

# Online Appendix for “The Effect of Title IX on Gender Disparity in Graduate Education” by Nayoung Rim

## 1 Elite Colleges became Co-Educational in 1969

Starting in the late 1960s, many elite colleges and universities became co-educational. This section examines the possibility that female students at these newly co-ed schools may be more likely to go to graduate school, thereby explaining the discontinuity in graduate fields of study. As the populations that can explain the sudden break in graduate-field convergence are those who started undergraduate studies in academic year 1968-69 or academic year 1969-70, I focus my analysis on undergraduate institutions that changed from male to co-ed or coordinate schools in 1969.<sup>1</sup> According to the HEGIS Fall Enrollment data, there are 32 such schools enrolling a total of 2,043 women in Fall 1969 (Table 1). Unfortunately, as neither HEGIS nor NSCG data contain information on where students completed their undergraduate *and* graduate studies, I am unable to examine whether it is the women who graduated from newly co-ed/elite schools who are driving the observed distributional change in graduate fields of study.

One test I can conduct is to examine whether the female students at newly-coed undergraduate institutions are intrinsically different from their female peers at “always co-ed” institutions. Specifically, I can compare the distribution of B.A. majors between those at schools that became co-ed versus those at schools that were always co-ed. This will provide insight into whether there is a difference in the types of female students between the two types of undergraduate institutions. To be sure, this is not a definitive test as they may still have different career aspirations with the same major (and therefore be more likely to apply to graduate school), but it is the best I can do with the available data.

Figure 1 plots the distribution of majors of female B.A. degrees conferred in Spring 1972 and Spring 1973 between the schools that became co-ed in 1969 versus schools that were always coed in my sample.<sup>2</sup> The majors are listed along the x-axis in rank order of expected salary. B.A. majors with higher expected salary are listed on the left (e.g., Natural Resources) and those with lower expected salary are listed on the right (e.g., Education).

The first noticeable fact is that at both types of institutions, very few women are majoring in the traditionally male-dominated degrees.<sup>3</sup> This is an important point as the main results find that the sudden change in graduate-field distribution is driven by female entry into previously male-dominated fields. There are some differences between female majors at these two types of institutions, most notably in Education and Social Sciences. Specifically, a young woman at a newly-coed school is much less likely to major in Education, which was a very popular undergraduate major for women at the time. At the same time, she is more likely to major in Social Sciences.

Although I am unable to examine whether young women at newly-coed schools were more likely to apply to and attend graduate school, this analysis indicates that - even if that were so - they were not necessarily

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<sup>1</sup>I am unable to check whether an institution became co-ed in 1968 since my HEGIS enrollment data start in 1968.

<sup>2</sup>Assuming a four-year undergraduate degree, those who began undergraduate studies in Fall 1968 or Fall 1969 would have graduated in Spring 1972 or Spring 1973.

<sup>3</sup>Majors are classified as male-dominant or female-dominant according to the major’s share of females between 1962 and 1970.

Table 1: Enrollment in 1968 for the 32 Institutions that became Co-educational in 1969

Institution Name	BA Women	BA Men
FAIRFIELD UNIVERSITY	0	1,838
TRINITY COLLEGE	0	1,204
WESLEYAN UNIVERSITY	0	1,315
YALE UNIVERSITY	0	4,018
CAPITOL INST TECHNOLOGY	155	174
COLUMBIA THEOLOGICAL SEM	14	1
GORDON MILITARY COLLEGE	47	325
LEWIS COLLEGE	102	1,431
LUTH SCH THEOLOGY CHICAGO	2	2
TOLENTINE COLLEGE	0	67
LOUISVL PRESB THEOL SEM	4	1
SAINT FRANCIS COLLEGE	4	609
ASSUMPTION COLLEGE	0	734
HELLENIC COLLEGE	1	90
LEICESTER JUNIOR COLLEGE	2	291
SAINT MARY'S COLLEGE	3	940
CONCORDIA SEMINARY	22	2
ROCKHURST COLLEGE	60	835
PRINCETON UNIVERSITY	0	3,252
SIENA COLLEGE	226	1,455
ASSUMPTION COLLEGE	0	75
KENYON COLLEGE	0	813
XAVIER UNIVERSITY	54	1,983
FAITH THEOLOGICAL SEM	0	0
FRANKLIN-MARSHALL COLLEGE	0	1,697
GANNON COLLEGE	497	1,992
CITADEL MILITARY C OF SC	0	2,062
LUTHERAN THEOL STHN SEM	0	0
UNIVERSITY OF THE SOUTH	0	795
EPIS THEOL SEM SOUTHWEST	2	0
MILWAUKEE SCH ENGINEERING	848	1,502
BEXLEY HALL	0	0
<b>Total</b>	<b>2,043</b>	<b>29,503</b>

Source: HEGIS 1968-1969 Fall Enrollment data.

pursuing graduate degrees in the fields that saw the greatest change.<sup>4</sup>

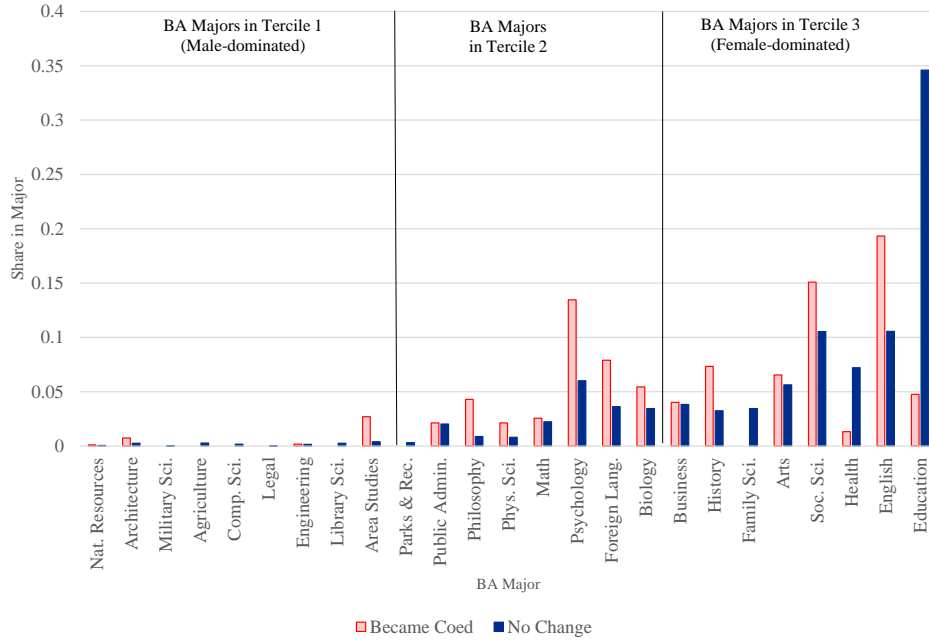
## 2 Vietnam War: End of Draft Deferments for Ph.D. studies in 1968

In this section, I discuss the argument that the end of blanket deferments for graduate school in 1968, particularly for doctoral programs, may have subsequently increased female enrollment in Fall 1968 or Fall 1969 and manifested in an effect in Spring 1974 or Spring 1975 (assuming it takes six years to complete a Ph.D.). Support for this alternative explanation is found in Singer (1989) and in Chiswick, Larsen, and Pieper (2010), which find a positive relationship between male doctoral degrees and the Vietnam War.

To examine this alternative explanation, I follow the methodology in Singer (1989) and plot the ratio

<sup>4</sup>This is assuming that B.A. major is closely related to graduate degree field of study.

Figure 1: Distribution of Female B.A. Majors by School Co-ed Status in 1969



Source: HEGIS 1968 Fall Enrollment data and 1972-1973 Earned Degrees data.

Notes:  $N = 786,012$ . B.A. majors are categorized into terciles based on the major's mean share of females between 1962-1970. Those in Tercile 1 have the lowest share of females ("male-dominated") and those in Tercile 3 have the highest share of females ("female-dominated"). Expected salary for B.A. major is calculated using everyone who majored in that field as an undergraduate, even if the student subsequently attended graduate school.

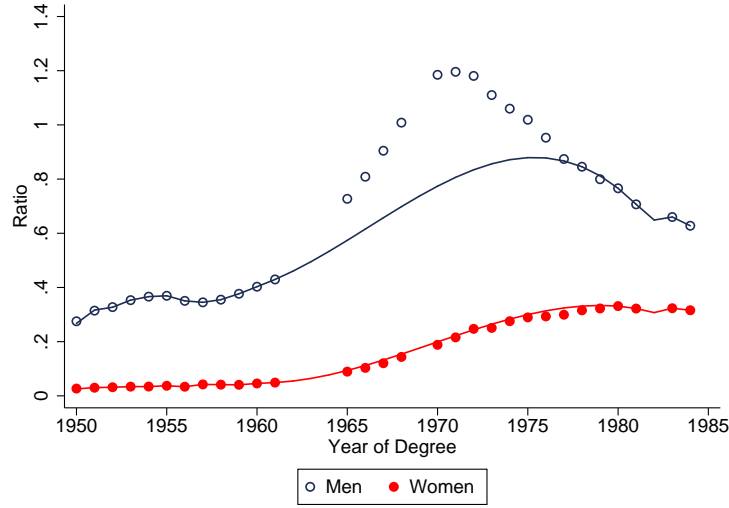
of awarded Ph.D.s to the civilian population aged 25-44 over time. To obtain the total number of awarded doctoral degrees, I use Harmon and Soldz (1963) for data between 1950 and 1962 and HEGIS Earned Degrees surveys for data between 1965 to 1984.<sup>5</sup> I obtain population counts from Census and Current Population Surveys.

Figure 2 clearly shows a marked increase in male Ph.D.s between 1965 and 1975, which overlaps with the years of the Vietnam War. In fact, the pattern is very similar to that in Singer (1989). The solid lines are estimated growth-curves that would have occurred in the absence of the Vietnam War draft effect. They were estimated by a spline regression using data points from 1950-1962 and 1980-1984. The distance between the actual data points and the estimated growth-curve for men highlights the fact that men were responding to the draft by pursuing doctoral degrees. In contrast, we do not see a reaction in women's Ph.D. degree obtainment. If the end of deferments for Ph.D. programs in 1968 resulted in an increase in female enrollment, then we would expect to see an inflated increase in degree obtainment relative to the estimated growth-curve. However, the data points for women lie exactly along the estimated growth-curve.

I would like to reiterate that I agree with the literature that the Vietnam War and its draft deferment policy had an impact on male educational choices. The evidence on male enrollment in undergraduate studies, especially, is very convincing. However, after a close examination of the data and timing, I believe there is reasonable doubt that the end of the deferment policy resulted in the large discontinuity in convergence trend between male and female graduate-field distributions.

<sup>5</sup>Note that data for 1969 and 1982 are missing in HEGIS surveys.

Figure 2: Ratio of Awarded Ph.D.s to Civilian Population



Source: 1950-1961: Harmon and Solz, 1963; Census data. 1965-1968, 1970-1981, 1983-1984: HEGIS 1965-1985 Earned Degree data; CPS data.  
Notes: The figure plots the ratio of awarded doctoral degrees to the civilian population (in thousands) aged 25-44. Lines depict growth-curves that would have occurred in the absence of the Vietnam War draft effect. They were estimated by a spline regression using data points from 1950-1962 and 1980-1981, 1983-1984.

### 3 Cohort-Specific Changes

This section examines the possibility of a cohort-specific change in preferences as an alternative explanation. The two changes I examine are a change in high-school course taking among females and a change in career aspirations.

#### 3.1 High School Courses

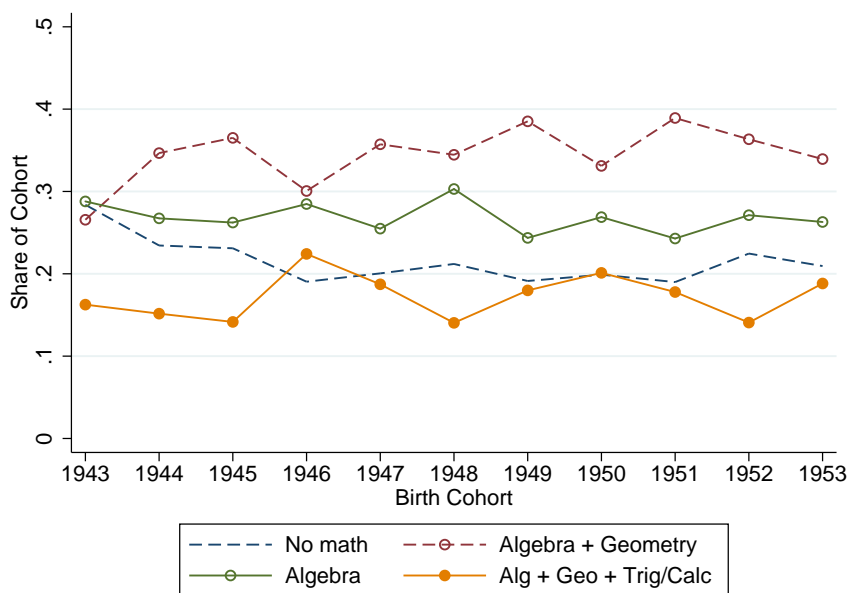
This section examines whether a change in high-school course taking among women led to the observed discontinuity in graduate fields. This alternative explanation stems from the fact that advance preparation and training is necessary to pursue a graduate degree. To answer this question, I take several approaches. First, I examine the number of math courses taken in high school by women. Next, I compare male and female preferences for high-school math and science courses. Last, I examine how undergraduate majors between men and women converged over time. Put together, the results indicate that high-school course preferences and math courses changed gradually over time. However - and this is the main counterargument - there is no sudden change in math course taking or in course preferences that can explain the sudden change in graduate-field distributions.

I first examine the number of math courses women took in high school. Although it does provide a limited look at high-school course taking among women, it does shed light on whether a change in high-school courses occurred among females during this time.<sup>6</sup>

<sup>6</sup>Ideally, I would like to examine their complete course-load. Unfortunately, the NLS Young Women's survey only asked about the number of math courses taken. Further, a similar question was not asked in the NLS Young Men's survey so a comparison is not possible.

For this analysis, I use the National Longitudinal Survey of Young Women (NLSYW), which interviewed 5,159 women who were ages 14-24 when first interviewed in 1968. The survey asked all respondents which, if any, of the three math classes they took in high school: algebra, geometry, and trigonometry or calculus. Figure 3 plots the share of women who took no math classes; just algebra; algebra and geometry; and algebra, geometry, and trigonometry/calculus by birth cohort.

Figure 3: Share of Women taking High School Math over Time



Source: NLSYW 1968 data.

Notes: N = 3,363.

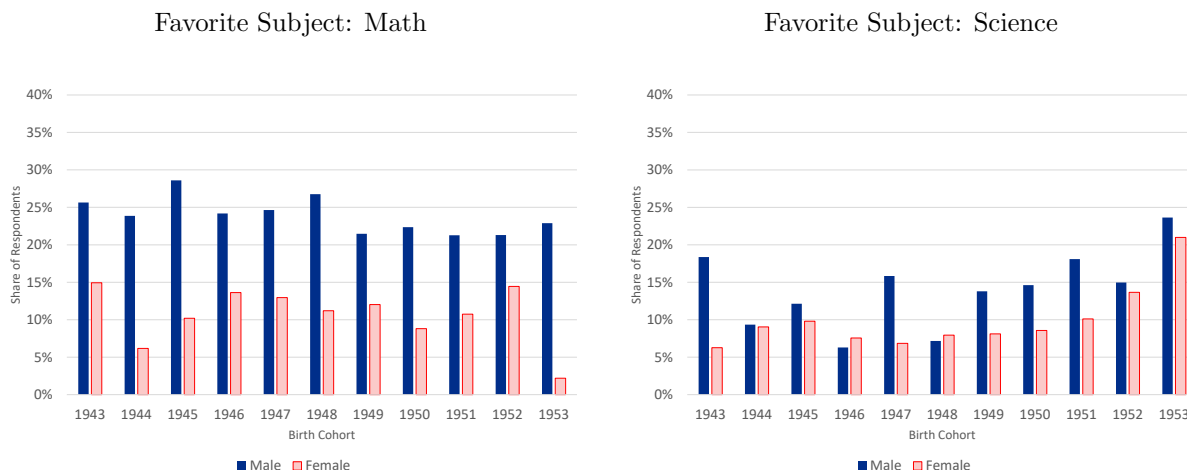
There are several things of note. First, the share of women taking algebra and geometry (2-3 years of high school math, depending on whether they took one or two years of algebra) increased by cohort. More interestingly, the rank ordering among the 1943 cohort vis-a-vis the 1953 cohort changed. In the 1943 cohort, the plurality of women is either taking no math or taking only algebra (around 28% for both percentages). Close behind is the share of women who took both algebra and geometry. Last is the share of women taking four years of high school math. In the 1953 cohort, however, the rank ordering changes. Nearly 34% of women took both algebra and geometry. Next largest is the share of women with algebra (26%), then the share of women with no math (20.9%), and last is the share of women with four years of high school math (18.8%). This figure highlights that there was indeed a change in high-school course taking between the 1943 cohort and the 1953 cohort. However, there does not appear to be a marked break for the 1950 and 1951 birth cohorts, our cohorts of interest.

I also examine how favorite subjects change over time. NLSYW also asks which high school subject was the respondent's favorite, and I compare the female and male answers by birth cohort in Figure 4.<sup>7</sup> Recall we are looking for a distinct change starting with the 1950-1951 cohort in order for this mechanism to explain the sudden change in gender convergence in graduate degree fields. We do not see such a change. There

<sup>7</sup>For male responses, I use the National Longitudinal Survey of Young Men (NLSYM), which interviewed 5,225 young men aged 14-24 starting in 1966. Although the survey population of NLSYW and NLSYM are from different birth cohorts, my analysis matches up male and female responses by the same age. In other words, I compare a 16 year old's male response to a 16 year old female's response. These two 16 year olds, however, are born in different years.

appears to be a change with the 1953 cohort, but this birth cohort is too young to explain my main results.

Figure 4: Favorite High School Subject by Sex and Birth Cohort



Sources: NLSYW 1968 data; NLSYM 1966 data.

Notes: N = 6,890. This figure depicts male and female responses given at the same age, and listed by female birth year.

Last, I examine the convergence trend in undergraduate majors. This provides an indirect test of whether a sudden change in high-school or undergraduate coursework among females led to the discontinuity in graduate-degree fields. To the extent that a sudden change in pre-graduate coursework is a valid explanation, we would expect to see a coincident change for undergraduate degrees conferred in Spring 1973 (academic year starting 1972).

Using HEGIS Earned Degrees data, I plot the EMD value between the male B.A. major distribution and female B.A. major distribution between 1965 and 1981 (Figure 5). The two distributions converge over time, as indicated by the downward-sloping line, and the slope steepens between academic year 1971-1972 and academic year 1975-1976. There is a slight indication that 1972 may be an inflection point, but overall the convergence trend is smooth and does not display a large discontinuous break as we saw with graduate degree fields. Further, this result is consistent with my analysis of high-school math and science courses, which also does not find a sudden change in female course-taking but rather a gradual change over time.

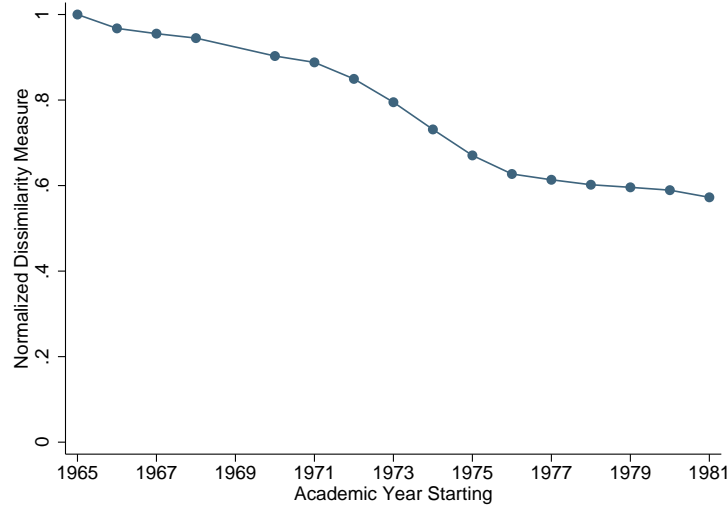
### 3.2 Career Aspirations

Next, I consider whether female work preferences changed across birth cohorts. Specifically, I examine whether the sudden change in graduate-degree fields between men and women can be explained by an underlying change in career aspirations of the young women who were pursuing these graduate degrees.

To answer this question, I use the NLSYW, which surveyed 14-24 year old women in 1968. This survey is ideal for this analysis because it surveyed young women born between 1944 and 1954, thereby including the cohorts of interest. Further, it asks about women's attitude towards working full-time in two scenarios: (1) if it is absolutely necessary to make ends meet, and (2) if she wants to work and her husband agrees.<sup>8</sup>

<sup>8</sup>The survey also asks about a third scenario: if she wants to work and her husband disagrees. I exclude this question from my analysis because this question captures more attitudes than a women's attitude towards work. For example, a response of "Probably not all right" or "Undecided" to this question does not necessarily imply that the woman does not desire to work. Rather, her response may merely reflect her acknowledgment that such a decision, especially if she and her husband do not agree, should be a joint decision and may require a lengthier conversation with her partner to determine the best action for their family.

Figure 5: Female-Male Convergence in Undergraduate Majors



Source: HEGIS Earned Degrees data, 1965-1981.

Notes: This figure plots the dissimilarity between female and male distributions of B.A. majors using the Earth Mover's Distance algorithm as a measure of dissimilarity. Majors are ordered in the distribution by expected salary. Expected salary for B.A. major is calculated using everyone who majored in that field as an undergraduate, even if the student subsequently attended graduate school.

The exact question wording is as follows:

Now I'd like you to think about a family where there is a mother, a father who works full time, and several children under school age. A trusted relative who can care for the children lives nearby. In this family situation, how do you feel about the mother taking a full-time job outside the house?

1. If it is absolutely necessary to make ends meet.
2. If she wants to work and her husband agrees.

For each scenario, the respondent chose a ranking from 1 to 5 with the following definitions: 1. Definitely all right; 2. Probably all right; 3. No opinion: Undecided; 4. Probably not all right; 5. Definitely not all right.

Because this question is not asked in consecutive survey years, I am unable to compare how the 1950 birth cohort responded to this question at age 18 to how other cohorts responded to this question at age 18.<sup>9</sup> Instead, I am only able to compare cohort responses in 1968. This means that I will be comparing 18 year olds (the 1950 cohort) to 19 year olds (the 1949 cohort). A key assumption is that preferences do not change over time within the same cohort. That is, the 1950 cohort holds the same preferences at age 18 as they will at age 20 or 22.

The proportion of each birth cohort that responded favorably towards working full-time ("Probably all right" or "Definitely all right") is pretty stable across birth cohorts; it remains around 90 percent.

<sup>9</sup>This three-part question series is asked again in 1972, which unfortunately is the year that Title IX was passed. Ideally, I would like to capture young women's attitudes towards work before Title IX's passage, in case its passage altered their career aspirations. Because these survey questions are asked only once before Title IX's passage, I am unable to compare responses given at the same age across different cohorts.

Table 2: Women’s Attitude Towards Work by Birth Cohort

Scenario:	If necessary to make ends meet		If want to work and husband agrees	
Outcome = 1 if:	Prob/Def okay	Definitely okay	Prob/Def okay	Definitely okay
	(1)	(2)	(3)	(4)
Birth cohort (relative to 1950-1951)				
1944	-0.00320 (0.0189)	0.140*** (0.0324)	0.0300 (0.0304)	0.0461 (0.0302)
1945	-0.0120 (0.0203)	0.128*** (0.0335)	-0.0499 (0.0327)	0.0530* (0.0312)
1946	-0.00448 (0.0193)	0.0902*** (0.0332)	0.00170 (0.0313)	0.0266 (0.0303)
1947	0.00861 (0.0173)	0.140*** (0.0306)	-0.0368 (0.0299)	0.0270 (0.0278)
1948	-0.000999 (0.0170)	0.0919*** (0.0298)	-0.0318 (0.0288)	0.00482 (0.0265)
1949	-0.00966 (0.0190)	0.0616** (0.0310)	0.00798 (0.0294)	0.0193 (0.0279)
1952	-0.0268 (0.0178)	-0.0257 (0.0291)	0.0367 (0.0270)	0.000867 (0.0262)
1953	-0.0187 (0.0177)	-0.0898*** (0.0288)	0.0249 (0.0277)	0.0422 (0.0273)
1954	-0.0721*** (0.0232)	-0.0704** (0.0323)	0.0463 (0.0305)	0.0201 (0.0298)
Constant	0.914*** (0.00974)	0.448*** (0.0172)	0.678*** (0.0164)	0.282*** (0.0152)
Mean in reference cohort	0.914	0.448	0.678	0.282
Observations	5,109	5,109	5,108	5,108

Source: NLSYW 1968 data.

Notes: Robust standard errors are in parentheses. \*\*\* p &lt; 0.01, \*\* p &lt; 0.05, \* p &lt; 0.1

Favorable responses to the second scenario fluctuate more, ranging between 60 and 70 percent. Under the second scenario, the proportion of those responding “Definitely all right” also remains relatively stable, but interestingly decreases for younger cohorts under the first scenario. To examine whether any of these differences are statistically significant, I estimate the following regression model:

$$y_i = \beta_0 + \sum_{c=1944, c \neq 1950, 1951}^{1954} \mu_c \cdot \mathbb{1}\{c = t\} + \varepsilon_i, \quad (1)$$

where  $y_i$  is a binary outcome variable indicating 1 if woman  $i$  responded favorably towards working and 0 otherwise, and  $\mathbb{1}\{c = t\}$  are indicator variables for birth cohort (reference group is 1950 and 1951). The parameters of interest are  $\mu_c$ , the coefficients on the cohort fixed effects relative to the 1950-1951 cohorts. Specifically, we are looking at the coefficients on the cohorts that were born *before* 1950 to see if they are statistically significantly negative. That is, we want to see if earlier cohorts were *less* likely to have favorable attitudes about working full-time. If we see a sudden change in female attitude towards work starting with the 1950 or 1951 birth cohort, then this provides some evidence that young women’s aspirations may explain the sudden change in graduate-field distributions instead of (or in addition to) Title IX’s passage.

The results are reported in Table 2. Columns (1) and (3) compare the proportion of each cohort that responded either “Definitely all right” or “Probably all right”, relative to 1950-1951 cohort’s response. For example, the 1949 cohort is 0.97 percentage-points less likely to respond favorably to survey question scenario



(1) and 0.80 percentage-points more likely to respond favorably to survey question scenario (2). Not only are these estimates small in magnitude, they are also not statistically significant. In fact, none of the earlier cohorts responded statistically significantly differently from the 1950-1951 cohorts (as measured by a favorable response or not).

Columns (2) and (4) narrow the definition of a “favorable” outcome and compare the proportions of those who responded “Definitely all right”. Again, we do not see *negative* coefficients between the earlier cohorts and the 1950-1951 cohorts. The coefficients for the 1944-1949 cohorts are statistically significant, but they are positive, indicating that older cohorts are *more* likely to want to work. These results suggest that a sudden change in work attitudes did not occur with the 1950 or 1951 cohort, indicating that it cannot explain the sudden change in graduate-field distributions observed in 1975.

It is important to remember that these results assume that preferences did not change over time within cohorts. Therefore, to the extent that this assumption is not valid, I am unable to definitively rule out changing preferences as an alternative explanation. This assumption may be a strong one to make between 18 year olds (1950 cohort in the regression analysis) and 24 year olds (1944 cohort in the regression analysis). However, it may not be so outlandish when comparing 18 year olds to 19 year olds (1949 cohort in the regression analysis). And between these two age groups, we do not see any significant differences.

## 4 Equal Employment Opportunity Act of 1972

This section explores the possibility that labor law changes affected women’s educational choices. The labor law in question is the Equal Employment Opportunity Act of 1972 (EEOA).

Although anti-discrimination laws in the labor market existed since the early 1960s<sup>10</sup>, enforcement powers were relatively weak. For example, the Civil Rights Act of 1964 created the U.S. Equal Employment Opportunity Commission (EEOC) but it “possessed no authority to force recalcitrant employers and unions to comply with the law” (Equal Employment Opportunity Commission, 1973, p. 1). This changed with the Equal Employment Opportunity Act of 1972, which gave the EEOC the power to bring civil actions against private employers. The Act also expanded the jurisdictional coverage of Title VII to employers with 15 or more employees, as well as to local and state governments and educational institutions (Equal Employment Opportunity Act, 1972).

Below I describe two analyses that examines whether EEOA affected educational choices. Given the three-year lag between this Act and when I first observe a discontinuity (Spring 1975), I look for an immediate effect.

My first analysis estimates the impact of the 1972 Act, which strengthened anti-discrimination labor laws. I follow a similar methodology to Chay (1998), which exploits the fact that some states already had fair employment practice (FEP) laws prior to the 1972 Act. According to Chay (1995), state FEP laws were very similar to Title VII and also established commissions that had enforcement powers. In fact, under Title VII, the EEOC was to defer the processing of discrimination charges to states with FEP laws. However, not all states had FEP laws. Most of the states with weak or no FEP laws were in the south (Chay, 1995, Appendix Table 1). For example, eight of the nine states with no FEP laws were in the South: Alabama, Arkansas, Georgia, Louisiana, Mississippi, South Carolina, Tennessee, and Virginia. Florida, North Carolina, and Texas had laws for public enforcement only. In contrast, “almost all of the states outside the South had FEP laws with more extensive coverage than that required by the 1972 EEOA” (Chay, 1998, p. 610).

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<sup>10</sup>The Equal Pay Act, which prohibited wage discrimination in sex, passed in 1963. Title VII of the Civil Rights Act of 1964 prohibited job discrimination because of sex in addition to race, color, religion, and national origin. In 1965, President Johnson signed Executive Order 11246, banning federal contractors from discrimination in employment based on sex as well as race, color, religion, and national origin.

Following the classification in Appendix Table 1 in Chay (1995), I separate states into those with weak or no FEP laws (“South”) or not (“Non-South”).

I estimate a difference-in-differences regression comparing the number of female graduate degrees earned between 1968 and 1972 in the South v. Non-South. Because I am testing whether 1972 Act had an immediate impact on women’s educational choices, I define the pre period as degrees earned between 1968-1972 and the post period as 1973-1975. I compare Southern states, where the EEOA definitively strengthened current labor laws, to Non-Southern states, where the EEOA had a more muted impact due to existing FEP laws. I use school-level data from the HEGIS Earned Degrees data to estimate the following regression model:

$$y_{it} = \beta_0 + \beta_1 South_i + \beta_2 Post_t + \beta_3 (South_i \times Post_t) + u_{it} \quad (2)$$

where  $y_{it}$  is the number of female graduate degrees conferred by school  $i$  and year  $t$ , and  $South_i$  is a binary indicator for whether school  $i$  is in a southern state. Standard errors are clustered by state, and  $\beta_3$  is the parameter of interest. The estimated coefficients are reported in Panel A of Table 3.

Table 3: Effect of Changes in Labor Laws on Female Graduate Degrees, 1968-1975

Gender parity tercile	Dependent Variable: Female Graduate Degrees			
	All (1)	Top (M-dom.) (2)	Middle (3)	Bottom (F-dom.) (4)
<i>Panel A: Effect of Equal Employment Opportunity Act of 1972</i>				
Post-EEOA	92.03*** (11.88)	1.128*** (0.204)	4.056*** (0.729)	17.00*** (2.406)
Southern State	-28.57 (19.91)	-0.808** (0.384)	-2.650* (1.351)	-15.03* (7.659)
Post-EEOA x Southern	28.17* (16.03)	-0.415* (0.246)	-0.860 (0.904)	11.37*** (4.135)
Observations	12,425	5,026	11,231	10,417
<i>Panel B: Effect of Equal Employment Opportunity Commission Enforcement</i>				
Post-EEOA	5,166*** (701.4)	32.58*** (5.888)	212.4*** (40.01)	839.0*** (112.0)
Change in Conciliation Share, 1973-74	9,676 (26,862)	-63.74 (176.5)	361.8 (1,420)	2,918 (7,362)
Post-EEOA x Conciliation Share	4,945 (5,826)	13.34 (77.40)	-48.44 (536.8)	1,115* (613.3)
Observations	100	100	100	100

Source: HEGIS 1968-1975 Earned Degrees data; Chay (1995), Appendix Table 1; EEOC Hearings, Table 1-2.

Notes: Sample is restricted to graduate degrees earned by women between 1968 and 1975. Post-EEOA is defined as degrees earned between 1973-1975. Southern States are Alabama, Arkansas, D.C., Delaware, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia. Conciliation Share is the number of investigations that are at the Conciliation stage, where a suitable remedy is sought after a finding of reasonable cause has been made. Standard errors are clustered by state and reported in parentheses. \*\*\* p< 0.01, \*\* p< 0.05, \* p< 0.1

Column (1) estimates how total female graduate degrees changed post-EEOA in Southern states relative to Non-Southern states. Columns (2)-(4) focuses on female graduate degrees in the three separate terciles by the field’s gender parity: Tercile 1 (male-dominated degrees), Tercile 2, and Tercile 3 (female-dominated degrees). These results indicate that EEOA had the strongest effect in female graduate degrees in tradi-

tionally female fields of study. This is the opposite of my main results, which found that women entered predominantly male fields of study after Title IX.

My second analysis estimates the effect of EEOC *enforcement* on female educational choices. Here, I follow the methodology in Beller (1982), which exploited geographic variation in the number of completed discrimination cases. To the extent that employer discrimination was preventing women from entering certain occupations (and thereby pursuing certain degree-fields), this analysis attempts to see if the threat of EEOC enforcement affected female graduate school choices. I create a measure of EEOC enforcement using EEOC data on the number of investigations and conciliations in each district office. Specifically, this measure is the difference in the state's percentage of investigations that were at the conciliation stage between 1973 and 1974.<sup>11</sup>

I estimate equation (2), except I control for the state's change in conciliation share instead of  $South_i$ . The parameter of interest is the interaction between the change in conciliation share and the  $Post_t$  dummy. Panel B of Table 3 reports estimates. Similar to what we see in Panel A, graduate degree-fields that were female-dominated saw the largest female growth in states that were more likely to resolve discrimination cases. This, again, is contrary to the main results.

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<sup>11</sup>The conciliation stage is where a suitable remedy is sought after a finding of reasonable cause has been made.

## References

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