

Statistical Evidence on the Gender Gap in Law Firm Partner Compensation

Marina Angel^a, Rajiv Banker^b, Eun Young Whang^c, Joseph Lopez^d

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^a Professor of Law, Temple University School of Law. B.A., Barnard College, 1965; J.D., Columbia University School of Law, 1969; LL.M., University of Pennsylvania School of Law, 1977. We thank the Temple Law School Faculty Colloquium and especially our Temple Law School colleagues, David Hoffman, Duncan Hollis, and Gregory Mandel for their review of an earlier draft of this study. Any errors are our own.

^b Merves Chair and Director of the Center for Accounting and Information Technology, Fox School of Business, Temple University. B.Sc., University of Bombay, 1973; Doctor of Business Administration, Graduate School of Business Administration, Harvard University, 1980.

^c Assistant Professor, College of Business Administration, The University of Texas-Pan American. B.B., Western Illinois University, 2002; M.A.S., University of Illinois Urbana-Champaign, 2003; M.B.A. Western Illinois University, 2004; Ph.D., Fox School of Business, Temple University, 2010.

^d J.D. Candidate, Temple University School of Law, expected graduation 2011. B.S., Stetson University, 2004; M.S., University of Central Florida, 2006.

I. Introduction

This study compiled the largest research sample on the gender gap in compensation at the 200 largest law firms by combining two large databases to examine why women partners are compensated less: because they are less productive than men partners or because they are women. The Am Law 100 and 200 studies include gross revenue, profits, number of equity and non-equity partners, and the total number of lawyers at each firm.¹ The Vault/MCCA Law Firm Diversity Programs study (Vault/MCCA) includes the gender ratios at each Am Law 200 firm.² Our study covers the years 2002 through 2007.

We find that the ratio of women equity partners to women non-equity partners is 2.546 compared to a ratio of 4.759 for their men counterparts over the six year period studied.³ An increase of 1% in the proportion of women partners at a law firm is associated with 1.112%

¹ Rosemarie Clancy & John O'Connor, *Stop-Loss: Heller Ehrman has suffered a relentless plague of partner defections. Can management end the pain?*, AM. LAW., May 2008, at 143 [hereinafter Am Law 100] (defining profits per partner (PPP) for the 100 highest grossing law firms in the U.S. as the net operating income divided by the number of equity partners, excluding non-equity partners from the calculation, and revenue per lawyer (RPL) as the gross firm income divided by the total number of lawyers at the firm excluding first year associates, outside contracted lawyers, and per diem lawyers). See generally Rosemarie Clancy & John O'Connor, *A Guide to Our Methodology*, AM. LAW., June 2008, at 129 (using the same definitions as Am Law 100 and continuing the study to include the next 100 most profitable firms). Together these publications detail financial information for the 200 highest grossing firms for the preceding year. We use the term Am Law 200 to refer to the combination of the first 100 and next 100 highest grossing law firms. The firms change from year to year due in part to attrition, mergers, and collapse. In total, our study includes the 123 firms that were present in all six years the study was conducted. Data about lock step compensation, continuity, and length of time worked at the firm were unavailable from these sources. See *infra* p. 38, Appendix B, Number of Observations Per Year.

² Vault was founded in 1996, to provide career guidebooks and corporate hiring programs. <http://www.vault.com/wps/portal/usa> (follow "Company History" hyperlink). In 2004, it paired with the Minority Corporate Counsel Association (MCCA) to catalog in an electronic database diversity information, including diversity statistics, employment records, and benefits, for the Am Law 200. <http://mcca.vault.com/about.cfm>. We validated our findings against other studies, including THE NATIONAL ASSOCIATION OF WOMEN LAWYERS AND THE NAWL FOUNDATION, REPORT OF THE THIRD ANNUAL NATIONAL SURVEY ON RETENTION AND PROMOTION OF WOMEN IN LAW FIRMS, 2008, at 1, available at <http://www.nawl.org/Assets/Documents/2008+Survey.pdf> [hereinafter NAWL REPORT 2008], (describing the increased hiring of women and minorities in firms as well as the creation and utilization of special programs for hiring women at the associate level in firms). NAWL's studies document gender ratios at most of the Am Law 200 firms. *Id.*

³ See *infra* p. 39, Appendix C, Distribution of the Status of Women and Men Lawyers in Am Law 200 Law Firms (calculating percentage of equity partners, non-equity partners, and associates, for our sample period for men and women respectively).

lowering of the overall compensation for all partners at the firm.⁴ This disparity in compensation between women and men partners exists even after controlling for the lower compensation of non-equity partners and the greater likelihood for women to remain non-equity partners.⁵ Furthermore, women partners are paid less despite the fact that they are not less productive than men partners in generating RPL for their firms.

The average gross revenue of firms with the highest percentages of women lawyers was approximately \$20 million dollars higher than firms with the lowest percentage of women lawyers, but the RPL of these firms dropped by approximately \$120,000 per lawyer.⁶ The average compensation for the lawyers at a firm goes down as the proportion of women at a firm rises, indicating that women in all positions at a firm are paid less than their male counterparts.⁷

More lawyers entered the workforce in recent years because of increased demand for legal services and growth in law school populations.⁸ Between 1987 and 2008, women first year J.D. students reached a low of 42.2% in 1990 and a high of 49.4% in 2000⁹ and increasing

⁴ See *infra* p. 15, Table 3, Fama-MacBeth Regression Estimation for Average Compensation of Partners.

⁵ See *infra* p. 18, Table 4, Fama-MacBeth Regression Estimation for Average Compensation of Equity and Non-Equity Partners.

⁶ See *infra* p. 25, Table 6, Descriptive Statistics for Subsamples of Firms with the Highest, Median, and Lowest One Third Percentages of Women Partners.

⁷ See *infra* p. 28, Table 7, Seemingly Unrelated Regression (SUR) Estimation for Subsamples of Firms with the Highest, Median, and Lowest One Third Percentages of Women Partners.

⁸ See generally THE NATIONAL ASSOCIATION OF WOMEN LAWYERS, A NAWL REPORT, NATIONAL SURVEY ON RETENTION AND PROMOTION OF WOMEN IN LAW FIRMS, 2006, at 3-7, available at <http://www.nawl.org/Assets/Documents/2006+Survey+Report.pdf> [hereinafter NAWL REPORT 2006], (describing the increased hiring of women and minorities at firms as well as the creation and utilization of special women hiring programs at the associate level). See also MARC GALANTER & THOMAS PALAY, TOURNAMENT OF LAWYERS: THE TRANSFORMATION OF THE BIG LAW FIRM 110-115 (1991) (noting that the average rate of growth in number of lawyers increased exponentially in the 1970s and continued until at least the early 1990s).

⁹ See AMERICAN BAR ASSOCIATION, ENROLLMENT AND DEGREES AWARDED 1963-2008 Academic Years Report (2008), available at <http://www.abanet.org/legaled/statistics/charts/stats%20-%201.pdf> (documenting the number of females and males enrolled at and graduating from law school in the years 1963 until 2008). See also LAW SCHOOL ADMISSION COUNCIL & AMERICAN BAR ASSOCIATION, ABA LSAC OFFICIAL GUIDE TO ABA LAW SCHOOLS 870-871 (ed. 2010) (documenting that women constitute 47% of all graduating law students in the U.S. in 2010).

numbers of women were hired at large law firms.¹⁰ A logical expectation would be that the proportion of women in positions of power at the Am Law 200 firms would increase over these twenty-one years. Women represented approximately 50% of the associate hires during the eighteen years prior to 2001 but only 15-16% of partners.¹¹ The women who make it to partner are paid less than their men counterparts.¹² This parallels the finding that even the women who are among the top executives leading major U.S. corporations are compensated 28% less than their men counterparts.¹³

Nearly 80% of the Am Law 200 firms now utilize a two-tier structure of equity and non-equity partners.¹⁴ An equity partner's compensation is primarily composed of profits of the firm; a non-equity partner's compensation is primarily on a fixed income basis.¹⁵ In a traditional one-tier partnership, there are only equity partners. Non-equity partnership can be an intermediate step to full partnership, but this is increasingly not the case. Firms are creating fewer equity partners and more non-equity partners.¹⁶ The development of two-tier partnerships, the

¹⁰ Marina Angel, *Women Lawyers of All Colors Steered to Contingent Positions in Law Schools and Law Firms*, 26 CHICANO-LATINO L. REV. 169, 169-70, 174-75 (2006) (discussing the rise in women graduates yet no corresponding rise in women lawyers as law school tenured or tenure track faculty or as equity partners in law firms).

¹¹ See generally NAWL REPORT 2006, fig. 1-3 (highlighting that women make up almost 50% of students in law schools, but only make up 15% of all partners or corporate counsel).

¹² See *infra* p. 25, Table 6, Descriptive Statistics for Subsamples of Firms with the Highest, Median, and Lowest One Third Percentages of Women Partners; see generally NAWL REPORT 2008, at 13-14 (describing the compensation gap between men and women at law firms for the year 2007-2008).

¹³ Mark Anderson, Rajiv Banker, Rong Huang, Jiangxia Liu, *The Gender Pay Gap in the Boardroom: Are Women Executives Underpaid?* (Aug. 6, 2007) (unpublished working paper, first presented at the Annual Meeting of the Academy of Management, and the 2008 Annual Management Accounting Research Conference).

¹⁴ William D. Henderson, *An Empirical Study of Single-Tier Versus Two-Tier Partnerships in the Am Law 200*, 84 N.C. L. REV. 1691, 1693-1695 (2006) (describing two-tier partnership in use at 80% of the Am Law 200 firms as a way of deferring creation of more equity partners thereby increasing the PPP of the firm). See also Am Law 100, *supra* note **Error! Bookmark not defined.**, at 144 (listing type of management structure utilized by the law firms in the Am Law 100).

¹⁵ Am Law 100, *supra* note **Error! Bookmark not defined.**, at 143.

¹⁶ Henderson, *supra* note 14, at 1691. See also Jonathan D. Glater, *Partnerships More Elusive at Law Firms, Survey Shows*, N.Y. TIMES, Mar. 1, 2005, at C3 (stating that the slower pace of equity partnerships has resulted in an 8.9% increase in firm profits and an increased PPP due to fewer equity partners sharing in profit distribution), cf. Joel Rose, *Show Me the Money: Why firms need more partner capital in 2010*, PA. L. WKLY., Aug. 17, 2010,

lengthening of the time periods to make partner and equity partner, the reduction in the number of equity partners, the creation of new categories of permanent associates and permanent non-equity partners, the expanded number of permanent of counsel, and the demand for increased billable hours, have combined to increase income for a shrinking group of equity partners and to disadvantage women in large law firms.¹⁷

Our paper examines the gender gap problem in law firm compensation primarily through an empirical lens. The results have important theoretical implications in the area of economic discrimination research. Our statistical analysis concludes that women partners are compensated less than men on average at the Am Law 200 firms regardless of whether they are equity partners or non-equity partners. This gender disparity cannot be explained by lower productivity of women partners. It is more appropriately attributed to discriminatory practices under both disparate treatment and disparate impact analyses.

II. Data

Sources of Data

Two databases are used as sources for our sample. The financial data in Am Law 200 includes each firm's gross revenue, net income, number of equity partners, number of non-equity partners, and the total number of lawyers at a firm, excluding first year associates, outside contracted lawyers, and per diem lawyers.¹⁸ Vault/MCCA contains the gender ratios at each Am Law 200 firm. Our compensation model covers the time period from 2002 until 2007 and includes all firms that appeared on both lists for at least four years, resulting in 638

at 10 (describing the increase in lateral hires and the decrease in recruitment of associates).

¹⁷ Angel, *supra* note 10, at 171.

¹⁸ See *infra* p. 37, Appendix A, Am Law 200 Descriptive Statistics of Variables. Outside contracted lawyers are obtained through temporary providers such as Kelly Services and per diem lawyers are hired directly by the firm for a set hourly wage, usually without any fringe benefits.

observations.¹⁹

The total number of lawyers at a firm is defined as the headcount of lawyers at the end of the fiscal year, excluding first-year associates, temporary contracted lawyers, and per diem lawyers.²⁰ The number of partners at a two tier law firm includes both equity and non-equity partners, but not retired partners or of counsel. The study adopts Am Law 100's definitions of equity partners as those who file Schedule K-1 tax forms and receive less than half of their compensation on a fixed income basis and of non-equity partners as those who receive more than half of their compensation on a fixed basis.²¹ If a firm has a one-tier partnership structure, the total number of equity partners equals the total number of partners at the firm.

A primary determinant of differences in average compensation of all partners across law firms is the average productivity of all partners measured by revenue per lawyer (RPL), a commonly used metric of a firm's productivity in legal statistics. Am Law 100 defines RPL as the gross revenue of the firm divided by the total number of lawyers at the firm.²² RPL is a size-scaled metric which allows comparison of firms of different sizes when constructing a model.

We examine average compensation of all partners by adding firm profit shared by equity partners to compensation paid to non-equity partners and by then dividing the total by the total number of equity and non-equity partners. We also examine average compensation of equity and non-equity partners separately. Differences in average compensation that may exist due to the

¹⁹ See *infra* p. 38, Appendix B, Number of Observations Per Year.

²⁰ See Am Law 100, *supra* note **Error! Bookmark not defined.**, at 143. The Am Law 100 definition of total lawyers at a firm excludes any lawyers who are not on payroll for a full year and first year associates who are not capable of generating their own revenue. The definition also excludes the temporary contracted and per diem lawyers to whom firms are increasingly turning for legal piece work. *Id.*

²¹ *Id.* Due to Am Law 100's 50% demarcation, some lawyers defined as partners under partnership agreements are excluded. Under §707 of the Internal Revenue Code, a partner may receive a guaranteed payment in place of salary but functionally equivalent with a bonus provided for billable hours. I.R.C. § 707 (2010) (allowing normal salaried employees to be called partners). We defer to the Am Law 100 definitions in this study.

²² See Am Law 100, *supra* note **Error! Bookmark not defined.**, at 143 (defining RPL to include both the salaries of associates as well as the compensation of equity and non-equity partners).

location of the headquarters of the firm are accounted for by controlling location. The locational demarcations are based on the United States Census Bureau's regional divisions and are classified into four regions: the Northeast includes Boston, New York, Philadelphia and Pittsburgh; the Midwest includes Chicago, St. Louis, Milwaukee, Kansas City, Cleveland and Minneapolis; the South includes Atlanta, Houston, Richmond, Washington D.C., and Winston-Salem; the West includes Los Angeles, San Francisco, Seattle, and Palo Alto.²³ Proportion of international operations may also explain differences among law firms. Am Law 100 defines an international law firm as having more than 40% of its lawyers located outside the U.S.²⁴

Table 1. NAWL and NALP Gender Data Findings

Table 1 contains statistics detailing the number and percentage of women associates, equity partners, and non-equity partners at a firm. These percentages are calculated based on Am Law 200 and Vault/MCCA data. We validated our findings against published reports by the NAWL on smaller statistical samplings of women in national law firms and six years of studies of the one hundred largest firms in Pennsylvania.²⁵ The percentage of women equity partners in our study varied in a very narrow range, between 15.1% in year 2002 and 15.7% in year 2007. Women non-equity partners were at a low of 22.5% in year 2004 and at a high of 24.9% in year 2002. In contrast, men made up roughly 85% of all equity partners during the same years. Women are three times more likely than men to be associates than partners.

²³ *Id* at 143.

²⁴ *Id.*

²⁵ Marina Angel, *PBA Commission on Women in the Profession Annual Report Cards, 2001-08* PA. BAR ASS'N, available at <http://www.pabar.org/pdf/wipreportcard08.pdf>.

Table 1. NAWL and NALP Gender Data Findings

Year 2002	N	Mean	Std. Dev.	25%	Median	75%
Total # of associates	100	348.38	182.03	213.50	309.00	454.50
Total # of equity partners	100	180.74	91.45	117.00	149.50	223.50
Total # of non-equity partners	58	68.72	70.51	21.00	48.00	88.00
% of women associates	100	0.421	0.054	0.384	0.426	0.456
% of women equity partners	100	0.151	0.039	0.121	0.150	0.171
% of women non-equity partners	57	0.249	0.119	0.179	0.233	0.300
Year 2003	N	Mean	Std. Dev.	25%	Median	75%
Total # of associates	110	341.88	181.62	210.00	315.00	433.00
Total # of equity partners	110	184.66	97.03	117.00	153.00	233.00
Total # of non-equity partners	65	71.79	71.82	24.00	49.00	91.00
% of women associates	109	0.426	0.058	0.389	0.432	0.457
% of women equity partners	109	0.152	0.035	0.122	0.156	0.172
% of women non-equity partners	64	0.245	0.121	0.162	0.239	0.302
Year 2004	N	Mean	Std. Dev.	25%	Median	75%
Total # of associates	109	327.70	173.87	199.00	298.00	414.00
Total # of equity partners	109	190.64	108.03	116.00	151.00	232.00
Total # of non-equity partners	59	76.08	64.65	29.00	58.00	100.00
% of women associates	109	0.429	0.050	0.401	0.428	0.457
% of women equity partners	109	0.151	0.036	0.121	0.148	0.174
% of women non-equity partners	59	0.225	0.098	0.167	0.228	0.277
Year 2005	N	Mean	Std. Dev.	25%	Median	75%
Total # of associates	111	334.75	179.01	200.00	297.00	416.00
Total # of equity partners	111	196.22	113.57	114.00	159.00	242.00
Total # of non-equity partners	61	83.64	70.65	29.00	64.00	117.00
% of women associates	111	0.444	0.058	0.408	0.442	0.473
% of women equity partners	111	0.154	0.037	0.125	0.153	0.181
% of women non-equity partners	61	0.237	0.076	0.192	0.242	0.279

Year 2006	N	Mean	Std. Dev.	25%	Median	75%
Total # of associates	107	356.92	187.29	215.00	333.00	428.00
Total # of equity partners	107	202.71	120.00	119.00	160.00	249.00
Total # of non-equity partners	57	95.49	75.17	34.00	70.00	134.00
% of women associates	107	0.447	0.060	0.414	0.447	0.485
% of women equity partners	107	0.154	0.034	0.130	0.153	0.180
% of women non-equity partners	56	0.243	0.083	0.206	0.246	0.294

Year 2007	N	Mean	Std. Dev.	25%	Median	75%
Total # of associates	102	374.85	201.84	222.00	341.00	453.00
Total # of equity partners	102	208.52	127.73	119.00	171.50	251.00
Total # of non-equity partners	100	50.94	70.96	0	3.00	88.50
% of women associates	102	0.448	0.051	0.424	0.446	0.482
% of women equity partners	102	0.157	0.035	0.134	0.155	0.180
% of women non-equity partners	56	0.247	0.076	0.188	0.241	0.299

Table 2. Correlation Between Women Partners and Law Firm Metrics

We began by examining correlation matrices to provide preliminary evidence on the pairwise relationships between variables. The variables examined include proportion of women partners, proportion of non-equity partners, location of firm, compensation, and RPL. In Table 2, a positive correlation of 0.301, with a .0001 significance level, exists between women partners and non-equity partners using the Pearson Product-Moment Correlation (PPMC)²⁶ and 0.308, with a .0001 significance level, using Spearman's Rank Correlation (SRC).²⁷ A positive correlation between women partners and non-equity partners suggests that a higher proportion of women partners occurs in firms that also have a higher proportion of non-equity partners. This is consistent with a glass ceiling effect. Women promoted within a law firm may be left in non-equity partner positions permanently. Further support of the glass ceiling effect is a strong negative correlation between women partners and compensation of -0.337 PPMC and -0.258 SRC, each with a significance level of .0001. A strong negative correlation between proportion of women partners and average partner compensation indicates that, as the proportion of women partners in a firm rises, the average compensation of all partners in the firm lowers. If women are being compensated less in partnership positions, the average compensation would be lowered as their proportion rises.

Also strongly significant is the negative correlation between the proportion of non-equity partners, including both men and women non-equity partners, and average partner compensation of -0.507 PPMC and -0.499 SRC, each with a significance level of .0001. This significant

²⁶ See generally Joseph Lee Rodgers and W. Alan Nicewander, *Thirteen Ways to Look at the Correlation Coefficient*, 42 THE AM. STATISTICIAN 13 (Feb. 1988) (describing PPMC as the correlation index between two variable and mathematically defined as the covariance of the variables divided by the product of their standard deviations).

²⁷ See generally Charles Spearman, *Proof and Measurement of Association between Two Things*, 15 AM. PSYCHOL. ASS'N 72, 77 (1904) (describing Pearson's SRC method as a measure of linear dependence between variables).

negative relationship suggests that, as the number of non-equity partners rises, the overall average partner compensation goes down. The fixed income compensation of non-equity partners is substantially less than the average compensation that equity partners receive.

Table 2. Correlation Between Women Partners and Law Firm Metrics

	% women partners	% non-equity partners	International	Northeast	West	Midwest	South	National	Avg. partner compensation	RPL
% women partners		0.301 (<.0001)	-0.084 (0.0337)	-0.304 (<.0001)	0.131 (0.0009)	0.192 (<.0001)	0.040 (0.3097)	0.093 (0.0194)	-0.337 (<.0001)	-0.19461 (<.0001)
% non-equity partners	0.308 (<.0001)		-0.098 (0.0057)	-0.368 (<.0001)	0.005 (0.8877)	0.244 (<.0001)	0.0001 (0.9974)	0.282 (<.0001)	-0.507 (<.0001)	-0.30331 (<.0001)
International	-0.066 (0.096)	-0.102 (0.0040)		-0.111 (0.0005)	-0.062 (0.0540)	-0.053 (0.0977)	-0.087 (0.0068)	-0.076 (0.0175)	-0.031 (0.3822)	-0.19684 (<.0001)
Northeast	-0.280 (<.0001)	-0.372 (<.0001)	-0.111 (0.0005)		-0.271 (<.0001)	-0.233 (<.0001)	-0.381 (<.0001)	-0.334 (<.0001)	0.489 (<.0001)	0.37891 (<.0001)
West	0.097 (0.0138)	0.010 (0.7766)	-0.062 (0.0540)	-0.271 (<.0001)		-0.130 (<.0001)	-0.212 (<.0001)	-0.186 (<.0001)	-0.016 (0.6452)	0.02887 (0.4145)
Midwest	0.187 (<.0001)	0.254 (<.0001)	-0.053 (0.0977)	-0.233 (<.0001)	-0.130 (<.0001)		-0.182 (<.0001)	-0.160 (<.0001)	-0.213 (<.0001)	-0.10903 (0.0020)
South	0.059 (0.1393)	-0.001 (0.9765)	-0.087 (0.0068)	-0.381 (<.0001)	-0.212 (<.0001)	-0.182 (<.0001)		-0.261 (<.0001)	-0.218 (<.0001)	-0.15402 (<.0001)
National	0.069 (0.0829)	0.279 (<.0001)	-0.076 (0.0175)	-0.334 (<.0001)	-0.186 (<.0001)	-0.160 (<.0001)	-0.261 (0.004)		-0.161 (<.0001)	-0.14734 (<.0001)
Avg. partner compensation	-0.258 (<.0001)	-0.499 (<.0001)	-0.019 (0.5961)	0.440 (<.0001)	0.006 (0.8646)	-0.228 (<.0001)	-0.198 (0.004)	-0.136 (0.0001)		0.89037 (<.0001)
RPL	-0.103 (0.0142)	-0.293 (<.0001)	-0.195 (<.0001)	0.358 (<.0001)	0.053 (0.1359)	-0.121 (0.0006)	-0.164 (<.0001)	-0.124 (0.0004)	0.892 (<.0001)	

III. Estimation Results

Since firms that have a high proportion of women partners also have a high proportion of non-equity partners, we next examined multivariate relationships to separate out these two effects. The Fama-Macbeth method²⁸ was used to estimate the regression coefficients for the multivariate models in Tables 3 and 4 because of the problem of serially correlated residuals that is common in time-series data. The Fama-Macbeth method first estimates the cross-sectional regressions separately by year for all firms. The final estimators of the regression coefficients are computed as the average of the first step coefficient estimators. With this two step approach, the Fama-Macbeth method alleviates the bias in estimated coefficients due to serial correlation and is particularly useful in explaining cross-sectional variations in data.

Table 3. Fama-MacBeth Regression Estimation for Average Compensation of Partners

Column 1 in Table 3 examines the effect the proportion of women has on average partner compensation. The Fama-MacBeth coefficient is -1.348 with a 0.0016 significance level. Thus, a 1% rise in the number of women partners is associated with a 1.348% decrease in average compensation for all partners. This important result documents that, for our overall sample of all partners at the Am Law 200 firms, women partners are compensated less on average and firms that have a higher proportion of women partners exhibit a lower average compensation statistic. If the prevailing market compensation levels for women partners are lower, a firm may not have the incentive to promote more women as partners. Such promotions would lower its compensation rating and possibly discourage new lawyers from applying to the firm. This, in turn, may perpetuate the firms' self-created cycle of under-compensating and under-representing

²⁸ See generally Eugene Fama & J. MacBeth, *Risk, Return, and Equilibrium: Empirical Tests*, 81 J. OF POL. ECON., 607, 614-618 (1973) (describing a statistical method for estimating regression coefficients in economic models).

women.

Column 1 shows that the coefficient for RPL is 1.652. Law firms that generate more RPL have more profits to distribute to their partners. For a 1% increase in RPL, the average compensation of all partners rises by 1.652%. The locational variables in column 1 show positive coefficients of 0.593 and 0.162 exist for international firms and firms in the Northeast respectively. These firms compensate their employees more due in part to the higher cost of living in the Northeast and because international firms need partners with greater skill sets to lead their more diverse operations. Data analyzed for firms in the South was not included in this and all subsequent tables as it was not statistically significant at a level of 0.10.

While the evidence in Column 1 suggests that women partners are paid less, it could be because more women are non-equity partners who are paid less regardless of whether they are women or men. To check this possibility, Column 2 of the table includes as explanatory variables not only women partners but also non-equity partners. The results when including non-equity partners remain similar to the results in Column 1. The coefficient on the proportion of women partners remains very significant. The negative coefficient of -1.112 indicates that a 1% increase in women partners at a firm would result in a 1.112% decrease in the average compensation for all partners, compared to a 0.484% decrease in average compensation when the proportion of non-equity partners increases by 1%.

Table 3. Fama-MacBeth Regression Estimation for Average Compensation of Partners

Log(Compensation) = f{log(RPL), % of women partners, International, Northeast, West, Midwest} (1)

Log(Compensation) = f{log(RPL), % of women partners, % of non-equity partners, International, Northeast, West, Midwest} (2)

	(1)	(2)
Intercept	-3.940*** (<.0001)	-2.957*** (<.0001)
% of women partners	-1.348*** (0.0016)	-1.112*** (0.0020)
% of non-equity partners		-0.484*** (<.0001)
International	0.593*** (<.0001)	0.477*** (<.0001)
Northeast	0.162*** (<.0001)	0.118*** (<.0001)
West	0.005 (0.8026)	-0.002 (0.9140)
Midwest	-0.090*** (0.0004)	-0.059*** (0.0097)
Log(RPL)	1.652*** (<.0001)	1.518*** (<.0001)
R-sq	0.8611	0.8788

Numbers in the parentheses are the estimated probability that the regression coefficient is equal to zero.
 *, **, *** indicate significantly different from zero at the 10%, 5%, and 1% levels.

Log(Compensation)	Log(Average compensation of all equity and non-equity partners in thousands)
% of women partners	Number of women equity and non-equity partners / Total number of equity and non-equity partners
% of non-equity partners	Number of non-equity partners / Total number of equity and non-equity partners
International	=1 if more than 40% of lawyers are located outside the US, =0 otherwise
Northeast	=1 if headquarter location is in New York, Philadelphia, Pittsburgh, or Boston, =0 otherwise
West	=1 if headquarter location is in San Francisco, Los Angeles, Seattle, or Palo Alto, =0 otherwise
Midwest	=1 if headquarter location is in Chicago, St. Louis, Milwaukee, Kansas City, Cleveland, or Minneapolis, =0 otherwise
Log(RPL)	Log(Gross revenue in thousands / Number of lawyers)

****Note that these variables are used throughout all proceeding tables.

Table 4. Fama-MacBeth Regression Estimation for Average Compensation of Equity and Non-Equity Partners

Table 3 examines the effect the proportion of all women partners in the firm has on the average compensation of all partners, both equity and non-equity, after controlling for the firm's RPL. Table 4 takes the results of Table 3 further and examines separately the effect the proportion of women equity partners has on the average compensation of equity partners and the proportion of women non-equity partners has on the average compensation of non-equity partners.

Column 3 examines the effect the proportion of women equity partners has on the average equity partner compensation of the firm. The coefficient relating the average compensation of equity partners to the proportion of women equity partners is highly significant. The regression coefficient is -0.424, indicating that a 1% increase in women equity partners results in a 0.424% decrease in average compensation of equity partners. A decrease in average compensation results from the addition of women partners' salaries lower than average partner compensation. This result also supports the belief that women equity partners are compensated less on average than men equity partners. The relationship between equity partner compensation and RPL has a positive coefficient of 0.681. Thus, a 1% increase in RPL results in an increase of 0.681% in the average compensation of equity partners.

Column 4 of Table 4 shows the effect the proportion of women non-equity partners has on the average non-equity partner compensation of the firm. The proportion of women non-equity partners has a coefficient of -1.301; a 1% increase in the number of women non-equity partners results in a 1.301% decrease in average compensation for all non-equity partners. This result is explained by the compensation of women non-equity partners being below the average compensation of all non-equity partners. Consistent with Column 3, Column 4 results indicate

that the relationship between non-equity partner compensation and RPL has a positive coefficient of 0.635; a 1% increase in RPL results in an increase in average compensation of non-equity partners by 0.635%. Firms that are more productive tend to pay their non-equity partners more.

Table 4. Fama-MacBeth Regression Estimation for Average Compensation of Equity and Non-Equity Partners

$$\text{Log(Equity partner compensation)} = f\{\text{log(RPL), \% of women equity partners, International, Northeast, West, Midwest}\} \quad (3)$$

$$\text{Log(Non-equity partner compensation)} = f\{\text{log(RPL), \% of women non-equity partners, International, Northeast, West, Midwest}\} \quad (4)$$

	(3)	(4)
Intercept	-1.418*** (<.0001)	-1.244* (0.0624)
% of women equity partners	-0.424*** (0.0094)	
% of women non-equity partners		-1.301*** (0.0037)
International	0.196*** (<.0001)	-1.025*** (<.0001)
Northeast	0.033*** (0.0015)	-0.132 (0.1970)
West	-0.009 (0.4400)	0.018 (0.3777)
Midwest	-0.020** (0.0152)	0.003 (0.8141)
Log(RPL)	0.681*** (<.0001)	0.635*** (0.0003)
R-sq	0.8306	0.4682

Numbers in the parentheses are the estimated probability that the regression coefficient is equal to zero.
 *, **, *** indicate significantly different from zero at the 10%, 5%, and 1% levels, respectively.

Log(Equity partner compensation)

Log(Average compensation of equity partners in thousands)

Log(Non-equity partner compensation)

Log(Average compensation of non-equity partners in thousands)

% of women equity partners

Number of women equity partners / Total number of equity partners

% of women non-equity partners

Number of women non-equity partners / Total number of non-equity partners

Table 5. Seemingly Unrelated Regression (SUR) Estimation.

A relationship of interest is whether firm productivity measured by RPL decreases with the proportion of women partners, which may explain why they are paid less. We model multiple causal relationships where the proportion of women equity and women non-equity partners may affect the firm's productivity, which in turn, affects the average compensation of equity and non-equity partners. This multiple equations model has a special recursive structure that enables it to be estimated using the SUR method,²⁹ which is a generalization of Ordinary Least Squares (OLS) method for multiple equations system.³⁰ OLS provides consistent coefficient estimation, but it does not provide efficient estimation if the model includes multiple equations where independent variables in some equations are dependent variables in other equations and the error terms are correlated across equations. In such a case, SUR provides more efficient estimation by using the cross equation covariance matrix from OLS estimation.

Column 1 details the relationship between the firm's productivity, RPL, and the proportion of women equity and non-equity partners as well as the proportion of all non-equity partners at a firm. The coefficients for the proportion of women equity partners and the proportion of women non-equity partners are positive but not significant, indicating that women partners are no less productive than men partners. The coefficient on non-equity partner proportion is negative -0.149 and significant. Non-equity partners do not contribute to firm profitability as much as equity partners.

²⁹ See generally Arnold Zellner, *An Efficient Method of Estimating Seemingly Unrelated Regression Equations and Tests for Aggregation Bias*, 57 J. OF THE AM. STATISTICAL ASS'N 298, 349-352 (June 1962) (describing a method for analyzing multiple regression equations with related error terms); see also Kajal Lahiri and Peter Schmidt, *On the Estimation of Triangular Structural Systems*, 46 ECONOMETRICA 1217, 1217-1219 (September 1978) (explaining that under certain circumstances structural models are triangular).

³⁰ See generally TAKESHI AMEMIYA, *ADVANCED ECONOMETRICS* 13-25 (Harvard Univ. Press 1985) (discussing using ordinary least squares method for economic models and in particular their use in systems of equations).

Column 2 is the equity partner compensation equation and it shows results consistent with those found in Tables 3 and 4. The proportion of women equity partners has a coefficient of -0.618; a 1% increase in the proportion of women equity partners decreases the average compensation of all equity partners by 0.618% after controlling for their firm's productivity. As with Tables 3 and 4, Column 2 of Table 5 confirms that firms with high RPL tend to pay higher compensation to their equity partners; a 1% increase in RPL results in 0.719% increase in equity partner compensation. International law firms tend to compensate their equity partners more than non-international law firms with a coefficient of 0.202.

Column 3 is the non-equity partner compensation equation. The proportion of women non-equity partners has a negative relation with the average compensation of non-equity partners. A coefficient of -1.565 indicates that a 1% increase in the proportion of women non-equity partners decreases the average compensation for non-equity partners by 1.565% after controlling for their productivity. A decrease in average compensation of non-equity partners upon the addition of more women non-equity partners indicates that women non-equity partners are compensated below the average compensation level for all non-equity partners. Consistent with Table 4, Column 4, RPL has a positive and significant coefficient which shows that more productive firms tend to pay higher average compensation to their non-equity partners; a 1% increase in RPL increases the average compensation of non-equity partners by 0.547%.

Table 5. Seemingly Unrelated Regression (SUR) Estimation.

$$\text{Log (RPL)} = f\{\% \text{ of women equity partners, \% of women non-equity partners, \% of non-equity partners, International, Northeast, West, Midwest}\} \quad (1)$$

$$\text{Log(Equity partner compensation)} = f\{\text{log(RPL), \% of women equity partners, International, Northeast, West, Midwest}\} \quad (2)$$

$$\text{Log(Non-equity partner compensation)} = f\{\text{log(RPL), \% of women non-equity partners, International, Northeast, West, Midwest}\} \quad (3)$$

	(1)	(2)	(3)
Intercept	6.450*** (<.0001)	-1.640*** (<.0001)	-0.607 (0.3833)
% of women equity Partners	0.251 (0.5534)	-0.618*** (0.0002)	
% of women non-equity partners	0.028 (0.8265)		-1.565*** (<.0001)
% of non-equity Partners	-0.149* (0.0752)		
International	-0.277*** (<.0001)	0.202*** (<.0001)	-1.008*** (<.0001)
Northeast	0.006 (0.8507)	0.016 (0.1856)	-0.156*** (0.0060)
West	0.026 (0.5310)	-0.031* (0.0542)	-0.011 (0.8822)
Midwest	-0.038 (0.2997)	-0.032** (0.0254)	-0.007 (0.9147)
Log (RPL)		0.719*** (<.0001)	0.547*** (<.0001)
R-square	0.08284	0.77961	0.38005

Numbers in the parentheses are the estimated probability that the regression coefficient is equal to zero.

*, **, *** indicate significantly different from zero at the 10%, 5%, and 1% levels, respectively.

Log(Equity partner compensation)	Log(Average compensation of equity partners in thousands)
Log(Non-equity partner compensation)	Log(Average compensation of non-equity partners in thousands)
% of women equity partners	Number of women equity partners / Total number of equity partners
% of women non-equity partners	Number of women non-equity partners / Total number of non-equity partners
% of non-equity partners	Number of non-equity partners / Total number of equity and non-equity partners

Table 6. Descriptive Statistics for Subsamples of Firms with the Highest, Median, and Lowest One Third Percentages of Women Partners

Our results empirically document that women partners are compensated less than male partners despite women being at least as productive as male partners in generating revenue for the firm. The estimated coefficients are positive suggesting that women partners are more productive, but these results are not statistically significant at a 0.01 level. Even if women do not devote as much time to their careers due to caretaking duties, there is no evidence of it adversely impacting their revenue generating ability. By discrediting the idea that women are paid less because they are not as productive as men, discrimination is left as an explanation.

Discrimination in the labor market may manifest itself in two forms. Disparate treatment exists when the same firm intentionally pays its women partners less than its men partners despite no differences in performance. More subtle disparate impact discrimination exists when firms have management practices that are biased against women, because they make it more difficult for women than men to continue to progress up the hierarchy of those firms. Practices at more hierarchical and less egalitarian law firms with higher compensation levels will seriously impact general statistics.³¹ If egalitarian firms provide more flexible work schedules and opportunities to partners as long as they reach their billable hours goals, they may be more attractive to women partners who need to balance the demands of their professional careers and their family lives.³² As a result, women partners may have fewer opportunities at higher paying

³¹ See generally Marc Reynolds, *The Non-Hierarchical Law Firms*, 26 LEGAL MGMT. 37 (2007) (demonstrating that firms can provide supportive and egalitarian workplaces for their attorneys); see also Executive Women's Networking Blog, <http://www.executivewomennetworkingblog.com/> (Mar. 16, 2009).

³² See Larry Hirschhorn, *Professionals, Authority, and Group Life: A Case Study of Law Firm*, 28 HUM. RESOURCES MGMT. 235, 237 (Summer 1989) (noting that egalitarian firms emphasize a collegial work environment, firm performance rather than individual performance, relatively equal contributions by partners, and a culture supportive of those who wish to pursue both career and domestic work).

hierarchical firms and relatively more opportunities in the lower paying egalitarian firms.³³

If women partners prefer egalitarian firms, egalitarian firms should have a high percentage of women partners. Our sample was split into three subsamples based on the percentage of female partners at each firm in order to test if our results hold for hierarchical as well as egalitarian firms.³⁴ The firms were divided into three approximately equally sized groups, highest, median, and lowest, for each year of our study, 2002 until 2007, based on the percentage of female partners. Groups of 216, 211, and 211 observations were created from our sample's total of 638 observations. Our analysis found that women partners, both equity and non-equity, are compensated less than male partners across all three subsamples. Consistent with the overall study result, women equity partners in the median and lowest groups are compensated less despite being more productive than men equity partners. Given these results, it is unlikely that a possible preference for egalitarian law firms on the part of women non-equity and equity partners would explain the lesser compensation.

Descriptive statistics are reported in Table 6. There are no statistically significant differences in gross revenue across subsamples, with the firms in the highest one third percent having on average \$493,486,000 in gross revenue and the lowest one third percent having \$477,721,000. Average compensation of equity partners in firms with the lowest percentage of women partners is \$1,248,480, which is significantly higher than that for the median subsample

³³ See generally Debra Weiss, *Egalitarian and Inclusive Cultures Propel Firms to Top of Associate Rankings*, A.B.A. J., Aug. 5, 2008, available at http://www.abajournal.com/news/article/egalitarian_and_inclusive_cultures_propel_firms_to_top_of_associate_ranking/ (noting that women are in a disadvantaged position and are not able to make as much human capital investment in their careers as men because they are sensitive to domestic work such as family and child care responsibilities).

³⁴ See generally Kevin Lang, Michael Manove, & William Dickens, *Racial Discrimination in Markets with Announced Wages*, 95 AM. ECON. REV. 1327, 1336-1340 (2004) (detailing use of multiple subsamples in partitioning data for use in a multi-state game model that predicts discrimination when firms are more concerned with maximizing profits than with eliminating discrimination).

at \$869,390 and the highest subsample at \$749,420. The three subsamples also differ in the proportion of women partners relative to women associates. There are only thirty three women equity partners for every one hundred women associates in the lowest subsample compared to forty seven in the highest subsample. While not reported in detail here, these statistics remain stable over all six years of our sample data. Evidently, an important difference over our time period between the different subsamples of firms is in the progression of women from associates to equity partners. Women have significantly less opportunity to be promoted from associate to equity partner in the subsample of firms that pays significantly higher average compensation to their equity partners.

Table 6. Descriptive Statistics for Subsamples of Firms with the Highest, Median, and Lowest One Third Percentages of Women Partners

Subsamples	Highest proportion of women partners		Modest proportion of women partners		Lowest proportion of women partners	
	Mean	Median	Mean	Median	Mean	Median
% of women partners	20.82%	20.19%	17.02%	16.99%	13.49%	13.83%
% of women associates	45.24%	45.65%	43.70%	43.96%	41.77%	42.25%
% of women partners / % of women associates	46.77%	45.00%	39.40%	38.91%	32.86%	32.79%
Number of lawyers	715.46	605.00	771.51	644.00	639.34	558.00
Gross revenue (\$ in thousands)	\$493,486	\$423,500	\$544,045	\$411,000	\$477,721	\$428,500
RPL (\$ in thousands)	\$685.69	\$665.00	\$694.19	\$670.00	\$807.61	\$722.50
Average equity partner compensation (\$ in thousands)	\$934.20	\$860.39	\$1,018.11	\$855.00	\$1,343.57	\$1,163.28
Average non-equity partner compensation (\$ in thousands)	\$290.91	\$326.39	\$333.05	\$338.10	\$336.67	\$313.54
Average partner compensation (\$ in thousands)	\$749.42	\$680.00	\$869.39	\$745.00	\$1,248.48	\$1,047.50

Table 7. Seemingly Unrelated Regression (SUR) Estimation for Subsamples of Firms with the Highest, Median, and Lowest One Third Percentages of Women Partners

Table 7 replicates the analyses in Table 5 separately for each of the three subsamples. The first column for each subsample shows the relation between the firm's productivity as measured by RPL and the percentage of women partners, both equity and non-equity. Interestingly, the coefficient on the percentage of women equity partners is negative and significant for the highest percentage subsample (-1.735) but is positive and significant for both the median and lowest subsamples (4.346, 2.676). This is in contrast to the result for the overall sample, because it indicates women equity partners are less productive than men equity partners in firms that have the highest percentage of women partners but are significantly more productive in other firms. The differences across the subsamples for women equity partners seem to cancel each other out for the overall sample. The results for non-equity partners are consistent with those for the overall sample: there are no significant differences between men and women non-equity partners in their impact on firm productivity measured by RPL.

The result that remains robust and consistent across all subsamples is that both women equity partners and women non-equity partners are paid less than their male counterparts. Even within each subsample of firms with the highest, median or lowest percentages of women partners, the average compensation for both equity and non-equity partners declines as the proportion of women partners increases. The second column for each subsample corresponds to the equity partner compensation equation. The coefficient on the proportion of women equity partners is negative and significant for all three subsamples (-0.453, -1.075, -1.261). The third column for each subsample corresponds to the non-equity partner compensation equation. The coefficient on the percentage of women non-equity partners is again negative and significant for all three subsamples (-1.637, -0.627, -3.345). The results for women equity partners in the

median and lowest subsamples are consistent with discrimination: women equity partners are more productive than men equity partners, yet they are compensated less. The results for women non-equity partners in all three subsamples are also consistent with discrimination: women non-equity partners are not less productive than their men counterparts, but they are compensated less.

Table 7. Seemingly Unrelated Regression (SUR) Estimation for Subsamples of Firms with the Highest, Median, and Lowest One Third Percentages of Women Partners

$$\text{Log (RPL)} = f\{\% \text{ of women equity partners, \% of women non-equity partners, \% of non-equity partners, International, Northeast, West, Midwest}\} \quad (1)$$

$$\text{Log(Equity partner compensation)} = f\{\text{log(RPL), \% of women equity partners, International, Northeast, West, Midwest}\} \quad (2)$$

$$\text{Log(Non-equity partner compensation)} = f\{\text{log(RPL), \% of women non-equity partners, International, Northeast, West, Midwest}\} \quad (3)$$

	High Proportion of Women Partners			Modest Proportion of Women Partners			Low Proportion of Women Partners		
	Log (RPL)	Log(Equity partner compensation)	Log(Non-equity partner compensation)	Log (RPL)	Log(Equity partner compensation)	Log(Non-equity partner compensation)	Log (RPL)	Log(Equity partner compensation)	Log(Non-equity partner compensation)
Intercept	6.845*** (<.0001)	-0.631** (0.0233)	2.816** (0.0360)	5.635*** (<.0001)	-1.331*** (<.0001)	-0.913* (0.0853)	6.095*** (<.0001)	-2.896*** (<.0001)	-2.034 (0.1307)
% of women equity partners	-1.735*** (0.0095)	-0.453* (0.0636)		4.346*** (0.0006)	-1.075*** (0.0053)		2.676** (0.0472)	-1.261*** (0.0039)	
% of women non-equity partners	0.019 (0.9185)		-1.637*** (<.0001)	0.341 (0.3871)		-0.627** (0.0250)	0.433 (0.1768)		-3.345*** (<.0001)
% of non-equity partners	-0.187 (0.1732)			0.292 (0.1040)			-0.340* (0.0707)		
International	-0.432*** (<.0001)	0.118*** (0.0017)	-2.172*** (<.0001)	-0.367** (0.0245)	0.136** (0.0308)	-1.156*** (<.0001)	-0.075 (0.4246)	0.258*** (<.0001)	-0.263 (0.1253)
Northeast	-0.171*** (0.0005)	-0.033 (0.1154)	-0.361*** (0.0006)	0.015 (0.8058)	0.035 (0.1376)	0.025 (0.6175)	0.111* (0.0600)	0.009 (0.6548)	-0.063 (0.5573)
West	-0.003 (0.9695)	-0.063** (0.0179)	-0.104 (0.4051)	0.041 (0.6034)	-0.027 (0.3559)	-0.043 (0.4956)	0.032 (0.6822)	-0.017 (0.5246)	0.335** (0.0279)
Midwest	-0.113** (0.0103)	-0.034* (0.0637)	-0.100 (0.2870)	-0.012 (0.8899)	-0.064** (0.0481)	0.015 (0.8209)	-0.023 (0.7875)	-0.036 (0.2311)	-0.068 (0.6539)
Log (RPL)		0.561*** (<.0001)	0.039 (0.8482)		0.681*** (<.0001)	0.557*** (<.0001)		0.925*** (<.0001)	0.803*** (0.0002)
R-square	0.25093	0.73124	0.62183	0.20624	0.77381	0.65285	0.20714	0.88539	0.40936

Numbers in the parentheses are the estimated probability that the regression coefficient is equal to zero.
 *, **, *** indicate significantly different from zero at the 10%, 5%, and 1% levels, respectively.

IV. Inadequate Alternative Justifications for Discrimination in Compensation and Rank

Two alternative explanations have been posited for the inequities demonstrated by our study. One is that women choose to work in more egalitarian firms that pay less. The other is that some large firms reward lawyers with uniform compensation and rank who arrive at the firms at the same time and carry the expected work load during uninterrupted, lockstep careers. Women who interrupt their careers for child birth and/or caretaking fall behind their men colleagues at firms that link compensation and promotion to conformity to a lockstep pattern.

Our databases do not contain specific information on which firms could be labeled egalitarian, which reward in lockstep, and which women interrupt their careers for child birth and/or caretaking. Nevertheless, we believe our data undercut both posited alternative explanations, especially when viewed in the context of other studies.

If women partners prefer egalitarian law firms, such firms should have a high proportion of women partners; non-egalitarian law firms should have a low proportion of women partners.³⁵ Women partners, both equity and non-equity, are compensated less in all three of our subsample firms, those with high, median, and low proportions of women partners.³⁶ Consistent with our overall results, women equity partners are compensated less in the median and low proportion of women partners subsample firms, although they are more productive.³⁷ A possible preference on the part of women equity and non-equity partners for egalitarian law firms does not explain the lesser compensation.

Lockstep compensation and rank should not affect those women who do not take time off for childbirth and caretaking. Successful women, and women law firm partners are the most

³⁵ *Supra* p. 25, Table 6, Descriptive Statistics for Subsamples of Firms with the Highest, Median, and Lowest One Third Percentages of Women Partners.

³⁶ *Id.*

³⁷ *Id.*

successful women at the Am Law 200 firms, are disproportionately unmarried and childless when compared to their men counterparts.³⁸

The same is true of U.S. Supreme Court Justices. In the history of the Court, there have been 109 Justices with only four unmarried male Justices: Frank Murphy, Benjamin Cardozo, James McReynolds, and David Souter.³⁹ In the last ten years, with the exception of Justice Souter, all the male Justices have been married with progeny: Samuel Alito, two children, Steven Bryer, three children, Anthony Kennedy, three children, William Rehnquist, three children, John Roberts, two children, Antonin Scalia, nine children, John Stevens, five children, and Clarence Thomas, one child.⁴⁰ Of the only four women Justices in the history of the Court, the two most recent appointees, Sonia Sotomayor⁴¹ and Elena Kagan,⁴² are childless. The first woman, Justice Sandra Day O'Connor, had three children; the first while she worked as a civilian attorney for

³⁸ One of the earliest studies, based on the 1970 census, found that 8% of men lawyers and judges were single contrasted to 31% of women; 87% of men lawyers and judges were married with a spouse present contrasted to only 41% of women; 6% of men lawyers and judges were separated, divorced, or widowed contrasted to 28% of women. CYNTHIA EPSTEIN, *WOMEN IN LAW* 331, tbl. 18.2 (1981). A recently released study shows that the most educated women are among the most likely never to have had a child; 24% of women 40-44. Gretchen Livingston & D'Vera Cohn, PEW RESEARCH CENTER, *CHILDLESSNESS UP AMONG ALL WOMEN: DOWN AMONG WOMEN WITH ADVANCED DEGREES*, June 25, 2010, <http://pewsocialtrends.org/assets/pdf/758-childless.pdf> (last visited Aug. 1, 2010). There are serious ramifications for societies when educated women forgo childbearing and childcare because of accompanying professional or economic disadvantages. *See generally* Frank F. Furstenberg, Jr., *On a New Schedule: Transitions to Adulthood and Family Change*, 20 *FUTURE OF THE CHILDREN*, Spring 2010, at 68-69 (note "a precipitous fertility decline" in the United States). *Id.* at 68-69. This situation exists in all developed countries and has reached crisis proportions in Japan, "with one of the world's most rapidly aging populations and lowest birthrates." Hiroko Tabuchi, *Indentured Workers in Distress*, N.Y. TIMES, July 21, 2010 at B1.

³⁹ The Reliable Source, <http://voices.washingtonpost.com/reliable-source/> (May 27, 2009); *see also* Biographies of the Current Justices of the Supreme Court, <http://www.supremecourt.gov/about/biographies.aspx> (last accessed August 20, 2010).

⁴⁰ Biographies of the Current Justices of the Supreme Court, <http://www.supremecourt.gov/about/biographies.aspx> (last accessed August 20, 2010).

⁴¹ *Id.* Justice Sotomayor's brief marriage ended in divorce. Sheryl Gay Stolberg, *Sotomayor, a Trailblazer and a Dreamer*, N.Y. TIMES, May 27, 2009, at A1 (detailing the history of Justice Sonia Sotomayor and noting that she married and divorced once and has no children); *see also* Biographies of the Current Justices of the Supreme Court, <http://www.supremecourt.gov/about/biographies.aspx> (last accessed August 20, 2010).

⁴² *See* Peter Baker and Jeff Zeleny, *Obama Picks Kagan as Justice Nominee*, N.Y. TIMES, May 9, 2010, at A1 (detailing Kagan's nomination to the Supreme Court and outlining her personal life, including that she never married and has no children); *see also* Biographies of the Current Justices of the Supreme Court, <http://www.supremecourt.gov/about/biographies.aspx> (last accessed August 20, 2010).

the U.S. military in Germany and the other two shortly thereafter during a five year break from her legal career.⁴³ Justice Ruth Bader Ginsberg had two children, one while she was a law student and the other while teaching at Rutgers University School of Law.⁴⁴ None of the four women on the U.S. Supreme Court was able to follow a big firm career path. The two that had children had them during less work pressured periods of their lives.

A detailed study of University of Michigan Law school graduates fifteen years after graduation from 1987 to 2000 found that 56% of women lawyers never worked part-time or took leave.⁴⁵ These women “worked high hours – roughly twenty-four hundred.”⁴⁶ Even these women had a 6% higher chance of attrition and a 17% lower chance of achieving partnership than men with comparable histories.⁴⁷

Our data show that women partners outperform their men counterparts.⁴⁸ If these women are underpaid and undervalued in terms of rank despite their conformity to a lockstep pattern, the inequalities could be due to intentional discrimination. Women who deviate from a lockstep pattern because of childbirth and/or caretaking are thereafter permanently excluded from rank

⁴³ See Linda Greenhouse, *Sandra Day O'Connor: A Different Kind of Justice*, N.Y. TIMES, October 9, 1981 at A24 (detailing Sandra Day O'Connor's professional and personal life); see also Biographies of the Current Justices of the Supreme Court, <http://www.supremecourt.gov/about/biographies.aspx> (last accessed August 20, 2010).

⁴⁴ Gardiner Harris, *M.D. Ginsburg, 78, Dies; Lawyer and Tax Expert*, N.Y. TIMES, June 28, 2010, at B8 (detailing Ginsburg's husband's death, their marriage, and the birth of their two children in 1955 and 1965); see also Biographies of the Current Justices of the Supreme Court, <http://www.supremecourt.gov/about/biographies.aspx> (last accessed August 20, 2010).

⁴⁵ See Mary C. Noonan & Mary Corcoran, *The Mommy Track and Partnership: Temporary Delay or Dead End?*, 596 ANNALS OF THE AM. ACAD. OF POL. AND SOC. SCI. 130, 138-140 (Nov. 2004) (finding a strong correlation between not having children and making partner for women as well as a strong correlation between taking time off for care giving and not making partner).

⁴⁶ *Id.* See also Barbara White, *The Career Development of Successful Women*, WOMEN IN MGMT. REV., Nov. 1995, 4, at 13 (noting that successful women identify that in order to succeed they must have a strong focus on career at the expense of other areas of their lives).

⁴⁷ Noonan & Corcoran, *supra* note 45, at 142. Similar results from the Michigan Law Alumni Data Set, the largest, longest, and most detailed survey of law school graduates, were reported in a new study funded by a Law School Admissions Council grant. Kenneth Day-Schmidt, *Men and Women of the Bar: The Impact of Gender on Legal Careers*, 16 MICH. J. OF GENDER & L. 49, 96-97, 100-02, 107, 111-12 (2009).

⁴⁸ *Supra* p. 25, Table 6, Descriptive Statistics for Subsamples of Firms with the Highest, Median, and Lowest One Third Percentages of Women Partners.

and salary equity despite matching or surpassing their male colleagues.⁴⁹ The inequalities could constitute disparate impact discrimination.

Women with children earn less than women without children, and the gap caused by this family penalty for women is growing larger.⁵⁰ On the other hand, married men, most with children, earn more than unmarried men, with estimates of a marriage premium for men between 10% and 15%.⁵¹ A University of Michigan Law School study found that only nineteen of 1,574 or 1.2% of fathers had worked part-time and only seventeen or 1% took childcare leave; of mothers, 47% had worked part-time and 42% had taken a leave.⁵² Time off from work and part-time work each significantly decrease the likelihood of becoming a partner.⁵³ “A family leave of one year reduced women’s chances of making partner by one-third and reduced women partners’ earnings by 28 percent.”⁵⁴ Given the substantially higher number of women lawyers who at some point take a leave or work part-time because of childbirth and/or childcare, the considerable compensation and rank penalties associated with leaves and part-time work have a massively disparate impact on women.

If women are underpaid and/or not promoted to partner or equity partner despite identical or better records than their men colleagues, including fitting a lockstep pattern, there could be intentional discrimination, known as disparate treatment discrimination.⁵⁵ If women deviate

⁴⁹ The Pregnancy Discrimination Act, 92 Stat. 2076 (1978) (codified as amended at 42 U.S.C. § 2000e(k) (2010)), brought pregnancy and birth with the scope of the gender discrimination prohibition of Title VII of the 1964 Civil Rights Act of 1964. The U.S. lags behind all developed nations in providing job-protected, paid leave to pregnant women and new mothers. Patricia Shiu & Stephanie Wildman, *Pregnancy Discrimination and Social Change: Evolving Consciousness About a Worker’s Right to Job-Protected, Paid Leave*, 21 YALE J.L. & FEMINISM 119, 120 (2009).

⁵⁰ See Jane Waldfogel, *Understanding the “Family Gap” in Pay for Women with Children*, 12 J. OF ECON. PERSPECTIVES 137 (Winter 1998) (commenting that the “greatest barrier to economic equality is children”).

⁵¹ *Id.* at 143.

⁵² Noonan & Corcoran, *supra* note 45, at 137.

⁵³ *Id.* at 141.

⁵⁴ *Id.* at 146.

⁵⁵ See Title VII of the Civil Rights Act of 1964, 42 U.S.C. § 2000(a)(1)(2); see generally MARK A. ROTHSTEIN ET

from a lockstep pattern because of childbirth and/or caretaking responsibilities and are thereafter permanently excluded from compensation and rank equity despite identical or better performances than their men colleagues, there could be disparate impact discrimination.⁵⁶

Intentional discrimination requires that plaintiffs suffer adverse employment conditions on the basis of gender. Justice Scalia, writing for a unanimous Court in *Oncale*, said “We have held [that the Civil Rights Act of 1964] not only covers ‘terms’ and ‘conditions’ in the narrow contractual sense, but ‘evinces a congressional intent to strike at the entire spectrum of disparate treatment of men and women in employment.’”⁵⁷

Ann Hopkins made out a case of intentional gender discrimination against her employer for failing to promote her to partner based on sex stereotyping.⁵⁸ She was described as “macho,” as “overcompensating for being a woman,” as needing “a course at charm school.”⁵⁹ Price Waterhouse is a top accounting firm whose organizational structure and culture resembles those at Am Law 200 firms.⁶⁰

AL., EMPLOYMENT LAW 128-150 (4th ed. 2010).

⁵⁶ Congress specifically recognized disparate impact discrimination in the Civil Rights Act of 1991, amending Title VII of the Civil Rights Act of 1964, 42 U.S.C. § 2000e-2(R)(1)(A)(i); Justice Scalia did not believe that the 1964 Civil Rights Act allowed disparate impact claims but acknowledged for a unanimous Court that “Congress codified the requirements of the ‘disparate impact’ claims *Griggs* had recognized [in the 1991 Civil Rights Act]. *Lewis v. Chicago*, 130 S.Ct. 2191, 2197 (2010); see generally MARK A. ROTHSTEIN ET AL., EMPLOYMENT LAW 128-150 (4th ed. 2010).

⁵⁷ *Oncale v. Sundowner Offshore Services, Inc.*, 523 U.S. 75, 78 (1998) (citing *Meritor Savings Bank F.S.B. v. Vinson*, 477 U.S. 57, 64 (1986)). In describing the breadth of the gender discrimination prohibition, Justice Scalia, writing for a unanimous Court, adopted Justice Ginsberg’s definition as stated in her concurring opinion in *Harris v. Forklift Systems*, 510 U.S. 17, 25 (1993). “The critical issue, Title VII’s text indicates, is whether members of one sex are exposed to disadvantageous terms or conditions of employment to which members of the other sex are not exposed.” *Id.*

⁵⁸ *Price Waterhouse v. Hopkins*, 490 U.S. 228 (1989).

⁵⁹ *Price*, 490 U.S. at 235 (plurality opinion). Justice Sandra Day O’Connor concurred in the judgment. The plurality required the plaintiff to show that gender played a “motivating” part in an employment decision. *Id.* at 258 (plurality opinion). She required a showing that gender was a “substantial” factor. *Id.* at 265 (concurring). The 1991 Amendments to Title VII of the 1964 Civil Rights Act resolved the issue by requiring a demonstration that sex was “a motivating factor for any employment practice, even though other factors also motivated the practice.” 42 U.S.C. § 2000e-2(m).

⁶⁰ See generally Arnold Lubasch, *Top Law Firm Bans Sex Discrimination; Sullivan & Cromwell Will Pursue a Policy of Hiring and Paying Women on Same Basis as Men*, N.Y. TIMES, May 8, 1977 at A13 (detailing a

Disparate impact discrimination was recognized by the U.S. Supreme Court in *Griggs v. Duke Power Co.*, the first main employment discrimination case to reach the Court under Title VII of the 1964 Civil Rights Act.⁶¹ A *prima facie* disparate impact case is made out if the plaintiffs demonstrate that a specific employment practice has a disproportionate adverse effect on a protected group.⁶² In *Griggs*, statistics showed that Black men overwhelmingly failed to meet the employer's job requirements of a high school degree and passage of two general intelligence tests, although some white men, the favored group, also failed to meet the requirements.⁶³ The Court held that the requirements were discriminatory.

Congress has now provided that tests or criteria for employment or promotion may not provide equality of opportunity merely in the sense of the fabled offer of milk to the stork and the fox ... The Act proscribes not only overt discrimination but also practices that are fair in form, but discriminatory in operation. The touchstone is business necessity. If an employment practice which operates to exclude Negroes cannot be shown to be related to

settlement of a sexual harassment suit against what was then one of the top three law firms in the nation); *see also* Rudy Johnson, *Law Firm Faces Sex-bias Hearing; Student Says She Couldn't Get Summer Job There*, N.Y. TIMES, May 8, 1977 at 31 (outlining the outcome of a New York City Human Rights Commission hearing finding that Royal Koegel and Wells was guilty of sex discrimination in its hiring and promotion practices); David Leonhardt, *A Labor Market Punishing to Women*, N.Y. TIMES, Aug. 3, 2010 at B1 (documenting recent discrimination at top New York law firms against those taking time off for childcare). In a recent case, a shareholder alleged that that her law firm had "a separate and lower employment track" for women who took maternity leave and/or had children, that a senior shareholder told her that "her priorities were not straight because... she did not spend enough time with her husband and children," that the "gals" should prepare cases for male lawyers to try, and that her major client "wanted only gray haired guys trying their cases." Complaint and Demand for Jury Trial, *Kirleis v. Dickie, McCamey & Chilcote, P.C.*, No. 06CV01495 (W.D. Pa. Nov 9, 2006) 2006 WL 5291524. In unpublished opinions, the district court granted Summary Judgment against the plaintiff on the ground that, as a shareholder, she was an employer not an employee protected by Title VII. 2009 WL 3602008 (W.D. Pa.), 107 Fair Empl.Cas. (BNA) 1121 (2009) (unpublished decision), *aff'd*, 2010 WL 2780927 (3d Cir. 2010), 109 Fair Emp.Prac.Cas. (BNA) 1428 (unpublished decision). For criticism of the Third Circuit's decision, see Gina Passarella, *Ruling Highlights Power Disparity Between Male, Female Partners*, THE LEGAL INTELLIGENCER, August 3, 2010, at 1-2, 9. *See also* Susan Strum, *Second Generation Employment Discrimination: A Structural Approach*, 101 COLUM. L. REV. 458 (2001) (describing the differences between blatant, intentional first generation discrimination and invidious, structural second generation discrimination).

⁶¹ *Griggs v. Duke Power Co.*, 401 U.S. 424, 431 (1971). Class action plaintiffs often assert "both disparate impact and disparate treatment claims, challenging employer policies and practices that permit stereotyping and bias to infect decision making processes and limit opportunities for women throughout the company." Melissa Hart & Paul Secunda, *A Matter of Context: Social Framework Evidence in Employment Discrimination Class Actions*, 78 FORDHAM L. REV. 37, 48 (2009).

⁶² Civil Rights Act of 1991 amending Title VII of the Civil Rights Act of 1964, § 703(R)(1)(A)(i), 42 U.S.C. § 2000e-2(R)(1)(A)(i); *see generally* MARK A. ROTHSTEIN ET AL., EMPLOYMENT LAW 128-150 (4th ed. 2010).

⁶³ *Griggs*, 401 U.S. at 430 n. 6.

job performance, the practice is prohibited.⁶⁴

Women are penalized for their unique childbirth leaves⁶⁵ and their caretaking leaves by law firms that demand lockstep. Women disproportionately utilize caretaking leaves as compared to their male colleagues.⁶⁶

Once women lawyers at an Am Law 200 firm demonstrate a massive disparate impact caused by a firm's lockstep policy,⁶⁷ the firm can avoid a finding of disparate impact discrimination if it meets the criterion and burden established by *Griggs*⁶⁸ and codified in the 1991 Civil Rights Act.⁶⁹ The firm must demonstrate that the particular employment practice, lockstep, is "job related for the position in question and consistent with business necessity."⁷⁰ A firm could attempt to justify a lockstep condition on the basis that childbirth and/or childcare leaves cause women's lawyering skills to deteriorate to a degree that merits perpetually lower rank and compensation. This justification will be impossible to prove given that our study shows that women partners, both non-equity and equity, match or outperform their men colleagues who are not burdened by pregnancy, childbirth, and caretaking.

Other professional service firms do not use lockstep. Corporate clients of law firms object that they should not be charged more "because [an] associate has had a birthday."⁷¹ There is a movement to replace lockstep with systems of "merit-based compensation," but it is not clear how merit would be defined, who would determine merit, and how such systems would impact

⁶⁴ *Griggs*, 401 U.S. at 431.

⁶⁵ Pregnancy Discrimination Act, 92 Stat. 2076 (1978) (codified as amended at 42 U.S.C. § 2000e(k) (2010)) (amending the term "sex" in the Civil Rights Act of 1964 to include "because of or on the basis of pregnancy, childbirth, or related medical conditions").

⁶⁶ Waldfogel, *supra* note 50, at 143.

⁶⁷ 42 U.S.C. § 2000e(m).

⁶⁸ *Griggs*, 401 U.S. at 432, 436.

⁶⁹ 42 U.S.C. § 2000e(R)(1)(A)(i).

⁷⁰ *Id.*

⁷¹ Stephanie B. Goldberg, *Merit-Based Compensation as an Alternative to Lockstep: Firms Test the Waters*, 18 A.B.A. PERSPECTIVES (Winter 2010), 4, at 6.

women.”⁷²

V. Conclusion

More than one hundred years have elapsed since the late 1800s when women first emerged in the men-dominated legal workplace.⁷³ However, women lawyers still need to fight for equality in compensation and promotion commensurate with their contributions to the highest grossing law firms in the U.S. Formal statistical results in this paper document that women lawyers are disadvantaged relative to men partners not because they are less productive in generating revenue for their law practices but because of discrimination.

Comparing the average compensation levels of partners across firms, we find that women partners are on average compensated less than men partners. Our results hold even after controlling for the lower compensation of non-equity partners, since women are more likely than men to remain a non-equity partner. This difference is striking because women partners are compensated less than men partners even though their impact on revenue generating productivity is not less than that of men partners.

The gender gap discrepancy in pay could be explained if women lawyers are paid less than their men colleagues, because they devote less time to their careers, are less productive, or opt for lower paying more egalitarian law firms. The analysis presented disproves these claims. Our results are consistent with discrimination.

⁷² *Id.* at 5-7. See generally Gina Passarella, *Drinker Biddle Creates Role of Chief Value Officer*, THE LEGAL INTELLIGENCER, Aug. 13, 2010, at 1.

⁷³ The first woman lawyer in America was Margaret Brent. KAREN MORELLO, *THE INVISIBLE BAR: THE WOMEN LAWYER IN AMERICA, 1638 To The Present* 3 (1986). Brent was so successful that she served as the executor for the governor of Maryland. *Id.* at 5. No other women lawyers are documented until the late 1860s, when women began to attend law schools and to be admitted to state bars. MARY MOSSMAN, *THE FIRST WOMEN LAWYERS: A COMPARATIVE STUDY OF GENDER, LAW, AND THE LEGAL PROFESSIONS* 23 (2006). However, women did handle their own cases both in colonial times and after independence. Epstein, *supra* note 38, at 8. Two women argued their own cases before the U.S. Supreme Court; the first was a Black woman who addressed the court in 1795. *Id.*

Appendix A – Am Law 200 Descriptive Statistics of Variables

Variables	N	Mean	Median	Q1	Q3
Average equity partner compensation (\$ in thousands)	801	1018.91	835.58	611.06	1220.00
Average non-equity partner compensation (\$ in thousands)	801	297.38	301.05	170.58	402.95
Average partner compensation (\$ in thousands)	801	893.85	700.00	500.00	1055.00
RPL (\$ in thousands)	801	688.20	645.00	540.00	785.00
% of women partners	638	0.17	0.17	0.15	0.19
% of women equity partners	638	0.15	0.15	0.13	0.18
% of women non-equity partners	347	0.24	0.24	0.18	0.29
% of non-equity partners	798	0.25	0.24	0.03	0.42
International	976	0.02	0	0	0
National	976	0.19	0	0	0
Northeast	976	0.33	0	0	1
West	976	0.13	0	0	0
South	976	0.23	0	0	0
Midwest	976	0.10	0	0	0

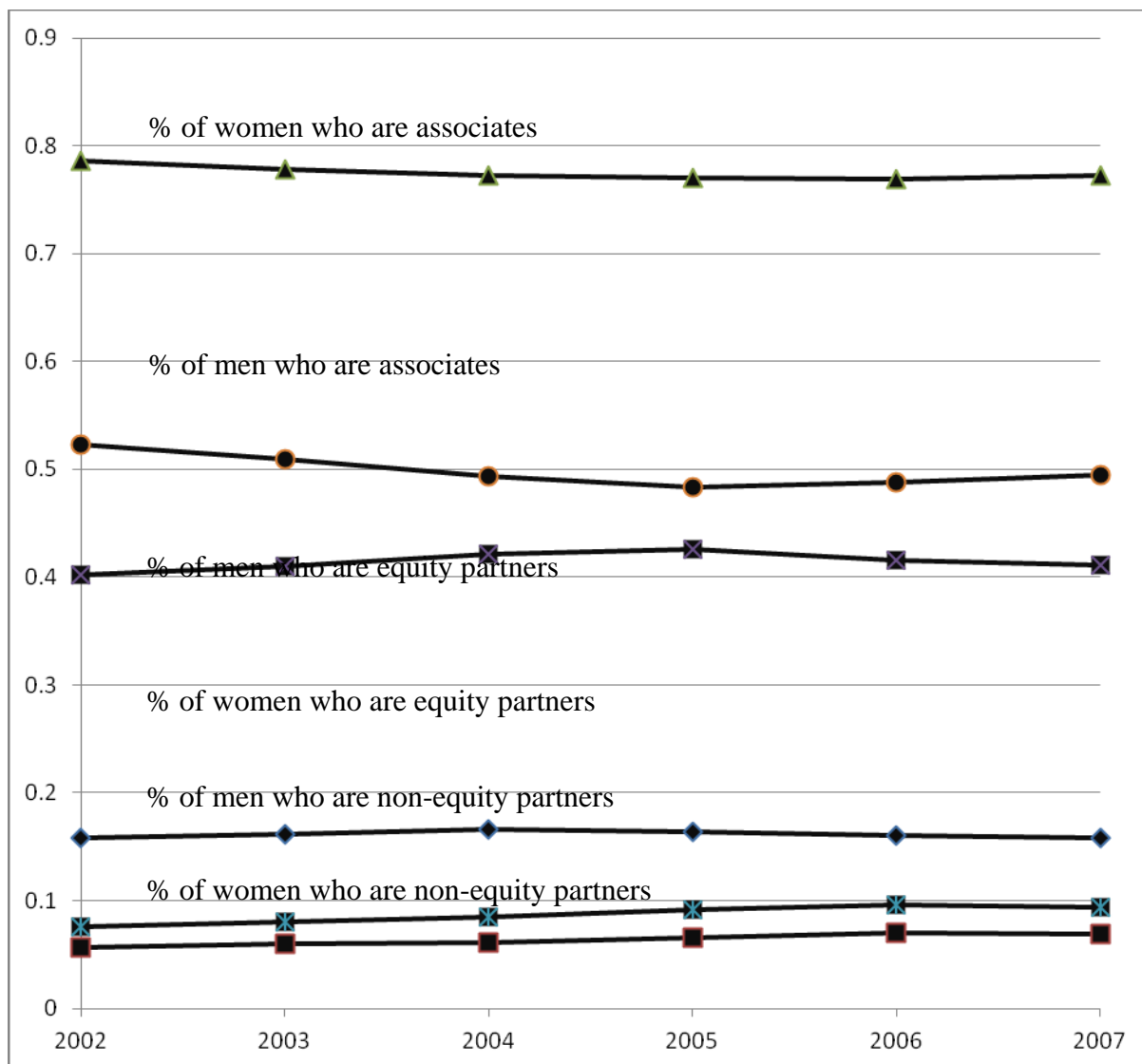
*Statistics provided in this appendix were computed using Am Law 100 and 200 data.

Appendix B – Number of Observations Per Year

Year	Number of firms
2002	100
2003	109
2004	109
2005	111
2006	107
2007	102
Total number of observations	638

*Statistics provided in this appendix were computed using Am Law 100 and 200 data.

Appendix C – Distribution of the Status of Women and Men Lawyers in Am Law 200 Law Firms



Average Statistics over Six Years (2002-2007):

	Men	Women
Equity Partners	41.46%	16.16%
Non-equity Partners	8.71%	6.35%
Associates	49.83%	77.49%
Total	100.00%	100.00%

*Statistics provided in this appendix were computed using Am Law 100 and 200 data.