

# The Securities Industry in New York City

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# **Highlights**

- The securities industry added 9,500 jobs last year and another 10,000 jobs during the first three quarters of 2007, although some firms have since announced plans to shed jobs.
- Wall Street accounts for 5 percent of jobs in New York City, but 23 percent of wages.
- Average salaries in the securities industry were 5.7 times the level of those in other industries in 2006—up from a multiple of 4.3 in 2003.
- Wall Street was responsible for 41 percent of the jobs gained in New York City between 2003 and 2006 and for 52 percent of the income gained.
- The average salary on Wall Street surged by 17 percent in 2006 to a record \$339,910. The average salary in the rest of the City's economy grew by only 5 percent to \$59,530.
- Wall Street bonuses reached a record \$23.9 billion in 2006—an average of more than \$136,000 per employee—although the 2007 bonus pool will be smaller.
- Personal and business tax collections from the securities industry account for almost
   9 percent of tax revenues for New York City and up to 20 percent for New York State.
- While New York City faces increased competition from overseas financial centers, the NYSE and the NASDAQ handle just under half of all equity trading in the world.
- Worldwide activity in mergers and acquisitions will set a new record in 2007. The value of completed deals reached \$2.5 trillion during the first three quarters of 2007—slightly less than all of last year.
- Six of the seven largest financial firms headquartered in New York City are among the top ten firms in the world for mergers and acquisitions, and underwriting activity.

Recent events underscore the cyclical nature of Wall Street. After three and a half years of solid gains that contributed to record New York City budget surpluses, the securities industry has been rocked by turmoil in the housing and credit markets. These events will exact a toll on profits, bonuses, jobs, and tax revenues, but the magnitude of the impact will depend on the depth and duration of the current credit crunch.

Traditional broker/dealer profits for New York Stock Exchange member firms totaled \$8.9 billion during the first half of 2007, only 4 percent less than last year, but profits are expected to be much weaker during the second half of the year.

The seven largest financial firms headquartered in New York City, which are highly diversified, posted record profits in 2005, 2006, and the first half of 2007. Although profits declined by almost 65 percent during the third quarter of 2007, profits for the first three quarters of the year are still slightly ahead of last year's record pace because of strong gains during the first half of the year. The fourth quarter will determine the outcome for the year and set the stage for 2008.

Given recent developments, the 2007 bonus pool will be smaller than last year's record level, but the decline may be modest given the performance of the large firms during the first half of the year and also because bonuses tend to decline at a slower rate than profits. Some firms and some employees, such as those working in mortgage-related areas, will experience large declines while others, such as those in investment banking, may receive even larger bonuses than last year.

Wall Street added 9,500 jobs last year and 10,000 jobs during the first three quarters of 2007—but the industry has announced plans to shed jobs. Job losses could accelerate in 2008 if fourth-quarter profits do not recover sufficiently and pressure mounts on financial firms to cut costs.

Fortunately, New York City's adopted budget for the current fiscal year had already assumed a slowdown on Wall Street. Next year's budget. however, could be affected to a greater degree if turmoil in the credit markets persists and extends to the City's real estate market, which heretofore has been remarkably resilient. The impact on New York State could be even greater than on the City because the State is more reliant on Wall Street as a source of revenue. Both the Mayor and the Governor have prudently taken recent developments into account as the City and the State update their financial plans.

While New York City should diversify its economy to protect against the cyclical nature of Wall Street, it also needs to support an industry so vital to the City's economy. The City, in partnership with Albany and Washington, is taking steps to improve the industry's ability to compete internationally, which will help maintain New York's prominent position in world finance.

# **Financial Market Trends**

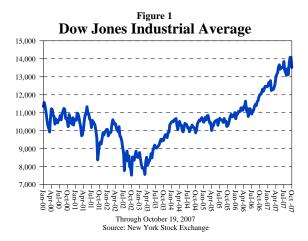
Large financial firms are increasingly operating on a global scale, and competition between major financial centers such as New York, London, Tokyo, and others has increased. Developments in one country—such as the market downturn in China in the spring, or the mortgage debt problems in the United States in the early summer—are quickly felt around the world. While the former event had short-term effects, the latter event escalated into a worldwide credit crisis.

### Equity Markets

Worldwide, equity markets rose sharply throughout 2006 and the first half of 2007. The Dow Jones Industrial Average closed above 14,000 for the first time on July 19, 2007 (see Figure 1). The Dow and other markets, however, promptly retreated as problems in subprime mortgage lending spread throughout the broader debt market, causing a rapid loss in the tolerance of risk, a tightening of credit standards, a reduction in available credit, the collapse of several hedge funds, and a virtual halt in leveraged buyout activity. By mid-August 2007, the Dow, the Tokyo Nikkei, and other major European market indices had fallen by about 10 percent from their earlier highs.

As the turmoil in the credit markets spread throughout the world, major central banks

(including those in the United States, Europe, and Japan) took action in August to maintain the financial system's liquidity. The Federal Reserve lowered the discount rate and eased other conditions on loans it makes to banks. In September, the Federal Reserve again lowered the discount rate. At the same time, it reduced the federal funds rate—which influences the cost of credit throughout the broader economy—by a half point, to 4.75 percent, in an attempt to boost economic growth and prevent a recession. The financial markets expect the Federal Reserve to further reduce interest rates.



Equity markets began to recover in late August, in the wake of the central banks' actions, although they remain volatile. The Dow surged in mid-September after the Federal Reserve cut rates, and subsequently topped 14,000 again to reach new records on October 1, 2007, and October 9, 2007. Overall, the Dow ended the third quarter with a slight gain compared to the end of the second quarter. Market indices in Europe and Tokyo showed slight losses, while other Asian markets had solid gains. Through October 23, 2007, the Dow was up 9.7 percent for the year.

# Asset-Backed Mortgage Securities

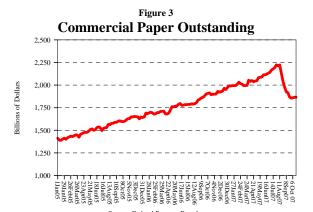
A rise in defaults among subprime mortgage borrowers—primarily in Arizona, California, Florida, Ohio, and Nevada—triggered the credit crunch. Banks and mortgage companies bundle their mortgage loans into securities and sell them as investments. The subprime mortgage problems quickly affected the entire mortgage investment pool because traditional and subprime mortgages are mingled in these investments. The market for asset-backed mortgage securities retreated sharply during the summer of 2007 (see Figure 2).

Figure 2
Asset-Backed Home Mortgage Securities Issued



# Commercial Paper

The credit turmoil quickly moved beyond the initial problems in subprime mortgages to encompass the entire credit market. In the commercial paper market, many firms found themselves unable to issue or renew their short-term notes.<sup>1</sup> Total outstanding short-term commercial paper fell by 16.1 percent between July 28, 2007 and October 20, 2007 (see Figure 3).



A sustained reduction in credit access would threaten economic growth—another factor in the Federal Reserve's effort to increase liquidity. Several major banks, at the urging of the U.S. Treasury Department, have announced the creation of an \$80 billion fund that will be able to buy asset-backed commercial paper, thereby assisting firms that need to refinance debts. The fund will only buy highly rated debt—that is, debt related to subprime mortgages will be excluded. Market reaction to the fund has been mixed, in part because it remains unclear how the fund will work and how it will price the debt it purchases.

<sup>1</sup> Maturities can last up to 270 days, but most last 30 days.

# Investment Banking Activity

Data from Thomson Financial show that mergers and acquisitions activity, which reached a record during 2006, is on track to set a new record in 2007. Momentum built up early in the year drove the level of completed transactions worldwide to \$2.5 trillion during the first three quarters of 2007—an increase of 23.2 percent compared to the same period in 2006. The value of completed transactions in the United States increased by 38.2 percent to reach more than \$1.2 trillion, accounting for 47 percent of transactions worldwide (slightly above the U.S. share in 2006).

Debt and equity underwriting also reached record levels in 2006.<sup>3</sup> Though growth stayed strong in the first half of 2007 it slowed dramatically in the third quarter of 2007 as the credit crunch curtailed debt underwriting. Despite the weak third quarter, debt and equity underwriting totaled \$6 trillion during the first three quarters of this year, 6.5 percent higher than the same period last year.

Global debt underwriting during the third quarter of 2007 totaled \$1.3 trillion—about 40 percent less than during the second quarter of 2007. Nonetheless, debt underwriting increased by 4 percent in the first three quarters of 2007 compared to the same period of 2006. In the nation, total long-term debt issuance declined by 1.9 percent in the first three quarters of 2007, with issuance of asset-backed securities declining by 17.2 percent and issuance of residential mortgage-backed securities declining by 11.8 percent.

According to Thomson Financial, equity issuances in the United States totaled \$167.9 billion during the first three quarters of 2007, accounting for 27 percent of worldwide activity. However, the rate of increase (17.5 percent) lagged behind the worldwide rate of growth (33.7 percent). Initial public offerings (IPOs) in the United States remained strong despite the credit crisis, totaling \$35.6 billion during the first three quarters of 2007—a 19.1 percent increase. Worldwide, IPO activity rose nearly 26 percent during this period.

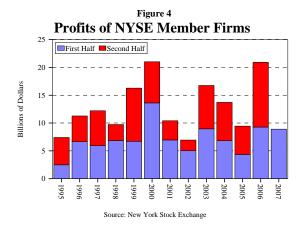
<sup>&</sup>lt;sup>2</sup> In 2006, the worldwide value of completed transactions totaled a record \$2.9 trillion, which was an increase of 25.8 percent from 2005.

That year, worldwide debt and equity underwriting increased by 15.5 percent to more than \$7.6 trillion. Debt accounted for more than 90 percent of underwriting activity.

The bulk of worldwide equity issuances and IPO activity occurred in Europe, the Middle East, Africa, and Asia—in fact, IPO activity in these areas was more than 3.5 times the activity in the United States.

# **Wall Street Profits**

Pretax profits of the broker/dealer operations of New York Stock Exchange member firms totaled \$20.9 billion in 2006 (see Figure 4)—just below the record \$21 billion reached in 2000 at the peak of the last bull market, and an increase of more than 121 percent from 2005 levels.



Profits totaled \$8.9 billion during the first half of 2007—only 4 percent less than the first half of 2006—although the second half of 2007 is expected to be much weaker. New York City's adopted budget assumed that profits would decline to \$16.8 billion in 2007, but the City now forecasts \$14.8 billion in profits.

Traditional broker/dealer profits alone, however, do not provide a full measure of Wall Street's health, as the large financial firms have diversified their operations into activities and markets that are not fully captured by this data. As a result, the Office of the State Comptroller (OSC) also

examines the pretax profits of the seven largest financial firms headquartered in New York City: Bear Stearns, Citigroup Markets and Banking, Goldman Sachs, JPMorgan Chase Investment Bank, Lehman Brothers, Merrill Lynch, and Morgan Stanley.

Profits at the seven firms peaked in the first quarter of 2007 at \$20.5 billion. During the second quarter, profits totaled \$18.6 billion as some firms—most notably Goldman Sachs and Bear Stearns—began to show the effect of the initial turmoil in the mortgage and debt markets. Nevertheless, profits for these seven firms increased by 41 percent during the first half of 2007 compared with the first half of 2006.

Third-quarter results show a more significant impact from the credit crunch, as profits at the seven firms totaled \$5.3 billion, which represents a decline of 64.8 percent compared with one year earlier. Despite the weak third quarter, profits for the first three quarters of 2007 are still slightly ahead of last year's record pace due to the strong first half of the year. In fact, several firms—such as Goldman Sachs and Morgan Stanley—are on track to report record profits for the year.

Goldman Sachs was the only firm to post an increase in profits during the third quarter (80.3 percent), reflecting strong market returns from hedging strategies and also the sale of an energy company (which yielded a profit of approximately \$900 million). Merrill Lynch, by contrast, was the only firm that reported a loss in the third quarter (\$3.5 billion, compared to a gain of \$4.1 billion one year earlier). The other major firms all made money in the third quarter, but pretax profits were lower than one year earlier—the declines ranged from 10.1 percent at Morgan Stanley to 83.4 percent at Citigroup (see Figure 5).

		Figu	re 5				
Preta	ax Profits at L	arge New	York City	y Financ	ial Firms		
	2006					First Half	YTD
	(in millions)	%Chng.	Q1/07	Q2/07	Q3/07	2007	2007
Goldman Sachs	\$14,560	76.0%	31.7%	-2.6%	80.3%	14.9%	31.1%
Morgan Stanley	10,958	60.5%	70.1%	34.3%	-10.1%	50.4%	30.2%
Merrill Lynch	10,426	44.2%	421.9%	27.3%	N/M	106.9%	-62.7%
Citigroup Markets and Banking	9,709	-0.6%	42.1%	67.7%	-83.4%	54.6%	10.4%
Lehman Brothers	5,905	22.3%	6.3%	25.4%	-11.9%	15.6%	7.2%
JPMorgan Chase Investment Bank	5,853	-0.1%	76.4%	36.1%	-76.7%	56.4%	6.8%
Bear Stearns	3,147	42.6%	11.0%	-33.6%	-73.8%	-12.5%	-30.6%
Total, Seven Firms	\$60,558	34.6%	59.1%	25.3%	-64.8%	41.0%	3.8%

The current credit crunch could remain a drag on profits for some time. In addition to the impact on underwriting and mergers and acquisitions activity, the turmoil has made it more difficult to determine the value of debt and other assets held by Wall Street firms, including those related to leveraged buyouts. Many firms continue to hold debt from deals that they have not yet been able to market, and which are now worth much less than initially estimated. Thus the firms will write-off the value of these holdings, which will erode earnings from other sources.

These write-offs were a significant factor in the reduced profitability reported for the third quarter of 2007. Merrill Lynch reported the largest writeoff—\$8.4 billion—reflecting the lower value of its debt holdings, primarily in subprime mortgage loans. Citigroup reported a \$2.9 billion write-off from the reduced value of its leveraged buyout and subprime mortgage debt. (Its banking side reported an additional \$2.2 billion write-off for bad consumer loans). Goldman Sachs, despite its overall strong gain, posted a \$1.5 billion reduction in the value of debt it held. Write-off losses at Bear Stearns and Lehman Brothers each totaled about \$700 million; at Morgan Stanley they totaled nearly \$900 million; and at JP Morgan they totaled \$1.3 billion.

Stock prices for the large financial firms reflect the weaker outlook for profits. As a result, market capitalization—the price of a firm's stock multiplied by the number of shares outstanding—fell as the crisis developed. Although a recovery has begun, at the beginning of October 2007 the combined market capitalization of Bear Stearns, Goldman Sachs, Lehman Brothers, Merrill Lynch, and Morgan Stanley (approximately \$275 billion) was still down more than 13 percent, or \$40 billion, since the end of June 2007. Still, this was slightly above where it stood at this time last year. Among the firms, Goldman Sachs has performed best, recovering nearly all its lost value.

# **Sources of Firm Revenues**

The large New York—based Wall Street firms have been increasing the volume of their international operations—and transferring executives from New York—to take advantage of the growth in overseas markets, particularly in London. In the aggregate, the seven large firms received nearly 43 percent of their revenues from non-U.S. sources in 2006, up

from 38 percent in 2004. The largest overseas contributions in 2006 occurred at Citigroup (63 percent) and JPMorgan (50 percent). Efforts to build business overseas have been particularly aggressive at Lehman Brothers, where the overseas share of revenues grew from 29 percent in 2004 to 53 percent in the third quarter of 2007.

The large Wall Street firms have four main sources of revenue: investment banking (which includes mergers and acquisitions and underwriting); principal transactions (trading with the firms' own investment portfolio); asset management; and interest income.

During the third quarter of 2007, net revenues declined by 18.3 percent at the seven firms. <sup>4</sup> This followed a 22.6 percent increase in the first half of 2007 and a 27.1 percent increase for all of 2006. Like profits, net revenue growth varied significantly among the firms in the third quarter, ranging from a 62.6 percent increase at Goldman Sachs to a 94.1 percent decline at Merrill Lynch.

The mix of revenues also changed markedly in the third quarter. During the first half of 2007 and all of 2006, almost half of total net revenues for the seven large firms were derived from principal transactions, while investment banking accounted for the next largest share (about 17 percent). Asset management and net interest (after interest expenses) each accounted for about 13 percent of net revenues. Large losses in mortgages and in the value of held debt sharply reduced the contribution of principal transactions at all the firms except Goldman Sachs (see Figure 6).

While the value of principal transactions grew by more than 46 percent in 2006, the rate of increase slowed to 27 percent during the first half of 2007. During the third quarter of 2007, income from principal transactions rose by 73.4 percent at Goldman Sachs, but there was an aggregate loss of close to \$4 billion at the remaining six firms. Growth in investment banking revenues remained strong, increasing by 15 percent in the third quarter of 2007, after growing by 33.1 percent in

<sup>&</sup>lt;sup>4</sup> As interest income is usually proportional to interest expenses, two of the seven firms (Citigroup Markets and Banking and JPMorgan Chase Investment Bank) report revenues on a net basis after subtracting interest expenses. Revenues at the other firms that report on a gross basis have been adjusted to a comparable net basis.

the first half of 2007 and 29.3 percent in all of 2006.

Figure 6
Firm Revenue Components

(in millions)

Goldman Sachs								
	Q3/06	Q2/07	Q3/07	Q3/07%				
Investment Banking	\$1,285	\$1,720	\$2,145	66.9%				
Principal Transactions	4,368	6,242	7,576	73.4%				
Asset Management	975	1,107	1,272	30.5%				
Net Interest Income	956	1,113	1,341	40.3%				
	n	C4						
Bear Stearns Q3/06 Q2/07 Q3/07 Q3/07%								
Itot Dl-i	284	-	Q3/07 277					
Investment Banking Principal Transactions	1,094	404 1,223	301	-2.3% -72.5%				
Asset Management	1,094	237	39	-74.7%				
Net Interest Income	316	342	359	13.6%				
ivet interest income	310	342	339	13.070				
	Morga	n Stanley						
	Q3/06	Q2/07	Q3/07	Q3/07%				
Investment Banking	1,138	1,913	1,659	45.8%				
Principal Transactions	3,143	5,842	1,939	-38.3%				
Asset Management	1,312	1,596	1,701	29.6%				
Net Interest Income	472	-271	1,133	140.0%				
	Lehman	Brothers						
	Q3/06	Q2/07	Q3/07	Q3/07%				
Investment Banking	726	1,150	1,071	47.5%				
Principal Transactions	2,247	2,889	1,612	-28.3%				
Asset Management	358	414	472	31.8%				
Net Interest Income	318	491	479	50.6%				
	3.6	n r						
	O3/06	ll Lynch O2/07	O3/07	Q3/07%				
Investment Banking	922	1,538	1,281	38.9%				
Principal Transactions	1,673	3,547	-5,930	N/M				
Asset Management	1,714	1,352	1,397	-18.5%				
Net Interest Income	1,227	583	2,379	93.9%				
Tier interest income			2,577	23.270				
		group		0.2/0.20/				
T	Q3/06	Q2/07	Q3/07	Q3/07%				
Investment Banking	933	1,422	-34	-103.6%				
Principal Transactions	1,521	2,403	-1,035	N/M				
Asset Management	780	974	1,085	39.1%				
Net Interest Income	1,913	2,831	3,359	75.6%				
JP Morgan								
	Q3/06	Q2/07	Q3/07	Q3/07%				
Investment Banking	1,419	1,900	1,330	-6.3%				
Principal Transactions	2,548	2,178	-848	N/M				
Asset Management	512	643	712	39.1%				
Net Interest Income	51	862	1,710	3252.9%				
N. D I C.			11					

Notes: Percent change is from the same period one year earlier.

 $N/M = Not \ Meaningful$  Source: Corporate earnings reports

### Investment Banking Fee Income

Except for Bear Stearns, the remaining six large New York firms were among the top ten in the world in 2007 based on the value of fees earned from mergers and acquisitions. All six firms showed growth in fee income of more than 20 percent during the first three quarters of 2007 compared with the same period in 2006. Goldman Sachs was the top-ranked firm, earning \$2 billion.

The same six firms were also among the top ten in the world for fees earned from debt and equity underwriting. Citigroup was the top-ranked firm in this category, earning \$2.6 billion in fees in the first three quarters of 2007. Although underwriting fees earned by Goldman Sachs declined by 5.2 percent in the first three quarters of 2007 when compared to the same period of 2006, the other five firms had growth rates that ranged from 8.8 percent to nearly 40 percent.

# **Employment**

The period between 2000 and 2003 was tumultuous for the City's securities industry because of the World Trade Center terrorist attack, a bear market, and corporate scandals that resulted in employment losses of 34,000 jobs on an average annual basis. Between 2003 and 2006, as Wall Street once again expanded, the industry regained more than half of its lost jobs as employment grew by 18,100 jobs to reach almost 180,000 (see Figure 7). Growth was particularly strong in 2006, when the securities industry added 9,500 jobs, a gain of 5.6 percent. This was the highest rate of growth since 1994.

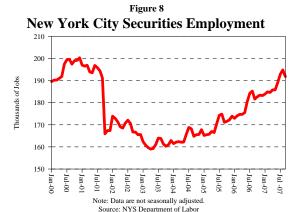
Figure 7
Wall Street Jobs and Wages

	2003	2004	2005	2006
Employment (in thousands)				
NYC Securities Industry Employment	161.3	164.7	169.9	179.4
Percent Change		2.1%	3.2%	5.6%
Difference		3.4	5.2	9.5
Cumulative Difference Since 2003				18.1
NYC Total Employment	3,531.7	3,550.3	3,602.2	3,664.4
Cumulative Difference Since 2003				132.7
Securities Employment as Percent of Total	4.6%	4.6%	4.7%	4.9%
Securities Share of Change Since 2003				13.6%
Wages and Bonuses (in billions)				
Securities Industry Bonuses	\$15.8	\$18.6	\$20.4 *	\$23.9 *
Percent Change		17.7%	9.9%	17.3%
NYC Securities Industry Wages	\$35.8	\$43.6	\$48.8	\$59.8
Percent Change		21.9%	11.9%	22.6%
Cumulative Difference Since 2003				\$24.1
NYC Total Wages	\$206.7	\$223.0	\$236.9	\$260.8
Cumulative Difference Since 2003				\$54.1
Securities Wages as Percent of Total	17.3%	19.6%	20.6%	22.9%
Securities Share of Change Since 2003				44.4%

\* OSC estimate

Sources: NYS Department of Labor; OSC analysis

Employment gains in the securities industry were also strong during the first three quarters of 2007 (5.6 percent or 10,000 jobs), growing at essentially the same rate as in 2006 (see Figure 8). Wall Street, however, is in the process of reassessing employment levels. In recent weeks a number of financial firms have announced plans to shed jobs due to ongoing problems in the housing and credit markets, which will be reflected in future employment data. Job losses could accelerate in 2008 if fourth-quarter profits do not recover sufficiently and pressure mounts on financial firms to cut costs. Thus, employment levels in 2008 will be determined by the depth and the duration of the current credit crunch.



The strong rate of job growth in New York City's securities industry during 2006 and the first three quarters of 2007 was 3.7 times faster than gains in the rest of the City's economy, where employment increased by 1.5 percent in all of 2006 and also in the first three quarters of 2007. A retrenchment in Wall Street employment in 2008 would adversely affect employment in secondary industries that support Wall Street, such as the rating agencies and legal profession, as well as the rest of the local economy, such as real estate and restaurants.

Figure 9
Securities Industry Employment

	NYC	NYS	Nation	NYC as a Po	ercent of:
	(000s)	(000s)	(000s)	NYS	Nation
1990	154.9	164.8	457.9	94.0%	33.8%
2000	195.4	211.3	804.5	92.5%	24.3%
2001	188.1	205.4	830.5	91.6%	22.6%
2002	169.5	185.7	789.4	91.3%	21.5%
2003	161.3	176.8	757.7	91.2%	21.3%
2004	164.7	181.8	766.1	90.6%	21.5%
2005	169.9	189.2	786.1	89.8%	21.6%
2006	179.4	199.6	816.3	89.9%	22.0%
2007	188.2	209.2	839.4	90.0%	22.4%

Note: 2007 is the average for the first three quarters.

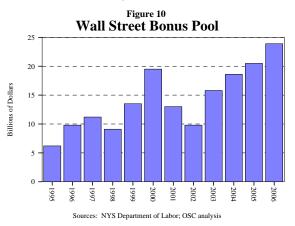
Sources: NYS Department of Labor; U.S. Bureau of Labor Statistics

New York City accounts for 90 percent of all securities jobs in New York State and more than 22 percent of such jobs in the nation (see Figure 9). The City's share of these jobs in the State has been slowly diminishing. During the last recession (and in the wake of the terrorist attacks of September 11, 2001) the securities industry contracted at a faster rate in the City than in the rest of the State, where employment benefited from relocations and the creation of backup facilities in the suburbs. Over the past few years, New York City's share of the nation's securities employment has grown somewhat, after years of

slow declines, reflecting the faster job growth of the industry in the City.

# **Wages and Salaries**

The State Comptroller found that Wall Street's year-end bonuses, boosted by high profitability (primarily from mergers and acquisitions, leveraged buyouts, and trading), reached a record \$23.9 billion in 2006 (see Figure 10). This represented an average bonus per employee of more than \$136,000. In the last four years Wall Street bonuses have steadily grown, reversing declines in 2001 and in 2002 (when bonuses fell to a low of \$9.8 billion).

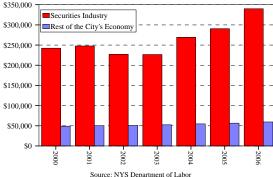


Although the turmoil in the credit markets will take its toll on Wall Street, bonuses tend to decline at a slower rate than profits, and the strong first half of 2007 will help support bonuses this year. OSC analysis indicates that the 2007 bonus pool may contract by up to 10 percent compared with last year's record level, but much will depend on the outcome of the fourth quarter. Some firms and employees, such as those working in mortgage-related areas, will experience large declines while others, such as those in investment banking, may receive larger bonuses than last year.

Together with base salaries, the total wages paid on Wall Street reached \$59.8 billion in 2006—a growth of 67.2 percent from 2003 (when the industry's recovery began), and almost four times faster than wage growth in the rest of the City's economy during the same period. Consequently, the share of City wages provided by Wall Street increased by 5.6 percentage points over this period, to reach nearly 23 percent in 2006. By contrast, Wall Street's share of employment hardly changed, rising by only 0.3 percentage points during this period, to nearly 5 percent.

The industry's share of City wages has been rising for some time. Twenty years earlier, in 1986 (before the 1987 market crash), Wall Street's share of employment was 4.6 percent (not significantly different from 2006), but its share of the City's wages (9.7 percent) was less than half its current level.

Figure 11
Average Salaries in New York City



The average salary on Wall Street surged to a record \$339,910 in 2006 (see Figure 11), as the pace of wage growth continued to exceed job growth. By contrast, the average salary in the rest of the City's economy reached \$59,530 in 2006. Between 2003 and 2006, the growth in the average salary within the securities industry was more than triple the growth in the average salary in nonsecurities industries (50 percent versus 13.8 percent). Consequently, securities industry average salaries were 5.7 times the level of nonsecurities industry salaries in 2006—up from a multiple of 4.3 in 2003.

Securities industry jobs in the rest of New York State paid about half as much—an average of \$167,100 in 2006—as in the City, primarily reflecting the retail, back-office, and backupfacility nature of the jobs. Nonetheless, the average securities industry salary in the rest of the State was still four times the average non-securities industry salary (up slightly from a multiple of 3.5 percent in 2003). As a result of the industry's high wages both in the City and in the rest of the State, the securities industry's share of total wages paid in the State (13.6 percent) was significantly higher than its share of employment (2.4 percent).

The industry's rising share of wages in both the City and the State has made both economies more dependent on the health of Wall Street. As a result, the booms and busts on Wall Street also contribute

to increased revenue swings in the City and State budgets.

# **Economic Multiplier**

The economic impact of the securities industry extends well beyond Wall Street itself. The direct effect of employment gains—and more importantly, of significant wage growth—increases employment and wages in other industries through multiplier effects. These effects can either be indirect (e.g., when securities firms purchase goods or services from other industries), or induced (e.g., the result of increases in household consumption).<sup>5</sup>

OSC analysis shows that each job added in the securities industry between 2003 and 2006 resulted in the creation of two additional jobs in other industries in the City. During this period, Wall Street employment increased by 18,100 jobs, which led to the creation of 36,500 jobs—5,800 jobs in industries doing business with Wall Street and 30,700 jobs due to increases in household consumption. These new jobs generated \$33.7 billion in additional income.

Wall Street-related job and income gains represented 41 percent of the City's total job gains and 52 percent of the City's total income gains between 2003 and 2006.

Employment gains resulting from indirect effects occurred mostly in export-oriented industries—which serve markets beyond the City—such as legal services, accounting, management consulting, and business support services. These industries have salaries above the Citywide average, though they are lower than the securities industry average. Job gains resulting from induced effects occurred primarily in industries serving local markets such as retail trade, health services, and restaurants; these generally have lower average salaries than the Citywide average.

Outside of the City, each new Wall Street job also results in 1.3 jobs in other industries across the rest of the State, predominantly in the suburban counties. Directly and indirectly, job gains on Wall Street between 2003 and 2006 resulted in the

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OSC analysis uses the IMPLAN input-output model. IMPLAN, originally developed for the federal government, utilizes detailed data on national and local interindustry economic transactions to model the effects of regional economic changes.

creation of 77,400 jobs and \$39.4 billion of income Statewide, accounting for 37.6 percent of total job gains and almost 37 percent of income gains in the State during the period.

# Tax Revenues

Wall Street makes sizable tax payments to New York City, and these have grown significantly in recent years as the industry's employment, wages, and profits have increased. OSC estimates that in FY 2007 the City collected over \$3.3 billion in tax revenue from the securities industry (see Figure 12). This revenue comes from payments in the business and personal income taxes (including payments resulting from realized capital gains; see Figure 13). Collections in FY 2007 were 45.8 percent more than the \$2.3 billion collected from Wall Street in FY 2001 at the peak of the last bull market. In FY 2007, these Wall Street revenues accounted for nearly 9 percent of City tax collections.



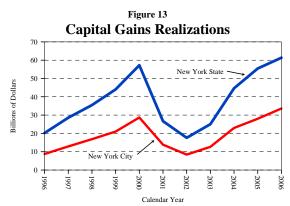


Note: City includes revenue from the personal income, general corporation, and unincorporated business taxes. State includes personal income and corporate Article 9A taxes. State and City personal income taxes include capital gains realizations.

Sources: NYS Department of Taxation & Finance; NYC Department of Finance; OSC analysis

New York State is even more dependent on Wall Street, as personal and business income taxes account for more than 62 percent of State tax revenues. The State benefits from the many industry employees who commute from the suburbs outside of New York City, as well as the larger statewide pool of capital gains realizations.

This estimate does not include industry payments of real property or real estate transaction taxes, or sales taxes paid on industry purchases. OSC estimates that New York State collected \$9.6 billion in revenue from the securities industry in State fiscal year (SFY) 2006-07 (see Figure 12). This was 23.2 percent more than the \$7.8 billion it collected in SFY 2000-01 at the peak of the previous bull market. The New York State Division of the Budget has indicated that in good economic times Wall Street accounts for up to 20 percent of State tax revenues.



Sources: NYS Department of Taxation and Finance; NYS Division of the Budget; NYC Office of Management and Budget

New York City's forecast of Wall Street-related tax revenues in the adopted budget for FY 2008 was conservative. Thus, the City has already recognized most of the down-side budgetary risk associated with the current credit crunch. Based on tax payment patterns, the City is not likely to see the revenue impact of the Wall Street turmoil until the second half of the current fiscal year. Next year's budget, however, could be affected to a greater degree if the turmoil in the credit markets persists and extends to the City's housing market, which heretofore has been remarkably resilient.

The impact on the State could be greater, both because the State was less conservative in its forecast of Wall Street—related revenues and because it relies more on Wall Street as a revenue source. Both the Mayor and the Governor have prudently taken recent developments into account as the City and the State update their financial plans.

# New York City's Competitive Position

New York City competes with other cities—both domestically and internationally—as a financial marketplace, where deals and products can be created and financial instruments can be traded.

<sup>&</sup>lt;sup>7</sup> Currently, the most recent final annual report on business tax collections issued by the New York City Department of Finance covers liability year 2003, while other preliminary reports cover through early FY 2006. OSC's estimates are based upon an extension of the trends in these reports.

# Domestic Competition

New York City is the heart of the securities industry in the United States. Among the 20 metropolitan areas with the nation's largest securities employment,8 the New metropolitan area provides the most jobs by farnearly 230,000 in 2006. (More than three quarters of these jobs are in New York City, though the entire metropolitan area includes New York City; the New York counties of Nassau, Putnam, Rockland, Suffolk, and Westchester; 12 counties in Northern New Jersey; and Pike County, PA.) The next-largest concentrations of securities jobs are in Chicago and Boston, each of which provided about 46,000 jobs in 2006 (see Figure 14).

Figure 14
Metropolitan Areas with Largest Securities Industry
Employment in 2006

Metropolitan Statistical Area	Jobs (000s)	Change from 2003	Wages (\$ bil)	Change from 2003
1. New York	229.9	11.3%	\$68.8	63.3%
2. Chicago	46.0	1.7%	8.0	35.9%
3. Boston	45.8	0.4%	8.3	29.5%
4. Los Angeles	37.1	13.5%	6.8	47.4%
5. San Francisco	25.6	-1.0%	6.8	42.7%
6. Philadelphia	20.7	NA	3.0	NA
7. Minneapolis-St. Paul	18.9	6.1%	2.4	26.2%
8. Dallas	18.6	18.2%	2.6	44.8%
9. Bridgeport-Stamford-Norwalk	16.6	26.0%	6.4	66.0%
10. Miami	16.5	12.3%	2.1	26.0%

Note: Data for Philadelphia not available for 2003.

Sources: Moody's Economy.com, based on data from the U.S. Bureau of Labor Statistics; OSC analysis

Similarly, more securities industry wages are earned in the New York metropolitan region than in anywhere else in the nation. Overall, the entire New York metropolitan area employed 28 percent of the nation's securities industry workers and paid 44.8 percent of all U.S. securities industry wages in 2006.

### International Competition—London

While New York City is indisputably the domestic leader of the securities industry, it faces stiff competition from London as the global leader. Both cities have particular strengths and weaknesses that contribute to their dominance.

As in New York, the securities industry in the United Kingdom has expanded in recent years, but the current credit crunch is having an adverse impact there as well. Between 2002 and 2006, the gross operating surplus for all financial

corporations in the U.K. had increased at an average annual rate of 8 percent, with average wages and salaries increasing by 4.7 percent annually. Employment in the financial intermediaries sector in the U.K. peaked in 2002 and then declined by 4.1 percent through 2006.

London's financial intermediation industry has had a large impact on the local economy, and shares many characteristics with New York City's securities industry. The industry has a higher average salary compared to other London industries (about \$165,000 in 2006<sup>10</sup>), and bonuses comprise a significant portion of total wages making up about 20 percent of total wages compared with 5 percent for other industries. Large income flows from the industry fuel growth in other sectors and have helped boost property values. The industry in London is also viewed as attractive to foreign workers, and recent increases in salary reflect the need for the industry to compete against other major markets, especially New York.<sup>11</sup>

London, however, faces its own pressures. The credit turmoil has likewise had an impact there—mortgage lenders are strained, leveraged buyout activity has slowed, financial firms and hedge funds have reported losses, and the recent failure of a mortgage bank led to a bank run. The Centre for Economics and Business Research, a U.K. consulting firm, estimates that bonuses for London's banking industry could decline by 15 percent in 2007. In addition, recent proposed and enacted tax changes will affect foreign business owners and private equity funds.

# Equity Trading

New York is the home of the world's leading equity exchanges. The World Federation of Exchanges reports that in 2006 the New York Stock Exchange (NYSE) Group had the greatest market capitalization of any equity exchange in the world, at \$15.4 trillion—more than three times

These 20 metropolitan areas accounted for 70 percent of 2006 securities employment in the United States.

The United Kingdom's standard industrial code is different from the North American Industrial Classification System used in the United States. OSC compared the U.K.'s financial intermediaries industry to the combination of the credit intermediation and securities industries in the U.S.

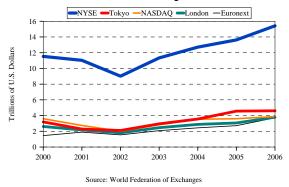
<sup>&</sup>lt;sup>10</sup> As noted in a speech by Sir John Gieve, Deputy Governor of the Bank of England, on June 26, 2007.

<sup>&</sup>lt;sup>11</sup> Ibid.

that of the second-ranked Tokyo exchange (\$4.6 trillion). The NASDAQ exchange ranked third (\$3.9 trillion), closely followed by the London Stock Exchange (\$3.8 trillion) and Euronext (\$3.7 trillion). These exchanges have had the largest capitalization throughout the 2000s (see Figure 15).

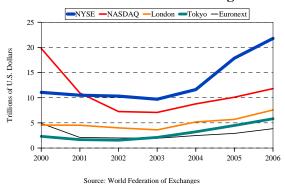
Figure 15

Domestic Market Capitalization



These five exchanges have also been the market leaders for the value in share trading during this period (see Figure 16). Together, the NYSE and the NASDAQ account for just under half of the value of all equity trading in the world.

Figure 16
Total Value of Share Trading



From the perspective of listed companies, the Bombay Stock Exchange had the most listings in 2006 (4,796), followed by TSX Toronto (3,842), the London Stock Exchange (3,256), the NASDAQ (3,133), Tokyo (2,416), and the NYSE (2,280). Both the NASDAQ and the NYSE have lost listings since 2000, when they were the top two exchanges for listings (with 4,734 and 2,862 listings, respectively). Listings on the London

Data for the Bombay exchange are not available for 2000, but in 2001 it ranked first, followed by the NASDAQ and the NYSE. Stock Exchange increased by 882 (37.2 percent) in this period.

While the London Stock Exchange has led the world in new listings for the last few years (with 576 new listings in 2006 and 626 new listings in 2005), it also leads the world in delistings (428 in 2006 and 372 in 2005). On a net basis, the largest increase in the number of listed companies in 2006 occurred on the TSX Toronto exchange, followed by the London Stock Exchange and the National Stock Exchange of India (see Figure 17). While London had the largest net increase in listings in 2005 and 2004, in earlier years it was not among the top ten.

Figure 17
Net New Listings

	2006		2005		
1	TSX Group	171	London SE	254	
2	London SE	148	TSX Group	173	
3	National Stock Exchange India	141	Australian SE	164	
4	Korea Exchange	70	National Stock Exchange India	86	
5	Tokyo SE	65	Bursa Malaysia	60	
6	Singapore Exchange	48	Singapore Exchange	60	
7	Shenzhen SE	45	Bombay SE	46	
8	Bombay SE	43	Tokyo SE	45	
9	Hong Kong Exchanges	39	Thailand SE	40	
10	OMX	34	Hong Kong Exchanges	39	

Source: World Federation of Exchanges

# Bond and Derivative Trading

While New York's exchanges dominate the equity markets, its share of the exchange-traded bond and derivatives markets is much smaller than London's. Most bond trading is done "over the counter," i.e., directly between buyers and sellers, usually with a bond dealer as intermediary. These trades do not take place on an exchange. About 80 percent of exchange-based bond trading occurs on the BME Spanish Exchange, the London Stock Exchange, and the OMX Scandinavian Exchange.

Exchange-based trading in derivatives is also heavily concentrated outside of New York, with different cities usually specializing in particular types of products. The World Federation of Exchanges reports that in 2006, by a wide margin, the Chicago Mercantile Exchange handled the most trading in short-term interest rate futures (\$505 trillion) and options (\$269 trillion), stock index futures (\$29.3 trillion), and currency futures (\$13.4 trillion) and options (\$451.7 billion).

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<sup>&</sup>lt;sup>13</sup> Many derivatives trade in a similar manner.

The Korea Exchange handled the most stock index options (\$41 trillion), while the London Metals Exchange handled the most commodity futures (\$7 trillion), and the German/Swiss Eurex handled the most long-term interest rate options (\$10.9 trillion) and futures (\$92.9 trillion).

The London-based Euronext.liffe placed among the top ten exchanges in many categories, as did several other European exchanges. New York's International Securities Exchange (which is being acquired by Eurex) and the New York Merchantile Exchange also placed on some of the top-ten lists.

# Competitive Ranking

Primarily because of the more diverse financial marketplace available in London, reports like the recent 2007 Mastercard Worldwide Centers of Commerce Index rank London above New York City as a worldwide financial center. The Mastercard index assessed financial centers across six factors—legal and political framework, economic stability, ease of doing business, financial flow, business center, and knowledge creation and information flow. While New York earned high marks for knowledge creation, London's significantly higher ranking for financial flows gave it the overall top ranking. These reports, however, do not reflect more recent developments that have improved the City's competitive position.

# Location of Large Firms

While New York City may not offer the same array of marketplaces that are available in London, it is home to more of the world's major financial firms. According to Thomson Financial, the top ten firms for completed mergers and acquisitions in 2005, 2006, and the first three quarters of 2007 consistently included six New York—based firms (Citigroup, Goldman Sachs, JP Morgan, Lehman Brothers, Merrill Lynch, and Morgan Stanley) and three European firms (Credit Suisse, Deutsche Bank, and UBS).

The same six New York-based firms also have consistently placed among the top ten for global

equity underwriting in recent years (as have the same three European firms), according to Thomson Financial. For debt underwriting, the six New York—based firms are on the top-ten list for 2005 and 2006, and five are on the list for the first half of 2007. Two of the European firms (Credit Suisse and Deutsche Bank), plus one London-based firm (Barclays Capital), are among the top ten in each of these periods.

# The Bloomberg/Schumer Report

Concern over the growing international and regional competition in the securities industry led New York City Mayor Michael Bloomberg and U.S. Senator Charles Schumer to commission an in-depth report on Wall Street's standing in the industry. The Bloomberg/Schumer report examined the role Wall Street plays in both the local and national economies and highlighted three areas that require action to maintain Wall Street's international financial dominance: the regulatory environment, the legal environment, and the availability of a highly skilled workforce. Without action, the report concludes, New York will soon lose its status as a global financial market center.

Many aspects of the report have received tremendous support and are being integrated into national and state agendas. This past summer, the Securities and Exchange Commission approved new auditing standards for Section 404 of the Sarbanes-Oxley Act of 2002 that are designed to reduce compliance burdens for small businesses; began the process of allowing firms to use international accounting rules rather than domestic accounting rules; and implemented a streamlined regulatory structure for the major American stock exchanges. In New York, Governor Eliot Spitzer announced the creation of a commission to the State's financial modernize services regulations. The State Comptroller supports efforts to improve New York City's competitive position in the global financial marketplace.

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<sup>&</sup>lt;sup>14</sup> Sustaining New York's and the US' Global Financial Services Leadership, January 2007.