The Impact of Wall Street On Jobs and Tax Revenues

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Contents

I. Executive Summary

In 1998 we issued a report that reviewed New York City's economic and fiscal dependence on Wall Street, covering the jobs, income, and tax revenues that the securities industry was contributing to the City. This report updates that earlier analysis.

Overall, the securities industry (also known as "Wall Street") remains one of the most important industries in New York City. Although the securities industry is still not a major source of employment—accounting for just 5 percent of all jobs in the City in calendar year 2002—it continues to be a major source of income, providing over one fifth of all wages paid in the City. This income is the basis of the securities industry's importance, because it creates demand and therefore jobs, in other industries. Based upon a model that utilizes national and local interindustry economic transactions, we estimate that approximately one of every seven jobs in the City is attributable to the securities industry.

The importance of the securities industry to the New York State and City economies is demonstrated by examining the recent bull and bear markets. During the five-year bull market that ended in 2000, employment in the securities industry grew by 33,800 jobs. The growth accounted not only for 8.8 percent of all the jobs created in the City, but also for 35.8 percent of the growth in wages because of the industry's lucrative salaries. The model shows that the income from these jobs helped create over 65,000 other jobs in the City—a multiplier of nearly two additional jobs created for every one that was created in the securities industry—for a total of 99,140 new jobs. This is the largest multiplier of any of the major industry groups in the City.

The presence of the securities industry in New York City also affects economies outside of the City's borders. The model shows that each new job created in the securities industry in New York City leads to the creation of another job outside the City. We estimate that the growth of the securities industry in New York City during calendar years 1995 through 2000 led to the creation of 43,000 jobs outside the City, primarily from commuters who spent their incomes in their home communities. Thus, in total, the securities industry in New York City was directly or indirectly responsible for the creation of over 142,000 jobs in New York State—nearly one fifth of all jobs created during calendar years 1995 through 2000.

The securities industry in New York City lost 34,950 jobs during calendar years 2000 through 2003, when the stock market was contracting. This was essentially the equivalent of all the securities jobs gained during the bull market, and accounted for 17.9 percent of all the job losses during 2000 through 2003. Given the industry's multiplier effects, the model shows that these job losses flowed through the City's economy and resulted in the loss of an additional 67,500 jobs in other employment sectors. The model also shows that statewide job losses that were directly or indirectly related to the decline in the securities industry totaled 147,000 jobs during this period.

The recent bear market was generated by a combination of factors, including the recession, the terrorist attacks on September 11, 2001, and corporate scandals. These scandals were very costly to individual investors, public pension funds, and the State and City budgets. In a separate report, we estimated that corporate scandals cost the City and State pension funds $15.9 billion and that the budgetary impact exceeded $1.3 billion. Recent efforts by the State Comptroller and others to improve corporate governance and financial reporting will help restore investor confidence and encourage investment, which in turn will create jobs.

The securities industry is also an important source of revenue for the City and State budgets, providing the single largest source of nonproperty tax revenue that supports the City's budget. At its peak in FY 2001, the industry contributed $2.4 billion to the City's coffers, or nearly 16 percent of nonproperty tax collections in that year. City tax collections related to the securities industry, however, fell by over $1 billion between fiscal years 2001 and 2003, and accounted for about two thirds of the decline in nonproperty tax collections during that period. Similarly, securities industry–related collections for the State, which had reached $8.2 billion or almost 19 percent of total tax revenues in State fiscal year 2001, fell by over $4 billion by State fiscal year 2003.

Whether the securities industry will expand or contract during the next business cycle remains to be seen. The major stock market indices registered significant gains during calendar year 2003, but in recent weeks the market has given back nearly all of the gains realized during the first quarter of 2004. Although the rate of job loss has slowed, New York City is still shedding jobs. Moreover, the current economic recovery is being fueled by historically low interest rates and tax cuts. If interest rates rise faster than expected, there is likely to be an adverse impact on the housing, bond and stock markets. Efforts to reduce the federal deficit through spending reductions or revenue enhancements also could slow economic growth.

No other industry rivals the securities industry in its importance to the economies of New York State and New York City. The industry, however, is undergoing changes that could reduce its concentration in New York City. Over the past decade, the securities industry has dispersed nationally and is less concentrated in

New York City than before. More recently, securities firms are being encouraged by the federal government to geographically diversify their operations in the wake of the terrorist attack on the World Trade Center, and there is growing pressure on the New York Stock Exchange to increase electronic trading. In addition, productivity gains and overseas outsourcing of professional and technical services could accelerate the loss of back-office jobs.

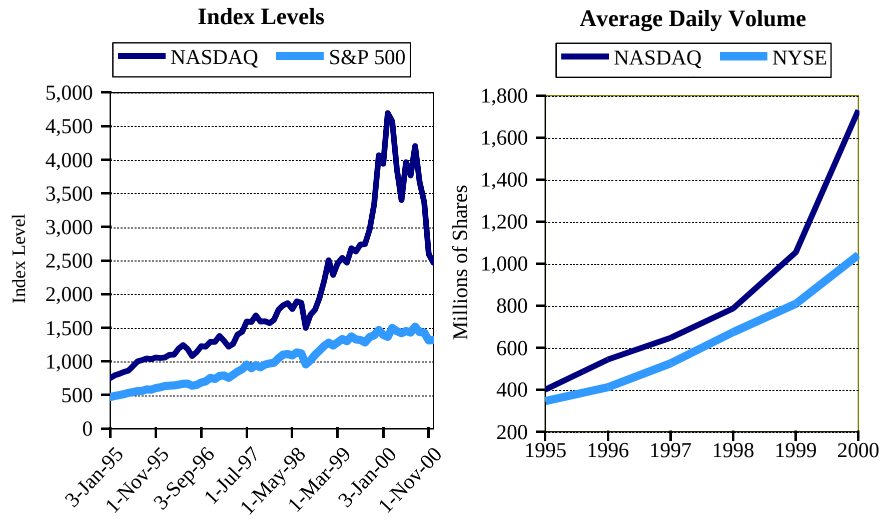
Neither future market cycles nor the structural challenges facing Wall Street are likely to diminish the importance of the securities industry to New York City and New York State in the near term. However, the State and City must pursue cost-effective policies that support the industry and assist its evolution so that New York City retains its preeminent position in the long term. In this regard, redeveloping Lower Manhattan, expanding the regional mass transit system to move workers into downtown and the central business district, upgrading the energy and telecommunications infrastructure, improving corporate governance and financial reporting, and encouraging the relocation of back-office operations to the City's outer boroughs are all critically important. At the same time, the State and City must diversify the City's economic base and promote the development of other high-paying industries.

II. The Bull Market

As 1995 began, the S&P 500 and the NASDAQ Composite Index opened at lower levels than they had a year earlier. However, as 1995 progressed, the financial markets started a strong period of expansion that lasted through 2000. During this period, the market indices more than doubled, and the gain in the NASDAQ was greater than 200 percent (see left panel of Figure 1).

Figure 1

Change in Prices and Trading Volume on the Major U.S. Financial Markets

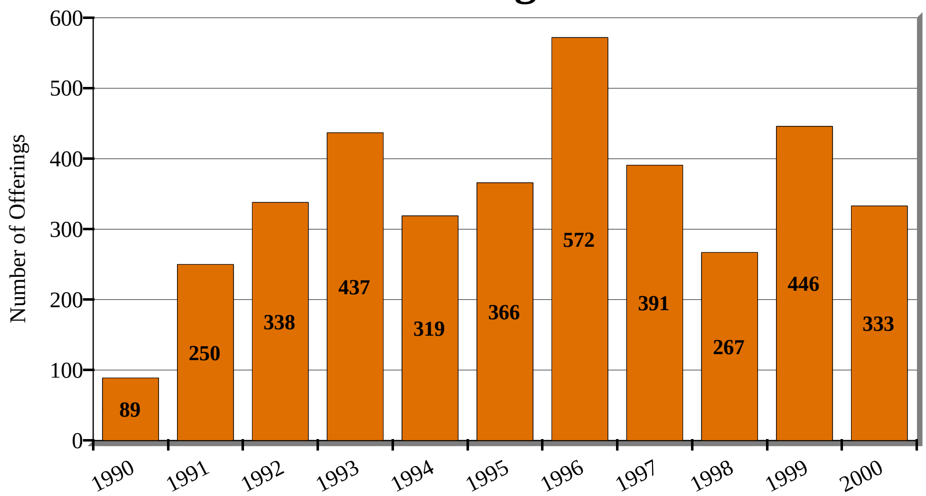


Sources: New York Stock Exchange; Standard & Poor's; NASDAQ

The growth in equity investment during this period was also reflected in the increased volume on both the New York Stock Exchange (NYSE) and the NASDAQ exchange. In 1995, the average daily volume on the NASDAQ was 401 million shares. By 2000, the volume on the NASDAQ exchange was more than 300 percent higher, at 1.73 billion shares (see right panel of Figure 1). Growth in volume was particularly strong in 2000 on the NASDAQ, increasing by 64.2 percent from 1999, and on several occasions daily volume exceeded 2 billion shares.

As the financial markets rose it became easier for new firms to issue stock, and the number of corporations that raised capital through initial public offerings (IPOs) increased. The number of IPOs began rising in the early 1990s and reached its peak in 1996 (see Figure 2). Companies with IPOs during this period included Netscape (1995), Yahoo! (1996), eBay (1998), McAfee (1999), and Palm (2000). These five offerings alone raised a combined $1.186 billion in capital. Stock prices for newly issued IPOs usually rose dramatically when they reached the markets, making such offerings extremely profitable for both the financial firms placing the issuances and for investors who could purchase the offerings at their initial prices.

Figure 2
Number of Initial Public Offerings 1990 through 2000



Includes only IPOs of at least $8 per share and excludes foreign IPOs.
Source: Jay Ritter, University of Florida

As prices in the financial markets increased in the later part of the decade, merger and acquisition activity also accelerated. The increase in activity reflected the need for corporations to expand their businesses in order to show continuous growth (i.e., to provide the increase in earnings needed to support the rising stock prices). The increased activity also reflected different strategic trends, in which corporations were either seeking to dominate a market or were diversifying into new areas in a quest for greater growth through synergies (such as uniting entertainment creation and distribution). Data from Thomson Financial Services show that from 1990 through 1994 an average of 4,183 mergers and acquisitions were completed annually, with each merger worth an average of $39.7 million. From 1995 through 2000, the average annual number of completed mergers and acquisitions nearly doubled, reaching 8,112, and the average transaction value increased threefold, to $119.4 million. Merger and acquisition activity is also very profitable for financial firms, and fees from this work helped fuel much of the growth in Wall Street profits in the later part of the 1990s.

Thus, with the financial market indices reaching new highs in the second half of the 1990s and demand for financial products and services increasing, the securities industry[1] in New York City boomed. Between 1995 and 2000, employment in the securities industry grew by almost 34,000 jobs, which represented 8.8 percent of all jobs added in the City during this period (see Table 1). Profits at securities industry firms skyrocketed from $7.4 billion in 1995 to a record high of $21 billion in 2000. As a result, the securities industry was able to pay its workers record bonuses of $19.5 billion in 2000, up from $6.1 billion in 1995. In addition, capital gains realizations for New York City taxpayers grew almost fivefold between 1995 and 2000, from $6.1 billion to $28.7 billion.

Table 1
Wall Street Economic Indicators

	1995	1996	1997	1998	1999	2000
Employment (in thousands)						
NYC Securities Industry Employment	161.6	161.7	170.5	179.8	185.6	195.4
Percent Change		0.0%	5.5%	5.4%	3.2%	5.3%
Difference		0.1	8.9	9.3	5.8	9.8
Cumulative Difference since 1995						33.8
NYC Total Employment	3,339.3	3,369.2	3,441.9	3,528.0	3,620.7	3,723.1
Cumulative Difference since 1995						383.8
Securities Employment as Percent of Total	4.8%	4.8%	5.0%	5.1%	5.1%	5.2%
Securities Share of Change since 1995						8.8%
Profits and Bonuses (in billions)						
Securities Industry Profits	$7.4	$11.3	$12.2	$9.7	$16.3	$21.0
Percent Change		52.7%	8.0%	-20.5%	68.0%	28.8%
Securities Industry Bonuses	$6.1	$9.7	$11.1	$9.0	$13.4	$19.5
Percent Change		59.0%	14.4%	-18.9%	48.9%	45.5%
NYC Capital Gains (in millions)	$6,126.1	$8,791.9	$12,869.1	$16,833.0	$21,014.2	$28,691.9
Percent Change		43.5%	46.4%	30.8%	24.8%	36.5%
Wages (in millions)						
NYC Securities Industry Wages	$19,160.5	$23,244.5	$27,314.3	$31,996.8	$33,091.4	$45,069.1
Percent Change		21.3%	17.5%	17.1%	3.4%	36.2%
Cumulative Difference since 1995						$25,908.6
NYC Total Wages	$140,674.9	$151,803.7	$163,327.0	$178,748.1	$189,872.7	$213,122.8
Cumulative Difference since 1995						$72,448.0
Securities Wages as Percent of Total	13.6%	15.3%	16.7%	17.9%	17.4%	21.1%
Securities Share of Change since 1995						35.8%

Sources: NYS Department of Labor; NYS Department of Taxation & Finance; New York Stock Exchange; OSDC analysis

[1] The securities industry is defined as NAICS code 523—Securities, Commodity Contracts, and Other Financial Investments and Related Activities—which includes securities and commodities brokers and dealers, as well as the various exchanges in which they operate (New York Stock Exchange, NASDAQ, New York Commodities Exchange, etc). Although in the NAICS system this code is technically a subsector and not an industry (because it has a three-digit rather than a four-digit code), by long-standing tradition this is commonly known as 'the securities industry.'

The strong growth in securities industry bonuses contributed to the overall increase in wages paid to securities industry employees in New York City, which rose at an average annual rate of 18.3 percent from 1995 to 2000, to total $45.1 billion. During these five years, securities industry wages increased 135 percent while wages in the rest of the local economy grew 38.3 percent. Thus, by 2000 the securities industry accounted for 21.2 percent of all wages paid in the City, compared to a 13.6 percent share in 1995. Overall, 35.8 percent of all wage gains in the City during the 1995 through 2000 period can be directly attributed to the securities industry.

With securities industry wages rising faster than employment, average salaries rose sharply, reinforcing the dominance of the securities industry compared to the rest of the local economy. Between 1995 and 2000, average salaries in the industry rose from $132,639 to $248,503, an increase of 87.4 percent. Average salaries in all other City industries grew by 24.6 percent, from $38,240 to $47,639. Thus, at the start of this period average salaries in the securities industry were 3.5 times the level of average salaries in nonsecurities; by the end of the period, they were 5.2 times greater.

The economic impact of the securities industry extends well beyond Wall Street. Employing a well-established economic model,[2] we estimated the extent to which the securities industry has acted as a driver of other sectors of the local economy. In addition, we can estimate the effect that spills over into portions of the surrounding suburbs.

According to the model, job growth in the securities industry (the direct impact) generates indirect and induced effects. The indirect effects reflect that as the securities industry grows it needs to purchase additional goods and services from other New York City companies. Thus, the direct addition of 33,800 jobs in the securities industry between 1995 and 2000 led other businesses that interact with the securities industry to create 9,200 jobs. Most of the jobs created were in export-oriented industries,[3] primarily in professional and business services.

On top of these business-to-business transactions, the income earned by all these new job holders leads to consumption spending, which causes other businesses to grow and hire new workers (known as the "induced effect"). The model estimates that the induced consumption spending by City residents which resulted from the combined direct and indirect employment gains added another 56,140 jobs to the City

[2] The IMPLAN model, developed for the federal government, utilizes detailed data on national and local interindustry economic transactions to model the effects of regional economic changes.

[3] The City's export-oriented sector consists of industries whose markets extend beyond the City's borders but bring income into the City, whereas the local market–oriented sector services the needs of City residents and businesses.

during the 1995 through 2000 period. These jobs were created largely in the local market-oriented sector, including retail stores and personal service.

In total, the securities industry directly or indirectly created 99,140 jobs in New York City, accounting for 25.8 percent of the job gains during the latter half of the 1990s. Each new job in securities indirectly led to the creation of almost two additional jobs in other industries in the City.[4] Based upon this multiplier and the current level of securities employment, we estimate that one in seven jobs in the City now is either directly or indirectly related to Wall Street.

In addition, some of the indirect and induced effects from the 1990s growth in the City's securities industry occurred outside the City. For example, some of the indirect business impacts went to firms located in other parts of the State, and to the extent that commuters held any of the new jobs that were created either directly or indirectly by the securities industry in the City, some portion of those incomes were spent outside the City. Utilizing the model, we estimate that each new securities industry job in the City also created approximately one other job in the rest of New York State, primarily due to the induced effects resulting from the consumption spending of commuters.[5] Like the induced–effect jobs that were created in the City, these new jobs were primarily in local market–oriented sectors such as retail, health services, construction, and restaurants. Thus, we estimate that the growth in the securities industry in the City was directly and indirectly responsible for the creation of over 142,000 new jobs in New York State during the 1995 through 2000 period, or 19 percent of the State's total job growth during those years.

Along with this growth in employment came increased tax revenues, primarily in the form of personal and business taxes. In the City, between fiscal years 1996 and 2001,[6] total tax payments attributable to the securities industry (reflecting tax payments by securities industry firms and employees, as well as taxes on capital gains realizations related to growth in the financial markets) grew by more than $1.4 billion. This was about one third of the increase in total nonproperty taxes during the period.

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[4] The employment multiplier, defined as total impact divided by direct effects, equals 2.9 for the securities industry. This includes the original securities job and the almost two new jobs that were added.

[5] The total employment multiplier for New York State as a result of securities industry changes in New York City equals 4.2. This includes the original securities job in New York City, almost two new jobs added in New York City due to indirect and induced effects, and slightly more than one job added in the rest of the State due to indirect and induced effects.

[6] The City's fiscal year runs from July 1 to June 30. FY 2001 was chosen as the end point of the Wall Street expansion because it includes the second half of 2000, Wall Street's most profitable year. Tax payments resulting from these large profits as well as increased bonuses and capital gains realizations continued to be paid into the start of calendar year 2001.

Tax collections directly or indirectly related to the securities industry grew from \$920 million, which represented 8.8 percent of total nonproperty tax payments in FY 1996, to \$2.4 billion in FY 2001, which represented 15.8 percent of total nonproperty tax payments in that year (see Figure 3). Increased personal income tax payments accounted for 93 percent of the total tax increase attributed to the securities industry. The State benefits from securities industry–related tax collections to a much greater extent than the City. Part of that reflects that the State personal income tax applies not only to City residents but also to residents in the rest of the State and to all out-of-state commuters. During State fiscal year 2001, these collections peaked at \$8.2 billion (see Figure 3), and accounted for 18.7 percent of State tax revenues.

Figure 3

Tax Payments Derived from the Securities Industry

Sources: NYC Department of Finance; NYC Office of Management and Budget; NYS Department of Taxation and Finance; U.S. Internal Revenue Service; OSDC analysis

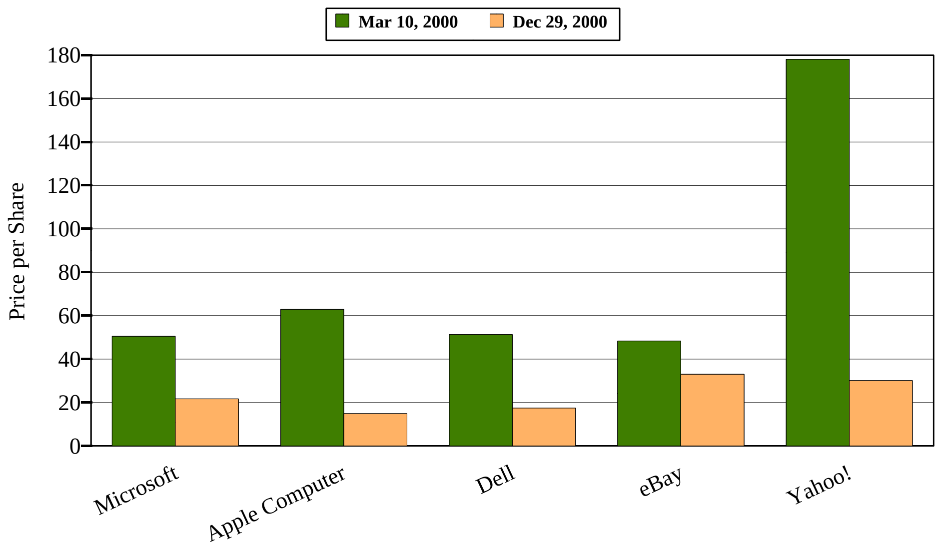
Overall, the late 1990s were a period of prosperity. Between 1995 and 2000, the nation’s real (i.e., inflation-adjusted) Gross Domestic Product (GDP) showed consistently strong growth, increasing at an average annual rate of 4 percent. This strength filtered down and helped lift business activity in the City. The model shows, however, that it was strong growth in the securities industry that spread out and helped generate the income and job growth in the City’s economy that allowed real Gross City Product (GCP) to expand at an average annual rate of 5.7 percent during this period. Thus, it was the expansion on Wall Street that enabled the City’s economy to outperform the nation’s during the late 1990s.

III. The Bear Market

Although the national recession did not begin until the first quarter of 2001, Wall Street showed some signs of weakening during 2000. Both the S&P 500 and the NASDAQ peaked during the first quarter of the year. By the end of 2000 the S&P 500 was down by 13.6 percent. The largely technology-laden NASDAQ Composite suffered far greater declines, losing more than half its value—falling from 5,048 in March to 2,470 at the end of the year. The value of many well-known, large technology stocks plummeted (see Figure 4).

Figure 4

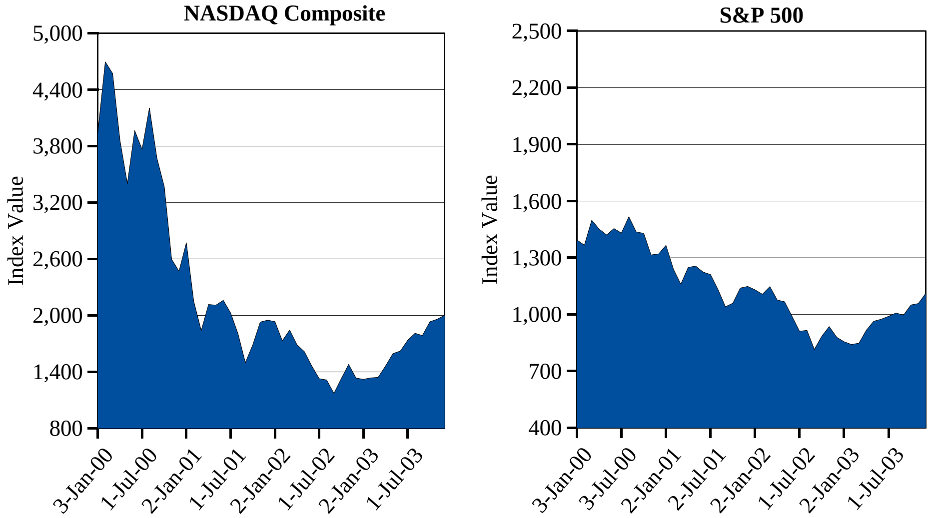
Prices of Selected Technology Stocks in 2000



Source: NASDAQ

With the onset of the national recession in the first quarter of 2001, the two indices continued to decline sharply, with the S&P 500 down 12.1 percent and the NASDAQ Composite losing an additional 25 percent of its value. During the second quarter of 2001, however, each index experienced a gain. Because of the impact of the recession, the gains of the second quarter were not sustainable, and during the summer the indices began to slide once again. The declines became even greater in August and into early September (see Figure 5), and then the markets were jolted by the September 11 terrorist attacks on the World Trade Center and the Pentagon. When the markets closed on the first day of trading following the attacks, September 17, the NASDAQ Composite had lost 6.8 percent and the S&P 500 lost 4.9 percent when compared with the close on September 10.

Figure 5
NASDAQ Composite and S&P 500 Indices
2000 through 2003



Sources: NASDAQ; Standard & Poor's

With the national economy weakening in 2001, activities related to mergers and acquisitions and IPOs declined. In 2001, the Securities Industry Association reported the value of all IPOs at $40.8 billion, which was 46 percent lower than in 2000. Similarly, the number of mergers and acquisitions in 2001 declined by 32 percent from 9,095 one year earlier. The declines in both these areas contributed to the fall in profitability for the securities industry.

The stock market fall, the national recession, and the September 11 terrorist attacks were then followed by corporate scandals and the war on terrorism—together, these events have hit Wall Street especially hard. In 2003 the share of securities industry employment in the City declined sharply to 4.5 percent (see Table 2), the lowest since 1993. Between 2000 and 2003 Wall Street lost 34,950 jobs, representing 17.9 percent of all City job losses during that period and more than all the jobs that the industry added from 1995 through 2000.

Profits at Wall Street firms, which had peaked at $21 billion in 2000, fell in 2001 and again in 2002. An improvement occurred in 2003, with profits reaching $16.8 billion, almost two and a half times the prior year's level. Bonuses paid to securities industry workers followed a similar pattern, peaking in 2000 and then declining in 2001 and 2002. We estimate that bonuses rose during 2003. Table 2 also shows that capital gains realizations for New York City taxpayers fell steeply during 2001 and 2002, with the decline in 2001 exceeding 50 percent.

Table 2
Wall Street Economic Indicators

	2000	2001	2002	2003
Employment (in thousands)				
NYC Securities Industry Employment	195.4	188.1	169.5	160.5
Percent Change		-3.7%	-9.9%	-5.3%
Difference		-7.3	-18.6	-9.0
Cumulative Difference Since 2000				-34.9
NYC Total Employment	3,723.1	3,692.0	3,583.5	3,528.5
Cumulative Difference Since 2000				-194.6
Securities Employment as Percent of Total	5.2%	5.1%	4.7%	4.5%
Securities Share of Change Since 2000				17.9%
Profits and Bonuses (in billions)				
Securities Industry Profits	$21.0	$10.4	$6.9	$16.8
Percent Change		-50.5%	-33.7%	143.5%
Securities Industry Bonuses	$19.5	$12.8	$8.6 *	$10.7 *
Percent Change		-34.4%	-32.8%	24.4%
NYC Capital Gains (in millions)	$28,691.9	$13,852.4	$8,588.2 **	$8,588.2 **
Percent Change		-51.7%	-38.0%	0.0%
Wages (in millions)				
NYC Securities Industry Wages	$46,105.4	$47,396.3	$37,826.9	NA
Percent Change		2.8%	-20.2%	NA
Cumulative Difference Since 2000			-$8,278.5	NA
NYC Total Wages	$213,122.8	$217,434.2	$205,864.6	NA
Cumulative Difference Since 2000			-$7,258.3	NA
Securities Wages as Percent of Total	21.6%	21.8%	18.4%	NA

* Estimated by The Office of the State Deputy Comptroller.
** Estimated by NYC Office of Management and Budget.

Sources: NYS Department of Labor; NYS Department of Taxation & Finance; New York Stock Exchange; Securities Industry Association; NYC Office of Management and Budget; OSDC analysis

Because year-end bonuses are typically paid in December and January, securities industry wages[7] continued to grow in 2001 but declined significantly in 2002. Between 2000 and 2002, securities industry wages fell by about 18 percent—far more than the 3.4 percent drop in total wages—while wages in nonsecurities industries grew by about 1 percent. Securities industry wages as a share of total wages paid in the City fell from 21.6 percent in 2000 to 18.4 percent in 2002 (the most recent year for which annual wage data are available).

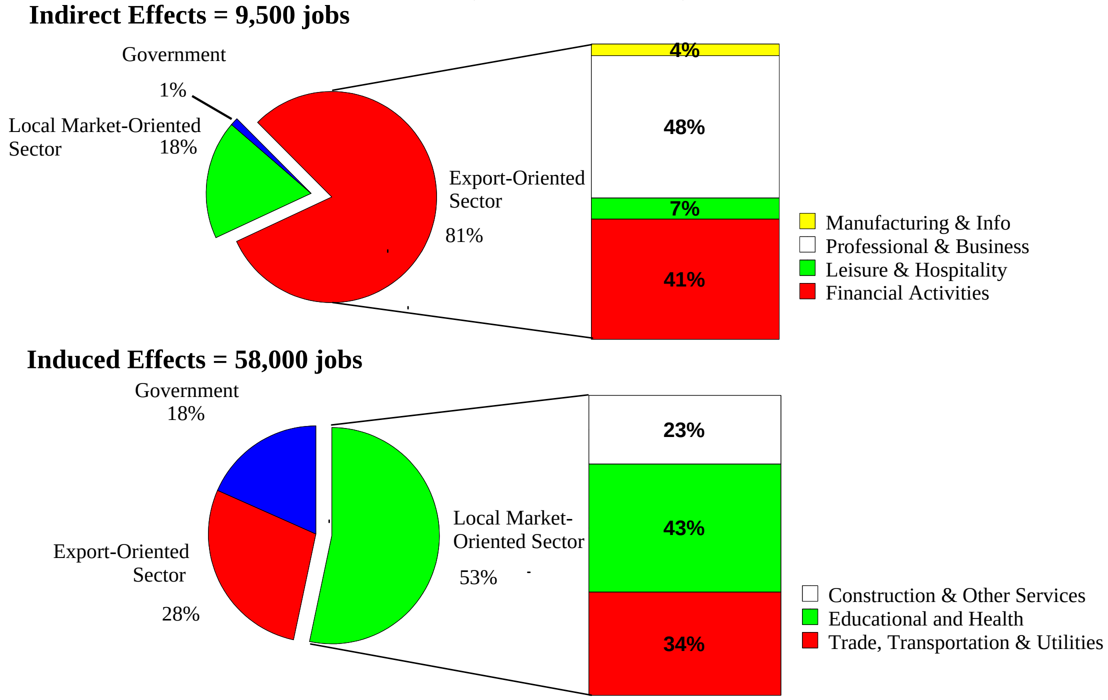
The downturn on Wall Street was also reflected in average salaries. While securities industry average salaries declined by 6.2 percent, falling from $242,193 in 2000 to $227,192 in 2002, average salaries in nonsecurities industries grew by 4 percent during this period, from $47,345 to $49,220.

As in the years during which the securities industry boomed, the economic impact of Wall Street spread to the local economy when the securities industry contracted. Results from the model indicate that the direct loss of 34,950 securities industry jobs between 2000 and 2003 led to indirect effects on other businesses that support the securities industry, causing them to lose 9,500 jobs. About 81 percent of these indirect job losses occurred in the City's export-oriented sector, primarily in financial activities and professional and business services (see Figure 6). The induced effects caused by reduced levels of household spending from all of these job losses led to additional job losses of 58,000 in other industries in the City. The combination of the direct, indirect, and induced effects of the contraction in the securities industry accounted for over 102,000 jobs, or nearly 53 percent of the City's total job losses during the 2000 to 2003 period.

The decline in securities industry jobs in New York City also affected the rest of New York State, again primarily through the effects of reduced spending due to job losses and income reduction for commuters. Based upon the model multipliers, we estimate that the contraction in the securities industry in the City ultimately led to a Statewide employment reduction of over 147,000 jobs, or 63 percent of the State's total job losses in the 2000 through 2003 period.

[7] Industrial classifications for wage and employment data were changed beginning in 2000. The new North American Industrial Classification System (NAICS) was designed to better categorize final products compared to the Standard Industrial Code (SIC) system. Although significant reclassification occurred in some industries, the financial industries, particularly those related to the securities industry, are largely unchanged in the new system.

Figure 6
Impact of Wall Street Job Losses on Other City Industries
(from 2000 to 2003)



Sources: NYS Department of Labor; OSDC analysis

Tax collections derived from the securities industry also declined significantly, falling from $2.4 billion in FY 2001 to $1.3 billion in FY 2003 (see Figure 3 in previous section). This $1.1 billion decline accounted for 67 percent of the drop in total nonproperty tax collections during those two years. Falling personal income tax collections were responsible for most of the decline in revenues derived from the securities industry. In fact, collections from capital gains realizations fell by more than 50 percent between fiscal years 2001 and 2002 and dropped another 38 percent in the next fiscal year.

State revenues related to the securities industry fell even faster than in the City, falling from $8.2 billion in SFY 2001 to $3.8 billion in SFY 2003—a decline of almost 54 percent compared to the 46 percent decline in the City.

IV. What Does the Future Hold?

The securities industry is always in flux as the investment climate shifts and investment products evolve. That is the nature of the business—there will always be cycles. Yet even with an improving economy, the market rebound that started in 2003 will be different from the 1990s boom. The bear market of the early 2000s was severe, and with many more Americans invested in the financial markets than there were when the last recession ended,[8] this experience will shape near-term investment decisions. The evolution of the business cycle will also be affected by several macroeconomic issues. Recent tax cuts and the current historically low interest rates were intended to stimulate the economy, but as the economy begins to grow, monetary and fiscal policy usually shifts to a less stimulative stance to slow the rise of wage and price inflation. The current stimulative fiscal policy has been bought at the expense of a rising federal budget deficit, which will need to be addressed before it has its own impact on interest rates and future economic growth. Moreover, America's financial markets are now more tied to the global markets, so domestic monetary and fiscal policies quickly receive international feedback, which can have additional impacts on the securities industry.

The securities industry also faces a number of structural issues that could affect how it operates. These include the industry's response to the threat of terrorism and the continued expansion of technology. There are also the continuing effects of the recent string of Wall Street scandals, which spanned both corporate governance and financial market operations. The decline in the financial markets that began in 2000 eventually exposed corporate accounting irregularities that had developed as the financial markets surged toward their peak. These disclosures were the start of broader scandals that extended across the areas of corporate governance, Wall Street practices, and the operations of the New York Stock Exchange. As a result, securities firms had to modify some aspects of their business.

While these cyclical and structural challenges will have an impact on the securities industry, they are not likely to diminish the industry's short-term economic or fiscal importance to the City and the State. Cycles are part of the nature of Wall Street, and one of Wall Street's strengths is adapting to new business environments. Structural challenges such as electronic trading may impact how financial instruments

[8] According to the Federal Reserve's *Survey of Consumer Finances*, the percentage of American families that have direct or indirect (e.g., mutual funds) stock ownership rose from 36.7 percent in 1992 to 51.9 percent in 2001. This survey is conducted every three years, with the results for 2004 expected to be released in 2006.

are traded, but deal-making and the creation of increasingly more sophisticated instruments is a major part of the business of the securities industry. Moreover, given the critical mass of highly skilled professionals available to the industry in New York City, as well as the City's international financial role—partnered with London in Europe and Tokyo in Asia—the high value–added aspect of the business is likely to remain. Nonetheless, the City and the State must not take the industry for granted, and both should pursue policies that support the industry and assist its evolution.

A. Macroeconomic Issues

After passing through a severe bear market, both the financial markets and the securities industry have started to recover. Several factors will influence the overall macroeconomic environment for this recovery.

Federal Reserve Policy

The financial markets and its participants are affected by monetary policy more directly than most aspects of the economy. Monetary tightening could cool off bond and stock market activity, as investors would perceive less corporate profitability and slower economic growth in response to rising interest rates. An unexpected or sharp rate increase would be especially detrimental to the financial markets and to Wall Street.

The historically low interest rate environment created by the Federal Reserve has helped sustain the economic recovery that began in late 2001. Currently, with inflation remaining subdued and the job market staying sluggish, monetary policy may remain accommodating for a longer period. Nonetheless, rising GDP growth—with its associated increase in labor and capacity utilization and the threat of rising prices—makes a rate hike inevitable. According to the March 2004 forecasts from Global Insight, the Federal Reserve would be most likely to raise the federal funds rate—a key overnight lending rate that currently stands at 1 percent—by 25 basis points in August and then again after the presidential election by an additional 50 basis points, bringing the rate to 1.75 percent by the end of this year. Beyond 2004, gradual increases in the federal funds rate are anticipated, with the average annual increase equal to 75 basis points. In this scenario, the impact of monetary tightening on financial markets and on Wall Street would be minimal because increases would be small and gradual, and the prospect of increased corporate profitability would outweigh the risk associated with higher interest costs.

However, a sudden and sharp rate increase beyond Wall Street's expectation cannot be ruled out. Between early 1994 and early 1995, the Federal Reserve raised the federal funds rate by a total of three percentage points in response to concerns about an accelerating economic expansion and a possible surge in inflation. The sharp rise in interest rates resulted in a slowdown of the economy, a slump in the bond market, and a depressed stock market. According to research conducted by the Federal Reserve, an unexpected rise in the federal funds rate of 1 percent would lead to a decline of stock prices between 3 percent and 6 percent. Therefore, a risk would exist if the Federal Reserve postponed raising rates and was forced to compensate with frequent or large increases beginning later in 2004 or early 2005.

Federal Budget Deficits

Growing federal budget deficits pose another risk, especially as baby boomers begin to retire and draw down Social Security and Medicare benefits. In order to fund the deficit, the Treasury will need to issue more debt, which in turn places upward pressure on interest rates in order to attract investors (either domestic or international). Additionally, an increased supply of Treasury securities could crowd out private sector businesses from the available funds in the financial markets. Since 2000, the federal government's fiscal outlook has deteriorated markedly, as a projected $5.6 trillion ten-year surplus has become a long-term deficit, currently projected by the Congressional Budget Office to total $2 trillion over the next ten years. The change has primarily occurred because of slower economic growth, two significant tax reductions, increased spending for wars and homeland security, and a Medicare prescription drug benefit. However, several initiatives could push the cumulative ten-year deficit higher, most notably making all the recent tax reductions permanent ($1.2 trillion) or reforming the alternate minimum tax ($376 billion).

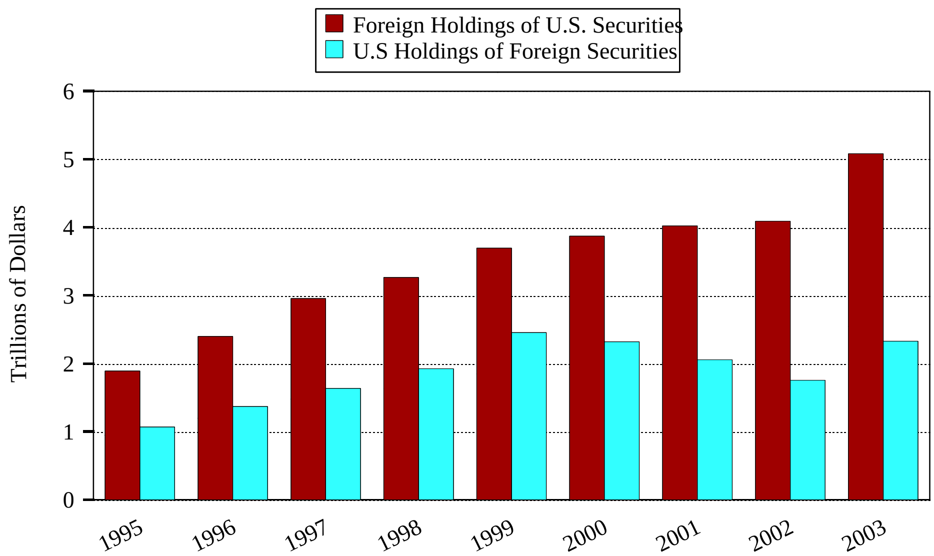
Interdependence of International Financial Markets

In the current era of globalization, international financial markets have become increasingly interdependent, and events that transpire in one country are instantaneously felt by world markets. For example, the financial turmoil that unfolded in Thailand in 1997 with the devaluation of its currency was felt throughout the world, including on Wall Street. Additionally, it is not uncommon for U.S. investors to hold assets based in foreign countries, including mutual funds comprised solely of international securities. Similarly, many financial instruments of U.S. corporations, as well as of government entities, are held by international investors.

At the end of 2003, U.S. holdings of foreign securities amounted to just over $2.3 trillion (see Figure 7). At the same time, overseas investors held almost $5.1 trillion in U.S. securities. Nearly three quarters of the financial assets of U.S. investors are either directly or indirectly linked to the financial marketplace. The cross-border mobility of capital flows has enormously increased throughout the years, largely as a result of the liberalization of markets.

Figure 7

International Securities Holdings



Source: Federal Reserve Bank, Flow of Funds

With net capital inflows rising, Wall Street could face a risk from the country's rising current account deficit (a much broader measure than the merchandise trade deficit, since it also includes investment flows), which reached a record high of 5 percent of the GDP in 2003, suggesting that the U.S. is consuming more than it produces. Foreign investors are currently willing to finance U.S. investments (including Treasury debt to support the federal budget deficit) and consumption in return for higher yields. However, global investors have become wary of the growing current account and federal budget deficits, and these concerns are contributing to the decline of the dollar in the foreign exchange markets. As the value of the dollar has fallen there have been short-term benefits, such as greater demand for U.S. exports and boosted U.S. stock prices (a falling dollar increases the value of overseas earnings for U.S. companies when they are restated in dollars). On the whole, however, the twin deficits could propel foreign investors to lose faith in the U.S. economy's ability to meet its long-run debt obligations. Interest rates would need to rise in order to attract foreign capital and to raise the value of the dollar. Rising interest rates, though, would place a drag on the national economy and could lower Wall Street's profitability.

B. Structural Developments

While macroeconomic factors help shape broader cyclical trends, the securities industry also faces more direct changes that will affect its basic operations.

Terrorist Attacks of September 11, 2001

The impact of the events of September 11, 2001, on Wall Street and the City's economy extended beyond the job losses associated with financial activities and the declining value of stocks. The financial markets remained closed for four days as the exchanges worked to reopen as soon as possible. Several logistical problems, especially those related to telecommunications, had to be solved. For example, 35 member firms of the New York Stock Exchange were either displaced or prevented from gaining access to their facilities, and about 1,000 telephone circuits on the trading floor had been connected to one of the destroyed buildings. Treasury securities experienced a brief disruption in market making and clearing, and some commodity markets were also closed during the period from September 11 to September 17.

While the events of September 11 showed the vulnerabilities of the industry to potential natural and manmade disasters, it also brought about examinations of these vulnerabilities, and subsequent recommendations to strengthen the markets.[9] These included expanding the geographic diversity of the exchanges and financial institutions, which would result in the permanent displacement of industry employees; and improving capabilities of both the industry's backup systems and the telecommunications infrastructure.

In February 2003, the U.S. General Accounting Office found that financial institutions had improved their security of physical and information infrastructure as well as their business community plans, designed to reduce the impacts of any future disasters. However, the findings noted that greater efforts needed to be made in areas related to backup systems. Some organizations needed to better insure that essential

[9] Analyses of the impact of the September 11, 2001 terrorist attack on Lower Manhattan and the securities industry have been performed by several organizations, including the SEC, the Comptroller of the Currency, the Federal Reserve, the Federal Deposit Insurance Corporation, McKinsey & Co., the Partnership for New York City, and the Regional Plan Association.

employees would be able to conduct critical operations at backup sites, and some organizations either had not developed a backup site or had located a backup site in close proximity to the primary site.[10]

Corporate Governance

During 2001 and 2002, a string of corporate scandals emerged, involving individual companies and their corporate officers, the accounting industry, and investment banking houses. Initial disclosures of questionable accounting practices and inadequate governance at several major corporations were quickly followed by similar reports at many other companies. Inflation of corporate earnings was found to be widespread, leading to a significant increase in earnings restatements. Some of the biggest scandals resulted in bankruptcy filings, and several corporate leaders faced criminal prosecution. Investigations also disclosed conflicts of interest between investment bankers and market analysts at many Wall Street firms. Research findings were modified to satisfy clients and generate additional banking business, while the top corporate officers of client firms were given preferential access to initial public stock offerings in return for bringing business to certain banks. The impact of these scandals was far-reaching. Public confidence in the financial markets and its stewards was shaken, and the bear market was prolonged.[11]

The aftermath of these scandals and the resulting investor losses brought reform efforts. In 2002, Congress passed and the President signed into law the Sarbanes-Oxley Act, which had the general goal of improving the quality of financial reporting through strengthened accounting and auditing standards and an increase in corporate executives’ responsibility for their financial reports. In addition, the Public Company Accounting Oversight Board was created, the Securities and Exchange Commission (SEC) was given increased oversight responsibilities, and new crimes and penalties were defined.

As the sole trustee for the New York State Common Retirement Fund, which is the nation’s second largest pension fund, the State Comptroller has advocated for improved corporate governance. In addition, he has joined with other institutional and individual investors from several states to form the National Coalition for Corporate

[10] The Securities Industry Association (SIA) is in agreement with these findings, and in testimony to the Congressional Subcommittee on Capital Markets, Insurance and Government Sponsored Enterprises, SIA noted that the industry was working to be better prepared.

[11] For more details see our report, *Impact of the Corporate Scandals on New York State,* August 2003.

Reform. The organization is currently working to improve proxy access for investors seeking to nominate candidates for corporate boards.

The New York State Attorney General, the SEC, and others investigated the contributions of Wall Street firms to the scandals. By early 2003, investigations covering conflicts of interest at the top ten investment banks were resolved in a global settlement, which specified a $1.4 billion payment consisting of civil penalties and disgorgement, and payments to fund independent research and investor education. In general, several aspects of how the securities firms operated were changed: research and investment banking operations must now be separated; banks are required to establish a fund to provide customers with investment research from at least three independent research firms; analysts are required to have a greater disclosure of the basis of their ratings; and the use of access to initial public offerings as an incentive to build investment banking fees is no longer permitted.

Mutual Fund Scandals

Corporate governance–related investigations of Wall Street led to the uncovering of improprieties in the operations of the mutual fund industry. The major investigations have centered on the prices made available to investors when trading their funds. Some fund managers allowed favored individuals or companies to make after-hours trades (a practice known as "late trading") that exploited market swings in ways unavailable to most investors. In addition, some firms allowed rapid buying and selling of fund shares by favored individuals or firms (a practice known as "market timing"). These quick, short-term positions utilize market price discrepancies relative to a fund's closing price to generate more profits than are available to regular, longer-term investors. Rapid trading has also allowed some firms to generate higher fees, as increased transaction costs must be spread among all fund investors. When market timing and late trading allow trading at prices other than a fund's official closing price, the fund must absorb the difference between the actual and closing price in these trades, thereby diluting the returns to all other fund investors. Thus far, the New York State Attorney General, Massachusetts regulators, and the SEC have charged several individuals and firms (primarily those with hedge funds) with various after-hours trading violations, and these investigations are continuing.

In January 2004, the New York State Comptroller and the treasurers of the states of California and North Carolina proposed mutual fund industry reforms for mutual fund firms seeking to do business with their states' pension funds, in response to the alleged after-hours trading violations. Congress is currently debating its own mutual fund industry reform bill. Given that mutual funds are the major source of stock ownership for many Americans—about 95 million individuals have invested in funds, which collectively manage about $7 trillion in assets—maintaining the health and integrity of the industry is good not just for investors, but also for New York City's economy. Unlike the corporate scandals, however, the mutual fund scandals have not yet resulted in a dramatic pullback by fund investors.

New York Stock Exchange Reforms

The NYSE is the world's largest capital market, and is at the heart of New York's securities industry. In 2003, the average daily trade volume was 1.4 billion shares, valued at $38.5 billion, and the total global market capitalization was $16.8 trillion. The number of listed firms reached 2,750 in 2003, of which 467 are non-U.S. companies from 50 different countries. As the corporate scandals unfolded and reform measures passed in Congress, the NYSE undertook its own corporate governance reform efforts for listed companies. However, the Exchange became immersed in its own governance scandal following disclosures about the pay package for its Chairman and Chief Executive Officer Richard Grasso, who was pressured to resign in September 2003. After his resignation, John Reed became interim chairman, keeping this position after John Thain was installed as chief executive officer in January 2004. New governance rules that cover both listed firms and the NYSE structure were proposed in late 2003 and approved by the SEC.

In order to change and improve its own governance, the NYSE reconstituted its Board of Directors to make it independent of the Exchange's management and listed companies. The board will monitor the Exchange's performance and competitive position, approve strategies, make managerial hiring and compensation decisions, and supervise the Exchange's regulatory oversight functions. At the same time, a Board of Executives was created to represent NYSE constituents and to serve in an advisory role to the Board of Directors. Meeting regularly throughout the year, this board will discuss organizational performance, membership and listed-company issues, and public subjects related to market performance and structure.

While it was addressing its own corporate governance issues, the NYSE also adopted new governance rules for its listed companies. The new rules were approved by the SEC in June 2003 and November 2003, and listed companies have until October 31, 2004, to abide by most of the new provisions. In general, these rules seek to strengthen the authority and responsibility of corporate boards of directors. Each listed company must have a corporate board constituted by a majority of independent directors (using several criteria to determine independence). Non-management directors are required to meet regularly without managers. Companies must also have several committees, including nominating, compensation, and audit committees. The audit committee has detailed responsibilities concerning the production and release of financial statements.

The NYSE also now requires that the boards of its listed companies adopt and publicly disclose a charter for each committee that addresses the responsibilities described in the Exchange rules, and approve and disclose a code of business conduct and ethics for all staff members. In order to assure that the listed companies are adhering to the standards, each chief executive officer must make an annual certification to the NYSE that he or she is not aware of any violation of governance standards, and must notify the Exchange after any executive officer becomes aware of any material noncompliance. Additionally, companies must give shareholders the opportunity to vote on all equity-based compensation plans, with limited exceptions.

Specialist Firms

The bulk of NYSE trades are handled on a trading floor, where human interactions result in a transaction. As the NYSE evolved, the role of the specialist was created—traders who help make a market for the stocks of a particular listed firm by matching buyers and sellers on the trading floor. When these matches do not occur, the specialist firms can intervene in the market. In the 1970s, Congress sought to link the different regional financial markets into a national market by creating the "trade-through" rule and the Intermarket Trading System to implement it. The trade-through rule requires that for customer orders affecting stocks listed on multiple exchanges, the transaction must be passed to the market with the best price—customer orders cannot be ignored or, in market parlance, "traded-through." On the NYSE, the specialists help establish that best price. However, as electronic trading was created and spread, it allowed transaction times to be reduced compared to the slower human interaction of specialists executing a trade. Decimalization of prices also allowed smaller variations in price than the older fractional increments. Critics claim that while the NYSE may post the best price most of the time, the slow specialist system is not always able to hold that best price as it changes during the course of the transaction. Critics also contend that the specialists protect the NYSE's dominant position in the financial markets, generate significant profit for themselves, and are open to abuse.

In December 2003, the nation's largest public pension fund (CalPERS), which has assets of more than $157 billion and provides retirement benefits to about 1.4 million public employees in the State of California, filed a lawsuit against the NYSE and seven of its specialist firms alleging that fraudulent practices have cost investors millions of dollars in recent years. This lawsuit came at a time when the SEC was conducting its own investigation into specialists' behavior. In its lawsuit CalPERS accuses the firms of failing to fill buy-and-sell orders at the best price and unnecessarily intervening in trades for their own financial benefits—a practice that is against federal law. The pension fund also alleges that the NYSE did not take the appropriate level of action in this situation, because its management is funded, in part, through fees paid by the specialist firms.

In February 2004, after an investigation conducted by the SEC that had lasted longer than a year, the NYSE's top market makers agreed to a tentative settlement whereby they would pay about $150 million in restitution to investors harmed by the trading infractions, and an additional $90 million in fines. This action is separate from the CalPERS suit, which is still pending.

On February 24, 2004, the SEC released for public comment its proposed new regulations to govern the equity markets, including a modification to the "trade-through" rule. Although customers would still be generally entitled to the best price available, they would be allowed to opt out of the rule on an order-by-order basis if they wanted to favor speed of execution over best price. In addition, orders could be sent or "traded-through" to an automated market even if that market showed a price that was inferior to the best price (but within an established range of one cent to five cents per share depending on the share price) when that best price was shown on a non-automated market. The NYSE does not favor this change, as it believes it would increase market volatility, reduce liquidity, weaken the unity between different markets, and raise costs for small investors.

Technology and Electronic Trading

Since its founding in 1792, the New York Stock Exchange (NYSE) has taken many innovative steps to incorporate technology into its functional processes. Early technological advances were adopted to allow better communication, including the telegraph, the stock ticker, and the telephone. Later, technology was applied to trading speed and automation. In 1968, the Central Certificate Service was created to transfer securities electronically. With the introduction of the "trade-through" rule came the Intermarket Trading System in 1978, and beginning in the 1980s various systems were introduced to better link trading floor participants and speed the flow of information and orders. In 1996 the NYSE provided the real-time stock tickers on CNBC and CNNfn. Initial electronic trading programs were introduced in 2000. Current NYSE management has stated that it is committed to improving and enhancing its use of technology, while also being mindful of the impact any developments might have on itself and its members. In February 2004, the NYSE's Board of Directors approved a proposal to expand access to electronic trading.

Currently, the NYSE has an electronic trading system for smaller orders that works as an optional alternative to the specialist system. This system now handles about 7 percent of the trading volume. However, the system is only available for orders that involve less than 1,100 shares, and individual customers can only place orders once every 30 seconds. The NYSE Board has approved the removal of the 30-second limit for consecutive orders and the elimination of the 1,099-share size restriction for these orders, which will permit the handling of larger trade blocks electronically. In addition to limit orders, the system will now handle market orders. These trading changes are being examined by the SEC and, if approved, would be implemented in three steps. It is expected that expanded electronic trading will prevent abuses such as those for which specialist firms have recently been under investigation. The continued expansion of electronic trading would also allow the NYSE to compete more effectively with other automated markets and maintain its importance in the evolving financial markets.

Back-Office Relocation

Back-office and support operations continue to move out of New York City in response to cost considerations (a trend that began several decades ago), and the rise in popularity of discount brokerages, along with increased telecommunications capabilities, has allowed companies to establish offices away from Wall Street. Nonetheless, while back-office and retail operations have moved elsewhere, the City remains the site for high value–added investment banking operations of the industry. Major deals continue to require interpersonal access to a critical mass of top financial personnel. This structural difference in the securities industry's operations is reflected in average salaries, as employees in the securities industry outside of the City are typically paid lower wages ($152,000 in 2000) than those in the City ($247,000 in 2000).

A March 2004 report by the Securities Industry Association anticipated growth in profits, employment, and compensation in 2004, but also stressed that cost concerns and changing technologies will require the industry to make choices concerning the extent and location of future expansion.

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