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# How Do Career-Family Tradeoffs Differ Across the Professions?

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## Motivation from national trends:

- Rising female share of college attendees and graduates;
  - Age at first marriage increased for college graduates;
  - Deferred births; rising share of college women having births in their thirties; increased fraction with no births by 45 years;
  - Increased share of women in various professions (e.g., M.D., J.D., M.B.A., Ph.D.);
  - Implications for career and family tradeoffs, particularly among the educational elite;
  - Popular press speculation about “opting out” and the squandering of elite college education by women.
  - We will examine these issues using the Harvard & Beyond and U. of Chicago GSB MBA samples
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# Career and Family Issues

Despite the reversal of gender gap in higher education and gender parity in elite colleges and professional degree programs, there still exists a substantial gender gap in terms of “career” achievement:

- Under-representation of women in top business and finance echelons
- Under-representation of women in tenured faculty positions, law partnerships, science as well
- Substantial remaining mean and median gender earnings gap for all, college, and post-college trained workers

# Why?

- Not enough time for changes to be reflected in professional achievement -- pipeline issue
- (Unobserved) skill differences
- Taste differences
- Discrimination/glass ceiling
- Lack of commitment to professional career
- Opting out/career break/slowing down because of family/kids issues
- How do these factors differ across career paths? MBAs vs. MDs vs. JDs vs. PH.D.s
- What about the educational elite with best opportunities?

## 2005 Annual Earnings, Harvard and Beyond Dataset: Full-time Full-year Workers

	Females	Males
Median earnings	\$112,500	\$187,500
Mean earnings	\$216,540	\$ 443,876
% more than \$100K	58.6%	77.6%
% more than \$250K	15.6%	36.9%
% more than \$1 million	2.5%	8.2%

## 2005 Annual Earnings, March CPS, U.S. National Full-time Full-year Workers, College Graduates, 25+

	Females	Males
Median earnings	\$46,948	\$66,166

Female/Male Log Wage Differentials for College Graduates  
 Pooling Those with 15, 25, and 35 years of potential experience  
 For FTFY Workers in 2005

Control only for experience	-0.373 in March CPS -0.537 in H&B
Control exp, adv degree	-0.366 in March CPS -0.546 in H&B

# Sources of Gender Gap in Earnings in H&B

## Sample – Goldin and Katz (2008)

- **Hours/Weeks** – 88% of Males vs. 62% of Females are FTFY among those with positive earnings
- **College Major**: Economics pays 33 log point premium vs. average major with basic controls and 19 log point premium adding occupation; 12% of males vs. 4% of females in economics; English has 13 log point deficit and 11% of females vs. 6% of males in English
- **Graduate Education**: 17% of males vs. 12% of females with MBAs
- **Time Out of Work**: 43% of females vs. 23% of males have at least one 6+ month out of work spell
- **Occupation** – 9% of males vs. 3% of females in financial sector; 15% vs. 3% for cohort 3 – 1.08 log points (195%) premium for finance with full set of controls

Table 2: Annual Earnings in the Harvard and Beyond Sample: Gender Gap and Determinants

	(1)	(2)	(3)	(4)	(5)
Female	-0.852 (0.031)	-0.517 (0.029)	-0.396 (0.028)	-0.359 (0.028)	-0.301 (0.026)
M.B.A.			0.518 (0.038)	0.525 (0.038)	0.264 (0.038)
J.D.			0.380 (0.034)	0.363 (0.033)	0.182 (0.043)
M.D., D.D.S., D.V.M., etc.			0.378 (0.041)	0.333 (0.041)	0.160 (0.069)
Ph.D.			-0.216 (0.034)	-0.237 (0.033)	-0.090 (0.035)
Any no work spell				-0.253 (0.032)	-0.246 (0.030)
Share of no work spells				-0.587 (0.132)	-0.429 (0.125)
Graduation class dummies	yes	yes	yes	yes	yes
FTFY status dummies	no	yes	yes	yes	yes
Controls	no	no	yes	yes	yes
Occupation dummies	no	no	no	no	yes
R <sup>2</sup>	0.123	0.304	0.419	0.433	0.509
Number of observations	6207	6207	6207	6207	6207

*Source:* Harvard and Beyond dataset (see text).

*Notes:* Each column is a separate regression. The dependent variable in all regressions is the natural log of annual earnings in year 2005. Controls include college grade point average (GPA), SAT math, SAT verbal, missing variable indicators for GPA and SAT, 48 college concentration (major) dummies, dummy variables for other masters and other professional degrees; there are three full-time full-year (FTFY) status dummies and 19 occupation dummies. Standard errors are in parentheses.



## Ln (Annual Earnings) Regressions: Gender Gap and Determinants

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# Career/Family Trade-Offs for H&B Females

- Apparent differences across occupations in ability of women to combine career and family.
- MDs, PhDs take briefest non-employment spells after having a child and continue to have high FTFY rates even with 2+ kids, JDs next, then MBAs, other masters and no graduate degrees
- Large discrete (nonlinear) and persistent earnings loss to any career interruption (of 6+ months) for MBA but not for MDs where no discrete impact just linear in lost experience
- Log Earnings Penalty to Standardized Time Out of Work (0.1 of time since graduation or 18 months for 1989-92 BAs):

MBA -0.53

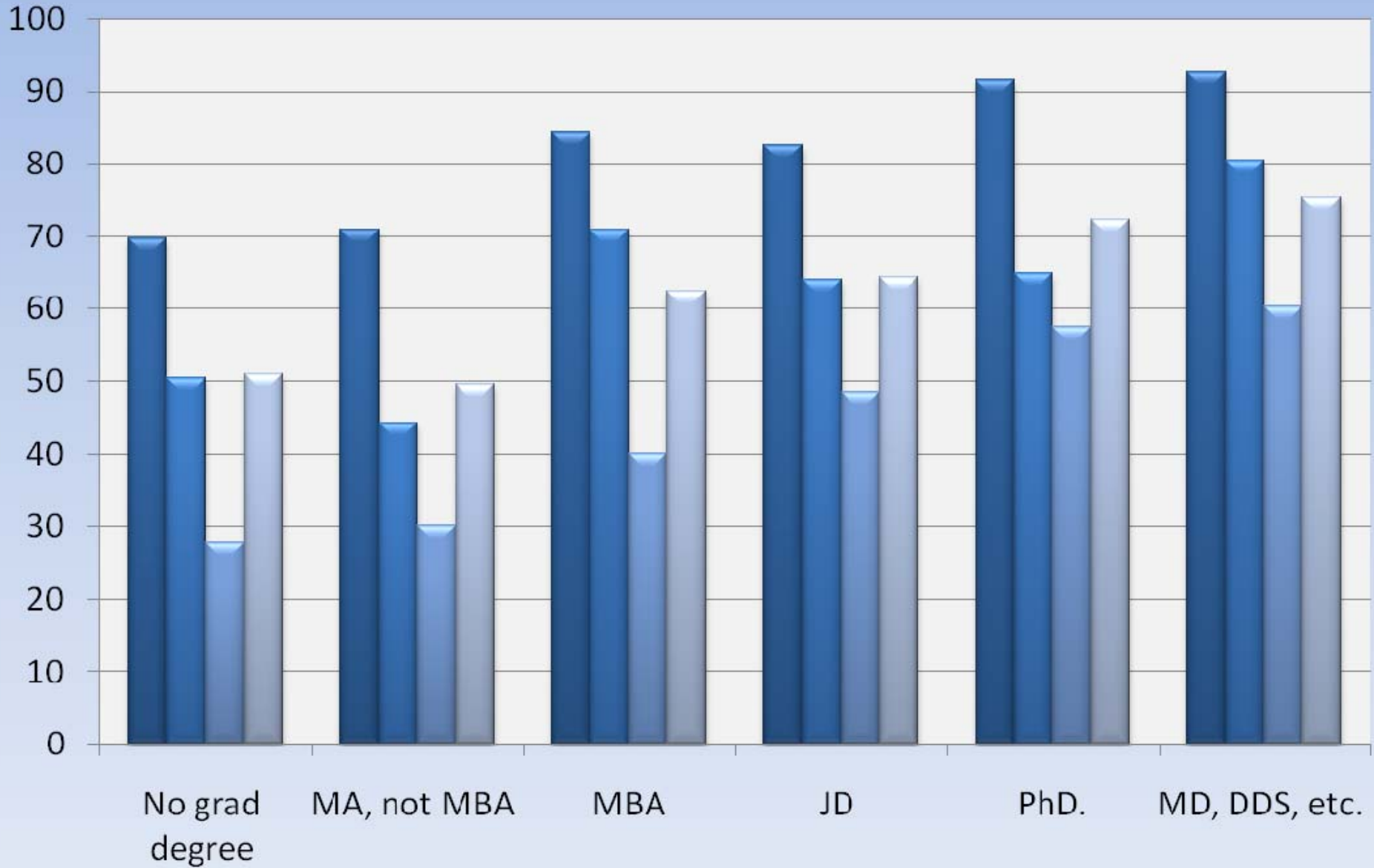
JD -0.34

PhD -0.34

MD -0.16

# Full-Time, Full-Year, 15 Years Out by Degree

■ No children   ■ One child   ■ Two plus children   ■ All



## Employment at 15 Years after Graduation: H&B Women

	Percent working full-time full-year, 15 years after graduation			
	No children	One child	Two plus children	All
Education				
No graduate degree	69.6	50.4	27.8	50.9
Masters, not M.B.A.	70.9	44.3	30.2	49.6
M.B.A.	84.4	70.9	40.0	62.4
J.D.	82.5	64.1	48.5	64.3
M.D., D.D.S., etc.	92.7	80.5	60.4	75.4
Ph.D.	91.5	64.9	57.5	72.4

# Career-Family Tradeoffs in Chicago MBA Sample

- Log Annual Earnings Wage penalty at 8 years out from an out-of-work spell of 1.5 years:
  - .461 overall
  - .389 for consulting
  - .601 for investment banking and management
- Quite similar to costs of career interruptions for MBAs in H&B sample for 1989-92 cohort
- Large Discrete, Persistent earnings cost to any career interruption =  $-.23$  log points
- Impact of first birth on career outcomes is negative for women and positive for males

# Career-Family Tradeoffs for Chicago MBAs

- Labor Market Impacts of First Birth for Chicago MBA Females
  - Employment rate:  $-.09$  first two years and  $-.14$  at 5 or more years
  - Log (Ann Earnings):  $-.13$  in first two years and  $-.25$  at 5 or more years
  - Negative Impacts of children on career are larger for women with more-educated and higher-earning spouses
  - Women shift into job functions with lower hours and more hours flexibility
  - Move into self-employment with increase in part-time work
  - Larger share of MBA women with children work part-time than “opt out” of labor force for both H&B cohort 3 and for Chicago GSB sample
  - Large increase in family reasons listed for non-work spell and for employer/job change vs. career reasons

# Career Family Trade-Offs Across the Professions

- What accounts for variation in labor market costs of taking time off (out-of-work) spells across professions (MD vs. JD vs. Ph.D. vs. MBA)?
- “Inherent” differences in productivity costs of job flexibility across different fields
- Career commitment differences
- Critical mass in health professions leads to change in organization of work (medical groups, veterinary groups)
- Differences in spouses’ earnings
- International differences in flexibility and part-time work in the professions – the Netherlands (part-time lawyers and physicians) vs. the United States



# Transitions Project: Ongoing Research

- Harvard and Beyond – narratives, more detailed information on family and career histories and college experiences; surveys linked to transcript data; adding reunion book data
- College and Beyond – 30+ elite colleges – 1980 and 1993 graduating classes – 1996 survey, being linked to Social Security earnings histories to look at earnings dynamics by gender, college major, graduate degrees
- National Survey of College Graduates: 1993 and 2003
- Chicago GSB MBA Alum Survey with Marianne Bertrand
- CPS and Census National Trends