

Week 9 – Economics and Gender

Global Pay Gaps (2015 WGEA)

Global pay gaps

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Senior Positions (ABS 2013-14)

- 17% of CEOs are female, 24% Board Directors, Key Management Personnel 26%

Academic positions at Australia universities + Economic Academic Positions

Academic Positions @ Australian Universities (% female)	
Above Senior Lecturers	30
Senior Lecturers	44
Lecturer	53
Below Lecturer	53

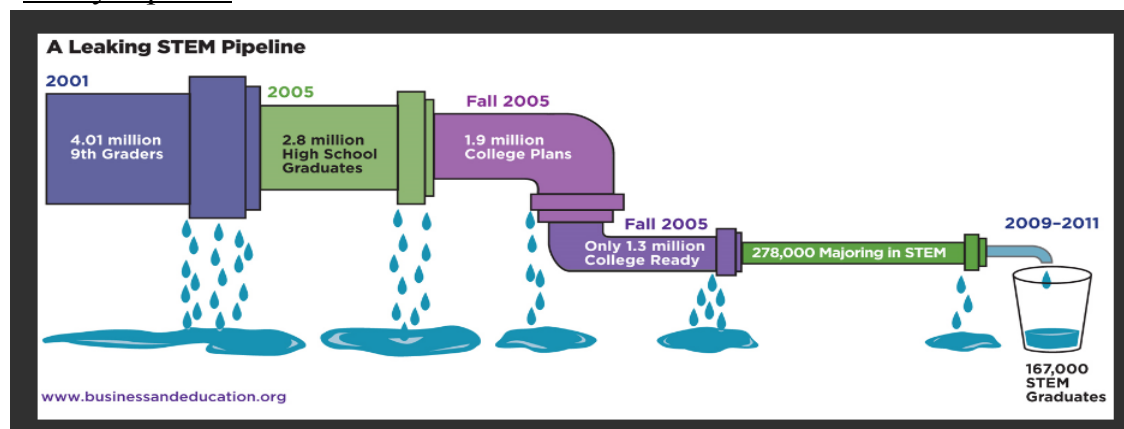
Academic Positions @ Other Universities (% female)				
	Japan	India	Europe	US
Academic Position	13	26-39	40	38-48

Economic Academic Positions (% female, 124 U.S. departments)	
Full Professor	12
Associate Professor	23
Assistant Professor	29
Ph.D. granted	33
Undergraduate Majors	33

(July 2015, Catalyst)

(2014 Status of Women in the Economics Profession)

Leaky Pipeline



Statistics

- Women earn ~20% less than men and hold fewer high ranking positions
 - These stats are true, but don't tell full story
- Data shows there are four broad reasons women are paid less than men:
 1. Women choose lower earning college majors
 2. More likely to have unpaid family responsibilities
 3. Women less likely to negotiate for higher wages, more likely to avoid competition and risk
 4. Discrimination and biases

1. Choice in Major

Percent Female by Area of Study @ Australian Universities

Area of Study	% Female	%Male
Education	76	24
Health	72	28
Humanities	64	36
Creative Arts	60	40
Average	56	44
Natural & Physical Sciences	52	48
Management & Commerce	50	50
Architecture & Building	49	51
Information Technology (IT)	19	81
Engineering & Related Tech	16	84

University Rankings – Gender Balance

Career Choices (2013-14 ABS)

By Career Choices	% Female	% Male
Professional/Scientific/ Technical	42	58
Education and Training	70	30
Health Care and Social Assistance	78	28

High School Track from Netherlands

Buser, Niederle and Osterbeek (2014)

Degree Tracks	% Female	% Male
Science Oriented	23	43
Health Oriented	26	17
Social Sciences	32	35
Humanities	18	5

High School Math/Science intensity directly tied to uni degrees, graduation rates and lifetime wages

From **Card and Payne (2017)**

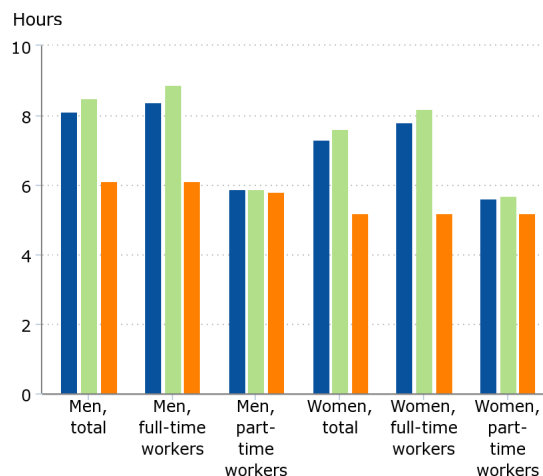
- The main sources of the gender gap in STEM entry is:
 1. Gender differences in the rate of STEM readiness
 2. Lower overall rate of university attendance by men
 - Non-STEM uni-ready women are more likely to attend uni than non-STEM uni-ready men
- Why don't more men choose non-STEM majors?
 - Preferences
 - Better outside options
- Why don't more women choose STEM majors and earn more money

2. Family Responsibilities

- Women tend to have more family responsibilities
- Men work more paid hours → women more likely to work part-time

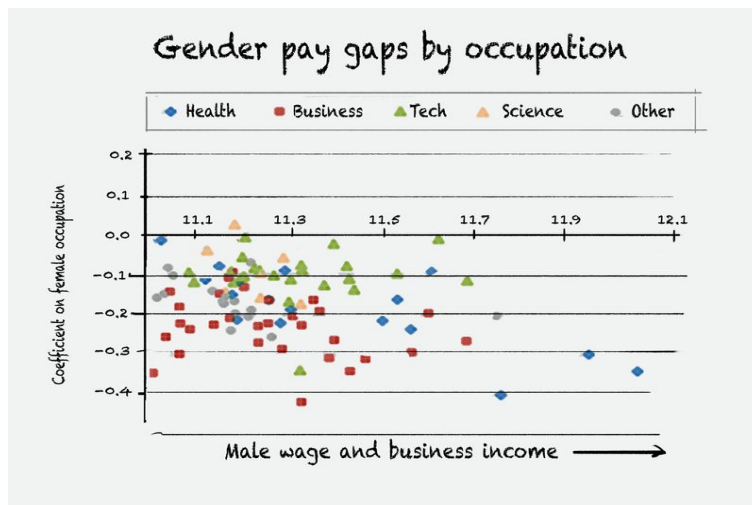
Average hours per day employed people age 15 and older worked, by day of week, full- and part-time status, and gender, 2014 annual averages

■ Average day ■ Average weekday ■ Average Saturday, Sunday, and holiday



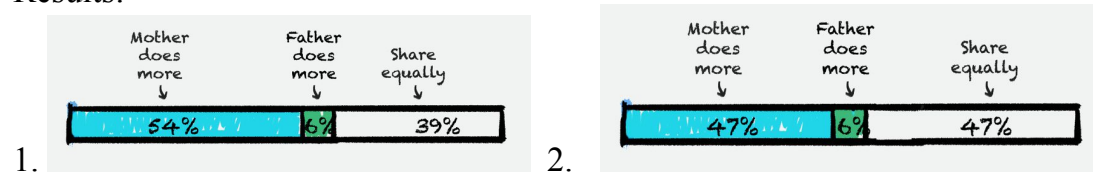
Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics.

- For most economists, this is the main cause of gender pay gap
 - Unpaid family work limits women's ability to get higher wages+ promotion
- What people miss about gender wage gap:
- **Goldin (2014)**
 1. The highest-paying jobs disproportionately reward those who can work the longest, least flexible hours.
 2. These types of job penalize workers who have caregiving responsibilities outside the workplace.
 3. Those workers tend to be women



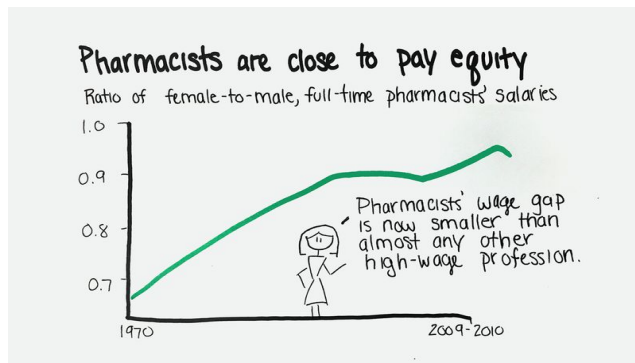
- In 2015, the Pew research Center surveyed 1807 parents in households where they both work. They asked “who does the work of managing you children’s schedules and activities?” and “who takes care of the kids when they’re sick?”

Results:



Politicians like to talk about solutions to the gender wage gap, but it's not clear how far government interventions can go

- Solution 1: Goldin's research suggests that the best way to tackle the wage gap is by implementing policies that make **all hours equally valuable** — or at least taking steps in that direction

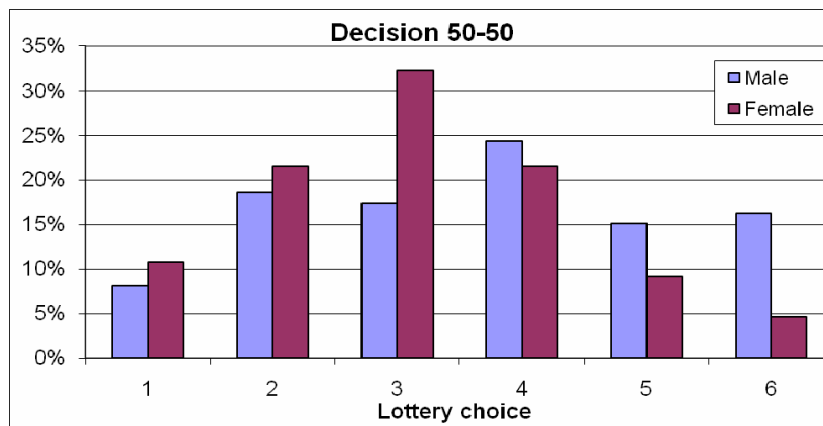


- Solution 2: Change traditional gender roles

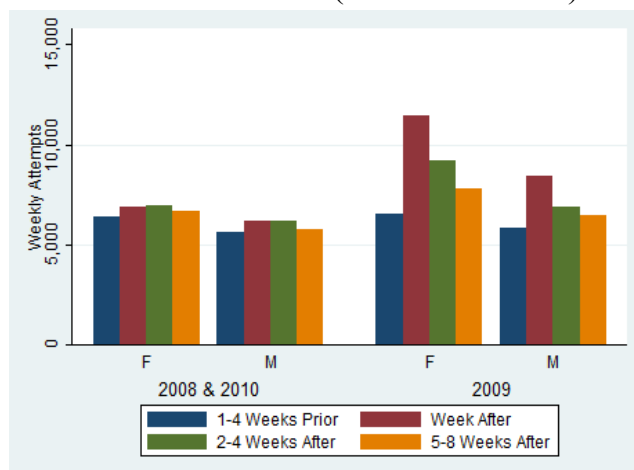
3. Risk, Altruism and Competition

- Numerous studies have found that women are less likely to ask for raises and promotions, and this contributes to the wage gap
 - Linda Babcock and Sara Laschever's book *Women Don't Ask* outlines dozens of studies that demonstrate women's reluctance to negotiate
 - E.g. survey of masters' students entering new jobs indicated that female students were likely to take the first offer of pay, while male students were eight times more likely to attempt negotiating a higher starting salary
- **Croson & Gneezy (2009)** reviews the economic literature on:
 1. Differences in risk preferences?
Women are more risk-averse than men
 2. Differences in altruism and social preferences?
Women are neither more nor less socially oriented than men, but their social preferences are more situation specific and malleable.
 3. Differences in competition preferences?
Women are more averse to competition than men.
- Gender differences in risk attitudes
- Many types of risk (social, lifestyle, health). Economists focus on financial risk
- **Garbarino, Slonim, Sydnor (2011)**

Lottery Choice	Heads	Tails
1	\$22	\$22
2	\$30	\$18
3	\$38	\$14
4	\$46	\$10
5	\$54	\$6
6	\$60	\$0



- Among university students, women on average pick a less risky option relative to the choice of men
- Robust for small and large gambles; for gains and losses
- Robust among student populations, younger, older people, across dozens of countries
- Implications
 - Savings, investing, & other financial decisions
 - Career choices
 - Leisure activities
- Gender differences in altruism
 - Choice of professions: Social work, education, nursing
 - Differences in attitudes towards social policy → women prefer re-distributive policies
- Little evidence of overall differences in monetary donations after controlling for income
 - Men and women donate blood about equally in the US, Canada, Australia
 - Women seem more responsive to disasters
- **Lilley & Slonim (2016)** looked at blood donations by gender before and after the Victorian bushfires (start 7 Feb 2009)



- Gender differences in accepting and receiving requests to perform non-promotional (voluntary) tasks
 - **Vesterlund, Babcock, Recalde, Weingart (2016); Taylor & Villas-Boas (2017)**
 - “I just can’t say no” club
- Potential explanations
 - Altruism
 - Social norms (don’t want to be perceived as a bitch)
 - Lack of information
- Gender differences in enjoyment of participating in competitions with winners and losers
 - Competing in tournaments (auctions and sports)
 - Competing for jobs, promotions and financial rewards
- **Gneezy, Niederle, Rusticini (2003)**: Men & Women solve math problems equally well when paid piece rate, but men’s performance increases significantly if in competitive situation, whereas women’s performance doesn’t increase as much
 - Gap closes if single sex competitions, which has policy implications: affirmative action e.g. law school quotas, PhD programs
- **Niederle & Vesterlund (2007)**: All else equal, women less willing to enter tournaments → robust across many countries, with children, to academic and physical activities

Math Olympiads

- Among high school students who took the math Olympiads in a given year, **Buser (2016)** considered the likelihood to take the examination again the following year if they either got just above or just below the threshold to advance to the next round
 - Among boys, they were equally likely to take the test again the follow year regardless of being just above or below the threshold
 - Among girls, those just below the threshold were over 10 percentage points less likely to take the test again
- **Buser (2016)** suggests this may explain the leaky pipeline
 - In sum, bad luck early in career (e.g. just missing a threshold) could be especially costly for high-performing women

Potential explanations (huge area of current research)

- Nature and/or Nurture
- Genetics/Biological/ Evolutionary Arguments
 - Primitive Societies and Male Selection
 - Hormones: Testosterone & Estrogen (T/E)
 - Men on average have higher T/E ratios → associated with aggression, but increasingly with willingness to take risks

- 2D:4D Measure of In-Utero Testosterone (**Bargarino et al 2011**)
 - Cultural/Sociological arguments
- Potential (partial explanations)
 - Overconfidence → men more confident
 - Emotions → lower utility resulting from bad outcomes
 - Challenge vs Threat → Fight or Flight
- Implications :
 - Career choices, applying for promotions, choice of academic study areas

2015 WGEA

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4. Discrimination & Biases

- Types of Discrimination
 - **Taste-based discrimination (Becker 1957)**
 - occurs when agents' personal prejudices or “tastes” against associating with members of a particular group (in a particular way) affect their treatment of those individuals
 - **Statistical discrimination (Phelph 1972; Arrow 1973)**
 - refers to a situation where, when selecting between different individuals, a selecting agency uses the average characteristics of groups that these individuals belong to (based on real evidence or stereotypes) as proxies for the characteristics of the individuals, in lieu of direct measurements of these characteristics for the individuals
- **Implicit Bias**

- Refers to the attitudes or stereotypes that affect our understanding, actions, and decisions in an unconscious manner
- Attitudes or stereotypes that affect our understanding, actions and decisions in an unconscious manner
 - Implicit association test on gender

Most respondents find it easier to associate Male with science and female with humanities compare to the reverse