

Financial Services and Inequality In New York

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ABSTRACT

As global cities have mushroomed in significance, mounting concern has accompanied the visible inequality that such centers contain. Sassen's influential dual city thesis maintains that the growth of the finance industry is largely to blame for inequality by generating an elite of well-paid occupations and large numbers of poorly paid ones. This approach, however, suffers from an inadequate explication of inter-industry linkages. This paper tests Sassen's thesis in light of the growth of the securities industry in the New York metropolitan region in the 1990s using an input-output model. Its findings bring the dual city thesis into question and suggest other, more complex causes of inequality might be at work.

INTRODUCTION

Global cities are the command and control centers of the global economy, host vast complexes of skilled, high value-added activities with globe-spanning consequences (Taylor 2000). At the top of the international urban hierarchy, this handful of specialized metropolises are simultaneously: (a) centers of creative innovation, news, fashion, and culture industries, (b) metropolises for raising and managing investment capital, (c) centers of specialized expertise in advertising and marketing, legal services, accounting, computer services, etc., and (d) the management, planning and control centers for corporations and nongovernmental organizations (NGOs) that operate with increasing ease over the entire planet (Knox 1995). New York, London, and Tokyo, and to a lesser extent, secondary metropolises such as Paris, Toronto, Los Angeles, and Singapore, lie at the core

of a worldwide chain of value-added linkages that have steadily fostered a pronounced concentration of strategic headquarter functions in a few conglomerations and a persistent dispersal of unskilled functions to the world's periphery. This process reinforces the long-standing transition of employment in such regions from low-wage, low value-added, blue-collar occupations to high-wage, high value-added, white-collar employment. At their core, global cities allow the generation of specialized expertise upon which so much of the current global economy depends. Numerous authors have pointed out the ways in which global cities are as much shaped by the world economy as they are shapers of it (Friedmann and Wolff 1982; Sassen 1991; Taylor 2000).

New York holds pride of place among global cities. Since its inception,

worldwide economic shifts and forces have been so interpolated so deeply with New York that it is impossible to comprehend the metropolis without reference to its international ties. New York's global standing is not new, having been shaped by decades of trade, finance, and immigration (Hackworth 1998), or in Castells' (1996) famous phrase, the "space of flows." Few locales offer such a stunning glimpse into the ways in which planetary-wide processes are telescoped into local contexts. Following the fiscal crises of the 1970s, during which the region tottered on the brink of fiscal bankruptcy, New York re-established its long-held role as a formidable juggernaut in the global financial system (Mollenkopf and Castells 1991; Fainstein, Gordon, and Harloe 1992; Fainstein 1994), rivaled only by London and, to a lesser extent, Tokyo. World trade in goods, which dominated New York's global connections for centuries, has been eclipsed by transnational shifts in capital and information, activities in which New York enjoys a special competitive niche. Wall Street has long symbolized New York's dominant role in financial markets of the U.S., and Manhattan remains the headquarters of most of the largest money-center banks in the nation, including Citicorp, Chemical, Chase Manhattan, and Morgan Guaranty. In the securities markets, New York remains the unquestioned leviathan of the nation; a sizeable share of all stock sales in the U.S. (861 billion in 2002, or 43 percent) are traded on the New York Stock Exchange (NYSE), the

world's largest. By attracting the headquarters of many multinational corporations and by serving as both an importer and exporter of people, goods, information, and services, New York has been both producer and beneficiary of globalization, i.e., it has been both a generator and in turn constituted by international flows and forces.

The analysis of global cities has been accompanied by growing concern regarding mounting inequality within them. Particularly in the U.S., with its increasingly frayed safety net of social services, cities such as New York exemplify sharp contrasts between wealthy elites and impoverished working class communities populated by immigrants and minorities. An oft-cited suspect for the creation of inequality is the financial sector, which is held to create "masters of the universe" and their counterparts toiling in dead-end service jobs, but few positions in between.

The prevailing interpretation, put forth by Saskia Sassen (1991), holds that the external functions of global cities such as New York as repositories of highly skilled corporate functions, particularly in finance, engender internal labor markets marked by great degrees of social polarity. While a small elite earns millions buying and selling stocks, this argument holds, the spin-offs are to be found in low-paying, unskilled jobs in retail trade, hotels, and personal services. Sassen's argument has become widely influential, as we shall see, it is not

without criticisms. In particular, her claims rest upon anecdotal evidence, which while rich, may fail to capture the complexity of regional economic systems typified by high degrees of inter-industry dependency.

The purpose of this paper is to test Sassen's thesis of the dual city using a rigorous analytic methodology. It begins by reviewing the critical role of finance to the New York metropolitan region's economy, focusing on the causes of the growth of the securities industry throughout the 1990s. Although investment banking suffered in the downturn following the year 2000, the 1990s boom had lasting effects on the city, and as the industry has recently returned to its former heights, is likely to do so again. Next, the paper turns to New York's labor markets and the inequalities present therein, including a large underclass of poorly skilled minorities. Third, it offers a means to explore the relations between the growth of finance and inequality using input-output analysis. The evidence from this exercise suggests that the distribution of jobs and incomes among industries and occupations is much more complex than the dichotomy that Sassen suggests. The conclusion calls for a nuanced understanding sensitive to the multiple causes of inequality.

FINANCE EMPLOYMENT CHANGE, AND INEQUALITY IN NEW YORK

New York's hegemonic position in the international economy may be interpreted as an outcome of the post-Fordist global division of labor that

emerged in the 1970s, which was marked by: the collapse of the Bretton-Woods agreement in 1971 and the shift to floating currency exchange rates; the oil crises of 1974 and 1979 and associated growth of Third World debt; the deindustrialization of much of Europe and North America and the concomitant rise of the East Asian newly industrializing nations; the steady growth of multinational corporations and their ability to shift vast resources across national boundaries; technological changes unleashed by the microelectronics revolution; the global wave of deregulation, privatization, and the lifting of government controls, all of which reflect the hegemony of neoliberalism worldwide; the integration of world financial markets through telecommunications systems; and the initiation of new trade agreements and trade blocs and agreements that accelerated the freedom of capital to transcend national borders. These changes produced a highly volatile, deregulated, globalized form of capitalism that greatly accentuated the position of global cities in the world space-economy (Knox 1995; Taylor 2000).

New York's position as a global city is closely bound up with the ability to move vast quantities of money and information rapidly (Wheeler 1990; Mitchelson and Wheeler 1994). Financial firms utilize an extensive worldwide web of electronic funds transfer networks that form the nervous system of the international economy, allowing them to move

capital around at a moment's notice, arbitrage interest rate differentials, take advantage of favorable exchange rates, and avoid political unrest (Warf 1995; Solomon 1997). Such networks create an ability to move money – by some estimates, more than \$3 trillion daily (Solomon 1999) – around the globe at the speed of light: subject to the process of digitization, information and capital became two sides of the same coin. A global web of fiber optics lines firmly links New York securities traders to their counterparts in London and elsewhere (Longcore and Rees 1996), allowing money to be switched in enormous volumes. The world's currency markets, for example, trade roughly \$800 billion every day (Solomon 1999). Every two weeks the sum of funds that passes through New York's fiber optic lines surpasses the annual product of the entire world; Salomon Brothers, which routinely buys 35% of U.S. government bonds, runs the equivalent of the nation's total bank holdings through its computers every year, while the New York bond market trades on the order of \$150 billion daily (Cohen 1998). The volatility of trading, particularly in stocks, has also increased as hair-trigger computer trading programs allow fortunes to be made (and lost) by staying microseconds ahead of (or behind) other markets.

In the 1990s, New York's stock markets experienced a pronounced "bull market." Deregulation, a booming national economy, and a wave of corporate mergers, takeovers, and leveraged buyouts propelled the Dow Jones Industrial Average to new

heights. Between 1990 and 2000, the total average volume of shares traded per day on the NYSE rose from 170 million to 1.2 billion, a 705% rise, and total capitalization in 2000 surpassed \$7.2 trillion. Although the New York region has lost some of its dominance in securities, its 150,000 jobs in this sector still account for almost 30 percent of the nation's securities employment.

Several reasons explain the recent surge in stock prices and trading volumes. First, the U.S. economy underwent a sustained period of rapid GNP and productivity growth. Following the recession of 1990-1991, a booming economy, low interest rates, and a global glut in raw materials (particularly cheap petroleum) combined to fuel a highly profitable boom. In the wake of the deindustrialization and restructuring of the 1980s, U.S. manufacturing, bolstered by the microelectronics revolution, regained its competitive strength internationally, fueling the demand for investment capital. National productivity growth, boosted by the microelectronics revolution, averaged more than three percent annually in the 1990s. Meanwhile, a wave of corporate downsizing and layoffs constrained the growth in labor income. (Note there is some dispute as to whether current measures of productivity reflect real productivity gains accurately; some observers point out the discrepancies between rising returns to capital and constant returns to labor as evidence that marginal productivity gains have been exaggerated by official statistics or

that the link between the marginal cost and productivity of labor has been annulled). These factors raised corporate earnings and profitability, if not wages, to record levels.

Second, the financial industry witnessed widespread deregulation, including the removal of numerous federal and state government restrictions in savings, commercial and investment banks. In 1980, Congress passed the Depository Institutions Deregulation and Monetary Control Act, and in 1982, the Garn-St. Germain Act, which permitted thrifts to compete directly with commercial banks and eliminated geographic limitations on Savings and Loan lending.

For investment bankers, key issues included the abolition of fixed commissions on stock market transactions and the approval of foreign memberships on stock exchanges. Simultaneously, new sources of investment capital, particularly mutual funds and pension funds, for which controls had been abolished, were introduced. Deregulation unleashed an enormous wave of investor-driven demand for investments, most of which found its way into commercial real estate and the stock market, particularly in the form of large investors who buy and sell enormous quantities of stocks, enhancing volatility and marginalizing small traders. The relaxation of interstate banking restrictions also heavily favored New York, whose money-center banks penetrated local markets around the

nation (Lord 1992). Other changes included the removal of restrictions governing pension and mutual fund portfolios, the abolition of fixed commissions on stock market transactions, the approval of foreign memberships on stock markets, and the current debate over the repeal of the Glass-Steagall Act, which separated commercial from investment banking since 1933.

Third, demographic changes, i.e., the economic behavior of the enormous baby boom generation, accentuated these trends. Entering its prime earning and savings years, this generation continues to pour resources (primarily via mutual and pension funds) into the stock market as well, viewing it as the best long-term investment. The growth of Internet banking also encouraged numerous small investors to play the market. Accordingly, the proportion of American households that own stock directly has risen to almost 50 percent, and millions more own them indirectly.

Of course, after 2000 the stock market bubble burst in a classic “market correction” that initiated a period of decline. In the wake of the dot com crash and national recession, the Dow Jones dropped from its high of 11,000 in 2000 to 8,500 in 2002. The attacks of September 11, 2001 accentuated this decline, spurring rounds of panic among the financial community in lower Manhattan. However, in 2003 most of the ground lost since 2000 has been recouped. Such swings indicate that volatility has become

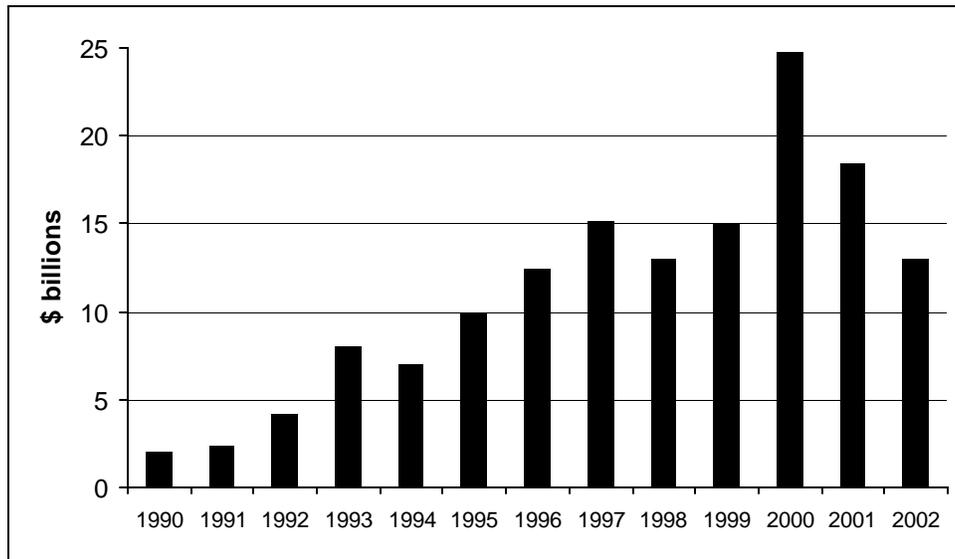
institutionalized within the market.

LABOR MARKETS AND INEQUALITY IN NEW YORK

The emergence of a global economy centered upon producer services, telecommunications, and hypermobile capital has certainly not favored all social groups equally. Even within the most digitized of cities there remains large pockets of "off-line" poverty, in which the poor and disenfranchised suffer the costs, but enjoy few of the benefits, associated with globalization. A lively debate over inequality in global cities has thus emerged. Sassen (1991), whose famous volume *The Global City* initiated the debate, maintained that globalization leads directly to social polarization. She held that the growth of the financial sector, in particular, led to the formation of a cadre of well-paying positions on the one hand, typified by managers, executives, and stock brokers, and on the other hand, large numbers of low-paying jobs, typically filled by women and minorities, in unskilled positions that cater to the elite. For the former, large annual bonuses are the norm (Figure 1); for the latter, often struggling in minimum wage jobs and with a steady supply of workers moving to the region from abroad, daily life becomes increasingly difficult. For those at the bottom of the socioeconomic ladder, globalization can lead to diminished social mobility (Badcock 1997).

Critics of Sassen, notably Hamnett (1994a, 1994b, 1996a, 1996b, 1998), focus on different causes of inequality, including the relative degree to which

immigration, a polarized wage structure characteristic of many services, and public policy have contributed to the yawning gap between the poor and wealthy in many such conurbations. The "jobs-skills mismatch" between employers who seek increasingly skilled labor and a workforce that possesses insufficient human capital exacerbates central city unemployment. A literature on urban poverty and the "underclass" has documented the travails of those caught under these circumstances (Chakravorty 1996; Fortin and Lemieux 1997; Small and Newman 2001; Strait 2000, 2001; Galster et al. 2003). White (1998) criticizes the dual city thesis on the grounds that it is economically reductionist and ignores the state. More broadly, inequality reflects an entire system of social stratification – including occupational change, racial and ethnic segregation, poor educational systems, lack of affordable housing, and spatial isolation – that has evolved over time, fed by various waves of immigration. Sociologists often tie wage inequality to shifts in family structures, demographics, and educational levels (Levy and Murnane 1992; Morris and Western 1999; McCall 2000). National level policies, particularly the increasingly regressive income tax structure and the growth of unearned. Perhaps no city in the U.S. more dramatically illustrates the globalization of finance and associated inequalities than does New York (Godfrey 1995). The New York region's shift into relatively highly skilled, white-collar service occupations, virtually all of which require a

Figure 1: Total New York Securities Bonuses, 1990-2002 (nominal dollars).

Source: Securities Industry Association data. incomes, also contribute to this trend (Pinch 1993; Levine 1996). As Castells and Mollenkopf (1991) note, such broad processes and divisions are too complex to be easily summarized by the notion of a “dual city.”

university education, has stimulated few opportunities for blue collar workers who traditionally worked with their hands (Warf 1990). Deindustrialization and the limited job mobility frequently exhibited by workers unable (or often too old) to retrain for new positions have thus conspired to depress incomes for many segments of the population. Thus, New York is an ideal laboratory for the empirical analysis of Sassen’s dual city thesis.

Labor markets in New York reveal a diverse and complex mosaic (Table 1). In the 1990s, total MSA employment stayed constant at 6.5 million, but declined in New York City and Manhattan, testimony to the steady growth of the suburbs. In 2000, the largest industries in terms of

employment were retail trade (997,000 in the 18 county MSA), health services (823,000), and wholesale trade (565,000). Such industries are generally considered “non-basic,” i.e., reliant upon locally-earned incomes. Propulsive sectors, in contrast, which generate extra-local incomes, include banking and securities (SIC 60 and 62, totaling 379,000), legal services (110,000), insurance (138,000), and engineering and architecture (223,000).

Whereas commercial banking in the region suffered a 27% decline in employment in the 1990s (from 225,000 to 181,000), securities grew by 16.9%, from 154,000 to 198,000. Manhattan continues to enjoy an unparalleled position of dominance

Table 1: Regional Distribution of Employment in New York City Metropolitan Region, 1990-2000 (thousands).

		1990	1990	1990	2000	2000	2000	-----% Change-----		
		MSA	NYC	Manhattan	MSA	NYC	Manhattan	MSA	NYC	Manhattan
	Total Employment	6,354.3	3,257.6	2,015.1	6,503.5	3,277.8	1,858.5	2.3	-5.9	-7.8
SIC	Total Manufacturing	1,062.0	368.4	215.6	825.7	264.7	151.2	-22.3	-28.1	-29.9
23	Apparel	129.1	91.7	60.0	93.6	66.6	42.4	-27.5	-27.4	-29.3
27	Printing/Publishing	164.4	93.0	80.7	128.8	66.6	58.0	-21.7	-28.4	-28.1
48	Communications	112.4	61.3	49.3	126.2	62.3	47.6	12.3	1.6	-3.4
50,51	Wholesale Trade	590.6	157.8	150.9	564.8	196.5	125.8	-4.4	23.8	-16.6
52-59	Retail Trade	1,047.3	388.3	202.8	997.3	372.8	200.0	-4.8	-4.0	-1.4
60	Banking	225.1	145.7	126.7	181.2	113.8	91.9	-19.5	-21.9	-27.5
62	Securities	153.9	130.0	129.1	197.9	153.6	150.9	28.6	18.2	16.9
63	Insurance	127.2	57.6	51.7	138.2	65.1	61.2	8.7	13.0	18.4
65	Real Estate	155.7	99.2	73.2	149.6	100.2	68.1	-3.9	1.0	-7.0
70	Hotels/Motels	64.8	35.4	32.2	54.0	30.4	27.3	-16.7	-14.1	-15.2
73	Business Services	499.0	258.9	214.8	542.5	246.1	201.3	8.7	-4.9	-6.3
78	Motion Pictures	44.5	35.0	32.1	32.8	21.5	18.6	-26.3	-38.6	-42.1
79	Entertainment	73.8	36.6	29.5	81.3	42.7	34.4	10.2	16.7	16.6
80	Health Services	716.5	352.4	134.3	823.4	408.3	151.7	14.9	15.9	13.0
81	Legal Services	114.6	76.0	70.3	110.0	68.6	63.1	-4.0	-9.7	-10.2
82	Education	184.3	117.5	78.3	199.8	123.8	79.3	8.4	5.8	1.3
86	Nonprofits	112.9	59.5	40.3	115.7	56.1	36.1	2.5	-5.7	-10.4
87	Engin./Architect	223.0	117.9	103.0	223.3	112.3	96.8	0.1	-4.7	-6.0

New York Metropolitan Statistical Area defined as New York City and Nassau, Suffolk, Westchester, Putnam, Rockland counties in New York State and Bergen, Essex, Hudson, Middlesex, Morris, Passaic, Somerset and Union counties in New Jersey

Source: calculated from *County Business Patterns*

within the regional economy: many firms prefer to concentrate there even though it exhibits the highest commercial rents, wages, taxes and congestion in the country. This primacy, however, is gradually being eroded as firms have relocated to the suburbs; continued change in this direction will eventually make the employment landscapes of New York more closely resemble those of other U.S. metropolitan regions, in which the vast majority of jobs are found on the metropolitan periphery.

Despite a booming regional economy in the 1990s, life for many New Yorkers got harder in the 1990s. Whereas per capita income between 1990 and 2000 rose from \$21,291 to \$22,402, median family income actually declined, from \$44,828 to \$41,887

(<http://www.nyc.gov/html/dcp/pdf/census/sociopp.pdf>). Poverty is still widespread in New York City: in 2001, 1.4 million people, or 20%, lived below the poverty line, including 28.7% of Latinos, 25.1% of non-Latino blacks, and 45% of all female-headed

households with children (Levitan 2003). While the poverty rate among largely white professionals and managers was 2.8%, it was 10.7% for blue-collar workers, who are disproportionately minorities. One-quarter of the city's population receives public assistance. The homeless population may range as high as 100,000. Beset by unemployment, high crime rates, inadequate educational opportunities, and other social pathologies, life for many unskilled, poorly educated residents has grown worse, not better, in the face of increasing globalization. In poor, predominantly minority neighborhoods such as Harlem, the south Bronx, and Brooklyn's Bedford-Stuyvesant, an "underclass" disenfranchised by the labor market lives in the shadow of the world's largest collection of financial firms. Rarely are the contradictions of capitalism revealed so bluntly and with such poignancy. The next step in this analysis offers a methodology for investigating these consequences analytically to assess the degree to which inequality in New York is attributable to the growth of financial services.

MODELING THE IMPACTS OF THE 90S BOOM

The analytical approach centered on a 34-sector input-output (I-O) model for the New York Metropolitan Statistical Area based on the 2000 Bureau of Economic Analysis's RIMS II model. The total effects of new hirings between 1990 and 2000 – the period of the great stock market boom – were analyzed as an increase in final

demand for output of the securities industry. The increase in final demand during this period was calculated using the I-O relationships between output per employee, x/e , changes in employment, Δe , and changes in final demand, Δf , in the securities industry. The IO relation among these three variables is

$$Df_i = (1/m_{ii})(x_i/e_i)De_i, \quad (1)$$

where i denotes the securities industry; m_{ii} is the I-O multiplier (Type I, excluding consumption-induced effects) for the securities industry; Δf_i is the computed change in final demand for the securities industry consistent with the increase in employment in the 1990-2000 time period. In standard IO fashion, the model assumes linear production functions, no economies of scale, and infinite elasticities of substitution.

The change in output in each industry generated by the increase the final demand for securities services was computed using the I-O equation

$$Dx = \mathbf{M}^{-1} Df_i \quad (2)$$

where Δx is a column vector of output changes in each of the industries in the I-O model; \mathbf{M}^{-1} is the Leontief inverse matrix (see Miller and Blair 1985). Column vector Δf_i indicates the volume of change in final demand for securities (\$2.1 billion); all elements other than that representing the securities industry are zero.

This approach allows estimates of output to be converted into employment change. Total change in

employment by industry were calculated by multiplying the vector representing change in output by a series of associated employment/output ratios derived from the RIMS II model. The total number of jobs generated in every industry, Δe , was computed by premultiplying the changes in industry output by a diagonal matrix of output-to-employment coefficients for every industry, \mathbf{N} , or

$$\Delta e = \mathbf{N}\Delta x \quad (3)$$

Changes in employment by industry may not be sufficiently accurate to assess issues of inequality. Occupations in many ways are a more meaningful measure of the skills and income changes associated with globalization. Thus, employment changes by industry were decomposed into occupational groups using a rectangular block-diagonal matrix of coefficients, \mathbf{K} , which represents the distribution of jobs in each industry among eight occupational groups. Algebraically, changes in employment by occupation can be calculated as

$$\Delta o = \mathbf{K}\mathbf{N}\Delta x, \quad (4)$$

where Δo is a column vector of the change in employment by occupation for each industry. Each block on the main diagonal of \mathbf{K} is a column vector of coefficients that allocates employment changes in each industry among occupations.

Last, changes in each industry's total wage and salary income induced by

the growth of the securities industry were computed using the changes in output calculated in equation (2). Data regarding the 2000 distribution of wage and salary income and business income per unit of output by industry were obtained from the Bureau of Economic Analysis' REIS system. Variations among output, jobs, and incomes thus reflect inter-industry linkages and associated multiplier effects, the relative capital or labor-intensity among industries, and the personal and business income levels per unit of output in each sector.

The results of this exercise include growth in output, jobs, and personal and business income. The 1990-2000 growth in securities and commodities employment in New York generated approximately \$3.35 billion in additional total output and 119,000 new jobs of employment above the 1990 level (Table 2), indicating an average output multiplier of 1.6 and average employment multiplier of 2.45 (118,000/48,000). The impacts varied widely among sectors. Because it enjoyed the both the direct effects of the stock boom (i.e., increase in final demand) and some of the indirect ones generated by the multiplier effects, the Finance, Insurance, and Real Estate (FIRE) sector witnessed the vast majority of increased output (\$2.4 billion), or roughly 68% of the total. FIRE's share of total employment gains, 47,691 jobs or 41% of the total, was much smaller than its share of additions to output, a reflection of the industry's increasingly high rates of labor productivity and capital intensity.

Table 2: Estimated Increases in Output and Employment due to Growth in Stock Market, 1990-2000.

Sector	(\$ Millions)	Jobs
Agriculture & fishing	9.0	368
Mining and petroleum	32.2	2,149
Construction	123.9	5,238
Foods & tobacco	14.1	1,180
Textiles	6.6	1,338
Wood and paper	39.8	2,116
Publishing	82.6	2,940
Chemicals	44.1	968
Rubber and plastics	10.5	1,033
Leather and footwear	.8	35
Stone and glass	2.6	238
Fabricated metals	30.1	204
Electronic equipment	118.4	4,094
Transport equipment	7.6	390
Scientific equipment	6.1	180
Misc. manufacturing	7.0	251
Land transport	17.0	2,324
Water transport	1.4	94
Air transport	3.9	1,455
Transport services	3.8	118
Communications	106.4	2,907
Utilities	35.3	4,075
Wholesale/retail trade	72.6	5,365
FIRE	2,385.4	47,691
Hotels	27.4	1,555
Personal & repair services	207.0	11,702
Business services	272.3	10,290
Entertainment	5.4	345
Health services	142.6	2,436
Legal services	20.3	1,197
Education	1.7	278
Nonprofit	3.5	288
Federal government	49.8	2,832
State & local government	6.2	1,212
TOTAL	3,348.0	118,888

Source: calculated by author.

Other industries that saw significant increases in output and employment attributable to the boom included business services (\$272 million and 10,290 jobs), personal and repair services (\$207 million and 11,702 jobs), construction (\$123 million and 5,238 jobs), wholesale/retail trade (\$72.6 million and 5,365), and electronic equipment (\$118 million and 4,094 jobs), all of which have extensive forward or backward linkages to FIRE. In contrast, most manufacturing sectors, transportation, and certain services (e.g., health, education, government) were only marginally affected. These results speak to the limited inter-industry linkages exhibited by the FIRE sector; the relatively self-contained complex of advanced producer services thus tends to contain its propulsive effects within a narrow group of affected sectors.

The occupational distribution of the employment generated by the stock boom differed from that of the U.S. labor force as a whole (Table 3). The relative distribution of jobs generated by the stock boom included fewer in managerial and professional occupations (19.1%) than the nation as a whole (29.8%), but significantly larger shares of craft workers and operators and laborers (39.8% v. 22.5%). The stock market boom appears to have generated larger numbers of semi-skilled and modestly paying positions than highly paid ones in finance, popular stereotypes of Wall Street yuppies notwithstanding. These distributions reflect the

patterns of inter-industry linkages through which multiplier effects flowed as well as the organization of occupations within each major industrial group. The fact that the bulk of new jobs generated by the growth of New York's security industry are not highly skilled should not be surprising. Sassen (1994:105) notes that "there is a tendency to assume that advanced industries, such as finance, have mostly good, white-collar jobs when in fact they also have a significant share of low-paying jobs, from cleaners to stock clerks." Inequality is thus produced within as well as among industries.

Finally, the personal income (wages and salaries) and business income (profits) effects of the stock boom were considerable (Table 4), totaling approximately \$13.6 and \$21 billion, respectively. As with output and employment, the FIRE sector dominated both sets of impacts, including \$4.4 billion in personal income (including large bonuses paid to brokers) and \$16.9 billion in corporate profits. Other industries to receive significant income boosts included personal and repair services (\$3.4 billion and \$862 million in personal and business income, respectively), communications (\$816 and \$600 million), and business services (\$787 and \$313 million).

CONCLUDING REMARKS

As Knox (1995:236) argues, global cities "facilitate the articulation of regional and metropolitan resources and impulses into globalizing processes

Table 3: Occupational Distribution of Employment Impacts of Stock Market Increase.

Boom-induced job	Jobs	%	U.S. %
Managers	11,425	9.6	12.9
Professionals	11,305	9.5	16.9
Sales brokers	7,496	6.3	4.8
Clerical workers	20,707	17.4	24.8
Unskilled sales	20,589	17.3	18.1
Craft workers	32,847	27.6	9.1
Operators/laborers	14,519	12.2	13.4
Total	118,888	100.0	100.0

Source: calculated by authors

while, conversely, mediating the impulses of globalization to local political economies."

Nor is globalization confined to purely economic processes, for it includes political and cultural forms as well. All of these shape local urban governance, including municipal budgets, expenditure priorities, and financing strategies (e.g., public-private partnerships).

Thus, to understand globalization and global cities in all of their complexity, urban analysis must bring to bear a nuanced comprehension of how the generalized dynamics of the world-system interact with the unique, locally-specific contexts of individual locales in contingent, and often unpredictable, ways. That the labor markets and built environment of New York are intertwined with a variety of global processes has long been evident to many observers. Compared to the U.S. as a whole, New York has been

gradually losing its share of employment, which may indicate its advantage as a global city may not last indefinitely (Markusen and Gwiasda 1994).

This line of thought leads to two important conclusions. First, the idiographic structure of New York – its regionally-specific occupational structure, inter-industry linkages, patterns of consumption, and regimes of governance – serves as important reminders that globalization is not telescoped into individual contexts uniformly throughout the world. Rather, national, regional, and local factors mediate these trends in important, contingent, and often unpredictable ways. Thus, simplistic claims about the “end of geography” (e.g., O’Brien 1992) may be dispensed without further consideration. Second, these results serve to eschew mechanistic views of global cities that hold their inequalities a unproblematic results of the concentration of financial services.

Table 4: Personal and Business Income due to Growth in Stock Market, 1990-2000(\$millions).

	Personal Income	Business Income
Agriculture and fishing	14.4	6.4
Mining and petroleum	84.3	101.8
Construction	579.8	144.8
Foods & tobacco	69.9	26.9
Textiles	38.8	18.6
Wood and paper	75.1	134.7
Publishing	321.1	330.8
Chemicals	41.3	121.5
Rubber and plastics	84.0	36.0
Leather and footwear	8.2	3.0
Stone and glass	28.7	10.4
Fabricated metals	115.8	14.1
Electronic equipment	181.8	79.4
Transport equipment	15.6	29.9
Scientific equipment	221.9	28.1
Misc. manufacturing	14.1	23.1
Land transport	124.3	105.8
Water transport	5.4	3.4
Air transport	257.4	209.5
Transport services	62.6	19.9
Communications	816.1	599.7
Utilities	217.2	68.9
Wholesale/retail trade	173.3	141.1
FIRE	4,420.9	16,899.5
Hotels	185.3	98.8
Personal & repair services	3,450.4	862.8
Business services	787.2	313.8
Entertainment	106.1	17.0
Health services	124.2	8.1
Legal services	167.8	71.2
Education	38.5	4.5
Nonprofit	217.4	20.8
Federal government	487.2	403.2
State & local government	55.3	24.9
TOTAL	13,591.5	20,982.6

Source: calculated by author.

Sassen's (1991) well-known model, for example, examines only Manhattan, and its loose methodology fails to take into account the inter-industry linkages that suture the FIRE sector to other parts of the regional economy. It is evident that the processes producing inequality in New York are considerably more diverse, including the proliferating linkages to be found in business services, law firms, accounting, advertising, real estate, and tourism. Moreover, this view ignores other causes of inequality, including the immigration of low skilled migrants and the offshoring of manufacturing jobs. To the degree that the growth of finance may create inequalities, such effects are dwarfed by other causes. Indeed, as this analysis indicates, the bulk of jobs created by the great boom of the 1990s favored low skilled occupations in personal services, retail trade, and craft positions. Put simply, New York is more complex than most current depictions of global cities have allowed themselves to admit. In light of these complexities, it is important to avoid demonizing the financial sector and to allow for more subtle understandings of regional inequality than that afforded by the "dual city" approach.

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