February 23, 2004

Dear Colleagues:

I am pleased to provide you with the NYS Assembly Ways and Means Committee's *Economic Report* for 2004 and 2005. 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.

Slow employment growth and abnormally weak labor markets have been the hallmark of the national recovery from the 2001 recession. New York has been particularly hard hit—fairing worse in both employment loss and declining wages than the nation as a whole. The September 11th terrorist attacks and difficulties in the securities industry, which is a vital sector of our State's economy, have intensified the recession's impact on New York State.

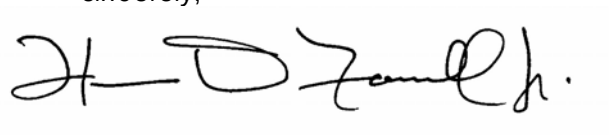
Moderate growth is expected in both the national and State economies in 2004. At the same time, the two areas that are anticipated to continue to show weakness are wages and employment. Both the State and nation are estimated to have ended 2003 with a year-over-year decline in employment, as the "jobless recovery" persists. In New York State in particular, wages, which experienced their worst year-over-year decline since 1938, remain sluggish compared to historical growth rates. Much of New York's eventual recovery will be driven by a rebound on Wall Street, increased variable compensation levels, and the continued economic recovery of New York City's financial sector.

The Ways and Means Committee staff's assessments and projections presented in this report are reviewed by an independent panel of economists, including professionals from major financial and manufacturing corporations and prestigious universities, as well as respected private forecasters. Assembly Speaker Sheldon Silver and I would like to express our appreciation to the members of this Board of Economic Advisors. Their dedication and expert judgment have been invaluable in helping to refine and improve the forecasts. While they have served to 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. In addition to this report, the Speaker and I have asked the Ways and Means staff to continue their efforts and develop additional materials which we believe will be beneficial to you and to your constituents.

As we continue our efforts toward enacting a 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 2004

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

Dean A. Fuleihan
Secretary to the Committee

Roman B. Hedges
Deputy Secretary

Kristin M. Proud
Deputy Secretary

Edward M. Cupoli

Steven A. Pleydle

Chief Economist/Director of Research

Director of Tax & Fiscal Studies

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EXECUTIVE SUMMARY

Lackluster employment growth and weak labor markets have characterized the United States recovery since the 2001 recession. Employment losses have been experienced across most sectors, with the manufacturing and information sectors being hit particularly hard. New York State has been especially affected, faring worse in both employment and wages than the nation as a whole. The September 11th terrorist attacks and difficulties in the vital securities industry intensified the recession's impact on the State economy.

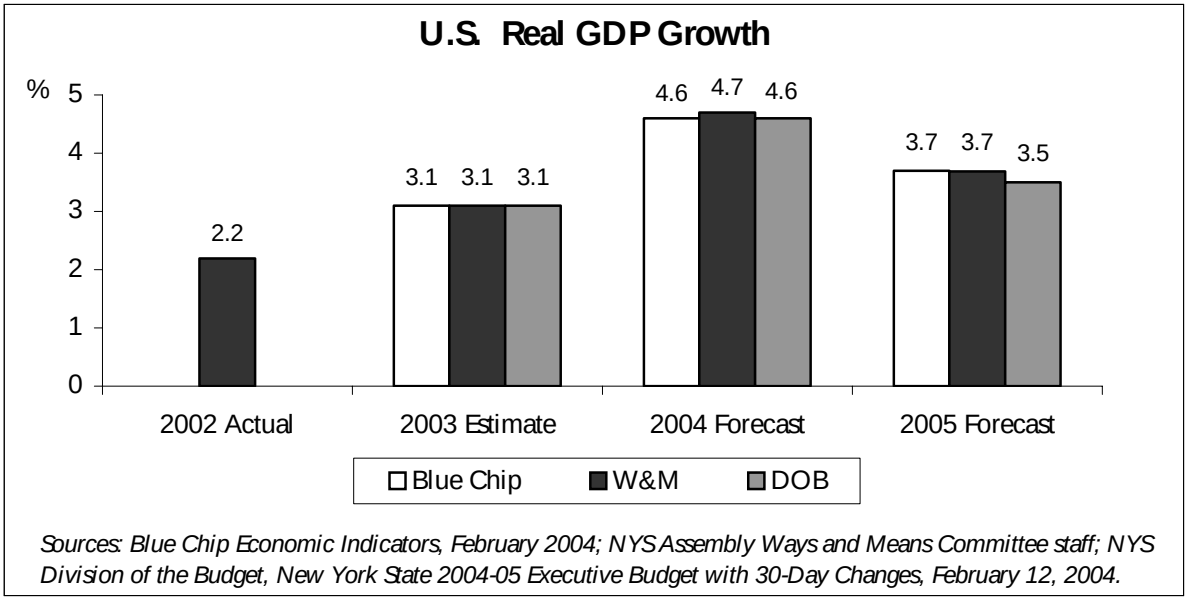
Both the national and state economies are expected to experience faster growth in 2004. Growth so far has been driven in large part by robust consumption spending as well as a large swing in investment spending compared to 2001. Positive developments in recent months include continued consumer spending incentives, low interest rates, rising stock prices, and strong growth in corporate cash flows. Dramatic increases in federal defense and public security spending along with tax cuts have also helped to add momentum to the economy.

Improvements in the labor market are expected to occur gradually as lethargic job creation is anticipated while the "jobless recovery" drags on. Both the country and State are estimated to have ended 2003 with a year-over-year decline in employment. Much of New York's eventual recovery will be driven by a rebound in the securities industry, increased variable compensation levels, and the continued economic recovery of New York City's financial sector.

United States Economy

GDP Growth

- In terms of output, most economic indicators are pointing to continued recovery from the 2001 recession.
- After growing 3.1 percent in 2003, the NYS Assembly Ways and Means Committee staff forecasts that the national economy, as measured by Real Gross Domestic Product (GDP), will grow 4.7 percent in 2004.

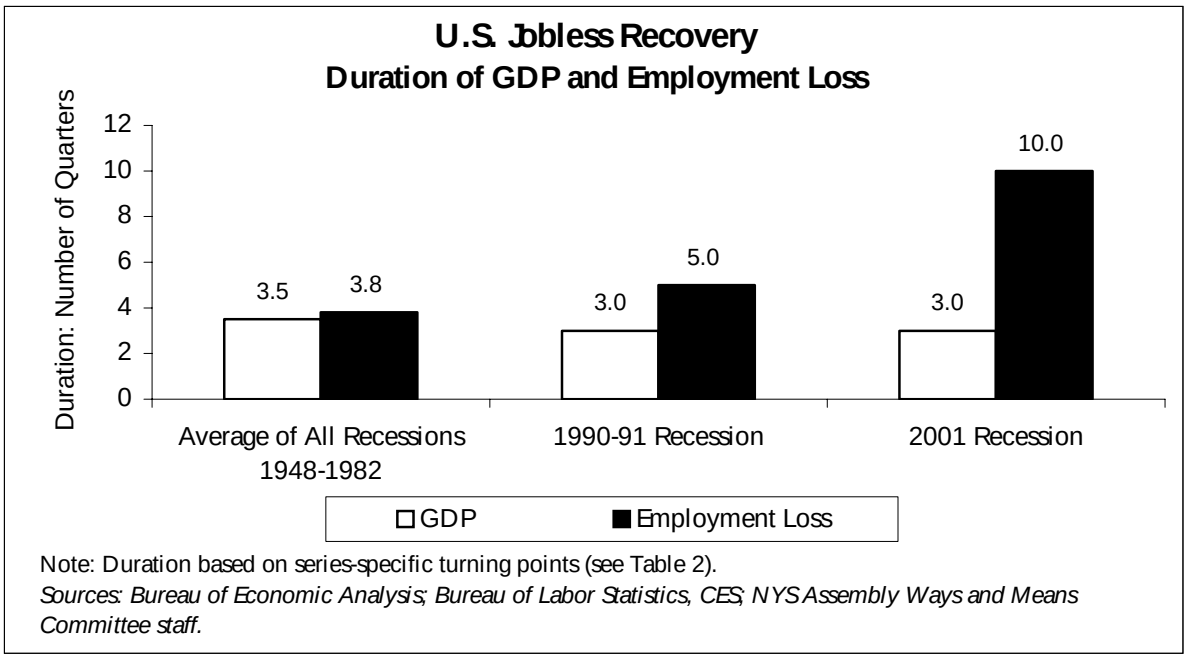


Sources: Blue Chip Economic Indicators, February 2004; NYS Assembly Ways and Means Committee staff; NYS Division of the Budget, New York State 2004-05 Executive Budget with 30-Day Changes, February 12, 2004.

2001 Recession Compared to Prior Recessions

- When employment's own peak and trough dates are used instead of the National Bureau of Economic Research's (NBER) business cycle dates, private sector employment loss this time around is not only the largest (3.3 million jobs) but has persisted the longest (ten quarters) since World War II.

- Though the duration of decline in real GDP was shorter than the post-World War II average, the duration of employment decline was longer. This indicates an increasing disconnect between output growth and employment growth—a "jobless recovery."



Note: Duration based on series-specific turning points (see Table 2).

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

Sectoral Employment Change

- The largest sectoral loss of employment in the recent recession is in manufacturing. Between the first quarter of 2001 (when the recession started) and the third quarter of 2003 (the last quarter of total employment decline), 15.0 percent of the nation's manufacturing jobs were lost, while 4.4 percent of U.S. manufacturing jobs were lost between the second quarter of 1990 and the third quarter of 1991 (the period of employment decline in the 1990-91 recession). In the recent employment downturn, 2.6 million manufacturing jobs were lost, whereas in the downturn of 1990-91, 0.8 million manufacturing jobs were lost.

- U.S. manufacturing has become increasingly specialized in industries with high technology content. Between 1980 and 1998, the output of U.S. manufacturing as a whole increased 70.0 percent, while the output of high-tech manufacturing industries grew 182.9 percent.

- Government employment grew 3.2 percent during the recent employment decline, compared to only 0.3 percent growth in the 1990-91 employment downturn. Construction employment, on the other hand, declined much more severely in 1990-91 than in the recent employment downturn.

U.S. Job Loss (Based on turning points in Total Employment)							
Peak to Trough	Duration (Quarters)		Depth				
			Total	Manufacturing	Services	Construction	Government
Average of All Recessions	3.8	***Percent Change***	(2.6)	(8.0)	(0.7)	(4.9)	1.8
1948-1982		*Level Change*	(1,640.6)	(1,404.1)	(173.7)	(183.3)	171.8
1990:Q2-1991:Q3	5.0	***Percent Change***	(1.4)	(4.4)	(0.2)	(11.1)	0.3
		Level Change	(1,501.0)	(814.2)	(149.0)	(588.7)	58.7
2001:Q1-2003:Q3	10.0	***Percent Change***	(2.0)	(15.0)	(0.7)	(1.5)	3.2
		Level Change	(2,642.7)	(2,635.3)	(568.7)	(100.7)	669.3
Note: Depth is defined as the trough level minus the peak level. Level change is non-farm employment in thousands.							
Source: Bureau of Labor Statistics, CES.							

The Stock Market

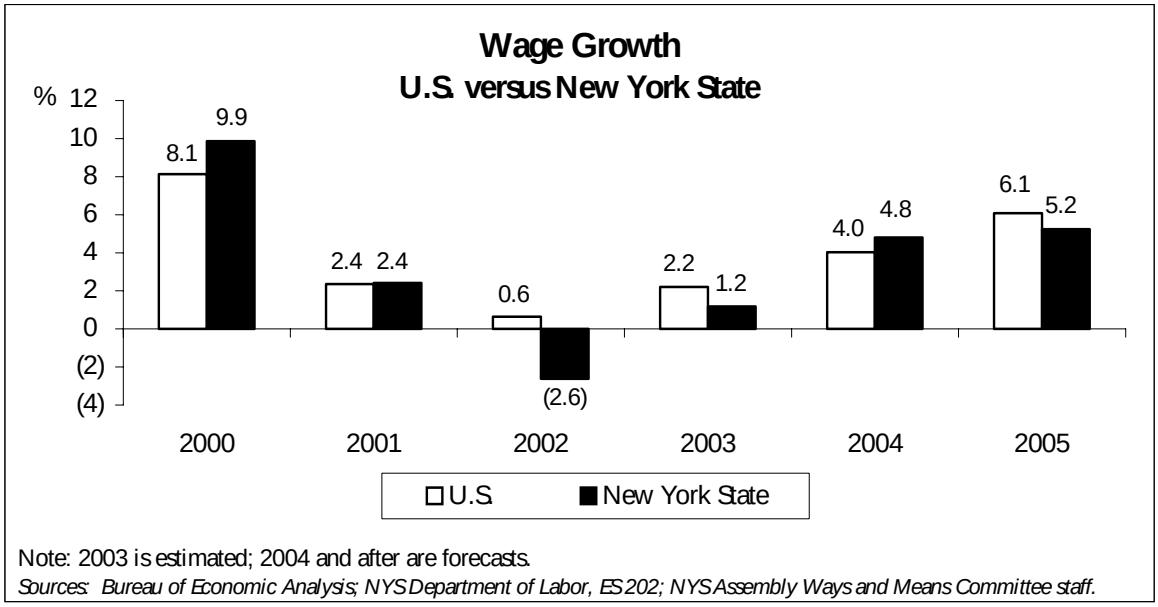
- After rising rapidly throughout most of the 1990s and into 2000, stock prices, as measured by the Standard and Poor (S&P) 500 Index, declined sharply from late 2000 until early 2003. The decline took away about half of the stock price gains experienced since 1990 and contributed significantly to the 2001 recession and the slow recovery. Since the first quarter of 2003, stock prices have once again been rising, and they are expected to continue to rise throughout the forecast period.

New York State Economy

Employment and Wage History

- The NYS Assembly Ways and Means Committee staff estimates that the New York State economy continued to lose jobs (over the same period of the previous year) until the fourth quarter of 2003, resulting in a year-over-year nonfarm employment decline of 44,800 jobs or 0.5 percent in 2003.

- In general, New York State was hit harder by the 2001 recession than the nation. This is particularly true for wages, which experienced a 2.6 percent decline in 2002, the worst year-over-year decline since 1938.



Note: 2003 is estimated; 2004 and after are forecasts.

Sources: Bureau of Economic Analysis; NYS Department of Labor, ES202; NYS Assembly Ways and Means Committee staff.

- New York State wages declined by an average of 0.9 percent per year during the recent recession (fourth quarter of 2000 to the second quarter of 2003). From 1980 to 2003 wage growth averaged 5.4 percent.

- Between 1995 and 2002, wages in New York City increased by $65.2 billion. This accounts for 60.5 percent of the wage gain in the State as a whole. The wage gains in New York City were led by the increase in the Finance, Insurance, and Real Estate (FIRE)[1] sector of $22.5 billion. The other downstate regions gained $24.5 billion in wages. Downstate as a whole represented 83.3 percent of the State's total wage growth over this period.

- If New York State employment had grown at the same rate as the nation between January 1995 and December 2003, the State would have created 432,900 additional jobs.[2]

[1] Definitions of sectors have changed under the new North American Industry Classification System (NAICS). The Committee staff has grouped some NAICS sectors together, including combining finance, insurance, real estate, rental, and leasing into the FIRE sector. See Appendix A on page 77 for more details.

[2] Calculation is based on Current Employment Statistics Survey (BLS 790) data.

Employment Growth of Nearby and Large States 2003 compared to 2002		
State	**Growth (percent)**	**Rank in Nation**
Florida	1.3	4
New Jersey	0.4	12
Texas	0.2	19
California	(0.2)	29
Pennsylvania	(0.3)	34
United States	**(0.3)**	
New York	**(0.5)**	**38**
Ohio	(1.0)	46
Connecticut	(1.1)	48
Massachusetts	(1.3)	51

Note: Data may be revised (possibly significantly) each month. Data source and therefore growth rates also differ from the ES 202 data used elsewhere in this report for New York State employment. Rankings are among all states plus Washington DC.

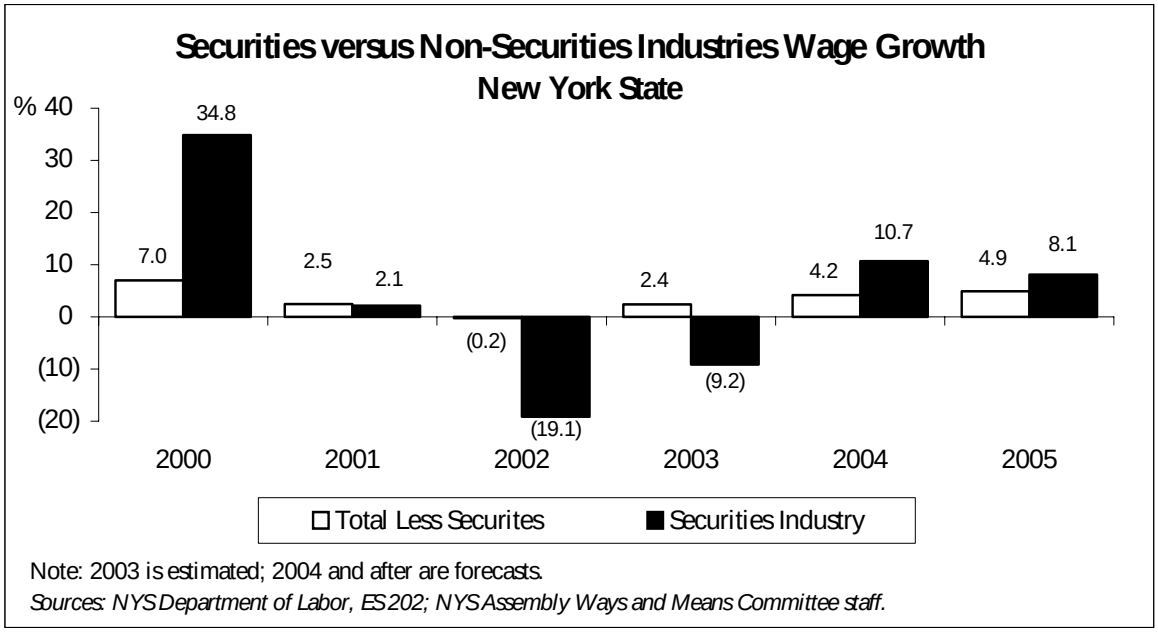
Source: Bureau of Labor Statistics, CES.

The Securities Industry and FIRE sector

- The FIRE sector accounted for 22.6 percent of the employment loss in New York City between the fourth quarter of 2000 and the second quarter of 2003. The State's FIRE sector accounted for 16.7 percent of the employment loss in the State.

- FIRE accounted for 90.2 percent of the wage loss in New York City between the fourth quarter of 2000 and the second quarter of 2003. The State's FIRE sector accounted for 147.6 percent of the total wage loss in the State, implying that outside of this sector wages in the State increased.

- Almost the entire 2.6 percent decline in State wages experienced in 2002 can be attributed to the securities industry. Excluding this industry, wages dropped only 0.2 percent.

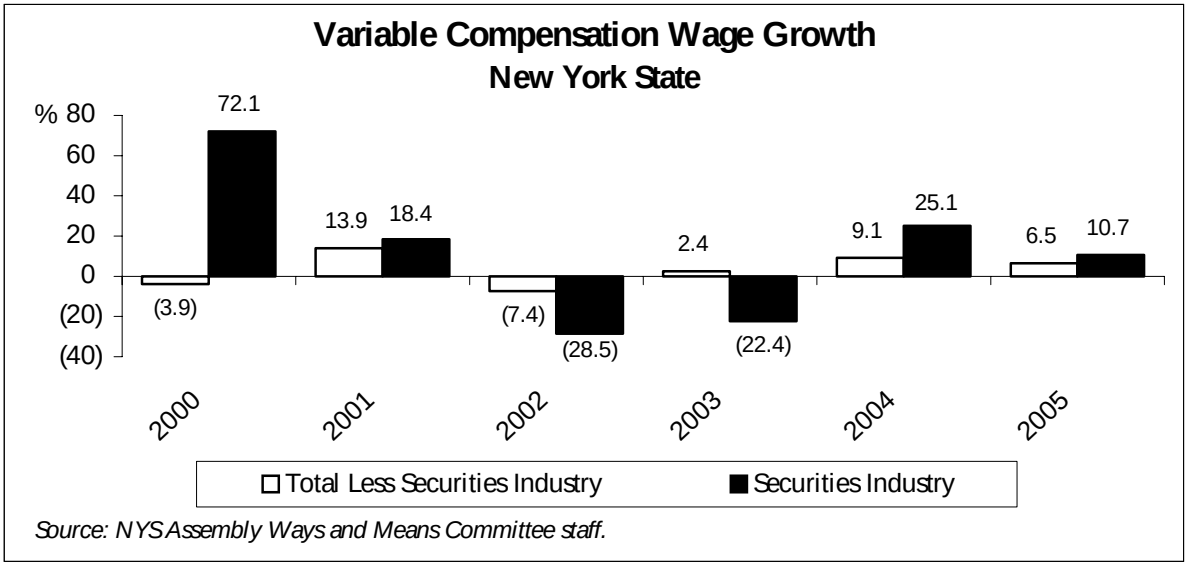


- Due in large part to the volatility of its variable compensation, securities industry wages are vital to understanding total wages in New York State. The securities industry makes up about ten percent of wages in New York. This is large for a single industry, but the industry's importance to understanding wages is even greater. In the last ten years, 19 percent of total wage growth and 43 percent of total wage variance can be attributed to the securities industry.

Variable Compensation

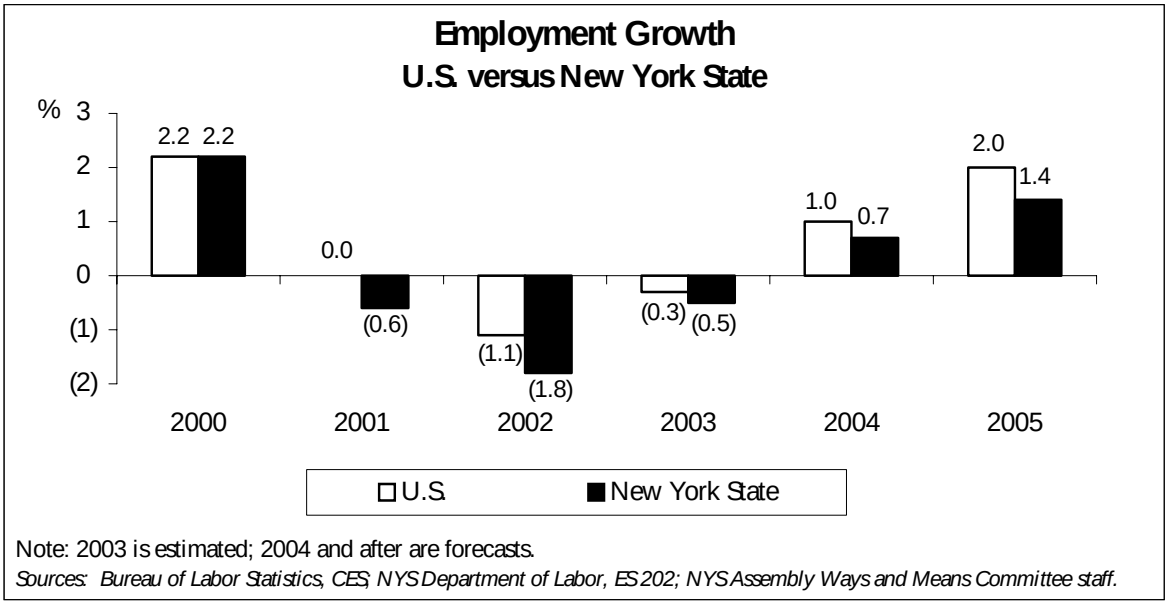
- The NYS Assembly Ways and Means Committee staff estimates that New York's total variable compensation, which was $40.7 billion or 10.4 percent of total State wages in 2001, declined $7.0 billion or 18.0 percent year-over-year during 2002. It is estimated to have declined 8.4 percent during 2003 due mainly to weak securities industry bonuses early in the year. Variable compensation is forecast to increase by 15.0 percent during 2004 as securities industry profits have improved and corporate profits are expected to continue improving.

- According to the NYS Assembly Ways and Means Committee staff, securities industry variable compensation dropped $5.8 billion or 28.5 percent in 2002. It is estimated to have declined another 22.4 percent in 2003. This decline occurred despite rising securities industry profits for the year because variable compensation changes typically lag changes in profits. It is forecast to grow 25.1 percent year-over-year in 2004 and 10.7 percent in 2005.



Employment and Wage Forecast

- New York State employment is forecast by the NYS Assembly Ways and Means Committee staff to rebound during 2004, growing 0.7 percent year-over-year and 1.4 percent in 2005.



- The NYS Assembly Ways and Means Committee staff estimates that New York State nonfarm wages grew 1.2 percent year-over-year in 2003 and forecasts growth of 4.8 percent in 2004. Although this is a significant improvement from 2002, it is still sluggish compared to historic growth rates of 6 to 9 percent during the expansions of the 1980s and 1990s.

- The Committee staff's 0.7 percent State employment growth forecast for 2004 is 0.4 percentage point lower than Global Insight's 1.1 percent, 0.1 percentage point lower than the Division of the Budget's 0.8 percent, and the same as Economy.com's 0.7 percent.[3]

- The Committee staff's 4.8 percent wage growth forecast for 2004 is 0.1 percentage point lower than the Division of the Budget's 4.9 percent forecast, 0.5 percentage point higher than Global Insight's 4.3 percent, and 1.7 percentage points higher than Economy.com's 3.1 percent.

Forecast Comparisons
(Percent Change)

	Actual 2002	Estimate 2003	Forecast 2004	Forecast 2005
NYS Employment (Nonfarm)				
Ways and Means	(1.8)	(0.5)	0.7	1.4
Division of the Budget	(1.8)	(0.5)	0.8	1.2
Economy.com	(1.8)	(0.5)	0.7	1.4
Global Insight	(1.8)	(0.6)	1.1	1.3
NYS Wages				
Ways and Means	(2.6)	1.2	4.8	5.2
Division of the Budget	(3.3)	1.6	4.9	4.9
Economy.com	(3.3)	1.1	3.1	4.6
Global Insight	(3.0)	1.2	4.3	4.9

Sources: NYS Assembly Ways and Means Committee staff; NYS Division of the Budget, New York State 2004-05 Executive Budget with 30-Day Changes, February 12, 2004; Economy.com, Forecast Tables, February 2004, < http://www.economy.com> ; Global Insight, Short-term Outlook for New York, January 15, 2004, < http://www.global insight.com> .

[3] Global Insight and Economy.com use the employment data from the Current Employment Statistics Survey (BLS 790) compiled by the Bureau of Labor Statistics and the wages and salaries data compiled by the U.S. Bureau of Economic Analysis (BEA). The NYS Division of the Budget and the NYS Assembly Ways and Means Committee staff use the Covered Employment and Wages data (ES 202) from the NYS Department of Labor. The NYS Assembly Ways and Means Committee staff prefer to work with ES 202 data because revisions to these data are much smaller than in the other data. Both the BEA and BLS 790 data are "benchmarked" and adjusted towards the Covered Employment and Wages data, because the coverage of the Covered Employment and Wages program is almost universal: 98 percent of all establishments are included in the counts of the Covered Employment and Wages program. The comprehensiveness of the ES 202 coverage makes the data more accurate. However, the Current Employment Statistics Survey and the Bureau of Economic Analysis data are available more quickly compared to the Covered Employment and Wage data.

INTRODUCTION

Most economic indicators are pointing to a continued recovery in 2004 from the 2001 recession. The nation is expected to benefit from robust consumption and investment spending, improvements in equity markets, and strong corporate cash flows. New York, after being hit particularly hard in 2001, will benefit like the rest of the country from general improvements across the economy. A key component of New York State's recovery will be continued improvement in the State's vital securities industry.

United States Economy

A strong national economic recovery is expected to continue in 2004 after picking up steam in the second half of 2003. The national recovery is being driven in large part by robust consumption spending as well as a large swing in investment spending. The recovery will also be experienced worldwide. Net export growth, though still not positive, will be less of a drag on economic growth than it was during the 2001-03 period. Continued growth in federal defense and public security spending will also help boost the economy during its recovery, though growth in state and local governments will continue to be weak.

The recovery will be broad, cutting across economic sectors, with services leading the way. Manufacturing will still continue its long-term employment decline, but as general economic conditions improve in 2004, jobs in the manufacturing sector will contract less rapidly and be less of a drain on the general economy. Business uncertainty on several fronts such as international uncertainty, terrorism threats, and financial markets uncertainty have been a drag on the economic recovery. This uncertainty is expected to gradually lift as recovery continues, helping boost economic growth.

The United States economy appears to have overcome most of the adverse effects of a series of recent events that slowed the recovery process including corporate accounting/investment banking scandals, SARS, and international crises. In fact, the National Bureau of Economic Research (NBER) Business Cycle Dating Committee announced on July 17, 2003, that the recession that had begun in March 2001 had ended in November 2001.

Several positive developments have been noticed in recent months:

- **Equity markets rebounding**. S&P 500 index gained 21.5 percent from 2003Q1 to 2003Q4. The equity markets are expected to continue to advance in a way that is consistent with improving economic fundamentals in 2004. In addition, mergers and acquisitions (M&A) activity has started to return after having declined for three years in a row

since 2000. Initial Public Offering (IPO) activity grew 7.3 percent in 2003 and is expected to increase further in 2004.

- **Corporate cash flows improving**. Corporate profits (on both economic and accounting bases) have increased an estimated 13 to 18 percent year-over-year during 2003. Profits are expected to gain further during the current year as the economy accelerates while employment growth remains slower than the typical post-recession pace.

- **Low interest rates with the Fed remaining on hold.** Rates are expected to remain low at least until the early summer of 2004. The Federal Reserve may well remain on hold until after the presidential election unless inflation starts creeping up faster than expected. Low rates will help sustain consumer spending as well as business capital spending.

- **The dollar weakening.** The dollar fell about 10.2 percent against major currencies from 2002Q1 to 2003Q4 and is expected to slide further during the forecast period. This will help boost global demand for U.S. exports.

- **Global economy improving.** World GDP grew 3.3 percent during 2003 and is expected to pick up the pace to 4.1 percent in 2004. This also will help boost global demand for U.S. exports.

- **The U.S. leading economic indicator index on a rise in recent months** (see Figure 1 on page 4). This is indicative of more positive economic news ahead. The interest rate spread, equity prices, building permits, nonmilitary capital goods orders and vendor performance are all increasing. Indicators that are part of the coincident index are also showing positive signs.

- **Business capital goods (nonmilitary) orders rising.** As of December 2003, capital goods orders, a leading indicator for business equipment spending, have risen 9.1 percent since the end of 2002. As companies start to increase output, they will continue to order more capital equipment.

- **Disposable personal income rising.** Though employment growth will be slower than during the typical recovery, personal income will rise due to an increase in employment as well as average wages. Tax cuts will also help increase disposable personal income.

- **Bonus depreciation available until the end of 2004.** As corporations are allowed to write off 50 percent of total depreciation for new equipment during the first year of installation, this will help encourage business capital spending during 2004.

- **Productivity surge.** Labor productivity increased 4.9 percent year-over-year during 2002 and an estimated 4.2 percent during 2003. This increase is due to a strong output recovery combined with still weak employment

growth (the so-called "jobless recovery"). The productivity growth seems to be high-tech driven, and is expected to contribute to strong corporate profits growth. As businesses continue to produce more output without increasing labor, productivity growth will remain strong.

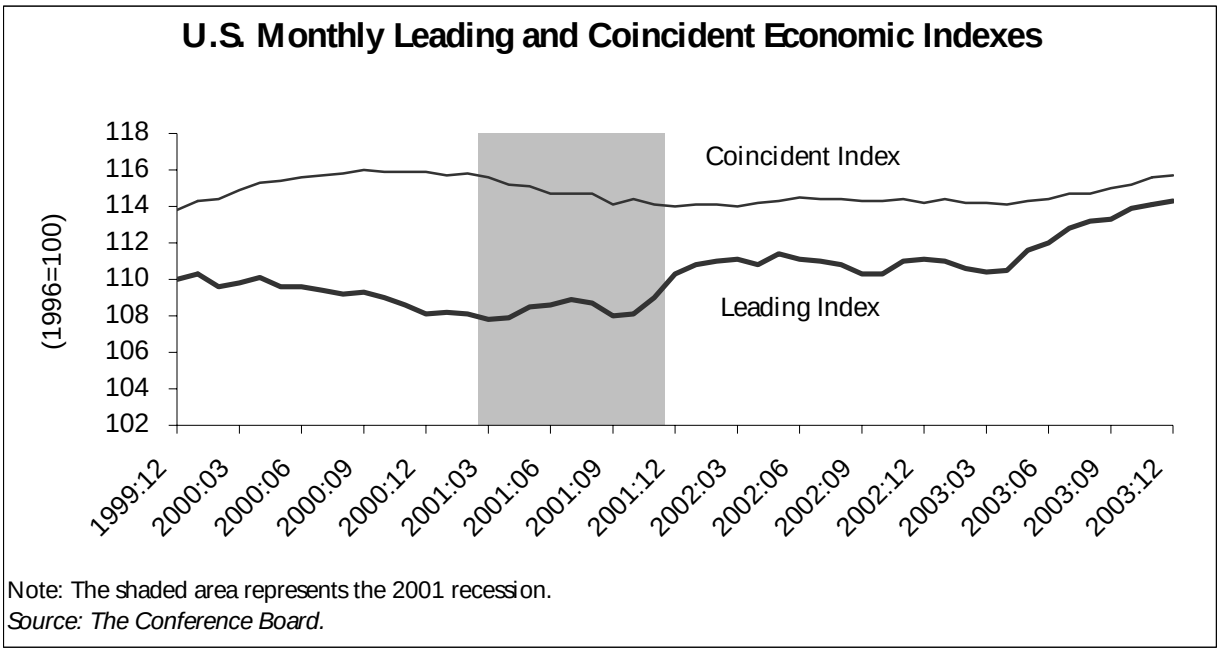


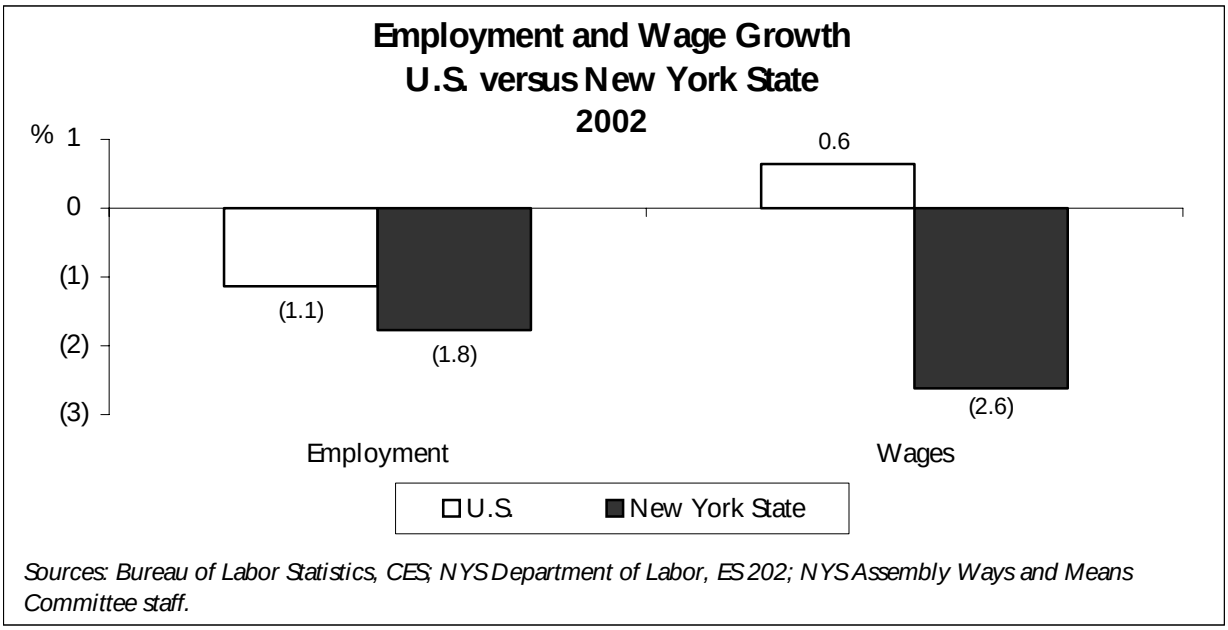
Figure 1

Despite these positive signs, the economic environment remains uncertain, with many risks to the current forecast. Frequent alerts of possible future terrorist attacks have contributed an air of uncertainty into the economy. This uncertainty could have an impact on spending and investment, as well as hinder confidence in the future performance of the economy. The future course of oil prices is an additional risk factor. The jobless nature of this recovery so far makes consumption spending an area of concern; it is uncertain how long consumption can remain strong as interest rates rise and job growth remains weak.

New York State Economy

In general, New York State was hit harder than the nation by the 2001 recession and the September 11th terrorist attacks (see Figure 2). This is particularly true for wages, which experienced a year-over-year decline of 2.6 percent in 2002, their worst decline since 1938.[4]

[4] Though the wage growth is computed with ES 202 data, the historical comparison is based on Bureau of Economic Analysis data because of the shorter history of the ES 202 data series.



Sources: Bureau of Labor Statistics, CES; NYS Department of Labor, ES 202; NYS Assembly Ways and Means Committee staff.

Figure 2

New York State performed poorly relative to the nation during the recession that started in 2001 for a number of reasons. Much of the downturn is a direct result of the September 11th terrorist attacks. New York was also severely hurt by industry-specific difficulties that befell the State's vital securities industry. The September 11th terrorist attacks struck the center of securities industry activity. In addition, there was the bursting of the dot-com bubble, the resultant financial market decline (particularly the NASDAQ), and corporate accounting and investment banking scandals. These difficulties were responsible in large part for the sharp 2.6 percent drop in State wages during 2002. More specifically, 28.5 percent decrease in variable compensation caused in part by disruptions in the securities industry was largely responsible for the drop in wages.

Looking forward, New York will benefit like the rest of the nation from general improvement across sectors in the economy. With rebounding equity markets as well as increasingly more positive signs of recovery in securities industry's profitability, New York is expected to come out a bit stronger than the nation in wages in 2004. Due to more weakness or slower recovery in several sectors including manufacturing and information services, however, New York is still forecast to lag the nation in employment.

The Recession of 2001

Every recession is unique in its duration and depth. Several facts are noteworthy in Table 1. First, the recent recession lasted only eight months, shorter than the typical recession and tying for the second shortest since World War II.[5] Second, real GDP, investment, and employment all tend to decrease during a recession, while consumption, on average, does not particularly decrease or increase. During the recent recession, however, real GDP experienced a slight increase rather than a decrease.[6] Consumption spending also experienced an increase. This is not unique, but it was a larger increase than the average increase of all previous recessions. Third, although the decline in business investment spending is believed to have triggered the recent recession, its size of decline relative to the peak level does not appear particularly large compared to the previous typical recession. Finally, according to the NBER's business cycle dates, employment loss during the recent 2001 recession may not appear particularly worse compared to previous recessions.

[5] The NBER committee that determines recession dates is considering whether to make the date of the beginning of the most recent recession as early as November 2000, much earlier than its current official March 2001 start date; see Jon E. Hilsenrath, "The Recession Started When? The Date Matters," *Wall Street Journal,* January 22, 2004, p. A2.

[6] The peaks and troughs of individual time series do not necessarily match the NBER's business cycle dates. That is because the NBER does not rely on any particular single time series to date a recession, but rather relies on four monthly indicators. These indicators include employment, personal income less transfer payments, sales in the manufacturing and trade sectors, and industrial production. Having said that, if the depths for real GDP are recalculated using its own peaks and troughs, real GDP also decreased during the recent downturn. But the recent depth is shallower than the previous typical depth, making the 2001 recession one of the more mild recessions in U.S. history. See Table 2 on page 8 of this report.

Table 1

U.S. Recessions Since World War II
(Based on NBER Business Cycle Dates)

Peak to Trough	Duration (Quarters)	Depth			
		GDP	Consumption	Investment	Employment
Average over All Previous Recessions	3.6	(1.9%)	0.8%	(16.8%)	(2.7%)
		($69.1)	$14.4	($76.5)	(1,632.0)
1990:Q3-1991:Q1	2	(1.3%)	(1.1%)	(10.1%)	(1.1%)
		($90.0)	($54.5)	($91.1)	(1,231.0)
2001:Q1-2001:Q4	3	0.0%	2.6%	(10.9%)	(1.2%)
		$1.4	$174.5	($183.8)	(1,636.0)

Note: Depth is defined as the change from the peak level to the trough level. GDP, consumption, and investment are in billions of chained 2000 dollars. Employment is non-farm total and in thousands. The peak and trough dates are the dates picked by the NBER Business Cycle Dating Committee. Duration is based on official starting and ending quarters. However, both of the last two recessions were eight months long.

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

However, employment declined both before and after NBER's official recession period. When employment's own peak and trough dates are used instead of the NBER's business cycle dates, employment loss this time around is not only the second largest (about 2.6 million jobs) but has persisted the longest (ten quarters) since World War II (see Table 2).[7] When compared to the duration of output loss, employment loss has lasted seven more quarters, making the recent recovery a "jobless recovery."[8] In most of the previous recessions, the duration of employment loss was just one to two quarters longer than that of output loss. Even around the 1990-91 recession, the decline in employment lasted just two more quarters than the decline in output.

The unusually long spell of employment decline evidenced during the recent period may be due to a change in corporate hiring practices, which may have resulted from increasing competition due to globalization and a high-tech-driven productivity surge. It is estimated that about one-fifth to one-third of the recent employment loss in the United States since its peak in March 2001 is due to the movement of jobs offshore.[9] While manufacturing accounts for most

[7] If the government sector is excluded, the current employment loss amounts to more than 3.3 million, which is the largest in absolute levels since World War II (using percent changes there are several larger employment declines). Unlike the 1981-82 period when both private and government sectors lost jobs, this time the government sector, in particular the state and local government sector, has gained 669,300 jobs since the first quarter of 2001.

[8] Stacey L. Schreft and Aarti Singh, "A Closer Look at Jobless Recoveries," *Economic Review*, Federal Reserve Bank of Kansas City, second quarter 2003, 45-73.

[9] Louis Uchitelle, "A Missing Statistic: U.S. Jobs That Went Overseas," *New York Times*, October 5, 2003, sec. 1, p. 2.

of the offshore jobs, some service sector jobs such as financial services, call centers, and computer software designing have also gone overseas.[10] Rising health care and benefit costs have also made corporations refrain from increasing their workforce. Also, private sector industries still seek to produce more output with less labor, partly due to great uncertainty in the current economic situation. This practice may continue until companies see evidence of a prolonged increase in economic activity.[11]

Table 2

U.S. Recessions Since World War II
(Based on Series-Specific Turning Points)

GDP			Employment		
Peak to Trough	**Duration (Quarters)**	**Depth**	**Peak to Trough**	**Duration (Quarters)**	**Depth**
1948:Q4-1949:Q4	4	(1.7%) ($28.1)	1948:Q3-1949:Q4	5	(4.4%) (1,973.0)
1953:Q2-1954:Q1	3	(2.7%) ($55.7)	1953:Q2-1954:Q3	5	(3.2%) (1,635.0)
1957:Q3-1958:Q1	2	(3.7%) ($86.8)	1957:Q2-1958:Q2	4	(4.1%) (2,200.7)
1960:Q1-1960:Q4	3	(1.6%) ($41.2)	1960:Q2-1961:Q1	3	(1.7%) (910.0)
1969:Q3-1970:Q4	5	(0.6%) ($24.4)	1970:Q1-1970:Q4	3	(1.0%) (737.7)
1973:Q4-1975:Q1	5	(3.1%) ($135.7)	1974:Q3-1975:Q2	3	(2.7%) (2,087.3)
1980:Q1-1980:Q3	2	(2.2%) ($113.9)	1980:Q1-1980:Q3	2	(0.9%) (847.0)
1981:Q3-1982:Q3	4	(2.7%) ($144.6)	1981:Q3-1982:Q4	5	(3.0%) (2,734.3)
Average over All Previous Recessions	3.5	(2.3%) ($78.8)	Average over All Previous Recessions	3.8	(2.6%) (1,640.6)
1990:Q2-1991:Q1	3	(1.3%) ($90.0)	1990:Q2-1991:Q3	5	(1.4%) (1,501.0)
2000:Q4-2001:Q3	3	(0.5%) ($53.1)	2001:Q1-2003:Q3	10	(2.0%) (2,642.7)

Note: Depth is defined as the level change from the peak level to the trough level. GDP, consumption, and investment are in billions of chained 2000 dollars. Employment is non-farm total in thousands. The percentages are the depth divided by the peak level.

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

[10] Mark Zandi, "Jobless Recovery," *Regional Financial Review*, July 2003, 13-8.

[11] Cathy E. Minehan, Federal Reserve Bank of Boston, (speech presented to Greater Dallas Chamber Women's Business Conference, September 25, 2003), <http://www.bos.frb.org/news/html/speeches/ 2003/092503.htm>.

The impact on the New York State economy in this most recent recession has also been different than that experienced by New York during the 1990-91 recession. The decline in employment was less severe following the 2001 recession, whereas the decline in wages was much more severe. As previously discussed, largely declining variable compensation in the securities industry caused this more severe wage decline. Manufacturing, services, and construction lost a higher percent of employment between 1989 and 1992 than between 2000 and 2003 (see Figure 3).

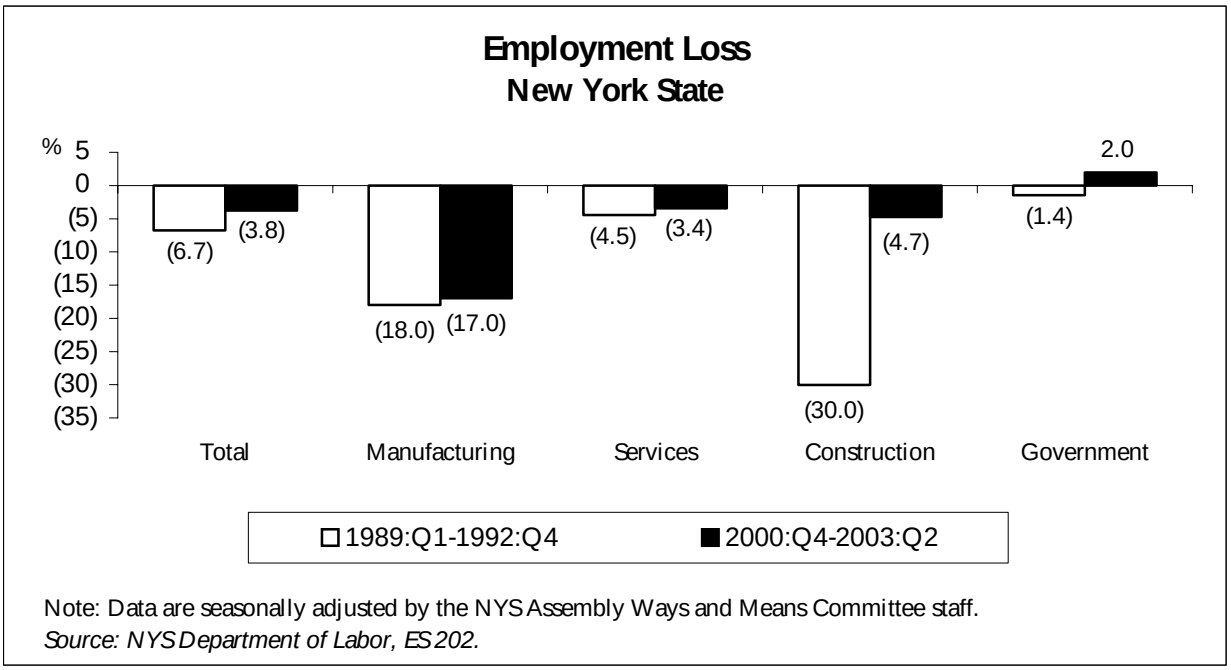
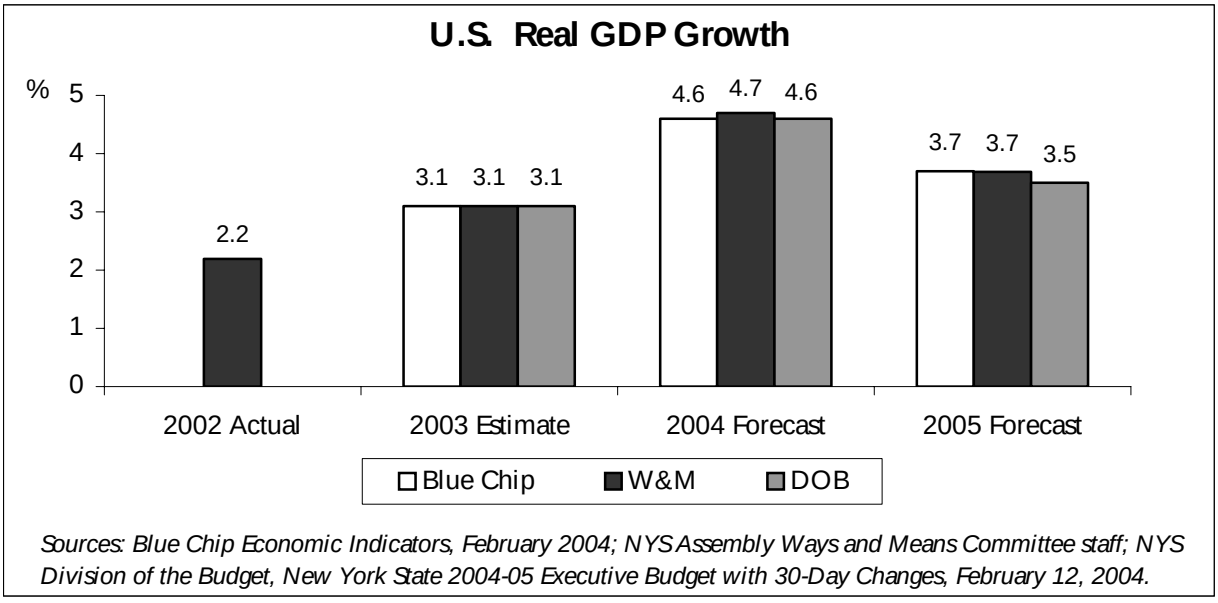


Figure 3

A national recovery from the 2001 recession gained momentum in the second half of 2003 and is expected to continue into 2004. Business uncertainty, which thus far has hindered a strong recovery, is expected to gradually lift. Investment spending is expected to be strong as interest rates remain low and corporate profits continue to improve. Employment growth, which generally lags changes in economic growth, is expected to improve more slowly.

Real Gross Domestic Product

The NYS Assembly Ways and Means Committee staff estimates that the national economy, as measured by Real Gross Domestic Product (GDP), grew 3.1 percent during 2003 (see Figure 4). The 2003 growth rate was 0.9 percentage point up from the 2.2 percent growth in 2002.

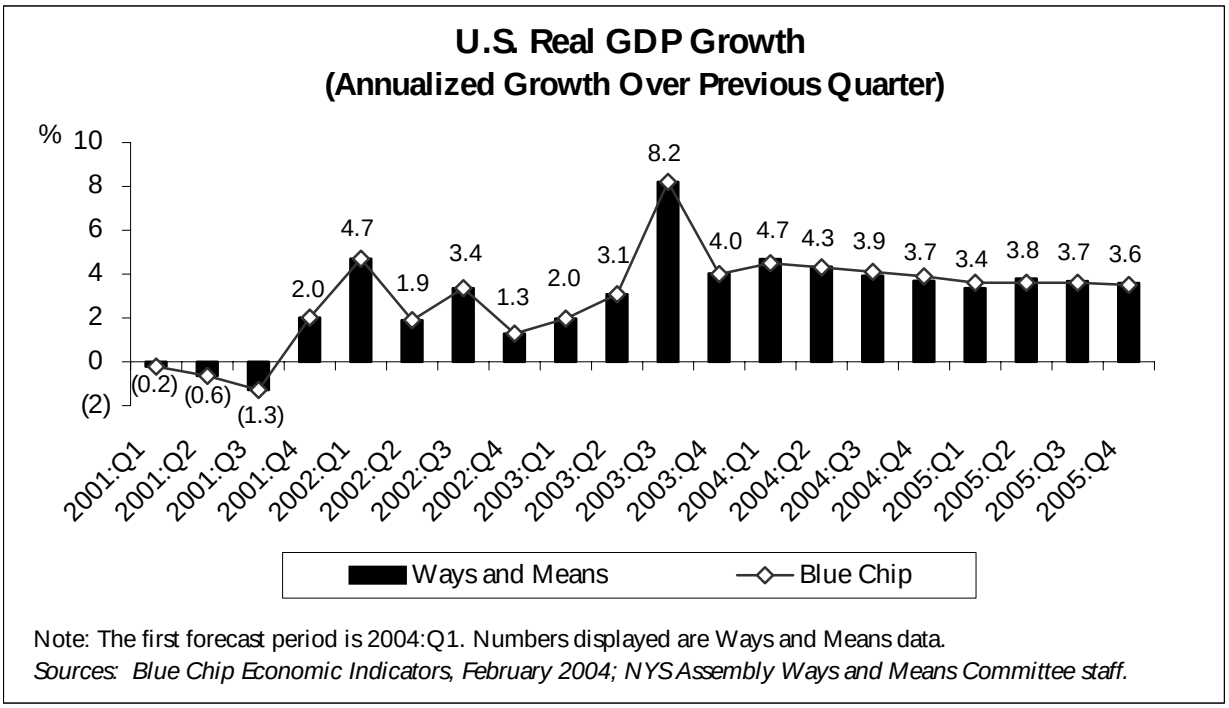


Sources: Blue Chip Economic Indicators, February 2004; NYS Assembly Ways and Means Committee staff; NYS Division of the Budget, New York State 2004-05 Executive Budget with 30-Day Changes, February 12, 2004.

Figure 4

Real GDP growth is expected to accelerate to 4.7 percent in 2004, due in large part to robust consumption spending as well as a big swing in investment spending compared to 2001-03. On a quarterly basis, real GDP is expected to grow around four percent in 2004, after climbing strongly in the second half of 2003 (see Figure 5). Real GDP growth is expected to slow to 3.7 percent in 2005.[12]

[12] In general, when components of GDP are discussed throughout this document, the numbers refer to real (inflation-adjusted) data. However, it is important to note that inflation for the components of consumption has behaved quite differently for goods, particularly durable



Note: The first forecast period is 2004:Q1. Numbers displayed are Ways and Means data.
Sources: Blue Chip Economic Indicators, February 2004; NYS Assembly Ways and Means Committee staff.

Figure 5

Consumption

In the recession and recovery so far, consumption growth has remained remarkably steady. During the forecast period, consumption growth is also expected to remain stable relative to other GDP components.

A strong housing market has aided consumption in the 2001 recession and recovery through three channels. First, as the largest single asset on the consumer balance sheet, rising home prices have generated additional spending through what economists call the "wealth effect." Second, low interest rates have also spurred a refinancing boom that has allowed consumers to directly tap into their home equity. The lower rates and therefore lower payments from many recent refinancing transactions have also helped consumption by freeing up disposable income on an ongoing basis for other uses. In addition, housing activity has spurred consumption by encouraging complementary purchases (such as appliances and home furnishings) soon after the purchase of a home.

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goods, that have actually been flat or even declining, while prices for services have been rising about three percent a year. Therefore, what is happening for nominal expenditures in the various components of consumption can be quite different from what is happening in real dollars. These price changes also have important implications for corporate profits. Firms, particularly those that produce goods, have been complaining of a lack of pricing power, which can hurt corporate profits.

The Assembly Ways and Means Committee staff forecasts that consumption spending growth will increase to 3.7 percent during 2004 after growing 3.1 percent in 2003. It will then slow a bit to 3.2 percent in 2005 (see Figure 6 below and Table 3 on page 20).[13]

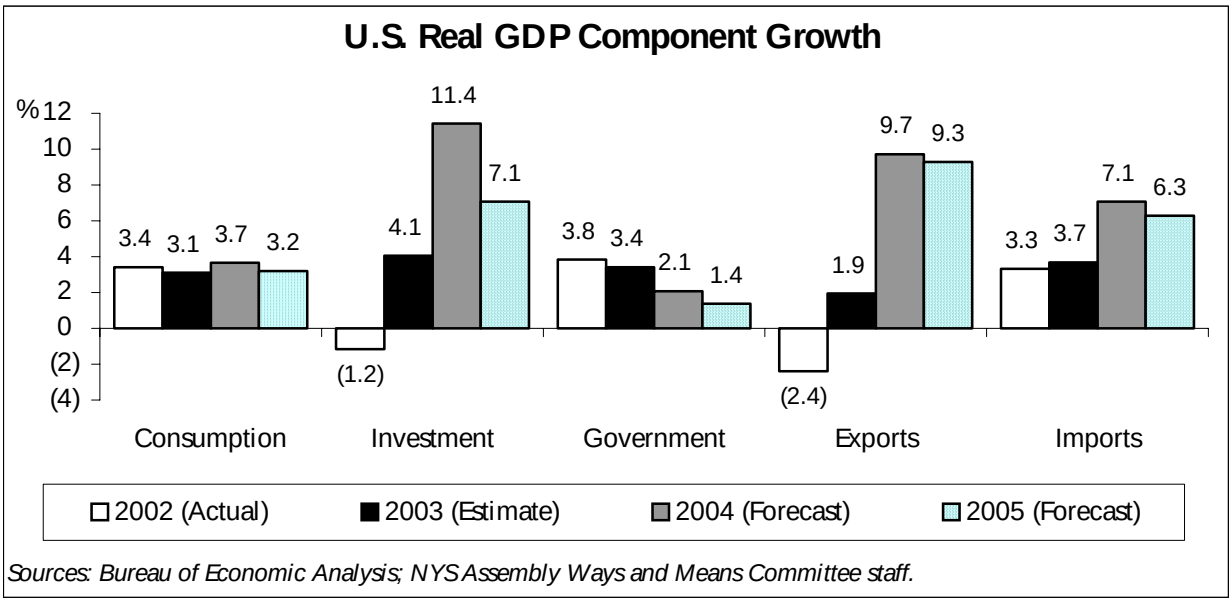


Figure 6

The following factors will contribute to robust growth in consumption spending:

* **Disposable personal income** will rise. Personal income will rise due to an increase in wages and employment. Though employment growth will be slower than during the typical recovery, it will contribute to personal income growth. Tax cuts should also play some role in increasing disposable personal income.

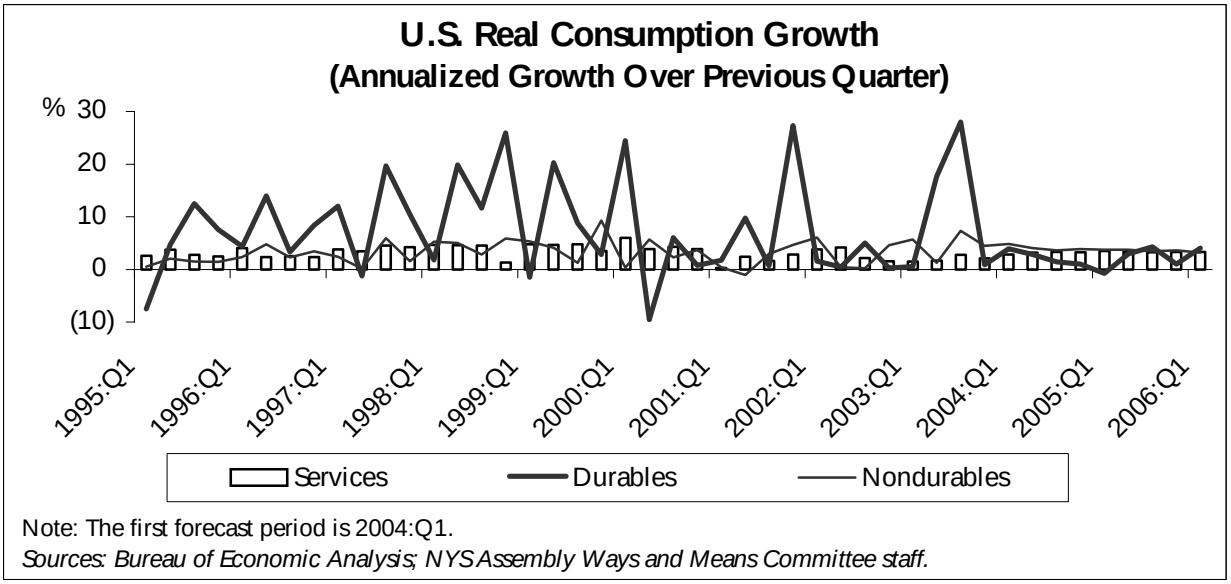
* **Interest rates** are still low. The low interest rates will continue to help consumers substitute more current consumption for future consumption (see Figure 28 on page 41).

* Consumer spending **incentives**. Incentives such as zero-percent financing for automobiles and other consumer durable goods are still plentiful.

[13] For levels, instead of growth rates, see Appendix C on page 83 of this report.

* Although housing price growth and refinancing activity are expected to slow somewhat, **rebounding stock markets** will be more of a comfort to consumers.

Services consumption, the least volatile as well as the largest component of consumption (about 56 percent of the total), is forecast to grow 2.8 percent during 2004 and 3.3 percent during 2005, after growing 2.0 percent year-over-year during 2003. Nondurable goods consumption grew 3.7 percent year-over-year during 2003, accelerating a bit from the 3.0 percent growth estimated for 2002. It will further grow by 4.5 percent in 2004 and then slow to 3.7 percent in 2005. Durable goods consumption, the most volatile as well as smallest component (about 14.5 percent of the total consumption), grew 7.4 percent year-over-year during 2003, after growing 6.0 percent or higher for several years in a row, including during the recent 2001 recession (see Figure 7). A good part of the steady growth in durable goods consumption for the past two years can be ascribed to the unusually strong auto sales due to various incentives. As auto sales and housing activity are not expected to achieve their current record levels in 2004, durable goods consumption spending growth is forecast to slow down to 6.1 percent year-over-year during 2004 and 1.5 percent during 2005.



Note: The first forecast period is 2004:Q1.
Sources: Bureau of Economic Analysis; NYS Assembly Ways and Means Committee staff.

Figure 7

Investment

The Assembly Ways and Means Committee staff forecasts that investment spending will accelerate in 2004 growing 11.4 percent after increasing 4.1 percent in 2003 and decreasing 1.2 percent in 2002. It is forecast to slow to 7.1 percent in 2005.

Investment dropped sharply in the 2001 recession. This has created pent-up investment demand that will lead to rapid investment growth in 2004. This recovery in investment spending will be due both to a strong rebound after several consecutive quarters of decline in business structure, equipment and software investment, and to a gradual build-up in inventories. Several factors will contribute to this recovery in business investment spending including:

* **Strong growth in corporate cash flow** (see the Corporate Profits section on page 41). Corporate profits have been steadily improving since the end of 2001. Gains in productivity will help to further add to profits.

* **Continued low interest rates** (see the Interest Rates section on page 39) helping to keep borrowing costs down for both consumer and investment spending. The result is more affordable borrowing for needed capital expenditures. Low interest rates are helping both consumer spending and investment spending, as companies are able to borrow what they need for capital expenditures.

* **Rebounding equity markets** (see the Stock Market section on page 43) providing opportunities for lower cost equity financing.

* **Tax credits and other incentives** including bonus depreciation (see the Corporate Profits section on page 41).

* **Nonmilitary capital goods orders** rising in recent months (see Figure 8). Demand may start to outpace what existing inventories can handle. Excess capacity is being depleted while remaining capital equipment is aging, causing new capital goods purchases. As businesses continue to see signs of an economic recovery, orders for capital equipment should continue to increase.

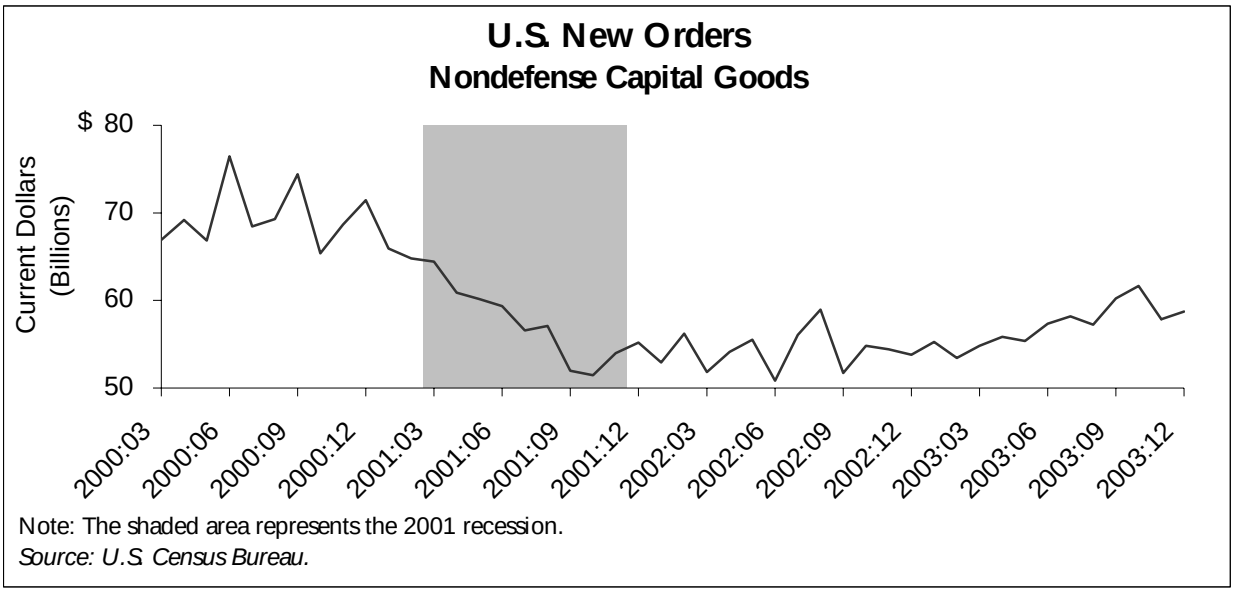
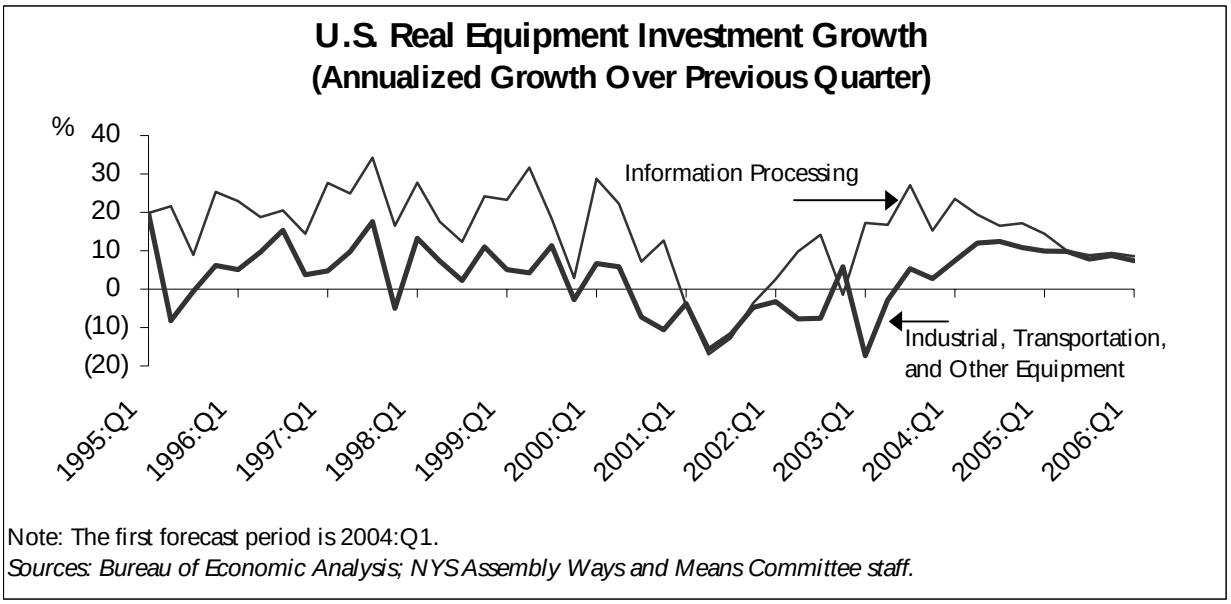


Figure 8

Although the pace of technological change in information processing may have slowed slightly since 2001, there is still rapid movement in this area. Many companies have put off buying new information-processing equipment and software since the start of the recession in early 2001. Therefore, much of their information-processing equipment stock is getting old to a point where system performance is noticeably below that of new equipment. Although businesses are reluctant to spend in these uncertain times and may continue to put off some large discretionary purchases, they still are willing to purchase new equipment when reliance on older equipment is hurting profitability.

Information-processing equipment and software investment, which accounts for 45.6 percent of total equipment investment,[14] has already started to rebound and will continue to come back strongly in 2004. It is forecast to accelerate to 19.8 percent during 2004 after growing 13.7 percent in 2003 and 0.4 percent in 2002. It will slow a bit to 13.5 percent during 2005. Industrial, transportation, and other equipment investment, which has declined for eleven quarters out of fourteen since the second quarter of 2000, appears to have started turning around beginning in the second half of 2003. It is forecast to grow 7.3 percent year-over-year during 2004 and 10.1 percent during 2005, after falling 4.8 percent in 2003. Overall, equipment investment grew 5.2 percent year-over-year during 2003, after declining 2.8 percent in 2002. It will accelerate to 14.6 percent during 2004 and 12.2 percent in 2005 (see Figure 9).

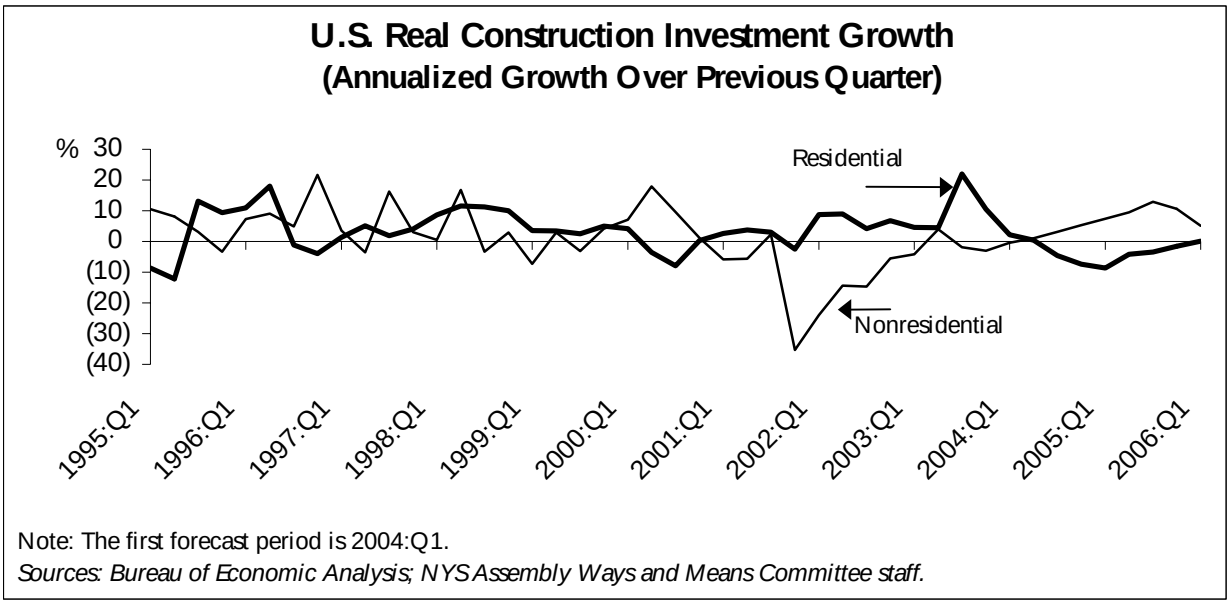
[14] Average based on the last five years of data.



Note: The first forecast period is 2004:Q1.
Sources: Bureau of Economic Analysis; NYS Assembly Ways and Means Committee staff.

Figure 9

Nonresidential construction has declined for ten out of twelve quarters since the fourth quarter of 2000. It is forecast to continue to decline throughout the first quarter of 2004, growing only 0.2 percent year-over-year during 2004. It will then further rebound during 2005, growing 7.3 percent (see Figure 10). On the other hand, as mortgage rates are expected to rise and housing starts are likely to weaken, residential construction, which has increased twelve out of thirteen quarters since the third quarter of 2000, is likely to start weakening during the second half of 2004 (see Figure 11 and Figure 12). It is forecast to increase 4.2 percent year-over-year during 2004 and decline 5.4 percent in 2005, after surging 7.6 percent in 2003.



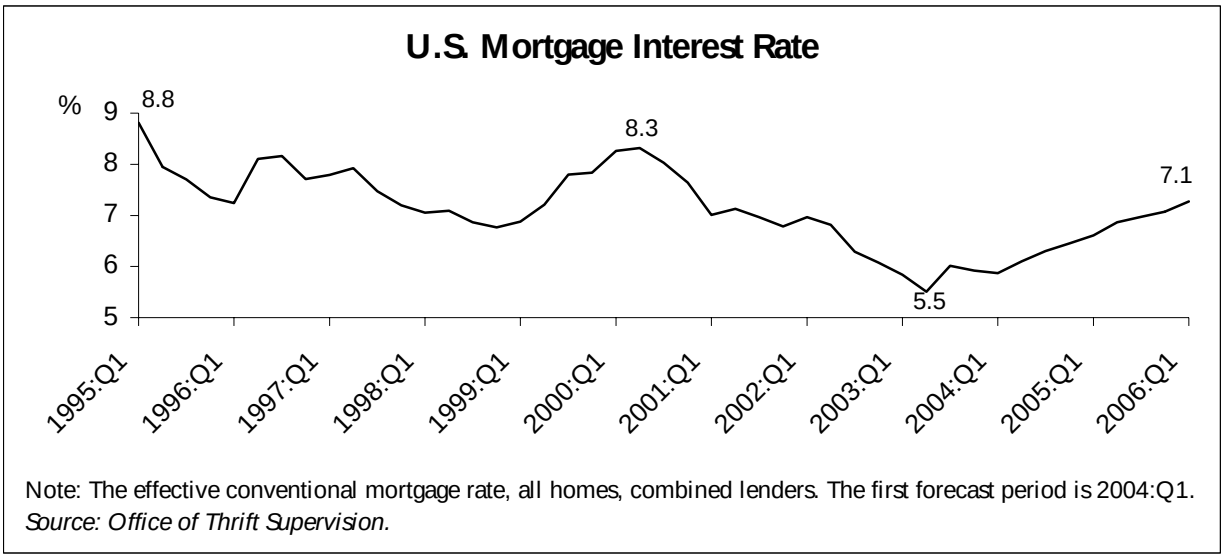
Note: The first forecast period is 2004:Q1.

Sources: Bureau of Economic Analysis; NYS Assembly Ways and Means Committee staff.

Figure 10

Source: U.S. Census Bureau.

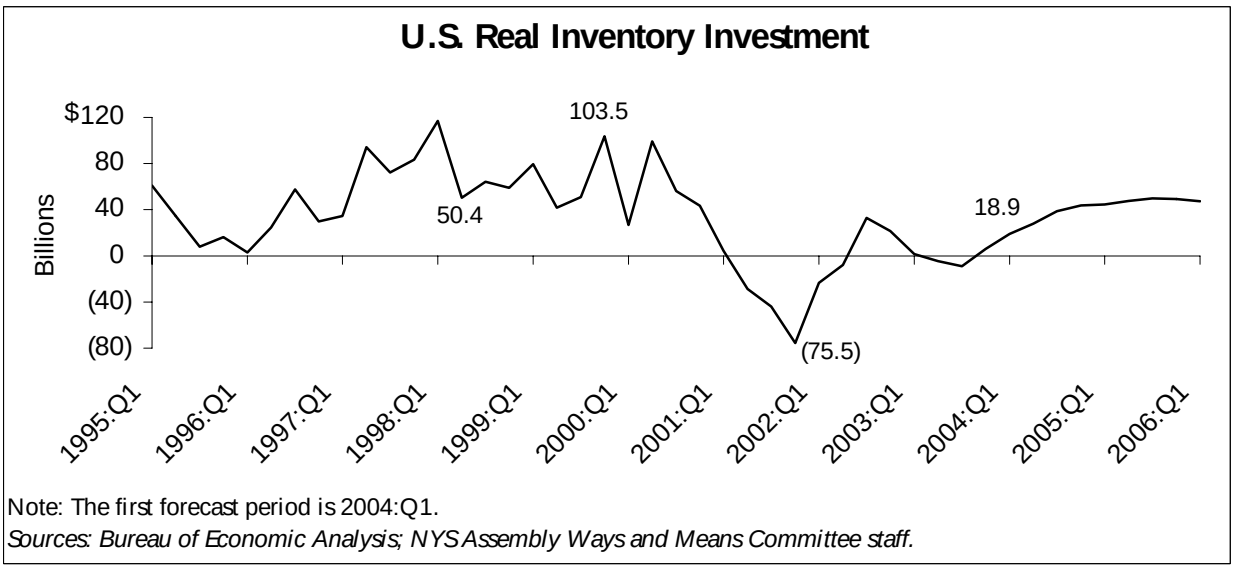
Figure 11



Note: The effective conventional mortgage rate, all homes, combined lenders. The first forecast period is 2004:Q1.
Source: Office of Thrift Supervision.

Figure 12

Despite holding only a three to four percent share in total business investment spending, inventory investment tends to be more volatile and cyclical than other components of investment and is therefore closely scrutinized by economists. Inventory investment appears to have bottomed out and should begin to grow again (see Figure 13).



Note: The first forecast period is 2004:Q1.
Sources: Bureau of Economic Analysis; NYS Assembly Ways and Means Committee staff.

Figure 13

The inventory/sales ratio, which is often used to track inventory levels, has experienced a long-term downward trend (see Figure 14). This trend has been caused in part by information technology that has enabled companies to more efficiently produce and distribute goods when they are needed rather than holding large buffers of materials, works in progress, and finished goods. Despite

this downward long-term trend, the inventory/sales ratio experienced a short-term peak in 2001 suggesting over-investment in inventory. This was followed by a rapid decline. Currently this ratio is below the long-term trend and is likely to rise.

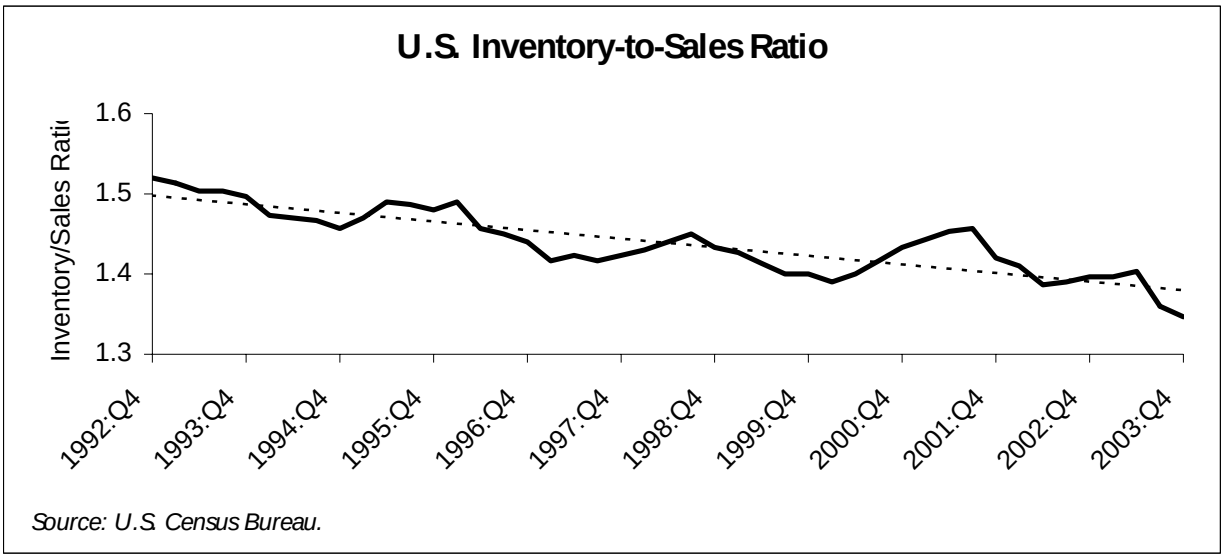


Figure 14

Table 3

U.S. Economic Outlook
(Percent Change)

	Actual 2002	Estimate 2003	Forecast 2004	Forecast 2005
Real GDP	2.2	3.1	4.7	3.7
Real Consumption	3.4	3.1	3.7	3.2
Real Investment	(1.2)	4.1	11.4	7.1
Real Exports	(2.4)	1.9	9.7	9.3
Real Imports	3.3	3.7	7.1	6.3
Real Government	3.8	3.4	2.1	1.4
Federal	7.9	8.7	4.0	1.1
State and Local	1.8	0.6	0.9	1.5
Personal Income	2.3	3.1	4.6	5.7
Wages & Salaries	0.6	2.2	4.0	6.1
Transfer Income	8.4	6.5	5.2	4.3
Corporate Profits (Accounting Basis)	6.9	13.0	19.4	30.9
Corporate Profits (Economic Basis)	17.4	17.5	20.4	4.4
Productivity	4.9	4.2	3.9	2.2
Employment	(1.1)	(0.3)	1.0	2.0
CPI-Urban	1.6	2.3	1.7	2.2
S&P 500 Stock Price	(16.5)	(3.2)	23.9	8.6
Treasury Bill Rate (3 month)*	1.6	1.0	1.2	2.4
Treasury Bond Rate (10 year)*	4.6	4.0	4.6	5.3

* Annual average rate.
Sources: Bureau of Economic Analysis; NYS Assembly Ways and Means Committee staff.

Government Spending

Due mainly to military operations in Iraq and the war on terrorism, federal spending increased sharply by 23.4 percent in the second quarter of 2003 (see Figure 15). It is forecast to grow 4.0 percent in 2004 following growth of 8.7 percent in 2003. Federal government spending will then grow 1.1 percent in 2005.[15] The slowdown in the growth of federal government spending is on account of a decline in the rate of growth of defense spending, both in 2004 and 2005.[16] State and local government spending is forecast to grow by

[15] Federal government spending as defined in GDP expenditures includes the goods and services purchased by the federal government. This includes employee compensation, but not social security or other transfers made by the government. Using this definition, over 60 percent of federal government expenditures are for national defense spending.

[16] U.S. Congress, Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2005 to 2014*, January 2004, Table 3-1, 50.

0.9 percent in 2004 and 1.5 percent in 2005. The fiscal condition of the States showed some signs of improvement in the third quarter of 2003, when the combined revenues from personal income tax, the corporate income tax and the sales tax rose for the first time since 2000. This accounts for the increase in the growth rate of state and local government spending in 2004 and 2005.[17] Aggregate government spending slowed to 3.4 percent in 2003 compared to the 3.8 percent realized in 2002. It is forecast to grow 2.1 percent in 2004, and 1.4 percent in 2005.

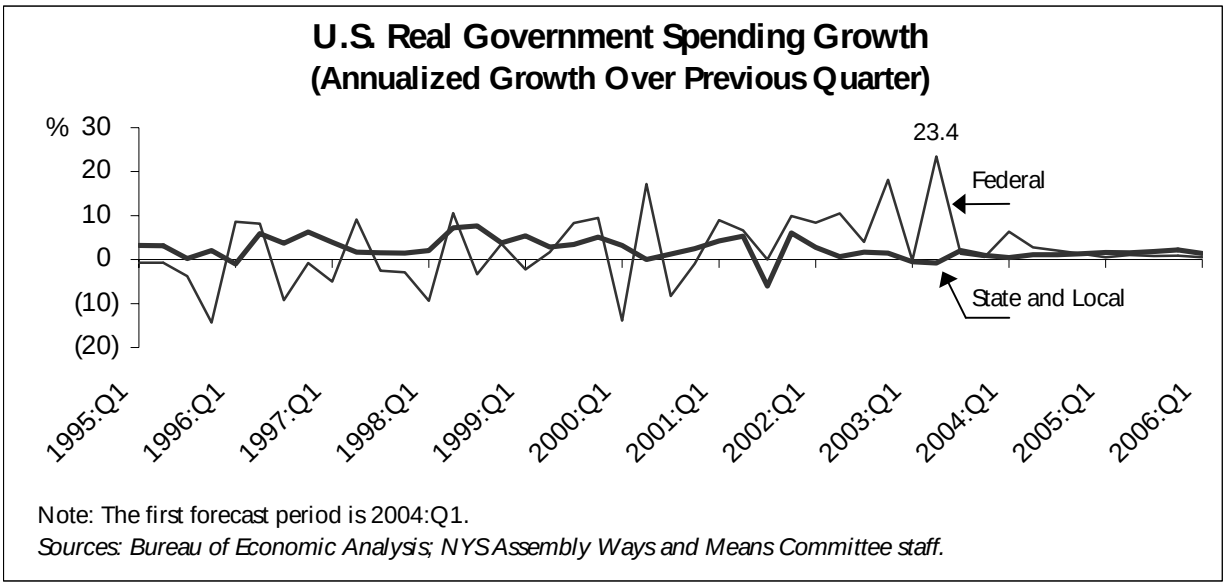


Figure 15

The federal budget for fiscal year 2004 extended the tax cuts in the Economic Growth and Tax Relief Reconciliation Act of 2001, but estimates reported by the Congressional Budget Office indicate that the budget contributed more to reduce the adverse effects of the recession than to increase long-term growth.[18] The Congressional Budget Office reports the results of two separate estimates[19] of the temporary contribution of the budget proposals to smoothing the economic cycle, and of the contribution to long-run growth. The estimates of the temporary contribution of the proposals to real GDP are 1.0 and 1.3 percent in fiscal year 2004. The two estimates for the impact on trend-GDP (the long-run effect) for 2004 are zero and 0.3 percent. Of the main budget provisions, the largest fiscal impact during fiscal years 2004 to 2008 will be the acceleration in the scheduled reduction in taxes under the Economic Growth and Tax Relief Reconciliation Act of 2001, the exclusion of part of

[17] U.S. Congress, Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2005 to 2014*, January 2004, Box 2-1, 36.

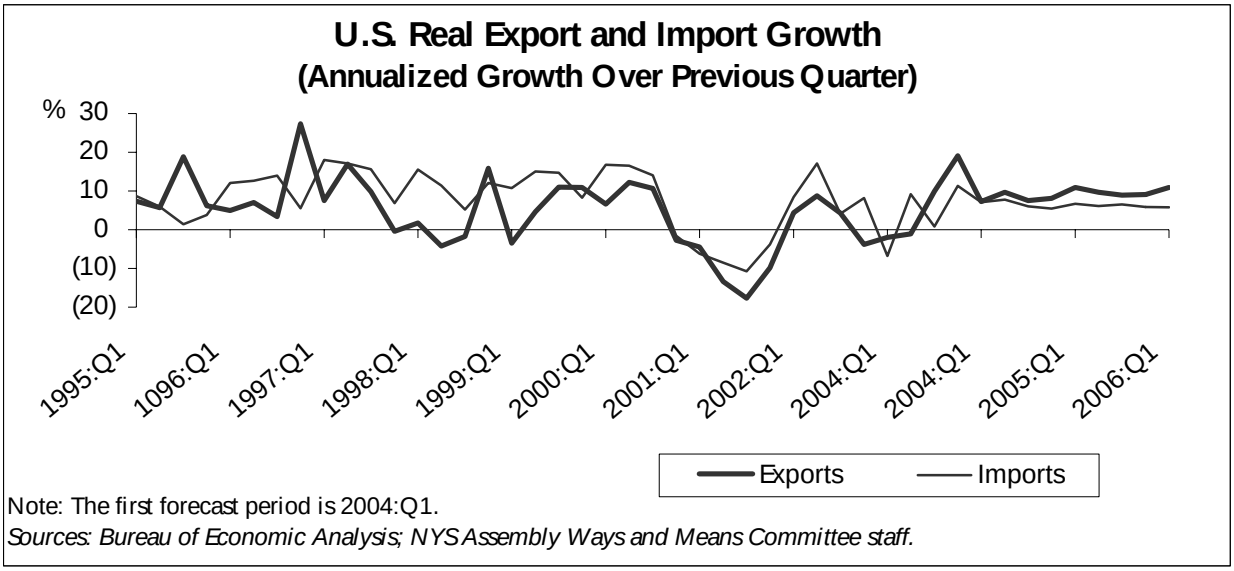
[18] U.S. Congress, Congressional Budget Office, *An Analysis of the President's Budgetary Proposals for Fiscal Year 2004*, March 2003.

[19] Estimates are produced by two consulting firms: Macroeconomic Advisers and Global Insight.

dividend income from double-taxation, and the expansion and changes to Medicare. The increase in the child tax credit during the tax year 2003 is estimated to have increased consumer income by $14 billion in fiscal year 2003 and may have contributed significantly to growth in the third quarter of 2003.[20] Due to the forecast horizon of this report, most of the discussion of fiscal policy focuses on short-term impacts. There is reason to believe that there are strong negative long-term effects of tax cuts and deficit spending that are beyond the scope of this report.

Exports and Imports

The Assembly Ways and Means Committee staff forecasts that exports will grow 9.7 percent in 2004 after rising 1.9 percent in 2003. This will be driven by an improving international economic outlook as well as the falling U.S. dollar value. With the U.S. economy expected to grow faster than the rest of the world, imports are forecast to grow 7.1 percent year-over-year in 2004, following 3.7 percent growth in 2003 (see Figure 16). Net exports, defined as exports minus imports, will further decline in 2004, negatively affecting GDP. This decline will occur despite a higher growth rate for exports than imports in percentage terms. This is because the base level of imports is about 50 percent higher than the level of exports. For example, in 2003 real exports were $1.0 trillion while real imports were $1.5 trillion. Therefore, even though exports will grow at a faster rate than imports in 2004, the growth in terms of actual dollar level will be lower for exports than imports.



Note: The first forecast period is 2004:Q1.
Sources: Bureau of Economic Analysis; NYS Assembly Ways and Means Committee staff.

Figure 16

[20] U.S. Congress, Congressional Budget Office, *The Budget and Economic Outlook: An Update,* August 2003, Table 1-8.

Like the recession, the current economic recovery is being experienced worldwide. Most of the developed countries are expected to have accelerating growth in the forecast period. Europe and Japan will likely grow more slowly than the United States, while Canada will grow at a rate similar to the United States.

In the developing world, some Asian countries are currently performing particularly well, with China, India, and Hong Kong all growing rapidly. China's growth has been particularly impressive, with a growth rate of 9.1 percent in the third quarter of 2003 compared to the same period in 2002. China's economic strength is due in part to a currency policy that undervalues their Yuan. China ties the value of the Yuan to the United States dollar at a rate that undervalues their currency by 20 to 25 percent. One estimate of this policy impact suggests that it raises the United States trade deficit by about $50 billion.[21] Although there is pressure on China to change their policy, this is unlikely to happen soon. The United States has a larger trade gap with China than any other trade partner. In fact, trade with China made up one quarter of the United States' record $489.4 billion trade deficit in 2003.[22]

In the global economy, the two largest issues of concern for the United States are oil imports and the strength of the dollar. Oil prices have been rising due to rising demand, decreased supply from OPEC, the build-up of the United State's Strategic Petroleum Reserve, and other concerns about the future of oil prices. Concerns about the future of oil prices center on political instability, infrastructure issues, and labor concerns. Political instability combined with the importance of the region as a source of oil imports makes the Middle East an area of concern. Labor unrest and conflicts in key oil states including Venezuala, Nigeria, and Indonesia have also been an issue.[23] Infrastructure for oil production is an issue in the Middle East, particularly in Iraq.

Although the dollar has weakened substantially recently against other currencies (see Figure 17), this has had little effect on the areas where weakening currency theoretically can have an impact. Foreign manufacturers have been more focused on maintaining market share than on maintaining their profit margin and therefore have been choosing to keep prices stable in dollar terms, even if this means reducing prices in their home-currency.[24] In addition, some countries, including China, have been pegging their currency to

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[21] Gwen Ifill, "Dollar Diplomacy," *Online NewsHour*, September 3, 2003, <http://www.pbs.org/newshour/ bb/economy/july-dec03/china_09-03.html>.

[22] Jeanine Aversa, "U.S. Trade Deficit Hit Record High in '03," *Associated Press*, February 13, 2004.

[23] Peter Coy and Stephanie Anderson, "Why is Oil so Expensive Again?", *Businessweek*, February 9, 2004, p. 40-42.

[24] Greg Ip, "Dollar's Decline Has Little Impact On Import Prices -- While Euro-Zone Nations Feel Pressure, Trade Deficit Remains Unaffected So Far," *Wall Street Journal,* January 14, 2004, p. A1.

the dollar, which reduces the impact of the dollar's change in value. Therefore, despite the decline in the dollar, prices appear stable, the trade balance has not dramatically shifted, and domestic financial markets have remained generally strong. The high current account deficit suggests that the value of the dollar may decline further.[25] However, futures markets, which are often taken as a good estimate of expected price changes, suggest that after weakening somewhat, the dollar will remain flat against other major currencies until 2005.

Weakness in the U.S. dollar in itself is not necessarily bad for the United States economy. A weak dollar helps raise exports and reduce imports, boosting the net exports component of GDP. In fact, a weak dollar has been cited as one of the reasons there are signs that corporate profits may have had their strongest quarter since 1993 in the fourth quarter of 2003.[26] What is of concern is not so much an orderly decline of the dollar, as a crash in the dollar. Currency crashes have large negative impacts. They weaken financial market prices and deter foreign investment. However, a currency crash appears unlikely. The rest of the world does not want a United States currency crash to occur, and would likely take strong countermeasures to avoid a sudden collapse in the dollar.

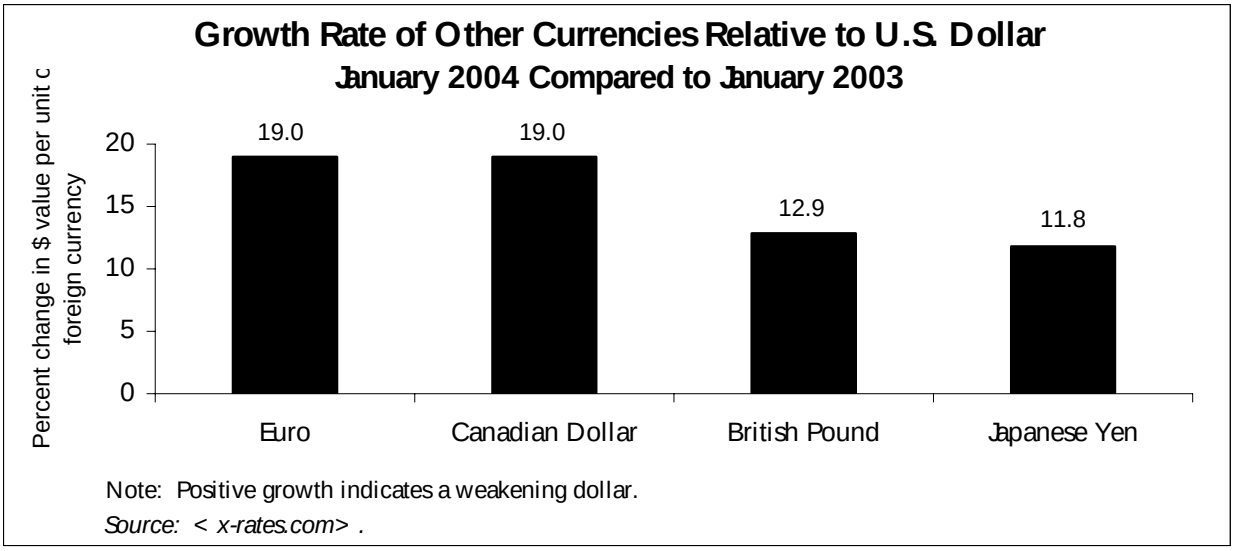


Figure 17

Employment

National nonfarm employment continued to decline by 0.3 percent in 2003. This follows a decline of 1.1 percent in 2002 (see Figure 18 for quarterly

[25] Frank Schmid, "Is the Current Account Deficit Weighing on the Dollar?" *International Economic Trends*, Federal Reserve Bank of St. Louis, August 2003.

[26] Stanley Holmes, "Corporate Profits Roar," *Businessweek*, February 9, 2004, p. 37.

growth patterns). It is forecast to grow by 1.0 percent in 2004 and 2.0 percent in 2005.

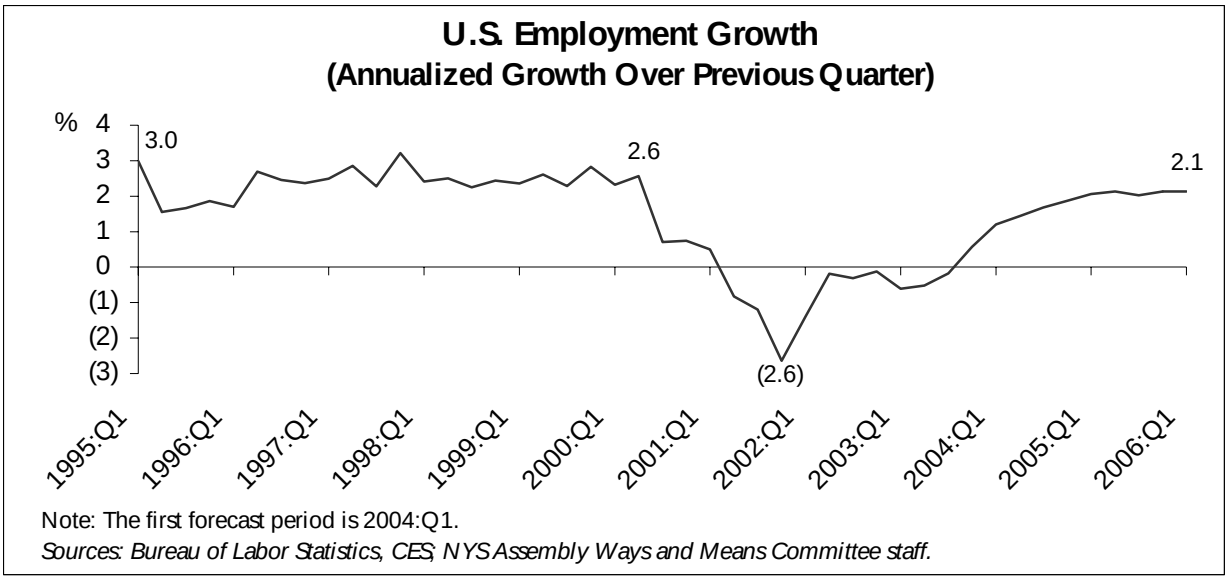


Figure 18

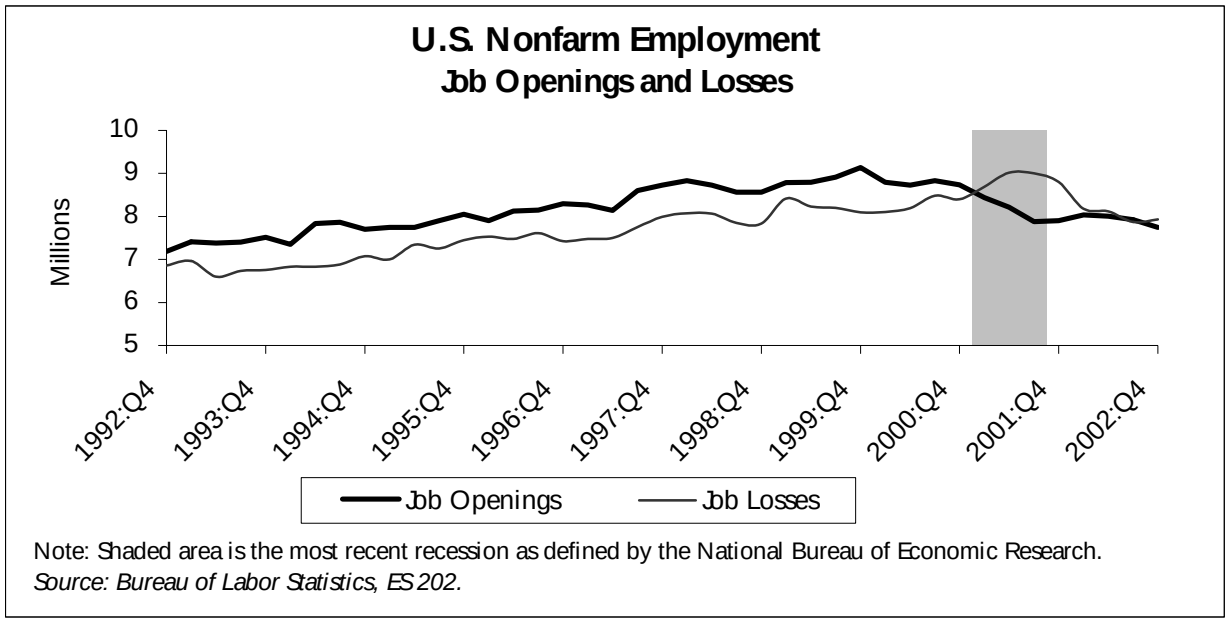
Unemployment, which generally lags changes in economic growth, peaked at 6.1 percent in the third quarter of 2003 and declined to 5.9 percent in the fourth quarter. It averaged 6.0 percent in 2003, up from the 5.8 percent average for 2002. With employment expected to pick up, the unemployment rate is forecast to decline to 5.6 percent in 2004 and 5.4 percent in 2005.

Although unemployment overall is expected to decline, it is important to note that the unemployment rate varies considerably by region and ethnicity. As of December, 2003, areas that had low unemployment rates included Putnam and Columbia Counties at 3.2 percent each and Albany County at 3.3 percent. The highest unemployment rates were found in Bronx County at 10.3 percent, Hamilton County at 9.6 percent, and Herkimer County at 9.4 percent.[27] As of the 2000 Census, the unemployment rate for African Americans in New York State was at 13.9 percent, almost double the total population's unemployment rate. The unemployment rate for the Hispanic or Latino population was at 12.2 percent, about 70 percent higher than the total population's unemployment rate.[28]

During this recovery, job losses have declined. However, more job losses occurred than job openings, leading to net declines in jobs (see Figure 19).

[27] New York State Department of Labor, prepared by Empire State Development.

[28] Use Census Bureau, Census 2000 Summary File 4, prepared by Korean American Coalition Los Angeles Census Information Center.



Note: Shaded area is the most recent recession as defined by the National Bureau of Economic Research.
Source: Bureau of Labor Statistics, ES 202.

Figure 19

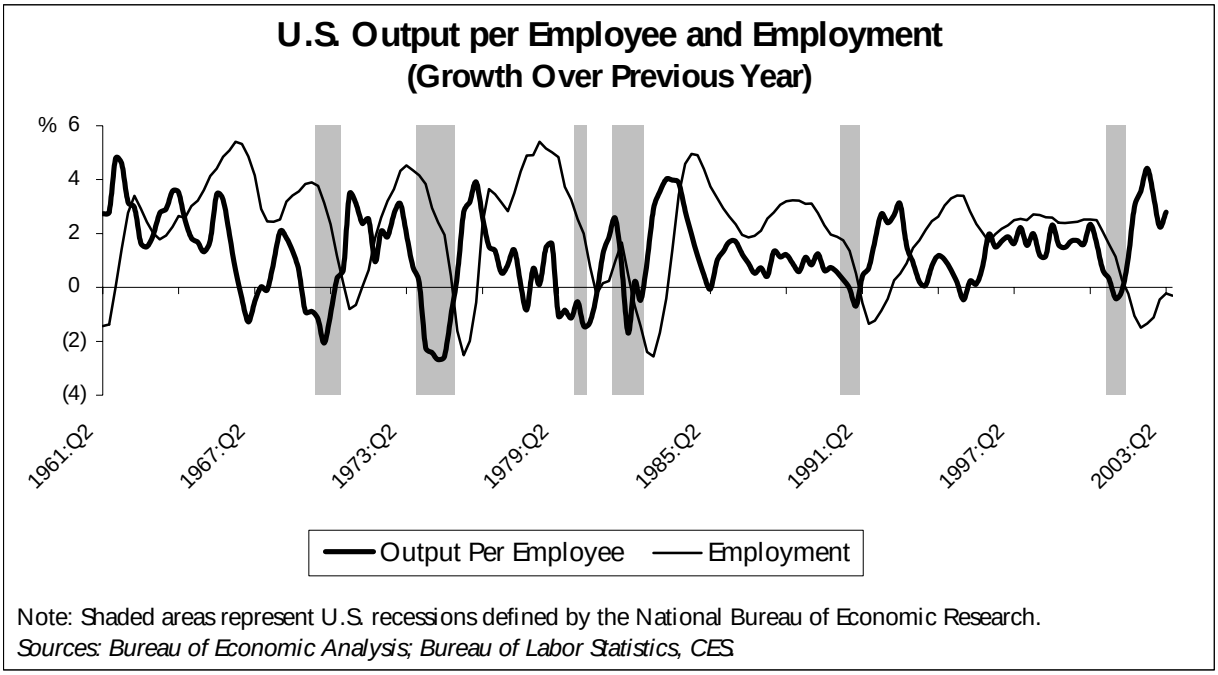
The Output Growth and Employment Growth Disconnect

Table 2 on page 8 shows that the duration of employment loss in the recent recession is the longest of post-war recessions. Since employment peaked in the first quarter of 2001, the loss of jobs in this decline is the second largest loss of any post-World War II period.[29] Though the duration of decline in real GDP was shorter than the post-war average, the duration of employment decline was longer. This indicates an increasing disconnect between output growth and employment growth—a "jobless recovery." Both the 2001 recession and the 1990-91 recession have been followed by jobless recoveries.

Employment growth typically revives after the resumption of output growth in the recovery phase of the business cycle. This lag in employment growth accounts for the steep increase in labor productivity in an economic recovery (see Figure 20). However, this relation may have been affected by significant changes in the U.S. economy in recent decades.[30]

[29] This is true in terms of absolute number of jobs. On a percentage basis, there are several larger job losses.

[30] These changes may include the increase level of global competition and the increased effectiveness of macroeconomic policy which are discussed in Douglas N. Thompson and Gary K. Ottosen, *The Real New Economy*, Crossroads Research Institute, 2003.



Note: Shaded areas represent U.S. recessions defined by the National Bureau of Economic Research.
Sources: Bureau of Economic Analysis; Bureau of Labor Statistics, CES.

Figure 20

GDP has become less cyclical in recent decades. There have been a number of explanations put forward for this trend including the improved effectiveness of macroeconomic policy, improved inventory and production management by firms, improved financial institutions, increased consumer liquidity, and a shift to a service-oriented economy combined with the lower cyclical variation in many services.[31] However, though output has become less cyclical, the same cannot be said for employment. There has been an increase in global competition. The effect of this increase in competition has been felt mostly in the manufacturing sector, where employment fell dramatically after 1998 (see Figure 21). While a third of the manufacturing job loss during the recent recession may be explained by the deterioration of the trade deficit (see discussion on page 30), the rest of the job loss is explained by other factors, which include improvements in productivity. While the fall in investment demand during the recent recession reduced employment in manufacturing industries such as machinery and equipment, the employment loss in the manufacturing sector is too large to be explained by a temporary loss of demand.[32]

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[31] Most of these explanations are discussed in Christina D. Romer, "Changes in Business Cycles: Evidence and Explanations," NBER Working Paper # W6954, February 1999; James J. Stock and Mark W. Watson, "Business Cycle Fluctuations in U.S. Macroeconomic Time Series, NBER Working Paper # 6528, April 1998; and NYS Assembly Ways and Means Committee, *Economic Report*, March 2003.

[32] U.S. Congress, Congressional Budget Office, *What Accounts for the Decline in Manufacturing Employment*, Economic and Budget Issue Brief, February 18, 2004; Robert E. Hall, "Understanding the Evolution of U.S. Manufacturing," (testimony before the U.S. Senate Finance Committee, July 8, 2003).

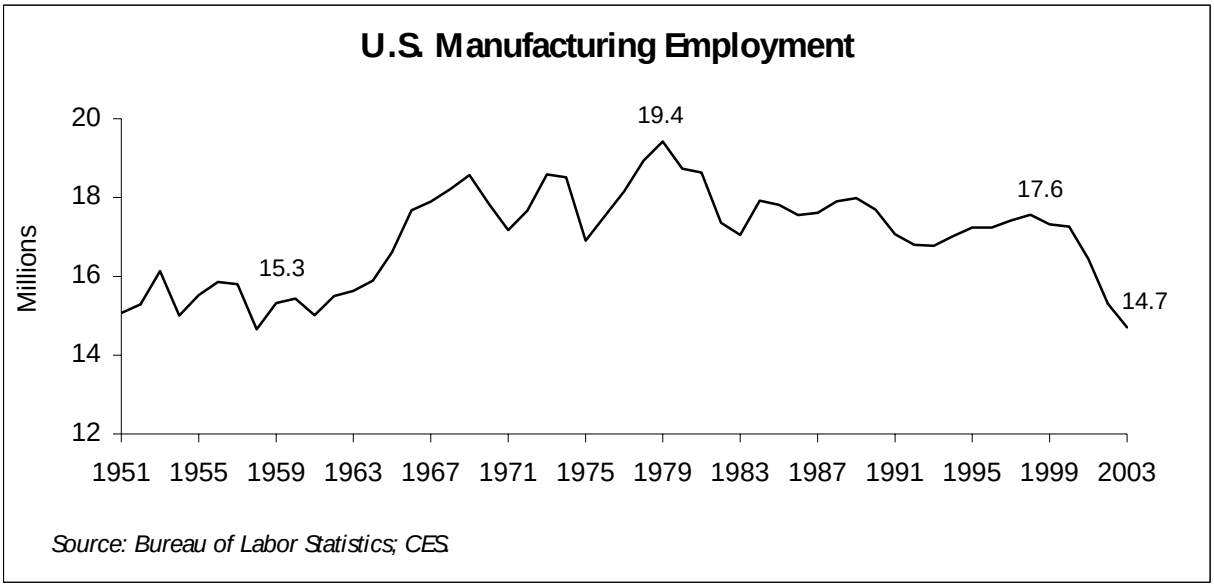

Figure 21

Other possible reasons for the delay in the employment recovery include the excessive hiring during the expansion of the 1990s, increased uncertainty in the economic environment, and rising benefit costs.[33]

Productivity Change

Recent calculations suggest that the annual growth rate of output per hour increased by 1.4 percentage points to 2.8 percent in the 1995-02 period compared to 1.5 percent in the 1975-95 period. If sustained over time, the recent increase in labor productivity growth reduces the number of years it takes to double labor productivity from forty-eight to twenty-five years.[34]

Compared to prior periods of significant technological change, such as the effect of the use of electric power and the dynamo in factory production after World War I, the sources of the increase in labor productivity in recent years are different.[35] In recent years, the increase in productivity was mainly due to the increased use of capital equipment in production, particularly those relating to information technology. Since the recent increase in labor productivity owes

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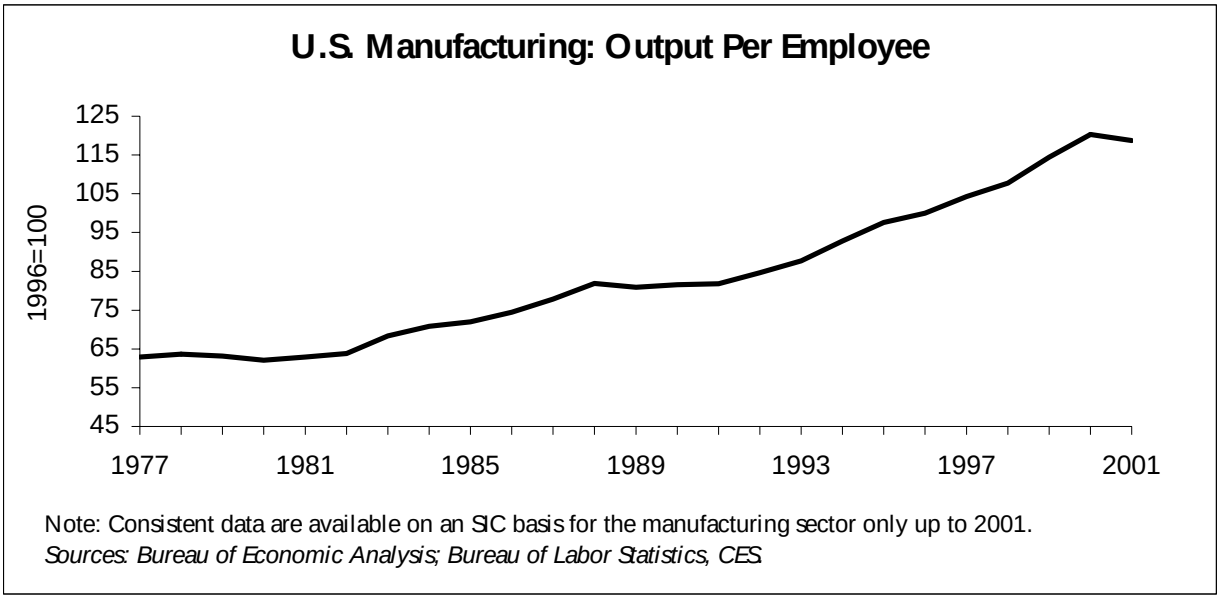
[33] Ben S. Bernanke, The Federal Reserve Board, (remarks at the Global Economic and Investment Outlook Conference, Carnegie Mellon University, Pittsburgh, Pennsylvania, November 6, 2003) <http://www.federal reserve.gov>.

[34] Calculation is based on Bureau of Labor Statistics data.

[35] Paul A. David and Gavin Wright, "General Purpose Technologies and Surges in Productivity: Historical Reflections on the Future of the ICT Revolution," (paper presented to the International Symposium on Economic Challenges of the 21st Century in Historical Perspective, Oxford, England, July 2, 1999) <http://ideas.repec.org/p/wop/stanec/99026.html>.

itself to a large extent to increased capital intensity, periods of weak demand, such as recessions, exert more downward pressure on employment growth.

Though manufacturing employment fell, with much of the decline in manufacturing employment occurring after 1998, U.S. manufacturing output growth has been generally positive in the last two decades. Manufacturing employment in the United States increased between 1950 and the late 1970s, declined gradually overall in the 1980s and 1990s, and then fell sharply after 1998 (see Figure 21 above).[36] With manufacturing output rising while employment has been declining, output growth in this sector has been achieved through productivity gains rather than employment growth (see Figure 22).



Note: Consistent data are available on an SIC basis for the manufacturing sector only up to 2001.
Sources: Bureau of Economic Analysis; Bureau of Labor Statistics, CES.

Figure 22

Employment and Net Exports

The ratio of the value of imported goods to domestic goods production increased from 5.8 percent in 1950 to 34.4 percent in 2002, indicating a loss of competitiveness in the long-run (see Figure 23).[37] Imports from countries that have a manufacturing sector average wage that is not greater than five percent of the U.S. average wage have increased from two percent of U.S.

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[36] This conclusion is based on data from the Current Employment Statistics Survey, which is subject to revision. However, Covered Employment and Wage (ES 202) data suggest that over 380,000 U.S. manufacturing jobs were lost between 1998 and 2000. Therefore, manufacturing employment declined before the 2001 national recession. Current Employment Statistics Survey data indicate a decline of 297,000 manufacturing jobs between 1998 and 2000.

[37] Also see Douglas N. Thompson and Garry K. Ottosen, *The Real New Economy*, Crossroads Research Institute, 2003, chart 2.1, 15.

imports in 1972 to 15 percent in 2002.[38] The trade balance in goods deteriorated sharply and significantly in the recent recession and it is estimated that the contribution of the trade deficit to the loss of jobs in the recession has been high. Both the decline in exports and the increase in imports contributed to the increase in the trade deficit: the decline in exports of machinery and automobiles and the increase in U.S. imports of energy and consumer products were important factors. In one estimate, 995,000 jobs were lost between February 2001 and September 2003 due to the decline in the trade balance; 798,000 or 80.2 percent of these jobs were lost in manufacturing.[39]

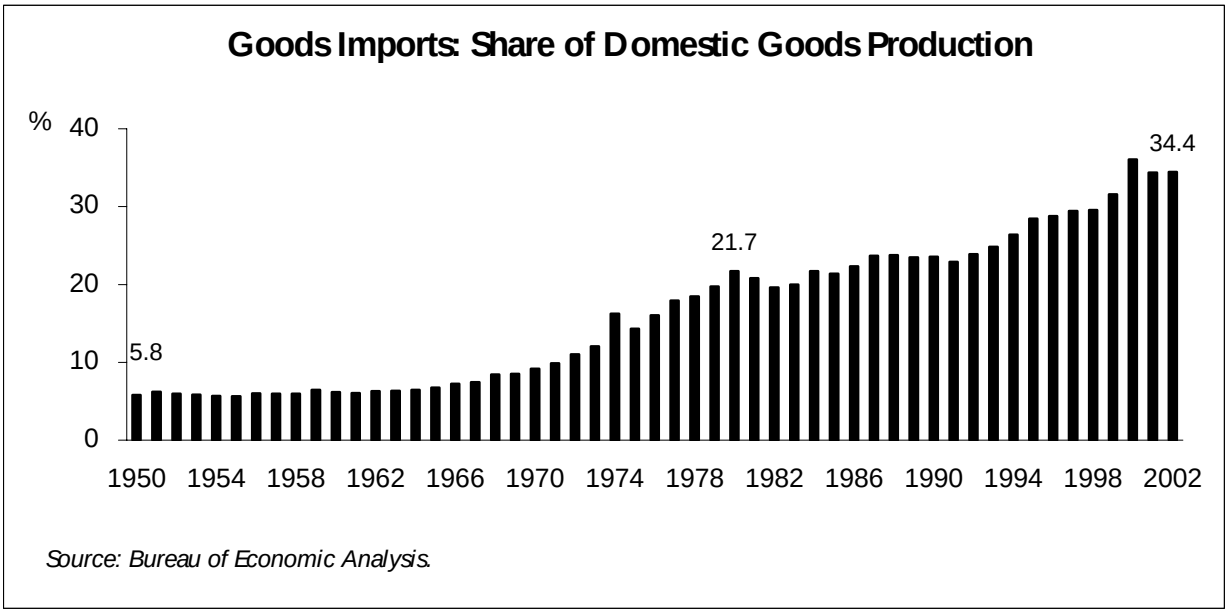

Figure 23

World manufacturing employment has also fallen in recent years, while world manufacturing output increased, indicating an increase in productivity worldwide.[40] Between 1995 and 2002, manufacturing employment fell in several countries including the United States, South Korea, Russia, the U.K., China, Japan and Brazil.

The share of the U.S. in world manufacturing exports has stayed steady in recent decades: in 1980, the United States accounted for 13.2 percent of world

[38] William Testa and Thomas Klier, "Is Midwest Manufacturing at a Crossroads?" *Chicago Fed Letter*, Federal Reserve Bank of Chicago, no. 197a, December 2003.

[39] Mark Zandi, "Off-Shoring Threat," *Economy.Com*, October 24, 2003. In this period, 2,459,000 manufacturing jobs were lost in the U.S.; roughly a third of the job loss in manufacturing is accounted for by the deterioration in the trade balance.

[40] Jon E. Hilsenrath and Rebecca Buckman, "Factory Employment is Falling World-Wide," *Wall Street Journal*, October 20, 2003, p. A2.

manufacturing goods exports; this share was 13.9 percent in 1998.[41] U.S. manufacturing production is specializing in industries with high technology content. Between 1980 and 1998, the output of U.S. manufacturing industries increased 70.0 percent, while the output of high-technology industries grew 182.9 percent.[42] However, the high technology exports of the rest of the world have grown faster than the United States: the share of the U.S. in world high technology exports fell from 25.7 percent in 1980 to 19.8 percent in 1998.

Sectoral Job Loss

The severity of the loss of jobs in manufacturing and the delay in the revival of service sector jobs have both contributed to the slower recovery of job growth from the recent recession in the United States. In the 2001 recession, the loss of manufacturing sector jobs was larger and more intense compared to the recession of 1990-91. The largest sectoral loss of employment in the most recent recession was in the manufacturing sector, which lost 2.6 million jobs between the first quarter of 2001 and the third quarter of 2003. This loss represents 15.0 percent of the manufacturing jobs in the first quarter of 2001. In the recession of 1990-91, the employment peak was in the second quarter of 1990 and the employment trough was in the third quarter of 1991. Between the peak and trough quarters of the 1990-91 recession, 0.8 million manufacturing jobs were lost. This loss represented 4.4 percent of U.S. manufacturing jobs in the second quarter of 1990 (see Table 4).

Table 4

U.S. Job Loss

(Based on turning points in Total Employment)

Peak to Trough	Duration (Quarters)		Depth				
			Total	Manufacturing	Services	Construction	Government
Average of All Recessions	3.8	***Percent Change***	(2.6)	(8.0)	(0.7)	(4.9)	1.8
1948-1982		*Level Change*	(1,640.6)	(1,404.1)	(173.7)	(183.3)	171.8
1990:Q2-1991:Q3	5.0	***Percent Change***	(1.4)	(4.4)	(0.2)	(11.1)	0.3
		Level Change	(1,501.0)	(814.2)	(149.0)	(588.7)	58.7
2001:Q1-2003:Q3	10.0	***Percent Change***	(2.0)	(15.0)	(0.7)	(1.5)	3.2
		Level Change	(2,642.7)	(2,635.3)	(568.7)	(100.7)	669.3

Note: Depth is defined as the trough level minus the peak level. Level change is non-farm total in thousands.

Source: Bureau of Labor Statistics, CES

[41] The calculations in this paragraph are based on National Science Board, *Science and Engineering Indicators 2002*, National Science Foundation, 2002, Appendix Table 6-1.

[42] This definition of high technology includes aerospace, computers and office machinery, communications equipment, and pharmaceuticals.

Service sector job growth revived more quickly from the 1990-91 recession compared to the recent recession in the United States. By the time employment reached its trough level from its peak, the service-producing sector was down 149,000 jobs. However, between the first quarter of 2001 and the third quarter of 2003 (after twice as many quarters) the service-producing sector was down 568,700 jobs. Retail trade industries lost jobs at similar rates in both recessions, while job losses in wholesale trade, transportation and utilities, information, professional and technical services, management, and administrative services were more intense and prolonged in the recent recession. There is increasing concern over the extent to which some of the loss of service sector jobs is due to the "outsourcing" of these jobs to other countries.

Job Loss in Construction and Government

Substantial employment differences between the two recessions exist in the government and construction sectors. While employment in the government sector grew during both recessions, the amount of growth in the most recent recession served as a significant moderating influence on aggregate job loss. As of the third quarter of 2003, the government sector gained 669,300 jobs. Local government contributed the overwhelming majority, 74.5 percent, of these jobs. In comparison, during the 1990-91 recession the government sector gained 58,700 jobs.

In the 1990-91 recession, the construction sector was hit especially hard losing 588,700 jobs, or 11.1 percent of all U.S. construction jobs in the second quarter of 1990. This was a greater percentage loss than in manufacturing and services. Employment in the construction sector began to fall in the late 1980s as the Tax Reform Act of 1986 ended many commercial property tax advantages.[43] The impending recession further reduced property demand, developers began to go bankrupt, and construction employment plummeted.

After the real estate collapse of the 1991 recession, surviving companies went public and paid down their debt with investor capital.[44] Moody's Investors Service now reports no corporate-debt defaults by real-estate companies in the past ten years. In the 2001 recession, the construction sector fared much better, losing 100,700 jobs, or 1.5 percent, since the first quarter of 2001.

Government employment grew 0.3 percent in 2003, following growth of 1.8 percent for 2002. It is forecast to increase 0.2 percent in 2004. This is due to unexpected extra spending on the Iraq War and the corresponding reduction in the regular government expenditures on wages and salaries. Employment in

[43] Dean Starkman, "Strong Foundation: Office Vacancies Are Sky-High; So Why No Crisis?" *Wall Street Journal,* January 23, 2004, p. A1.

[44] Ibid.

manufacturing and information is estimated to have declined in 2003 and forecast to continue to decline in 2004. Other industries, in particular some of the service industries such as the health and education sector and the leisure and hospitality industry, are expected to see positive growth in 2004 (see Table 5).[45]

Table 5

U.S. Employment by Sector
(Percent Change)

	Actual 2002	Estimate 2003	Forecast 2004	Forecast 2005
TOTAL	(1.1)	(0.3)	1.0	2.0
Government	1.8	0.3	0.2	0.9
Education & Health	3.6	2.3	2.7	3.6
Retail Trade	(1.4)	(0.7)	0.7	1.9
Manufacturing[1]	(7.1)	(4.7)	(2.0)	(0.4)
Other Services[2]	(0.7)	0.9	2.5	3.2
Leisure & Hospitality	(0.4)	1.2	1.9	2.6
FIRE[3]	0.5	1.6	0.3	1.0
Construction	(1.6)	0.1	2.0	2.2
Wholesale Trade	(2.1)	(0.8)	0.9	2.5
Professional Services	(3.3)	(0.8)	2.1	3.4
Transp. & Utilities[4]	(3.1)	(1.3)	0.9	2.3
Information	(6.5)	(5.8)	(0.5)	1.4
Mgmt. of Companies	(4.1)	(1.8)	0.3	1.8

[1] Including Mining and Logging.
[2] Including Administrative, Support, and Waste Management Services.
[3] Financial Activities including Finance, Insurance, Real Estate, Rental, and Leasing.
[4] Transportation, Warehousing, and Utilities.
Sources: Bureau of Labor Statistics, CES; NYS Assembly Ways and Means Committee staff.

The Household Survey and the Payroll Survey

The Current Population Survey (CPS, commonly called the Household Survey), administered by the U.S. Census Bureau, and the Current Employment Statistics Survey (CES, also known as the Payroll Survey or the establishment survey, BLS 790), administered by the Bureau of Labor Statistics, both provide monthly data on United States employment. The Household Survey estimates employment based on responses by workers and is based on a sample of 50,000

[45] Definitions of sectors and their subcategories have changed to the new NAICS classification. For more information, see the NAICS section in Appendix A on page 77 of this report. For actual levels of employment and wages in 2002, both nationally and in New York State, see Appendix B on page 82 of this report.

households, while the Payroll Survey estimates employment based on responses by employers and initially includes 400,000 establishments.[46]

During the recent recession, the estimates of employment in the two surveys diverged significantly (see Figure 24).[47] In 2000, the employment estimate from the Payroll Survey was 3.4 million lower than the Household Survey estimate.[48] Many factors contributed to the difference. Prominent among them were the revisions to population estimates in the Household Survey after the Census 2000 counts were received, the inclusion of agricultural and self-employed persons in the Household Survey estimate, and the ability to distinguish between multiple jobs held by the same person in the Household Survey. Even when these factors were taken into account, the difference in the estimates was substantial.[49]

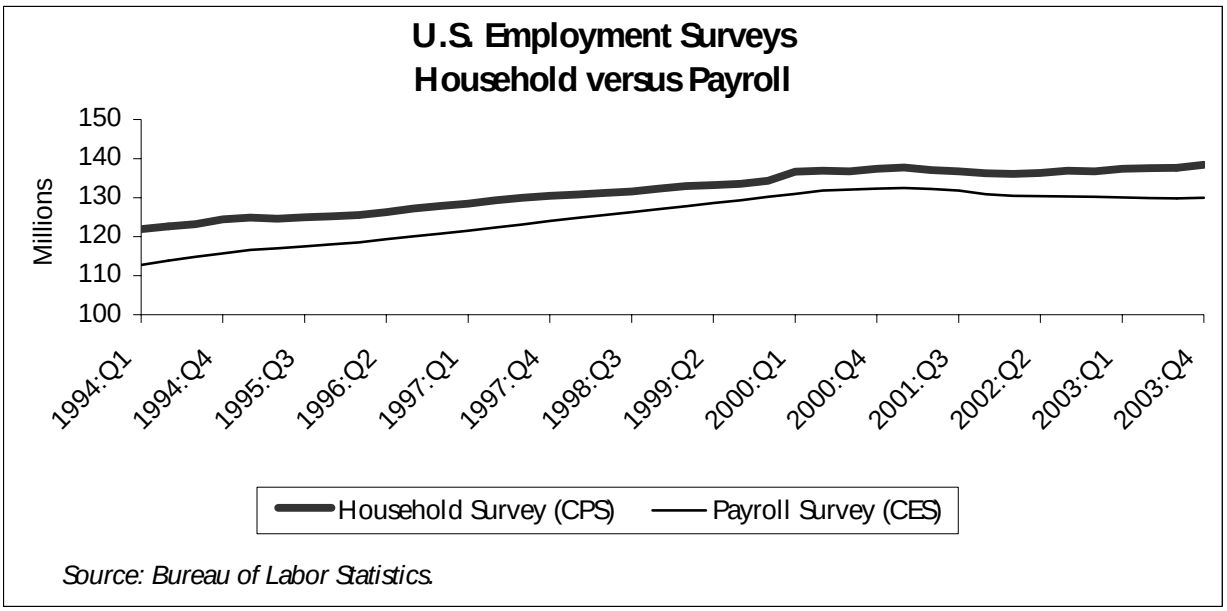

Figure 24

Since 2000, the gap between employment from the Household Survey and the Payroll Survey has more than doubled. The difference between the two surveys in job loss estimates for the 2001 recession is as high as 3.2 million. The

[46] U.S. Department of Labor and U.S. Department of Commerce. "Current Population Survey Design and Methodology," Technical Paper 63RV, March 2002, Chapter 1.

[47] Both surveys have revised their estimation methodologies recently, and this adds to the problems in the comparison of these estimates over time.

[48] Thomas Nardone, Mary Bowler, and Jurgen Kropf, "Examining the Discrepancy in Employment Growth between the CPS and the CES," paper prepared for presentation to the Federal Economic Statistics Advisory Board (sponsored by the Bureau of Labor Statistics, Bureau of Economic Analysis, and the U.S. Census Bureau), October 17, 2003.

[49] Ibid, Table 1, p. 37.

Household Survey estimates a 0.8 million increase in employment between March 2001 (the start of the 2001 recession) and January 2004 (the month for which we have the most recent data), but the Payroll Survey estimates a decline of 2.4 million. In fact, the two series give completely different perspectives on employment in the recent recession: the Household Survey leads to the impression of a much faster recovery in job growth.[50]

There generally is a preference for Payroll Survey employment data due to the larger size of the sample and because the Payroll Survey is revised towards the counts of employment received from the Covered Employment and Wages Program (the ES 202), which is based on 98 percent of all establishments. There is no similar employment benchmark for the Household Survey.

The higher estimates of employment in the Household Survey are a reflection of the higher estimates of population that are used in calculating the employment estimate.[51] This estimate is believed to be affected by an overestimate of immigration in recent months, which is not sensitive to changes in economic conditions, and contributes to the higher divergence between the estimates during a recession (see Figure 25).[52] However, some believe the Payroll Survey has in the past had a tendency to underestimate both job losses during a downturn and job gains during a recovery on account of its inability to capture the effects of the entry and exit of firms during the business cycle. Recent changes to the Payroll Survey methodology have attempted to address this issue. The Household Survey includes the self-employed, while the Payroll Survey does not. There is some evidence that independent contractors and self-employment have been a growing source of employment.[53] The true employment change probably lies somewhere between the household and establishment surveys. However, experts differ in their opinion of where exactly between the two numbers the truth lies.

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[50] The same divergence is seen for New York State: the data from the Local Area Unemployment Statistics Program (the Household Survey for states, counties, metropolitan areas, and cities) suggest a much faster recovery from the recent recession compared to the Current Employment Statistics Survey (the Payroll Survey) results.

[51] Thomas Nardone, Mary Bowler, and Jurgen Kropf, "Examining the Discrepancy in Employment Growth between the CPS and the CES," paper prepared for presentation to the Federal Economic Statistics Advisory Board (sponsored by the Bureau of Labor Statistics, Bureau of Economic Analysis, and the U.S. Census Bureau), October 17, 2003, 29.

[52] Ibid.

[53] Jon E. Hilsenrath, "Self Employed Boost the Economic Recovery," *Wall Street Journal*, December 1, 2003, p. A2.

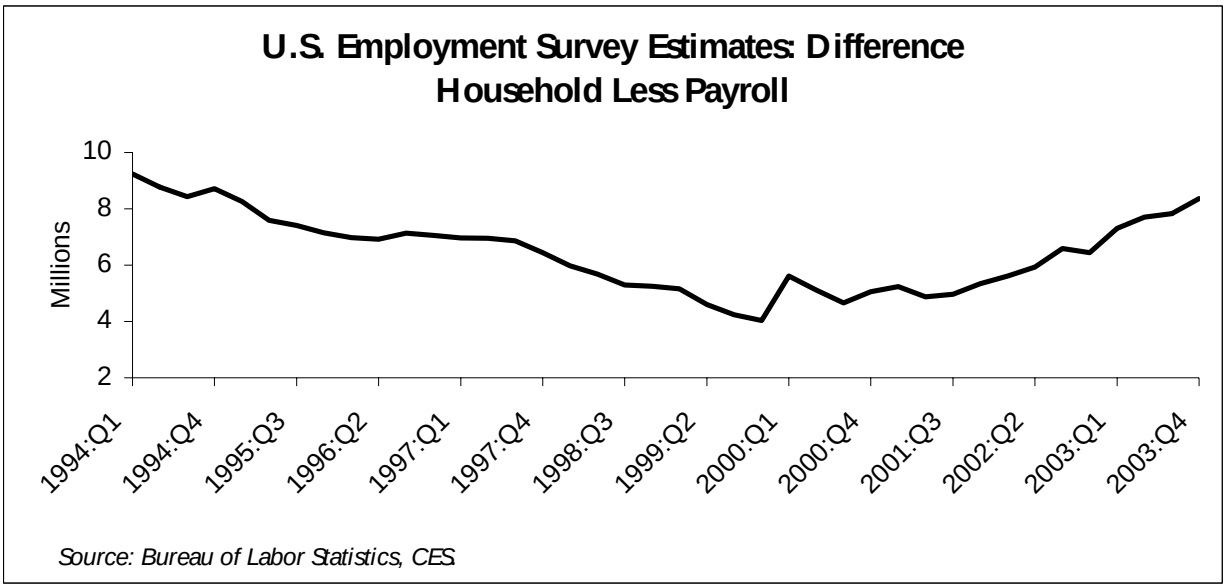
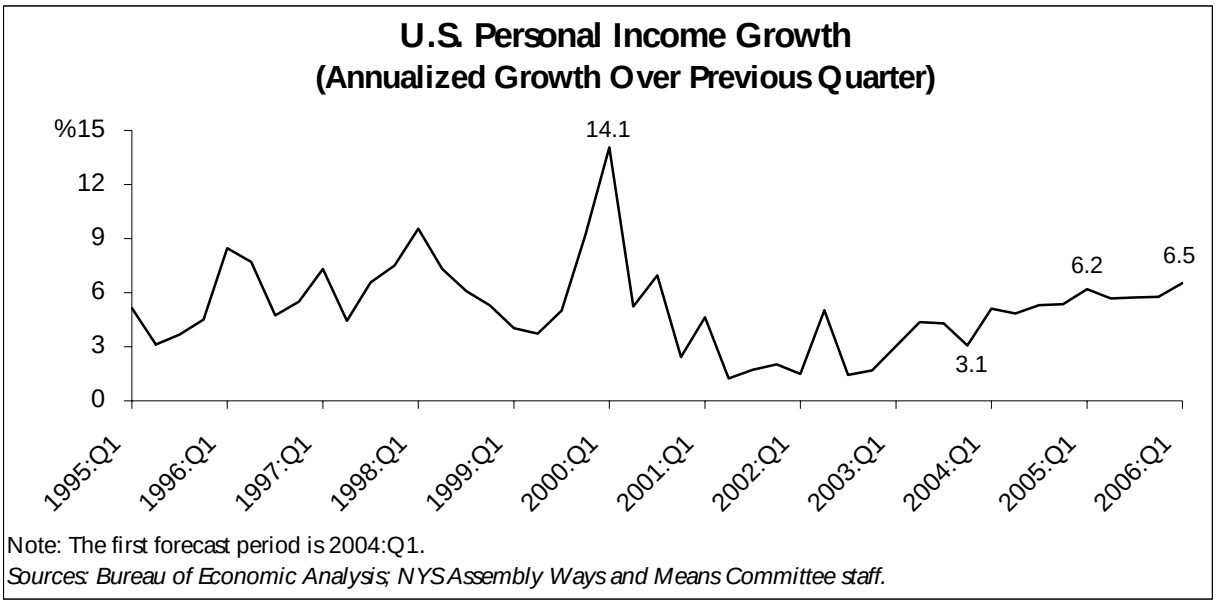


Figure 25

The differences between the establishment and household surveys for New York State also require interpretation. The difference between employment by household and employment by place of work is bound to be large on account of the significant number of commuters from outside the State, particularly in New York City. These estimates are also affected by the relocation of firms and workers following September 11th. Since wages and therefore tax revenue are related to where people work, this gives another reason why the Payroll Survey may be preferable for purposes of this report.

Personal Income

The Ways and Means Committee staff forecasts that most of personal income's components are expected to remain strong or grow faster during the current forecast period. Personal income will grow 4.6 percent in 2004 and 5.7 percent in 2005, after an increase of only 3.1 percent in 2003 (see Figure 26).



Note: The first forecast period is 2004:Q1.
Sources: Bureau of Economic Analysis; NYS Assembly Ways and Means Committee staff.

Figure 26

Wages and salaries income is the largest component of total personal income and accounted for around 55 percent in 2003. With a gradual improvement expected in payroll employment as well as average wages, this component is forecast to grow 4.0 percent year-over-year during 2004 and 6.1 percent in 2005. Wages and salaries income increased only 2.2 percent in 2003. Proprietor's income is expected to grow 8.3 percent in 2004 and 7.8 percent in 2005, due in part to the growth in self-employment that has been fueled by the jobless recovery. Employees have been forced to find ways of earning money such as taking outsourcing jobs, some of which are classified as self-employment. Benefits income, or "employer's contributions to employee pension and insurance funds," is forecast to increase 6.8 percent in both 2004 and 2005, due partially to rising healthcare costs, which have jumped up significantly in recent years.

Dividend income is forecast to increase in 2004 and 2005 by 7.1 percent and 6.1 percent, respectively. Much of this increase can be attributed to a continued improvement in the stock market and a reduction in the dividend tax, which likely induces more investors to get interested in dividend-paying equities and which in turn may lead corporations to pay more dividends. With relatively low interest rates still expected during 2004, interest income is forecast to continue to decline year-over-year in 2004 by 1.8 percent and then grow by 2.3 percent in 2005. As a record level of mortgage refinancing activity entailed a large amount of financing costs in 2003,[54] rental income, a comparatively

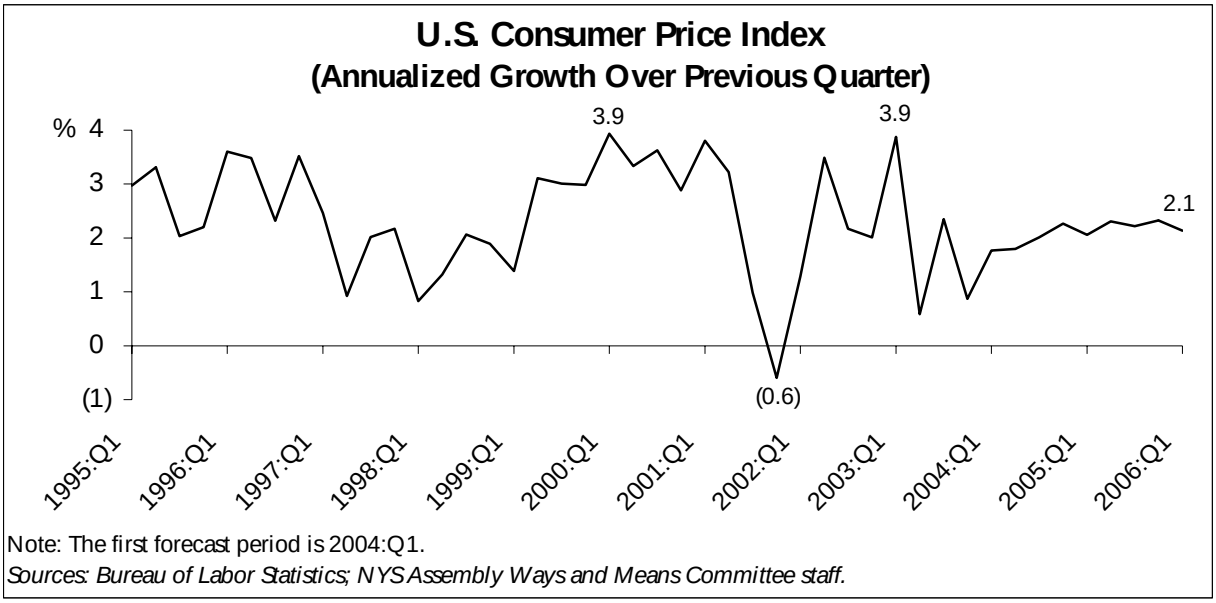
[54] BEA's computation of imputed rental income (or the so-called "rent on owner-occupied dwellings") calls for subtracting depreciation, hazard insurance premiums, maintenance costs, and financing costs from rent received.

small component of personal income, fell by 5.3 percent in 2003, the largest decline since 1986. With refinancing activity expected to subdue, however, rental income is expected to grow by 15.4 percent in 2004 and 5.3 percent in 2005.

With unemployment expected to continue to decrease as economic recovery progresses, transfer income is forecast to slow to 5.2 percent in 2004 and further down to 4.3 percent in 2005, following a growth of 8.4 percent during 2002 and 6.5 percent in 2003.

Prices

The Assembly Ways and Means Committee staff forecasts that inflation will stay low throughout 2004 and 2005, with prices as measured by the Consumer Price Index (CPI) growing by only 1.7 percent and 2.2 percent, respectively (see Figure 27). Inflation has been quite low recently with CPI growth of 2.3 percent in 2003 compared to an average of 3.0 percent in the 1990s and 5.6 percent in the 1980s. Several factors may be contributing to this low inflation. Higher productivity allows firms to reduce costs, which in turn can reduce product prices, helping to control inflation. Also, slack on the supply side of the economy (too much supply) could be keeping inflation in check. If there are more goods available than demanded, this will exert downward pressure on prices. Inexpensive imported consumer goods have also helped to keep overall consumer prices from rising.



Note: The first forecast period is 2004:Q1.
Sources: Bureau of Labor Statistics; NYS Assembly Ways and Means Committee staff.

Figure 27

The price outlook in the near future must take into consideration the possibility of increases in energy prices, among other factors. The Committee

staff predicts oil prices (measured by the U.S. refinery's average acquisition price of imported oils) will eventually drop to $25 in the second quarter of 2004. Oil prices are forecast to stay around that level for the rest of the forecast period. However, rising oil prices, which would result in increasing gasoline prices, would add upward pressure on prices.

Oil prices carry a great deal of uncertainty. Contributing to this uncertainty are fluctuations in energy demands, uncertainty regarding the rebuilding of Iraq, and Organization of Petroleum Exporting Countries (OPEC) actions of either tightening or easing supply. OPEC unexpectedly cut supply on November 1, 2003, leading to rising prices.

In 2002 and early 2003 there was some discussion of the danger of deflation. Deflation represents a danger to consumption spending, as consumers may tend to expect even lower prices and postpone spending. Deflation is also a risk because declining asset prices makes loans riskier and causes a negative wealth effect. Although higher inflation is not predicted for the near future, the Committee staff maintains that the danger of deflation is low. Economic growth that is forecast to remain in excess of potential output in both 2004 and 2005 will mitigate the recent downward pressure on the general price level. Falling U.S. dollar values will also likely take out some of the downward pressure by causing the prices of imported goods to rise or at least stop falling. Signs of rising prices of some world commodities have also been observed, due to natural disasters in some parts of the world as well as rising demand for raw materials driven by a brighter global economic outlook. The Federal Open Market Committee seems to have sensed this subtle change in the inflation/deflation landscape when it announced that "The probability of an unwelcome fall in inflation has diminished in recent months and now appears almost equal to that of a rise in inflation" in the recent statement released after its January 27-28, 2004, meeting.[55]

Interest Rates

The Federal Reserve cut the federal funds rate at their June 25, 2003, meeting from 1.25 percent to 1.0 percent. Since the June 2003 meeting, the Fed has remained neutral, leaving the target rate at 1.0 percent. It is assumed for the present forecast that as the recovery starts to take hold, the Fed will not make any further rate reductions.

The delay in the economic recovery (particularly in investment spending), the possibility of a drop in the inflation rate, the continuing decline of the stock market, and the effects of September 11th were all key concerns for 2002. There are more indications now that an economic recovery is underway and

[55] Federal Reserve Board, Press Release, January 28, 2004.

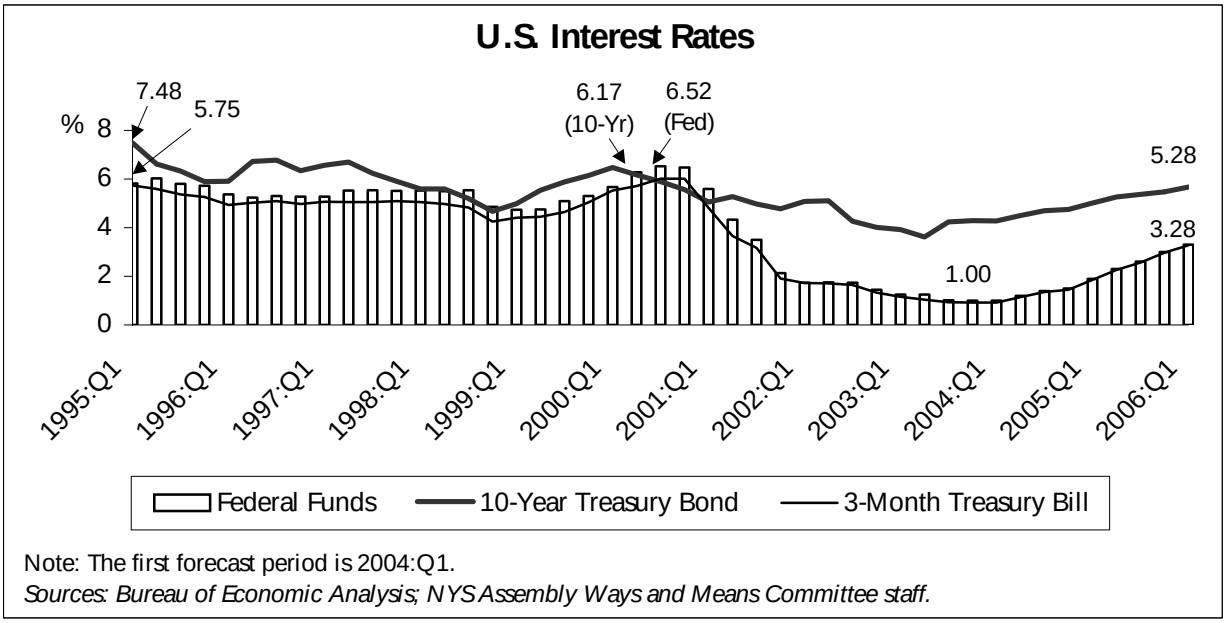
gathering momentum. The decline in equity prices was reversed in early 2003, and investment spending contributed significantly to the growth of GDP in the second quarter of 2003. A recent statement from the Federal Reserve noted that the economic recovery has taken hold and that the inflation rate is stable.[56] While the Federal Open Market Committee decided to keep the target rate for federal funds at 1.0 percent at the January 28, 2004, meeting, many economists believe that the Federal Reserve is now preparing to raise interest rates.

Economic expansion and the increase in the federal budget deficit will contribute to a rise in long-term interest rates in the next few years. Recent estimates indicate that an increase in the deficit-GDP ratio by one percentage point leads to an increase in long-run interest rates of between 0.25 to 0.6 percentage point.[57] However, the effect of deficits on the interest rate depends on the general set of economic circumstances, including monetary policy.

The three-month Treasury bill rate is expected to increase from 0.92 percent in the fourth quarter of 2003 to 1.45 percent in the fourth quarter of 2004. The ten-year Treasury bond rate is forecast to increase from 4.29 percent in the fourth quarter of 2003 to 4.75 percent in the fourth quarter of 2004 and 5.48 percent in the fourth quarter of 2005 (see Figure 28). While short-term interest rates have fallen in response to Federal Reserve policy, long-term rates have not declined as sharply. While the three-month Treasury bill rate has declined 5.1 percentage points from 6.0 percent in the fourth quarter of 2000 to 0.9 percent in the fourth quarter of 2003, the ten-year Treasury bond yield has declined much less, declining from 5.6 percent in the fourth quarter of 2000 to 4.3 percent in the fourth quarter of 2003. This has been an impediment to the economic recovery process. The Treasury yield spread, measured by the difference between the ten-year Treasury bond and the three-month Treasury bill, is an indicator of how the short-term rate is expected to change in future years, with higher spread numbers indicating that short-term rates are expected to rise. The yield spread turned positive in 2001 and remained high in 2002 and 2003.

[56] Ibid.

[57] Thomas Laubach, *New Evidence on the Interest Rate Effects of Budget Deficits and Debt*, Finance and Economics Discussion Series 2003-12 (Washington: Board of Governors of the Federal Reserve System, 2003); and Peter R. Orszag, *Budget Deficits and Long-Term Economic Performance*, Brookings Institution and Tax Policy Center, September 2003.



Note: The first forecast period is 2004:Q1.

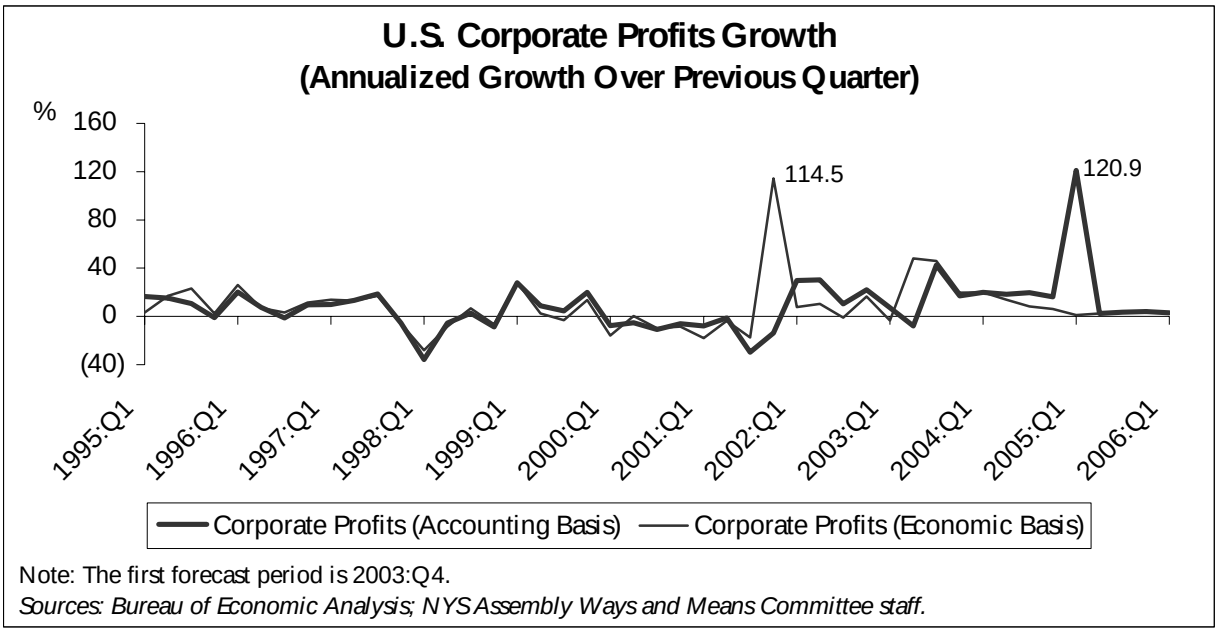
Sources: Bureau of Economic Analysis; NYS Assembly Ways and Means Committee staff.

Figure 28

Corporate Profits

Corporate profits (on a pre-tax, or accounting basis) have been quite volatile in recent quarters (see Figure 29). This was due mainly to a recent increase in the volatility of capital depreciation adjustments (the so-called "bonus depreciation") as well as the volatility of the underlying economic profits that are directly related to economic factors rather than accounting rules.[58]

[58] Accounting profits (also known as "before-tax profit" in NIPA Table 1.12) are derived from economic profits, which are computed based on net national output. Since net national output is gross national output minus capital depreciation, a decline in capital depreciation, with all other factors held equal, would result in larger net national output and larger economic profits. Two adjustments are made to economic profits to arrive at accounting profits: one is capital depreciation adjustment and the other is inventory valuation adjustment. These adjustments convert capital depreciation and inventory withdrawals from historical cost to replacement cost, which is the measure used in the BEA's national income and product accounts.



Note: The first forecast period is 2003:Q4.

Sources: Bureau of Economic Analysis; NYS Assembly Ways and Means Committee staff.

Figure 29

Due in large part to a big decline in capital depreciation in the fourth quarter of 2001, economic profits rose a whopping $150 billion or at an annualized rate of 114.5 percent from the previous quarter.[59] Economic profits rose again in the second quarter of 2003 by $95.7 billion or at an annualized rate of 48.1 percent. It was due in part to a decline in capital depreciation as well as faster growth in output relative to labor and interest costs. A decrease in rental costs also contributed to the economic profits spurt. Despite these large increases in corporate profits on an economic basis, corporate profits on an accounting basis declined 13.8 percent and 7.9 percent, respectively, in those two quarters. The main reason for the recent decline in accounting profits was that U.S. corporations were allowed a 30 percent bonus first-year depreciation deduction for qualified equipment, software, and leasehold property under the provisions in the Job Creation and Worker Assistance Act of 2002. The additional first-year deduction was raised to 50 percent in the Jobs and Growth Tax Relief Reconciliation Act of 2003. Consequently, corporations wrote-off $187.9 billion as depreciation in the fourth quarter of 2001 and $229.2 billion in the second quarter of 2003.

Despite the recent surge in volatility, corporate profits both on an accounting basis and an economic basis have been improving since 2001 when profits had the largest year-over-year decline (9.9 percent and 5.8 percent, respectively) in nineteen years. Economic profits are estimated to have increased 17.5 percent year-over-year during 2003. Profits will grow 20.4 percent

[59] Capital depreciation usually increases over time as physical capital stock accumulates. But as a large amount of capital stock was destroyed by the September 11th terrorist attacks, capital depreciation decreased in the fourth quarter of 2001.

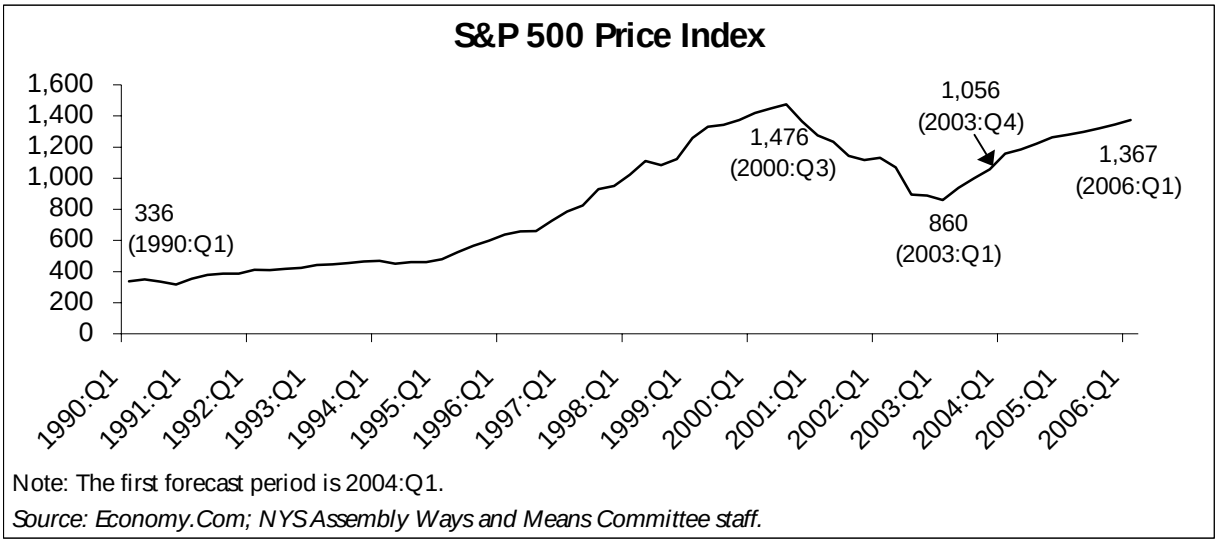
during 2004 and then slow to 4.4 percent during 2005. The large improvement in 2003 and 2004 is due to robust growth in productivity, among other reasons. Accounting profits are estimated to have risen 13.0 percent during 2003 and are forecast to grow 19.4 percent during 2004 due to robust growth in economic profits. As the 50 percent bonus depreciation deduction is set to expire on January 1, 2005, accounting profits are forecast to surge 120.9 percent in the first quarter of 2005, resulting in a 30.9 percent year-over-year growth in 2005.[60]

Stock Market

The stock market, measured by the S&P 500 index, is estimated to have declined 3.2 percent year-over-year in 2003 following a 16.5 percent decline in 2002. However, after the first quarter the stock market grew every quarter in 2003 compared to the prior quarter. In the second quarter of 2003, the stock market rose 9.1 percent followed by 6.7 percent growth in the third quarter and 5.6 percent growth in the fourth quarter. This rebound is due to improving corporate profits and investor confidence. The S&P 500 index is forecast to grow 23.9 percent year-over-year during 2004 and 8.6 percent in 2005. Although the 2004 forecast appears aggressive, it is not when the growth so far is taken into account. The 2004 forecast of the S&P 500 level implies a growth of 7.7 percent from 1,145.8 where it stood on February 13, 2004, to the fourth quarter of 2004.

After rising rapidly throughout most of the 1990s and into 2000, stock prices as measured by the S&P 500 index declined sharply from late 2000 until early 2003. The decline took away about half of the stock price gains experienced since 1990 and contributed significantly to the 2001 recession and slow recovery. Since the first quarter of 2003, stock prices have once again been rising, and they are expected to continue to rise throughout the forecast period. However, even by early 2006 stock prices are not expected to return to the former peak experienced in 2000 (see Figure 30).

[60] Although the forecast assumes that the bonus depreciation deduction will expire as scheduled, it is possible that the federal government will extend the bonus depreciation deduction, which would reduce 2005 accounting profits.



Note: The first forecast period is 2004:Q1.

Source: Economy.Com; NYS Assembly Ways and Means Committee staff.

Figure 30

Securities industry activity is closely tied to the stock market and is expected to experience a similar trend. Revenue and profits declined between the first quarter of 2000 and early 2003. Employment and wages for the industry have also been generally declining. Recently however, the industry has experienced growth in profit, and revenue is expected to begin growing as well soon. It is expected that the securities industry will regain revenue and profits followed by growth in employment and wages. Nevertheless, the industry is unlikely to return to its peak wages for quite some time.

Comparison with Other Forecasting Groups

The Assembly Ways and Means Committee staff forecast for overall national economic growth in 2004 is 4.7 percent, 0.1 percentage point higher than the February 2004 Blue Chip Consensus forecast. Economy.com's forecast is 4.3 percent, Global Insight's forecast is 4.8 percent and the Division of the Budget's forecast is 4.6 percent (see Table 6). The February 2004 Blue Chip Consensus forecast is the average of fifty-three forecasters. Twenty-four of these forecasters, or 45.3 percent, have 2004 GDP growth forecasts at least as high as the Committee staff forecast.

Table 6

U.S. Real GDP Forecast Comparisons
(Percent Change)

	Actual 2002	Estimate 2003	Forecast 2004	Forecast 2005
Ways and Means	2.2	3.1	4.7	3.7
Blue Chip Consensus	2.2	3.1	4.6	3.7
Division of the Budget	2.2	3.1	4.6	3.5
Economy.com	2.2	3.1	4.3	2.7
Global Insight	2.2	3.1	4.8	3.8

Sources: NYS Assembly Ways and Means Committee staff; Blue Chip Economic Indicators, February 2004; NYS Division of the Budget, New York State 2004-05 Executive Budget with 30-Day Changes, February 12, 2004; Global Insight, U.S. Executive Summary, February 2004, < http://www.globalinsight.com> ; Economy.com, Forecast Tables, January 2004, < http://www.economy.com> .

The Ways and Means Committee staff forecasts 3.7 percent economic growth for 2005, which is the same as the Blue Chip Economic Consensus forecast. Economy.com's forecast is 2.7 percent, the Division of the Budget's forecast is 3.5 percent, and Global Insight's forecast is 3.8 percent. Thirty-three of the fifty Blue Chip Consensus forecasters, or 66.0 percent, have 2005 GDP growth forecasts at least as high as the Committee staff's forecast.

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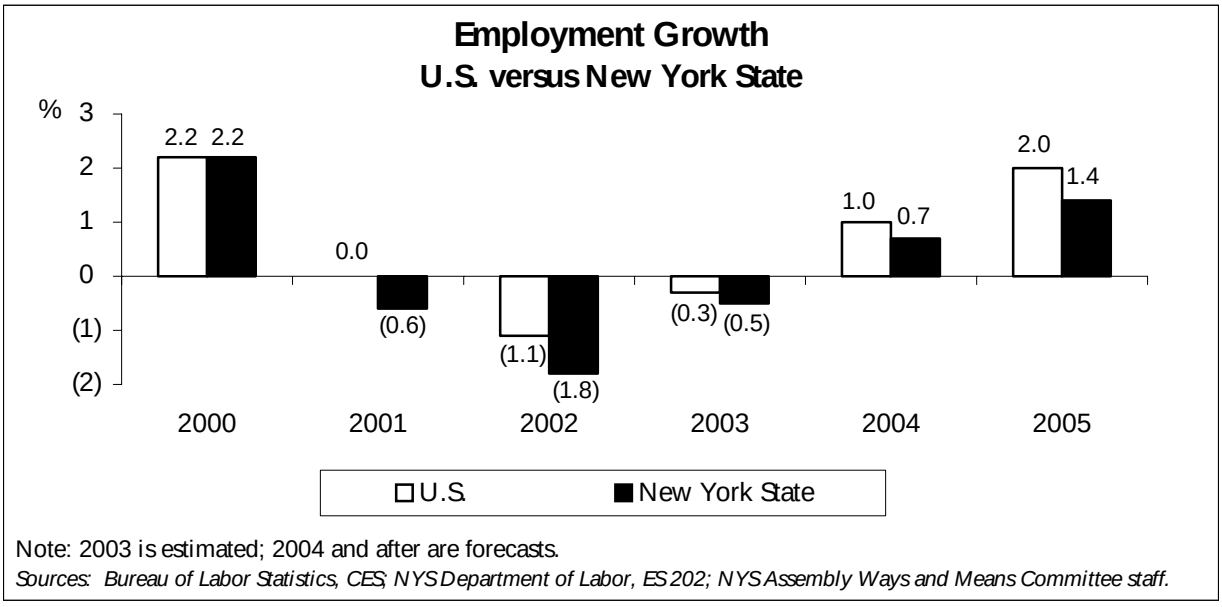
The New York State economy declined more severely than the nation during the 2001 recession. Although recovering, the State economy is rebounding slowly and is still suffering from employment losses. However, employment and wages should rebound in 2004, picking up the pace in 2005.

Employment

The New York State economy lost 148,800 jobs or 1.8 percent in 2002 (see Figure 31). In the first quarter of 2002 alone, almost a quarter million jobs were lost; this was the largest loss in any quarter since the first quarter of 1992.



Note: 2003 is estimated; 2004 and after are forecasts.

Sources: Bureau of Labor Statistics, CES; NYS Department of Labor, ES 202; NYS Assembly Ways and Means Committee staff.

Figure 31

The NYS Assembly Ways and Means Committee staff estimates that the State economy continued to lose jobs (over the same period of the previous year) until the fourth quarter of 2003, resulting in a year-over-year decline of 44,800 jobs or 0.5 percent in 2003. New York State nonfarm employment is forecast to rebound during 2004, growing 0.7 percent year-over-year and then 1.4 percent in 2005. This growth in employment for New York State through 2005 is expected to be slower than the employment growth experienced at the national level.

The State employment losses experienced in 2002 were spread across most sectors of the New York economy, with the information[61] and manufacturing sectors being hit particularly hard. Figure 32 displays the sectors in which there were employment losses (see also Table 7 on the following page). The loss of jobs in the manufacturing sector, transportation, and wholesale trade may be a part of the long-run processes of change in these sectors. The loss of employment in FIRE was the result of the cyclical downturn, the September 11th attack, and the long-run dispersion of securities industry employment. The job losses in professional services as well as administrative services were most likely the result of the recession and technological changes in the service industry. The job loss in the information sector was caused by losses in telecommunications, publishing, motion pictures, and internet service providers.

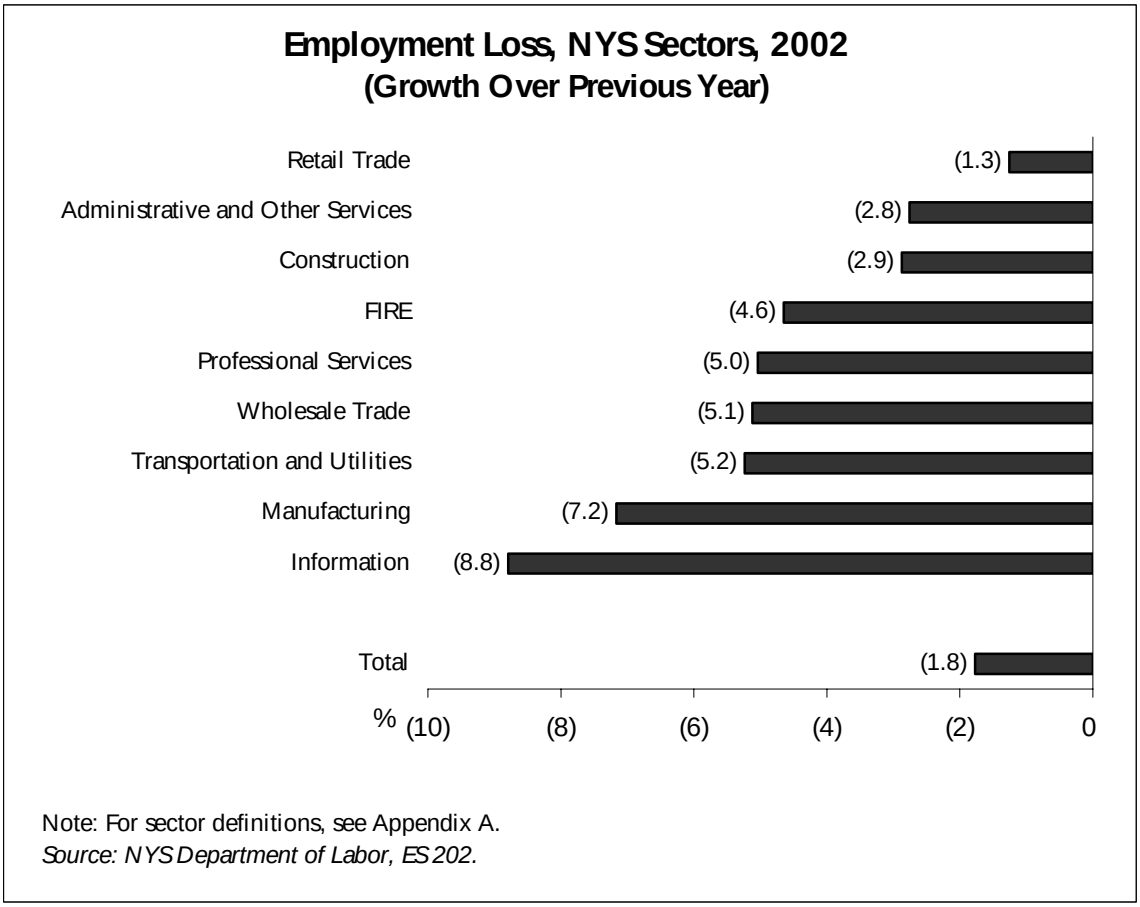


Figure 32

[61] Within the information sector, publishing accounted for 32.1 percent of employment, telecommunications for 25.4 percent, motion pictures for 18.4 percent, broadcasting for 14.3 percent, and internet service providers for 10 percent in 2002.

Table 7

Employment and Wage Change (Over Previous Year), 2002
New York State

	Employment		Wages	
	Percentage	Level	Percentage	Level ($ in Millions)
Total	**(1.8)**	**(148,751)**	**(2.6)**	**($10,295.8)**
Management	2.3	2,682	8.5	1,055.3
Education and Health	2.2	29,238	5.3	2,363.2
Government	1.4	20,082	3.6	2,101.2
Leisure and Hospitality	0.5	2,978	1.8	241.7
Retail Trade	(1.3)	(10,897)	1.7	366.9
Administrative and Other Services	(2.8)	(20,639)	0.0	5.1
Construction	(2.9)	(9,467)	(0.5)	(81.7)
Transportation and Utilities	(5.2)	(14,268)	(0.7)	(76.1)
Manufacturing	(7.2)	(50,432)	(3.5)	(1,090.3)
Wholesale Trade	(5.1)	(19,095)	(4.4)	(910.9)
Professional Services	(5.0)	(27,023)	(5.1)	(1,881.3)
Information	(8.8)	(28,475)	(10.0)	(2,188.3)
FIRE	(4.6)	(34,198)	(12.8)	(10,645.1)

Source: NYS Department of Labor, ES 202.

Estimates for 2003 indicate that the loss of jobs continued for many sectors, although at a slower pace than in 2002. Sectors showing a turnaround in their rate of decline in 2003 and achieving positive job growth by 2004 include transportation and utilities, and professional services. The manufacturing and information sectors are expected to experience job loss through 2005. However, the decline slowed in manufacturing to 5.7 percent in 2003 from a 7.2 percent decline in 2002, and the information sector's decline slowed to 7.3 percent from 8.8 percent in 2002 (see Table 8).

Table 8

ECONOMIC INDICATORS
New York State

		Actual 2002	Estimate 2003	Forecast 2004	Forecast 2005
Personal Income	***Percent Change***	**0.2**	**2.7**	**5.2**	**5.3**
	Level Change	1.2	18.3	35.7	38.3
Wages and Salaries	***Percent Change***	**(2.6)**	**1.2**	**4.8**	**5.2**
	Level Change	(10.3)	4.5	18.6	21.2
Total Employment	***Percent Change***	**(1.8)**	**(0.5)**	**0.7**	**1.4**
	Level Change	(148.8)	(44.8)	59.8	119.4
Government	***Percent Change***	**1.4**	**(0.2)**	**(0.2)**	**0.3**
	Level Change	20.1	(2.5)	(2.5)	4.1
Education & Health	***Percent Change***	**2.2**	**2.3**	**3.1**	**2.8**
	Level Change	29.2	30.9	43.7	40.7
Trade	***Percent Change***	**(2.4)**	**(0.4)**	**0.7**	**1.9**
	Level Change	(30.0)	(4.6)	8.5	23.6
Other Services[1]	***Percent Change***	**(2.8)**	**(0.6)**	**1.5**	**2.1**
	Level Change	(20.6)	(4.1)	10.9	15.4
FIRE[2]	***Percent Change***	**(4.6)**	**(1.4)**	**(0.1)**	**0.5**
	Level Change	(34.2)	(10.1)	(0.4)	3.6
Manufacturing[3]	***Percent Change***	**(7.2)**	**(5.7)**	**(3.4)**	**(1.7)**
	Level Change	(50.4)	(37.0)	(20.9)	(10.0)
Leisure & Hospitality	***Percent Change***	**0.5**	**1.0**	**1.9**	**2.2**
	Level Change	3.0	6.7	12.5	14.3
Professional Services	***Percent Change***	**(5.0)**	**(1.0)**	**1.8**	**2.7**
	Level Change	(27.0)	(4.8)	9.0	14.1
Construction	***Percent Change***	**(2.9)**	**(0.5)**	**1.8**	**2.2**
	Level Change	(9.5)	(1.5)	5.7	7.1
Information	***Percent Change***	**(8.8)**	**(7.3)**	**(3.4)**	**(1.0)**
	Level Change	(28.5)	(21.6)	(9.2)	(2.6)
Transp. & Utilities[4]	***Percent Change***	**(5.2)**	**(0.7)**	**1.3**	**2.3**
	Level Change	(14.3)	(1.9)	3.3	6.1
Mgmt of Companies	***Percent Change***	**2.3**	**0.7**	**1.5**	**2.3**
	Level Change	2.7	0.8	1.8	2.8
CPI	***Percent Change***	**2.5**	**3.1**	**2.5**	**2.4**

Note: Boldface numbers represent percent changes and regular type numbers represent level changes. Income and wages are in billion dollars. Employment is in thousands.

[1] Including Administrative, Support, and Waste Management Services.

[2] Financial Activities including Finance, Insurance, Real Estate, Rental, and Leasing.

[3] Including Mining.

[4] Transportation, Warehousing, and Utilities.

Sources: Bureau of Economic Analysis; NYS Department of Labor, ES 202; NYS Assembly Ways and Means Committee staff.

The 1990-91 and 2001 Recessions

Although it is too early to assess the full impact of the 2001 recession on New York State employment, it is still useful to contrast what is known about the two most recent recessions. As of the second quarter of 2003 (the last quarter for which ES 202 data are available), State total employment had declined for ten quarters compared to a decline of fifteen quarters following the start of the 1990-91 recession (see Table 9). In addition as of the second quarter of 2003, the fall in NYS total employment had also been less severe at 3.8 percent or 315,500 jobs, (as measured from the fourth quarter 2000 employment peak), compared to the decline of 6.7 percent or 539,700 jobs seen during the 1990-91 recession.

Table 9

NYS Job Loss

(Based on Turning Points in Total Employment)

Peak to Trough	Duration (Quarters)		Depth				
			Total	Manufacturing	Services	Construction	Government
1981:Q3-1982:Q4	5	***Percent Change***	(0.7)	(9.2)	1.1	4.2	0.6
		Level Change	(49.3)	(111.2)	46.3	9.0	6.7
1989:Q1-1992:Q4	15	***Percent Change***	(6.7)	(18.0)	(4.5)	(30.0)	(1.4)
		Level Change	(539.7)	(185.9)	(235.3)	(98.8)	(19.7)
2000:Q4-2003:Q2	10	***Percent Change***	(3.8)	(17.0)	(3.4)	(4.7)	2.0
		Level Change	(315.5)	(125.8)	(201.9)	(15.3)	27.4

Note: Depth is defined as the trough level minus the peak level. Level change is in thousands. Data are seasonally adjusted by the Ways and Means Committee staff. Sectors will not add to total due to an unclassifed category not shown.

Source: NYS Department of Labor, ES 202.

The manufacturing and services sectors played a significant role in the intensity and duration of job loss during both recessions, declining by similar percentages in each peak to trough time period. New York State's manufacturing sector was hit harder than the rest of the nation both during the 1990s expansion and the 2001 recession. New York had the sixth largest percentage decline in manufacturing among all states, and the second largest absolute decline behind North Carolina. Of all large and neighboring states, New York had the largest decline (see Table 10).

Table 10

Manufacturing Employment Decline of Nearby and Large States
1995 to 2003

State	Decline (Percent)	Rank in Nation
New York	**(3.3)**	**6**
New Jersey	(2.8)	9
Massachusetts	(2.7)	12
Ohio	(2.4)	16
Connecticut	(2.4)	14
Pennsylvania	(2.3)	18
Florida	(1.8)	25
Texas	(1.0)	39
California	(0.9)	42

Note: Data may be revised (possibly significantly) each month. Data source and therefore growth rates also differ from the ES 202 data used elsewhere in this report for New York State employment. Rankings are among all states plus Washington DC.

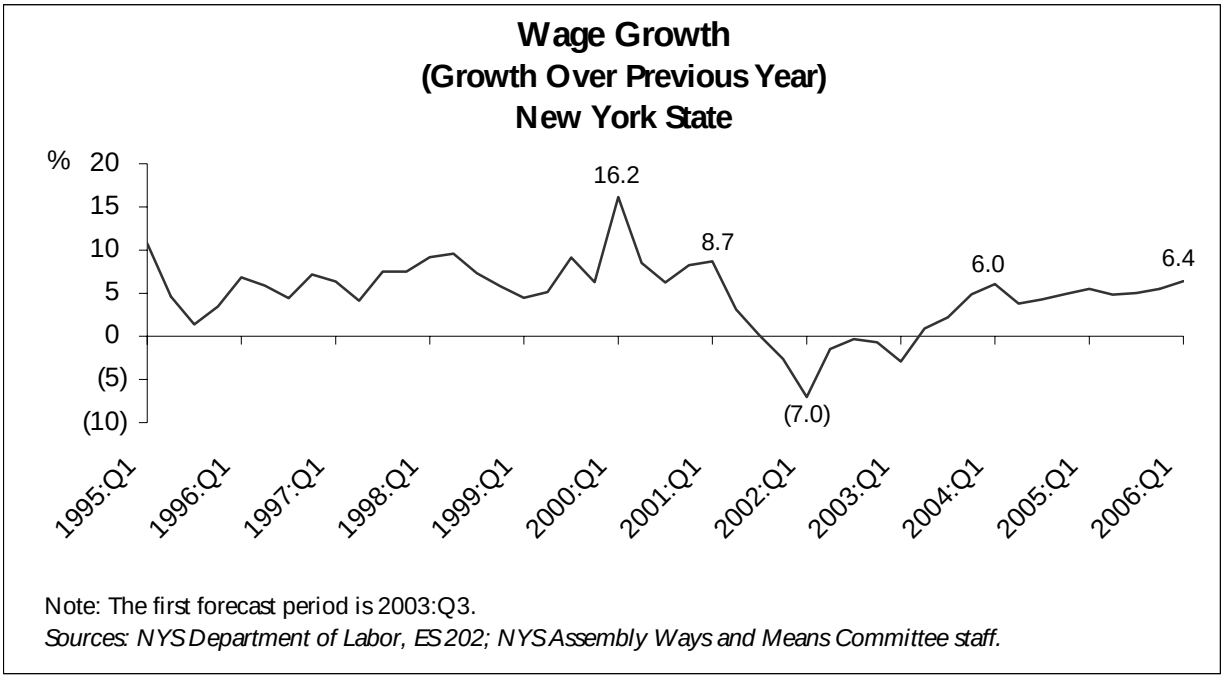
Source: Bureau of Labor Statistics, CES

Construction and government sectors offer the clearest picture as to employment differences between the two recessions. As previously discussed, the U.S. construction sector was hit especially hard during the 1990-91 recession (see the U.S. employment section on page 24). In New York State, the loss of construction jobs was even more severe than the national trend, as the State construction sector lost 30.0 percent of its jobs (as measured from the first quarter of 1989). In addition, employment in the government sector declined by 1.4 percent or 19,700 jobs, further exacerbating the fall in State total employment.

In contrast, during the most recent recession, not only did the construction sector fare comparably better, but gains in government employment offset (in the aggregate state total) the declines that did occur in construction. As of the second quarter of 2003, the State had lost 15,300 construction jobs but had gained 27,400 jobs in the government sector. As a result, the government sector was able to lessen the State's total decline in employment whereas in the 1990-91 recession the reverse was true. The decline in construction was certainly more severe in the 1990-91 recession and the further loss of government sector jobs added to the intensity of aggregate job loss.

Wages

New York State wage growth has slowed quite rapidly since the first quarter of 2001, when wages grew 8.7 percent. The first quarter of 2002 was particularly bad with a decline of 7.0 percent (see Figure 33). Overall, State wages declined 2.6 percent year-over-year during 2002, the worst decline since 1938.[62]

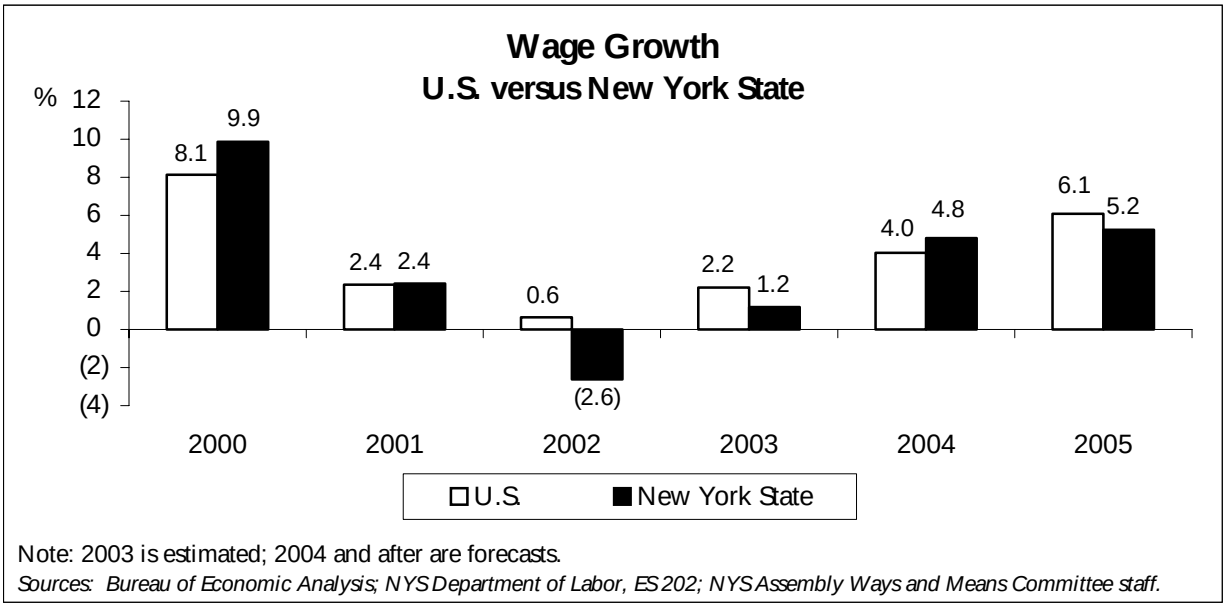


Note: The first forecast period is 2003:Q3.
Sources: NYS Department of Labor, ES 202; NYS Assembly Ways and Means Committee staff.

Figure 33

In 2002, New York State wages experienced a severe decline, while at the national level wages increased 0.6 percent. The Committee staff estimates that the State made a modest recovery in 2003 with a wage growth of 1.2 percent compared to 2.2 percent for the nation. Although still sluggish compared to historic growth rates, this is a significant improvement from 2002. This wage growth was driven by an impressive rebound on Wall Street as well as slower declines in employment. In 2004, New York State wages are forecast to grow 4.8 percent, a bit faster than the national growth rate of 4.0 percent. The State is likely to surpass the nation in wage growth in 2004 due to the fact that while both New York and the nation are going through slow employment recovery, the State benefits disproportionately more from improvement on Wall Street in 2004 than the nation does. As employment is forecast to continue to gain in 2005, State wages will also improve further in 2005 growing 5.2 percent year-over-year (see Figure 34).

[62] Though the wage growth is computed with ES 202 data, the historical comparison is based on Bureau of Economic Analysis data because of the shorter history of the ES 202 data series.



Note: 2003 is estimated; 2004 and after are forecasts.

Sources: Bureau of Economic Analysis; NYS Department of Labor, ES 202; NYS Assembly Ways and Means Committee staff.

Figure 34

City, State, and National Wage Growth

Recovery in State wages has been significantly slower than it was following the 1990-91 recession. This is due in large part to the fact that the State financial sector, which grew more and more important to New York's economy in terms of its wage share, got hit disproportionately hard as a result of the stock market bubble bursting and corporate accounting and investment banking scandals.[63] The September 11th terrorist attack struck the center of the State's financial sector.

In the first quarter of 2003 the growth rates of employment and wages in New York City were negative, as they were in the first quarter of 2002. However, the change in the growth rate was large; New York City employment fell 4.2 percent in the first quarter of 2002, while it only fell 0.8 percent in the first quarter of 2003. New York City wages fell 11.1 percent in the first quarter of 2002 year-over-year and 5.8 percent in the first quarter of 2003. The change in the growth rate is much larger over time in the City compared to other regions in New York and in the United States (see Figure 35 and Figure 36).

[63] The securities industry's share in New York State total wages and salaries more than doubled from 5.0 percent in 1990 to 12.4 percent in 2001.

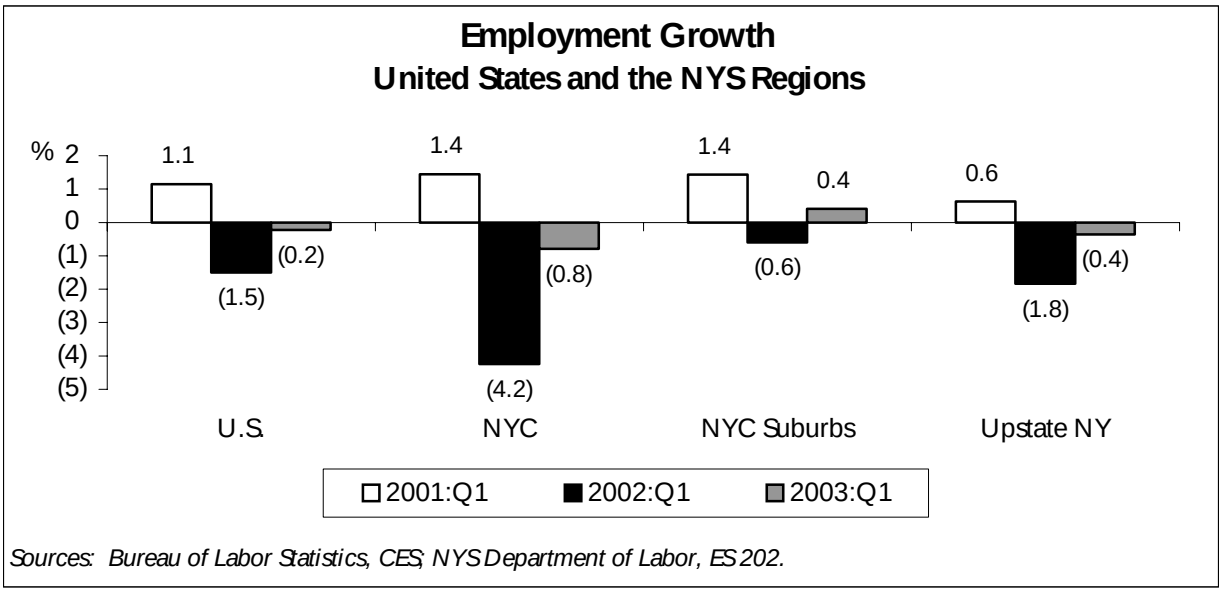


Figure 35

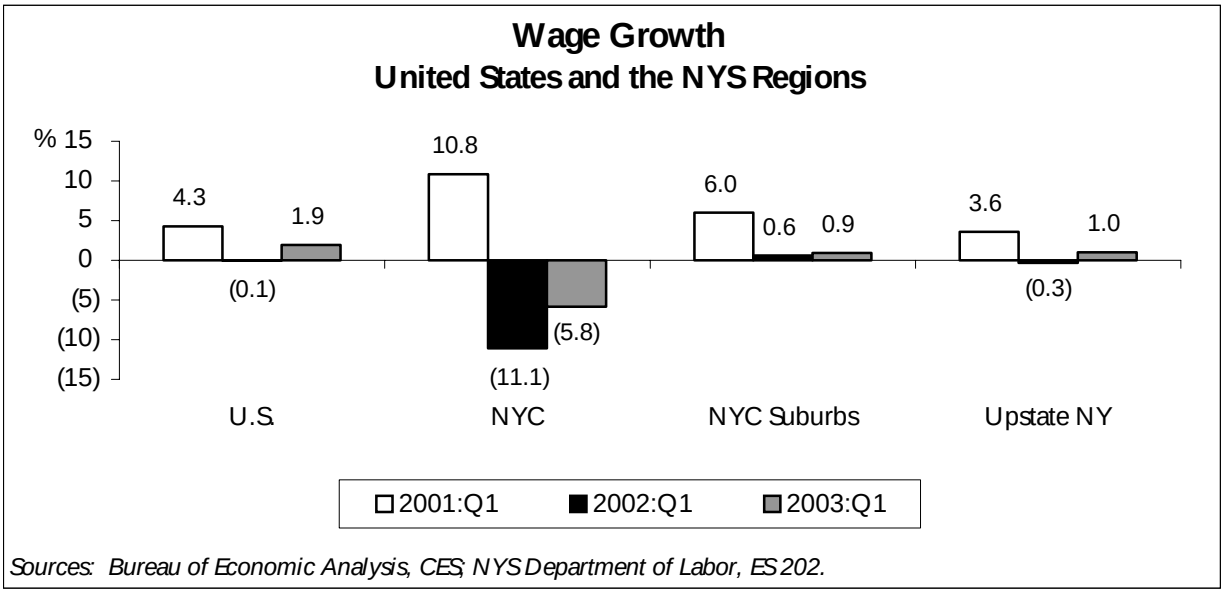
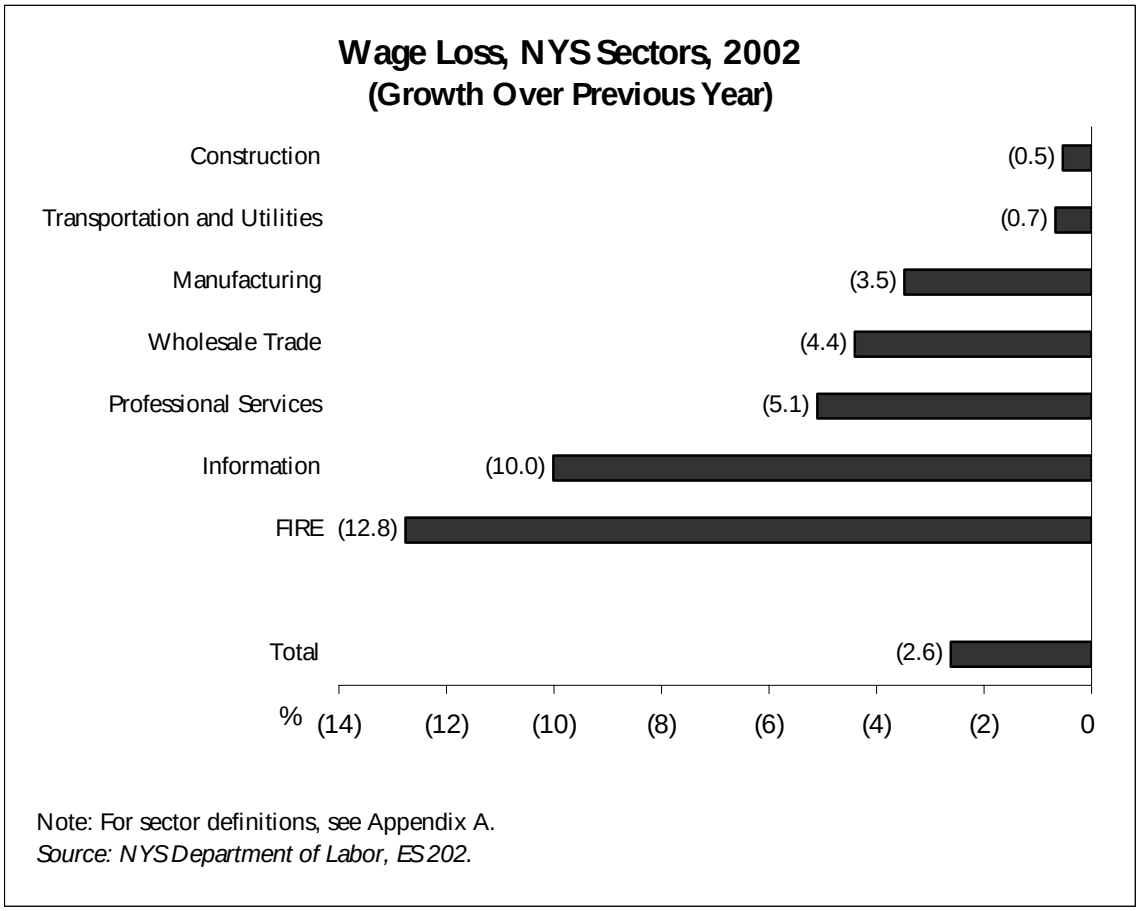


Figure 36

Sectoral Wage Loss

Wages in the financial services industry were the most affected of any sector in 2002, with a 12.8 percent wage loss in 2002 (see Figure 37). The information sector lost 10.0 percent and bore the second largest wage loss. Wage losses in publishing, telecommunications, and motion pictures and broadcasting contributed to the large wage loss in the information sector. Those sectors with high average wages (such as finance, information, and professional services) suffered wage losses at rates that were equal to or higher than their

rates of employment loss. This is consistent with the idea that in these industries the jobs that were lost were relatively well paying. In those sectors in which employment has stagnated or declined over the last two decades (such as manufacturing, wholesale trade, and transportation) aggregate wages declined at significant rates as well.



Note: For sector definitions, see Appendix A.
Source: NYS Department of Labor, ES202.

Figure 37

Variable Compensation

Variable compensation is the most volatile component of State wages and plays a particularly important role in the movements of financial sector wages over time (see Figure 38).[64]

[64] There is no known series of data for state or national variable compensation. The NYS Assembly Ways and Means Committee staff estimates variable compensation based on seasonal variations in wage patterns. These seasonal patterns are broken down by sector (at the NAICS six-digit level) to improve the precision of the estimate. 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

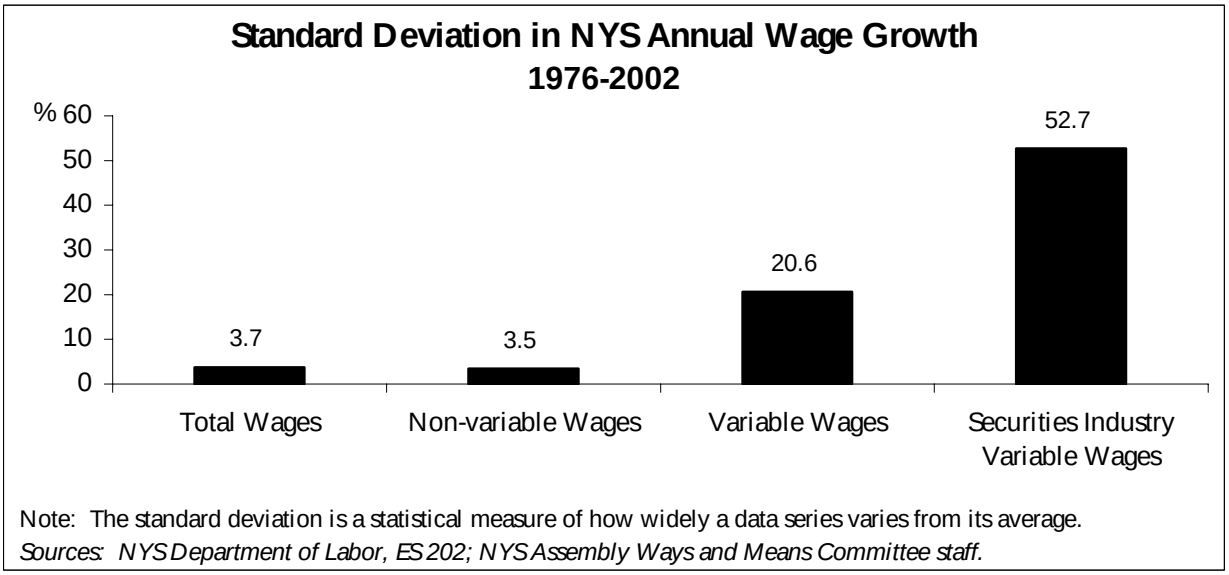


Figure 38

The Assembly Ways and Means Committee staff estimates that State total variable compensation, which was $40.7 billion or 10.4 percent of total State wages in 2001, declined $7 billion or 18.0 percent year-over-year during 2002. It is estimated to have declined 8.4 percent during 2003 and forecast to increase by 15.0 percent during 2004 as securities industry profits as well as other corporate profits are expected to improve. However, variable compensation in 2004 will not grow as quickly as profits because the profit growth came from cost cutting rather than revenue growth. Growth will slow down to 8.2 percent year-over-year during 2005. Securities industry variable compensation is expected to grow faster than variable compensation in other industries (see Figure 39).

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if there are regular seasonal patterns (such as if overtime regularly occurs in a certain quarter). Therefore, variable compensation contains high uncertainty—even in terms of the data history.

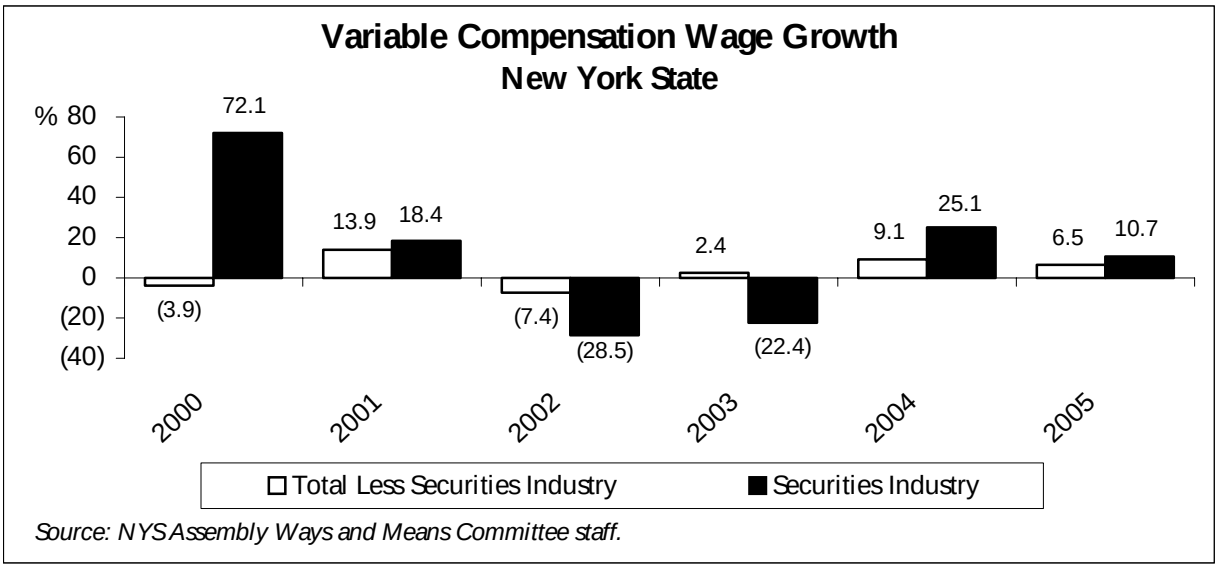


Figure 39

Securities industry variable compensation is linked with securities industry profits (see Figure 40). When industry profits decline as they did in 1990, 1994, and 1998, variable compensation tends to decline, but the change in variable compensation is generally less dramatic than the change in profits.

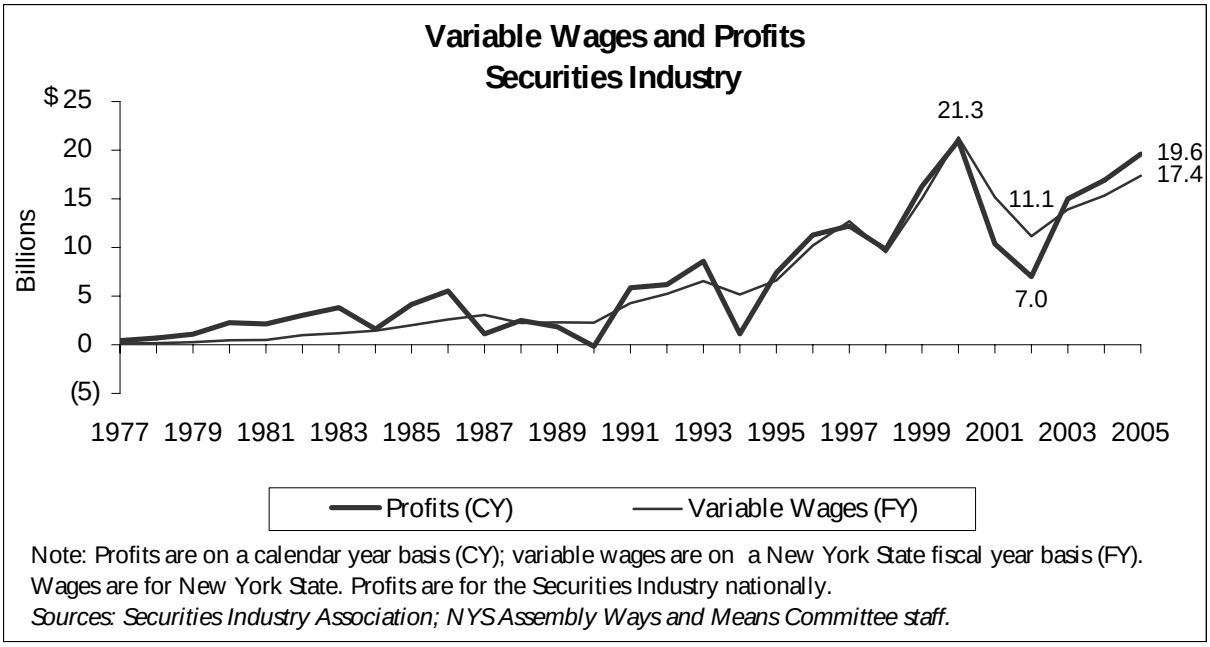


Figure 40

Securities industry variable compensation averaged almost half of New York State total variable compensation in 2000 and 2001. The Committee staff estimates that the securities industry's variable compensation dropped $5.8 billion or 28.5 percent in 2002 and will drop $3.3 billion or 22.4 percent in 2003. It is forecast to grow 25.1 percent year-over-year in 2004 and 10.7 percent in 2005 due to rising industry profits expected in 2003 and 2004.

Financial markets and the securities industry have been severely shaken by scandals and the bursting of a stock market bubble. These scandals are serious and have had a significant impact on the securities industry. However, both in terms of market performance and industry profitability, the worst appears to be over. Despite new scandals being uncovered, most recently in the mutual fund industry, investor confidence and industry profitability are growing rather than weakening. Therefore, it is expected that over the forecast period the State and national economy will benefit from rapidly rising securities industry profits and expanding financial markets, despite any scandals.

Although security industry profitability will be a big boost to New York's economy, the growth has been due to cost cutting rather than revenue growth. Therefore, wages and variable compensation were boosted by the securities industry, but not as strongly as the profit figures might suggest.

Variable compensation is estimated to have dropped for the securities industry in 2003 despite rapid growth in profits for the same year. This is due to both timing issues and the sources of this profit growth. In terms of timing, annual performance bonuses in the securities industry for a given year are typically either given in December of that year or the first quarter of the following year, with the majority of the bonuses being given in the first quarter of the following year. Therefore, a large portion of the bonuses relating to the record industry performance in 2003 will be given in 2004 and show up in 2004 compensation. It is for this reason that the Committee staff often charts calendar year profits for the securities industry alongside fiscal year variable compensation so that the true relationship between the two series can be observed.

All of the profit improvement in 2003 comes from declining expenses rather than rising revenues. This is expected to cause the rise in variable compensation to be less sharp than the rise in profits, even when timing issues are taken into consideration. Revenue of the securities industry hit a record $245 billion in 2000, then declined to $195 billion in 2001 and $149 billion in 2002. In 2003, revenue is estimated to have decreased to $142 billion (see Figure 41). The decline in revenue is in sharp contrast to the doubling of profits. Unlike profits, revenues for the industry will remain far below their peak in 2000 throughout the forecast period.

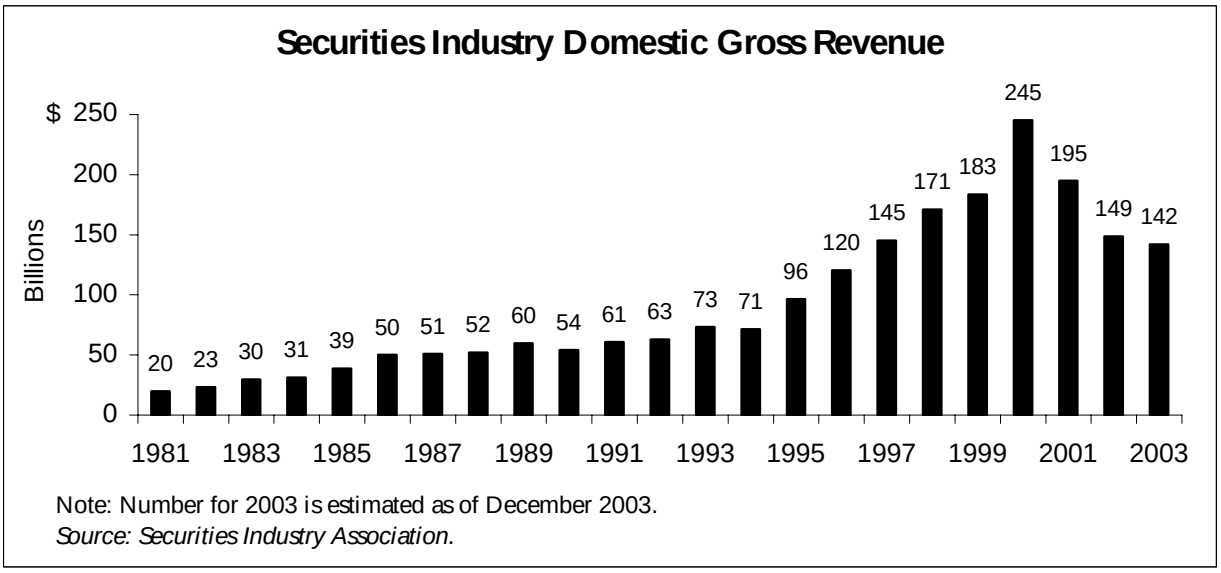


Figure 41

Due in large part to the volatility of its variable compensation, securities industry wages are vital to understanding total wages in New York State. The securities industry makes up about ten percent of wages in New York. This is large for a single industry, but the industry's importance to understanding wages is even greater. In the last ten years, 19 percent of total wage growth and 43 percent of total wage variance can be attributed to the securities industry. In fact, almost the entire decline in total wages in 2002 came from the securities industry (see Figure 42). Excluding this industry, wages dropped only 0.2 percent.

Uncertainty regarding how much variable compensation will be and how much of this compensation will come in the form of stock options versus cash payments are major risk factors to the Ways and Means Committee staff forecast of New York State wages.

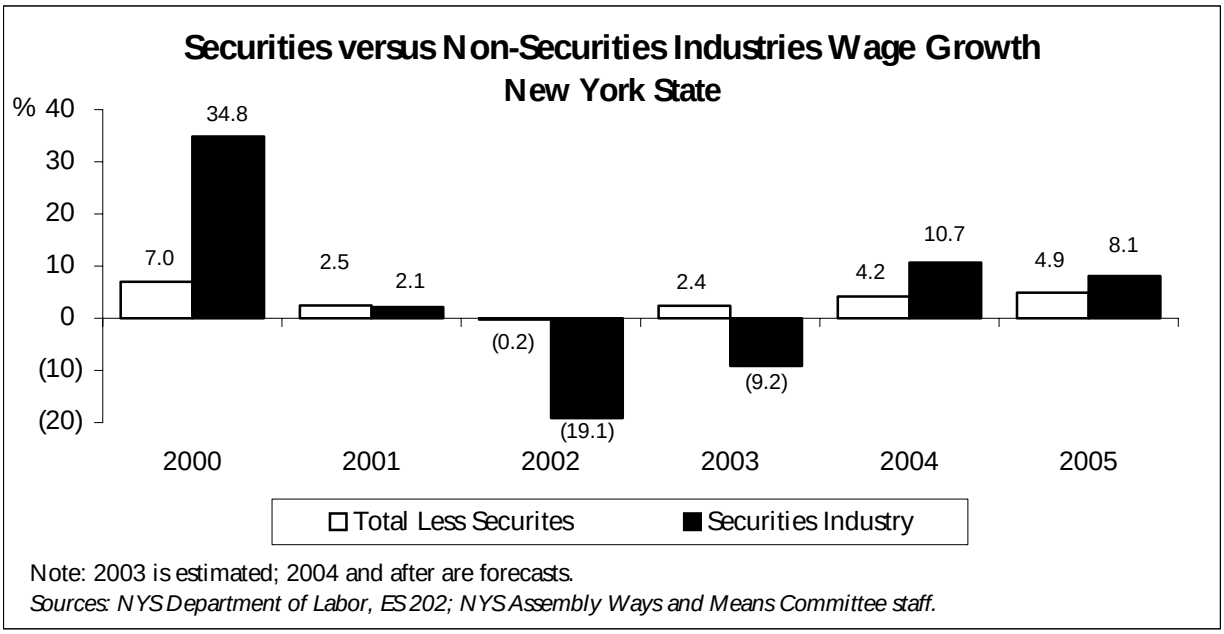


Figure 42

The New York City Economy and the Recent Recession

The New York State economy depends greatly on economic activity in New York City. Wage growth in New York City dramatically slowed from 19.6 percent in the first quarter of 2000 to positive 10.8 percent in the first quarter of 2001, to negative 11.1 percent in the first quarter of 2002. Employment and wage growth in the City over the medium-term will be conditional on the efforts to revitalize lower Manhattan.

According to estimates by the New York City Comptroller's Office, the Gross City Product declined for the tenth consecutive quarter in the second quarter of 2003.[65] By the second quarter of 2003, the cumulative loss of Gross City Product since the first quarter of 2001 was 7.3 percent. However, in the third quarter of 2003, Gross City Product increased 0.3 percent, indicating that the City's recession ended in that quarter.[66] The New York City Office of Management and Budget estimates that Gross City Product grew 3.9 percent in 2003 and forecasts that it will grow 4.6 percent in 2004.[67] In 1992, the overall vacancy rate in the Manhattan primary office market was 17.0 percent, the highest in the 1989-02 period.[68] The vacancy rate fell to 3.0 percent in 2000 before it started to rise. The Manhattan office market is expected to remain

[65] New York City Office of the Comptroller, *Economic Notes* 11, no. 3, September 2003.

[66] New York City Office of the Comptroller, *Economic Notes* 11, no. 4, December 2003.

[67] The City of New York, Office of Management and Budget, *January 2004 Financial Plan, Fiscal Years 2004-2008*, January 15, 2004.

[68] Data from Cushman and Wakefield.

stable in 2004 and then improve in 2005. In 2004, the office market vacancy rate is expected to be 12.4 percent, and fall to 11.2 percent in 2005. In the second quarter of 2003, New York City employment declined for the ninth consecutive quarter and State employment for the eighth. The rate of New York City employment decline in 2003 is estimated to have been 1.3 percent. Figure 43 on page 64 indicates that the employment decline has slowed down. New York City employment growth is forecast at 1.1 percent in 2004 and 1.4 percent in 2005.[69]

Employment Change in Recent Quarters

The loss of employment in New York City in the recession of 2001 is comparable in its intensity and its duration to the loss of employment in the recession of 1990-91. Between the fourth quarter of 2000 and the second quarter of 2003, the State lost 315,531 jobs on a seasonally adjusted basis. Of these, 233,053 or 73.9 percent of the State's employment loss was in New York City.

The largest sectoral loss of employment in New York City was in FIRE, which lost 52,786 jobs (see Table 11). This accounted for 22.6 percent of jobs lost in the City between the fourth quarter of 2000 and the second quarter of 2003. The other large sectoral losses were as follows: professional services (21.5 percent of all jobs lost); manufacturing (18.0 percent); information (17.7 percent); and other services (15.2 percent).

[69] The City of New York, Office of Management and Budget, *January 2004 Financial Plan, Fiscal Years 2004-2008*, January 15, 2004, 17.

Table 11

Employment Change, 2000:Q4 to 2003:Q2
New York State Regions

	NYC	NYC Suburbs	Upstate New York	NYS
Total	**(233,053)**	**(8,924)**	**(73,553)**	**(315,531)**
FIRE	(52,786)	(2,600)	2,352	(53,034)
Securities Industry	(36,295)	(1,970)	(402)	(38,666)
Professional Services	(50,015)	(3,642)	(4,084)	(57,741)
Manufacturing	(41,851)	(17,033)	(66,873)	(125,757)
Information	(41,181)	(7,158)	(4,920)	(53,259)
Other Services	(35,420)	(1,112)	(8,757)	(45,289)
Transport and Utilities	(15,078)	(2,070)	(4,554)	(21,702)
Retail Trade	(13,429)	(2,695)	(9,497)	(25,621)
Wholesale Trade	(12,597)	(11,963)	(5,588)	(30,149)
Construction	(11,430)	1,639	(5,488)	(15,278)
Leisure and Hospitality	(5,476)	9,027	(609)	2,942
Government	2,124	10,212	15,080	27,416
Management	5,394	(1,396)	(426)	3,572
Education and Health	38,692	19,868	19,810	78,370

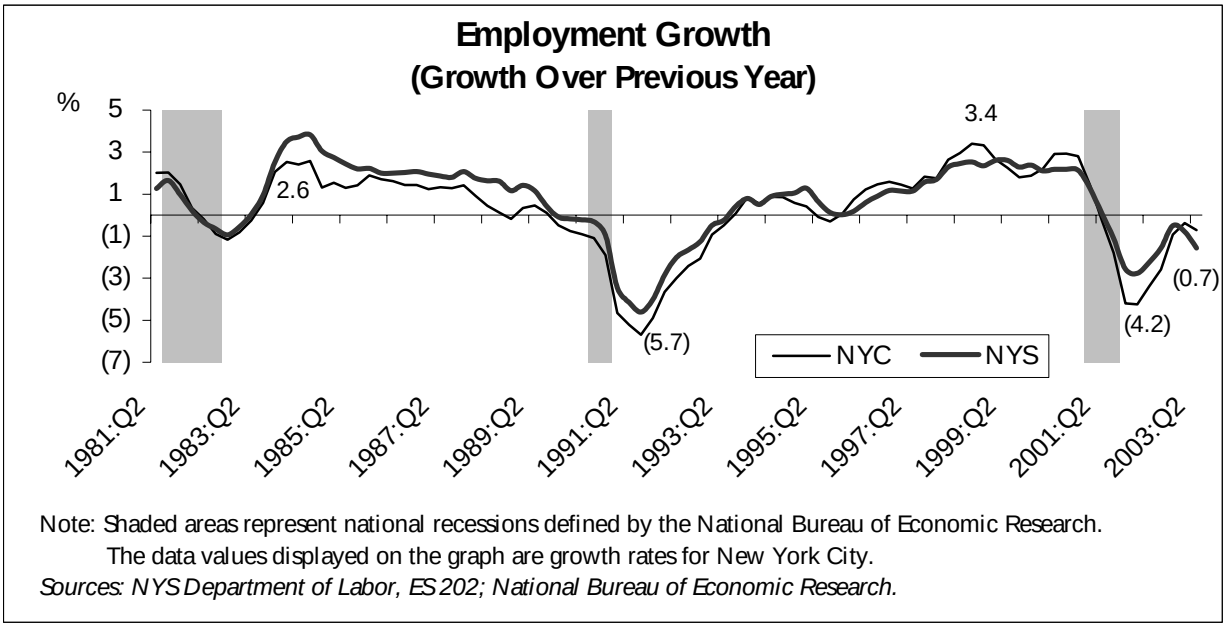
Note: Totals are the sum of industry seasonally adjusted data.
Sources: NYS Department of Labor, ES202; NYS Assembly Ways and Means Commimttee staff estimates.

In four of the five sectors in which the loss of jobs in New York City was the largest, the share of New York City in the State's job loss was over 70 percent. In professional services, for example, New York City experienced 86.6 percent of the State's job loss in that sector. In FIRE, the City accounted for 99.5 percent of the State's employment loss. The one exception in these five sectors was the manufacturing sector, where New York City only accounted for 33.3 percent of the 125,757 jobs lost in the State. Manufacturing had the largest sectoral job loss for the State as a whole. Other sectors in which the loss of jobs was more evenly distributed across the State were wholesale trade, retail trade, and other services.

In education and health, New York's regions gained jobs. In the State as a whole, 78,370 jobs were gained in education and health. New York City accounted for 38,692 of this gain, or 49.4 percent.

The pattern of aggregate employment gains and losses in the State over time are similar to the pattern observed in New York City (see Figure 43). In the recession of 1990-91 and in the recession of 2001, the loss of employment in the City was sharper and more prolonged than in the State as a whole.[70] In the recent recession, the duration and intensity of job loss in New York City is milder so far compared to the recession of 1990-91.

[70] Both employment and wage decline in New York City in the recent recession started one quarter before their decline in the State.



Note: Shaded areas represent national recessions defined by the National Bureau of Economic Research.
The data values displayed on the graph are growth rates for New York City.
Sources: NYS Department of Labor, ES 202; National Bureau of Economic Research.

Figure 43

Wage Change in Recent Quarters

The concentration of the State's wage loss in New York City was much greater than the concentration of employment loss. While New York City accounted for 73.9 percent of the loss of jobs between the fourth quarter of 2000 and the second quarter of 2003, the share of wage loss was 163.6 percent, implying that the rest of the State had significant wage gains. In this period, New York State lost $10.5 billion in wages, while New York City lost $17.1 billion (see Table 12). Outside of the City, wages in the State increased by $6.6 billion.

The FIRE sector accounted for 90.2 percent of the wage loss in New York City. The City's FIRE sector accounted for 105.2 percent of the total FIRE wage loss in the State. The loss of wages in professional services and in the information sector are also noteworthy. Between the fourth quarter of 2000 and the second quarter of 2003 in New York City, professional services lost $3.1 billion and the information sector lost $2.0 billion.

The State's wage gain in education and health is remarkable. In the two and a half year period after the fourth quarter of 2000, wages rose $6.6 billion in these sectors in the State. New York City accounted for $3.3 billion or 50.2 percent of the State's wage gain.

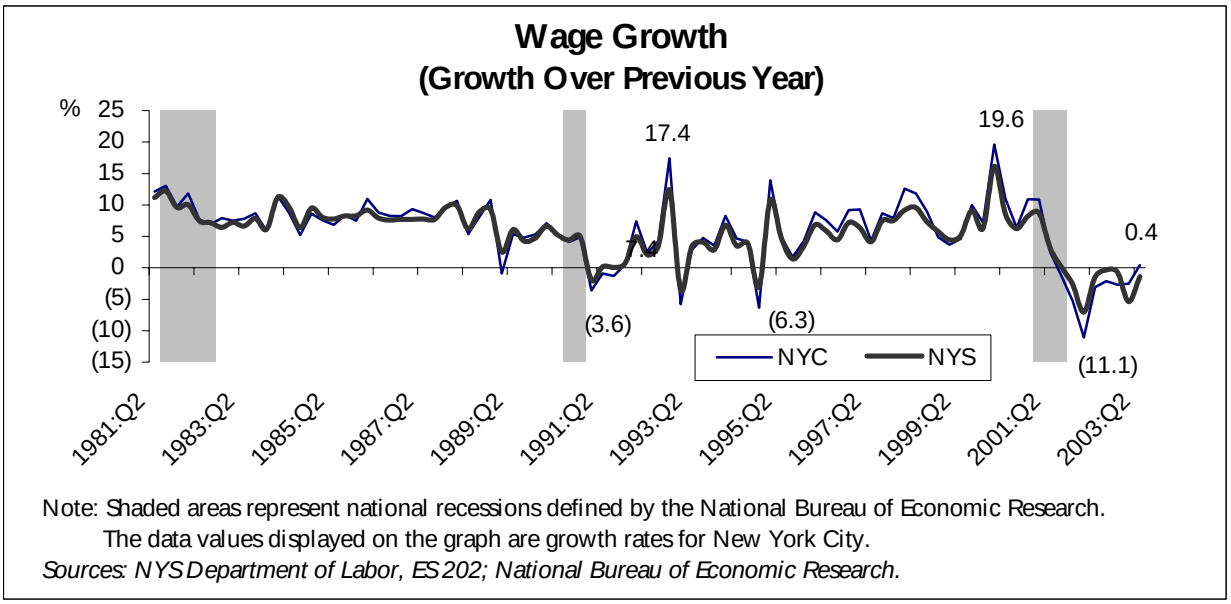
Table 12

Wage Change, 2000:Q4 to 2003:Q2
New York State Regions
($ in Millions)

	NYC	NYC Suburbs	Upstate New York	NYS
Total	**($17,129.7)**	**$3,572.4**	**$3,088.8**	**($10,468.5)**
FIRE	(15,451.7)	217.2	541.8	(14,692.8)
Securities Industry	(14,108.6)	(409.9)	(116.5)	(14,635.1)
Professional Services	(3,077.6)	60.7	(128.0)	(3,144.9)
Information	(1,960.4)	(415.2)	(165.7)	(2,541.4)
Manufacturing	(689.7)	(106.4)	(1,288.8)	(2,084.9)
Other Services	(531.8)	373.7	235.3	77.2
Construction	(173.0)	505.7	73.1	405.8
Management	(155.8)	(89.1)	86.1	(158.8)
Wholesale Trade	(155.8)	(817.0)	17.6	(955.2)
Transport and Utilities	(129.9)	151.1	18.0	39.2
Leisure and Hospitality	(68.9)	321.2	69.4	321.7
Retail Trade	138.0	532.8	369.5	1,040.2
Government	1,815.1	1,264.5	1,549.0	4,628.7
Education and Health	3,311.8	1,573.3	1,711.6	6,596.6

Note: Totals are the sum of industry seasonally adjusted data.
Source: NYS Department of Labor, ES 202; NYS Assembly Ways and Means Committee staff estimates.

In contrast to the similarity of employment loss across the recessions of 1990-91 and 2001, wage loss was much higher in the recent recession (see Figure 44). The decline in wages was much steeper and prolonged in the recession of 2001. This reflects the loss of activity and employment in relatively well-paid sectors such as FIRE, professional services, and information as well as a sharp drop in securities industry variable compensation.



Note: Shaded areas represent national recessions defined by the National Bureau of Economic Research.
The data values displayed on the graph are growth rates for New York City.
Sources: NYS Department of Labor, ES 202; National Bureau of Economic Research.

Figure 44

In the second quarter of 2003, the sectors with the highest average wage in the State were management, FIRE, professional services, information, wholesale trade, and construction. In these sectors, the average wage is higher than the State average wage of $46,653. While the State generally lost more in wages and less in employment in the recent recession compared to the previous one, the average wage rose in most sectors in the recent recession. It must be noted, however, that the annualized rate of average wage growth in the recent recession of 0.4 percent was far lower than the annual average wage growth of 5.0 percent in the 1980:Q1 to 2003:Q2 period. This indicates that the recent recession has affected the rate of average wage growth. Much of this effect can be attributed to the fall in the average wage in FIRE and management (see Table 13). The slow growth of the average wage in the recent recession is not seen in all sectors. In the manufacturing sector, for example, the average wage grew at a 5.0 percent annualized rate in the recent recession; the annual growth in the average manufacturing wage was 4.5 percent between 1980:Q1 and 2003:Q2. This suggests that the recent recession consisted of sector-specific disturbances: FIRE and management were affected by huge reductions in bonuses and executive compensation, while manufacturing was affected by on-going structural change and productivity improvements.

Table 13

Annualized Growth in the Average Wage, 2000:Q4 to 2003:Q2
New York State Regions

	NYC	NYC Suburbs	Upstate New York	NYS
Total	**(0.6)**	**2.0**	**2.6**	**0.4**
FIRE	(4.8)	2.0	3.7	(4.5)
Securities Industry	(4.7)	(3.1)	(5.0)	(4.7)
Management	(4.5)	0.7	2.2	(1.7)
Leisure and Hospitality	0.5	2.3	1.1	0.8
Professional Services	1.8	1.7	0.5	0.9
Other Services	2.5	3.6	4.1	2.8
Government	2.7	2.1	2.2	2.4
Retail Trade	2.8	3.6	3.8	3.3
Wholesale Trade	2.9	(0.8)	2.7	1.5
Construction	3.0	3.7	3.3	3.2
Education and Health	3.5	3.3	3.9	3.6
Information	3.9	0.1	0.7	2.2
Transport and Utilities	4.2	3.8	2.7	3.6
Manufacturing	7.3	3.9	4.4	5.0

Note: Data are seasonally adjusted.
Source: NYS Department of Labor, ES 202; NYS Assembly Ways and Means Committee staff estimates.

New York State Regions

Between 1995 and 2002, wages in New York State grew 5.2 percent per year. Among the regions of the State, New York City grew the fastest with wage growth of 5.7 percent per year. Wages in downstate New York grew faster than upstate, with wages in the Mid-Hudson region growing at 5.5 percent per year and Long Island wages growing at 5.0 percent per year. Wage growth in the State's regions ranged from 5.7 percent to 2.7 percent in this period (see Figure 45).

Source: NYS Department of Labor, ES 202.

Figure 45

Between 1995 and 2002, wages in New York City increased by $65.2 billion. This accounts for 60.5 percent of the wage gain in the State as a whole. The wage gains in New York City were led by the increase in the FIRE sector of $22.5 billion. The other downstate regions gained $24.5 billion in wages. Downstate as a whole represented 83.3 percent of total wage growth in the State. Among the upstate regions, the Capital, Western New York, and Finger Lakes regions had the largest wage increases. Together, these three regions accounted for 10.7 percent of the wage gains in State (see Figure 46).

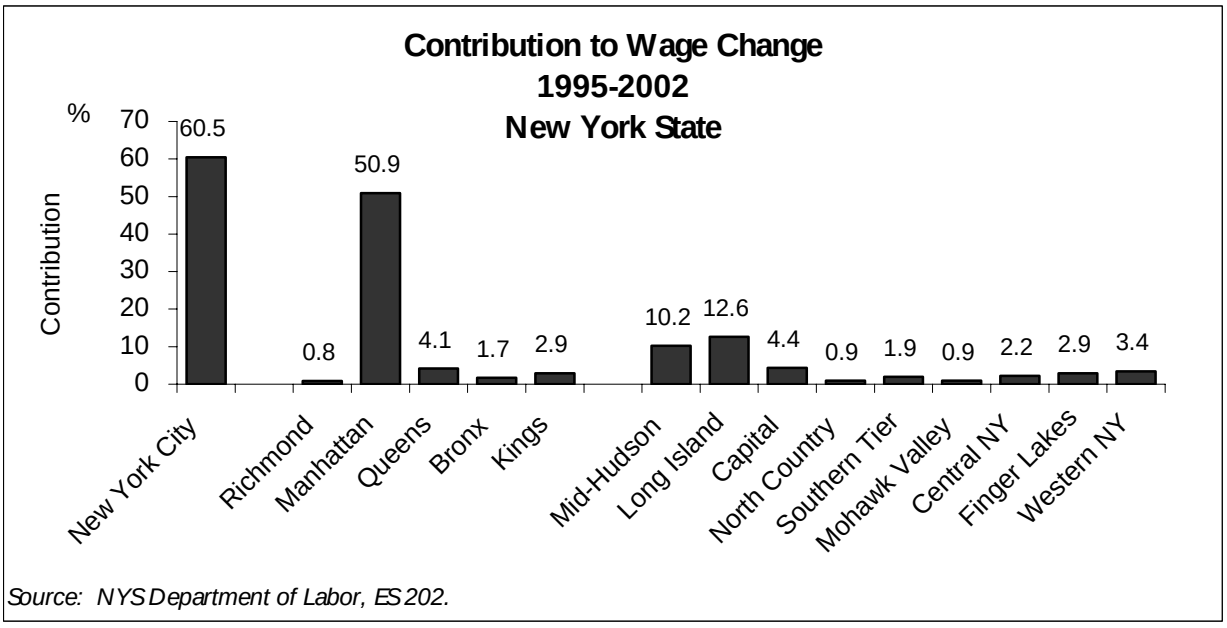


Figure 46

New York State employment growth averaged 1.0 percent per year in the 1995-2002 period. Most regions that had high wage growth also had high employment growth. The fastest employment growth was in the Mid-Hudson region, followed by Long Island and New York City. In New York City, Richmond county employment grew the fastest, at 1.8 percent per year (see Figure 47).

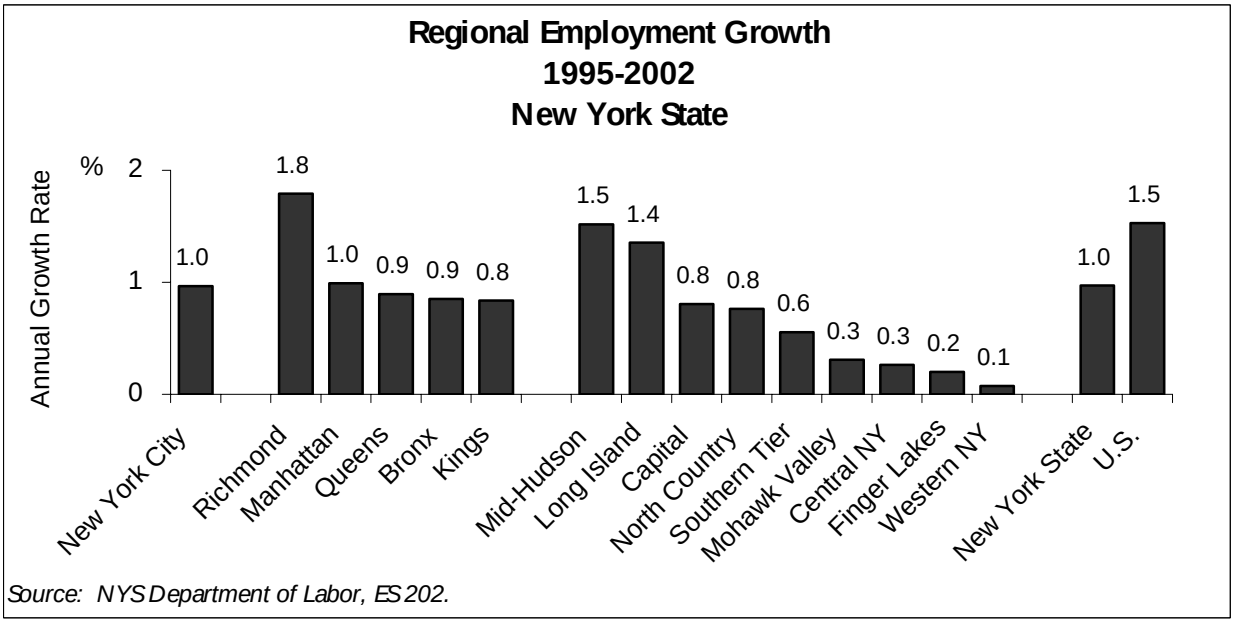


Figure 47

The New York City region employs the largest number of people among the regions. In recent years, the region also accounted for a large share

(46.3 percent) of the additional jobs that were created in the State. Long Island and the Mid-Hudson region also shared in the large gains in employment that were made in recent years. These two regions accounted for 39.9 percent of the additional jobs that were created in the State between 1995 and 2002. The largest gain in employment in upstate New York was in the Capital region (see Figure 48).

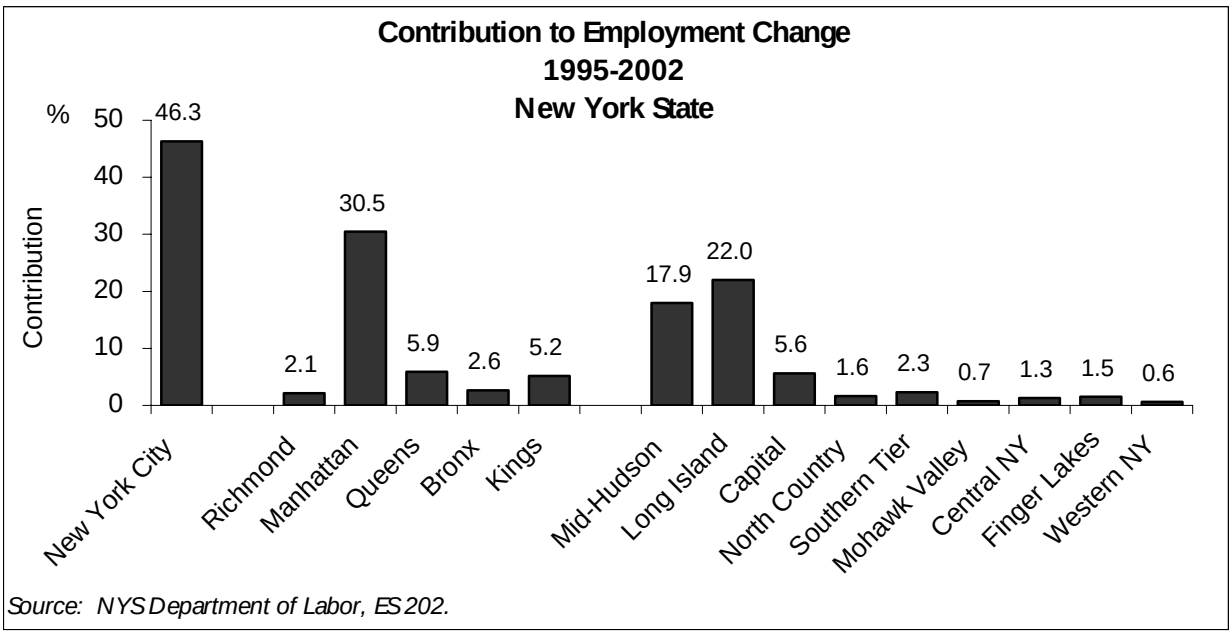


Figure 48

New York State Forecast Comparison

The Committee staff's 0.7 percent employment growth forecast for 2004 is 0.4 percentage point lower than Global Insight's 1.1 percent, 0.1 percentage point lower than the Division of the Budget's 0.8 percent, and the same as Economy.com's 0.7 percent (see Table 14).[71]

The Committee staff's 4.8 percent wage growth forecast for 2004 is 0.1 percentage point lower than the Division of the Budget's 4.9 percent forecast, 0.5 percentage point higher than Global Insight's 4.3 percent, and 1.7 percentage points higher than Economy.com's 3.1 percent.[72]

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[71] Global Insight and Economy.com use the employment data (BLS 790) compiled by the Bureau of Labor Statistics and the wages and salaries data compiled by the Bureau of Economic Analysis. The NYS Division of the Budget and the NYS Assembly Ways and Means Committee staff use the Covered Employment and Wages data (ES 202) from the NYS Department of Labor. See footnote 3 on page ix of this report's Executive Summary for a more detailed explanation.

[72] The 2002 wage growth difference between the NYS Division of the Budget (DOB) and the NYS Assembly Ways and Means Committee staff is due to the fact that DOB made its own adjustments to ES 202 wage data for 2000 and 2001.

Table 14

Forecast Comparisons
(Percent Change)

	Actual 2002	Estimate 2003	Forecast 2004	Forecast 2005
NYS Employment (Nonfarm)				
Ways and Means	(1.8)	(0.5)	0.7	1.4
Division of the Budget	(1.8)	(0.5)	0.8	1.2
Economy.com	(1.8)	(0.5)	0.7	1.4
Global Insight	(1.8)	(0.6)	1.1	1.3
NYS Wages				
Ways and Means	(2.6)	1.2	4.8	5.2
Division of the Budget	(3.3)	1.6	4.9	4.9
Economy.com	(3.3)	1.1	3.1	4.6
Global Insight	(3.0)	1.2	4.3	4.9

Sources: NYS Assembly Ways and Means Committee staff; NYS Division of the Budget, New York State 2004-05 Executive Budget with 30-Day Changes, February 12, 2004; Economy.com, Forecast Tables, February 2004, < http://www.economy.com> ; Global Insight, Short-term Outlook for New York, January 15, 2004, < http://www.global insight.com> .

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RISKS TO THE FORECASTS

Risks to the National Forecast

Downside Risk

Although the recent recession has officially been declared over as of November 2001, several risks still remain to the recovery. So far, this has been a "jobless recovery," leading to questions as to when employment will pick up. The long-term impact of the recent surge in exceptionally strong labor productivity and the emerging emphasis on the global movement of jobs offshore (especially in industries other than manufacturing) is still not clearly understood. Continued signs of stagnant job creation and slow growth in wages could shake consumers' confidence and stall overall growth if consumers are left unable to continue spending.

Related to consumer spending, increased borrowing at current rates of growth may no longer continue to be feasible, especially when interest rates begin to climb. Consumer debt levels have already reached record levels with the Federal Reserve reporting credit outstanding, including credit card and auto loans but excluding mortgages, reaching a record $2.0 trillion in 2003, up 5.2 percent from 2002. Further indications of the unsustainable debt levels include the swell in personal bankruptcies, as reported by the Administrative Office of the U.S. Courts, reaching an all-time high of 1.6 million households in the federal fiscal year ending in 2003.

The housing market also presents a risk to the forecast as current forecast numbers indicate residential construction investment should decrease in coming quarters. The risk remains for investment to decline even further as even a modest rise in interest rates will increase the exceedingly low mortgage rates that have been driving housing demands. The boom in housing prices also presents the risk for a "bust" in the housing market. In addition, if interest rates rise faster than expected, the vehicle market would also be affected as auto dealers may be unable to continue the zero percent financing deals that have motivated much of the growth in vehicle sales.

The continued depreciation of the U.S. dollar also poses potential risks to the forecast. If in order to avoid further losses, foreign investors decide to sell large holdings of U.S. assets or foreign producers try to raise import prices, this would have potential consequences for the nation's continued economic growth.

Terrorism will remain a concern. The uncertainty of if, when, and where another attack may occur contributes to a lingering sense of business uncertainty that could slow investment and spending. Unforeseen continued costs related to fighting terrorism also could have an adverse effect on the economy and the recovery. These costs could increase the deficit even further. An actual attack would have serious implications for the economy. The events of September 11th had a direct adverse impact on the travel and tourism sectors because of the particular way the attacks were carried out. It is impossible to predict the direct impacts of another attack.

Energy prices may remain high longer or rise even higher, depressing consumers' purchasing power. Of particular concern are natural gas prices, which had seen some of the highest price increases on record in 2003. Oil prices are also a risk because of possible actions that may be taken by OPEC as well as weak Iraq production.

While rising energy costs would increase business costs, so too would an increase in healthcare costs. Recent growth in employment costs has been driven by increases in both healthcare and pension costs. According to Economy.com, healthcare costs have posted double-digit gains for the past four years and are expected to continue at such a pace. These costs will continue to hamper employment growth, as companies are unwilling to increase hiring when faced with the mounting costs.

Additional corporate and investment banking scandals, especially those resulting in more penalties being charged to firms in the securities industry, could have a negative effect on the securities industry and the stock market. This is also a concern for New York State, as the concentration of securities industry firms located in New York is quite high.

All of these risks to the national economy are unpredictable. This adds to the uncertainty in the forecast, as even the probability of some of these events cannot be accurately estimated. Uncertainty itself can have a negative effect on investment and spending, adding to downside risk.

Upside Potential

Continued rebuilding in Iraq would have a positive effect on oil prices if production in Iraq were to return to pre-war levels, easing supply concerns. This would help oil prices to return to lower levels.

Despite rising mortgage rates, the housing market may well continue to be a surprise, leading to a further increase rather than a slow-down or decrease

in residential investment spending. Also, a larger increase than expected in business investment could provide some upside potential for the forecast.

The U.S. dollar may stabilize sooner than expected. If growth in the U.S. outpaces the growth seen in Japan and the Euro zone, the flight of foreign investment may be minimal. Further foreign investment flows from the U.S may also be discouraged due to scandals such as Parmalat in Europe. In addition, on the positive side of a weak dollar, the stimulus to U.S. exports may provide a boost to the embattled manufacturing sector.

Employment may turn around sooner and faster than is expected in the current forecast. If so, consumers, with their income growing faster, will be able to pull the economy up more vigorously.

Risks to the New York State Forecast

Downside Risk

The behavior of Wall Street and the finance industry in general is a risk to the forecast. New York is particularly sensitive to the performance of the finance sector. The fact that the securities industry may face further penalties and lawsuits resulting from corporate and investment banking scandals and the uncertainty of the financial markets in general contribute to this risk. The resignation of the chairman of the New York Stock Exchange (NYSE) and criticisms of the NYSE could lead to a loss of confidence and a loss of company listings. Companies may be lured to list elsewhere, including overseas, reducing the revenues for New York's securities industry.

The national economy is as always, a risk to the New York State forecast. If the national economy does not do as well as expected in the national forecast presented here, then the State economy will perform worse than indicated by the forecast.

The threat of another terrorist attack on New York again remains a concern of which the magnitude is unknown. New York City has particularly felt the effects of this uncertainty.

Upside Potential

Several factors present a possible upside potential to the New York State forecast. Bonuses, which are expected in this forecast to rise at a slower rate than securities industry profits, may be higher than expected if firms decide that they still need to give out high bonuses to retain their key employees. In addition, stronger-than-expected corporate profits could lead to faster stock market growth than predicted, producing in turn higher profits on Wall Street, higher bonus income, rising investor confidence, rising price earnings ratios, higher wages from stock options, and higher capital gains. Since the forecast assumes little actual rebuilding underway in 2004, the positive stimulus from rebuilding Manhattan could be stronger than has been expected. A better-than-expected national economy would also improve conditions in the State economy.

APPENDIX A: North American Industry Classification System (NAICS)

Throughout the report, the breakdown of United States employment numbers into industry sectors is based on the North American Industry Classification System (NAICS). The Current Employment Statistics (CES) survey, with the release of May 2003 data, changed the basis for industry classification from the 1987 Standard Industrial Classification System (SIC) to the NAICS system. The Covered Employment and Wages (ES 202) data are currently available from the first quarter of 2000 on a NAICS basis; SIC-based ES 202 data ends in the second quarter of 2002.

The coding system of NAICS is different from that of SIC. NAICS classifies all economic activity into twenty industry sectors with four classification levels defined within each sector. The NAICS system recognizes hundreds of new businesses and redefines sectors to recognize the emergence of many high-tech, service, and information-based industries. The NAICS system also allows the United States, Canada, and Mexico to share a common classification system for direct comparison of data throughout North America.

The NYS Assembly Ways and Means Committee staff combines some NAICS sectors into common groups when describing employment data in this report. The groups are defined as follows (NAICS sector numbers are in parentheses).

Committee Staff Group	NAICS Sectors
Manufacturing	Mining (21), Manufacturing (31-33)
Transport and Utilities	Utilities (22), Transportation and Warehousing (48-49)
Education and Health	Educational Services (61), Health Care and Social Assistance (62)
Leisure and Hospitality	Arts, Entertainment and Recreation (71), Accommodation and Food Services (72)
FIRE	Finance and Insurance (52), Real Estate and Rental and Leasing (53)
Other Services	Administrative and Support and Waste Management and Remediation Services (56), Other Services except Public Administration (81)

Note: Current Employment Statistics data includes logging in the goods-producing sector, while ES 202 includes logging in the farm sector.

All other industry definitions contained in this report are the same as in NAICS. A complete listing of NAICS follows.

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**
211	Oil and Gas Extraction
212	Mining (except Oil and Gas)
213	Support Activities for Mining
22	**Utilities**
221	Utilities
23	**Construction**
236	Construction of Buildings
237	Heavy and Civil Engineering Construction
238	Specialty Trade Contractors
31-33	**Manufacturing**
311	Food Manufacturing
312	Beverage and Tobacco Product Manufacturing
313	Textile Mills
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
326	Plastics and Rubber 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
425	Wholesale Electronic Markets and Agents and Brokers
44-45	**Retail Trade**
441	Motor Vehicle and Parts Dealers
442	Furniture and Home Furnishings Stores
443	Electronics and Appliance Stores

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The North American Industry Classification System (NAICS) -- *(continued)*

Code	NAICS Title
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)
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

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The North American Industry Classification System (NAICS) -- *(continued)*

Code	NAICS Title
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: Executive Office of the President, Office of Management and Budget, North American Industry Classification System, United States, 2002.

APPENDIX B: U.S. and New York State Employment and Wages in NAICS Sectors

Employment and Wages in NAICS Sectors, 2002

	Employment (Thousands)			Wages ($ in Billions)		
	U.S.	NYS	NYS Share of U.S. (Percent)	U.S.	NYS	NYS Share of U.S. (Percent)
Total	**130,375.8**	**8,251.1**	**6.3**	**$4,968.4**	**$382.8**	**7.7**
Government	21,483.3	1,423.3	6.6	777.6	61.1	7.9
Education & Health	16,183.8	1,362.5	8.4	580.6	47.2	8.1
Retail Trade	15,048.1	855.1	5.7	379.9	21.4	5.6
Other Services	13,002.9	728.4	5.6	395.3	21.1	5.3
FIRE	7,843.5	701.6	8.9	374.2	72.8	19.5
Securities Industry	801.1	184.6	23.0	112.4	40.3	35.8
Manufacturing	15,816.2	653.4	4.1	732.5	30.2	4.1
Leisure & Hospitality	11,970.4	637.7	5.3	264.8	13.5	5.1
Professional Services	6,714.7	509.0	7.6	360.9	35.0	9.7
Wholesale Trade	5,641.5	353.7	6.3	280.5	19.8	7.1
Construction	6,734.3	319.8	4.7	277.1	15.3	5.5
Information	3,419.8	295.4	8.6	163.3	19.7	12.0
Transport & Utilities	4,806.0	258.2	5.4	340.2	11.2	3.3
Management of Companies	1,711.2	118.8	6.9	72.1	13.4	18.6

Note: Some NAICS sectors are grouped with others. For sector definitions, see Appendix A.

Sources: NYS Employment and Wages: NYS Department of Labor, ES 202; U.S. Employment: Bureau of Labor Statistics, CES; U.S. Wages: Bureau of Economic Analysis.

APPENDIX C: U.S. Economic Outlook

U.S. Economic Outlook	Actual 2002	Estimate 2003	Forecast 2004	Forecast 2005
Real GDP*	10,083.1	10,397.2	10,882.2	11,283.5
Real Consumption*	7,140.5	7,362.2	7,631.4	7,875.4
Real Investment*	1,572.0	1,635.7	1,822.8	1,951.8
Real Exports*	1,014.2	1,033.9	1,134.3	1,239.6
Real Imports*	1,484.8	1,539.4	1,648.4	1,751.8
Real Government*	1,836.9	1,899.5	1,938.8	1,965.3
*Federal**	648.0	704.3	732.6	741.0
*State and Local**	1,189.1	1,195.7	1,206.7	1,224.9
Personal Income**	8,910.3	9,187.4	9,607.6	10,151.8
Wages & Salaries**	4,974.6	5,084.5	5,289.5	5,611.0
Transfer Income**	1,292.2	1,376.7	1,448.2	1,509.8
Corporate Profits (Accounting Basis)**	745.0	842.0	1,005.7	1,316.9
Corporate Profits (Economic Basis)**	904.2	1,062.5	1,278.9	1,335.1
Productivity (1992= 100)	123.5	128.7	133.7	136.7
Employment***	130.3	129.9	131.2	133.7
CPI-Urban (1982-84= 100)	179.9	184.0	187.0	191.1
S&P 500 Stock Price (1941-43= 10)	995.6	963.7	1,193.8	1,297.0
Treasury Bill Rate (3 month)****	1.6	1.0	1.2	2.4
Treasury Bond Rate (10 year)****	4.6	4.0	4.6	5.3

* In billions of chained 2000 dollars.
** In billions of dollars.
*** In millions.
**** Annual average rate.

Sources: Bureau of Economic Analysis; NYS Assembly Ways and Means Committee staff.