

Gender Identity and Relative Income within Households

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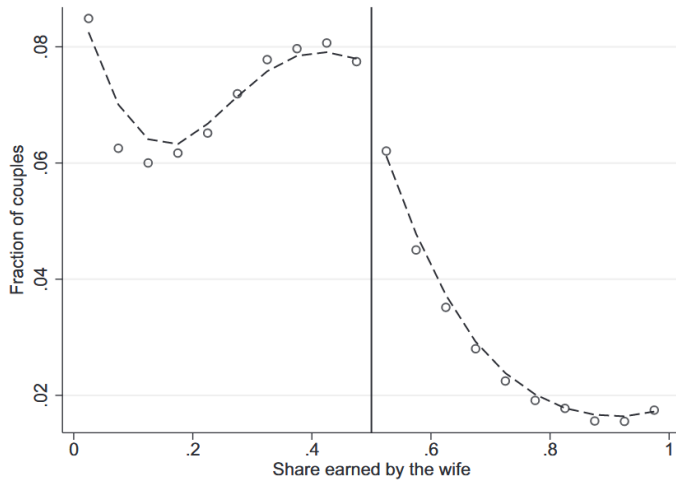


Outline

- 1 Introduction
- 2 Relative Income
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- 4 Women's Labor Supply
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Motivation



- Standard models of the marriage market cannot account for the observed distribution of relative income with its discontinuous drop at the point where the wife earns more than the husband.

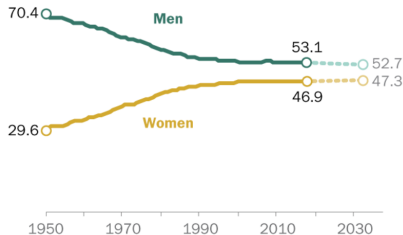
- 1995 World Value Survey: 38% of the U.S. respondents agree with the claim “If a woman earns more money than her husband, it’s almost certain to cause problems.”
- How does the behavioral prescription that “a man should earn more than his wife” affect social and economic outcomes?

- Akerlof and Kranton (2000)¹ imports the concept “identity” into economics. Identity derives from social differences. For instance, gender identity, everyone in the population is assigned a gender category, as either a ‘man’ or a ‘woman’. Following the behavioral prescriptions for one’s gender affirms one’s self-image, or identity, as a ‘man’ or as a ‘woman’.
- Does traditional gender role attitudes (identity) still influence our behavior?

¹Akerlof, G. A., & Kranton, R. E. (2000). Economics and identity. *The quarterly Journal of Economics*, 115(3), 715-753.

Stylized Fact

Percentage of the U.S. labor force who are men/women



Median hourly earnings of U.S. women as a percentage of men's median earnings among all workers ages 16 and older



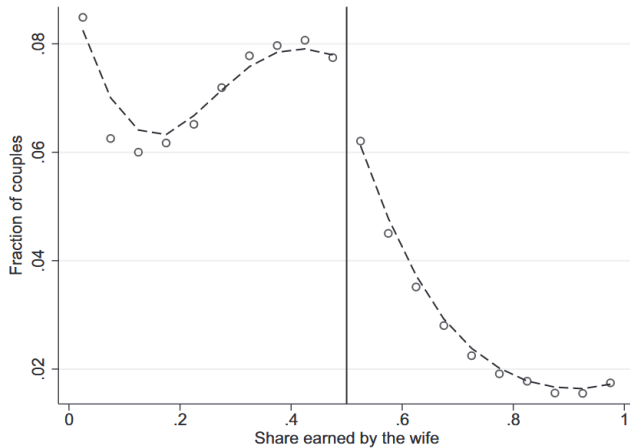
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- Survey of Income and Program Participation (SIPP)
 - Administrative data on income from the Social Security Administration and the Internal Revenue Service.
 - Using the observation from the first year that the couple is in the panel, which ranges from 1990 to 2004.

- w_i (h_i): The total labor and self-employment income of the wife (husband).
- r_i : $\frac{w_i}{w_i + h_i}$, the share of wife's income in the couple's income.

Discontinuity

- The distribution drops by 12.3% ($p < .01$).

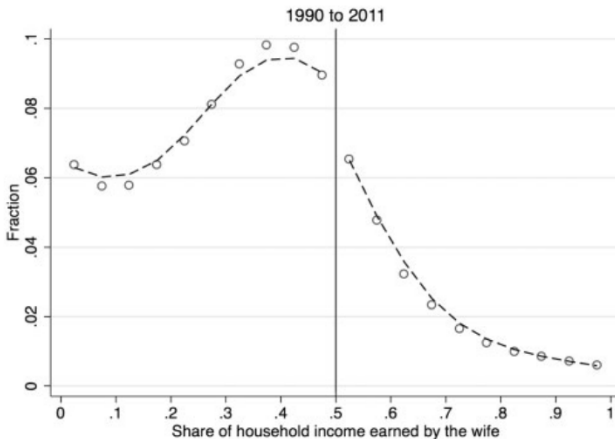


- 1970–2000 U.S. Censuses and the American Community Survey (ACS) 2008 to 2011 from the U.S. Census Bureau².

²For convenience, we refer to the 2008–2011 ACS as 2010 data.

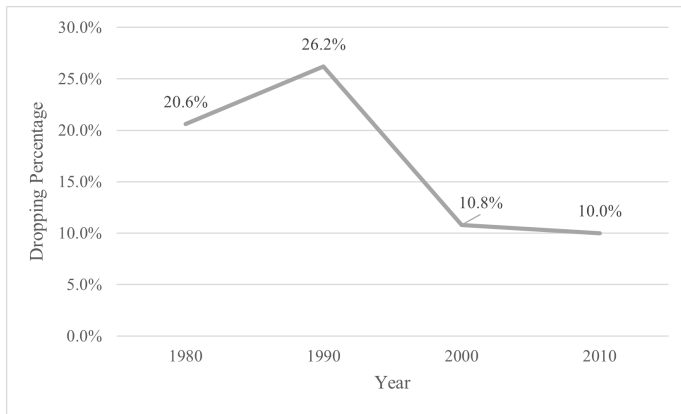
Discontinuity

- The distribution drops by 13.6% ($p < .01$), compared to the 12.3% drop in the SIPP.



Panel View

- The size of the discontinuity seems to have gotten smaller in the past 20 years. All estimates below are significant ($p < .01$).

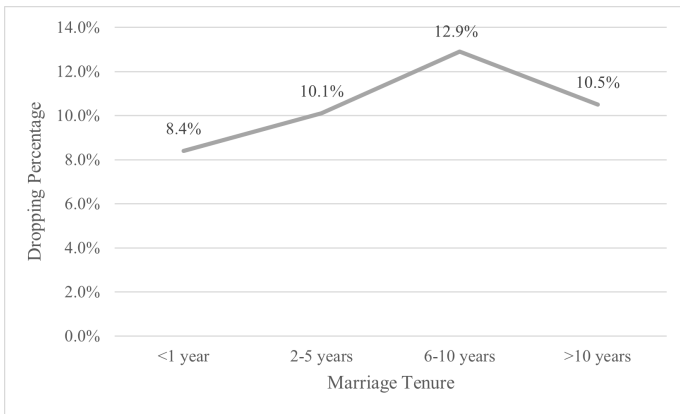


Heterogeneity: Presence of Children

- Among couples with a child, the drop is 15.2%.
- Among those without, the drop is 11.6%.
- All estimates above are significant ($p < .01$).

Heterogeneity: Marriage Tenure

- All estimates below are significant ($p < .01$).



Heterogeneity: Education

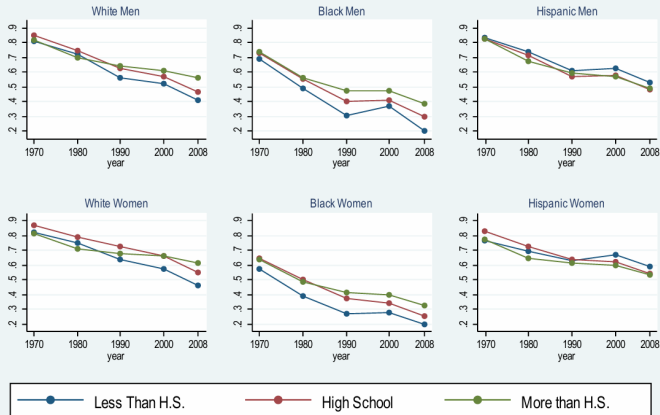
- Among less-educated couples, the distribution drops by 20.1% ($p < .01$).
- Among more educated couples, there is only a drop of 5.53% which is statistically insignificant.
- This difference in the discontinuity across these education groups is significant ($p < .05$).

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Stylized Fact

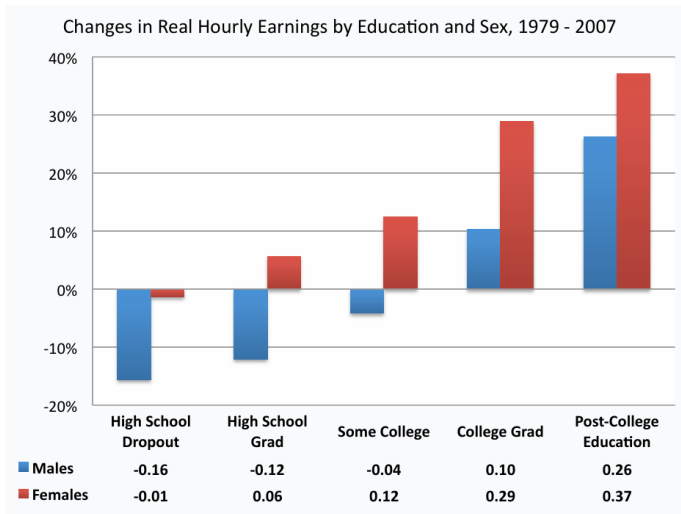
Marriage Rate of Young Men and Women

by Race and Education, Ages 25-39, 1970-2008



Source: Census IPUMS 1970 through 2000 and American Community Survey 2008.

Stylized Fact



Marriage Markets

- We define marriage markets based on race, age group, education group, and the state of residence.
- Overall, 59% of all marriages are between a man and woman from the same marriage market.
- Marriage market variable m .
- Year variable $t \in \{1980, 1990, 2000, 2010\}$.
- The share of males who are currently married MS_{mt} ³.

³We get similar results if we use the share of women who are married.

Woman Earns More?

- Given woman i and man j , consider a binary variable that takes value 1 if i 's income exceeds j 's.
- $PrWEM_{mt}$: The mean of the binary variable taken across all possible couples.
- Randomly drawing 50,000 women and men with replacement and computing the value of the variable.

Baseline Regression

- Baseline OLS in column (1):

$$MS_{mt} = \beta_0 + \beta_1 \times PrWEM_{mt} + \beta_2 \times X_{mt} + \varepsilon_{mt}$$

where X_{mt} includes

- Logs of the average female and male income.
 - Logs of female and male income at each income decile in the marriage market that year.
 - Marriage market FE.
 - Year FEs interacted with race, age group, education group, and the state of residence.
- Standard errors are clustered by state, and each observation is weighted by the number of women in the marriage market.

- In column (2): Adds a control for average women's income divided by the sum of average men's and women's income.
- In column (3): Add several additional marriage market by year controls:
 - Sex ratio.
 - Male and female incarceration rates.
 - Average years of schooling for men and women.
 - The number of men and women in the market.
- In columns (4)-(6): Construct the variable $PrWEM_{mt}$ (as well as all other relevant income variables in the regression) using predicted income instead of the realized income.

- Identifying assumption: $PrWEM \perp \varepsilon$.
- But across all census years and marriage markets, the likelihood that a randomly chosen woman earns more than a randomly chosen man is about 0.25.
- This residual variation have varied across marriage markets and have increased steadily over time, which stems from:
 - Compositional shifts within a marriage market over time.
 - Shocks that differentially affect men and women within a marriage market.

- Construct a instrumental variable z for the entire distribution of potential income in each marriage market, which isolate the nationwide changes in labor demand across industries.
 - $z \perp MS$.
 - $z \Rightarrow PrWEM$.

Shift-Share Instrument

- Average yearly wages instrumented by gender and marriage market:

$$\bar{w}_{mt}^g \equiv \sum_j \gamma_{rejs,1980}^g \times w_{reat,-s}^g$$

where g indexes gender, r race, e education group, a age group, j industry, t census year, and s state.

- $w_{reat,-s}^g$ is the average wage in year t in industry j for workers of a given gender, race, education, and age group in the nation, excluding state s .
- $\gamma_{rejs,1980}^g$ is the fraction of individuals with gender g , race r , and education e in state s who are working in industry j , as of the base year 1980.

Shift-Share Instrument

- We modify the standard Bartik (Shift-Share) instrument to compute predicted yearly wages at the $p = \{5\text{th}, 10\text{th}, \dots, 95\text{th}\}$ percentile.

$$\bar{w}_{mt}^{g,p} \equiv \sum_j \gamma_{rejs,1980}^g \times w_{reajt,-s}^{g,p}$$

where $w_{reajt,-s}^{g,p}$ is the p th percentile of the national income distribution in year t in industry j for workers of a given gender, race, education, and age group, excluding state s .

- Then we draw from the distributions defined by $\{\bar{w}_{mt}^{g,p}\}_p$, and calculate the likelihood that a randomly chosen woman earns more than a randomly chosen man.
- In columns (7)-(9): Construct the variable $PrWEM_{mt}$ (as well as all other relevant income variables in the regression) using instrument $\bar{w}_{mt}^g$ and $\bar{w}_{mt}^{g,p}$.

TABLE I
POTENTIAL RELATIVE INCOME AND MARRIAGE RATES

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Actual			Predicted			Bartik		
Income measure:	Dependent variable: <i>shareMarried</i>								
<i>PrWomanEarnsMore</i>	-0.080 [0.075]	-0.046 [0.080]	-0.209*** [0.074]	-0.266*** [0.068]	-0.252*** [0.066]	-0.236*** [0.062]	-0.515*** [0.189]	-0.343* [0.183]	-0.351* [0.181]
ln Average Women's Income	0.055* [0.030]	0.171** [0.071]	0.088 [0.074]	0.066* [0.036]	0.266** [0.108]	0.151 [0.108]	0.270 [0.177]	0.943*** [0.333]	0.461 [0.371]
ln Average Men's Income	0.023 [0.032]	-0.092 [0.070]	0.005 [0.073]	-0.001 [0.053]	-0.201** [0.084]	-0.063 [0.093]	0.114 [0.140]	-0.558* [0.292]	-0.097 [0.348]
Sex Ratio			-0.030*** [0.007]			-0.027*** [0.007]			-0.006 [0.007]
Female Incarceration Rate			-0.369 [0.241]			-0.292 [0.232]			-0.048 [0.172]
Male Incarceration Rate			0.433*** [0.089]			0.210*** [0.071]			0.056 [0.069]
Female Average Years of Education			0.009 [0.008]			0.005 [0.007]			-0.002 [0.007]
Male Average Years of Education			-0.031*** [0.010]			-0.023** [0.008]			-0.010 [0.007]
Number of Females (per million)			0.001 [0.005]			0.003 [0.006]			-0.003 [0.008]
Number of Males (per million)			0.004 [0.005]			0.002 [0.006]			0.005 [0.007]
Observations	3,635	3,635	3,635	3,578	3,578	3,578	3,636	3,636	3,636
R-squared	0.990	0.990	0.991	0.990	0.990	0.991	0.991	0.991	0.991
Control for relative income	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Control for deciles of men's and women's income	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

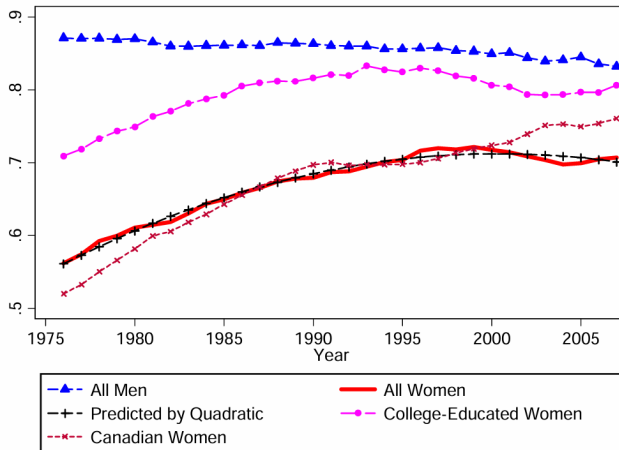
- The secular increase in the income of women relative to that of man explains 29% of the overall decline in marriage rates over the 1980-2010 period⁴. (according to column (9))
- Education heterogeneity:
 - $\beta_1 = -0.631$ in the less educated markets. ($p < .01$)
 - $\beta_1 = 0.141$ in the more educated markets. (insignificant)
 - Observed relationship is driven by traditional attitudes toward gender roles.

⁴The coefficient -0.351 multiplied by the 14 percentage point increase in $PrWEM$ is 29% of the 17 percentage point decrease in marriage rates.

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Stylized Fact

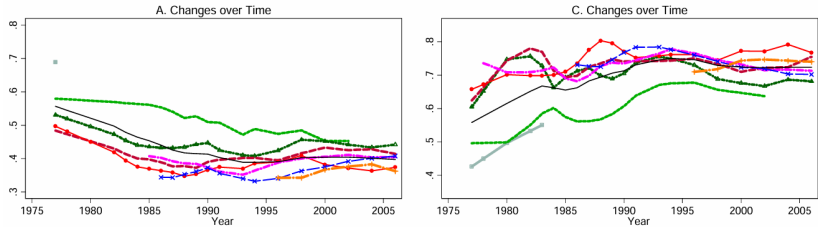
Figure 1. Labor Force Participation 18-65 Year Olds



Note: Computed from March CPS data and Statistics Canada, CANSIM data. .

Stylized Fact

Figure 3. Gender Role Attitudes of Women by Birth Cohorts
Traditional Views **Egalitarian Views**



- For each couple i , we estimate the distribution of the wife's potential earnings as follows:
 - For $p \in \{5, \dots, 95\}$, define w_i^p as the p th percentile of earnings among working women in the wife's demographic group that year. The demographic group based on race, age group, education level, and state of residence.
 - Define $PrWEM_i = \frac{1}{19} \sum_p \mathbf{1}_{\{w_i^p > h_i\}}$.

Baseline Regression

- Given a couple i , let $WLFP_i$ be a binary variable equal to 1 if the wife is in the labor force.
- Baseline OLS in column (1):

$$WLFP_i = \beta_0 + \beta_1 \times PrWEM_i + w_i^p + \beta_2 \times \ln h_i + \beta_3 \times X_i + \varepsilon_i$$

where X_i represents:

- Year FE.
 - State FE.
 - The wife's and the husband's race.
 - The wife and the husband's age group.
 - The wife's and the husband's education level.
- Standard errors are clustered by the wife's demographic group (which pins down the distribution of her potential income).

- In column (2): Include a cubic polynomial in $\ln h_i$ for its non-linear effect on the marginal utility of household income.
- In column (3): Control the interaction between w_i^p (accurately, the median of the wife's predicted income w_i^{50}) and h_i .
- In column (4): Add several indicator variables for:
 - Whether the wife ever had a child.
 - The full interaction of the wife's demographic group and the husband's demographic group.

- A woman who is willing to marry a man whose income is below her potential income might have unobservable characteristics that keep her out of the labor force.
 - Systematic underachievers.
 - Systematically lack the confidence to participate in the labor market.
- Such women might be relatively more drawn toward home production and child-rearing activities.

- The ACS contains information on the year the current marriage started. So we can partly isolate the variation in $PrWEM_i$ that is driven by changes in relative income that took place after the couple got married.
- For each couple i , let m_i be the census year that is the closest to the year of marriage. Then construct the distribution of potential income for both the husband $\{h_i^p\}$ and the wife $\{w_i^p\}$ in year m_i , using the same procedure as before.
- Define $PrWEMAM_i = \frac{1}{361} \sum_p \sum_q \mathbf{1}_{\{w_i^p > h_i^p\}}$, which captures the probability that the wife's potential income exceeded that of the husband at the time of marriage.

- In column (5): Replicates the specification from column (2) but using only data on couples for whom we could construct relative earnings at marriage.
- In column (6): Add controls $PrWEMAM_i$, the vigintiles of the potential earnings for both the husband and the wife at marriage, and non-parametrically for marriage duration in years.

TABLE II
POTENTIAL RELATIVE INCOME AND WIFE'S LABOR FORCE PARTICIPATION

	(1)	(2)	(3)	(4)	(5)	(6)
	Dependent variable: <i>Wife in the labor force</i>					
<i>PrWifeEarnsMore</i>	-0.178*** [0.004]	-0.142*** [0.004]	-0.139*** [0.004]	-0.143*** [0.004]	-0.148*** [0.005]	-0.152*** [0.005]
Observations		7,384,176			1,375,121	1,375,121
<i>R</i> -squared	0.097	0.103	0.104	0.145	0.087	0.090
Additional controls:						
Cubic in <i>lnHusbIncome</i>	no	yes	yes	yes	yes	yes
<i>lnMedianWifePotential</i> × <i>lnHusbIncome</i>	no	no	yes	yes	no	no
<i>anyChildren</i>	no	no	no	yes	no	no
Wife's demographic group × Husband's demographic group	no	no	no	yes	no	no
<i>PrWifeEarnsMore AtMarriage</i>	no	no	no	no	no	yes
Vintiles of the wife's and the husband's potential income at marriage	no	no	no	no	no	yes
Marriage duration fixed effects	no	no	no	no	no	yes
Sample restriction	none	none	none	none	2010sub	2010sub

Gap between Potential and Realized Income

- Having the wife leave the labor force is a financially costly way to restore traditional gender roles.
- It would be less costly for the wife to simply reduce her earnings to a level that does not threaten the husband's status as the primary breadwinner.

Gap between Potential and Realized Income

- Given a couple i , define $G_i = \frac{w_i - \check{w}_i}{\check{w}_i}$, where $\check{w}_i$ is simply the mean of the distribution of potential earnings for the wife.
- Replicates the specification from the table above, but with G_i rather than $WLFP_i$ as the dependent variable.

TABLE III
POTENTIAL RELATIVE INCOME AND WIFE'S REALIZED EARNINGS

	(1)	(2)	(3)	(4)	(5)	(6)
	Dependent variable: <i>incomeGap</i>					
<i>PrWifeEarnsMore</i>	-0.031*** [0.007]	-0.095*** [0.006]	-0.095*** [0.006]	-0.109*** [0.007]	-0.168*** [0.009]	-0.176*** [0.009]
Observations	5,306,682	5,306,682	5,306,664	5,306,664	1,049,793	1,049,793
R-squared	0.004	0.006	0.006	0.050	0.007	0.013
Additional controls:						
Cubic in <i>lnHusbIncome</i>	no	yes	yes	yes	yes	yes
<i>lnMedianWifePotential</i> × <i>lnHusbIncome</i>	no	no	yes	yes	no	no
<i>anyChildren</i>	no	no	no	yes	no	no
Wife's demographic group × Husband's demographic group	no	no	no	yes	no	no
<i>PrWifeEarnsMoreAtMarriage</i>	no	no	no	no	no	yes
Vintiles of the wife's and husband's potential income at marriage	no	no	no	no	no	yes
Marriage duration fixed effects	no	no	no	no	no	yes
Sample restriction	none	none	none	none	2010sub	2010sub

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- National Survey of Families and Households (NSFH)
 - Nationally representative survey of U.S. households and includes approximately 9,500 households that were followed over three waves from 1988 to 2002.
 - We use data from the first two waves (1987–88 and 1992–94).
 - Three questions on marital stability.

- ① Taking things all together, how would you describe your marriage?
 - A scale of 1 (very unhappy) to 7 (very happy).
 - HM_i , a binary variable which indicates whether the answer is “very happy”.
- ② During the past year, have you ever thought that your marriage might be in trouble?
 - MT_i , a binary variable which indicates an affirmative response.
- ③ During the past year, have you and your husband/wife discussed the idea of separating?
 - DS_i , a binary variable which indicates an affirmative response.

Baseline Regression

- Define WEM_i as a binary variable equal to 1 if $r_i > \frac{1}{2}$. $\tau_i = h_i + w_i$ as the total income.
- Baseline OLS in column (1):

$$Y_i = \beta_0 + \beta_1 \times WEM_i + \beta_2 \times \ln w_i + \beta_3 \times \ln h_i + \beta_4 \times \ln \tau_i + \beta_5 \times X_i + \varepsilon_i$$

where Y_i is the answer to the survey question and X_i represents:

- Region FE.
- Indicator for whether the wife/husband is working.
- The wife and the husband's race and education groups.
- A quadratic in the wife's and the husband's age.
- We pool the wives' and the husbands' responses (and include as a control an indicator variable for whether the respondent is the wife or the husband).
- We cluster standard errors at the level of the couple.

- In column (2): Add cubic polynomials of $\ln w_i$ and $\ln h_i$.
- In column (3): Add r_i as a control.
- In column (4): Add a control for the absolute difference in income rank of the wife and the husband (defined within gender-specific distributions of income).

TABLE IV
RELATIVE INCOME AND MARITAL SATISFACTION

	(1)	(2)	(3)	(4)
Panel A: dependent variable: <i>happyMarriage</i>				
<i>wifeEarnsMore</i>	-0.068** [0.031]	-0.060* [0.032]	-0.070* [0.036]	-0.065* [0.037]
Observations	7,659	7,659	7,659	7,659
R-squared	0.025	0.026	0.025	0.025
Panel B: dependent variable: <i>marriageTrouble</i>				
<i>wifeEarnsMore</i>	0.082*** [0.027]	0.078*** [0.029]	0.079** [0.033]	0.086** [0.034]
Observations	7,520	7,520	7,520	7,520
R-squared	0.047	0.048	0.047	0.048
Panel C: dependent variable: <i>discussSeparation</i>				
<i>wifeEarnsMore</i>	0.068*** [0.024]	0.064*** [0.024]	0.060** [0.028]	0.065** [0.028]
Observations	7,507	7,507	7,507	7,507
R-squared	0.034	0.034	0.034	0.034
Additional controls:				
Cubic in <i>lnWifeIncome</i> and <i>lnHusbIncome</i>	no	yes	no	no
<i>relativeIncome</i>	no	no	yes	yes
<i> Wife-Husb Income Rank </i>	no	no	no	yes

- For each couple in Wave 1 (1987–88), construct a binary variable D_i which is equal to 1 if the couple is separated or divorced when they are reinterviewed in Wave 2 (1992–94).
- Replicates the specification from the table above, but with D_i rather than Y_i as the dependent variable.
 - WEM increases divorce only among the more educated couples (where both the husband and the wife have at least some college education).

TABLE V
RELATIVE INCOME AND DIVORCE

	(1)	(2)	(3)	(4)
	Dependent variable: <i>divorced</i>			
<i>wifeEarnsMore</i>	0.062** [0.025]	0.060** [0.026]	0.048 [0.030]	0.051* [0.030]
Observations	3,439	3,439	3,439	3,439
R-squared	0.080	0.086	0.080	0.080
Additional controls:				
Cubic in <i>lnWifeIncome</i> and <i>lnHusbIncome</i>	no	yes	no	no
<i>relativeIncome</i>	no	no	yes	yes
<i> Wife-Husb Income Rank </i>	no	no	no	yes

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- American Time Use Survey (ATUS) and the Current Population Survey (CPS), covering the years 2003 to 2011.
 - It only includes one respondent per household, so we focus on the interaction between the impact of gender and the impact of relative income on time use.
- $TNMW_i$, the weekly number of hours spent on chores and childcare.
- S_i , an indicator for sex.

Non-Market Work

- Chores.
 - “Core” non-market work, such as meal preparation and cleanup, doing laundry, vacuuming, etc.
 - Time spent “obtaining goods and services”, such as grocery shopping.
 - Time spent in “other” home production, such as home maintenance, vehicle repair, gardening, etc.
- Childcare.
 - Primary child care, such as changing diapers and feeding the child.
 - Educational child care, such as helping a child with homework.
 - Recreational child care, such as playing games with the children, taking them to the zoo, etc.

- Baseline OLS in column (1):

$$\begin{aligned}TNMW_i = & \beta_0 + \beta_1 \times S_i \times WEM_i + \beta_2 \times S_i + \beta_3 \times WEM_i \\ & + \beta_4 \times \ln w_i + \beta_5 \times S_i \times \ln w_i \\ & + \beta_4 \times \ln h_i + \beta_5 \times S_i \times \ln h_i \\ & + \beta_4 \times \ln \tau_i + \beta_5 \times S_i \times \ln \tau_i \\ & + \beta_{10} \times X_i + \beta_{11} \times S_i \times \ln X_i + \varepsilon_i\end{aligned}$$

where X_i represents:

- Year, state, and day of the week FEs.
- Indicator for whether the wife/husband is working.
- The wife and the husband's race and education groups.
- A quadratic in the wife's and the husband's age.

- In column (2): Add cubic polynomials of $\ln w_i$ and $\ln h_i$.
- In column (3): Add r_i as a control.
 - Beckerian forces will lead the wife to do less housework when her contribution to family income increases.
 - But once a wife earns more than her husband she starts to compensate for it by spending more time on chores and childcare.

- In column (4): Control for the presence of children of various ages.
- Restricting the sample:
 - In column (5): Both the wife and the husband have strictly positive earnings.
 - In column (6): time-use during weekdays only.

TABLE VI
RELATIVE INCOME AND THE GENDER GAP IN NONMARKET WORK

	(1)	(2)	(3)	(4)	(5)	(6)
	Dependent variable: <i>Total nonmarket work (hours per week)</i>					
<i>female</i> × <i>wifeEarnsMore</i>	1.087 [0.740]	1.263* [0.762]	2.183*** [0.782]	2.297*** [0.756]	2.961*** [0.844]	2.757*** [0.998]
<i>wifeEarnsMore</i>	0.460 [0.523]	0.132 [0.544]	-0.031 [0.557]	-0.147 [0.538]	-0.546 [0.600]	-0.439 [0.707]
Observations	37,665	37,665	37,665	37,665	22,390	18,227
R-squared	0.233	0.233	0.234	0.285	0.224	0.375
Additional controls:						
Cubic in <i>lnWifeIncome</i> and <i>lnHusbIncome</i>	no	yes	yes	yes	yes	yes
<i>relativeIncome</i>	no	no	yes	yes	yes	yes
Children controls	no	no	no	yes	yes	yes
Sample restriction	none	none	none	none	both spouses have positive income	week-day only

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- Panel Study of Income Dynamics (PSID).
 - The family files (1968–2009).
 - The marital history file (2009).

- Baseline OLS in column (1):

$$WLFP_{it} = \beta_0 + \beta_1 \times PrWEM_{i,t-1} + w_{i,t-1}^p \\ + \beta_2 \times \ln h_{i,t-1} + \beta_3 \times X_{i,t-1} + \varepsilon_{it}$$

- Robustness:

- In column (2): Include cubics of each spouse's income as controls.
- In column (3): Add $r_{i,t-1}$ as a control.
- In column (4): Add a vector of controls for the presence of children.
- In column (5): Add couple fixed effects. (yields the same estimate as the cross-section)

- Baseline OLS in column (1):

$$\begin{aligned} D_{it} = & \beta_0 + \beta_1 \times WEM_{i,t-1} + \beta_2 \times WEM_{i,t-2} \\ & + \beta_3 \times \ln w_{i,t-1} + \beta_4 \times \ln h_{i,t-1} + \beta_5 \times \ln \tau_{i,t-1} + \beta_6 \times X_{i,t-1} \\ & + \beta_7 \times \ln w_{i,t-2} + \beta_8 \times \ln h_{i,t-2} + \beta_9 \times \ln \tau_{i,t-2} + \beta_{10} \times X_{i,t-2} \\ & + \varepsilon_{it} \end{aligned}$$

- Robustness: Same as above.

- Define GH_{it} as the time gap in housework between husband and wife.
- Baseline OLS in column (1):

$$GH_{it} = \beta_0 + \beta_1 \times PrWEM_{i,t-1} + w_{i,t-1}^p \\ + \beta_2 \times \ln h_{i,t-1} + \beta_3 \times X_{i,t-1} + \varepsilon_{it}$$

- Robustness: Same as above.

TABLE VII
RELATIVE INCOME AND LABOR FORCE PARTICIPATION, DIVORCE, AND GENDER GAP IN HOUSEWORK, PANEL DATA EVIDENCE

	(1)	(2)	(3)	(4)	(5)
Panel A: relative income and labor force participation					
	Dependent variable: <i>Wife in the labor force in t</i>				
<i>wifeEarnsMore in t-1</i>	-0.019*** [0.004]	-0.018*** [0.004]	-0.013*** [0.004]	-0.012*** [0.004]	-0.014*** [0.003]
Observations	110,123	110,123	110,123	110,123	110,123
R-squared	0.718	0.720	0.720	0.721	0.662
Panel B: relative income and marital stability					
	Dependent variable: <i>Divorced in t</i>				
<i>wifeEarnsMore in t-1</i>	0.003 [0.002]	0.003 [0.003]	0.004 [0.003]	0.004 [0.003]	0.000 [0.003]
<i>wifeEarnsMore in t-2</i>	0.005* [0.003]	0.005* [0.003]	0.005 [0.003]	0.005 [0.003]	0.002 [0.003]
Observations	72,169	72,169	72,169	72,169	72,169
R-squared	0.418	0.418	0.418	0.418	0.013
Panel C: relative income and gender gap in housework					
	Dependent variable: <i>Wife housework in t - Husband housework in t</i>				
<i>wifeEarnsMore in t</i>	0.059 [0.250]	0.464* [0.261]	1.048*** [0.275]	0.904*** [0.273]	1.141*** [0.310]
Observations	67,603	67,603	67,603	67,603	67,603
R-squared	0.586	0.587	0.587	0.595	0.376
Additional controls:					
Couple fixed effects	yes	yes	yes	yes	no
Cubic in <i>lnWifeIncome</i> and <i>lnHusbandIncome</i>	no	yes	yes	yes	yes
<i>relativeIncome</i>	no	no	yes	yes	yes
Children controls	no	no	no	yes	yes

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- The social norm “a man should earn more than his wife” influences:
 - The distribution of relative income within households.
 - The patterns of marriage and divorce.
 - Women’s labor supply.
 - The division of home production activities between husbands and wives.

Conclusion

- The structural change in labor market happened quickly in comparison to the slow-moving social norms and concepts of gender.
- Slow-moving identity norms are an important factor that limits further convergence in labor market outcomes. “Women are bringing personal glass ceilings from home to the workplace.”

Questions are welcome.