

Labor Market Trends and Issues
in the
New York City Securities Industry

Fiscal Policy Institute

One Lear Jet Lane
Latham, NY 12110
518-786-3156

275 Seventh Avenue
New York, NY 10001
212-414-9001

www.fiscalpolicy.org

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Please direct questions, comments and suggestions to:
Matthew Mitchell
212-414-9001 x229
mmitchell@fiscalpolicy.org

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1. Overview

The Fiscal Policy Institute Labor Market Analysis Project

The Fiscal Policy Institute (FPI) Labor Market Analysis Project aims to provide timely, accurate, and useful labor market information to leading New York City and State business, labor, government, and civic institutions. The project is informed by a concern with the pronounced erosion of quality labor market opportunities for low and middle income New Yorkers documented by FPI in the *State of Working New York*. This concern leads us to the belief that an immediate need exists to focus attention on helping more New Yorkers establish the skills and credentials needed to move upward into jobs that provide real self-sufficiency, stability, and family security.

Founded in 1991, the Fiscal Policy Institute (FPI) is a non-profit, non-partisan research and education organization that focuses on tax and fiscal policy, economic analysis, and labor market research in New York City and State.

Purposes and sponsors of this study

This report on the New York City securities industry was made possible through funding from the Institute for Business Trends Analysis at the Borough of Manhattan Community College (BMCC), of the City University of New York (CUNY). Additional support was provided by the Consortium for Worker Education (CWE), under a post September 11th National Emergency Grant from the U.S. Department of Labor.

The study has three purposes:

- To provide a broad economic and labor market context for a workforce development strategy designed to better link New York City residents, including workers displaced since the attacks on the World Trade Centers, with what is almost unquestionably the City's leading export industry.
- To help the City University of New York and other key local economic and workforce development institutions make stronger and more positive institutional connections with the securities industry.

- To provide strategic insights on program development opportunities for the CUNY system and other local workforce development providers.

Please note that it is not our purpose to provide a fully exhaustive academic overview of this extremely complicated global industry. Our aim, rather, is to set the stage for a sector strategy by providing as much actionable information as we can as quickly as possible.

Economic/labor market findings

The following findings are intended to provide a context for thinking about the role of the securities industry in the New York City economy and labor market.

1. New York State Department of Labor (NYS DOL) data adjusted by FPI show clearly that the securities industry is one of several sectors – along with air transport, restaurants, hotels and garment manufacturing that were especially strongly affected by the events of September 11, 2001. This effect was both economic and human/personal in its nature.
2. This industry retains a strikingly intimate connection to New York City. For example, U.S. and State labor market information data show that 24% of U.S. securities industry workers have jobs in NYC, and that these employees earn a full 41% of U.S. securities industry wages.
3. Long-term trend data show that this industry is much more cyclical than the economy as a whole, presenting special challenges for local economic and workforce development policy especially in times of financial market downturns. A look at the employment numbers shows that these challenges are structural, and existed prior to the movement of some 13,000 securities jobs out of New York City in the month after the attacks on the World Trade Center.
4. U.S. Bureau of Labor Statistics (BLS) data, combined with primary interview research, show that the securities labor market is measurably different in New York City and its surrounding area from elsewhere in the country. A unique specialist professional workforce remains heavily embedded here. Moreover, this workforce exhibits far closer connections to the local information technology sector than is often understood.

5. Prospective entrants to the labor market in the securities industry face a “dual challenge.” One challenge is the fact that this is a highly cyclical industry in a time of financial market downturn. The industry is simply not doing a lot of hiring at present. The other challenge stems from the desirability of often very high-wage securities jobs. Precisely because the securities industry provides such high wages (and often a certain degree of glamour), many jobs in this industry are highly competitive and sought-after by people from all over the U.S. and the rest of the world. In other words, this is by no means a purely or even mostly local labor market.
6. Equal Employment Opportunity Commission (EEOC) and Census data show that diversity remains an issue for this industry. Whites constituted 87% of the managerial workforce and 76% of the professional workforce in securities, but only 57% of the NYC workforce in all industries and 35% of the NYC population.
7. Minorities and others facing the “dual challenge” can sometimes gain entry to the securities labor market through some combination of: a) special internship programs; and/or b) strong quantitative and especially computer programming skills.

Program development recommendations

Based on our economic research and interviews with industry experts, FPI has developed the following initial program development recommendations for CUNY and other workforce development training providers.

1. CUNY schools should attempt to develop “cooperative” internship programs with leading local securities companies. This should start with a very targeted pitch to individual companies (in the words of one industry representative, “a rifle approach as opposed to a shotgun approach.”)
2. CUNY should work with the Securities Industry Association (SIA) and leaders at cooperating firms to develop and/or revamp competitive academic programs leading to financial sector internships. Such programs could begin at the community college level, and would include a quantitative or math emphasis.

3. In addition to building cooperative internship programs, CUNY community colleges should also carefully nurture linkages with top tier senior colleges and universities (private or public) that now enjoy direct recruiting relationships with securities firms. Such an approach would accept in a clear-eyed way the fact that an elite “feeder system” exists for Wall Street jobs, and attempt to carve new points of entry into the base of the system.
4. CUNY, the Consortium for Worker Education, and other training providers should focus intently on fostering information technology skills in the local workforce, and on developing institutional relationships with specific IT hiring professionals within the securities industry. Developing the appropriate IT skills appears, at the present time, to represent one of the most straightforward paths to a job in the securities industry. Also it is path that often simply bypasses the “feeder system” mentioned above.
5. Working with the IT Career Ladders Consortium organized through the Federal Reserve Bank of New York, CUNY, the CWE, and others should reach out to local community groups to recruit students interested in developing IT careers.

The FPI research team

FPI Project Director Matthew Mitchell was the primary author and researcher of this report. FPI Deputy Director and Chief Economist James Parrott provided overall direction, insight, and support. Research Analyst Sarah Crean and Economic Analyst Oliver Cooke both contributed to important parts of the research and editing process.

The research team wishes to specially thank Rodney Alexander at the CUNY Institute for Business Trends Analysis, along with the Consortium for Worker Education for sponsoring the work reflected in this study.

2. The Securities Industry in the New York Regional Economy

This section of the report provides a basic overview of the securities industry and its unique role in the New York regional economy. This is intended as necessary context for a discussion about the specific workings of the securities industry labor market in part three.

Securities industry definition

“Establishments engaged in the underwriting, purchase, sale and brokerage of securities and other financial contracts,” runs the Federal definition of the securities industry and by extension one definition of an industry identified with New York City more strongly than perhaps any other.

Standard and Poor’s describes the industry simply as “the investment banking and brokerage industry,” drawing a distinction between this and the allied but conceptually separate mutual fund or “investment management” industry. Other “financial sector” institutions like commercial banks and insurance firms aren’t part of the narrow definition of the sector, though institutions like the stock exchanges are. Citigroup’s Salomon Smith Barney, New York City’s (and the nation’s) largest investment bank as defined by total public debt and equity offerings, describes its own “core services” neatly as including “sales, research and trading for individuals and institutions, underwriting, advisory and specialty financing for corporations and government entities, mutual fund services, futures and asset management.”

Unless otherwise noted, the charts and tables in this report all for consistency’s sake employ the Federal two-digit Standard Industrial Classification¹ (SIC) code definition (number 62) for “Security and Commodity Brokers, Dealers, Exchanges, and Services.” This excludes aspects of the final phrase of Salomon Smith Barney’s self-definition (the part about mutual fund services, futures and asset management). But by any definition one could choose, the securities industry plays a pivotal role in the New York regional economy, and an even more pivotal role in the economy of downtown Manhattan. The importance, and changing nature, of this role can be seen in the upcoming review of the industry’s basic economic statistics.

¹ We chose not to use the new North American Industry Classification (NAICS) system because our analysis relies heavily on long-term trend data that is difficult to obtain or unavailable under the new system.

Securities industry concentration in the local economy

A commonly used means to define a given industry's importance in a particular local or regional economy involves calculating its "location quotient." This fancy-sounding term actually involves the computation of a simple set of ratios, as seen in the box below.

$$\frac{\text{Local employment in sector}}{\text{Total local employment}} \div \frac{\text{National employment in sector}}{\text{Total national employment}}$$

A resulting location quotient over "1" means simply that a given sector is more concentrated in a local or regional economy than in the national economy. A location quotient under "1," by contrast, represents an industry that's less concentrated locally. Definitions vary, but a location quotient over 1.25 and certainly over 2 may be taken as an indicator of an "export sector" - or key cluster of activities bringing new wealth into the region.

The location quotient for the securities industry (SIC 62) in New York City for the year 2000 (the latest year for which both the local and national data is available) is an extraordinarily high 8.7. And the location quotient for SIC 621, the key three digit sub-industry covering security underwriters, brokers and dealers is an even more impressive 9.2.

In a sense, these numbers should not be surprising. New York City, after all, is corporate home to effectively all of the nation's largest investment banking houses (including household names like Goldman Sachs, Morgan Stanley, Merrill Lynch, UBS Paine Webber, Salomon Smith Barney, Credit Suisse First Boston and the like). If one excludes commodities trading, all the major American stock exchanges have their home base in Manhattan. The New York City metro area is also home to a variety of other lesser-known but equally crucial institutions and specialized business associated with specific pieces of the securities trading and clearing process. Among other effects, this institutional mix makes the area: 1) an embedded labor market for specialized industry skills not found in similar density elsewhere in the U.S.; and 2) a natural (though not commonly recognized)

hub for certain kinds of innovations in the area of information technology. We will come back to both these points, and their possible implications in terms of regional job training and economic development strategies, later in this report.

Long-term trends in securities industry employment and wages

Regional economic analysts have focused for several years on the relatively stagnant overall headcount of securities industry jobs in New York City, and the declining (though still very high) percentage of national securities jobs located here². These trends are of clear concern, especially as the kinds of jobs that have been leaving have often been those “back office” functions most accessible to a local, non-elite labor market. Additional concern, as will be subsequently discussed, exists about potential decentralization of the industry as a result of the events of September 11, 2001.

FPI’s focus here, however, is to look at employment trends in context with wage trends. Our contention based on the numbers to be presented below is that while New York City may be losing share of national securities industry jobs, it seems at the very same time to be actually gaining share of many of the highest paid (and presumably highest level) jobs.

This contention is borne out in the following set of charts, which deploy “ES 202” series unemployment insurance data to look at industry employment and wage trends from the peak of the last financial market boom³ in 1987 to the peak of the most recent boom in 2000. Very recent numbers (from the Current Employment Survey), including post-September 11 numbers, are presented in a separate section.

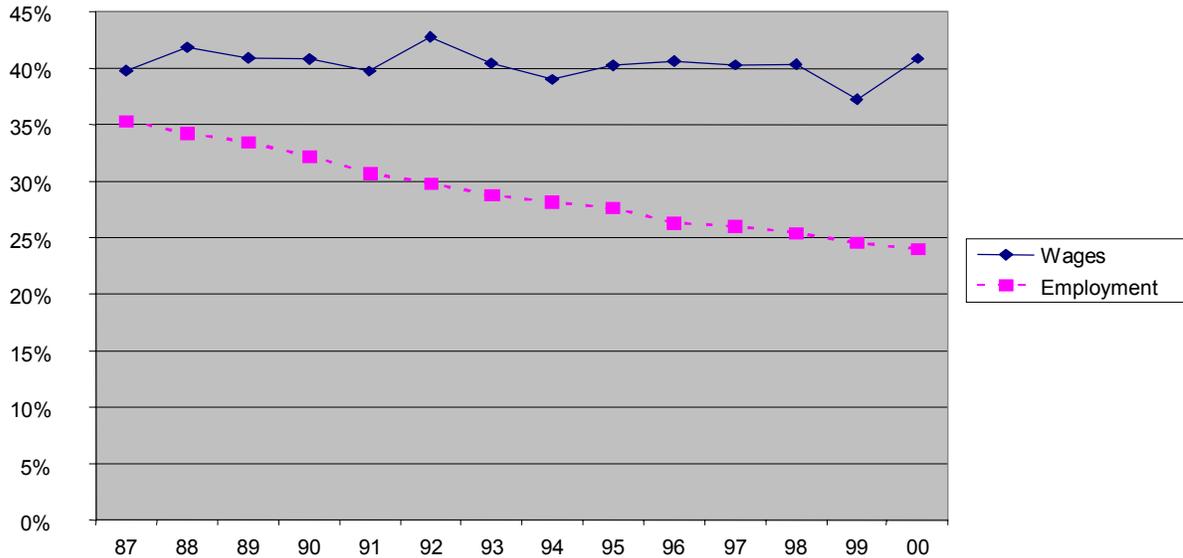
² See for example Securities Industry Association 2001 *Year in Review*. (Detailed cite in References).

³ There was a break in the SIC code definitions for 1987. While this break affected SIC 62 far less than other industries (notably commercial banking), it’s worth noting that the 1987 numbers may be slightly skewed by the definitional change. 1988 numbers use the newer definition.

Labor Market Trends and Issues in the New York City Securities Industry

Chart 1a depicts the percentage of national securities industry jobs, and national wages, located in New York City from stock market peak to stock market peak.

Chart 1a: Total NYC Wages and Employment as % of US: SIC 62



Source: NYS and US Covered Employment Statistics

This chart implies that the percentage drop in New York City's share of national securities industry employment may not, in fact, reflect any corresponding drop in the importance of the City as a location for high-level industry functions. By the year 2000, the 24% of U.S. securities industry workers in New York City earned a full 41% of U.S. securities industry wages. Chart 1b and 1c on the next page dramatically re-emphasize this same point.

Labor Market Trends and Issues in the New York City Securities Industry

Chart 1b: Average Employment in NYC and Rest of US: SIC 62

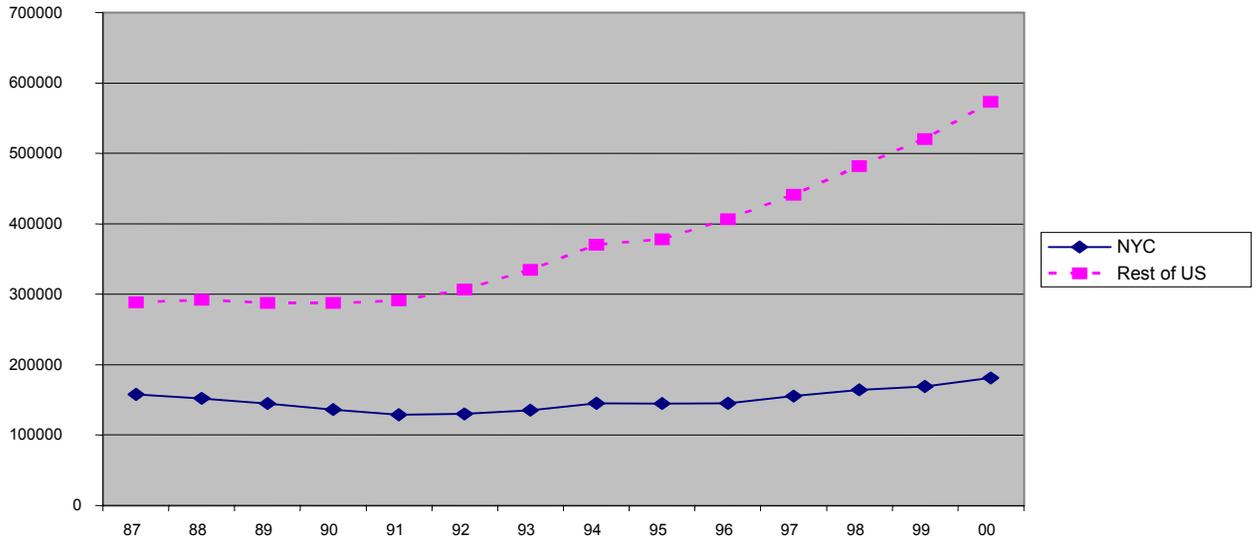
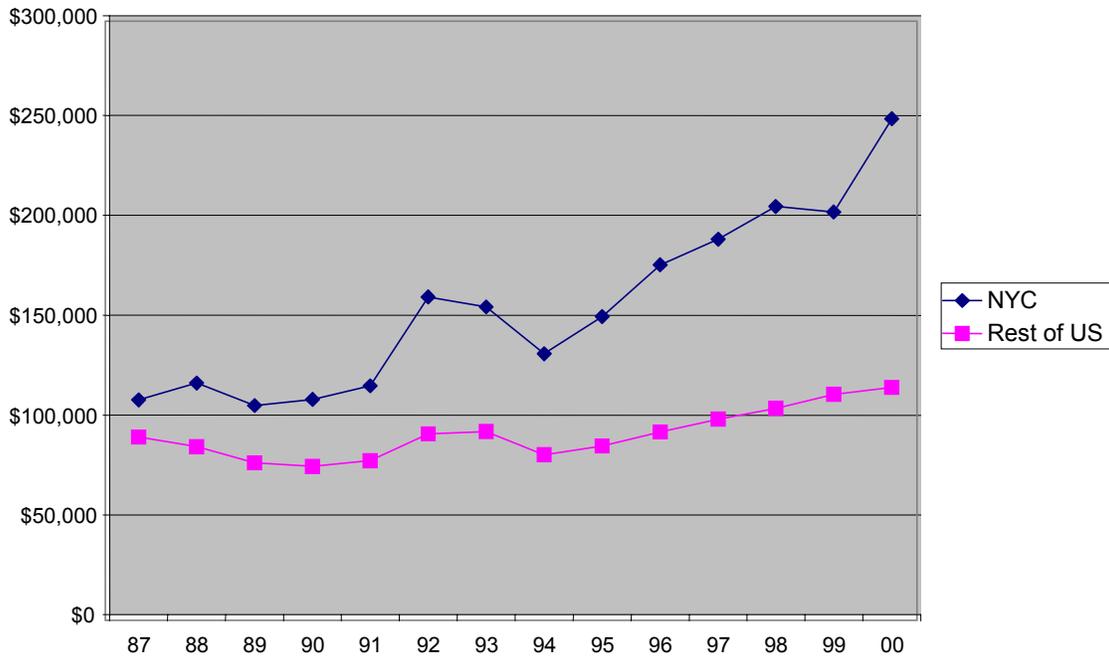


Chart 1c: Average Annual Wages in NYC and Rest of US: SIC 62



Source: NYS and US ES 202 data. (In 2000 dollars.)

As may be readily seen, these charts form near mirror-images of one another. In other words the growth of employment in New York City from boom peak to boom peak has been minimal, while the growth in wages exceptional. By contrast, the rest of the US has seen rapid securities industry employment growth but much more restrained growth in average annual wages.

The following points may also be worth noting:

1. The average year 2000 annual wage number for New York City securities firms reflected in table 1c is \$248,500. This is a numeric mean that includes relatively low paid workers (secretaries, mail room clerks and the like) paid as part of these firms' in-house labor force.
2. By point of contrast, using the same unemployment insurance data for the same time period, we can see that the mean private sector wage for New York City minus the securities industry was \$49,765. The mean wage in the Bronx was \$31,765, and \$29,240 in Brooklyn.

Can CUNY and other local training providers play a role in somehow helping their students/clients make the jump into the high-wage part of the economy? This question seems relevant not only from a program development standpoint, but also from the larger standpoint of citywide economic development policy.

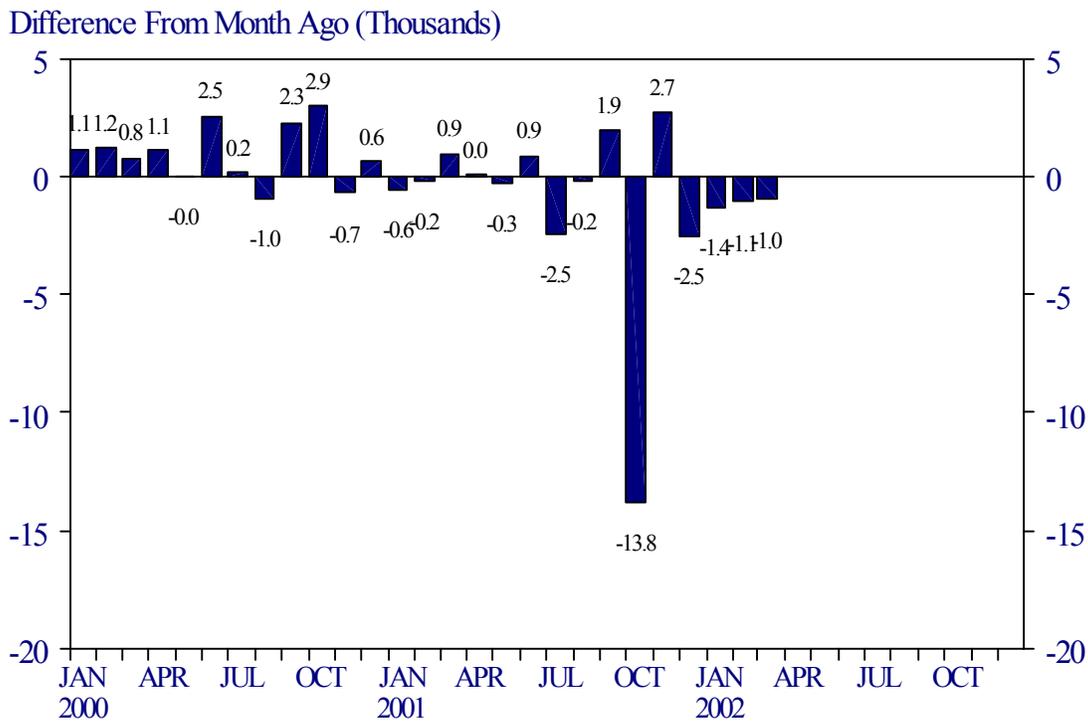
Post-September 11 employment trends in the securities industry

The events of September 11, 2001 affected all New Yorkers. But it is also undeniable that people in particular walks of life were much more likely to actually lose their lives, or those of close friends and colleagues. Firefighters and policemen fall in this category, but equally so workers in particular civilian industries. The financial industry, clearly, was one of the sectors of New York most directly affected (not to mention directly targeted) by the murderous attacks.

It is difficult to say with any real precision how September 11 will affect long-term patterns of centralization or decentralization within the industry, and equally difficult to disaggregate the effects of this event from other factors driving industry location. One example is technological change, which, as noted by the Securities Industry Association's Chief Economist and Research Director, has long exerted "both a centripetal and centrifugal force on the industry."

It is possible, however, to look at employment patterns in the months leading up to and following September 11. These patterns, based on benchmarked New York State Department of Labor "790 series" survey data seasonally adjusted by FPI, are presented in Chart 2, below.

Chart 2 Securities Employment New York City



Source: NY State Department of Labor data seasonally adjusted by FPI

The most obvious factor in this chart is the 13,800 jobs leaving New York City in October, 2001. A jump of 2,700 jobs in November (probably reflecting firms moving workers back into Lower Manhattan locations), was followed by job declines in December, January, and February. While more recent data are not yet available, it seems likely (barring an unforeseen stock market upturn) that overall job declines in this industry will continue into the near future.

What remains unclear is the extent to which key industry functions may decentralize either within New York City, or away from the City, in the new environment of fear and insecurity caused by terrorist attacks. In late January, decisions by Morgan Stanley and Goldman Sachs to move key divisions to Westchester County and New Jersey, respectively, raised municipal anxiety. More recent press coverage has pointed to a trend toward decentralization of operations within Manhattan and other parts of the five boroughs.

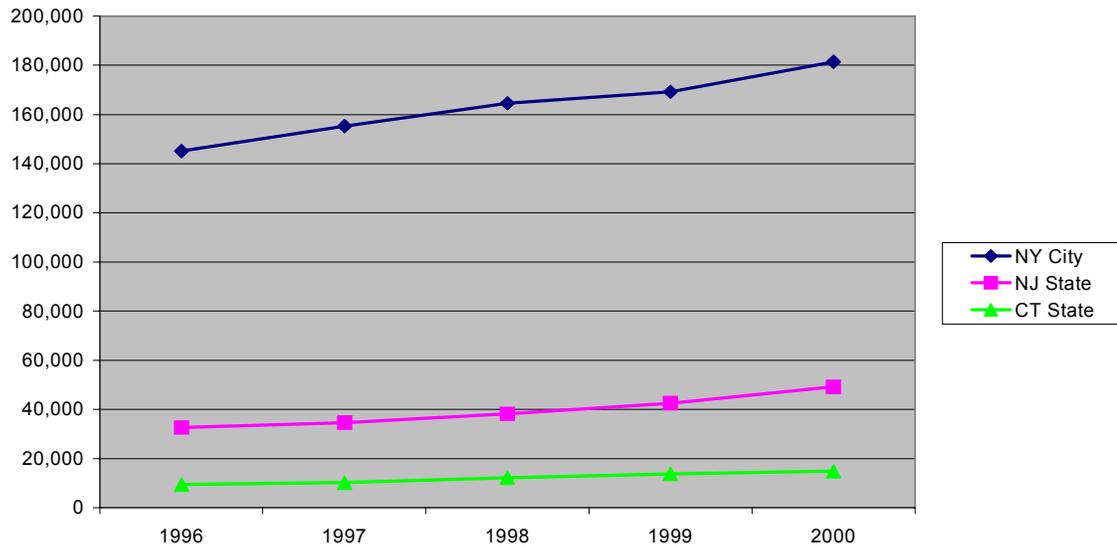
Industry growth patterns in the tri-state area

Perceptions of regional competition over this industry beg the question, what is actually happening over with New York City's "competitors" in New Jersey and Connecticut? In other words, how much are we to draw from the sight of office towers under construction (in part for securities-related activities) just west across the Hudson River from CUNY's Borough of Manhattan Community College campus?

A thorough look outside New York City would be beyond the scope of this study, but we do hope to evade the most serious form of myopia by presenting the following facts about securities industry employment before and after September 11th. First the medium-term trends from the late-90's boom shown in charts 3a and 3b.

Labor Market Trends and Issues in the New York City Securities Industry

Chart 3a: Regional Securities Industry Employment Trends (Late 90's Boom)



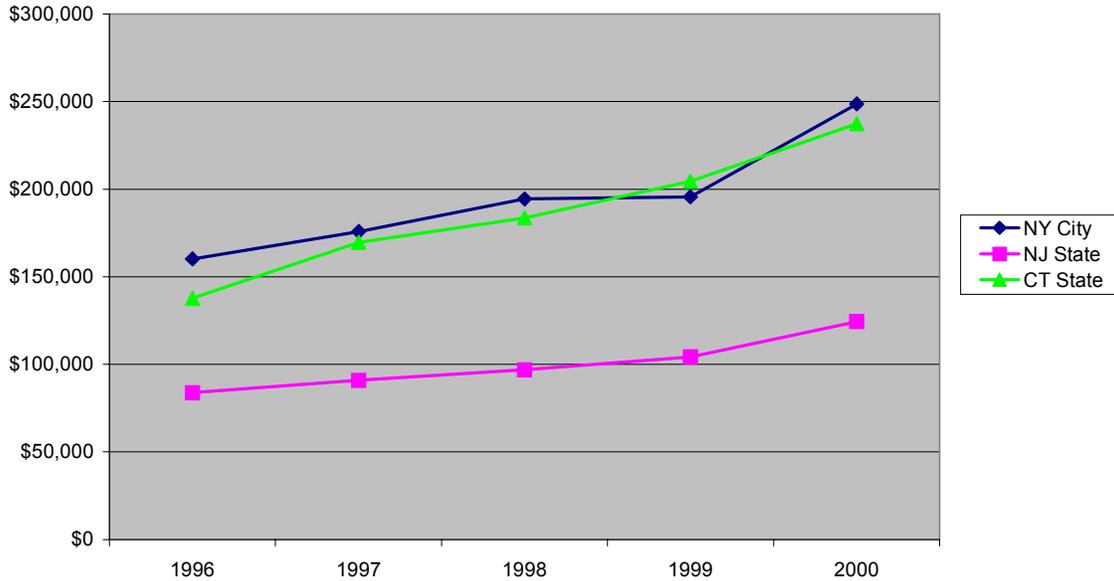
Source: NJ, NJ, and CT Covered Employment Data

Chart 3a shows a similar general trend line for New York City and the two surrounding states. This runs counter to the conventional wisdom that New Jersey has been attracting huge numbers of high finance jobs at the expense of New York. On the other hand, it is true that in percentage terms the gains for the 1996-2000 period were substantially higher for New Jersey (at 51%) and Connecticut (at 59%) than for New York City (25%). However, in terms of absolute numbers of jobs, New York City retained a clear dominance over the other two states throughout the period.

On the other hand, information on the breakdown of securities employment within New York City show that – for the key three digit SIC code that constitutes most of SIC 62 employment (SIC 621) – a full 99.5% of New York City jobs were located in Manhattan in 2000. The aforementioned office towers under construction in Jersey City, therefore, clearly do represent a missed opportunity for Brooklyn, Queens, and the other boroughs.

Chart 3b presents trends over the same period in average annual wages.

**Chart 3b: Regional Securities Industry Wage Trends
(Late 90's Boom)**



Source: NJ, NJ, and CT ES 202 data (unadjusted)

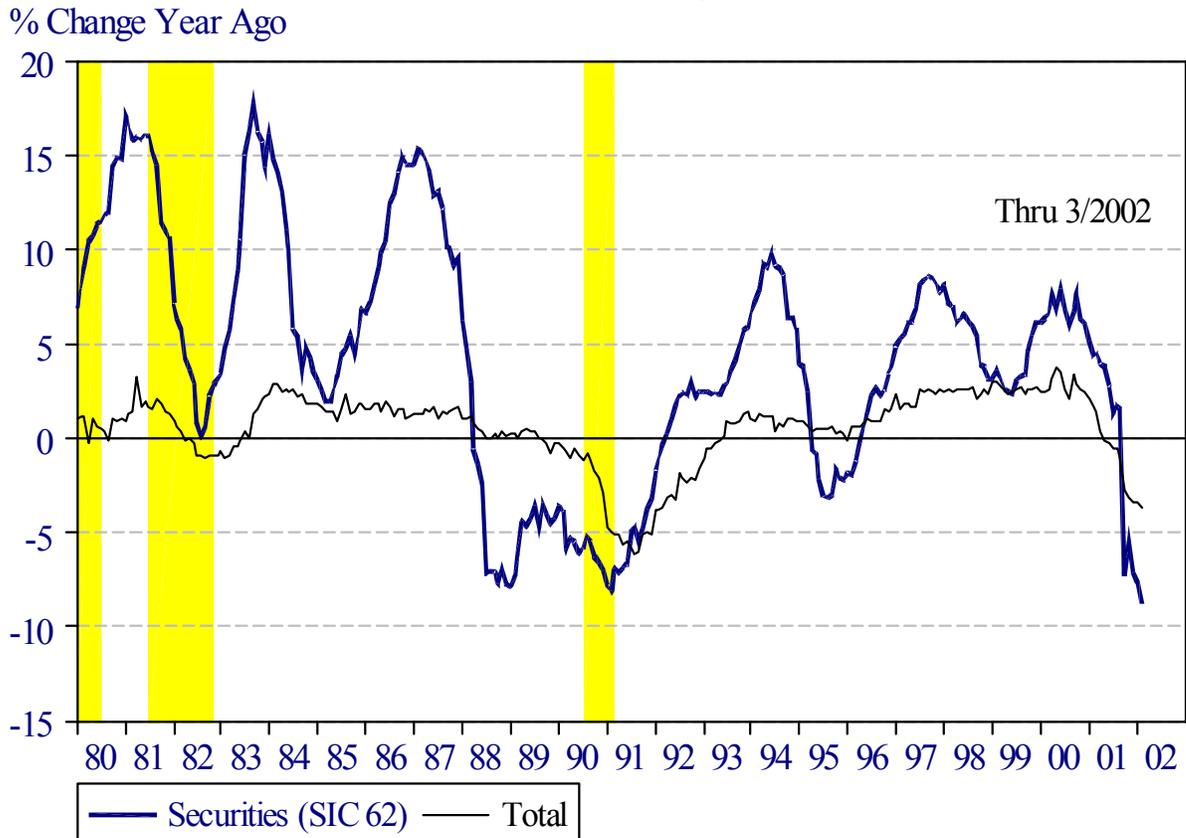
What's curious about this chart is the discrepancy between New York City and Connecticut, on the one hand, and New Jersey, on the other. New York City and Connecticut appear to be essentially equal redoubts of extremely high-wage employment, whereas New Jersey seems to concentrate more in the way of comparatively moderate wage jobs (the \$124,000 average salary for New Jersey is high no doubt, but still only about half the average wage of New York City or Connecticut.).

Two points are in order here. One is simply that these numbers refer to average wages for jobs located in the given areas. Many securities industry workers in New York City actually live in New Jersey and Connecticut. The second is that New Jersey may be a growing home of more moderately paid (and presumably more accessible) "back office" functions. While this contention would require more research to actually prove, it indicates that CUNY may want to actively look at building connections with New Jersey based firms, and New Jersey based units of firms headquartered in New York City.

A highly cyclical industry

A final key point about securities relates to the fact that this is a highly cyclical industry, much more so than the New York City economy as a whole. This can be seen quite clearly in Chart 4, which tracks percentage change in securities industry monthly employment versus percentage change in monthly employment for New York City as a whole.

Chart 4 New York City Job Growth



Source: New York State Department of Labor

Two observations are immediately apparent from this chart. One is that securities is an industry that seems to both hire and hire quite rapidly, depending on what's happening in the stock market and the economy at large. CUNY and other training providers need to be able to respond to this fact, and get in a position to provide workers very quickly when firms in the industry are in hiring mode.

The second observation is that, at least over the past two decades, the securities industry seems to be somewhat of a “leading indicator” for employment levels in New York City as a whole. In other words, drops in securities industry employment seem to precede noticeable (though less steep) drops in overall employment, while increases in securities employment seem to slightly precede upturns in overall employment. This may in part reflect the fact that both securities and overall employment follow overall economic trends. On the other hand, several recent reports have also pointed out New York City and State’s increasingly high levels of economic and fiscal dependence on Wall Street firms⁴.

From an overall economic development policy perspective, it’s important to simply point out here that both the cyclical nature of the securities industry and the State and City’s increasing dependence on the industry have not gone unnoticed by public sector leaders. Over the past decade to decade and a half, New York City government has generously provided substantial tax subsidies to many if not most Wall Street firms, ostensibly to retain jobs in the city.⁵

What would a different, “high-road” industrial policy toward New York City’s leading export industry look like? The details have yet to be established, but we do know that such a policy would involve a focus on public infrastructure that benefits multiple companies, as opposed to tax breaks for individual firms. We also know that institutions CUNY and the Consortium for Worker Education would develop a key role in responding to the needs of the sector for well-trained technical, administrative, and professional staff. And we know, if nothing else, that if the money exists to continue the current tax-subsidy based industrial policy, then the issue is important enough for the city to fund a high-road approach focused on infrastructure and job training useful to the industry (and the citizenry) as a whole.

⁴ For example see Fiscal Policy Institute, *State of Working New York*. 2001. (Detailed cite in References).

⁵ See the Good Jobs New York database at www.goodjobsny.org for more details on the subsidy issue.

3. Labor Market Trends in the Securities Industry

This portion of the study moves from the previous discussion on the unique role of the securities industry in the New York City economy, to a more specific examination of the industry's labor market.

The section starts out at a broad level of generalization, mapping out a "prototypical" career path through the securities labor market and noting the barriers that prevent many workers from even entering the job queue. Next, FPI looks at some of the different kinds of jobs that exist in securities. Using government occupational data and interviews, we examine the differences between the New York City securities labor market and the labor market for securities nationally, focusing on the uniquely dense pool of professional and technical workers that exists in the tri-state area, and the connections of this workforce to the local Information Technology (IT) sector. Finally, Equal Employment Opportunity Commission (EEOC) data are examined in order to take a look at racial, ethnic and gender diversity in securities.

FPI combines a number of information sources for this portion of the study. These include interviews with industry insiders and experts, analysis of government occupational and equal employment opportunity data, and analysis of industry careers websites.

The dual challenge

CUNY and other local training providers face two basic challenges in placing their students and clients in jobs with the securities industry. One, covered in the previous section, is the fact that this is a highly cyclical industry in a time of stock market downturn. The industry is simply not doing a lot of hiring at present.

The other challenge is also implied – through the discussion of wage data – in the previous section on general industry characteristics. Precisely because the securities industry provides such high wages (and often a certain degree of glamour), many jobs in this industry are highly competitive and sought-after by people from all over the U.S. and the rest of the world. In other words, this is by no means a purely or even mostly local labor market.

The dual challenge for CUNY and other local training providers, therefore, is to find ways to work an industry that's hugely important to New York City, and yet is neither: 1) in hiring mode; nor 2) wedded to hiring from a local labor pool.

Prototypical candidates and career paths

The following section serves to state the second part of the dual challenge in somewhat more precise terms; in other words, it shows what a prototypical or “model” Wall Street job candidate and career path might look like. While in actual point of fact no ideal type career really exists in any industry, it is possible to use qualitative data to show us a bit more about a given industry’s self-perceptions with regard to its labor market. What kinds of candidates do securities firms appear to be searching for? What is a typical career path through the industry? Finally, what barriers might a CUNY student or worker displaced since 9/11 face in accessing a job in this industry?

Who are securities firms looking for?

A good place to start in answering this question might be the industry’s own recruiting material, much of which exists on the internet. Careers websites at leading securities industry firms are quite clear – and, though the language varies slightly, quite consistent – in stating their companies’ hunger for the very sharpest and most single-mindedly ambitious candidates, wherever they can find them. A few examples may be useful for flavor:

Goldman Sachs Website: “We are looking for people with contagious energy, creativity and an entrepreneurial spirit, whose vision is boundless and aim is to make a mark on the world.”

Morgan Stanley Website: “Success means no boundaries.”

Credit Suisse First Boston: “A team of superstars is still a team. Join us.”

Lehman Brothers Website: “We seek to attract and develop talented people who share our passion for excellence, our focus on teamwork, and our determination to make each client’s vision our own.”

Bear Stearns Website: “There’s a lot of energy, intensity, and fun at Bear. Every hour the bar is raised. Either you relish the challenge and keep ahead, or you decide to go elsewhere.”

These official statements largely speak for themselves. At the same time, seems worth noting that if success on Wall Street truly “means no boundaries,” then the potential Wall Street workforce becomes limited to people able and willing to devote themselves nearly exclusively to their careers. Notes one securities industry recruiter,

“I think the biggest thing for an analyst is drive and commitment – it’s the love of the deal. They’re going to be working 100 to 120 hours per week. But then again, what they all say, is that it’s not so much the hours, but the fact that their time is simply not their own.”
(Recruiter, Top Ten Investment Banking Firm)

Very few people in the labor market are actually unconstrained enough in their family and personal lives to make the commitment implied in this statement. Even fewer, almost without a doubt, will be able to work these kinds of hours over any extended period.

And if the funnel of potential entrants to the core securities labor force is highly constrained by the work commitment required, it is also unmistakably constrained by a marked preference for candidates graduating from top tier colleges and universities. Without belaboring the point, this preference can be seen quite readily on the online recruiting calendars at leading industry firms.

So are Wall Street companies simply looking for workaholic recent Ivy League graduates to fill their vacancies? Partly yes, would seem to be an honest answer. On the other hand, interviews point to a picture that’s somewhat more complicated. For example, the Director of Career Services at Columbia University (Columbia enjoys an active recruiting relationship with securities firms) had the following advice on helping students at CUNY get a leg up on Wall Street jobs.

“If the students can get themselves any kind of internship to prove that they have the right skills and the right level of motivation, then that’s a good thing. Also it helps if they can show the firm that they have some good quantitative skills, and if they’ve demonstrated an interest in finance by being in some sort of club or group. In general the hand-on experience is just really important. I’ve noticed that one person can have a spotless 4.0 academic average, but if another person has proven themselves in a summer internship then the second person has a huge leg up on getting a job.” (Director, Columbia University Career Services)

Other interviewees echoed and expanded upon these basic thoughts. For example, the Executive Vice President for Human Resources at UBS Paine Webber had the following to say,

“The goal for CUNY should be a rifle approach and not a shotgun approach. They need to go firm-by-firm and start building relationships. That’s the way the Harvards and Columbias of the world do it. There’s definitely a feeder mechanism and that’s how it works.

Look, corporations – if you build a relationship with a college – the hope is to get the best and brightest from that school. You hope that individual professors will learn to steer their very best students toward you. That’s our real motivation.” (Executive Vice President, UBS Paine Webber)

And the Chief Economist at the Securities Industry Association emphasized that an intern with the appropriate quantitative and mathematical bent is especially valuable.

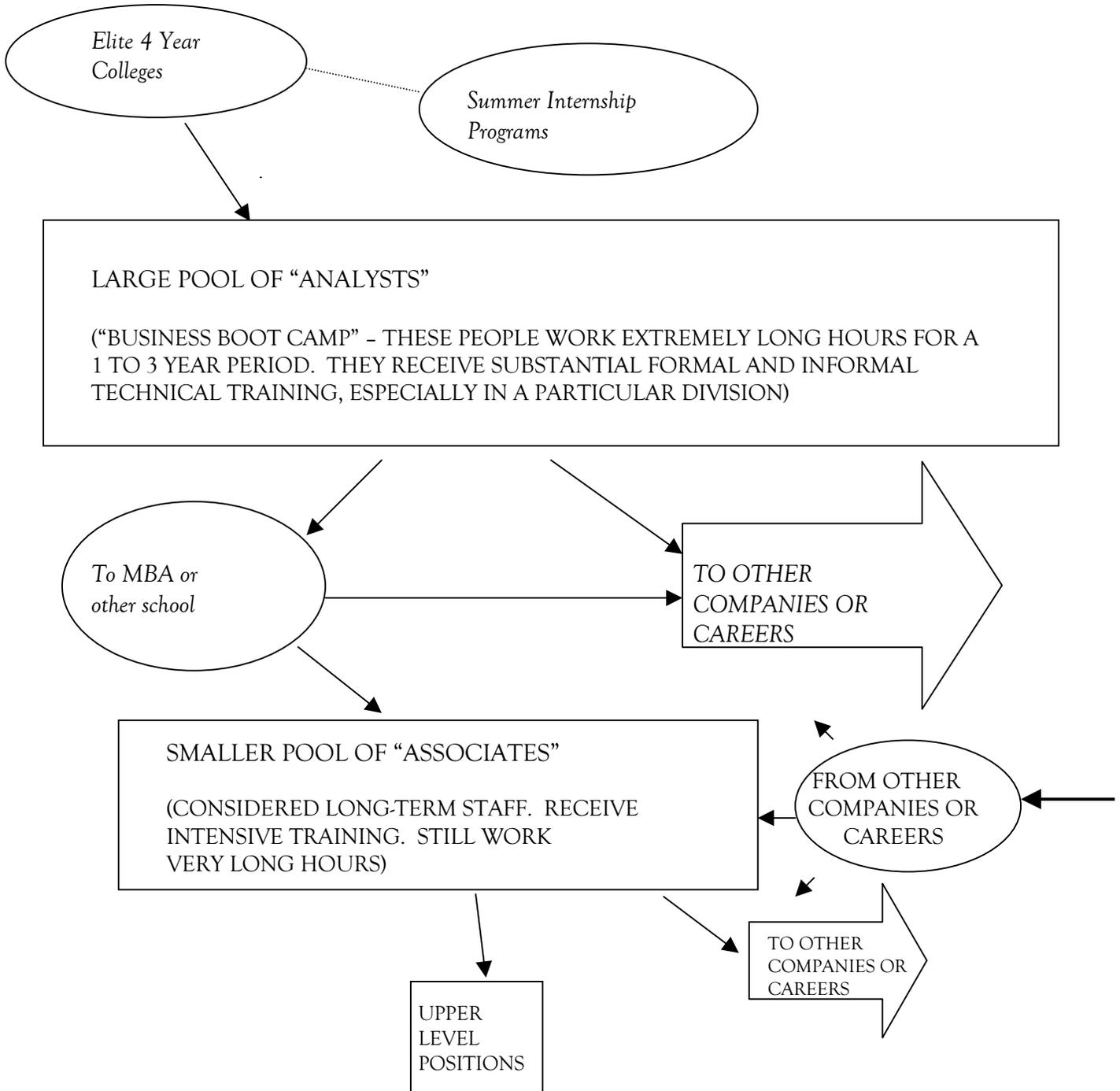
“If you think about it, what do investment bankers actually do? Yes they make deals, but first you have to be able to price a deal. You have to be able to evaluate risk and return, and both of these are mathematical computations.” (Chief Economist, Securities Industry Association)

All these comments shows that, with the exposure provided through an initial internship, a motivated person with reasonably well-developed quantitative skills can clearly land a job in the securities industry. A focus on internships, therefore, seems to represent one way to overcome the “dual challenge.” Notes our UBS Paine Webber interviewee, “All the major investment banking firms have big internship programs. We’re used to working this way.”

What is a typical career path within one of the big companies?

It may be useful, at this point, to simply sketch the career path of a hypothetical person entering a large Wall Street firm. Diagram 1 draws on interviews and material from industry websites to map out such a career path.

**DIAGRAM 1: PROTOTYPICAL WALL STREET
CAREER MAP**



Source: Industry Interviews/Websites

In a way, the thrust of Diagram 1 is summed up in the following statement from the Chair of the Finance Department at Columbia University's Business School. "The Street hires a ton of undergraduates, with the idea that some of them are eventually going to get their MBA and move up into management."

Where might be the opportunity for CUNY graduates, or workers displaced by the events of 9/11 in this "prototypical" career path? One opportunity, discussed above, is at the very top of the diagram. This involves the creation of specialized internship programs, perhaps focused on people with demonstrated quantitative and analytical reasoning skills.

Another opportunity is represented by the oval on the lower right with the caption "From other Companies or Careers." In the real world, securities firms hire much of their staff as "experienced hires." This practice seems to be common across all industry divisions, but seems to be especially common (as will be seen below) in technology divisions. The background reasons why this appears to be the case are discussed in the following section.

The rise of the specialist technical workforce

In a little-noticed but extremely insightful 1995 Monthly Labor Review article, Bureau of Labor Statistics economist Brett Illyse Graff noticed several striking occupational trends in the largest three-digit subcomponent of the securities industry (SIC 621 - which includes among other things bond dealer and brokers, mutual fund agents, security traders, securities underwriters, oil and gas lease brokers, and tax certificate dealers). These trends became apparent through an analysis of the OES or Occupational Employment Statistics survey for the period 1984 through 1993.

The OES classifies occupations into nine major categories, and then hundreds of individual occupations within these categories. Workers in SIC 621 overwhelmingly fall into four of the nine major categories - managerial occupations, "professional" occupations, sales and related occupations, and clerical and administrative support occupations.

By analyzing the OES data, Graff noticed a major shift in the distribution of workers among these four basic categories. Two of the four - managerial occupations and administrative support occupations - were losing share of total industry employment. The other two - professional occupations and sales occupations - were gaining share.

The decrease in administrative support occupations is a widely analyzed trend,⁶ often discussed as an exodus of “back office” jobs. Less widely known, however, was the sharp decrease in managerial workers in the wake of the 1987 crash. Notes Graff,

“Firms in the industry further trimmed their managerial ranks from 1990 to 1993, even though, in the first half of 1993, net income for broker-dealers ... topped that for all of 1992. The industry showed a managerial decline of 18%, and decrease in managerial concentration to 7.3 percent from the 9.5 percent reported in 1990.” (Graff, 1995, p. 25)

The two largest categories of managerial layoffs were for financial and general managers, but severe losses were also reported for categories like mathematical managers, marketing managers, public relations managers, and personnel managers.

But as the industry cut general management and administrative staff, it was aggressively adding new professional and technical workers. Furthermore, according to Graff, this new workforce was emerging almost exclusively within the very largest companies (these large companies, as we have discussed, are in turn almost all located in the Tri-State area.) Graff is worth quoting at length on this point, because her discussion provides a sense for who these “professional” workers are.

“Due to the aforementioned factors, only a small percentage of establishments reported employing professionals, as they are defined for this study. The 1993 employment level for financial analysts was 6,380, yet only 10 percent of units reported employment for this occupation. An estimated 4,950 accountants and auditors employed within the securities brokers and dealers industry were reported by 12 percent of the units. Workers in computer science occupations totaled 9,850 within securities brokers and dealers. Of these, systems analysts and computer programmers were reported at 7 and 8 percent of firms, respectively. Credit analysts, budget analysts, management analysts, and systems researchers each were reported by approximately 2 percent of establishments in the industry.” (Graff, 1995, p. 25)

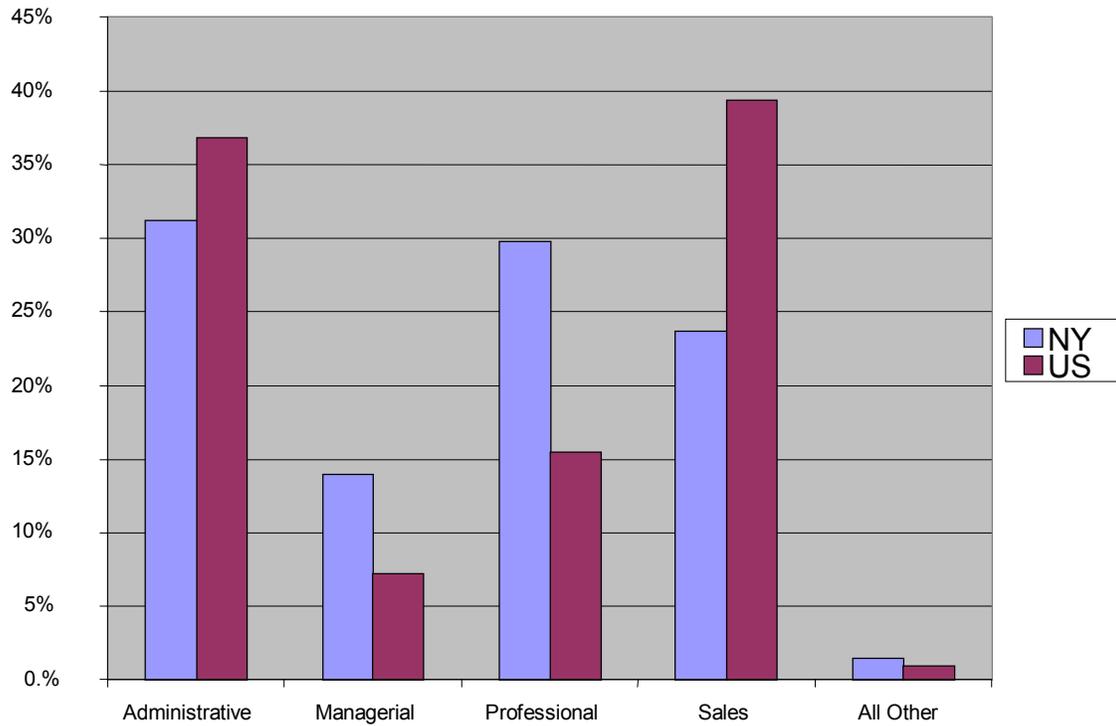
⁶ See for example Economic Development Quarterly, 2001. (Detailed cite in References).

These highly-trained, mostly technically oriented professional workers were the biggest gainers by far in Graff's study. As noted above, these workers were overwhelmingly concentrated in the very largest firms, which are located in and around New York City. Since we already know that New York City employment was declining or flat over the period Graff studied, this means by extension that large New York City -based companies were downsizing middle managers and "back office" administrators as aggressively as they were hiring the new category of technically savvy "professionals."

To sum up, Graff's study points to a major change in the basic occupational structure of the securities industry as Wall Street firms in the industry responded to the 1987 crash. This change in the occupational structure seems to have been most pronounced in the very largest companies, which in other words means it was most pronounced in New York City and the surrounding tri-state area.

FPI does not have access to OES records at the level of detail that Graff enjoyed for her article. For the purposes of the current study, however, we were able to bring some of the basic themes up to 1998, which was the most recent year for which OES data exists on this industry. Our new analysis operates at the two digit SIC level (as opposed to at Graff's three digit level), and involves a comparison of occupational classifications for the New York City securities industry versus the U.S. as a whole. The results of this analysis are presented in Chart 5.

Chart 5: Securities Employment Distribution: NYC and U.S.



Source: OES data from NYS DOL, 1998.

This new FPI chart using the 1998 OES data seems to show that the trend toward a large workforce in the “professional” category is even more pronounced in New York City, which is of course home to many of the large firms.

Labor Market Trends and Issues in the
New York City Securities Industry

With this finding in place, it makes sense to take a closer look at the 1998 numbers on professional occupations in the securities industry. A grouping of these are listed in Table 2, below. This table includes all professional occupations (OES codes beginning in the digits 2 or 3) that have 100 workers or more for SIC 62 in New York City.

Table 2: Selected OES “Professional” Occupations: NYC & SIC 62

OES	TITLE	TOTAL NYC EMP	SIC 62 EMP	% IN SIC 62
21199	Financial specialists, n.e.c.	24725	12326	49.9%
39999	Professional & technical occupations, n.e.c.	39095	4961	12.7%
25105	Computer programmers	23044	4123	17.9%
21114	Accountants & auditors	40691	4052	10.0%
21999	Management support occupations, n.e.c.	31461	3747	11.9%
25315	Financial analysts, statistical	5082	3465	68.2%
25102	Systems analysts	21123	3182	15.1%
25104	Computer support specialists	17666	2340	13.2%
27102	Economists	4106	2211	53.8%
21511	Personnel, training, labor relations specialists	15541	1250	8.0%
25302	Operations - research analysts	3713	1239	33.4%
25199	Computer scientists, n.e.c.	3575	1138	31.8%
28108	Lawyers	30719	743	2.4%
25103	Database administrators	3901	719	18.4%
22127	Computer engineers	6423	667	10.4%
21905	Management analysts	8329	522	6.3%
21911	Inspectors & compliance officers	6872	329	4.8%
28302	Law clerks	1966	284	14.4%
28305	Paralegals	8996	278	3.1%
25108	Computer programmer aides	2215	230	10.4%
28399	Legal assistants, n.e.c.	1274	200	15.7%
22199	Engineers, n.e.c.	4704	193	4.1%
34008	Public relations specialists	8347	192	2.3%
21105	Credit analysts	2453	167	6.8%
21308	Purchasing agents, except wholesale/retail/farm pr	3875	121	3.1%
21117	Budget analysts	1358	118	8.7%

Aside from providing a general sense for the kinds of workers that fit into the OES “professional” category, Table 2 is interesting in the sense that it provides an idea for how concentrated certain kinds of technical occupations are within the local securities industry. It’s not surprising that about half the city’s financial specialists and economists, or 68% of its statistical financial analysts work for Wall Street firms. More surprising, perhaps, is the concentration of information technology professionals in the securities industry. While only 6% of private sector workers employed in New York City as a whole work for the securities industry, some 18% of computer programmers, 15% of systems analysts, 32% of computer scientists, 18% of database administrators, and 10% of computer engineers work for this industry. These numbers are very likely low, as essentially all the information technology work for the stock exchanges is subcontracted out to a wholly owned non-profit (SIAC) that may not be listed under SIC 62. In addition, as will be discussed below, many stand alone information technology companies in New York City are founded by people emerging out of the securities sector.

Drawing on preliminary interview research to date, the next section deals in somewhat more detail with information technology applications related to the securities industry.

IT and the securities industry: qualitative interview data

Interview data collected for this study support the conclusion that information technology occupations are a key area of employment growth for the securities sector at large. This is also a potentially fruitful area for CUNY and other local training providers, because these occupations aren’t necessarily part of the “analyst/associate” career track that starts at the elite 4 year colleges. Notes the lead technology recruiter for one of the nation’s largest investment banks,

“Top management’s ideal situation would be to only have hires through the regular college track, and then everyone moves up internally. But in a boom especially it just doesn’t work that way. I’d say that when things were hot we hired about 10 to 1 people with industry experience over people just out of college. {When you say ‘industry experience,’ do you mean experience in securities or in IT?} I mean in the IT field.” (Senior IT Recruiter, Top Ten Investment Banking Firm)

Given the fact that the “regular college track” tends to exclude many if not most New York City residents, this statement seems represents a very clear opportunity for local institutions able to train people in the appropriate IT skills.

Other comments bear this out, and also touch on the little understood importance of the New York City IT workforce in the securities industry. For example, the President of the New York Software Industry Association said:

“There’s an incredibly strong connection between the securities industry and the New York City software industry. A very large number of the people who start IT companies in New York come out of the financial sector, and the securities industry is also by far the largest customer of local IT companies. Securities and banking without any real doubt represents the biggest single pool of IT talent in the New York area.

... And you know, a lot of people say New York is a place that’s just about doing deals. But it’s not true! It’s crucial that the City and the immediate tri-state area not lose those IT departments in the big companies. It would be like Microsoft losing its center of gravity in Washington State, or the Indian software industry losing its center of gravity in Bangalore. This just shouldn’t happen, yet nobody seems to understand it or even know what’s going on.” (President, NY Software Industry Association)

Our Securities Industry Association (SIA) interviewee made a very similar point:

“STP, or Straight Through Processing, and T+1, or Trade Day Plus One, are major technological goals for this industry. The clearing function of the industry, which is most intimately involved with these goals, has some of the highest-technology operations and workforce I’ve seen literally anywhere.

Overall, the industry is spending literally billions to get toward STP and T+1. And the interesting thing is, that traditionally, the “back” end of the industry dealing with stock clearing has always been more the province of a local New York City labor market than the “front” or investment banking end.” (Chief Economist, Securities Industry Association)

A personal contact from SIAC interviewed by FPI brought it all home.

“Basically we work for an industry that’s totally dedicated to technology. And we’re still hiring.”
(Programmer, Securities Industry Automation Corporation)

The recent formation of an initiative called the IT career ladders consortium, sponsored through the Federal Reserve Bank of New York and modeled after a similar initiative in the San Francisco Bay Area, responds in part to the recognition that important opportunities continue to exist in the area of IT despite the collapse of the “dot com” bubble. Many of these opportunities may connect to the financial services industry. The CUNY system is already involved with this initiative through two of its community colleges, which plan to work with locally-based community organizations.

Analysis of EEOC data on race and gender

New York University academic Walter Stafford, in an important unpublished report, has used data from the U.S. Equal Employment Opportunity Commission (EEOC) to document the race and gender of employees within selected New York City private industries and government agencies.

This EEOC survey data is less comprehensive than the BLS ES 202 unemployment insurance data used in several other places in this report, in part because it only includes establishments over 100 employees. On the other hand, as Stafford points out in his report, this problem is less severe for the New York City securities industry because it is so dominated by the big firms. EEOC private sector employment for this industry, in New York City, was 77.4% of BLS employment.

Table 3, adapted from Stafford’s report, displays employment percentages within the New York City “securities and commodities brokers” classification (SIC 621) for selected race and gender classifications and by professional classification. Data are for 1997. The Native American classification isn’t included, but as the numbers total to 100% anyway we can infer that very few Native Americans work in this industry at present.

Table 3: New York City security & commodities brokers by race and gender

	White M.	White F.	Black M.	Black F.	Latino M.	Latino F.	Asian M.	Asian F.
All Workers	48.8%	25.7%	*	*	*	*	*	*
Managerial Workers	66.0%	20.5%	2.9%	2.2%	2.2%	1.0%	3.7%	1.5%
Professional Workers	51.6%	24.6%	3.4%	3.4%	2.9%	1.9%	7.7%	4.5%

What's clear from the EEOC data above is that the securities sector remains very male, and overwhelmingly white. By point of comparison, the same 1997 EEOC data show that white males were only 31.0% of the workforce in all industries.

Stafford's findings must be seen as alarming for CUNY's highly diverse student body, and for those working with the equally diverse pool of workers economically displaced by the events of September 11, 2001. On the other hand, the situation does present CUNY Administrators with an opportunity to use moral suasion to get a hearing with industry leaders.

One area on which to focus remains internships, or cooperative programs. Notes one of my interviewees (a relatively recent college graduate):

“The cooperative program at my school – which was in the Boston area – was just great! Students were placed in local firms as part of their academic work, and many of them ended up getting jobs in these places.” (Programmer, Securities Industry Automation Corporation)

This seems a positive note upon which to end, and reminder that internships are one of several ways to address the “dual challenge” facing entrants to the securities industry labor market.

4. Concluding Observations: Why Invest in Wall Street?

This report suggests a rationale for investing the time and energy of New York City's public university system, along with its single largest non-profit job training provider, in an industry that may not, at first glance, look like a great investment. The securities industry, while highly profitable, is also highly cyclical (and on a down cycle to boot). In addition, because of its very profitability, the securities industry doesn't need to rely on a local New York City labor pool. It can and does buy talent from wherever it wants.

Despite this dual challenge, both CUNY and the Consortium for Worker Education clearly need to invest time and energy in working with leaders of the local securities sector. This investment, moreover, needs to happen without expectation of leveraging large numbers of short-term job placements.

Why invest in Wall Street? The most immediate reason is that the securities industry represents in many ways the center of the city's high-wage "primary" labor market. While the barriers to entry into this labor market are undoubtedly high, even relatively humble administrative and technical support jobs in securities firms are likely to offer substantially greater income and stability to New York City residents than jobs in low-wage sectors of the economy. Almost any kind of placement on Wall Street, in this sense, represents a "win" for CUNY, the CWE, and other local training providers in the battle to get more New York City residents out of low wage jobs and into middle and high wage jobs.

Another reason to invest in Wall Street relates to the discussion in Part 3 on information technology. This discussion suggests that alternative career ladders may now be opening up to those with the right kinds of "hard" technology and quantitative skills. While further research would be needed to adequately pin down and define these emerging career ladders, it's important to understand that technological change represents an opportunity for non-traditional entrants into the Wall Street labor market to both get jobs and rise up. Can CUNY, the CWE, and others position themselves and the diverse population they serve to seize these opportunities?

A third reason to focus on the securities industry relates back to the industry's cyclical nature. While expectations of lots of immediate job placements on Wall Street are unrealistic in an economic downturn, history tells us that when this industry does go into hiring mode it tends to do so much more rapidly than other industries. A relative handful of successful placements now, in other words, could lead to many more placements when the bulls again start charging through the financial markets and securities firms suddenly need to get people hired "yesterday."

A final reason to invest in Wall Street is a broader public policy reason, and relates to the fact that the City and State already invest very heavily in the securities industry. This investment takes place through a quiet but unmistakable (and unmistakably expensive) industrial policy approach of corporate "retention" through tax abatement deals with individual firms. Conceptually, the polar opposite of the existing policy approach focused on individual companies would be an approach focused on investments in local workforce training, and on investments in industry infrastructure common to all firms.

Several changes need to take place before such a new policy direction might fall into place, but there is only one change that that the CUNY system, the CWE, and other education and training providers can control. This is to prove their direct value to leading Wall Street firms. This report suggests that one way to approach this task (probably most relevant for CUNY) would be to focus on developing cooperative internship programs with targeted individual companies. Another way (relevant to both CUNY and the CWE), would be to focus on helping students and clients develop the kinds of information technology skills immediately in demand by Wall Street.

Interviews

Twenty-six people were contacted for possible interviews as part of this study, most two or three times. Of this group, the following nine were willing to speak with FPI (three of on condition of anonymity).

- Bruce Bernstein, President, New York Software Industry Association
- Frank Fernandez, Senior VP & Chief Economist, Securities Industry Association
- Lawrence Glostén, Chair, Finance Department, Columbia University
- Matthew Levitan, Executive Vice President, UBS Paine Webber
- Bob Limage, Office of the State Comptroller
- Patricia Macken, Director, Columbia University Career Services
- Programmer, Securities Industry Automation Corporation
- Recruiter, Top Ten Investment Banking Firm

Written References

Published articles and news stories

Global Investment Banking Survey. (2002, Feb. 22). *Financial Times*, pp. I-VIII.

Graff, B. I. (1995). Employment trends in the security brokers and dealers industry. *Monthly Labor Review*, 118, No. 9. 20-29.

Immergluck, D. (2001). The Financial Services Sector and Cities: Restructuring, Decentralization, and Declining Urban Employment. *Economic Development Quarterly*, 15, No. 3. 274-288.

Gandel, S. (2002, Apr. 1-7). Wall Street hit by wave of price cuts. *Crain's New York Business*, p. 1.

Policy & technical reports

Corporation of London. (2000). *London-New York study: The economies of two great cities at the millennium. Final report, section 2, chapter 5.* Dilnot, S., Hyde, W., Kaufman, M., Large, P., Orr, J., & Rosen, R.

Economic Development Administration, U.S. Department of Commerce. (1998). *Socioeconomic data for understanding your regional economy.* Cortright, J. & Reamer, A.

Empire State Development Corporation. (2001). *The financial services industry in New York State.*

Federal Reserve Bank of New York. (1999). *Can New York City bank on Wall Street? (Current Issues in Economics and Finance Series).* Bram, J. & Orr, J.

Fiscal Policy Institute. (2002). *The employment impact of the September 11 World Trade Center attacks: updated estimates based on the benchmark employment data.* Parrott, J.

Fiscal Policy Institute. (2001). *World Trade Center job impacts take a heavy toll on low wage workers: occupational and wage implications of job losses related to the September 11 World Trade Center attack.* Parrott, J. & Nowakowski, Z.

Fiscal Policy Institute. (2001). *The state of working New York: working harder, growing apart.* Adler, M., Cooke, O., Dyssegaard-Kallick, D., Nowakowski, Z., & Parrott, J.

New York City Council. (1997). *Hollow in the middle: the rise and fall of New York City's middle class.* Angelo, L., Mollenkopf, J., McMahon, T., et. al.

New York University. (2001). *Labor market segmentation: analysis of industrial and occupational employment in New York City public and private sectors by race/ethnicity and gender.* Stafford, W. (Unpublished).

Securities Industry Association. (2002). *Securities industry 2001 year in review and 2002 outlook.* Fernandez, F., Monahan, G., Toto, G.

Standard & Poor's Industry Surveys. (2001). *Investment Services.*

Government data sets

New York State Department of Labor

- Covered employment (ES 202) data, 1987-2000.
- 790 series survey data. 2000-March, 2002.
- Occupational employment survey (OES) data. 1998.

U.S. Bureau of Labor Statistics

- Covered employment (ES 202) data, 1987-2000.
- Occupational employment survey (OES) data. 1998.

Equal Employment Opportunity Commission (EEOC)

- EEOC data, 1992 & 1997. (Drawn from New York University report, above).