (\$29.0) | 1981:Q3-1982:Q4 | 5 | (22.5%) (\$180.6) | |
| Average over All Previous Recessions | 1.4 | (0.5%) (\$21.0) | Average over All Previous Recessions | 4.1 | (20.1%) (\$100.7) | |
| 1990:Q3-1991:Q1 | 2 | (1.1%) (\$56.6) | 1990:Q2-1991:Q2 | 4 | (12.7%) (\$129.1) | |
| 2000:Q4-2001:Q3 | No Decline | 1.2% \$94.2 | 2000:Q2-2001:Q4 | 6 | (14.3%) (\$286.6) | |
| 2007:Q4-2009:Q2 | 6 | (3.4%) (\$314.1) | 2006:Q1-2009:Q2 | 13 | (38.3%) (\$869.1) | |

Note: Depth is defined as the level change from the peak level to the trough level. Consumption and investment are in billions of chained 2005 dollars. The percentages are the depth divided by the peak level.

Sources: U.S. Bureau of Economic Analysis; U.S. Bureau of Labor Statistics, CES; NYS Assembly Ways and Means Committee staff.

| NYS Employment and Wages in NAICS Sectors | | | | | | | | |
|---|------------------|-------------------------|--------------------|------------------|---------------------------|------------------|--|--|
| | E (1 | mployment Thousands) | | | Wages (\$ in Billions) | | | |
| | Estimate 2011 | Forecast 2012 | Forecast 2013 | Estimate 2011 | Forecast 2012 | Forecast 2013 | | |
| Total | 8,415.5 | 8,500.0 | 8,601.8 | 525.6 | 539.3 | 562.9 | | |
| Education & Health | 1,608.7 | 1,636.0 | 1,665.3 | 74.7 | 78.9 | 83.6 | | |
| Government | 1,392.2 | 1,372.8 | 1,368.6 | 78.2 | 78.3 | 79.0 | | |
| Retail Trade | 889.4 | 901.2 | 910.0 | 27.1 | 28.4 | 29.8 | | |
| Other Services | 751.9 | 765.8 | 779.7 | 29.8 | 31.0 | 32.3 | | |
| Financial Activities | 672.1 | 671.0 | 670.2 | 110.5 | 108.1 | 112.9 | | |
| Leisure & Hospitality | 763.5 | 786.3 | 808.5 | 20.9 | 22.1 | 23.5 | | |
| Professional Services | 570.1 | 586.8 | 603.5 | 54.1 | 57.5 | 61.5 | | |
| Manufacturing | 461.2 | 461.9 | 461.3 | 28.4 | 29.4 | 30.3 | | |
| Construction | 304.4 | 308.9 | 318.5 | 18.9 | 19.7 | 20.9 | | |
| Wholesale Trade | 330.3 | 333.9 | 336.8 | 24.7 | 25.7 | 27.0 | | |
| Transport & Utilities | 256.3 | 259.4 | 262.3 | 13.8 | 14.3 | 14.9 | | |
| Information | 252.1 | 250.3 | 248.9 | 24.0 | 24.5 | 25.3 | | |
| Management of Companies | 133.0 | 135.7 | 138.1 | 19.3 | 20.2 | 20.8 | | |
| Note: Some NAICS sectors a | re grouped w it | h others. For se | ector definitions, | see Appendix I. | | | | |
| Sources: NYS Department of | of Labor, QCEV | V; NYS Assemt | oly Ways and Me | ans Committee s | staff. | | | |

APPENDIX C

| NYS Employment and Wage Growth in NAICS Sectors (Percent Change) | | | | | | | | |
|---|------------------|------------------|---------------------|------------------|------------------|------------------|--|--|
| | | Employmer | nt | | Wages | | | |
| | Estimate 2011 | Forecast 2012 | Forecast 2013 | Estimate 2011 | Forecast 2012 | Forecast 2013 | | |
| Total | 1.2 | 1.0 | 1.2 | 4.7 | 2.6 | 4.4 | | |
| Construction | (0.4) | 1.5 | 3.1 | 2.4 | 4.4 | 6.2 | | |
| Education & Health | 1.8 | 1.7 | 1.8 | 4.8 | 5.5 | 6.0 | | |
| Government | (2.9) | (1.4) | (0.3) | 0.6 | 0.2 | 0.8 | | |
| Leisure & Hospitality | 4.2 | 3.0 | 2.8 | 7.3 | 5.9 | 6.2 | | |
| Professional Services | 3.3 | 2.9 | 2.9 | 7.9 | 6.2 | 7.0 | | |
| Transport & Utilities | 1.1 | 1.2 | 1.1 | 4.3 | 3.8 | 4.5 | | |
| Other Services | 2.7 | 1.9 | 1.8 | 4.1 | 3.9 | 4.1 | | |
| Retail Trade | 1.8 | 1.3 | 1.0 | 5.1 | 4.7 | 4.8 | | |
| Wholesale Trade | 1.7 | 1.1 | 0.9 | 5.9 | 4.3 | 4.9 | | |
| Information | 0.3 | (0.7) | (0.6) | 5.0 | 2.1 | 3.4 | | |
| Management of Companies | 1.2 | 2.0 | 1.8 | 4.8 | 4.6 | 2.8 | | |
| Financial Activities | 1.3 | (0.2) | (0.1) | 6.0 | (2.1) | 4.4 | | |
| Manufacturing | 0.2 | 0.1 | (0.1) | 3.9 | 3.3 | 3.2 | | |
| Note: Some NAICS sectors a | re grouped w it | h others. For se | ctor definitions, s | see Appendix I. | | | | |
| Sources: NYS Department o | of Labor, QCEV | V; NYS Assemb | oly Ways and Me | ans Committee s | staff. | | | |

APPENDIX D

APPENDIX E

| New York State Economic Outlook State Fiscal Year | | | | | | | | |
|--|-----------------------|-------------------|---------------------|---------------------|---------------------|--|--|--|
| | | Actual 2010-11 | Estimate 2011-12 | Forecast 2012-13 | Forecast 2013-14 | | | |
| Employment | Percent Change | 0.7 | 1.1 | 1.0 | 1.3 | | | |
| | Level | 8,342.9 | 8,437.3 | 8,522.2 | 8,632.1 | | | |
| Personal Income | Percent Change | 5.2 | 2.8 | 4.1 | 4.3 | | | |
| | Level | 938.8 | 965.3 | 1,004.8 | 1,048.2 | | | |
| Total Wages | Percent Change | 5.4 | 1.6 | 4.5 | 5.0 | | | |
| | Level | 513.0 | 521.3 | 544.8 | 571.9 | | | |
| Base Wages | Percent Change | 3.0 | 3.9 | 4.0 | 4.5 | | | |
| | Level | 446.6 | 463.8 | 482.6 | 504.4 | | | |
| Variable Compensation | Percent Change | 24.7 | (13.5) | 8.4 | 8.4 | | | |
| | Level | 66.4 | 57.4 | 62.2 | 67.5 | | | |
| CPI (1982-84=100) | Percent Change | 1.7 | 2.9 | 1.9 | 1.9 | | | |
| | Level | 242.0 | 249.2 | 253.8 | 258.7 | | | |

Sources: U.S. Bureau of Economic Analysis; NYS Department of Labor, QCEW; U.S. Bureau of Labor Statistics; NYS Assembly Ways and Means Committee staff.

APPENDIX F

| U.S. Economic Outlook (Levels) | | | | | | | |
|--------------------------------------|----------|----------|----------|----------|--|--|--|
| | Actual | Estimate | Forecast | Forecast | | | |
| | 2010 | 2011 | 2012 | 2013 | | | |
| Real GDP* | 13,088.0 | 13,312.9 | 13,599.7 | 13,947.9 | | | |
| Real Consumption* | 9,220.9 | 9,420.4 | 9,612.3 | 9,835.9 | | | |
| Real Investment* | 1,714.9 | 1,794.9 | 1,934.6 | 2,083.0 | | | |
| Real Exports* | 1,663.2 | 1,775.9 | 1,840.6 | 1,968.4 | | | |
| Real Imports* | 2,085.0 | 2,187.7 | 2,248.5 | 2,348.7 | | | |
| Real Government* | 2,556.7 | 2,502.0 | 2,459.5 | 2,408.3 | | | |
| Federal* | 1,075.9 | 1,054.7 | 1,034.7 | 997.1 | | | |
| State and Local* | 1,487.0 | 1,453.4 | 1,430.7 | 1,417.1 | | | |
| Personal Income** | 12,373.6 | 12,961.0 | 13,416.0 | 13,929.6 | | | |
| Wages & Salaries** | 6,408.3 | 6,636.3 | 6,881.3 | 7,199.5 | | | |
| Corporate Profits (Economic Basis)** | 1,800.1 | 1,938.3 | 1,996.4 | 2,024.1 | | | |
| Productivity (1992=100) | 109.8 | 110.8 | 112.0 | 114.0 | | | |
| Employment*** | 129.9 | 131.4 | 133.2 | 135.2 | | | |
| CPI-Urban (1982-84=100) | 218.1 | 224.9 | 229.9 | 234.6 | | | |
| S&P 500 Stock Price (1941-43=10) | 1,139.3 | 1,268.9 | 1,341.8 | 1,431.7 | | | |
| TreasuryBill Rate (3-month)**** | 0.1 | 0.1 | 0.1 | 0.1 | | | |
| Treasury Bond Rate (10-year)**** | 3.2 | 2.8 | 2.2 | 2.8 | | | |

* In billions of chained 2005 dollars.

** In billions of dollars.

*** In millions.

**** Annual average rate.

Sources: U.S. Bureau of Economic Analysis; U.S. Bureau of Labor Statistics; Federal Reserve; Standard and Poor's; NYS Assembly Ways and Means Committee staff.

| APPENDIX | G |
|----------|---|
|----------|---|

| U.S. Economic Outlook | | | | | | |
|------------------------------------|--------|----------|----------|----------|--|--|
| (Percent Change) | | | | | | |
| | Actual | Estimate | Forecast | Forecast | | |
| | 2010 | 2011 | 2012 | 2013 | | |
| Real GDP | 3.0 | 1.7 | 2.2 | 2.6 | | |
| Real Consumption | 2.0 | 2.2 | 2.0 | 2.3 | | |
| Real Investment | 17.9 | 4.7 | 7.8 | 7.7 | | |
| Real Exports | 11.3 | 6.8 | 3.6 | 6.9 | | |
| Real Imports | 12.5 | 4.9 | 2.8 | 4.5 | | |
| Real Government | 0.7 | (2.1) | (1.7) | (2.1) | | |
| Federal | 4.5 | (2.0) | (1.9) | (3.6) | | |
| State and Local | (1.8) | (2.3) | (1.6) | (0.9) | | |
| Personal Income | 3.7 | 4.7 | 3.5 | 3.8 | | |
| Wages & Salaries | 2.2 | 3.6 | 3.7 | 4.6 | | |
| Corporate Profits (Economic Basis) | 32.2 | 7.7 | 3.0 | 1.4 | | |
| Productivity | 4.1 | 0.8 | 1.1 | 1.7 | | |
| Employment | (0.7) | 1.2 | 1.4 | 1.5 | | |
| CPI-Urban | 1.6 | 3.1 | 2.2 | 2.1 | | |
| S&P 500 Stock Price | 20.3 | 11.4 | 5.7 | 6.7 | | |
| Treasury Bill Rate (3-month)* | 0.1 | 0.1 | 0.1 | 0.1 | | |
| Treasury Note Rate (10-year)* | 3.2 | 2.8 | 2.2 | 2.8 | | |
| * Annual average rate. | | | | | | |

Sources: U.S. Bureau of Economic Analysis; U.S. Bureau of Labor Statistics; Federal Reserve; Standard & Poor's; NYS Assembly Ways and Means Committee staff.

APPENDIX H

| U.S. Economic Outlook State Fiscal Year (Percent Change) | | | | | | |
|--|---------|----------|----------|----------|--|--|
| | Actual | Estimate | Forecast | Forecast | | |
| | 2010-11 | 2011-12 | 2012-13 | 2013-14 | | |
| Real GDP | 3.0 | 1.7 | 2.2 | 2.8 | | |
| Real Consumption | 2.5 | 1.9 | 2.3 | 2.3 | | |
| Real Investment | 17.2 | 4.9 | 7.5 | 8.3 | | |
| Real Exports | 10.8 | 5.5 | 3.8 | 8.1 | | |
| Real Imports | 13.2 | 3.1 | 3.2 | 5.0 | | |
| Real Government | 0.1 | (2.2) | (1.9) | (2.0) | | |
| Federal | 2.9 | (2.0) | (2.6) | (3.8) | | |
| State and Local | (1.7) | (2.4) | (1.4) | (0.6) | | |
| Personal Income | 4.8 | 4.0 | 3.7 | 4.1 | | |
| Wages & Salaries | 3.2 | 3.2 | 4.0 | 4.7 | | |
| Corporate Profits (Economic Basis) | 22.6 | 7.2 | 1.2 | 3.1 | | |
| Productivity | 2.9 | 0.7 | 1.3 | 1.7 | | |
| Employment | 0.2 | 1.3 | 1.4 | 1.5 | | |
| CPI-Urban (1982-84=100) | 1.6 | 3.3 | 2.1 | 2.1 | | |
| S&P 500 Stock Price (1941-43=10) | 15.6 | 7.5 | 6.6 | 7.5 | | |
| Treasury Bill Rate (3-month)* | 0.1 | 0.0 | 0.1 | 0.2 | | |
| Treasury Note Rate (10-year)* | 3.2 | 2.4 | 2.4 | 3.1 | | |

* Fiscal year average rate.

Sources: U.S. Bureau of Economic Analysis; U.S. Bureau of Labor Statistics; Federal Reserve; Standard & Poor's; NYS Assembly Ways and Means Committee staff.
APPENDIX I

| The North American Industry Classification System (NAICS) | | |
|---|--|--|
| Code | NAICS Title | |
| 11 | Agriculture, Forestry, Fishing and Hunting | |
| 111 | Crop Production | |
| 112 | Animal Production | |
| 113 | Forestry and Logging | |
| 114 | Fishing, Hunting and Trapping | |
| 115 | Support Activities for Agriculture and Forestry | |
| 21 | Mining Oil and Cas Extraction | |
| 211 | Mining (except Oil and Cas) | |
| 212 | Support Activities for Mining | |
| 213 | | |
| 22 | | |
| 221 | | |
| 23 | Construction | |
| 236 | Construction of Buildings | |
| 237 | Specialty Trade Contractors | |
| 230 | | |
| 31-33 311 | Food Manufacturing | |
| 312 | Reverage and Tohacco Product Manufacturing | |
| 313 | | |
| 314 | Textile Product Mills | |
| 315 | Apparel Manufacturing | |
| 316 | Leather and Allied Product Manufacturing | |
| 321 | Wood Product Manufacturing | |
| 322 | Paper Manufacturing | |
| 323 | Printing and Related Support Activities | |
| 324 | Petroleum and Coal Products Manufacturing | |
| 325 | Chemical Manufacturing Plastics and Pubber Products Manufacturing | |
| 327 | Nonmetallic Mineral Product Manufacturing | |
| 331 | Primary Metal Manufacturing | |
| 332 | Fabricated Metal Product Manufacturing | |
| 333 | Machinery Manufacturing | |
| 334 | Computer and Electronic Product Manufacturing | |
| 335 | Electrical Equipment, Appliance, and Component Manufacturing | |
| 336 | Transportation Equipment Manufacturing | |
| 337 | Furniture and Related Product Manufacturing | |
| 339 | Miscellaneous Manufacturing | |
| 42 | Wholesale Trade | |
| 423 | Merchant Wholesalers, Durable Goods | |
| 424 | Merchant Wholesalers, Nondurable Goods | |
| 423 | ** continued on next page ** | |

| The North American Industry Classification System (NAICS) (continued) | | |
|---|---|--|
| Code | NAICS Title | |
| 44-45 | Retail Trade | |
| 441 | Motor Vehicle and Parts Dealers | |
| 442 | Furniture and Home Furnishings Stores | |
| 443 | Electronics and Appliance Stores | |
| 444 | Building Material and Garden Equipment and Supplies Dealers | |
| 445 | Food and Beverage Stores | |
| 446 | Health and Personal Care Stores | |
| 447 | Gasoline Stations | |
| 448 | Clothing and Clothing Accessories Stores | |
| 451 | Sporting Goods, Hobby, Book, and Music Stores | |
| 452 | General Merchandise Stores | |
| 453 | Miscellaneous Store Retailers | |
| 454 | Nonstore Retailers | |
| 48-49 | Transportation and Warehousing | |
| 481 | Air Transportation | |
| 482 | Rail Transportation | |
| 483 | Water Transportation | |
| 484 | Truck Transportation | |
| 485 | Transit and Ground Passenger Transportation | |
| 486 | Pipeline Transportation | |
| 487 | Scenic and Sightseeing Transportation | |
| 488 | Support Activities for Transportation | |
| 491 | Postal Service | |
| 492 | Couriers and Messengers | |
| 493 | Warehousing and Storage | |
| 51 | Information | |
| 511 | Publishing Industries (except Internet) | |
| 512 | Motion Picture and Sound Recording Industries | |
| 515 | Broadcasting (except Internet) | |
| 516 | Internet Publishing and Broadcasting | |
| 517 | Telecommunications | |
| 518 | Internet Service Providers, Web Search Portals, and Data Processing Services | |
| 519 | Other Information Services | |
| 52 | Finance and Insurance | |
| 521 | Monetary Authorities - Central Bank | |
| 522 | Credit Intermediation and Related Activities | |
| 523 | Securities, Commodity Contracts, and Other Financial Investments and Related Activities | |
| 524 | Insurance Carriers and Related Activities | |
| 525 | Funds, Trusts, and Other Financial Vehicles | |
| 53 | Real Estate and Rental and Leasing | |
| 531 | Real Estate | |
| 532 | Rental and Leasing Services | |
| 533 | Lessors of Nonfinancial Intangible Assets (except Copyrighted Works) | |
| | ** continued on next page ** | |

| The North American Industry Classification System (NAICS) (continued) | | | |
|---|--|--|--|
| Code | NAICS Title | | |
| 54 | Professional, Scientific, and Technical Services | | |
| 541 | Professional, Scientific, and Technical Services | | |
| 55 | Management of Companies and Enterprises | | |
| 551 | Management of Companies and Enterprises | | |
| 56 | Administrative and Support and Waste Management and Remediation Services | | |
| 561 | Administrative and Support Services | | |
| 562 | Waste Management and Remediation Services | | |
| 61 | Educational Services | | |
| 611 | Educational Services | | |
| 62 | Health Care and Social Assistance | | |
| 621 | Ambulatory Health Care Services | | |
| 622 | Hospitals | | |
| 623 | Nursing and Residential Care Facilities | | |
| 624 | Social Assistance | | |
| 71 | Arts, Entertainment, and Recreation | | |
| 711 | Performing Arts, Spectator Sports, and Related Industries | | |
| 712 | Museums, Historical Sites, and Similar Institutions | | |
| 713 | Amusement, Gambling, and Recreation Industries | | |
| 72 | Accommodation and Food Services | | |
| 721 | Accommodation | | |
| 722 | Food Services and Drinking Places | | |
| 81 | Other Services - except Public Administration | | |
| 811 | Repair and Maintenance | | |
| 812 | Personal and Laundry Services | | |
| 813 | Religious, Grantmaking, Civic, Professional, and Similar Organizations | | |
| 814 | Private Households | | |
| 92 | Public Administration | | |
| 921 | Executive, Legislative, and Other General Government Support | | |
| 922 | Justice, Public Order, and Safety Activities | | |
| 923 | Administration of Human Resource Programs | | |
| 924 | Administration of Environmental Quality Programs | | |
| 925 | Administration of Housing Programs, Urban Planning, and Community Development | | |
| 926 | Administration of Economic Programs | | |
| 927 | Space Research and Technology | | |
| 928 | National Security and International Affairs | | |
| Source: Executi | Source: Executive Office of the President, Office of Management and Budget, North American Industry Classification System, | | |

United States, 2002.