Recent Developments in Inequality Research

The Remaining Gender Disparities in the Labor Market: Causes and Policy Responses

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Women have made substantial gains over the last half century in many countries around the world:

- Education
- Labor force participation
- Earnings

Main explanatory factors:

- Technological changes
  - Advances in home production technologies: washing machines, microwaves, vacuum cleaners
  - Substitutes to maternal inputs: infant formula
  - Innovations in contraception
- Labor demand shifts toward industries where female skills are disproportionately represented
  - Women have comparative advantage in “brains” vs. ”brawn”
- Lower discrimination (stronger regulatory controls, increased market competitiveness)
Figure 1
College Graduation Rates (by 35 years) for Men and Women: Cohorts Born from 1876 to 1975

Gender Differences in Share with College Education, by GDP per capita in 1970 and 2010

Figure 3.—Gender difference among 30–34-year-olds in share with college education, by per capita GDP, 1970. Vertical line represents median log per capita GDP. Source: See figure 1.

Figure 4.—Projected gender difference among 30–34-year-olds in share with college education, by per capita GDP, 2010. Source: See figure 1. Vertical line represents median log per capita GDP (2000).

Source: Becker, Murphy, and Hubbard (2010)
Yet, substantial gaps remain...

- Convergence in labor market outcomes appears to have slowed since early-mid 1990s
  - Women’s labor force participation (LFP) has plateaued in several countries, especially the U.S.
- A significant gender gap in earnings remains, even among full-time-full-year (FTFY) workers
  - In the U.S., FTFY female workers earn about 20 to 25 percent less than FTFY male workers
- Women remain highly underrepresented in high status/high income occupations (e.g. corporate sector) as well as in certain fields (e.g. STEM).
What explains the remaining gender gaps?

- A quick tour through the most active current areas of research (in economics) in explaining the remaining gender gaps
  - Gender differences in psychological attributes
  - Work-family balance and the work environment
  - Social norms: gender role attitudes and gender identity
- Very brief discussion of possible policy responses
Gender Differences in Psychological Attributes

- Large number of laboratory studies over the last decade or so have documented robust gender differences in a set of psychological attributes.
- Some of these attributes could potentially explain labor market choices and labor market outcomes.
- In particular, these studies find that:
  - Women are more risk averse
  - Women negotiate less/women do not ask
  - Women are less competitive – they tend to opt-out of competitive environments and perform more poorly in competitive settings
  - Women lack self-confidence (while men tend to be overly confident)
- More recent studies attempt to quantify the impact of these gender differences in psychological attributes on real outcomes.
  - Account for small to moderate portion of the gender pay gap (16% or less).
• It is worth noting that gender differences in psychological attributes / non-cognitive skills may also work to the advantage of women
  • Increasing evidence that the greater incidence of behavioral problems among boys may contribute to their lower rate of college-going.
  • Controlling for non-cognitive behavioral factors can explain female advantage in college attendance, after adjusting for family background, test scores, and high school achievement (Jacob, 2002).
• Female advantage in “people skills” coupled with growing importance of interpersonal interactions and social skills (driven by technological change) could work to the advantage of females in the labor market.
  • Borghans et al. (2014), Deming (2015)
• Women remain the dominant providers of childcare within the household, as well as other forms of non-market work.

• Many of the higher-paying jobs have long hours and inflexible schedules, making it difficult to combine job and family responsibilities.

• Moreover, many high-paying, high-status careers require continuous labor force attachment in order to stay on the “fast track” – any job interruption becomes very costly (e.g. maternity leave).
Evidence from MBAs and JDs

  - Small gender differences at the outset of the career, 4 years post-degree, men earned about 30% more, which grows to about 82% more 10-16 years post-degree.
  - Main contributor to growing gender gap in earnings in this group is a growing gender gap in labor supply:
    - Women have lower actual post-MBA work experience, weekly hours worked
    - Most of the gender gap in labor supply can be explained by the presence of children

- Similar findings for lawyers from U. Michigan (Noonan, Corcoran, and Courant, 2005)
  - Gender wage gaps arise due to shorter work hours, part-time work, and time out after child birth.
Workplace Demands and Temporal Flexibility

- Recent research takes a closer look within occupations to examine the impact of (in)flexible work environments on the gender wage gap.
- Goldin (2014) argues that the disproportionate rewards in some occupations/firms for working long hours and particular hours are an important cause of the gender pay gap.
  - Pay differences arise because different workplaces place different values on long hours (also particular hours, or no job interruptions)
  - Occupations with higher returns to current hours impose larger penalty on shorter work hours and time out of the labor market
  - Since women place a higher value on temporal flexibility than men, they tend to sort into positions with more flexible time requirements to accommodate work-family considerations
The findings gleaned from each of the graphs are similar although the levels are a bit different. In almost all cases the coefficient on female for each of the occupations is negative. That should not come as a surprise since it is a reflection of the lower earnings women receive relative to men in almost all occupations. If the individual’s past employment history was included, as it will be for specific occupations presented later, the coefficients would be considerably smaller. Presented as in Figure 2, the coefficients give the raw gender gap in pay adjusted for age, education and time worked.

One way to think about the coefficient is that it is the penalty to being a woman relative to a man of equal education and age, given hours and weeks of work for each of the occupations. But why should the penalty differ so greatly by occupation, even for occupations that are high paying?

Each of the occupations has been categorized into one of five sectors: Business, Health, Science, Technology, and a miscellaneous group called “Other.” Although the categorization is generally clear (e.g., engineers in Technology; physicians in Health), occupation descriptions and groupings of the occupations in O*Net were used for less obvious cases. 19 The list of occupations by category is given in online Appendix Table A1.

The Department of Labor’s Occupational Information Network (O*Net) is the successor to the Dictionary of Occupational Titles (DOT), which was first published by the Department of Labor in 1938 and last updated in 1991. Source: Goldin (2014)
Work-Family Balance: Policy Responses

- There are a large number of public policies and firm-level HR policies that are aimed at work-family considerations within the workplace:
  - Parental leave
  - Part time work, shorter hours, flexibility during the workday
  - Child care services

- Theoretically ambiguous effects of some of these policies:
  - Longer parental leave raise costs for employers of hiring women, avoid assigning women to important jobs or clients.
  - Part-time entitlements encourage women to take part-time rather than full-time jobs.

- Re-organize work to reduce the “flexibility penalty”:
  - Push more women to top organizations layers to accelerate job re-design
  - Find ways to make employees more substitutable to clients e.g. enumerate employees on the basis of output rather than input
  - Case studies such as pharmacists, pediatricians, obstetricians may be instructive
• Work-family issues remain largely a “woman’s problem” because of persistent gender norms.

• Long-standing idea in social science that people are unwilling to act in contravention of understood/agreed upon behaviors.

• Akerlof and Kranton (2000) import insights from social psychology re. an individual’s social identity and how it can influence behaviors and choices.
  • Identity: sense of belonging to a social category
  • Departure from norms generate disutility

• Attitudes toward the appropriate gender roles could result in differential treatment received by women from actors whom they interact with in the labor market
  • Male employers who hold these norms might engage in taste-based discrimination (Becker, 1971)
Gender Role Attitudes and Gender Identity Norms

• Gender role attitudes:
  • “Scarce jobs should go to men first”
  • “Man achieve outside the home, women take care of family”
  • “Preschool child suffers if his/her mother works”

• Gender identity norms:
  • “Men should earn more than their wives”
  • “Men should not do women’s work”

• Perhaps also:
  • “Women should not compete”
  • “Women should not take too much risk”
Figure 1

Women’s Employment Rate Across Countries

a) Scarce Jobs Should Go to Men

b) Competition OK

c) Being a Housewife Fulfilling

d) Volunteer in Leadership Org.

Source: Fortin (2005)
Figure 2: Relationship between Selected GSS Sexism Questions and Outcomes

Source: Charles, Guryan and Pan (2016)
Fig. 1.—Four gender attitudes: 1977–2008. “Strongly agree” (“disagree”) and “agree” (“disagree”) are combined. “Don’t know” responses are coded as not egalitarian. Data are from the General Social Surveys, 1977–2008.

Source: Cotter, Hermsen, and Vanneman (2011)
Distribution of relative income across couples

Figure I

Distribution of Relative Income (SIPP Administrative Data)

Source: Bertrand, Kamenica, and Pan (2015)
Gender Identity and Relative Income within Households

• We show that the identity prescription that “men should earn more than their wives” has an impact on:
  • Marriage formation
    • Within marriage markets, when a randomly chosen woman becomes more likely to earn more than a randomly chosen man, marriage rates decline.
  • Wives’ labor force participation and relative earnings
    • Within couples, when the wife’s potential income is likely to exceed the husband’s, the wife is less likely to be in the labor force and earns less than her potential if she does work.
  • Division of chores within the household & marital stability
    • In couples where the wife earns more than the husband, the wife spends more time on household chores.
    • Moreover, marital satisfaction is lower and these couples are more likely to divorce.
Implications of Gender Role Attitudes and Gender Identity Norms

- How malleable are social norms? How long will it take for these norms to adjust?
  - Evidence of strong persistence
    - Current gender beliefs and women’s LFP related to pre-industrial agricultural practices (Alesina et al., 2013)
  - But also responsive to labor market changes within a generation
    - Fernandez et al. (2004) show that men whose mothers worked are more likely to have working wives. As female education/LFP rises, there will be more “new” men, which in turn raises the returns to investing in labor market skills...
    - Innovations in contraception may have contributed to altering women’s identity in the 1960s and 1970s.
- Policies may help to accelerate the process:
  - Exposure to female leaders – weaken men’s stereotypes about gender roles
  - Paternity leave policies (Norway and other Scandinavian countries) – weaken traditional division of labor
Concluding Remarks

- Gender disparities in the labor market continue to persist despite the large improvement in women’s earnings potential
  - Macroeconomic implications are large
- Work-family trade-offs likely to be the first-order explanation for gender inequality in the labor market
- Some of the identified factors may be relatively slow to adjust, e.g. persistent social norms.
- An important challenge is the design and evaluation of policies to address the remaining gender gaps.