The Gender Pay Gap in New York, 1995 to 2013

by Bhaswati Sengupta

n New York, as elsewhere in the nation, working women average far lower earnings than men. Nationally, among full-time employees, women make about 80 cents for every dollar earned by men. While New York performs substantially better in terms of wage levels than the national average, it is instructive to look at the remaining wage gap today, and explore where it is most persistent and why. Debates on the pay gap have recently intensified to a national conversation, with both Hollywood celebrities and women CEOs weighing in¹. Just last year, Governor Andrew Cuomo signed into law a package of Pay Equity bills passed by the NY State Legislature that broadly attempt to increase both pay transparency as well as employer penalties for gender based wage discrimination.²

The aforementioned cases all point to one dimension of the pay gap: employer and industry-based pay differences between genders. While this aspect is an important dimension of the gap, it is essential to note how occupational differences between genders also contributes to the wage gap; equal-pay-for-equal-work may be an accessible way to quantify the end of gender discrimination, but ultimately not a very useful one if women are relegated to lower paying occupations in larger proportions than men. There may be perfect wage parity between the genders within occupations, but an overall gender gap would still persist with more women in the lower end of the wage distribution. In fact, approximately two-thirds of Minimum Wage earners over the age of 24 are women³, and thus the minimum wage remains a powerful tool in reducing the overall gender gap by lifting the bottom of the distribution that remains disproportionately populated by women.

It is also important to take stock of the progress women have made over the last three decades, even though wage convergence has slowed down more recently. Women have narrowed the gap with men in most of the measures that are used to explain wage differences – educational attainment, diversity in occupations, time spent in the labor force, etc. They are graduating from college at higher rates than men, and compared to earlier cohorts of women, selecting more "career-oriented" majors. They are more spread out over different types of occupations and are more likely to work throughout their adult lives. Compared to earlier generations, they also take less time off from work after having children.⁴ (Labor market interruptions reduce the years of accumulated work

experience below men of comparable age, which affects the wage path over one's career.) The last of these suggests that parental responsibilities are converging to some extent across genders, and *all* of these trends indicate that women are building deeper and longer ties to the labor force than ever before.

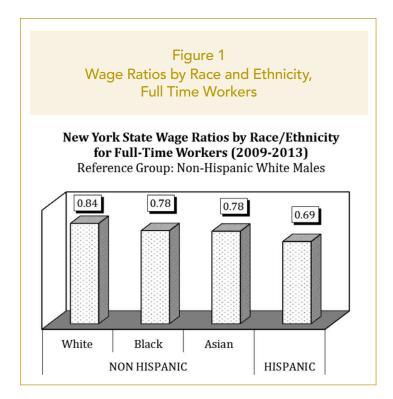
These changes behind the closing of the wage gap have taken place within the context of enormous transformations inside U.S. labor markets in the last three decades. While part of the closing gap is explained by stagnating men's median wages and the reasons behind it (for example, de-unionization and the loss of manufacturing sector jobs have affected men disproportionately), other forces that have led to stagnating men's wages have affected women as well – a shift in demand towards more skilled workers in an increasingly technology-intensive economy, have affected lower income workers across the board, of which women have made up a substantial part. In that sense, women have had to "swim upstream" to attain more gender parity.5 Ultimately, in the big picture, the wage gap has narrowed, as "explainable" sources of the gap have, as well. Today, we are still left with a wage gap, which, though smaller than before, has a larger proportion of the "unexplained" (or difficult to generalize empirically) part. How much of the unexplained gap is due to employer discrimination (which the recently passed laws in New York would help to alleviate), and how much is a symptom of still-persistent societal gender norms expressing themselves in women's choices, which may be difficult to target through legislation, remains a question that motivates much of the current research on the subject.

Data

This article utilizes data from the Outgoing Rotation Group (ORG) Files of the Current Population Survey for the years 1995-2013.⁶ The sample includes wage and salary workers over the age of 16 who worked full time.⁷ An hourly wage was calculated for all workers based on the following. If a valid hourly wage was available, it was used in the analysis. An hourly wage was estimated for salaried workers who typically report weekly earnings by dividing it by their hours worked in the week.⁸ This article uses both weekly earnings of full time workers, and the hourly wage in comparisons. The estimated hourly wage series as well as weekly earnings were converted to 2013 dollars by using CPI-U for New York, Northern New Jersey and Long Island, so all dollar values are in 2013 dollars.

Table 1
Median Hourly Wage, Weekly Earnings for Full Time Workers
in the 15 Largest Metropolitan Areas

	Hourly Wage		Weekly Earnings		Percent of
Metropolitan Area	Men	Women	Men	Women	Men's Wage
San Francisco-Oakland-Fremont, CA	17.26	16.57	1151	962	96.0%
Los Angeles-Long Beach-Santa Ana, CA	14.71	14.12	791	702	95.9%
Washington, DC/MD/VA	16.29	15.20	1173	952	93.3%
Miami-Fort Lauderdale-Miami Beach, FL	14.00	13.00	797	673	92.9%
Phoenix-Mesa-Scottsdale, AZ	15.20	14.12	856	716	92.9%
Dallas-Fort Worth-Arlington, TX	13.89	12.89	829	676	92.8%
Riverside-San Bernadino, CA	15.74	14.21	812	660	90.2%
New York-Northern New Jersey- Long Island, NY-NJ-PA	15.53	14.00	946	769	90.1%
New York City	15.00	13.48	820	726	89.9%
Long Island	16.80	15.00	1058	800	89.3%
Chicago-Naperville-Joliet, IL-IN-WI	15.25	13.73	940	721	90.1%
Detroit-Warren-Livonia, MI	16.23	14.50	969	704	89.3%
Boston-Cambridge-Quincy, MA-NH	17.74	15.83	1140	855	89.2%
Philadelphia-Camden-Wilmington, PA/NJ/DE	17.00	15.00	990	777	88.2%
Houston-Baytown-Sugar Land, TX	14.47	12.50	812	641	86.4%
Atlanta-Sandy Springs-Marietta, GA	14.96	12.84	916	710	85.8%
Seattle-Tacoma-Bellevue, WA	18.64	15.56	1077	797	83.5%



New York vs. Other Big Metro Areas

It is common to find more gender equity in and around large city centers with greater job opportunities, as these large population centers typically act as a magnet for younger cohorts of college educated workers, a demographic among which there is much greater wage parity.

Table 1 ranks the 15 largest metropolitan areas in the U.S. by how much women make, as a percentage of men's income (shown in the rightmost column). Using data from 2009-2013 in order to get substantially robust samples, we find that the New York-Northern New Jersey-Long Island area falls in the middle of the group, with wage ratios around 90 percent compared to the 80 percent national average. There are two points about these numbers worth mentioning:

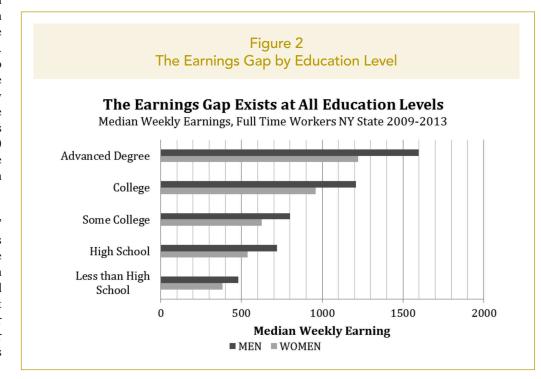
1) What may seem to be a "middling" performance for the New York area is in fact quite remarkable, since it is the largest Metropolitan area, by *far*, with 50 percent more people than the second largest (LA area). It is also at least three times as populous as the other metropolitan areas with also higher gender ratios, and so the parity affects a great many more women.

2) One should be careful in narrowing the focus to simply the wage ratio – a greater equality in wages may hide lower incomes for both genders, and so may have little consequence for women on payday. For instance, the Boston area has a larger wage gap than the Miami area, but women earn substantially more in the former (\$855 dollars compared to \$673 per week). In an area with more low paid jobs, the wage gap is compressed at the low end by the Minimum Wage, which puts a floor below which wages cannot fall. The data in the Table also precede the adoption and implementation of the \$15 minimum wage in Seattle, which currently sits at the bottom of the list, and it will be interesting to see if that has an effect on the gender gap, given the relatively high concentration of well-paid (and more unequal) occupations in the area.

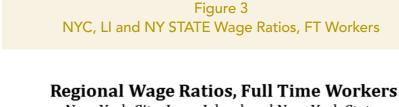
Variations by Race, Ethnicity & Education

Since Non-Hispanic White men is the highest wage demographic, it is common to use the median wage of this group as a benchmark against which to assess performance of other racial/ethnic groups. Figure 1 provides the wage ratios of women measured relative to this group.

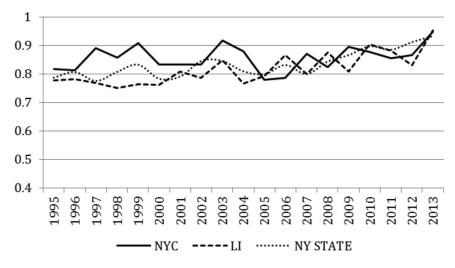
The wage ratios in Figure 1 are lower across the board compared to the New York average of all men and women (0.88), since they are individually estimated against the high-wage group. Within the subgroups, Hispanic women fare the worst, confirming a pattern found at the national level. Hispanic women are most likely to work in service related jobs that are on the low end of the wage scale, since they are also much less likely to have a college degree.⁹ (For a more detailed treatment of educational attainment and occupational spread based on race/ethnicity for New York, see Sengupta, 2008.¹⁰)

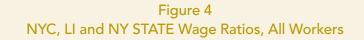


7



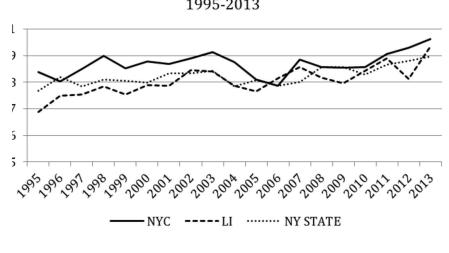
New York City, Long Island and New York State: 1995-2013





Regional Wage Ratios, All Workers

New York City, Long Island and New York State: 1995-2013



Even though women have made immense progress closing the educational gap with men, they still face a persistent earning gap at every education level, as can be seen in Figure 2. While earnings clearly increase with education, the earnings gap gets larger for more educated women. Within the Advanced Degree category, are Masters, Doctoral, and Professional Degrees, and the last typically exhibits the most pronounced gap.11 Even though women now account for almost half of students in law, medical and business administration graduate programs, and earn roughly the same as their male peers starting out their careers, their salary paths diverge substantially as they get older and have children. This divergence is most pronounced for more educated, higher income workers.

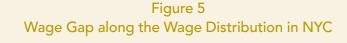
Before further exploring the occupations at the high end of the wage distribution, here is a quick look at broad regional picture and how it's changed in the last few decades. Over the last twenty years, Long Island has caught up to New York City with gradually increasing wage ratios over time (defined as the ratio of women to men's median wage). In Figures 3 and 4, we also see how the wage ratios have become more compressed over time, suggesting that there has been less variation in the last decade in the experiences of New York City and Long Island with regards to the gender gap.

The Wage Gap Widens at Higher Incomes

Both New York City and Long Island confirm what we see at the national level¹² – the gender gap increases, the higher up the wage distribution we look. As mentioned earlier, one of the factors that reduces the gap at the lower end is the Minimum Wage, below which wages cannot fall. Since women are disproportionately represented among minimum wage workers, the gap is smaller at this end. Figures 5 and 6 present the numbers for New York City and Long Island, and except at the very low end, show women consistently earning less than men at every rung of the income ladder. In order to close the gap, the median wage for women would have to rise at a rate faster than that of men.

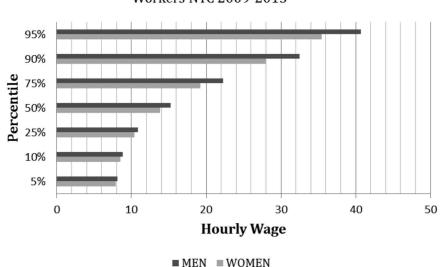
In order to better understand the large gaps at the top, we can ask -how do women fare relative to men in the best paid jobs? As we see in Figure 7, large gaps in the earnings of men and women exist in the 5 highest-earning occupational groups in New York State. The gap is largest in the legal occupations group that include all sub-occupations like lawyers, judges, paralegals and legal assistants, court reporters, etc. Interestingly, even as more and more women pursue Law, making up almost half of all law school graduates, a third of Federal and State appellate judges, a third of the Supreme Court of the United States, they make up only 16 percent of partners in law firms. 13 In a recent paper,14 Claudia Goldin, an eminent Harvard economic historian of American working women, suggests that in many highly paid occupations such as in the Financial, Legal and Corporate fields, both the number of hour worked and when they are worked are very important in determining the wage-path over one's career. In these fields, extra hours worked are compensated at a disproportionately high rate, since it is difficult to substitute one worker's hours for another. Many of these fields require workers to spend "Face-time" with clients and cases, with often inflexible demands on when these hours need to be worked, making it difficult for a worker to hand-off a case to another worker. Since women require more flexible work schedules when they have children (even when working fulltime), they are also disproportionately penalized for this flexibility.

Not all well-paid occupations exhibit low substitutability between workers, and a worker being easily able to hand-off a case to another worker need not imply a low level of skill in the group. Goldin finds that within the group of highly paid occupations, there are some that exhibit a very low gender gap, and these are typically where flexibility in hours worked are not penalized as heavily. She takes, among others, the example of Pharmacists, who make a median annual income of \$120,000. Technology has allowed extensive and complex medical records to be easily and quickly accessed by any pharmacist, and while processing that information takes a high degree of knowledge of and familiarity with the system, it can be just as easily done by another pharmacist similarly trained.15 Women pharmacists with young children are thus more easilyaccommodated and not disproportionately penalized for flexibility in hours worked. Unsurprisingly, there is almost perfect wage



The Gender Gap gets Wider at the Higher End of the Wage Distribution

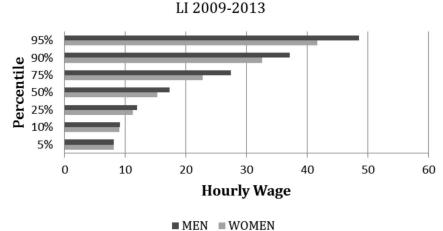
Hourly Wages by Gender and Percentile, Full time Workers NYC 2009-2013





A Widening Gender Gap in Long Island Moving up the Income Ladder

Hourly Wages by Gender and Percentile, Full time
Workers



parity in this occupation. (Checking the numbers for New York, we find a similar story, with women pharmacists making 90 percent of what men do.) Goldin foresees the inexorable force of technological advance creating greater and greater flexibility between workers, and a further decrease in the wage gap, the "last chapter" in the story.

Wage Gaps By Occupation

The Institute for Women's Policy Research (IWPR) found, in a 2012 study, that even in the most common occupations for women nationwide, the vast majority still paid full-time women workers a lower median income than men. Repeating the exercise for New York, one finds a similar sobering pattern. Table 2 presents earnings gaps for 10 occupations with the largest employment of women. (Note that these occupations are more narrowly defined than the larger occupational groups in Figure 7.) Two of the occupations that pay women more than men, are also on the lower end of compensation scale, Receptionists and Information Clerks and Customer Service Representatives. The bestpaid occupations in the group also show significant wage gaps, with the largest gap experienced by Accountants and Auditors.

Why Is There Still A Residual Pay Gap?

There is a larger consensus among economists as to what reasons *fail* to adequately explain the wage gap, than about those that do. Goldin's theory of a non-linear pay structure in many occupations that penalizes women's time off from work at a

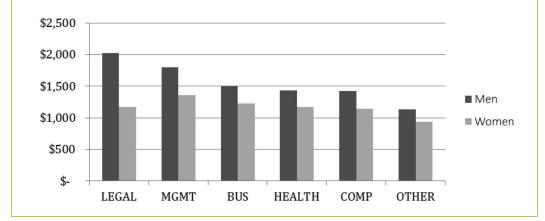
disproportionate rate is a compelling one. Other, behavioral explanations suggest that women may not be strong negotiators relative to men, and that puts them at a disadvantage in bargaining situations. Yet others suggest that women are more self-critical in the assessment of their own achievements and so less likely to ask for a promotion or a raise. While the behavioral explanations may tell a part of the story, they remain incomplete. They cannot

Figure 7 Weekly Earnings in the 5 Best Paying Occupational Groups in New York

Major Occupational Group	Men	Women	Ratio
Legal Occupations	\$2,019	\$ 1,170	0.58
Management Occupations	\$1,794	\$ 1,355	0.76
Business and Financial Operations Occupations	\$ 1,496	\$ 1,230	0.82
Healthcare Practioners and Technical Occupations	\$ 1,435	\$ 1,173	0.82
Computer and Mathematical Occupations	\$ 1,424	\$ 1,147	0.81
All Other Occupations	\$ 1,134	\$ 938	0.83

In the Top Tier, the Earnings Gap is Large and Varies by Occupation

Weekly Earnings in the 5 Highest Paid Major Occupation Groups, Full Time College Educated Workers, New York State 2009-2013



10

address why wage gaps exist even in jobs where bargaining ability is not relevant, or why women without children experience better labor market outcomes than those with children, or why women's time off from work extracts a bigger cost from them in some occupations more than others (Goldin, 2014). The most persistent part of the wage gap still appears to result from women's time off the labor force to meet caregiving needs at home. Figure 8 compares women of different ages (under and over 40) representing

Table 2
NY State Median Weekly Earnings, Full-Time Workers (2009-2013)

10 Most Common Occupations for Women Nationwide, Ranked by Employment	Men	Women	Women's Earnings as Percent of Men's
Secretaries and administrative assistants	\$797	\$741	92.9%
Elementary and middle school teachers	\$1,333	\$1,157	86.9%
Registered nurses	\$1,346	\$1,173	87.1%
Nursing, psychiatric, and home health aides	\$509	\$447	88.0%
Customer service representatives	\$622	\$640	102.9%
Cashiers	\$438	\$360	82.2%
First-line supervisors/managers of retail sales workers	\$820	\$615	75.0%
First-line supervisors/managers of office and administrative support workers	\$867	\$808	93.1%
Accountants and auditors	\$1,369	\$1,077	78.7%
Receptionists and information clerks	\$498	\$ 570	114.4%

different cohorts, younger and older, in different time periods. In every time period, the younger cohort does better in terms of gender equality than the older cohort, and this difference is persistent over successive generations, implying a wage penalty paid by older women who have taken time off the labor force. However, the gender gap is slowly getting smaller in the older cohorts as well, which is a welcome sign that some of the improved parity achieved by successive generations of young women carries over time.

Finally, outright employer discrimination against women still exists, as has been demonstrated in a multitude of experimental studies. One simply but starkly showed how identical resumes with women's names elicited significantly fewer callbacks even in gender neutral jobs. ¹⁶ However, the extent of discrimination's effect on the overall wage gap is difficult to quantify. Legislation on pay transparency and heftier penalties for such discrimination thus try and cast a wide net, aiming to reduce such discrimination across the board.

Until parenting responsibilities across genders converge, the gender pay gap is likely to persist, which has long term consequences for women and their families. For example, Social Security and private pension benefits are set based on lifetime earnings. In 2014, the average annual Social Security income for women over 65 was \$12,520 compared to men, who received \$16,398.17 So long as many mothers gladly spend time with their young children by taking time off from the labor force, the question persists: why should they still be penalized in both their working years and in retirement (when most outlive their spouses) for contributions we value as society?¹⁸ The United States remains in the very tiny minority of countries (along with Oman and Papua New Guinea) without a paid maternity leave law.¹⁹ Among the rest, 98 countries offer paid maternity leave for at least 14 weeks. In the vast majority of OECD countries, the government foots the bill, though in some cases, employers are also asked to contribute ask well.²⁰ Such societal sharing of the responsibility of bringing up children is commonplace in most of the world, and a crucial next step for the United States in bettering the lives of its working women.

11

Bhaswati Sengupta is an Assistant Professor of Economics at Iona College.

REGIONAL LABOR REVIEW, vol. 18, no.2 (Spring/Summer 2016). © 2016 Center for the Study of Labor and Democracy, Hofstra University

NOTES:

- ¹ In 2015, Jennifer Lawrence was joined by other Hollywood actresses in pointing to a gender bias in Hollywood in pay compensation. Oscar-winner Lawrence was surprised to learn from leaked emails that her male co-stars with similar or less "bankability" were paid substantially more for their work in a recent movie. Facebook CEO Sheryl Sandberg's bestselling book *Lean In* elaborates on lessons learned from her personal experiences moving up the corporate ladder. While Women's rights activists have generally welcomed the role these recent events have played in bringing the gender gap into the popular consciousness, they also point out that the new tone of the conversation risks overshadowing the plight of the least privileged groups (Black and Latina women), where attention is most direly needed.
- ² The new bills signed into Llw can be accessed from https://www.governor.ny.gov/news/governor-cuomo-signs-legislation-protect-and-further-women-s-equality-new-york-state
- ³ National Women's Law Center calculations based on Bureau of Labor Statistics (BLS), Characteristics of Minimum Wage Workers, 2014, available at http://www.nwlc.org/resource/fair-pay-womenrequires-fair-minimum-wage#one
- ⁴ Comparing men and women born between 1980 and 1984 with men and women born between 1957 and 1964, labor force participation rates of women in the year after having the first child are significantly higher in the younger cohort. See "How has labor force participation among young moms and dads changed? A comparison of two cohorts" (Bureau of Labor Statistics, U.S. Department of Labor, *Beyond the Numbers*, Volume 3, No 19, Sept 2014) *available* at http://www.bls.gov/opub/btn/volume-3/pdf/how-has-labor-force-participation-among-young-moms-and-dads-changed.pdf
- ⁵ See Blau, Francine D. and Lawrence M. Kahn, "Swimming Upstream: Trends in the Gender Wage Differential in the 1980s," *Journal of Labor Economics*, 15 (January 1997 Part 1)
- ⁶ CPS data was accessed from IPUMS Sarah Flood, Miriam King, Steven Ruggles, and J. Robert Warren. *Integrated Public Use Microdata Series, Current Population Survey: Version 4.0.* [Machine-readable database]. Minneapolis: University of Minnesota, 2015.
- ⁷ Full time workers were characterized as those working 35 or more hours a week and those who worked less if they indicated that their full time job demanded a lower commitment.
- ⁸ The hourly wage does not include overtime, tips and commission (OTTC) and can thus lead to an undercount of the actual hourly earnings. However, earlier studies at the national level find that imputing a wage for these workers by dividing weekly earnings by hours worked result in implausible negative estimates of OTTC (See State of Working America, Economic Policy Institute 2005).

12

- ⁹ See "Women of Color and the Gender Wage Gap", Center For American Progress, April 2015 available at https://www. americanprogress.org/issues/women/report/2015/04/14/110962/ women-of-color-and-the-gender-wage-gap/
- ¹⁰Sengupta B. "The Gender Pay Gap in New York City and Long Island: 1986-2006", *Regional Labor Review*, Fall 2008.
- 11"Women's Participation and Education in the Workforce" Report from the Council of Economic Advisors, updated October 2014. Available at https://s3.amazonaws.com/s3.documentcloud.org/ documents/1350163/women_education_workforce.pdf
- ¹²For a comparison to the national figures, see http://www.epi.org/ publication/women-still-earn-less-than-men-across-the-board/
- ¹³See http://ms-jd.org/blog/article/has-women-lawyers-progress-stalled, for a detailed breakdown of the statistics.
- ¹⁴See Goldin C. "A Grand Gender Convergence: Its Last Chapter." American Economic Review. 2014; 104(4):1091-1119.
- ¹⁵Another such increasingly common experience is hospital patients seeing an entire team of Doctors at different times, all familiar with the case whose specifics can be immediately accessed by any one doctor.
- ¹⁶Neumark et al. "Sex Discrimination in Restaurant Hiring: An Audit Study" NBER Working paper 5024
- ¹⁷See http://www.aarp.org/work/social-security/info-2014/womenand-social-security-benefits.html
- ¹⁸Even in their working years, broader measures of compensation show that the gap is not limited to wages. Women are less likely to have an offer of health insurance from their employer, have a retirement savings plan in place, or have access to paid sick leave. See https://www.whitehouse.gov/blog/2015/04/14/five-facts-about-gender-pay-gap
- ¹⁹See "Maternity and Paternity at Work: Law and Practice across the World", ILO Report, 2014, *available* at http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_242615.pdf
- ¹⁹See "Among 38 nations, U.S. is the outlier when it comes to paid parental leave." Pew Research Center, *available* at http://www. pewresearch.org/fact-tank/2013/12/12/among-38-nations-u-s-is-the-holdout-when-it-comes-to-offering-paid-parental-leave/

Take the fast track to a professional career



Earn both a Hofstra B.A. and an M.B.A. in just five years – with big savings in time and tuition.

Hofstra undergraduates may now enroll in a dual-degree program, combining their studies toward a Labor Studies B.A. degree with work toward a Master of Business Administration. The dual-degree program can be completed in five years. Qualified students who major in labor studies and who are admitted to the M.B.A. portion of the dual-degree program may substitute up to 14 semester hours of M.B.A.-level graduate course work for an equal number of hours of undergraduate courses toward the completion of the B.A. degree.

Five-year Dual-degree Program in Labor Studies (B.A.) and Business Administration (M.B.A.)

For more information, please contact the Labor Studies Program at laborstudies@hofstra.edu or visit hofstra.edu/laborstudies

13