

ECON 1000

Empirical Exercise #5 Submission Template

Due TUESDAY 11/14/2023, by 10am EDT on Gradescope

Gradescope Course Link: <https://www.gradescope.com/courses/565275>

Name: Sonya Rashkovan

Group members with whom you worked¹:

1.

2.

3.

4.

¹ In this class we encourage working in groups because you will learn a great deal from your peers. At the end of the day, however, it is important that you write up your own analysis. Your exploration in Q7 and your narrative should be your own. Please then list all group members with whom you worked. If you have any questions, please ask.

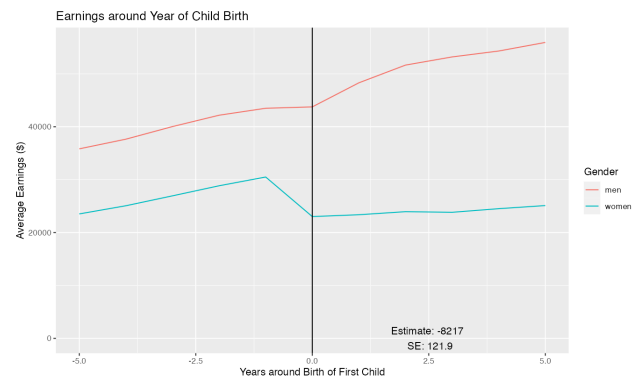
Narrative:

In this lab, we analyzed the significance of having children on employment and earning rates and the contrast between these changes for men and women, a concept also known as the child penalty. The first thing that is observed is the overall lower average earning of women than men, \$24,782.5 against \$47,570.33, respectively; that is a stark difference of almost 50%. When it comes to men and women without children, the gap between them is a bit less as childless men earn on average \$39,904.62 and women \$26,977.97. When it comes to parents, the largest gap between sexes appears: women with children earn on average \$23,882.06 while men earn \$50,619.33 — the child burden starts seeming very

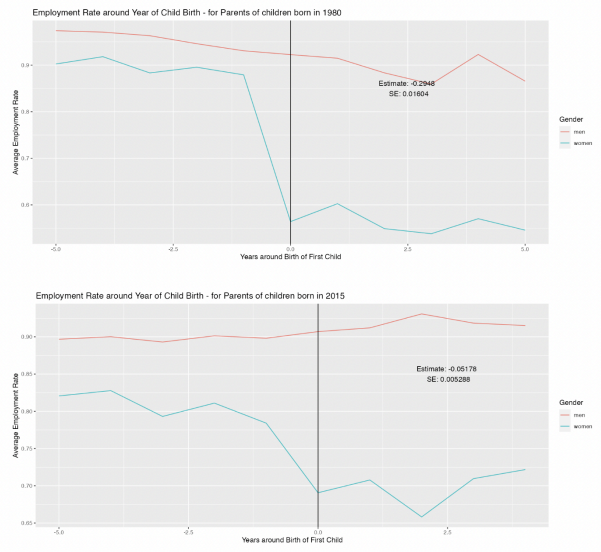
onesided as men with children earn more than an average man while women earn much less. A possible explanation for this is that it's more socially acceptable for women to not come back to work after having children while men are expected to start earning more as now they have to provide for more

people in the family. According to the graph on the right, the year of the child's birth becomes a breaking point for women's earnings to drop and for men's earnings to grow. What is an interesting observation is that women's earnings fall drastically even before the first child's birth, about 1 year before, which could possibly be explained by women leaving their jobs or not taking career advancements when starting to plan for children; also discrimination against women of child-bearing age could be a reason.

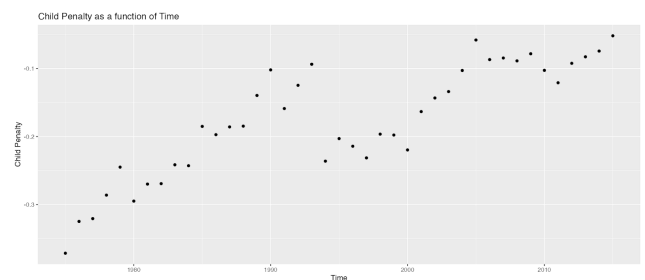
What is a bit uplifting to see is that there has been progress from 1980 to 2015. The employment level drop for women became less sharp in 2015 as well and after about 2 years after the first baby, the employment rate seems to start climbing up for women — while they remain steadily growing for men. However, it's surprising that the 1980 graph shows higher employment of women 5 years before the



birth of the child, around 90%, when in 2015 it's at around 83%. That can be explained though by the 2008 recession that many men and women haven't gotten back to secure jobs by 2010. The overall difference in women's employment after having a child between 1980 and 2015 can be explained by the changing gender roles and narratives in society: in the past, it was more common for stay-at-home moms to be considered a full-time occupation, so women didn't have to return to the workforce, having found another job in motherhood. Also, women would have more children back-to-back, so after having the first child, they continued to expand their families instead of getting back into the workforce. It was also more affordable to have a single-income family where the husband could sustain children and stay-at-home mom when now more people struggle to afford that, so women are getting back into the workforce. Society has become more accepting of working moms and there are more accommodations like childcare, even at the workplace, and pre-K programs that liberate mothers from having to be full-time caregivers until Kindergarten/School age.

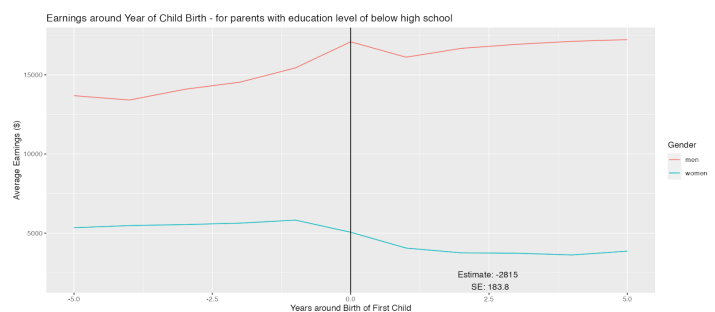
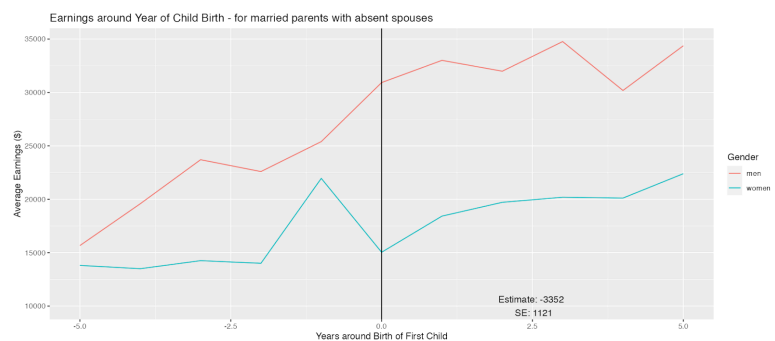
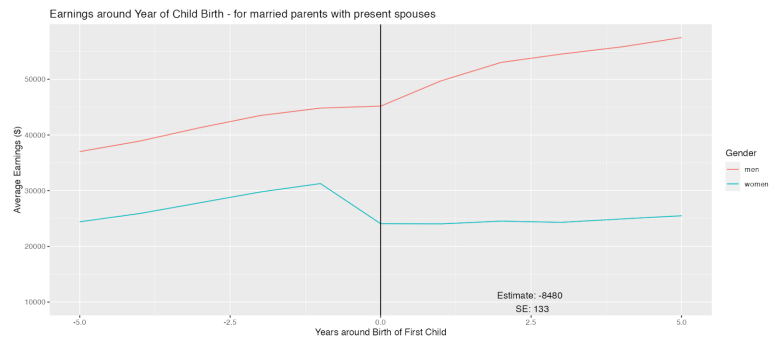


While it's clear that the child penalty remains a huge point of inequality between women and men as within the same family, the man's earnings would benefit, or at least just continue its steady growth, while the woman is losing her career and subsequent earnings — all from the same event that both parties participate in. However, over time, the child penalty decreased, as from 1975 to 2010s the child penalty is heading towards a -0.1 correlation coefficient from almost -0.4 in the past three decades.

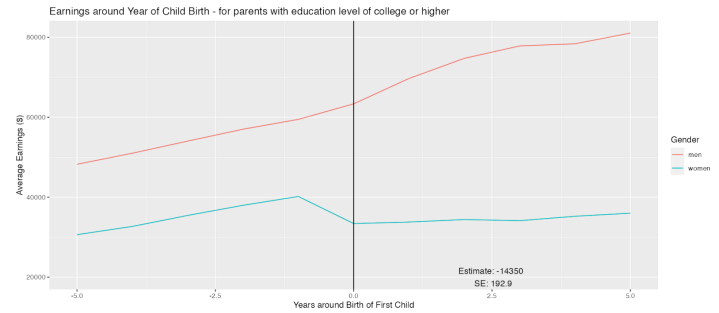


The child penalty doesn't affect everyone equally, sometimes showing that the ability to not come back to work is a privilege rather than a punishment. The three dimensions that display the nuance of the child penalty are marital status, education level, and citizenship status. Among married parents who have present vs absent spouses, the income and earnings dip differ. Women who have an absent spouse get their earnings back quickly. With a V-turn right after the first child's birth. For women with present spouses, the earnings fall at around one year before the first child's birth (could be the same explanation as above) and fall flat after that. That difference does make sense though as women without a present spouse have to be the main breadwinners in the family to continue supporting the children, so they have to get back to the workforce almost immediately as there isn't a support system that can take the earnings on them. For men with present or absent spouses, earnings stay on the positive slope. However, men with absent spouses earn less than those with present spouses: peak earnings are around \$35,000 for men with absent spouses while it goes beyond \$55,000 for those with present spouses.

The image is dull for parents with an education level of below high school. The average income for men and women in this group is at a peak a bit higher than \$15,000 and just above \$5,000 respectively. Earnings of



women with high school degrees or lower drop and don't rise after children's birth. For women with college degrees and higher, the image is a bit more promising because the earnings do fall around a year before the first child's birth but then very slowly rise, though not reaching the peak income of about \$40,000 within the five-year after



the child's birth. Men with college degrees or higher are the most privileged group within this dimension as they have higher earnings that steadily grow before and after the child's birth with a peak above \$80,000 5 years after the child's birth which suggests that it keeps growing after as well.

Surprisingly, there isn't that much difference between immigrant and US-born parents, with US-born men following the general trend of steadily rising earnings, while US-born women's earnings peak around a year before the child's birth and then fall and remain on that level. Immigrant women experience lower overall average income, peaking at only \$30,000 at around the same time, as opposed to \$35,000 for US-born women. However, about 2.5 years after the child's birth, earnings start slowly increasing. For immigrant fathers, there is a weird V-shaped dip around the child's birth, followed by a rapid rise back up higher than before the child's birth.