Manhattan's financial sector and the 2005–07 employment dynamic

Despite a reduced level of job activity, as reflected by gross gains and losses, Manhattan enjoyed above-average growth just prior to the recession beginning in December 2007; the financial sector, characterized by a deceleration in job creation along with strong wage escalation, provides a unique vantage point for examining the dynamics of employment growth at the local level

Solidelle F. Wasser, Bruce J. Bergman, and Michael L. Dolfman

Solidelle F. Wasser is an economist formerly in the New York-New Jersey Information Office, Bureau of Labor Statistics; Bruce J. Bergman is a labor economist in the same office; and Michael L. Dolfman is the New York-New Jersey Information Office Regional Commissioner. E-mail: bergman.bruce@bls.gov or dolfman.michael@bls.gov

he New York metropolitan area, accounting for nearly \$1.1 trillion dollars, or 9 percent of the Nation's gross domestic product, ranks as "the largest metropolitan area economy."1 At the core of that economy is New York County, otherwise known as Manhattan. To a large degree, the financial activities industry has powered the Manhattan economic engine. This article takes a new look at what distinguished both that industry and Manhattan in light of newly released Business Employment Dynamics (BED) data from the Bureau of Labor Statistics (BLS).

BED data offer a different perspective on the labor market, measuring the summation of gross job gains and losses at the establishment level. This approach is in contrast to the periodic release of other BLS employment numbers, which the Agency refers to as payroll data. With those data, the difference obtained between two periods is the net change, a static measure, such as -100,000. By contrast, the dynamic captured by BED statistics is the level of job change activity behind the net change: how did the economy end up with a net job loss of 100,000? BED data measure how many jobs were created by establishment openings

and expansions, in addition to how many jobs were destroyed by establishment closings and contractions.²

In other words, BED gross job gains and gross job losses attest to the volume of activity in labor market demand, and the numbers help explain payroll employment change, an outcome of that activity. The study of Manhattan employment presented in this article analyzes both of these aspects: gross activity and net payroll change. Taken together, these two elements enable us to gauge excess job reallocation,³ and this information adds a unique dimension to economists' understanding of local employment trends.

In the course of the period for which BED data are available, namely, 1992–2008, the U.S. economy experienced two recessions.⁴ Prior to the 2001 recession, the high point in the payroll job count occurred in the fourth quarter of 2000 in both the Nation and Manhattan. Although the timing of the economic recovery differed, the United States and Manhattan shared a post-2001 employment crest in the fourth quarter of 2007.

Manhattan employment never quite rebounded as high as it did during the earlier peak, and on the surface, it may have appeared that the events of 2001 inflicted permanent damage to the economy. Nevertheless, despite great loss, the pace of employment growth, as measured by BLS payroll data, grew to finally exceed that of the Nation during the 3-year period prior to the December 2007 peak. Paradoxically, BED data show that this event occurred at a time of diminished job creation—that is, noticeably fewer job gains. So, what differentiated the periods leading to the last two employment peaks?

Part of the answer to this question lies with structural changes that occurred in Manhattan's base industries—information, financial activities, and professional and business services—shortly after 2001.⁵ This study narrows the perspective to the Manhattan financial sector, an industry characterized by a deceleration in job creation along with extraordinary wage escalation. The unique vantage point of that perspective yields a better understanding of the mechanics of employment demand.

After summarizing Manhattan job creation and destruction between 1992 and 2007, the article focuses on job flows into and out of financial activities, contrasting the period prior to the 2007 employment peak with the one prior to the 2000 peak. Next, the discussion goes on to frame the BED job change data in the context of payroll data from the Quarterly Census of Employment and Wages (QCEW), highlighting those characteristics which may have factored into the job flow patterns of the financial sector. Finally, the article examines the relationship between job activity and wage change in Manhattan.

The analysis indicates that Manhattan's payroll growth prior to the 2007 recession was attributable largely to a slower rate of job destruction, as opposed to a higher rate of job creation. Despite slowing rates of job creation, the interplay of job reallocation and relatively high wages may have contributed to above-average growth in wages and employment in the financial sector.

Job flows in Manhattan, 1992–2007

The components of BED job activity—gross job gains and gross job losses—are measured by a longitudinal database derived from the QCEW, a census of employer reports required by State unemployment insurance laws that cover 96.2 percent of wage and salary workers. Gross job gains include increased employment from business expansions and openings.⁶ Gross job losses cover employment decreases caused by business contractions and closings.⁷

This article uses both seasonally adjusted and unadjusted quarterly BED data, along with over-the-year averages.⁸

Quarterly data from the BED program and employment data from the QCEW refer to the fourth quarter, unless otherwise noted. This selection of quarterly data was intended to highlight the periods that reflected peak employment in two business cycles—the fourth quarters of 2000 and 2007, respectively—occurring within the timeframe covered by the available data. The selection of the fourth quarter also reflects the predominance of autumn in Manhattan hiring patterns. (See the appendix.)

What BED data teach us is that employment change represents an equilibrium of substantial activity. During the period of this study, a typical quarter in Manhattan yielded more than 100,000 gross job gains, with 4 out of 5 originating at expanding establishments. At the same time, the Manhattan workforce generally experienced a comparable magnitude of job loss, with about the same proportion of destroyed jobs involving contracting (instead of closing) businesses.⁹ The difference between these measures—the net employment change—varied each quarter, usually amounting to less than 50,000. (See chart 1.)

Gross job gains each quarter ranged from 100,000 to 158,400 (seasonally adjusted) over the 1992–2007 period, while there were between 93,400 and 179,300 gross job losses each quarter. The largest net employment decline that occurred in any quarter in Manhattan was –58,000, during the fourth quarter of 2001, and the largest net gain, 28,800, occurred during the third quarter of 2000. The fewest job losses occurred during the quarters leading to the 2007 recession: Manhattan job losses were fewer than 100,000 in 7 of the 12 quarters ending in December 2007.

The changing gain-loss balance highlights different employment turning points in the U.S. and Manhattan job markets. Nationally, gross employment gains peaked in the first quarter of 2000 and began to slow relative to levels from the 1998–99 period, lending credence to the observation in the job flow literature that BED data are useful harbingers of business cycle turns. By the start of the 2001 recession, job gains in the Nation fell about 5 percent from the peak, as job losses rose 6 percent during the same period. (A similar pattern of declining gains preceded the next recession: gross job gains slowed to relatively low levels in 2007, but gains still exceeded losses in 3 of the 4 quarters .)

Job creation in Manhattan, however, continued to increase during the national slowdown. Up until the first quarter of 2001, Manhattan gross job gains outpaced losses, which also were rising (in absolute terms). It was only in the fourth quarter of 2001, capturing the economic effects of the 9/11 attack,¹⁰ that the gross job loss (179,254)



became severe and lasting. The net change, -58,000 jobs, was followed for several years by relatively subdued activity, which, compared with U.S. job activity, substantiates the finding that 9/11 aggravated the effect of the economic downturn in Manhattan.

By the third quarter of 2003, net job change in the United States had turned positive, after which it remained that way until 2007. Although job gain activity in the Nation returned to levels similar to those existing prior to 2001, quarterly gross job gains in Manhattan tended to be below earlier levels: between 93,000 and 118,000 jobs were gained, compared with between 105,000 and 158,000 during the 1997–2000 period. Despite the decline in jobs gained, Manhattan's net change (as a percentage of average employment) exceeded that of the Nation in every quarter from 2006 through 2007.

Where the jobs changed

In Manhattan, the greatest share of job changes, about 22 percent to 25 percent of all gross gains and losses, occurred in professional and business services, a supersector that employs about 1 out of every 4 private-sector workers. (This supersector also experienced the greatest share of job changes at the national level, where it accounted for about 16 percent of the private sector.) Typically, many other Manhattan industries' shares of total activity also were close to their proportions of total employment: construction, manufacturing, wholesale trade, and education and health services. Retail trade, along with leisure and hospitality, industries characterized by high turnover and seasonal employment, had shares of gains and losses that exceeded their employment shares. In contrast, financial activities and information had smaller shares of both.

Though smaller, the share of gross job gains and losses that occurred in financial activities was nevertheless considerable. Financial activities' share of job reallocation was higher in Manhattan than in the Nation, a large difference accounted for by the relative importance of finance in Manhattan. Financial activities' shares of each of the components of total reallocation tended to trend in tandem. This behavior is consistent with the frequently noted phenomenon that, contrary to expectations, job gains and losses tend to increase and diminish simultaneously. The sector accounted for an average of 15.1 percent of gains and an average of 15.7 percent of losses over the years examined, indicating that, in Manhattan, financial activities' share of total reallocation was somewhat stable (with the exception of the early 1990s and of 2001 and its aftermath, when losses accelerated). In the Nation, financial activities accounted for an average of just 5.8 percent of both losses and gains during those years.

The "great moderation" at the local level

A decline in job activity at the national and State levels during 1992–2008 has been documented extensively elsewhere.¹¹ The Manhattan data exhibit a similar pattern: all job flow components declined from earlier levels, and the level of activity approaching the most recent employment peak in the fourth quarter of 2007 did not match activity levels from the earlier peak in the fourth quarter of 2000.

The activity slowdown affected most sectors. Gross job gains in professional and business services were consistently above 30,000 per quarter from 1996 until 2001. Reflecting the aftereffect of both the recession and the 9/11 attack, net employment fell during 7 of the 8 quarters of 2001 and 2002. Activity in the professional and business services sector remained subdued (below earlier levels) throughout the period leading to 2007. Gains and losses in the information sector also exhibited a secular decline, having dropped by half since 2000. Education and health services, by contrast, tended to show a persistent pattern of both gains and losses even through the downturn. Only in one year, 1999, were there consecutive quarterly net losses. The national pattern exhibited even stronger job performance: not even a single quarter posted a net loss.

Like the Manhattan base industries,¹² the declining sectors—manufacturing, transportation and warehousing, and wholesale trade—exhibited decreased job activity. Manufacturing decreased steadily in both gains and losses to the point that the sector's total activity was about one-third of what it had been in the late 1990s.¹³

Financial activities

The decline in job reallocation also was evident in the financial activities sector. Chart 2 shows that, after spiking in late 2001, Manhattan job losses "settled down" to levels lower than what they had been earlier, and gains moderated. The chart represents gains and losses as a moving average, indexed to the average gain and loss level for the



period of the study. What emerges is a consistently higher level of gains compared with losses, despite both series being at levels that were below the U.S. average. The chart also shows how losses started to increase in 2007.

A comparable view of financial activities on the national level, excluding Manhattan, yields a sharp contrast. As chart 3 shows, losses started to build in the rest of the United States in the third quarter of 2005, and the index of losses exceeded gains shortly thereafter.

Although financial activities accounted for a major amount of Manhattan job activity, if we factor in employment and if we express gains and losses as rates,¹⁴ it is evident that the sector had relatively less activity than other Manhattan sectors, as well as a declining amount of activity over time. The average quarterly rate of private-sector job loss in Manhattan prior to 2001 ranged from 6.6 percent to 7.3 percent. (See table 1.) After 2001, rates of job loss ranged from 5.2 percent to 7.1 percent, with all but one year below 6.4 percent. A similar trend of declining losses appears in the financial activities data: before 2001, losses ranged from 3.8 percent to 5.9 percent, after 2001, losses ranged from 3.8 percent to 6.2 percent, with only one year (2002) above 4.8 percent. Financial activities had lower rates of gross job loss during all 15 years for which four-quarter averages are available.

An examination of average gross gain rates yields a cor-

responding conclusion: job creation in financial activities tended to be below average during the same period and declined over time. As indicated in table 2, Manhattan financial activities experienced a decline in fourth-quarter job gain rates, from 5.2 percent in 2002 to 4.2 percent in 2007. During that period, the national rate of job gains declined from 6.1 percent to 5.3 percent.¹⁵ Table 1 shows that, in Manhattan, financial activities had a lower rate of gross gains and losses during most years. Construction, manufacturing, retail trade, information, professional and business services, and wholesale trade all had higher gain and loss rates. (On a national basis, financial activities also tended to have a lower rate of job reallocation.)

The exception to this pattern was 2002: still reeling from the 2001 terrorist attack, financial activities lost jobs in 2002 at a higher rate in Manhattan (6.2 percent) than in the United States (5.9 percent). This situation was unlike that of most years, when Manhattan's rates tended to be below national averages for both private industry and financial activities. Table 2 shows that average rates for job gains and job losses declined between 2002 and 2007 in both Manhattan and the Nation, but the decline in losses, particularly within financial activities, was much sharper at the local level. By 2007, the average rate of job losses in the supersector dropped to 3.8 percent in Manhattan,



Table 1. Rates of gross job change in Manhattan, four-quarter averages, not seasonally adjusted								
Type of change and year	Private industry	Construction	Manufacturing	Retail trade	Financial activities	Information	Professional and business services	Wholesale trade
Gross losses								
1993	7.1	11.6	11.5	8.7	5.9	5.9	7.0	8.2
1994	6.6	11.8	10.8	8.9	4.0	6.6	7.2	7.7
1995	6.8	13.2	11.2	8.7	5.0	7.3	7.0	7.5
1996	6.9	13.0	11.5	8.7	4.8	6.9	7.2	7.9
1997	6.6	11.0	10.7	8.9	4.5	5.7	6.8	7.1
1998	6.8	9.6	11.8	8.8	4.7	6.7	6.5	8.7
1999	7.3	11.7	12.9	9.4	5.0	5.9	7.2	8.3
2000	6.9	10.2	11.9	9.2	4.9	6.2	7.0	9.0
2001	8.4	12.1	12.7	9.9	6.7	9.7	9.6	8.9
2002	7.1	11.5	10.6	8.0	6.2	8.3	7.6	7.2
2003	6.3	11.1	9.6	7.7	4.8	5.7	6.6	6.7
2004	6.2	11.0	9.0	7.7	4.7	5.8	6.6	6.6
2005	5.7	10.3	8.4	6.9	4.2	4.2	5.8	6.6
2006	5.4	8.9	8.5	6.8	4.3	4.8	5.2	6.5
2007	5.2	8.5	7.5	6.8	3.8	4.1	5.3	5.9
Gross gains								
1993	73	14 5	10.4	93	62	63	73	73
1994	7.5	12.8	10.4	93	4.2	6.5	8.0	7.5
1995	7.0	14.1	10.2	9.2	4.2	7.2	7.4	7.4
1996	7.6	13.1	10.4	10.0	47	7.5	88	7.6
1997	7.3	12.1	10.1	8.9	5.0	6.8	81	7.5
1998	7.5	13.0	9.9	9.9	5.1	7.1	8.1	8.0
1999	7.9	13.0	11.9	10.8	5.2	7.1	8.3	8.8
2000	8.0	12.3	9.6	10.0	5.3	8.6	8.6	8.6
2001	6.5	9.6	8.2	7.5	4.9	6.9	6.4	6.8
2002	6.5	9.0	7.7	8.3	5.2	5.8	6.6	6.6
2003	6.0	9.5	7.6	7.0	4.3	4.1	6.3	6.5
2004	6.4	10.4	8.0	8.4	4.7	4.9	6.9	6.1
2005	6.2	10.8	6.7	7.9	4.9	4.7	6.4	6.5
2006	6.1	10.3	6.2	7.4	4.8	4.7	6.0	6.0
2007	5.9	10.9	6.5	7.7	4.2	4.8	6.1	5.8

Table 2. Gross job flows measured by average rates, not seasonally adjusted, Manhattan and United States, 2002–07

Manhattan or	Gross jo	ob gains	Gross job losses		
and year (ending December)	Private Financial industry activities		Private industry	Financial activities	
Manhattan					
2002 2003 2004 2005 2006 2007	6.5 6.0 6.4 6.2 6.1 5.9	5.2 4.3 4.7 4.9 4.8 4.2	7.1 6.3 6.2 5.7 5.4 5.2	6.2 4.8 4.7 4.2 4.3 3.8	
United States 2002 2003 2004 2005 2006 2007	7.2 7.0 7.2 7.1 6.8 6.7	6.1 5.6 5.9 5.9 5.5 5.3	7.4 7.0 6.7 6.6 6.5 6.5	5.9 5.4 5.6 5.4 5.4 5.6	

whereas it was 5.6 percent in the Nation as a whole, having risen from 5.4 percent in 2005.

The preceding rate data indicate that the latest period of net employment growth was not due to a higher rate of job creation; rather, the Manhattan "advantage" was due to slower destruction. A slowdown in job creation was accompanied, and compensated for, by a more pronounced slowdown in job destruction. Table 3 shows that this slowdown in job losses, relative to the Nation's losses, was most apparent in the declining rate of jobs lost at contracting firms. In 2002, job losses in contracting establishments were 4.4 percent of average employment in the Nation; by 2005, the rate had fallen to 4.0 percent nationally and 3.1 percent in Manhattan. From that point, it began to inch up in the United States, but in Manhattan the rate edged down even further, to 3.0 percent in 2007.

Chart 4 contrasts rising levels of activity in the runup to 2001 with activity leading to the 2007 recession. In financial activities, the 2000 high point in employment was

Manhattan and United States, 2002–07							
Manhattan or United States, and year (ending December)	Expansions	Contractions	Openings	Closings			
Manhattan	3.8	4.5	1.4	1.7			
2002	3.0	3.5	1.3	1.3			
2004	3.6	3.6	1.2	1.1			
2005	3.9	3.1	1.1	1.1			
2006	3.8	3.2	1.1	1.1			
2007	3.4	3.0	.8	.8			
United States							
2002	4.6	4.4	1.5	1.6			
2003	4.4	4.2	1.2	1.3			
2004	4.5	4.2	1.3	1.4			
2005	4.5	4.0	1.4	1.4			
2006	4.3	4.2	1.2	1.2			
2007	4.1	4.3	1.2	1.3			

Table 3.	Gross job flows measured by average rates,
	financial activities, not seasonally adjusted,
	Manhattan and United States, 2002–07

preceded by an increase in both expansions and contractions. In Manhattan and in the United States, an upswing in contractions occurred among rates of employment loss in contracting firms about eight quarters prior to the 2000 employment peak. During the eight quarters prior to the 2007 peak, however, the upswing occurred nationally, but not in Manhattan. This difference reinforces the dichotomy evident in charts 2 and 3, and it tells us that the positive net change—the employment "growth" in Manhattan—was more closely explained by contractions and closings than by job gains.

Putting the BED data in context

Just as the job flow data add a dynamic dimension to other employment data, QCEW data offer an insight into county-level employment characteristics. A key feature of the Manhattan economy, evidenced by the QCEW numbers, has been its continuous adaptation. Over the past three decades, Manhattan's economy was characterized by a relative flatness of the employment trend. (See chart 5.) More telling than total changes in employment, however, are the *shifts* in employment that have occurred, the result being reflected in a persistent modernization of the county's industry mix.

For example, in Manhattan, about 80,000 jobs were lost in two declining industries—manufacturing and wholesale trade—between 1992 and 2007; over the same period, employment in professional and business services increased by 137,000. This type of adaptability has contributed to the county's ability to retain much of its industrial importance.

Employment distribution and growth

The 2001 recession and terrorist attack had a profound effect on those Manhattan industries which had weakening employment shares, such as manufacturing, wholesale trade, and financial activities. As table 4 shows, during the 8 years prior to the 2000 employment peak, employment in financial activities grew by just 5 percent, compared with 19 percent throughout Manhattan private industry. The national rate of job growth in the financial sector, also shown in table 4, was 3 times that in Manhattan. The attacks on the World Trade Center on September 11, 2001, affected more than the 194,000 jobs in finance, insurance, and real estate that were located within the immediate vicinity. The local adjustment after the shock was severe: as the following tabulation of 12-month percent changes in employment shows, in the 12 months ending in December 2002 Manhattan private industry contracted by 2.2 percent while employment in financial activities dropped by 6.2 percent and financial activities employment edged up by 0.6 percent nationally:

	Private	Financial
Year	industry	activities
Manhattan:		
2002	-2.2	-6.2
2003	7	-2.7
2004	.9	.5
2005	2.4	3.0
2006	2.5	2.8
2007	3.2	2.4
United States:		
2002	4	.6
2003	.0	1.2
2004	1.9	1.4
2005	1.9	2.2
2006	1.7	.8
2007	.7	-1.4

In a short amount of time, the pace of net job growth in Manhattan accelerated to surpass that of the Nation. From 2004 to 2007, the 3 years prior to the December 2007 peak, the 12-month rate of job growth in private industry in Manhattan was 2.4 percent or more, while in the United States it was between 0.7 percent and 1.9 percent. Private-industry growth slowed nationally in 2007, but in Manhattan it topped 3 percent. The contrast was even more striking in financial activities, whose employment growth started slowing in 2006. In 2007, the credit crisis



Average rates of job change in financial activities, 0-24 quarters prior to employment peak,





and the housing slowdown took a much greater toll nationally than it did on Wall Street: while the Nation shed 1.4 percent of its financial activities jobs, employment in Manhattan continued to grow at a rate of 2.4 percent.

The wage picture

Beyond employment, a key to understanding the Manhattan economy is the distribution and growth of wages. Manhattan's adaptation to economic and technological developments has translated largely into gains in average wages, as opposed to employment. From 1992 to 2007, total wages in the private sector advanced 2.4 percent in Manhattan, about 5 percentage points less than they did in the Nation; local employment growth lagged that of the United States by almost 10 percentage points. The net result was a faster rate of average wage growth in Manhattan.

The structure of wages helps explain this phenomenon. With the largest percentage share of total payroll wages in the Nation (18.9 percent), professional and business services accounted for an even higher share of the wage bill in Manhattan (26.3 percent). Nevertheless, the largest share (39.6 percent) of Manhattan wages stemmed from financial activities.

The dominance of the Manhattan wage picture by financial activities contrasts sharply with the picture for the Nation, where the sector accounted for only about 10 percent of payroll wages. Despite strong employment and wage shifts among the other sectors in Manhattan, financial activities maintained approximately the same share of total private-sector wages throughout the 16-year period of this study.

Payroll data show that, although employment in financial activities never returned to its 2000 peak—or even to its 1992 levels—average weekly wages in the supersector compared favorably not only with other supersectors within Manhattan, but also with those of the Nation as a whole. In both 1992 and 2007, one financial activities industry securities, commodities contracts, and investments—had the highest fourth-quarter average weekly wage among all service-providing subsectors in Manhattan.

As regards wage growth, weekly wages in the financial activities sector grew by 50 percent, topping wage growth in all the other private-industry sectors, between 1992 and 2000. Wage growth in the sector accelerated in the years that followed, and by 2007 average wages in Man-

hattan's financial activities sector were more than double what they were in 1992. Nationally, weekly wages grew 85 percent during the same period.

Distinguishing characteristics

The QCEW payroll data reveal important features of the Manhattan financial activities sector that may factor into any changes in job flow activity that occur in the county. In Manhattan, a greater proportion of employment exists in larger establishments and in higher paying financial industries. QCEW data indicate that the average establishment size in the Nation has declined over time, from 13.9 in 1993 to 12.8 in 2008.¹⁶ The average establishment size in financial activities in the United States also declined, from 11.1 in 1993 to 9.2 in 2008. In contrast, the average establishment size in Manhattan was 16.0, and that of the financial

cial activities sector was 22.9 in 1993 and 20.1 in 2008.

A key distinction between financial activities in Manhattan and in the United States is in the proportion of establishments that employ at least 50 or more employees.¹⁷ That size category accounted for 2.4 percent of financial activities establishments, and 48.4 percent of the sector's workers, nationwide. In Manhattan, 9.7 percent of the establishments employed at least 50 workers, and their share of employment, as table 5 shows, was 70.1 percent. The significance of the relation between employment size, on the one hand, and gains and losses, on the other, will be explored subsequently.

National data from the QCEW indicate that the largest establishments tended to have above-average weekly wages. In the private sector, large establishments (those with at least 250 employees) had average weekly wages that were higher than the average for all sizes every year from

In percent of total]	1				1		1	
Manhattan or United States,	Average monthly employment (thousands)		Employment change, percent		Total wages (millions of dollars)		Change in average weekly wages, percent	
and industry sector	2000	2007	1992–2000	1992–2007	2000	2007	1992–2000	1992-2007
Manhattan								
Total private industry	1,983.2	1,952.6	19.0	17.2	40,628.8	52,132.7	32.5	72.8
Construction	1.9	1.8	51.8	46.7	1.7	1.7	29.2	78.7
Manufacturing	3.4	1.9	-31.8	-62.7	2.2	1.4	33.2	101.2
Wholesale trade	4.6	4.2	-7.8	-17.3	4.6	4.1	22.0	57.4
Retail trade	7.1	7.7	27.9	37.1	3.3	3.5	21.4	55.8
Information	8.6	7.0	31.1	4.8	8.2	7.0	20.6	64.5
Financial activities	20.6	19.6	5.0	-1.4	39.6	39.4	50.6	104.9
Professional and business								
services	25.4	25.3	40.8	38.5	26.3	26.7	31.5	74.3
Educational and health								
services	12.6	15.0	22.8	44.2	6.5	7.8	19.8	56.9
Leisure and hospitality	9.6	11.2	39.8	60.0	4.4	4.9	32.2	63.6
Other services, except								
public administration	4.3	4.6	18.5	24.4	1.9	2.3	29.0	87.3
United States								
Total private industry	111 343 3	114 917 0	23.2	27.1	1 044 811 9	1 346 643 2	313	63.8
Construction	6.1	6.6	45.2	62.2	6.6	7.3	34.6	70.9
Manufacturing	15.5	12.0	2.8	-18.0	18.4	14.3	30.7	64.1
Wholesale trade	5.2	5.2	17.1	22.0	7.2	7.3	35.8	70.4
Betail trade	14.2	13.9	18.8	19.7	8.6	8.0	26.7	50.3
Information	33	26	38.1	12.7	5.0	4.0	46.2	78.2
Financial activities	68	7.0	15.7	23.3	10.0	10.9	39.8	84.5
Professional and business	0.0	7.0	13.7	20.0	10.0	10.5	55.0	0 1.5
services	15.2	15.7	52.7	63.3	18.9	20.2	33.1	71.8
Educational and health		13.7	52.1	00.0		20.2	33.1	, 1.5
services	131	15.4	24.2	51.0	118	144	18.4	52.9
Leisure and hospitality	10.6	11.5	25.3	40.6	46	49	33.3	63.7
Other services, except public			23.5			1.9	33.5	0.00.7
administration	37	3.9	19.5	28.3	23	24	30.2	62.4

Table 5. Employment, by size of establishment, Manhattan and United States, March 2008						
Number of	All	Percent	Financial	Percent		
employees	industries	share	activities	share		
Manhattan						
All sizes	2,374,109	100.0	377,464	100.0		
Fewer than 5	110,536	4.7	16,018	4.2		
5 to 9	118,093	5.0	21,958	5.8		
10 to 19	157,811	6.6	31,658	8.4		
20 to 49	257,007	10.8	43,183	11.4		
50 to 99	211,376	8.9	33,424	8.9		
100 to 249	281,609	11.9	46,535	12.3		
250 to 499	198,288	8.4	37,518	9.9		
500 to 999	188,326	7.9	30,457	8.1		
1,000 or more	851,063	35.8	116,713	30.9		
50 or more United States	1,730,662	72.9	264,647	70.1		
All sizes	112,664,943	100.0	8,004,315	100.0		
Fewer than 5	7,726,877	6.9	880,417	11.0		
5 to 9	9,317,085	8.3	1,013,595	12.7		
10 to 19	12,711,584	11.3	1,059,301	13.2		
20 to 49	19,590,711	17.4	1,176,519	14.7		
50 to 99	15,201,036	13.5	799,091	10.0		
100 to 249	18,771,468	16.7	930,318	11.6		
250 to 499	10,489,713	9.3	632,478	7.9		
500 to 999	7,357,375	6.5	630,484	7.9		
1,000 or more	11,499,094	10.2	882,112	11.0		
50 or more	63,318,686	56.2	3,874,483	48.4		

SOURCES: U.S. data are from the Bureau of Labor Statistics, Quarterly Census of Employment and Wages; unpublished Manhattan data are from the New York State Department of Labor.

2001 to 2008. In financial activities, this also was true for establishments with 100 to 249 workers. (See table 6.)

Data from the QCEW also show how the industrial composition of financial activities differs in Manhattan from that in the United States. In 1992, securities, commodity contracts, and other financial investments and related activities, the financial activities subsector with the highest average weekly wage, accounted for 37 percent of the sector's employment, and almost two-thirds of its total wages, in Manhattan. In stark contrast, nationally the subsector accounted for 7.7 percent of financial activities employment and 23.1 percent of the sector's wages. Other subsectors, such as credit intermediation and real estate, had greater shares of employment and wages nationally than they did in Manhattan.

In Manhattan, as in the Nation, the securities subsector had increasing shares of employment and wages in 2000 compared with 1992. The following tabulation shows that, in 2007, the securities industry held a large share of financial activities' employment and wages in Manhattan:

		Rest of
Year and measure	Manhattan	United States
Securities industries' percent		
of all financial activities, 1992	:	
Establishments	20.7	5.9
Employment	37.0	5.9
Total wages	64.3	15.3
Average weekly wage	\$3,510	\$1,761
Securities industries' percent		
of all financial activities, 2000	:	
Establishments	24.1	8.9
Employment	46.8	9.0
Total wages	72.0	22.2
Average weekly wage	\$4,670	\$2,336
Securities industries' percent		
of all financial activities, 2007	:	
Establishments	26.4	10.1
Employment	47.6	8.9
Total wages	72.6	22.9
Average weekly wage	\$6,296	\$3,232
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Table 6.	Average weekly wages, by size of establishment, United States, 2001–08
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Year	All sizes	50 to 99	100 to 249	250 to 499	500 to 999	1,000 or more
Total private industry						
2001 2002 2003 2004 2005 2006 2007 2008 ¹	\$720 719 728 758 777 848 892 912	\$663 667 676 703 717 778 813 838	\$710 719 733 762 776 847 892 910	\$792 799 802 850 880 962 1,010 1,035	\$870 889 920 961 991 1,080 1,153 1,200	\$1,104 1,073 1,080 1,154 1,187 1,339 1,439 1,454
Financial activities						
2001 2002 2003 2004 2005 2006 2007 2008 ¹	1,348 1,272 1,265 1,414 1,482 1,686 1,895 1,898	1,306 1,307 1,302 1,497 1,559 1,694 1,884 1,981	1,496 1,444 1,467 1,690 1,718 1,917 2,251 2,202	1,692 1,569 1,489 1,697 1,876 2,131 2,282 2,397	1,504 1,494 1,575 1,685 1,800 1,924 2,199 2,207	2,639 2,186 2,080 2,567 2,803 3,666 4,350 4,033
¹ Preliminary.		Ct . t . t	0			1

SOURCE: Bureau of Labor Statistics, Quarterly Census of Employment and Wages.

Fully 47.6 percent of the Manhattan supersector was employed in securities in 2007, earning 72.6 percent of the total financial activities wage bill. In contrast, the securities industry shares remained unchanged in the rest of the Nation from 2000 to 2007, at about 9 percent of employment and 22 percent of total wages.

Thus, the QCEW data show not only the economic importance of the financial activities supersector in Manhattan, but other important features that distinguish it there from its importance in the Nation, and those characteristics could help explain job flow trends. At the onset of the period studied, the Manhattan finance industry already had a pay advantage, partly related to its size and industry makeup. Over time, employment became even more concentrated into the higher paying finance industries, which already accounted for a far greater share of financial activities in Manhattan compared with the rest of the Nation.

Explaining job flow trends

With the backdrop afforded by the QCEW data, we can better understand the churning in jobs added and lost each quarter. Much theorization has centered about the cause of the churning: job activity may be attributed to establishments that are adjusting payrolls in response to productivity changes, business competition, external shocks, seasonal changes, or the business cycle. From this perspective, jobs are reallocated to a more efficient structure on the basis of employer decisions.

That Manhattan has maintained a pay advantage for private industry as a whole, and for financial activities in particular, might suggest that Manhattan has attained an efficient allocation of labor. At the same time, as a corporate and metropolitan center, the county accommodates business establishments that tend to be larger, and better positioned financially, than average, and these characteristics may have had implications for employment growth and business turnover.

The above-average size of Manhattan businesses may partly explain the reduced level of activity over time. About 60 percent of job activity in the Nation involves firms¹⁸ with fewer than 100 employees. Beyond this fact, additional BLS research indicates that a dropoff in job activity, observed nationally, was more pronounced among establishments that changed employment by more than 20 employees. It may be presumed that most of the establishments in this category are larger. Thus, given the larger establishments characteristic of the Manhattan economy, one might expect a decline in activity to be more pronounced at the local level.

seasonally adjusted, Manhattan and United States, 1992–2007							
	Manh	attan	United	States			
Year	Rate of net change	Excess reallocation rate	Rate of net change	Excess reallocation rate			
Total private industry							
1992	1.2 2.4 2.3 2.8 3.2 3.0 3.1 3.8 3.0 .0 2.2 2.5 2.7 3.1 3.1 3.3	11.6 10.8 10.8 11.2 10.6 10.0 11.0 11.2 14.6 10.0 8.8 9.2 7.8 7.8 7.8 7.6	0.2 .6 .5 .3 .8 .7 .8 1.0 .4 8 2 .4 .5 .4 .3	15.0 14.6 14.8 15.2 14.6 15.2 14.2 14.0 14.4 14.0 13.8 13.0 13.0 13.0 12.8 12.8			
Financial activities 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2007	6 1.6 1 .3 .7 .9 .0 1.5 1.2 -4.5 .0 .7 1.5 1.7 1.1 .7	7.6 5.6 7.0 8.0 8.8 7.0 8.6 8.4 8.0 8.0 8.2 6.4 5.6 5.6 6.0 6.0	.4 1.0 4 .7 1.1 1.3 1.2 .8 1.0 .3 .9 .1 .7 .8 .4 .4 .2	10.4 9.8 10.8 10.6 10.2 11.0 11.6 11.0 10.6 11.2 9.8 10.2 10.0 9.6 9.8 10.2			

Fourth-quarter rate of net change in employment compared with excess reallocation rates, not

Table 7.

Expectations, however, do not explain *why* a slowdown in job activity occurred. For that, we may look to *excess* reallocation, the "extra" gain and loss activity above and beyond the net change. A net job loss of 100,000 could be caused by gross losses amounting to 250,000 and gross gains totaling 150,000. Or it could reflect 500,000 gross losses and 400,000 gross gains. In the former example, excess reallocation equals 300,000 jobs (gross gains and gross losses that cancel each other out); in the latter example, excess reallocation amounts to 800,000 jobs, obviously much more activity.

Excess reallocation, then, is essentially the number of establishment payroll-level changes that do not show up in reported industry payroll counts. Table 7 shows that total private-industry rates of excess reallocation were lower, on average, in Manhattan than in the Nation. Financial activities' excess reallocation rates were even lower than those of private industry. The table contrasts the slowdown in Manhattan excess reallocation compared with U.S. excess reallocation, together with an increasingly higher (net) growth rate in Manhattan.

Some have theorized that job reallocation increases during recessions and decreases during expansions.¹⁹ More specifically, countercyclical movements in job reallocation rates are initiated by sharp increases in job destruction prior to, and during, recessions. Evidence (based on manufacturing data at a time when the secular trend was downward) pointed to job creation continuing at a steadier rate than job destruction, even during recessions, and the researchers concluded that job reallocation could lead to recessions.

BED data for Manhattan, however, do not confirm that pattern. Excess reallocation is *not* countercyclical for financial activities or the other base industries. Other research²⁰ finds rising volatility among publicly traded firms, but that privately held firms have become less volatile and dominate the overall trend.

BED data do illustrate a close relation between excess reallocation and total wages in Manhattan financial activities. Chart 6 shows a coincident rise in excess reallocation with first-quarter wages in financial activities, centering in the quarter of bonus payments characteristic of this supersector. The pattern, also reflecting the seasonal nature of the data, holds almost to the end of the series, even as excess reallocation activity slows. A somewhat different pattern is revealed by the less turbulent fourth-quarter data, as depicted in Chart 7.

In the fourth quarter, excess reallocation appears to lead the wage change up to 2002. After that, there is a break in the connections between the series, and excess reallocation drops well below its previous average.

This trend in excess reallocation coincided with both an acceleration in total wages that followed the fourth quarter of 2002 and an increasing concentration of employment in securities, perhaps suggesting that the objectives of job reallocation were realized. The accelerating rise in average weekly wages with relatively low job creation in Manhattan financial activities that occurred starting in





2004 might suggest that a more optimal level of job allocation had been reached. What will be particularly telling is what happened, and what will be happening, after the 2007 recession, now that the financial sector is facing new challenges.

Additional research is needed to explore excess reallocation and its explanatory value. A closer look at the activity patterns, as well as the establishment size and turnover, of industries in various sectors can be further analyzed to explain shifts in establishments, employment, and wages.

Articles on BED data have been written by scholars who have had access to detailed data at the establishment level. Many have noted the heterogeneity of the data even at that level. Even without establishment-level detail, however, there is evidence that reallocation has contributed to a different industry mix within the Manhattan supersector from that of the rest of the country. The redistribution of industries within the supersector may explain divergences between Manhattan and the Nation, particularly in the post-2001 recession.

BUSINESS EMPLOYMENT DYNAMICS DATA shed light on conflicting patterns evident in BLS payroll data. Gross employment flow activity—gains and losses of jobs—provides

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another dimension to understanding differences in growth. In the years prior to the latest recession, Manhattan had a reduced level of activity and still outperformed the Nation. The adaptation of financial activities, an industry with deep roots in Manhattan's past, has been accompanied by patterns of excess reallocation and wage change distinct from those of the Nation. From the labor market experiences in the aftermath of September 11, it is clear that the adaptability of local economies' core industries is a critical ingredient of the eventual recovery of those economies.²¹

Although the Manhattan experience tends to reflect the national pattern of a secular decline in the magnitude of job flows, the BED data reveal an important fact: the latest period of relative employment growth in Manhattan was due, not to a higher rate of job creation, but to a slower pace of job loss in contracting and closing establishments, and a substantial part of this effect occurred in the financial sector.

BED data also reveal differences in the timing of job gains and losses, and these differences are of particular interest as regards the runup to the latest recession. As early as the third quarter of 2006, the national figures prefigured the downturn to come, while a different story emerged in Manhattan. That story is related to excess job reallocation, a previously unexplored aspect of understanding job flows and, consequently, shifts in wages.

BED data illuminate Manhattan business patterns and shed light on growth and job flow activity. What appears as a paradox—reduced activity and increased growthmay be a reflection of the unique character of financial activities, a sector that has continuously adapted to contemporaneous business activity, and this adaptation has made Manhattan a driving force for the much larger socioeconomic area. $\hfill \Box$

Notes

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¹ See Sharon D. Panek, Frank T. Baumgardner, and Matthew J. Mc-Cormick, "Introducing New Measures of the Metropolitan Economy," *Survey of Current Business*, November 2007, pp. 79–114, especially p. 79.

² National and State data currently are published quarterly by NAICS supersector and size of firm. Future expansions of available data will include greater industry and geographic detail.

³ Job reallocation, an indicator of how much job activity is occurring, is equal to the sum of gross job gains and gross job losses. Excess job reallocation, describing the amount of activity above and beyond the net change, is equal to job reallocation minus the absolute value of the net employment change.

⁴ The National Bureau of Economic Research designates recessions as periods of significant decline in economic activity throughout the U.S. economy. The determination of when a recession begins and ends is based on a number of indicators, such as production, income, and employment. No comparable official date exists, however, for timing the economic decline (and recovery) at the local level. A comparison involving solely employment shows that, compared with the United States, New York City suffered a larger and more protracted percentage decline in employment during both the 1991 and 2001 recessions.

⁵ See Michael L. Dolfman, Solidelle F. Wasser, and Kevin Skelly, "Structural changes in Manhattan's post-9/11 economy," *Monthly Labor Review*, October 2006, pp. 58–79.

⁶ Increased employment from establishment openings comes from seasonal reopenings and other situations, in addition to establishment births. Representing about 60 percent of openings, births are new businesses that report employment for the very first time or that report positive employment after four consecutive quarters of zero employment. (See Akbar Sadhegi, "The births and deaths of business establishments in the United States," *Monthly Labor Review*, December 2008, pp. 3–18.)

⁷ Reduced employment associated with closing establishments comes in part from temporary shutdowns of seasonal units. Deaths, which account for about 60 percent of closing establishments, are businesses that disappear by reporting no employment for four consecutive quarters.

⁸ QCEW data are not seasonally adjusted, necessitating over-the-year analysis. For a discussion about interpreting annual compared with quarterly changes in BED data, see James R. Spletzer and Joshua C. Pinkston, "Annual measures of gross job gains and gross job losses," *Monthly Labor Review*, November 2004, pp. 3–13. (See also Akbar Sadeghi, James R. Spletzer, and David M. Talan, "Business employment dynamics: annual tabulations," Monthly Labor Review, May 2009, pp. 45-56.)

⁹ See Sadeghi, Spletzer, and Talan, "Business employment dynamics." The authors illustrate how seasonal variation and employment patterns are less visible in the annual data. For example, when national gross job gains are measured on a quarterly basis, 81 percent of the gains are found to be due to expanding establishments. On an annual basis, the number is 69 percent.

¹⁰ See Dolfman, Wasser, and Skelly, "Structural changes in Manhattan."

¹¹ See Sheryl L. Konigsberg, James R. Spletzer, and David M. Talan, "Business employment dynamics: tabulations by size of employment change," *Monthly Labor Review*, April 2009, pp. 19–29.

¹² The base industries of the county, as indicated by location quotients of employment (measures of how the local distribution of industry employment differs from the national distribution) are financial activities, information, and professional and business services.

¹³ The decline in manufacturing was characterized by a very high rate of employment lost to closings (60 percent), as opposed to that lost to existing businesses contracting. (Interestingly, the proportion of employment gained from openings, 41 percent, was higher in manufacturing than in any other sector.)

¹⁴ Computing an activity measure as a rate involves expressing the measure as the result of the count divided by an average of beginning-period employment to ending-period employment.

¹⁵ In addition to the number of gross job gains dropping to low levels nationally, establishment births as a percentage of total establishments exceeded establishment deaths each quarter from the first quarter of 2002 through the fourth quarter of 2006. Prior to the December 2007 peak, the birthrate declined from representing 3.27 percent of all establishments in the third quarter of 2005 to 2.89 percent.

¹⁶ Authors' tabulations using aggregate QCEW establishment and employment counts.

¹⁷ The QCEW program tabulates data by establishment size class for the first quarter of each year. The size class of each establishment is determined by the March employment level. Each establishment of a multiestablishment firm is tabulated separately into the appropriate size class; the total employment level of the reporting multiestablishment firm, however, is not used in the size tabulation.

¹⁸ Establishments are used in the tabulation of the BED statistics by industry, and firms are used in the tabulation of the BED size class statistics. Among BED data are data on the magnitude of job losses on an establishment basis; for example, it has been found that approximately *one-third* of gross job gains and gross job losses originate from establishments that change employment by 20 or more jobs. Also, one-third of gross job gains and gross job losses originate from a large number of establishments that have changed their employment level by 1 to 4 employees. ¹⁹ See Scott Schuh and Robert Triest, "Job Reallocation and the Business Cycle: New Facts for an Old Debate," in *Beyond Shocks: What Causes Business Cycles*? Proceedings from the Federal Reserve Bank of Boston Conference Series no. 42, 1998.

²⁰ See Steven J. Davis, R. Jason Faberman, John Haltiwanger, Ron S. Jarmin, and Javier Miranda, "Business Volatility, Job Destruction, and

APPENDIX: The seasonality of job movement in Manhattan

A close examination of BED data confirms an aspect of city life long celebrated in fiction and song: the quickening of bigcity life known as the "fall season" is grounded in a pickup in hiring activity. Data from the BED show this strong seasonal pattern. Both the United States and New York County (Manhattan) tend to exhibit seasonal patterns in net changes between gains and losses produced by industry expansion and contraction and the opening and closing of places of business. Winter and summer patterns are characterized by negative changes, in contrast to positive changes in spring and fall. As the following tabulation shows, it is the dominance of the fall changes in Manhattan that separates economic activity there from the national pattern:

	BED net change (rate)		
Quarter ending in—	Manhattan	United States	
March:			
Average	2.0	-1.8	
Maximum	-1.0	-1.2	
Minimum	-3.3	-2.5	
June:			
Average	1.0	3.0	
Maximum	1.9	3.8	
Minimum	7	1.9	
September:			
Åverage	7	1	
Maximum	.4	.8	
Minimum	-3.5	-1.6	
December:			
Average	2.6	.4	
Maximum	3.8	1.0	
Minimum	.0	8	

Unemployment," *Discussion Papers*, CES 08–26 (U.S. Census Bureau, Center for Economic Studies, August 2008).

²¹ For a discussion of the importance of core industries in a particular economic downturn, see Michael L. Dolfman, Solidelle Fortier Wasser, and Bruce Bergman, "The effects of Hurricane Katrina on the New Orleans economy," *Monthly Labor Review*, June 2007, pp. 3–18.

Despite Manhattan's reputation as an international emporium, increases in retail trade are far less important in explaining the fourth-quarter increases there than they are nationwide. In the Nation, retail trade and education are typical sectors which experienced gains in the fourth quarter that offset heavy losses in construction and in leisure and hospitality. In Manhattan, by contrast, few losses occurred at all in the fourth quarter. Small losses in manufacturing were offset by small gains in wholesale trade, and construction was flat. No other sector lost jobs.

Contrary to the national pattern, in Manhattan professional and business services accounted for about one-fourth of all job gains, while retail trade also added about one-fourth to the total, followed by leisure and hospitality at 21 percent. Net changes in professional and business services tended to result primarily from a drop in contracting businesses and closings, while retail trade and leisure changes reflected an increase in expansions. One might suggest that these expansions were a reaction to demand coming from base-industry employees, whose high wages appeared to be less threatened by contractions in the fourth quarter.¹

Note to the appendix

¹ This pattern of demand and its consequent effect on employment was noted in Michael L. Dolfman, Solidelle F. Wasser, and Kevin Skelly, "Structural changes in Manhattan's post-9/11 economy," *Monthly Labor Review*, October 2006, pp. 58–79.