

The influx of women into legal professions: an economic analysis

Women are increasingly attracted to the field of law, possibly because of its favorable economic factors, such as relatively high earnings early in the career and ease of re-entry into the field after periods of nonparticipation in the labor force

Joe G. Baker

The year 2001 was a watershed year in legal education. For the first time, female law school entrants outnumbered men.¹ This event is the culmination of a trend over the last half-century which saw the legal profession experience rapid increases in the number and percent of women receiving law degrees. At the same time, a large body of literature documented a “second class” professional status of women in the legal field. If women are treated so poorly in the legal profession, why do they find it an attractive career choice?

Previous examinations of the status of women in law have compared female to male law graduates. This research examines the proposition that the correct economic comparison, especially from an occupational choice standpoint, is not between genders within a profession but the relative desirability across professions for women. As such, this article compares the relative economic rewards to women of four professional degrees: law, medicine, M.B.A.s, and social science/psychology doctorates.

Background and literature review

Chart 1 compares the relative share of degrees awarded to women from 1966 to 1996 (indexed to 100.0 in 1966) for five “reference” professions (law, medicine, M.B.A.s, social science Ph.D.s, and psychology Ph.D.s). Women have increased their share of total law degrees by almost twelve-

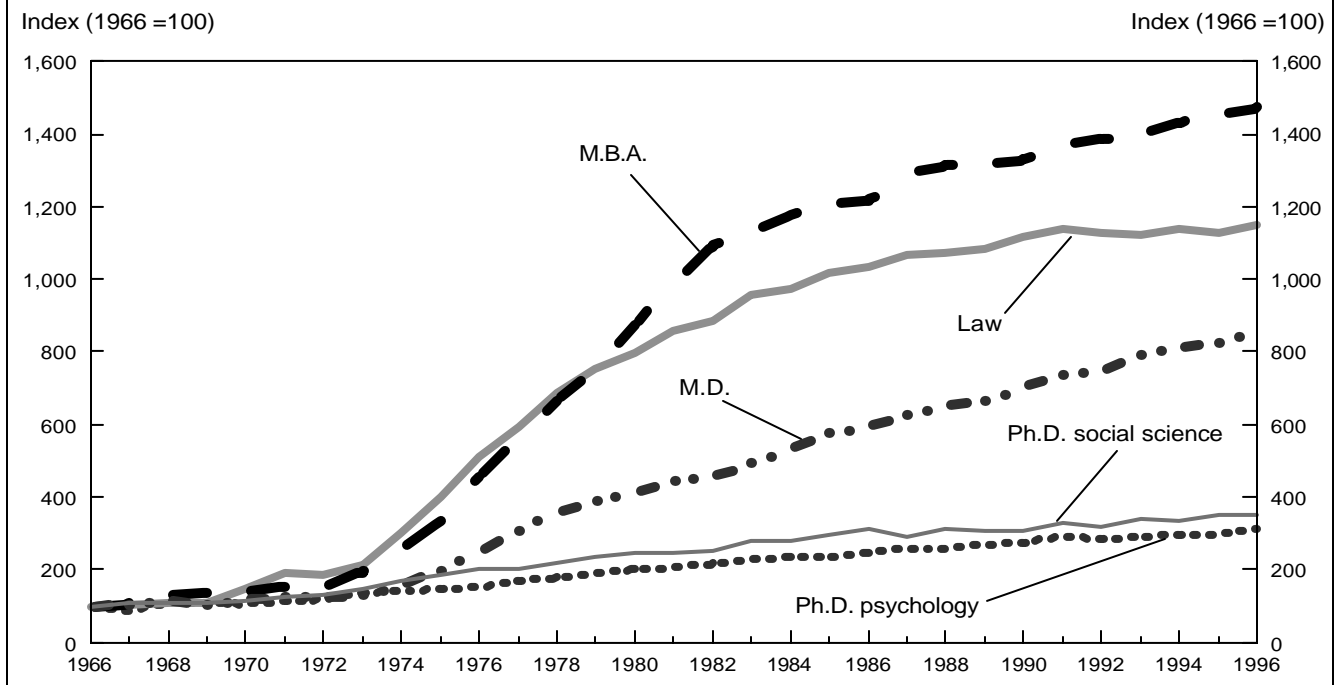
fold (in 1966, only 3.8 percent of law degrees were awarded to women; in 1996, this statistic was 43.5 percent).² In terms of the relative growth of women in the profession, law trails only M.B.A.s over this period but is substantially in excess of the other professional fields.³ As stated by Professor Sherwin Rosen, “...the story of the legal profession (and, similarly, for the medical practice) in the 1970s and 1980s is the entry of women...”⁴

Part of the explanation for this growth in female lawyers has been the revolution in female participation in the labor force in general (overall female labor force participation rates grew to 58.9 percent from 39.8 percent for the January 1966–96 period).⁵ Another explanation is the increased number of college degrees awarded to women, which grew to 55.2 percent of all bachelor degrees in 1996, up from 42.6 percent in 1966.⁶ However, the “feminization rate” of the legal profession exceeds by several-fold these trends in labor force participation and degree awards.

The general conclusion of previous research into the status of women in the legal profession is that women are treated poorly. Wynn R. Huang found that “the earnings structure found in the law profession rewards men more than it does females.”⁷ Huang also found that women receive lower benefits than men for attendance at a prestigious law school, and suffer earnings penalties after having families.⁸ Paul W. Mattessich and Cheryl W. Heilman’s study of University of Min-

Joe G. Baker is associate professor of economics, Southern Utah University, Cedar City, Utah. Email: Baker_J@suu.edu

Chart 1. Relative share of professional degrees awarded to women, 1966–96



nesota law graduates found that women in the legal profession earn less than men, and were discriminated against in the workplace.⁹ Sherwin Rosen found that female lawyers earned significantly less than men.¹⁰ Robert L. Nelson found that female lawyers worked in “less remunerative, if not lower status, positions.”¹¹ John Hagan and Fiona Kay’s 1995 study of Canadian lawyers found large gender differences, especially in earnings.¹² Robert G. Wood, Mary E. Corcoran, and Paul N. Courant’s study of University of Michigan Law School Graduates found that even after controlling for childcare, work history, school performance, and other variables, about one-fourth of the male-female wage gap remained unexplained.¹³ These findings seem at odds with the rapid growth of female law graduates.

Richard H. Sander and E. Douglas Williams argue that the rapid feminization of the law was the result of three factors: 1) job opportunities in teaching, a traditionally female occupation, declined forcing women into other careers; 2) law was “disproportionately attractive” to women during the period of increasing female labor force participation, especially for women of upper- and upper-middle income families; and 3) high relative salaries of lawyers to bachelor-degree recipients.¹⁴ (Sander and Williams did not compare salaries across professional degrees for women.) Sander and Williams compare the starting salaries of corporate lawyers to new bachelor-degree recipients over the 1961–85 period, and found

these data were consistent with waxing and waning law school enrollments.

The data

The primary data for this analysis is the 1993 National Survey of College Graduates.¹⁵ The survey sampled approximately 215,000 individuals, of which approximately 168,000 responded (78 percent response rate). The sample size varied based upon strata. For purposes of this analysis, individuals were classified into professional fields based upon their “most recent or highest degree.” Several individuals in the sample have more than one professional degree, for example, the physician who goes on to get a law degree. It is assumed that the most recent/highest degree is a good approximation of career interests, and was therefore used as the classification variable. Further, unless otherwise specified these statistics are for those under age 66 who received their “most recent or highest” degree within the last 10 years (that is, their career age is less than 11 years). This last restriction is necessary because most women in these professions have lower career age and experience than men; this biases the aggregate statistics. Because many occupational decisions are made on the basis of career characteristics as opposed to starting salaries, some of the comparisons that follow also ex-

Table 1. Descriptive statistics of professional degree fields, 1993

Characteristic	Law		M.B.A.		M.D.		Social Science Ph.D.		Psychology Ph.D.	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Number	633,175	241,228	489,629	157,645	610,078	154,711	69,354	21,956	65,575	53,243
Percentage of total	72.4	27.6	75.6	24.4	79.8	20.2	76.0	24.0	55.2	44.8
Disabled	2.5	2.0	2.0	1.2	2.7	2.4	2.8	2.9	3.1	4.4
Married	76.1	62.9	83.1	65.4	84.7	71.9	78.9	64.0	81.2	65.9
Divorced/separated	9.1	11.3	6.1	12.0	5.8	7.6	7.8	14.5	9.5	18.5
Not in labor force	4.9	11.2	5.6	9.7	5.2	9.9	6.0	9.3	4.0	6.7
With children at home	54.3	47.1	60.2	47.7	60.4	51.8	48.9	43.1	53.2	45.0
New graduate ¹	15.2	31.1	25.5	46.6	12.4	24.8	14.5	28.6	14.1	28.4
Working in degree field	86.0	86.3	51.1	56.3	96.9	95.5	76.5	78.1	87.5	84.7
Not a U.S. citizen (Visa)	1.0	1.8	4.0	4.5	5.8	10.9	11.2	6.3	4.0	3.9
Mean of number:										
Biological age (years)	41	36	41	35	42	36	46	43	45	43
Career age (years) ²	17	10	13	7	19	12	17	12	15	11
Annual salary (median)	\$75,000	\$55,000	\$60,000	\$48,000	\$96,000	\$68,000	\$54,500	\$50,000	\$55,000	\$48,000
Full-time professional experience (years)	18	10	20	13	17	9	20	15	19	14
Average workweek (hours) ³	46	38	46	41	49	42	46	42	46	41

¹ New graduates are individuals who received professional degree within 5 years or less. ² Includes all career ages. Career age is defined as years since receipt of professional or graduate degree. ³ Average workweek data for full-time workers only.

SOURCE: 1993 National Survey of College Graduates.

amine older career age cohorts. Table 1 contains descriptive statistics for the professional fields.

Law schools and business schools attract students with similar backgrounds. Almost two-thirds of law school graduates (62 percent) have bachelor degrees in social science (44.7 percent) or business (17.3 percent).¹⁶ The same two bachelor fields make up 49.7 percent of M.B.A.s (with a bachelor degree in business at 37.2 percent); and 80.3 percent of social science doctorates (with a bachelor degree in social science at 74.7 percent).¹⁷ Although not perfect substitutes, these professions do appear to be competing career choices for a large number of undergraduates who go on to professional school. Medicine was included in this article because of rapid growth in the participation of women that parallels the growth in law degrees among women, although the types of undergraduates who go into medicine are substantially different from those who enter the legal profession (health and life science bachelor degrees make up about 69.2 percent of M.D.s). (See chart 1.) Psychology is included because it is a profession that has historically been characterized by high levels of female participation. In 1966, 1 out of 5 psychology doctorates were awarded to women; and in 1996, 2 out of 3 were.

Labor force participation

Following Gary S. Becker's pioneering model of the household production function, households allocate time among many work and nonwork activities.¹⁸ Because household labor supply decisions are often made on the basis of more than

one worker, demographics and family structure can affect labor supply. For example, marriage or the presence of children, or both, require considerations of joint earnings and household division of labor. This may restrict job search or hours of work for one or both spouses. The presence of children increases the value of nonwork production and may result in one spouse completely dropping out of the labor force. In most two-earner households, male earning potential exceeds that of women.

Becker's model of household production predicts that the rational household would thus allocate most "home" production to the wife and allocate "market" production to the man.¹⁹ The value of "home" production also rises with the presence of children; therefore, female participation tends to drop during child-rearing years for married women.

National labor force participation data are consistent with this prediction: female participation rates are less than men's, and drop during the peak childbearing years. Thus, at least for married mothers, the ability to exit and re-enter a profession is an attractive attribute.²⁰ In addition, professional field attractiveness would be related to job opportunity, that is, unemployment rates. Table 2 contains labor force participation rates and unemployment rates for female professionals in the four comparison fields. Law has the lowest female labor force participation rates of the comparison fields; it also ranks second behind only M.B.A.s in terms of unemployment rates.

At first glance, these attributes would appear to make law less attractive than the comparison fields. However, if labor force exit is by choice, then the labor force participation rates reflect voluntary decisions. Table 3 contains data on why

Table 2. Labor force participation by professional degree

Characteristic	Law		M.B.A.		M.D.		Ph.D.	
	Male	Female	Male	Female	Male	Female	Male	Female
Total	191,283	143,413	220,550	115,726	171,341	84,573	40,365	38,565
Working	178,778	121,352	209,484	101,965	164,176	75,011	38,069	36,268
Unemployed	4,874	4,747	6,223	4,688	803	540	1,216	239
Not in labor force	7,631	17,314	4,843	9,073	6,362	9,022	1,080	2,058
Percent distribution								
Working	93.5	84.6	95.0	88.1	95.8	88.7	94.3	94.0
Unemployed	2.5	3.3	2.8	4.1	.5	.6	3.0	.6
Not in labor force	4.0	12.1	2.2	7.8	3.7	10.7	2.7	5.3
Unemployment rate	2.7	3.8	2.9	4.4	.5	.7	3.1	.7
Labor force participation rate	96.0	87.9	97.8	92.2	96.3	89.3	97.3	94.7

NOTE: This table restricts the population to those with a career age of less than 11 years (that is, those received their most recent or highest degree within the last 10 years).

SOURCE: 1993 National Survey of College Graduates.

Table 3. Reasons for not being in the labor force, by professional degree

[In percent]

Characteristic	Law		M.B.A.		M.D.		Ph.D.	
	Male	Female	Male	Female	Male	Female	Male	Female
Total not in labor force	7,631	17,314	4,843	9,073	6,362	9,022	1,080	2,058
Retired	4.7	11.2	21.7	.0	2.3	.0	5.0	.0
On layoff	11.4	3.4	1.4	1.6	.0	.0	.0	.0
Student	41.8	23.5	62.4	8.0	87.1	56.3	44.2	5.2
Family responsibilities	2.4	56.3	.0	72.3	1.8	24.2	22.6	61.1
Illness/disability	7.6	2.0	5.5	.8	4.6	4.4	.3	18.0
No suitable job	6.6	3.6	7.4	.0	.0	2.4	16.4	8.6
Did not want work	11.4	23.7	1.4	17.2	.0	5.9	.0	15.7
Other	19.5	15.3	3.5	11.0	2.8	19.7	6.2	28.1

NOTE: This table restricts the population to those with a career age of less than 11 years (that is, those received their most recent or highest degree within

the last 10 years).

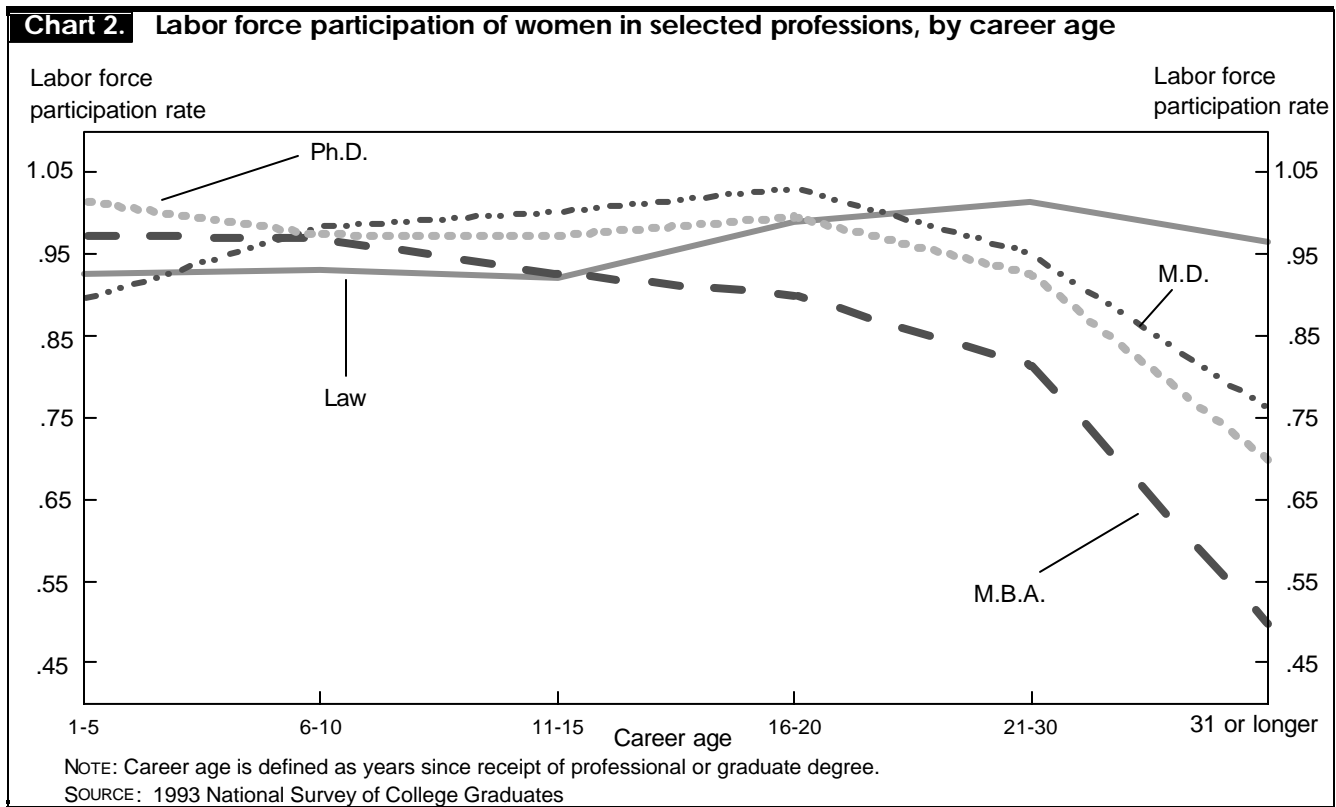
SOURCE: 1993 National Survey of College Graduates.

professional degree holders were not in the labor force (percentages can add to more than 100 percent because respondents were asked to check all the applied). Compared with the other professional fields, law ranks very high in terms of “voluntary” female labor force exit—retired (11.2 percent, a higher percentage retired than other female professionals); student (23.5 percent, second only to M.D.s, of which a large percentage were most likely still doing post-degree specialty training); and “did not want to work” (23.7 percent, first). “Family responsibilities” were more important reasons for M.B.A.s and doctorates to not participate in the labor force. Female law graduates do fare poorly in terms of “layoff from job” (first) and “no suitable job” (second), although these percentages are small.

Another characteristic that would make law attractive to women is the ability to maintain high rates of labor force participation over a career. This is especially important in professions with high training costs, so that one can recover the costs of this training through higher earnings.

Women in law have comparable participation rates with other professions early in their careers, but are able to maintain high levels of participation later in the career. (See chart 2.) The other professions all show steep declines in “late-career” participation.

Finally, the ability to exit and re-enter the workforce is an attractive job attribute for married women, especially those with children. Table 4 contains data on re-entry rates for female professionals over the 5-year, 1988–93 period by career age. When one examines only re-entry into any job, law does not compare favorably with the other professions in early career but has high rates of re-entry in middle and late career (periods in which careers are likely to be interrupted for family reasons). Law becomes even more attractive to women when one restricts the re-entry data to jobs closely related to degree. These data suggest that skill obsolescence and lack of employment opportunity appear to be lower barriers for female law graduates to re-enter the workforce, especially late in their careers.



Salaries

In its most abstract form, economic theory distills occupational choice into comparison shopping for the highest wage. Table 5 contains median earnings data for full-time professionals who have had their professional degree 10 years or less.²¹ Median earnings for early career female law school graduates exceed all other professions. Overall, female law graduates make 92.3 percent of male law graduate earnings; this percentage is surpassed only by female Ph.D.s.²²

When one examines earnings by employer type, a mixed picture emerges. Female law graduates have comparable earnings to men in the private sector (for-profit and not-for-profit), substantially less in State Government employment, and exceed male earnings by 20 percent in the U.S. Government sector.

Data on the workforce in general indicates that men work a longer workweek than women, and this trend holds also for professionals.²³ Table 5 contains data on median hours worked per week.²⁴ Using these data, annual median salaries are adjusted to conform to a 40-hour workweek. These adjusted totals indicate that most of the difference between male and female law school graduate earnings can be explained by workweek length. Further, after this adjustment, law only trails Ph.D.s in terms of relative earnings of women to men.

Why do female professionals in general work fewer hours than men? Although data are not available to answer this question, the National Survey of College Graduates did query respondents on reasons why they were working part time; these responses provide some insight into decisions regarding quantity of labor supplied. As can be seen in table 6, the majority of women work part time by choice (family reasons, student, and did not want to work).

Table 4. Re-entry rates for female professionals, 1988-93

[In percent]

Career age in 1988	Percent of total not working in 1988 moving to employed in 1993			
	Professional degree field			
	Law	M.B.A.	M.D.	Ph.D.
Re-entry into any job:				
1-10 years	48.0	73.7	73.8	45.4
11-20 years	69.5	28.2	70.7	21.8
21 and older	80.5	.0	10.3	13.9
Re-entry into job closely related to degree:				
1-10 years	29.9	37.3	64.3	24.9
11-20 years	65.5	7.3	58.3	.0
21 and older	40.3	.0	6.5	5.7

NOTE: Includes all career ages. Career age is defined as years since receipt of professional or graduate degree.

SOURCE: 1993 National Survey of College Graduates.

Table 5. Median salaries of full-time professionals, 1993

Employer type	Law		M.B.A.		M.D.		Ph.D.	
	Male	Female	Male	Female	Male	Female	Male	Female
Private, for-profit	\$61,000	\$60,000	\$56,000	\$46,800	\$90,000	\$60,000	\$60,000	\$44,720
Private, not-for-profit	32,000	33,956	53,000	45,968	57,000	72,000	44,000	42,000
Self employed	55,000	48,000	36,000	39,600	86,400	75,000	72,000	60,000
Local government	41,000	37,416	44,770	45,916	40,000	70,000	41,600	47,500
State government	39,000	36,664	41,616	42,000	89,000	(¹)	45,000	41,600
U.S. Government	50,000	60,000	48,200	45,000	55,000	(¹)	63,000	55,450
Educational institution	50,000	43,700	35,000	40,000	33,333	32,000	40,000	38,600
Total	54,000	48,000	54,000	45,916	60,000	45,000	44,720	43,100
Median workweek (hours)	50	42	45	40	50	50	45	40
Adjusted total ²	\$43,200	\$45,714	\$48,000	\$45,916	\$48,000	\$36,000	\$39,751	\$43,100

¹ Small number of observations.² Adjusted total salary assumes a 40-hour workweek.

NOTE: This table restricts the population to those with a career age of less than 11 years.

SOURCE: 1993 National Survey of College Graduates.

Table 6. Reasons for working part time, professional employees, 1993

[In percent]

Reason	Law		M.B.A.		M.D.		Ph.D.	
	Male	Female	Male	Female	Male	Female	Male	Female
Total, professionals working part time	7,225	17,431	5,789	7,173	3,535	11,162	2,654	7,370
Retired7	.8	29.0	(¹)	1.6	(¹)	4.6	4.7
Student	47.7	14.9	24.5	8.6	24.5	3.4	28.3	8.5
Family responsibilities	2.4	61.2	14.6	61.6	(¹)	54.7	8.5	49.1
Illness/disability	(¹)	1.0	(¹)	1.3	5.2	13.2	2.0	(¹)
No suitable job	39.1	10.6	40.8	9.2	21.9	8.9	35.8	20.1
Did not want full-time work	8.0	31.1	22.7	42.2	40.5	36.7	28.3	28.3
Other	14.8	12.0	6.2	28.9	26.4	10.0	22.8	9.9

¹ Small number of observations.

the last 10 years).

NOTE: This table restricts the population to those with a career age of less than 11 years (that is, those received their most recent or highest degree within

SOURCE: 1993 National Survey of College Graduates.

Table 7. Age-earnings profiles of full-time professionals

Characteristic	Median earnings							
	Law		M.B.A.		M.D.		Ph.D.	
	Male	Female	Male	Female	Male	Female	Male	Female
Career age:								
1-5 years	\$46,000	\$40,000	\$50,500	\$44,400	\$36,000	\$32,500	\$40,000	\$40,000
6-10 years	61,600	59,000	60,000	50,900	86,000	75,000	49,100	46,634
11-15 years	73,900	55,416	61,700	52,000	104,000	86,400	54,000	52,896
16-20 years	85,000	76,000	65,000	49,000	116,200	90,000	60,000	54,000
21-30 years	97,000	79,437	70,000	48,000	110,000	90,000	60,000	65,000
More than 30 years	90,000	90,000	90,000	(¹)	100,000	84,000	70,000	52,000
Estimated lifetime earnings (in millions) ²								
Total	3.203	2.846	2.786	1.942	3.811	3.160	2.316	2.138
Present value	1.225	1.071	1.086	.831	1.465	1.224	.908	.866
(5 percent discount rate)								

¹ Small number of observations.² Full-time workers only. Lifetime earnings assumes 40-year worklife and \$48,000 for female M.B.A.s over career age 30.

NOTE: Data are for full-time workers only. Career age is defined as years since receipt of professional or graduate degree.

SOURCE: 1993 National Survey of College Graduates.

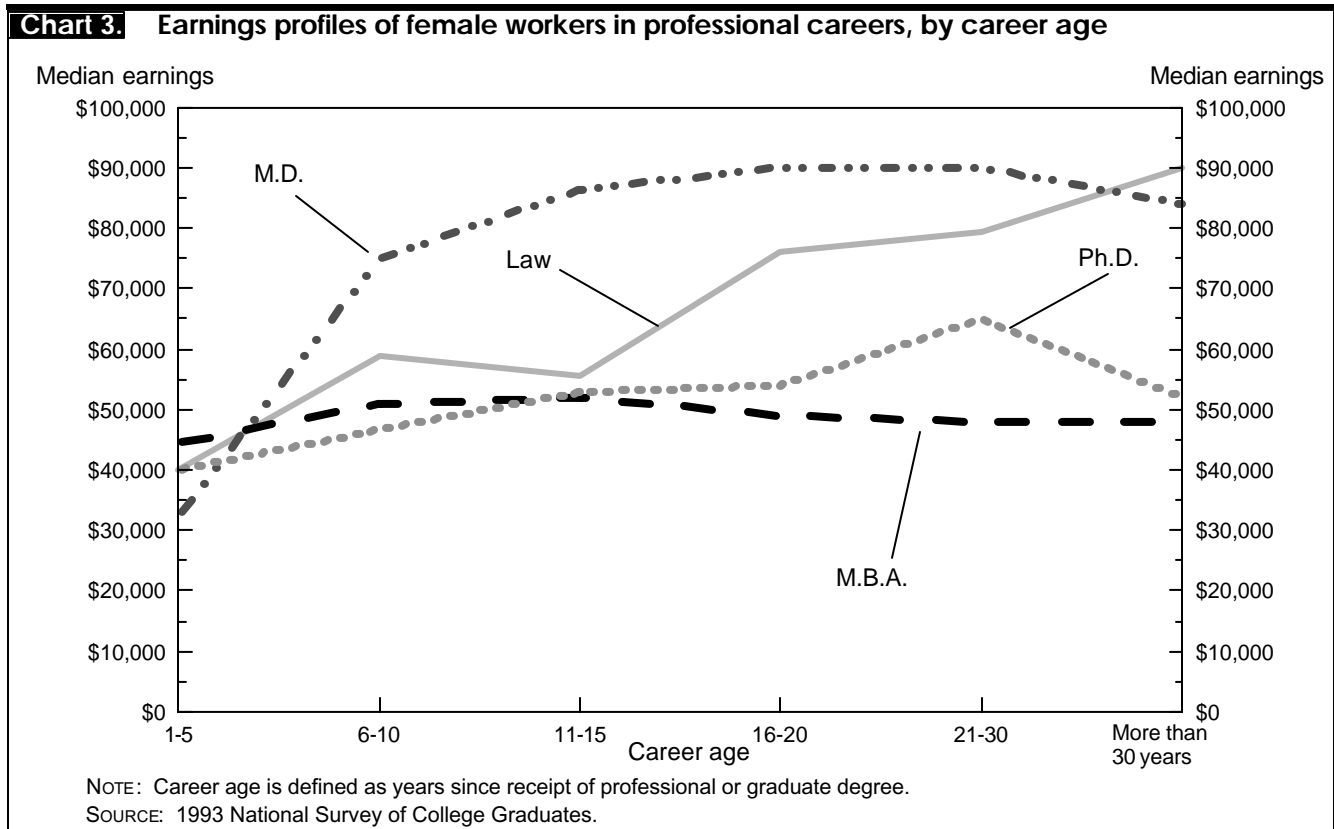
Earnings early in one's career are important, but lifetime earnings are the basis for undertaking the large investments of time and money for professional school. Table 7 contains data on median earnings by career age. Although these data are cross-sectional, one can infer lifetime age-earnings profiles from them. One interesting attribute of female law graduate earnings is the relatively "steep" age-earnings profile compared with other female professionals save M.D.s. (See chart 3.) This implies two things regarding female law graduates: 1) there is little skill obsolescence and penalty for workforce exit and re-entry (consistent with the labor force re-entry data in table 4); and 2), law has high returns to experience.²⁵

What are the expected lifetime earnings of female professionals? Lifetime earnings can be estimated from the career age-earnings cross-section in table 7. Using the assumption of a 40-year working life, a 1993 male law graduate would expect to earn \$3.2 million—and a female graduate \$2.8 million—over their lifetime.²⁶ Female lifetime law graduate earnings are exceeded only by female M.D.s. Discounting this future earnings stream to present value does not change these rankings.

Returns to schooling

While information regarding salaries and lifetime earnings provide information about the relative economic benefits of a career, they have no cost component. Occupational choice theory is grounded in the concept of human capital, which views education as an investment that results in higher future income. A rational individual would thus compare the costs and benefits of alternative careers in order to make a career choice.

The benefits of professional school are the increased earnings associated with a professional career, *ceteris paribus*. A female M.D. expects to make about \$3.2 million over her working life, compared with the lifetime earnings of \$2.8 million for a female law graduate. (See table 7.) However, these earnings are gross benefits, and the decision to undertake a professional career is based upon the increased (or net) earnings one would make over not attending professional school. Thus, one must consider what one's earnings profile would be without a professional degree compared to one with a degree. This is further complicated by the different earnings profiles that men and women have; lifetime earnings also vary with bachelor-degree field.



Costs of professional school are composed of direct costs (tuition, fees, books and so forth); opportunity costs of foregone earnings while in school; and psychic costs associated with the stress and difficulty of professional school (the “paper chase”). The largest component is usually the opportunity costs of lost income while in school; this would vary by individual based upon such characteristics as race, sex, age, baccalaureate institution, and bachelor-degree field.

To compare the returns to professional school training for women, table 8 estimates costs and benefits within this human capital framework:

1. Average annual direct costs. There are two components to direct costs: tuition, and books and other fees. The annual tuition data are for 1993 and are from the National Center for Education Statistics. These tuition data are the average of all private and public institutions (in-state tuition) weighted by number of degrees granted. To cover books and other fees, \$1,000 was added annually to these figures. These data were available for law, graduate school (used for doctorates in table 8), and medical school. Estimates for tuition costs for M.B.A. programs were made based upon tuition figures from *Peterson’s Guide to Professional Schools (1999)*.²⁷ Student support, with the exception of doctoral education, was ignored. In graduate school, a large number of students receive some support that re-

duces the direct costs of education. Although data on the average level of support are not available, the National Science Foundation estimates that 57 percent of graduate students in the social and behavioral sciences receive some sort of support. As a crude adjustment to the direct costs of graduate school, it was assumed that the net direct costs, on average, were therefore reduced by 57 percent.²⁸

2. Foregone earnings (opportunity costs). These costs are based upon the salaries individuals would have earned had they not been in professional school. These salaries are thus based on sex, undergraduate degree, and also length of training period. Using the NSCG data, average bachelor-degree salaries by sex, field of study, and career age were calculated (for example, median starting full-time salary for a woman with a political science bachelor degree; median second-year salary for the same individual). These median salaries were then weighted by the mix of undergraduate degrees held by those attending professional schools. For example, baccalaureate origins for law school graduates were 40 percent social science/history degrees; 16.9 percent business degrees; and 2.4 percent engineering degrees. Thus the average annual forgone earnings for women and men differ for law school because earnings vary by sex and undergraduate study field.

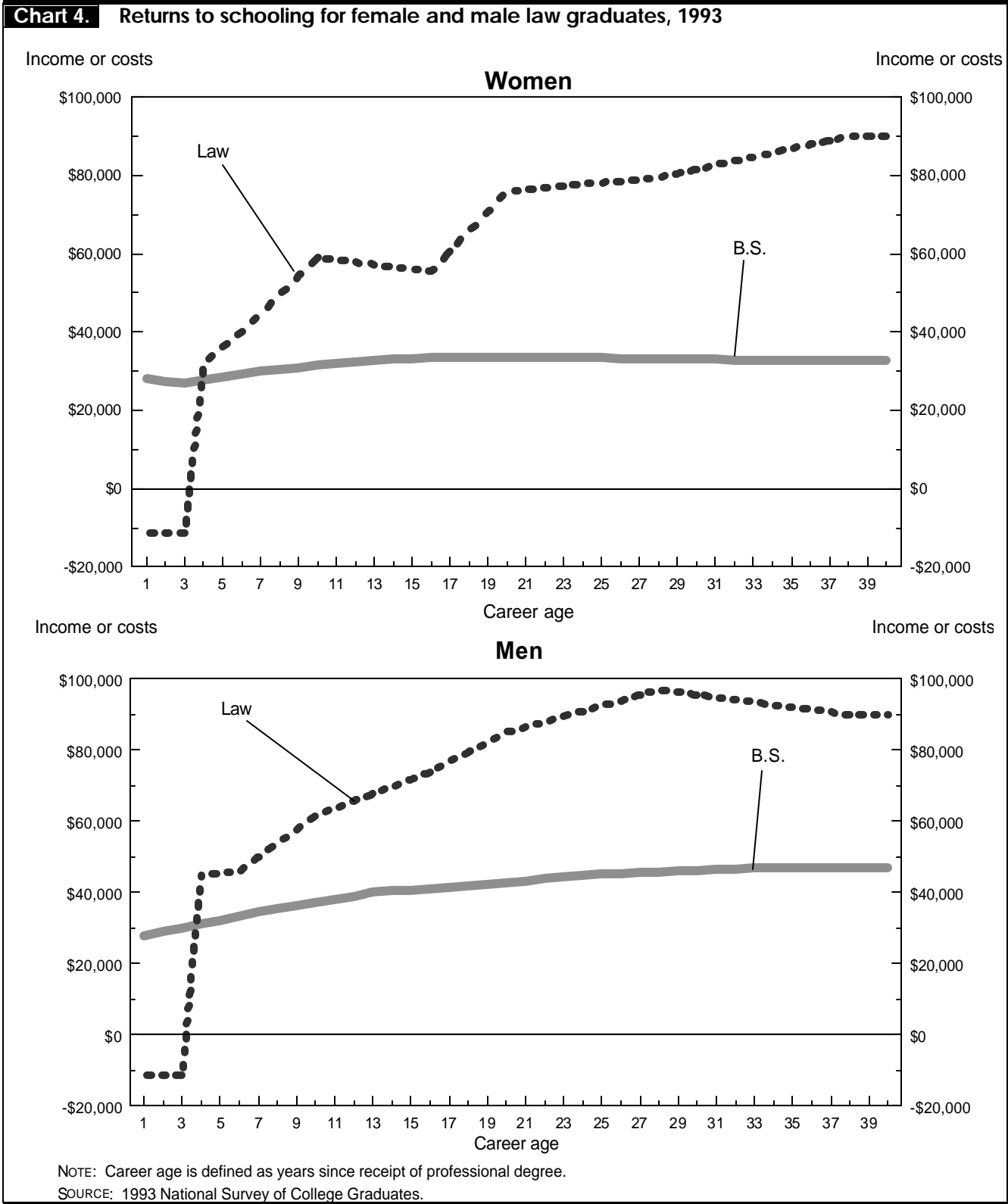
Table 8. Estimated rates of return to professional degrees by gender

Employer type	Law		MBA		M.D.		Social Science/Psychology Ph.D	
	Male	Female	Male	Female	Male	Female	Male	Female
Costs of training:								
Average annual direct costs	\$11,460	\$11,460	\$7,044	\$7,044	\$13,265	\$13,265	\$2,771	\$2,771
Average annual foregone earnings	28,908	27,390	37,097	33,987	31,600	30,134	31,641	28,502
Total	40,368	38,850	44,141	41,031	44,865	43,399	34,412	31,273
Training period (years)	3	3	2	2	4	4	8	8
Total training costs	\$121,104	\$116,550	\$88,282	\$82,062	\$179,460	\$173,596	\$275,296	\$250,184
Lifetime benefits to training:								
Total Bachelor’s earnings	\$1,568,070	\$1,200,394	\$1,825,805	\$1,355,509	\$1,556,777	\$1,271,354	\$1,401,662	\$1,054,546
Total professional earnings	2,941,000	2,586,013	2,617,000	1,850,700	3,438,700	2,845,500	1,773,500	1,708,250
Net lifetime benefits to training	1,372,931	1,385,620	791,196	495,191	1,881,923	1,574,147	371,838	653,704
Internal rate of return to training								
(percent)	15.8	14.8	14.0	12.5	13.6	12.6	1.3	4.6
Degree completion median age (years) ..	26	27	28	28	27	25	36	37

NOTE: Career age is defined as years since receipt of professional or graduate degree.

SOURCES: Estimated by the author using data from the following sources: Data on earnings and completion age from the 1993 National Survey of College Graduates. Direct training costs from U.S. Department of Education, “Digest of Education Statistics” (Washington, DC: Department of Education, 1998), table

314 and the authors estimates for M.B.A. degrees. Time to degree for Ph.D.s from the National Science Foundation Computer Aided Science and Policy Analysis Research database. Direct costs for Ph.D.s assumes average student receives 57 percent support; this estimate is based upon the National Science Foundation publication “Graduate Students and Postdoctorates in Science and Engineering Fall 1997” (Washington, DC: National Science Foundation, 1999), table 23.



3. Lifetime benefits to training. To calculate the net benefits to professional school attendance, lifetime earnings for bachelor-degree only and for professional degrees were calculated using data from the NSCG. The earnings stream for the bachelor-degree only was based upon baccalaureate mix of those who attend a given professional school by sex. All data assumed full-time employment for a 40-year career life.²⁹

Results. Table 8 contains the results of this analysis. For women attending law school, the total investment for the law degree is estimated at \$116,550 in 1993. The majority of this cost is composed of the average annual full-time earnings that would be given up for the 3-year training period (average of \$27,390 per year). On the benefit side, a female bachelor-degree holder would expect to earn approximately \$1.2 million over her working life; a female law graduate, \$2.6 million. The net benefits (\$1.4 million) of law school thus represent an internal rate of return of 14.8 percent per year on the initial investment of \$116,550. These data are summarized in chart 4; this chart also summarizes the data for male law school graduates.

Male age-earnings profiles are much steeper than those of women's. Over their career life, a male law school graduate's expected earnings are approximately 14 percent more than women. However, when one examines rates of return, this difference is mitigated because women have lower costs of training and also lower bachelor-degree earnings. As a result, female net lifetime earnings exceed that of men's. However, because most of these net benefits accrue in late career, the internal rate of return on professional school investment is lower for women (14.8 percent) than men (15.8 percent). Part of this difference is driven by mid-career decline in law school graduate earnings for women. This decline occurs at career age 10–13 (biological age “thirty-something”), and is likely the result of labor force interruptions for family reasons (this is consistent with the labor force participation data in chart 2). Overall, the rate of return to a female law degree exceeds female professionals in other fields.

Doctorate degrees in social science and psychology have the highest training costs and lowest rates of return of any of

the professional degrees. These statistics are primarily driven by the long time it takes to earn a Ph.D., averaging 8 years in 1993 for these disciplines. In addition, there is considerable risk involved in pursuing these degrees—data indicate that approximately half of all doctoral students in these fields fail to complete degrees.³⁰

Why has an explosion occurred in the number of female law graduates beginning in the 1970s? The analysis in this article finds that the legal profession is very attractive to women compared with other professional fields in terms of labor force participation, career re-entry, earnings, and returns to schooling.

In terms of labor force participation, female law graduate participation rates are not higher than the other professional fields in early career. However, a law degree appears to allow for greater ease in re-entry into the field after periods of nonparticipation, especially for jobs that are closely related to the degree field. Also, the rates of labor force participation over a working career are very high for female law graduates versus the other professional fields.

When one compares early career earnings of women in different professions, law ranks first. Further, when these median salaries are adjusted to reflect length of workweek, female law graduate earnings exceed that of male law graduates. Finally, female law graduate earnings have a relatively steep profile over the working life compared with other professional fields that show decline in earnings, especially in later career. Expected lifetime earnings of female law graduates are exceeded only by female M.D.s.

When one considers both the costs and benefits of professional school attendance, an even stronger economic case for law school emerges. Using a human capital analysis, the internal rate of return on a law school education averaged a 14.8-percent annual rate for women, which exceeded returns to female human capital investment in the comparison fields.

There are substantial economic reasons why women have been attracted to law during the last three decades. As female participation in higher education grew, law appears to have been able to attract a disproportionate share of these new professional school entrants based upon favorable economic factors compared with other professional fields. □

Notes

ACKNOWLEDGMENT: The author acknowledges the helpful comments and suggestions of Professor Lewis A. Kornhauser of New York University, Professor Thomas C. DeLeire of the University of Chicago, and Professor R. Kim Craft of Southern Utah University. Funding for this research was provided by the Law School Admission Council. The views expressed here are solely those of the author and do not necessarily reflect those of the institutions or persons listed above.

¹ Marjorie Williams, “A Women’s Place is at the Bar,” *The Washington Post*, April 4, 2001, p. A23.

² These data are from the National Center for Education Statistics, as reported on the National Science Foundation CASPAR Web site www.nsf.gov/sbe/srs/stats.htm.

³ In 1966, social science (10.9 percent female) and psychology (20.9 percent female) doctorates are fields that already had high percentages

of women; this high rate of feminization in the base year limits the potential growth in the index number.

⁴ Sherwin Rosen, "The Market for Lawyers," *Journal of Law and Economics*, October 1992, p. 218.

⁵ See the Current Population Survey, Bureau of Labor Statistics, on the Internet at <http://data.bls.gov/servlet/SurveyOutputServlet>

⁶ These data are from the National Center for Education Statistics, as reported on the National Science Foundation CASPAR Web site www.nsf.gov/sbe/srs/stats.htm.

⁷ Wynn R. Huang, "Gender Differences in the Earnings of Lawyers," *Columbia Journal of Law & Social Problems*, vol. 30, 1997, p. 267.

⁸ Ibid.

⁹ Paul W. Mattessich and Cheryl W. Heilman, "The Career Paths of Minnesota Law School Graduates: Does Gender Make a Difference?" *University of Minnesota Law Review*, vol. 9, 1990, p. 59.

¹⁰ Rosen, *Journal of Law and Economics*.

¹¹ Robert L. Nelson, "The Futures of American Lawyers; A Demographic Profile of a Changing Profession in a Changing Society," *Case Western Reserve Law Review*, vol. 44, 1994, p. 379.

¹² John Hagan and Fiona Kay, *Gender in Practice* (New York, Oxford University Press, 1995.)

¹³ Robert G. Wood, Mary E. Corcoran, and Paul N. Courant, "Pay Differences Among the Highly Paid: The Male-Female Earnings Gap in Lawyers' Salaries," *Journal of Labor Economics*, vol. 11, 1993, p. 417.

¹⁴ Richard H. Sander and E. Douglas Williams, "Why Are There So Many Lawyers? Perspectives on a Turbulent Market," *Law & Social Inquiry*, vol. 14, 1989, p. 431.

¹⁵ The NSCG is a re-survey of 1990 Census recipients who reported a bachelor degree or higher from any source. More information about the NSCG survey methodology can be found on the Internet at <http://www.nsf.gov/sbe/srs/snscg/cgmeth.htm>

¹⁶ 1993 National Survey of College Graduates.

¹⁷ Ibid.

¹⁸ Gary S. Becker, "A Theory of the Allocation of Time," *Economic Journal*, vol. 75, 1965.

¹⁹ Ibid., p. 493.

²⁰ "Married with children" composes the following percentages of women by professional degree (all career ages): law, 40.9 percent; M.B.A., 42.9 percent; M.D., 47.6 percent; and Ph.D., 38 percent.

²¹ It should be noted that many M.D.s are still in residency during early career and have relatively low earnings.

²² This finding is very close to Wood et al. (1993), who found that 5 years after graduation female Michigan Law graduates earned 90 percent of males.

²³ The Bureau of Labor Statistics estimates that the average workweek for all professionals in 1997 was 45.7 hours for men and 43.3 hours for women. See *Employment and Earnings*, vol. 45 (Bureau of Labor Statistics, January 1998), table 23.

²⁴ These data are from the 1990 census.

²⁵ Wood et al. (1993) found little earnings penalty to female law graduates who took time off to care for children. However, they found that part-time work had a "permanent, and sizeable reduction in earnings capacity" for women.

²⁶ Women on average have shorter working lives than men. 1994 data indicate that at age 25, female college graduates have an expected working life of 31.8 years compared to 35.8 years for men. See Ronald G. Ehrenberg and Robert S. Smith, *Modern Labor Economics* (New York, Addison-Wesley, 2000), table 9.2.

²⁷ *Peterson's Graduate Programs in Business, Health, Information Studies, Law, and Social Work*, (Princeton, NJ: Peterson's Guides, 1999). These tuition data were deflated to 1993 values and weighted by private and public enrollment in M.B.A. programs for 1993.

²⁸ It should be noted that the results are not very sensitive to this assumption for two reasons: first, direct costs are less than 10 percent of costs of training; and second, the returns to investment are very low for graduate and professional school, and relatively insensitive to direct costs estimates.

²⁹ Not all career working lives are the same, and data show that women have shorter careers to recover human capital investments than men (see endnote 26). However, discounting reduces the present value of earnings beyond 35 years to such small amounts that this assumption is not critical.

³⁰ Ronald G. Ehrenberg, "The Flow of New Doctorates," *Journal of Economic Literature*, vol. 30, 1992, table 2.3.