

The Securities Industry in New York City

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Highlights

- The broker/dealer operations of New York Stock Exchange member firms earned a record \$35.7 billion in the first half of 2009—more than one and a half times the previous annual peak.
- Net revenue totaled \$91.4 billion in the first half, compared to \$35 billion in the first half of 2008.
- The four largest investment firms headquartered in New York City (for which there are data) earned \$22.6 billion in the first nine months of 2009, compared to a loss of \$40.3 billion in 2008.
- Employment in the securities industry in New York City has declined by 28,300 jobs since employment peaked in November 2007.
- Job losses in the securities industry in New York City are unlikely to exceed 35,000, a much smaller loss than previously forecast. (The industry added 3,600 jobs in September 2009.)
- Even though the securities industry accounted for less than 5 percent of the jobs in New York City in 2008, the industry accounted for 24 percent of all of the wages paid in the City.
- The nation's six largest bank holding companies set aside \$112 billion for compensation in the first nine months of 2009, and are on track to exceed last year's compensation level. Individual firms may approach or even exceed the 2007 level.
- The bonus pool (including deferred compensation) for the securities industry in New York City could be higher than last year based on current compensation trends.
- New York City tax collections from Wall Streetrelated activities declined by an estimated \$1.9 billion, or 40 percent, in City Fiscal Year 2009.
- Wall Street accounted for 20 percent of New York State tax collections two years ago, but will account for about 15 percent of tax collections in the current fiscal year.

The global financial crisis was rooted in excessive risk-taking, which exposed the financial industry to historic losses when underlying assumptions proved faulty. As the crisis unfolded, it claimed thousands of jobs, saw the demise of storied firms, fundamentally transformed Wall Street, and precipitated a global recession and a fiscal crisis for New York State and New York City.

With severe job losses in the securities industry, Wall Street's multiplier impact—which had enormous benefit to New York City's economy during the economic expansion—worked in reverse, leading to job losses in the rest of the City's economy. While the pace of Wall Street job losses has slowed considerably, the industry is not yet adding jobs on a sustained basis.

The national economy is slowly improving, but Wall Street has recovered much faster than anyone had envisioned. Profitability is on track to exceed 2006 levels, which was a banner year for the industry. Strong profits have been driven by low interest rates, which reduce the cost of doing business.

Compensation is also increasing faster than expected, leading to expectations of higher bonuses. The federal government, which spent trillions of dollars to support the financial sector, has taken steps that may restrict cash bonuses and defer compensation to future years in an effort to reduce excessive risk-taking and reward long-term performance. While these initiatives may reduce personal income tax collections in the short term, New York State and New York City could benefit from increased stability in the financial sector.

Even in the wake of the crisis, Wall Street remains the economic engine of both New York State and New York City. Although the industry's prospects are much brighter than one year ago, it continues to face challenges as it adjusts to the postcrisis environment, and may still experience setbacks.

Financial Crisis Overview

The root cause of the current financial crisis was excessive risk-taking by the finance industry. The crisis was precipitated by a decline in U.S. housing prices that began in 2006. By the end of 2007, financial firms were reporting losses related to asset-backed securities, and as 2008 progressed, losses widened to other types of debt instruments, equity markets fell, and firms rushed to raise capital in order to remain solvent.

The crisis peaked in September 2008 when Lehman Brothers collapsed and credit markets froze. The International Monetary Fund has estimated that top U.S. and European banks have lost more than \$1 trillion on toxic assets and from bad loans since the start of 2007. The U.S. government responded—along with many other nations—with both fiscal and monetary policy initiatives. Nearly \$9 trillion has been committed worldwide to support the global financial system.

In October 2008, Congress approved the \$700 billion Troubled Asset Relief Program (TARP). Originally intended to allow the government to remove toxic assets from bank balance sheets, TARP was instead used to inject capital directly into the banks and to fund other rescue initiatives, including bailout efforts for AIG, Chrysler, and General Motors.

In October 2008, the U.S. Department of the Treasury required the nation's nine largest financial institutions—Bank of America, Bank of New York Mellon, Citigroup, Goldman Sachs, JPMorgan Chase, Merrill Lynch, Morgan Stanley, State Street, and Wells Fargo—to accept \$125 billion in TARP funds in exchange for senior preferred stock and warrants. Eventually, both Citigroup and Bank of America required additional TARP resources. The initiative was then expanded to smaller institutions. Ultimately, nearly 700 banks received funds.

Beginning in June 2009, the U.S. Treasury began to allow the large banks to repay their TARP funds (some smaller banks had already begun repayment). Through mid-October 2009, a total of 41 banks (including Goldman Sachs, JPMorgan Chase, and Morgan Stanley) repaid nearly \$72 billion. In addition, the Treasury earned nearly \$12 billion from dividends on the preferred shares it has held, and nearly \$3 billion from warrants sold back when banks repaid their TARP funds.

Since the Federal Reserve reduced interest rates to almost zero between September 2007 and December 2008 in order to increase liquidity in the financial system, it had to develop other tools to support the system and to stimulate the economy.

The Federal Reserve expanded existing lending programs and created new initiatives, many of which operated in conjunction with the Treasury. These efforts more than doubled the size of the Federal Reserve's balance sheet, which rose from \$926 billion in the first week of January 2008 to a high of \$2.3 trillion in the last week of December 2008 (see Figure 1). The balance sheet has declined only slightly since then, and the Federal Reserve is developing an exit strategy to withdraw liquidity from the financial system before it fuels inflation or creates other imbalances.

- 2007-06-20 - 2007-02-28 - 2006-11-08 - 2006-07-19

Sources: Federal Reserve; OSC analysis

- 2008-01-30 - 2007-10-10

Figure 1 Fotal Assets of the Federal Reserve

Risk Premiums

- 2005-04-27

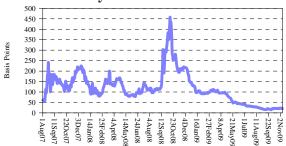
2005-08-17

700

More than one year after the collapse of Lehman Brothers, the worst of the crisis appears to be over and some aspects of the financial markets have almost returned to precrisis levels. One notable area of improvement is in the pricing of risk in financial instruments.

One common measure of risk is the difference between the interest rate on 3-month Treasury bills and the 3-month interbank lending rate, reflected in the London Interbank Offered Rate (i.e., the LIBOR). As shown in Figure 2, this spread surged to nearly 458 basis points in early October 2008 as the crisis intensified, but the spread narrowed as the U.S. and other nations worked to assist the financial sector. As the credit crunch eased and confidence in the banking system grew, the spread dropped to about 20 basis points in mid-September 2009—a level last seen in 2004.

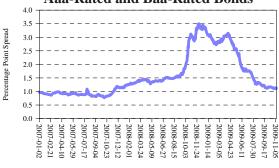
Figure 2
Spread Between Interest Rate on 3-Month
Treasury Bills and LIBOR Rate



Sources: British Bankers' Association; U.S. Board of Governors of the Federal Reserve System Moody's Economy.com; OSC analysis

The premium spread between higher- and lower-rated corporate bonds has also narrowed. During the crisis, concerns about credit quality caused the spread between Moody's top-rated Aaa corporate bonds and lower-rated Baa bonds to rise, from 0.77 percentage points on October 11, 2007, to 3.5 percentage points on December 3, 2008 (see Figure 3). By early November 2009, the spread had narrowed to 1.12 percentage points.

Figure 3
Interest Rate Spread Between Corporate
Aaa-Rated and Baa-Rated Bonds



Sources: Moody's Investors Service; OSC analysis

The financial crisis also increased borrowing costs for municipalities and limited the size of issuances that the market could absorb. Moody's Municipal Bond Yield 20-Year Composite shows that in October and December of 2008, municipal bond yields rose above 6 percent (see Figure 4). Since then, conditions have improved, and the average interest rate was 4.8 percent in early November.

The federal government established the Build America Bonds (BAB) program to reduce borrowing costs for states and localities. Although the bonds are taxable, the Treasury reimburses issuers for 35 percent of the interest payments. In October 2009, BABs accounted for 29 percent of municipal bond issuances.

Figure 4
Municipal Bond Average Yield:
20-Year Composite



Access to Credit

Despite a Federal Reserve program that bought commercial paper to prop up the market, the level of outstanding commercial paper fell by 52 percent from its peak in July 2007 of \$2.2 trillion to a low in July 2009 (see Figure 5). Although the economy is now improving, businesses are still finding it difficult to obtain credit. The amount of commercial paper outstanding started to increase beginning in July, but the level was far lower than in earlier periods, and in recent weeks the amount of commercial paper outstanding has begun to contract.

Figure 5

Commercial Paper Outstanding

2.4

2.2

2.0

1.8

1.6

1.4

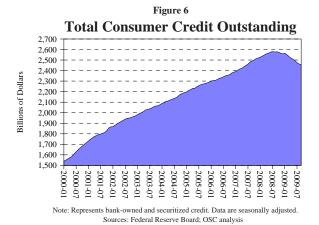
1.2

2.005-05-05-04-01

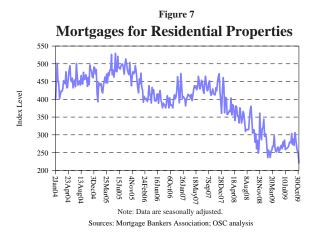
2.0005-05-05-04

Note: Data have been seasonally adjusted.

Consumers are still encountering difficulty in accessing the credit markets. Banks have reduced their exposure by tightening lending standards and reducing available credit lines. Many consumers have cut back on borrowing in the wake of job losses. From a peak in July 2008 to September 2009, the level of outstanding consumer installment credit fell by \$126 billion to \$2.5 trillion (see Figure 6).



Tighter credit standards and lower income levels have affected mortgage financing. A weekly index of residential mortgage originations shows that the number of new mortgages fell sharply beginning in late 2007 (see Figure 7). The value of outstanding mortgages declined by \$200.2 billion during the second quarter of 2009—the fifth consecutive quarterly decline. (Refinancing surged throughout the first half of 2009, reflecting the impact of lower rates.) New mortgage originations had received a temporary lift from the tax credit for first-time home buyers.

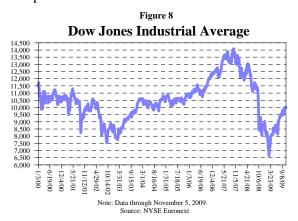


Financial Market Conditions

Conditions in the financial markets began to change dramatically during the third quarter of 2007, as uncertainty increased for several investment classes. Events reached a critical point in September 2008 as liquidity evaporated, credit markets froze, equity markets plunged, losses mounted, and financial firms failed. Conditions are slowly improving, and the financial industry has returned to profitability.

Equity Markets

Following the economic downturn of the early 2000s and the terrorist attacks of September 11, 2001, the Dow Jones Industrial Average declined by 37.8 percent from 11,723 on January 14, 2000, to 7,286 on October 9, 2002. Over the next five years, the stock market rose again, peaking at 14,164 on October 9, 2007. During the following 17 months, the Dow dropped by 53.8 percent, to 6,547 on March 9, 2009 (see Figure 8). During this period, worldwide markets experienced similar declines, with the index for the London Financial Times Stock Exchange (FTSE) lower by 46.6 percent and the Tokyo Nikkei index down by 56.4 percent.



Beginning in the second quarter of 2009, worldwide equity prices rallied. As of November 13, 2009, the Dow had risen by nearly 57 percent, the London FTSE by 49.5 percent, and the Tokyo Nikkei by 37.9 percent. Nevertheless, worldwide markets are still well below their previous peaks.

Equity market losses have had a considerable impact on Americans' retirement savings. The Urban Institute estimates that retirement accounts lost \$2.7 trillion between September 2007 and May 2009—31 percent of total assets—despite the market recovery that began in the spring of 2009.

Although volatility in the U.S. equity markets has subsided markedly in recent months, it still remains above precrisis levels. By the end of August 2009, the Chicago Board Options Exchange Volatility Index was 68.9 percent lower than its high in November 2008 (see Figure 9). The current level is still about twice the average level for the period between January 2004 (when the current index began) and June 2007.

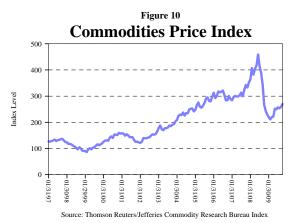


Commodities

The turmoil in the financial markets affected not only financial instruments but commodities as well. The price and trading volumes of commodities skyrocketed before the crisis, driven by rising demand and speculation, but the lack of available credit and a worldwide recession then depressed demand (especially for energy).

According to the Bank for International Settlements, the outstanding value of over-the-counter derivatives contracts for commodities reached \$13.2 trillion worldwide by the middle of 2008—more than 16 times the level in mid-2002—and then fell by 67 percent to \$4.4 trillion by the end of 2008. Similarly, the Thomson Reuters/Jefferies composite commodity price index peaked at 469.7 on July 2, 2008 (see Figure 10), and then fell by 54 percent by the end of February 2009.

Between February and October 2009, however, this index rose by nearly 30 percent, to 270, as the financial markets stabilized and the recession eased, and demand for and investment in commodities grew.

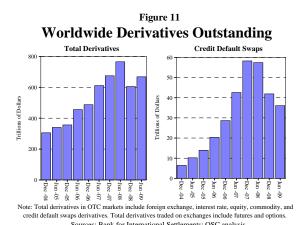


Derivatives

Derivatives are financial contracts whose prices depend on the values of other underlying financial instruments. They are often used to hedge risk, but can also be used for speculative purposes. The total value of outstanding derivatives more than doubled between December 2004 and June 2008, peaking at \$766 trillion (see Figure 11).

During the second half of 2008, the total value of outstanding derivatives declined by 21 percent, but growth resumed in the first half of 2009. Credit default swaps—essentially insurance against a default by the issuer of an underlying financial instrument—continued to decline, falling by 14 percent in the first half of 2009 after a 27 percent drop in the second half of 2008 (see Figure 11).

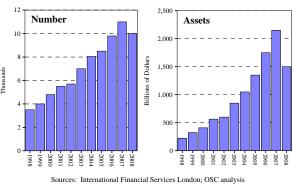
Losses in derivatives trading—and the linking of firms through derivatives contracts that spread risks—were major factors in the losses at AIG and other firms, and in the freezing-up of markets after the collapse of Lehman Brothers.



Alternative Investments

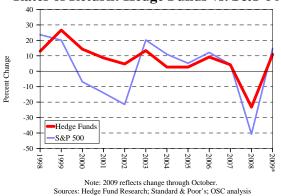
The financial crisis also severely affected alternative investments, lowering rates of return and affecting the ability to raise and leverage capital for new investments. Losses in many hedge funds were compounded by investors' withdrawals of assets, which led to the failure of many funds. According to International Financial Services London (IFSL), the value of assets under management declined by 30.2 percent to \$1.5 trillion in 2008, and the number of hedge funds declined by 9.1 percent that year, to about 10,000 (see Figure 12).

Figure 12 Global Hedge Funds



According to Hedge Fund Research, hedge funds lost 23.3 percent in 2008, whereas the Standard & Poor's 500 stock index lost 40.7 percent (see Figure 13). As financial markets have recovered, hedge funds have also benefited. The value of assets under management has grown, and returns averaged 10.9 percent during the first ten months

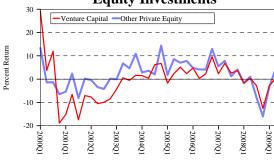
Figure 13
Rates of Return: Hedge Funds vs. S&P 500



According to IFSL, new worldwide investments by private equity firms fell by 40 percent in 2008, to \$189 billion. (Preliminary data indicate that private equity investments during the first half of 2009 declined by 83 percent compared to one year earlier, to \$24 billion—a 12-year low.) The inability of private equity firms to raise capital has caused a sharp reduction in leveraged buyouts.

While private equity firms experienced large losses during 2008, returns on investments have begun to improve. In the second quarter of 2009, venture capital investments earned 0.2 percent, while other private equity activity—primarily buyouts—earned 4.3 percent (see Figure 14).

Rate of Return for U.S. Private Equity Investments



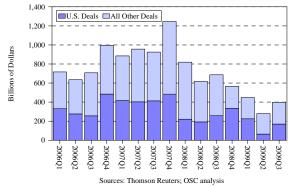
Note: Pooled quarter-to-quarter return, net of fees, expenses, and carried interest.

Sources: Cambridge Associates: OSC analysis

Mergers and Acquisitions

Mergers and acquisitions activity, which generates significant revenue for the securities industry, fell sharply beginning in the fourth quarter of 2007 as the financial crisis limited the ability of firms to raise capital (see Figure 15). According to Thomson Reuters, the total value of completed transactions worldwide fell from more than \$4 trillion in 2007 to \$2.7 trillion in 2008, with the average value of each deal declining by 27.3 percent. For the first nine months of 2009, the value of transactions totaled \$1.1 trillion—down 46.9 percent compared to the same period in 2008. Activity rebounded in the third quarter of 2009, rising by 42.4 percent from the previous quarter.

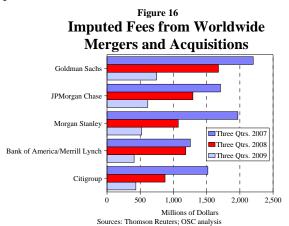
Figure 15
Value of Completed Mergers and Acquisitions



The decline in the value of deals in the United States during the first nine months of 2009 (31.4 percent) was not as severe as the decline elsewhere because of some very large transactions in the pharmaceutical industry. Although the nation's rebound between the second and third quarters of 2009 was very strong—an increase of 162.1 percent—the value of transactions remained well below quarterly levels in 2007 and 2008.

of 2009.

As a result of the declining value of mergers and acquisitions activity, fees associated with this activity declined substantially during 2008 and the first three quarters of 2009 (see Figure 16). Imputed fees were lower worldwide by 29.6 percent in 2008, and lower for the large New York firms by 37 percent. In the first nine months of 2009, fees fell by about 55 percent both worldwide and for the Wall Street firms. Fee income rebounded with activity in the third quarter of 2009, with fees earned by Wall Street firms rising by 34 percent compared with the second quarter.



Equity and Debt Underwriting

Activity in the equity underwriting market began to weaken during the second half of 2007, and declined by 42.3 percent worldwide in 2008. Despite a 43 percent decline in initial public offerings (IPOs) in the United States in 2008, equity underwriting rose slightly (4.6 percent), reflecting efforts to recapitalize the financial industry.

After a weak first half of 2009, worldwide equity underwriting rebounded strongly in the third quarter. In the United States, however, equity underwriting declined by 18.5 percent overall during the first nine months of 2009.

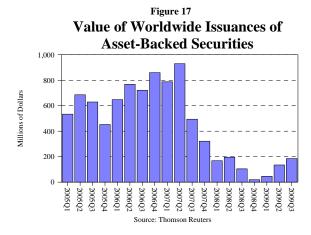
The value of IPOs in the nation fell from more than \$26.2 billion during the first nine months of 2008 to \$6.4 billion during the same period in 2009. Partially offsetting the decline was a 19.1 percent increase in secondary offerings, as the financial industry raised capital in the wake of the federal government's stress tests. Overall, imputed fees for worldwide equity underwriting rose by 32.5 percent during the first nine months of 2009.

Despite the lack of activity in the asset-backed securities market, the market for new debt underwriting rose by 22.2 percent worldwide (19.8 percent in the United States) during the first nine months of 2009 compared with the same period in 2008. The growth reflects debt issued by the United States and other nations to support financial market intervention and economic stimulus initiatives.

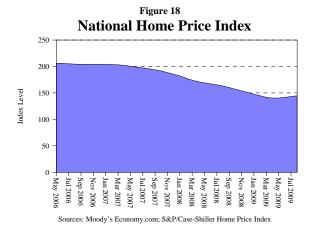
Worldwide debt issued by government agencies grew by 137 percent to reach \$1.4 trillion during the period from January 2009 through September 2009. (In the United States, such debt increased by 282.6 percent to \$435.9 billion.) Fees collected by firms from debt underwriting grew by 31.1 percent during the first nine months of 2009 compared with the same period of 2008.

Asset-Backed Securities

During the middle of the decade, financial institutions increased their reliance on asset-backed securities. Although these securities were risky, they proliferated based on the assumption that home prices could not fall, thereby protecting the value of the underlying asset; total quarterly issuances rose to reach \$930 billion in the second quarter of 2007 (see Figure 17).

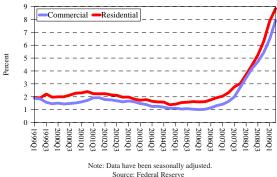


A collapse in the demand for mortgage-backed securities precipitated the falloff in the overall asset-backed market. U.S. home prices had declined by 32 percent between May 2006 and May 2009 (see Figure 18). As prices fell, it became more difficult to refinance, and mortgage delinquencies and foreclosures rose. Such developments undermined the value of mortgage-backed securities, leading to large losses for financial firms.



As shown in Figure 19, commercial real estate loans have run into problems similar to residential loans. The default rates have grown from less than 2 percent in the third quarter of 2007 to 7.9 percent in the second quarter of 2009 for commercial loans and 8.8 percent for residential loans. The value of outstanding commercial real estate loans doubled between 2000 and 2008, to more than \$2.5 trillion—and this value was only slightly lower in the second quarter of 2009.

Figure 19 **Delinquency Rates for Mortgages**

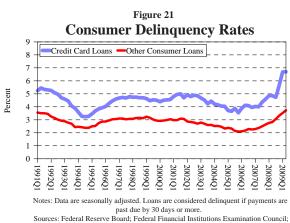


Worldwide underwriting for asset-backed securities began to show signs of recovery in 2009, although activity is still well below 2007 levels. During the first nine months of 2009, total issuances were 83.4 percent lower than during the same period in 2007, and 21.9 percent lower than the first nine months of 2008. The rates of decline in the United States were similar to those worldwide. Issuances have increased, however, since the low reached in the fourth quarter of 2008.

Household Wealth

The financial crisis has taken a heavy toll on the wealth of American households. Household wealth fell from a peak of \$65 trillion in the third quarter of 2007 to \$51.1 trillion in the first quarter of 2009 (see Figure 20). Households lost \$6.7 trillion in stocks and mutual funds and \$3.7 trillion in real estate during this period (another \$3.6 trillion was lost in pension funds). A modest recovery began in the second quarter of 2009, as home prices stabilized and financial markets began to recover.

The recession—with its associated job losses and reductions in income—has further stressed household finances, and more consumers are having trouble paying their bills. Data from the Federal Reserve indicate that the delinquency rate on various consumer loans has risen by about half since the beginning of 2007 (see Figure 21). Many financial firms, after recognizing losses on the values of their mortgage loan portfolios, are now beginning to increase their write-offs from losses on credit cards and other consumer loans.



OSC analysis

Wall Street Profits

After incurring significant losses and a sharp decline in revenues in 2008, the financial industry has begun to recover. As shown in Figure 22, five of the six largest bank holding companies in the nation had much higher pretax profits during the first three quarters of 2009 than they did for all of 2008. This was driven by significant increases in revenues and low interest rates, which held down the cost of doing business. All of these firms were considered "too big to fail" by the Treasury, and all received initial TARP distributions. Four firms (Goldman Sachs, JPMorgan Chase, Morgan Stanley, and Wells Fargo) have since repaid the Treasury.

Figure 22 Profit and Revenue Trends at the Nation's Six Largest Bank **Holding Companies** (in millions)

Firm	2008 Profits	2009 YTD	2009 YTD
	(Losses)	Profits	Revenue Chng.
Bank of America	(\$36,908)	\$5,779	55.5%
Citigroup	(38,147)	6,637	62.9%
Goldman Sachs	2,336	12,452	49.4%
JPMorgan Chase	4,679	12,267	33.0%
Morgan Stanley	2,187	114	-46.2%
Wells Fargo	<u>3,585</u>	13,915	24.0%
Total	(62,268)	51.164	

Notes: Bank of America includes Merrill Lynch and Countrywide. JPMorgan Chase includes Bear Stearns and Washington Mutual. Wells Fargo includes Wachovia. Data for 2009 includes first three quarters only. Profits are before taxes. Change is from the same period one year earlier.

Sources: Corporate earnings statements; OSC analysis

In past years, we have examined the pretax profits of the seven largest securities firms headquartered in New York City. The financial crisis, however, permanently changed the landscape for these firms: Bear Stearns was acquired by JPMorgan Chase in March 2008 as it was on the verge of failure; Lehman Brothers failed in September 2008; and Merrill Lynch was sold to Bank of America in December 2008 (although profits continue to be reported separately).

In addition, Goldman Sachs and Morgan Stanley converted to commercial banks, which changed the timing of their respective fiscal years—and all prior periods have not been restated. Finally, because of accounting changes, it is no longer possible to isolate Citigroup's investment banking operations from the rest of the bank. As a result, we have narrowed our survey to the pretax profits of four firms: Goldman Sachs, Merrill Lynch, Morgan Stanley, and JPMorgan Chase Investment Bank.

As shown in Figure 23, profitability has improved at each firm. Even Merrill Lynch, which lost more than \$41 billion last year, reported a gain of \$2.4 billion through the first nine months of 2009. These results helped improve the overall performance of their parent companies (i.e., bank companies), as other financial operations—such as consumer credit cards—are generating losses that are still holding down overall earnings.

Figure 23 Profits at Four Major Firms Headquartered in New York City (in millions)

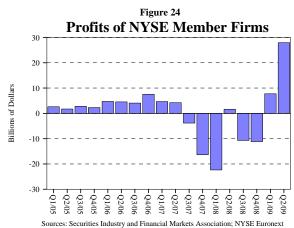
2008
\$2 336

Firm	2008	2009 YTD
Goldman Sachs	\$2,336	\$12,452
Merrill Lynch	(41,336)	2,435
Morgan Stanley	2,187	114
JPMorgan Chase Investment Bank	(3,524)	7,605
Total	(40,337)	22,606

Note: JPMorgan Chase includes Bear Stearns. Profits are before taxes.

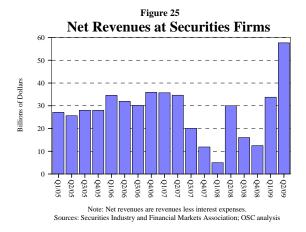
Sources: Corporate earnings statements; OSC analysis

According to the Securities Industry and Financial Markets Association (SIFMA), the broker/dealer operations of New York Stock Exchange (NYSE) member firms sustained losses in five of the six quarters prior to 2009 (see Figure 24). Pretax profits totaled a record \$35.7 billion during the first half of 2009—more than one and a half times the previous annual peak in 2000. Member firms sustained losses of \$11.3 billion in 2007 and \$42.6 billion in 2008. Profitability soared because revenues rose while the cost of doing business particularly interest costs—declined. profitability could be reduced by rising interest rates and changes in the regulatory environment.



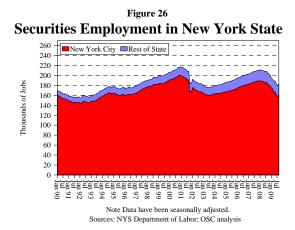
Office of the State Comptroller

As shown in Figure 25, net revenues (excluding interest expenses) reached a historic high—\$57.7 billion—in the second quarter of 2009. While total revenues have been higher in other quarters, the sharp decline in interest expenses (to \$5 billion in the second quarter of 2009 from a high of \$76.3 billion in the last quarter of 2007) has allowed net revenues to surge. Additionally, firms reported gains on their own securities trading accounts in 2009 compared to losses in 2007 and 2008, and other income soared, especially in the second quarter of 2009.



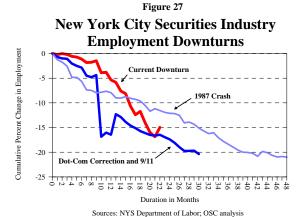
Employment

Employment in the securities industry in New York City peaked at 189,200 jobs in November 2007 (see Figure 26). As of September 2009, the industry had lost 28,300 jobs (a decline of 15 percent), which was a much deeper reduction than elsewhere in the nation. While the initial rate of decline was modest, job losses accelerated in the first half of 2009 before easing in the third quarter. Industry employment elsewhere in the State has remained essentially unchanged.



In the rest of the nation (excluding New York State), employment in the securities industry peaked in March 2008 at 657,800 jobs. As of September 2009, it had declined by 9.2 percent, or nearly 61,000 jobs. Given the slower rate of decline in the rest of the nation, New York City's share of all securities industry jobs in the country has fallen slightly, from 22 percent in November 2007 to 20.6 percent in September 2009. (In contrast, the United States suffered proportionally greater losses in the banking sector.)

Figure 27 shows that employment in the securities industry in New York City contracted by 21 percent after the 1987 market crash and by 20.4 percent after the 2000 dot-com correction. In the current downturn, job losses began more slowly, but then accelerated rapidly. Over the past three months, job losses have begun to slow and the industry even added 3,600 jobs in September 2009. Though it is too early to say the industry is on a sustained course to add jobs, the recent developments are encouraging.



Job losses have spread throughout the rest of the financial sector. New York City's credit intermediation sector has lost 10,100 jobs, a decline of 10.5 percent, since March 2007. The losses followed growth in this sector during the mid-2000s (after declines for more than two decades), which ended in 2007 (see Figure 28). In the rest of the State, although job losses in credit intermediation began more than six months earlier than in New York City, the decline has been nearly the same—10.6 percent or 9,200 jobs.

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The credit intermediation sector includes commercial and savings banks, consumer and commercial lending, and mortgage financing.

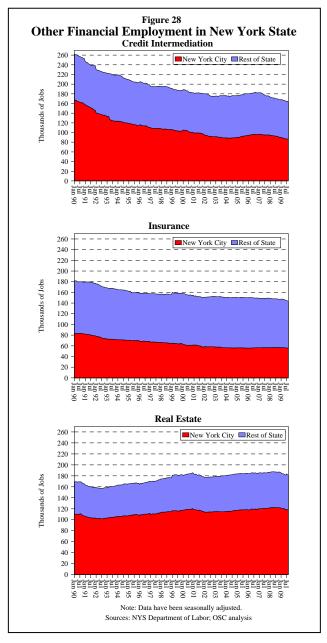
Employment in the insurance industry in New York City has been in slow decline for two decades, and an additional 1,300 jobs were lost between November 2007 and September 2009. The insurance industry is the largest finance sector employer in New York State outside of the City, accounting for 35.4 percent of the jobs.

The real estate industry in New York City, which continued to add jobs until March 2008, has lost 5,600 jobs since then, which brings employment to the November 2004 level. The real estate industry outside of the City lost 2,500 jobs between November 2007 and April 2009, but has since recovered most of its job losses.

Total employment in the financial sector has declined by 8.9 percent (42,000 jobs) in New York City since a peak in November 2007, compared with a 2.4 percent decline (6,300 jobs) in the rest of New York State. In the rest of the nation, financial employment peaked earlier (in December 2006) than it did in New York City, and the subsequent rate of decline was lower (7.6 percent or 416,000 jobs). The City also has lost proportionally more higher-paying jobs (primarily in the securities industry) than the rest of the nation.

New jobs on Wall Street create jobs in other industries through multiplier effects due to high compensation levels in the securities industry. The Office of the State Comptroller estimates that each new job in the securities industry leads to the creation of two additional jobs in other industries in New York City.² The model also shows that each new Wall Street job creates 1.2 jobs elsewhere in New York State, mostly in the City's suburbs. A large number of Wall Street's employees are commuters who spend part of their incomes in their home communities.

With employment in the securities industry now declining, Wall Street's multiplier impact—which had enormous benefit to the City's economy during the economic expansion—is now working in reverse, leading to job losses in the rest of the City's economy. Between September 2008 and September 2009, the City lost 106,300 jobs. Wall Street directly and indirectly accounted for three-



quarters of all the jobs lost in the City. During the same time period the State lost 265,200 jobs, with Wall Street, directly and indirectly, accounting for 43 percent of the jobs lost.

The Office of the State Comptroller forecasts that job losses in the securities industry in New York City are unlikely to exceed 35,000, reflecting the rapid improvement in the industry. Just five months ago, New York City's adopted budget for the current fiscal year had assumed a loss of 47,000 jobs. Similarly, total job losses in New York City are unlikely to exceed 175,000—significantly less than the City's June 2009 forecast of 328,000 lost jobs.

OSC used the IMPLAN input-output model, originally developed for the federal government with detailed interindustrial economic transaction data, to model the effects of regional economic changes.

Compensation

The financial crisis has fueled considerable worldwide debate about how compensation practices contributed to excessive risk-taking, which ultimately damaged the financial system and brought about the collapse of major firms. As the crisis has begun to recede and compensation levels have begun to rise, high compensation has again become controversial given the level of government support that the financial sector required during the crisis, and the large amount of government aid that has yet to be repaid.

The United Kingdom was the first nation to adopt regulations governing executive new compensation. In August 2009, the British Financial Services Authority (FSA) announced rules that modified compensation practices for 26 large firms and provided guidelines for smaller firms. The rules, which will take effect January 1, 2010, require firms to implement compensation policies consistent with effective management.

In September 2009, the rules were expanded when U.K. subsidiaries and branches of global banking firms adopted the compensation reforms that were agreed to at the G-20 summit in Pittsburgh. The reforms include deferring 40 percent to 60 percent of compensation over three years, limiting bonus agreements to one year, and reducing and/or recalling compensation following poor performance (i.e., clawbacks).

Recently, the Special Master for TARP Executive Compensation halved pay for the top 25 executives at the seven firms that received exceptional levels of assistance but have not yet repaid the Treasury (AIG, Bank of America, Citigroup, General Motors, GM GMAC, Chrysler, and Chrysler Financial). The Special Master also promulgated rules that require these firms to reduce cash compensation to their top employees and to provide compensation that is contingent on long-term performance (such as stock). While cash bonuses and overall compensation will be reduced, in many instances base pay has been raised.

For the 28 largest financial firms that either repaid or did not receive TARP aid, the Federal Reserve Board has issued compensation guidelines. The guidelines apply to senior-level executives and others responsible for the oversight of firmwide activities, and to nonexecutive employees whose activities may expose firms to material amounts of risk. Under the guidelines, firms are discouraged from providing incentives to employees for activities that encourage excessive risk-taking beyond the firm's ability to identify and handle risk. These guidelines take effect in the current bonus year. Congress is also considering legislation that would regulate compensation in the finance industry.

Even though financial firms have increased the amount of money set aside for compensation in the current year as profitability has improved, compensation reforms could restrict the amount that is paid in cash and increase the amount deferred to future years.

Compensation (including salaries and bonuses) at the nation's six largest bank holding companies (after adjusting for mergers) totaled \$163.9 billion in 2007 but then fell sharply to \$137.2 billion in 2008 (a decline of 16.3 percent). During the first nine months of 2009, the six firms have set aside \$112 billion for compensation (see Figure 29), and some of these firms are on track to approach or even exceed their 2007 compensation levels. After taking into account job losses, average compensation could also exceed the 2007 level at some firms.

Figure 29
Compensation Trends at the Nation's Six Largest
Bank Holding Companies

(in billions)

Firm	2007	2008	2009 YTD
Bank of America	\$38.8	\$35.4	\$24.2
Citigroup	33.9	31.1	18.7
Goldman Sachs	20.2	10.9	16.7
JPMorgan Chase	29.9	25.4	21.8
Morgan Stanley	16.6	11.3	10.9
Wells Fargo	24.5	23.1	19.7
Total	\$163.9	\$137.2	\$112.0

Notes: Bank of America includes Merrill Lynch and Countrywide. JPMorgan Chase includes Bear Stearns and Washington Mutual. Wells Fargo includes Wachovia. Data for 2009 includes first three quarters only.

Sources: Corporate financial statements; OSC analysis

At both Bank of America and Citigroup, total compensation is likely to be lower in 2009 than it was last year, driven by downsizing and weak profits. These two firms had the most severe problems during the crisis, and the Special Master for TARP Executive Compensation has cut compensation for top employees and has issued guidelines that will reduce cash compensation.

Compensation has improved at the four largest investment firms headquartered in New York City. Goldman Sachs and JPMorgan Chase are both on track to pay out more in compensation in 2009 than in 2007. Compensation is still declining at Merrill Lynch and Morgan Stanley, where the rate of decline has slowed since last year (see Figure 30).

Figure 30

Change in Compensation at the Four Largest Financial
Firms Headquartered in New York City

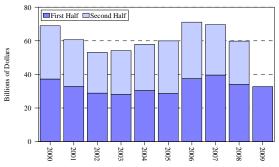
Firm	2008	2009 YTD
Goldman Sachs	-45.8%	46.3%
JPMorgan Chase Investment Bank	-25.8%	20.5%
Merrill Lynch	-5.7%	-17.6%
Morgan Stanley	-31.8%	-9.2%

Notes: JPMorgan Chase includes Bear Stearns. Data for 2009 includes first three quarters only. Change is from the same period one year earlier.

Sources: Corporate financial statements; OSC analysis

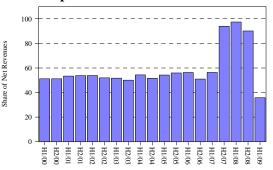
According to SIFMA, compensation paid by the broker/dealer operations of member firms of the New York Stock Exchange reached a record \$71.1 billion in 2006 (see Figure 31), but then declined by 2.1 percent in 2007 and by another 14.1 percent in 2008. In the first half of 2009, compensation declined only slightly compared to the same period in 2008. Because employment has been sharply reduced during this period, average compensation levels have risen.

Figure 31
Compensation at NYSE Member Firms



Note: Results are for broker/dealer operations of New York Stock Exchange member firms Sources: Securities Industry and Financial Markets Association; OSC analysis Historically, compensation at securities firms represented about 50 percent of net revenues before 2007 (see Figure 32). The ratio then changed dramatically, averaging more than 90 percent during the second half of 2007 through the second half of 2008 while revenues contracted sharply. During the first half of 2009, compensation represented only 36 percent of net revenues as a result of sharply higher revenues (161 percent) and lower interest costs.

Figure 32
Compensation as Share of Net Revenues



Note: Results are for broker/dealer operations of New York Stock Exchange member firms Sources: Securities Industry and Financial Markets Association; OSC analysis

Industry Wages and Average Salaries

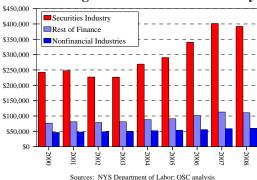
The securities industry accounted for 24 percent of the wages paid in New York City in 2008, even though the industry accounted for only 5 percent of the jobs. Despite the turmoil in the financial markets, total wages paid in the securities industry in New York City declined by only 2.7 percent in 2008, because the majority of near-record bonuses earned during 2007 were paid during the first quarter of 2008.³ (The sharp decline in 2008 bonuses will be reflected in 2009 wages.)

The average salary in the securities industry in New York City declined slightly in 2008, falling by 2.3 percent to \$392,130 from a peak of \$401,500 in 2007 (see Figure 33). Nevertheless, average salaries in the securities industry were still more than 6 times greater than in other industries. Since 2003, salaries have grown by 73 percent compared to a gain of only 20.4 percent in nonfinancial industries. The average industry salary will be much lower in 2009 (reflecting the sharp decline in 2008 bonuses that were mostly paid during the first quarter of 2009), but will still be much higher than nonfinancial salaries.

Wages fell by more than 7 percent in credit intermediation, were basically unchanged in insurance, and rose slightly in real estate.

The average salary for the rest of the financial sector also fell, declining by 2 percent to \$110,740, primarily due to a decline in credit intermediation. For all other nonfinancial industries in the City, the average salary rose by 2.2 percent to \$59,900.

Figure 33
Average Salaries in New York City



Most of the highest-paying positions in the securities industry (e.g., chief executives, investment bankers, financial advisors, and other senior managers) are still located in New York City, and as a result average salaries in the City are substantially higher than elsewhere in the nation. The average salary in the securities industry in New York State outside of New York City was \$225,560 in 2008, an increase of 10.1 percent from the previous year, while the average salary in the rest of the nation declined by 1.3 percent to \$155,840.

Bonuses

Despite record losses and the sale or failure of some firms, the Office of the State Comptroller estimated last January that cash bonuses paid by the securities industry to its employees working in New York City totaled \$18.4 billion (see Figure 34). Although the cash bonus pool was 44 percent smaller in 2008 than it was in 2007, it was still the sixth-largest on record.

With securities industry profits on the rise, the bonus pool (including deferred compensation) for employees located in New York City could be higher than last year based on current compensation trends. The average bonus could grow at an even higher rate since there are fewer jobs than last year. (Johnson Associates, a compensation consulting company, forecasts that bonuses at investment and commercial banks will increase an average of 40 percent, but bonuses at hedge fund and private equity firms could be up to

25 percent less than last year.) Compensation reform, however, will restrict the amount paid this year in cash and will increase the amount deferred to future years. Early next year, the Office of the State Comptroller will release its forecast of cash bonuses paid in New York City based on compensation patterns at the end of the year and tax collections beginning in December 2009.

The New York State Division of the Budget assumes that cash bonuses for the entire financial sector will decline statewide by 22 percent in 2009, which is a reasonable assumption for financial planning purposes, given the uncertainty introduced by compensation reform. Even if cash bonuses were to increase this year, the additional tax revenue would reduce the State's budget gap for this year by a relatively modest amount.

Tax Revenues

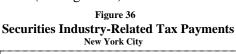
Wall Street activity has traditionally generated a disproportionate share of State and City tax revenue because of high levels of compensation, profitability, and capital gains. In recent years, tax revenues from the securities industry grew rapidly and helped to fill the State and City coffers. (The industry had accounted for about 20 percent of State tax revenues and 12 percent of City tax revenues before the crisis.) The financial crisis severely curtailed this flow of revenue.

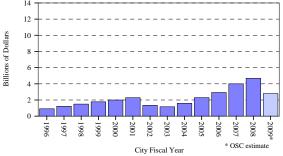
Capital gains realizations, like bonus payments, had surged to record highs in recent years (see Figure 35). During Wall Street's last downturn, realizations declined by about 70 percent over a two-year period for both the City and the State. In the current crisis, realizations are estimated to have been cut approximately in half in 2008. Further declines are expected for 2009, although the State is projecting a much larger reduction (44 percent) than the City (14 percent).



NYC Office of Management and Budget; OSC analysis

The Office of the State Comptroller estimates that between City fiscal years (CFY) 2003 and 2008, personal income taxes (including payments from realized capital gains) and business taxes related to the securities industry have more than tripled to \$4.7 billion (see Figure 36).⁴





Notes: Includes revenue from the personal income, general corporation, and unincorporated business taxes. Personal income taxes include capital gains realizations.

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

New York City tax collections from Wall Streetrelated activities declined by an estimated \$1.9 billion, or 40 percent, in CFY 2009. While City tax collections are likely to decline further in CFY 2010, the size of the decline could be less than previously projected given the improvement in the financial market, the rising profitability of the financial firms, and lower-than-expected job losses.

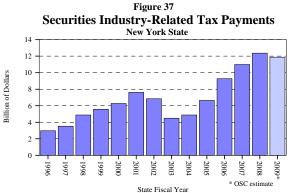
Forecasting tax collections from Wall Streetrelated activities for CFY 2010 is complicated by the unknown impact of compensation reform, which could restrict cash bonuses in the current year, and the amount of business tax credits accumulated by financial firms from record losses.

Given these uncertainties, the Office of the State Comptroller estimates that for CFY 2010 the decline in tax collections from Wall Street-related activities could range from 5 percent to 20 percent. A reduction of this magnitude could cut Wall Street's share of City tax revenues by about half.

New York State is even more dependent on Wall Street than New York City is because it relies more heavily on personal and business taxes. (The City also levies property taxes.) In addition, New York State receives tax revenues from the many industry employees who commute from the suburbs outside of New York City, and from the larger statewide pool of capital gains realizations.

The Office of the State Comptroller estimates that between State fiscal years (SFY) 2002-2003 and 2007-2008, personal income and business tax collections from Wall Street-related activities almost tripled, from \$4.2 billion to \$13.1 billion (see Figure 37).

New York State tax collections from Wall Streetrelated activities declined by only an estimated \$500 million, or 4 percent, in SFY 2008-2009 because collections benefited from increased capital gains realizations in 2007. The Office of the State Comptroller estimates that the decline in State tax collections from Wall Street-related activities could range from 25 percent to 35 percent in the current State fiscal year (SFY 2009-2010). A reduction of this magnitude could reduce Wall Street's share of State tax revenues from 20 percent two years ago to about 15 percent.



Notes: Includes the personal income and corporate Article 9A taxes. Personal income taxes include capital gains realizations Sources: NYS Department of Taxation & Finance; OSC analysis

Office of the State Comptroller

Excluding revenue from real property or transaction taxes, and sales taxes on industry purchases.