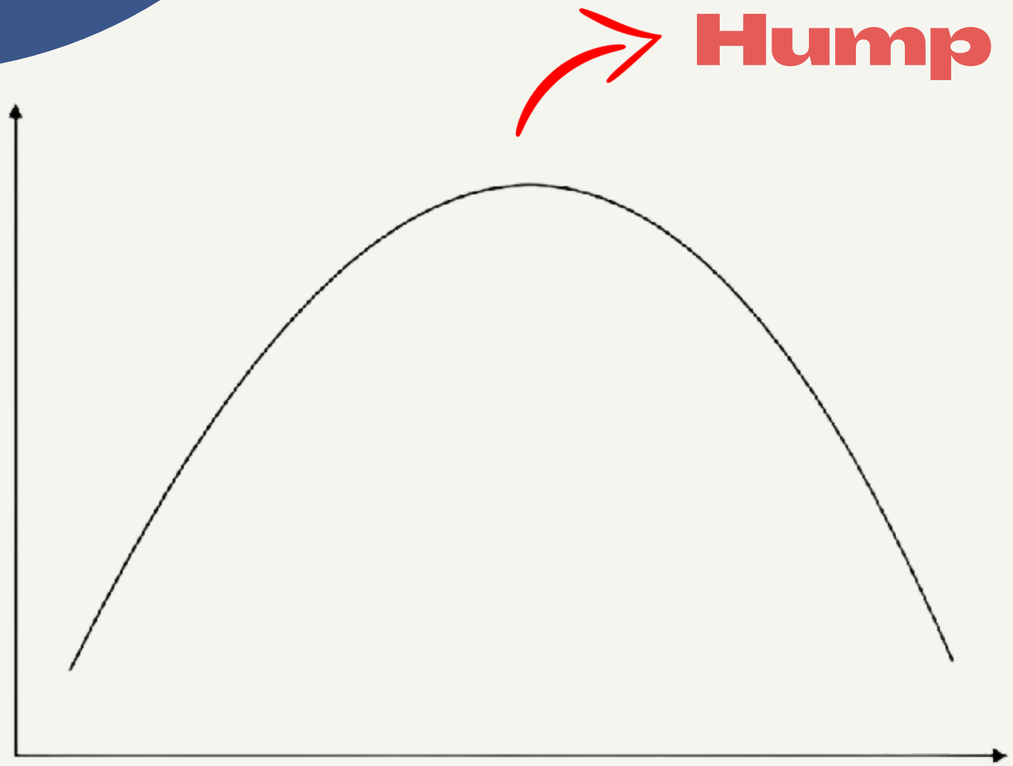
The New Life Cycle of Women's Employment: Disappearing Humps, Sagging Middle, Expanding Tops

Introduction



- Labor force participation of the US women born before the 1950s over the life cycle in distinct inverted-U-shape or what we call "Hump"
- The emergencec of new life cycle of women's labor force participation that causes "Sagging Middle" and "Expanding Top"
- Full women's new life cycle of labor force participation which looks high and flat
- The twist in the labor force rate

Introduction

- 3 customary effects

1. Period (year)

Period effects are, for example, war and recession that affects women at all ages

2. Cohort (year of birth)

Cohort effect determines the intercept of a life-cycle path shifting the labor force participation of the specific cohort up or down

3. Life-cycle (age)

Life-cycle effects determine the shape of function by age and can be altered by change in age at marriage and at first birth

- Heterogeneous and homogeneous labor force
- Synthetic and actual longitudinal data
- The effect of birth events on the US female labor participation force

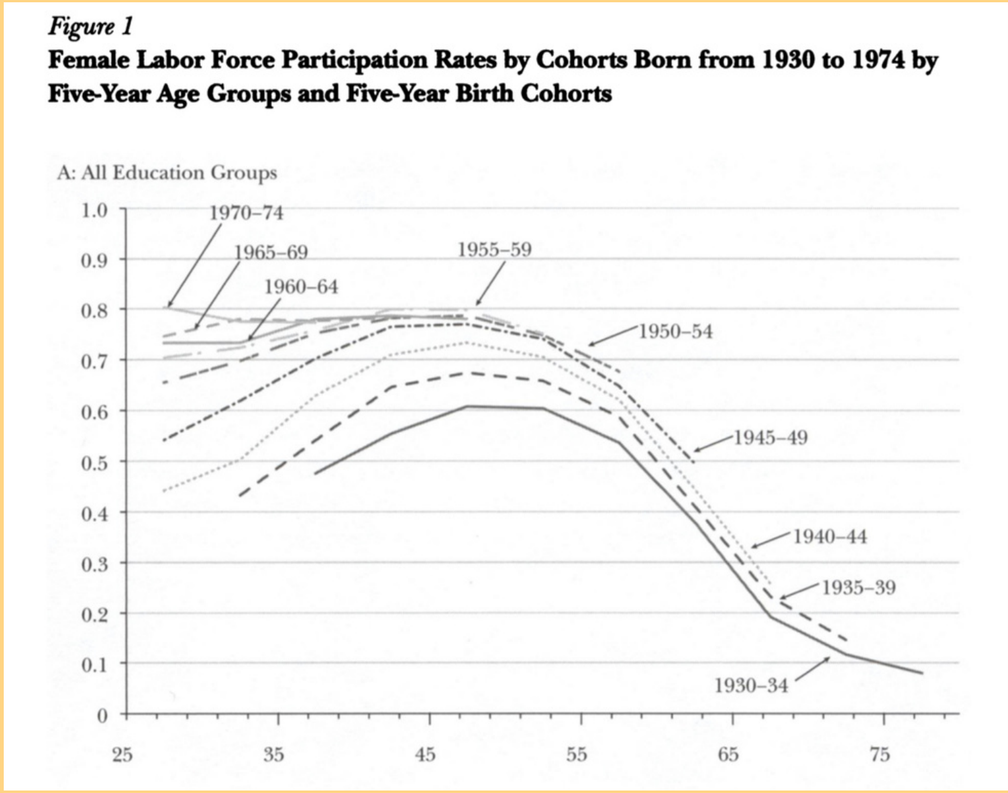
The Evolving Life Cycle of Women's Employment

- Synthetic labor force participation rate for different cohorts created by linking age group over time
- Focus on nine cohorts born during five-year interval from 1930 to 1974
- Start with the age of 25 to avoid confusing of inverse relationship of education and labor force participation
- Information of younger year in early cohorts are not included

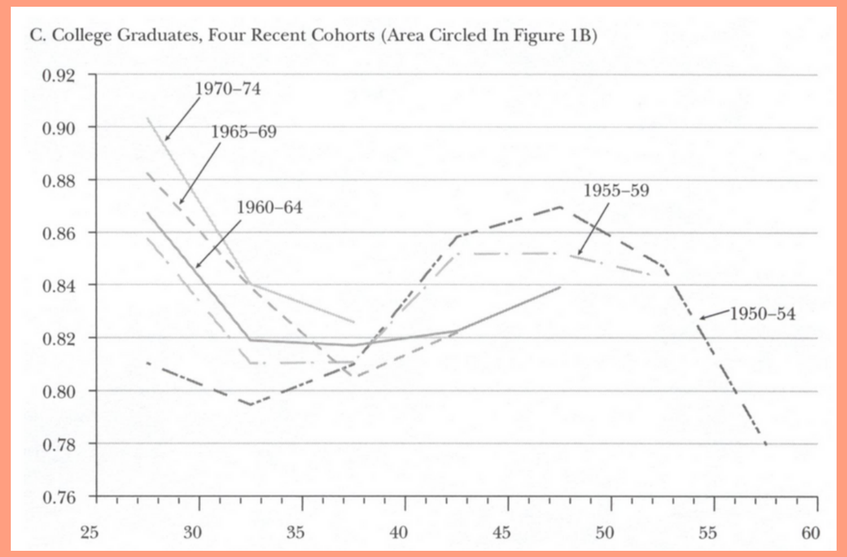
The Evolving Life Cycle of Women's Employment

Figure 1A

- Synthetic cohort labor force data for women born between 1930 to 1974
- Increase intercepts, increased in Labor force participation rates for women with each cohort
- Sagging middle of lower labor force participation among women in their 30s to 40s
- Relationship of Labor participation and Life cycle stages of each cohorts



The Evolving Life Cycle of Women's Employment



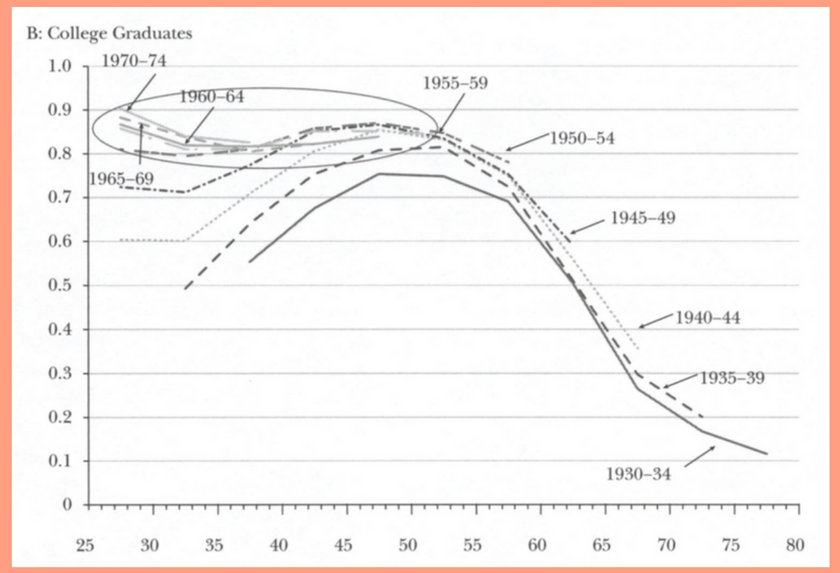


Figure 1B

- Labor force participation rates by cohort for college graduate women

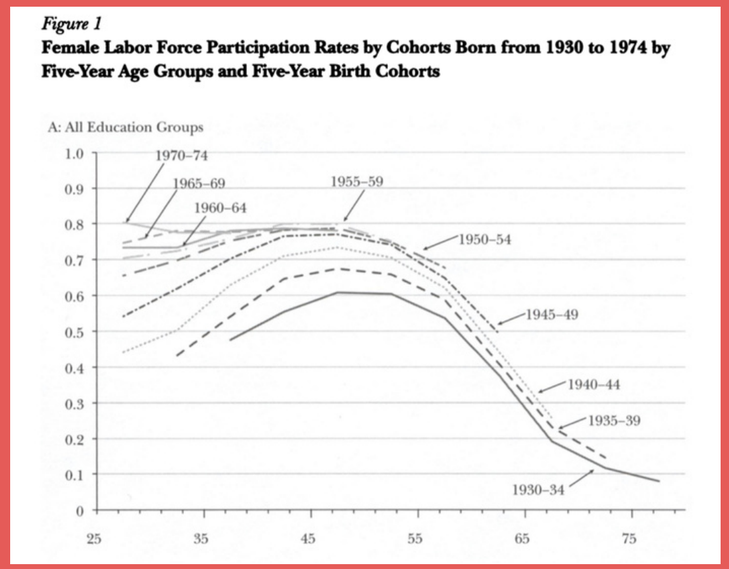
Figure 1C

- Labor force participation on the five most recent college graduate cohorts born in five-year interval from 1950 to 1974

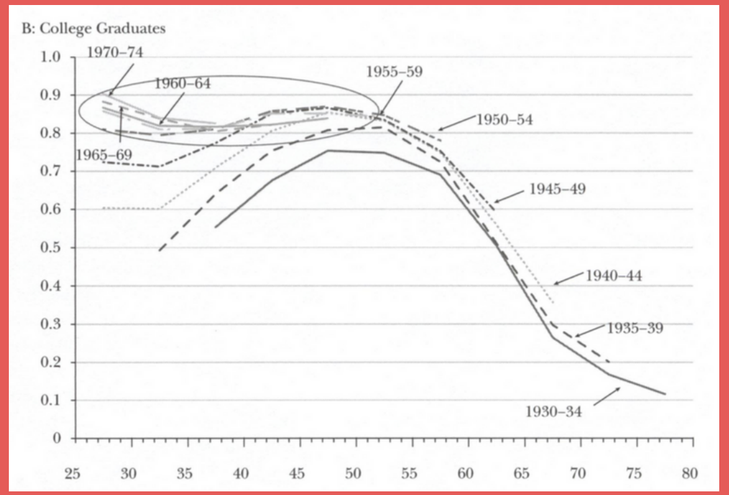
New life-cycle labor force participation women

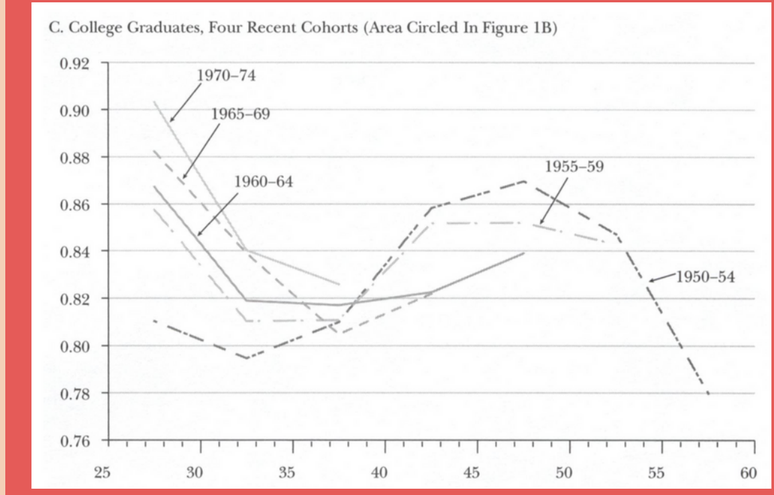
- Hump-shape of labor force participation
- Beginning high, dipping down, and increasing again
- Reverse order in early 40s
- Cohort effect swamped by the life-cycle effect

Longitudinal data



- Aggregate synthesis cohort data is not detail enough
- The Health and Retirement study (HRC) provides information on the respondent's longest occupation and also the year the individual worked for a government agency
- The Survey of income and program participation (SIPP)k contains information that bears on whether the woman took job-protected or paid leave after having a birth, whether she quit her current job around the time of birth event.
- Both contain variables that are reasonably time invariant





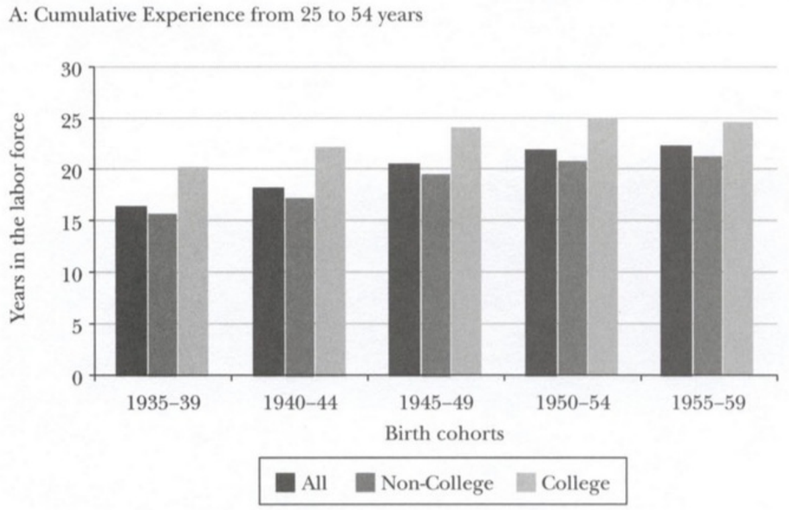
To conclude, both data closely match each other for overlapping birth cohorts so any measurement error should be low.

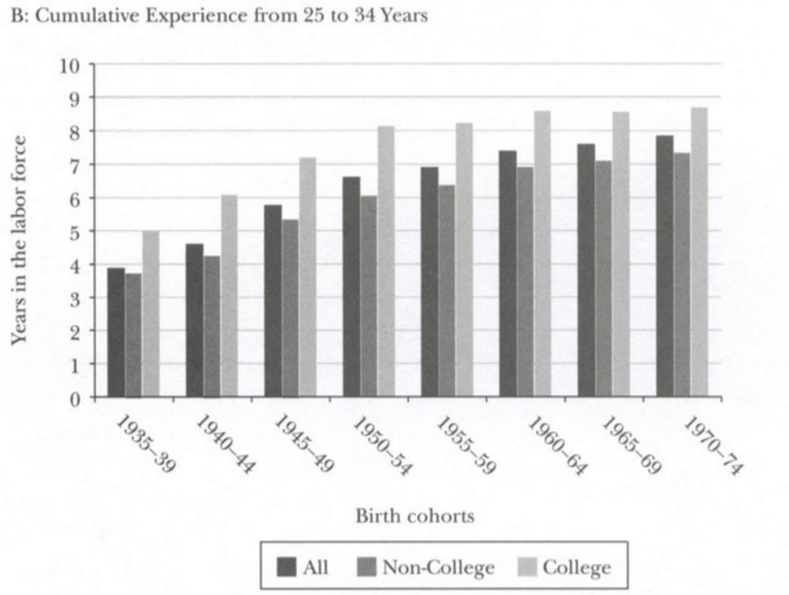
Evidence on New and Old Life Cycles from Administrative Data

Labor Force Experience

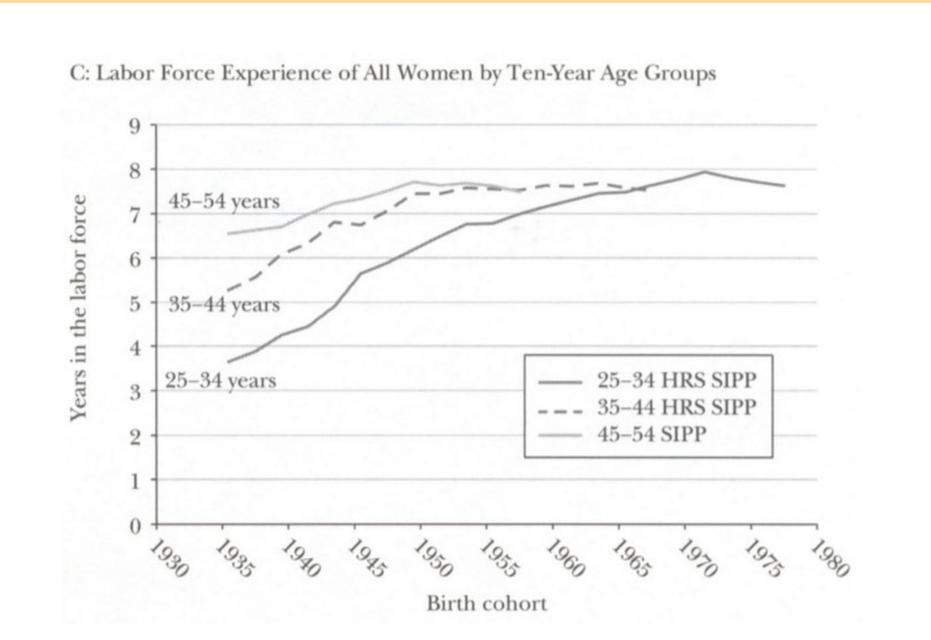
- Most of the total increase in mean year of experience across successive cohorts occurred in the youngest age group of 25-34 years
- Labor force experience and education level of women increased from 16.4 in 1935-1939 to 22.2 in 1955-1959
- Only longitudinal data can be used to construct work experience
- More than half of the total increase from 25-54 years old among women occurred in the 25-34 year group
- Most of the increase in mean year of work experience across successive cohorts occurred for cohorts born before 1959
- Average work experience for the birth cohorts reach 8.7 years for college graduates and 7.3 years for non-college groups

Figure 2
Labor Force Experience for Women Born 1935 to 1974 and by Education Level





Labor Force Experience



- Ten year age groups : Total cumulative experience doubled from 3.9 to 7.85
- Sturdy increases until around early 1950
- 25-34 year-old women in the labor force began to exceed the 35-44 year-old group
- Older group's fraction has exceeded the younger group
- Delay of childbirth led to increase in the youngest female group participation toward the labor force but it might at the same time cause the delay increase for the middle group

Distribution of Work Years

Figure 3A

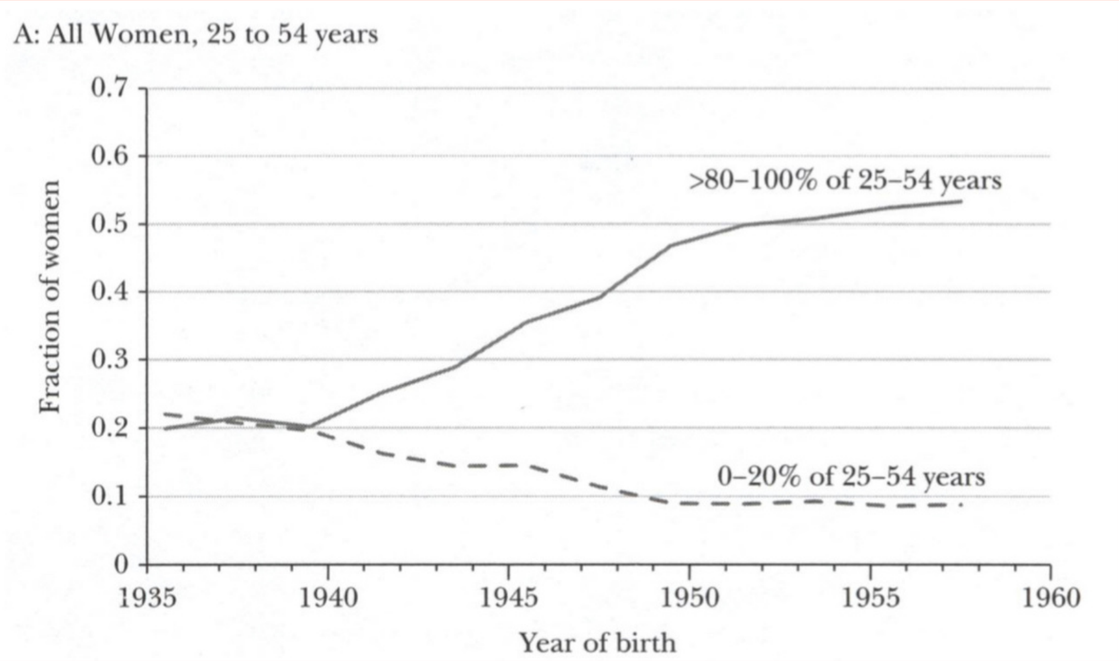
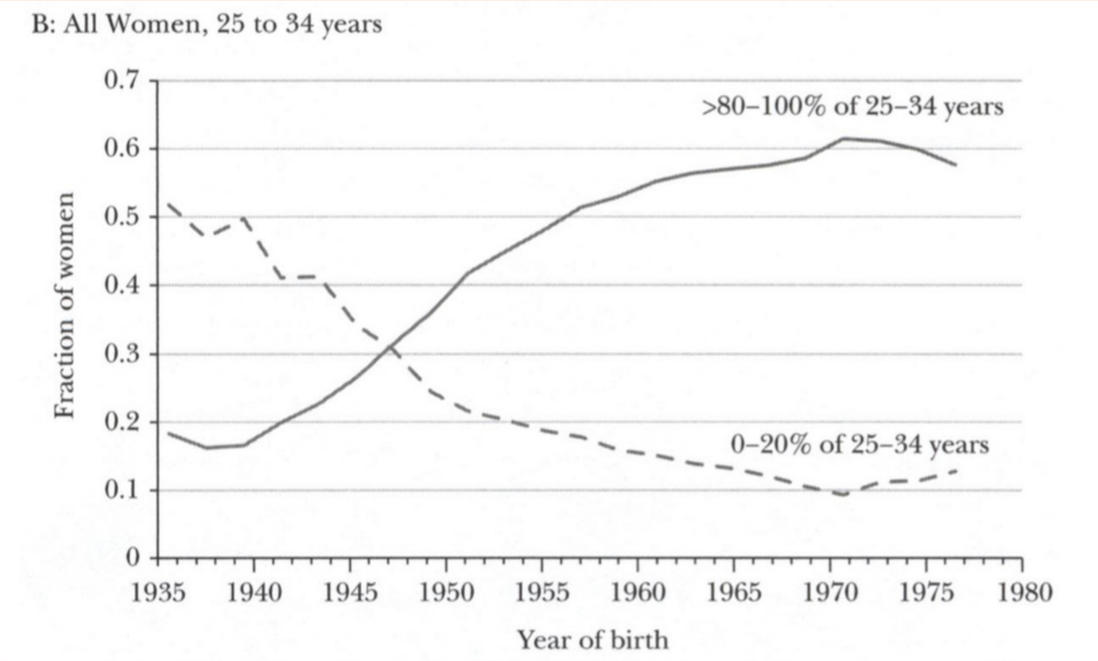


Figure 3B



- The distribution of work years : Who work more when young will continue labour force when older to get higher degree than who work less when young
- The role of delayed childbirth for most recent cohort

Liceria Inc.

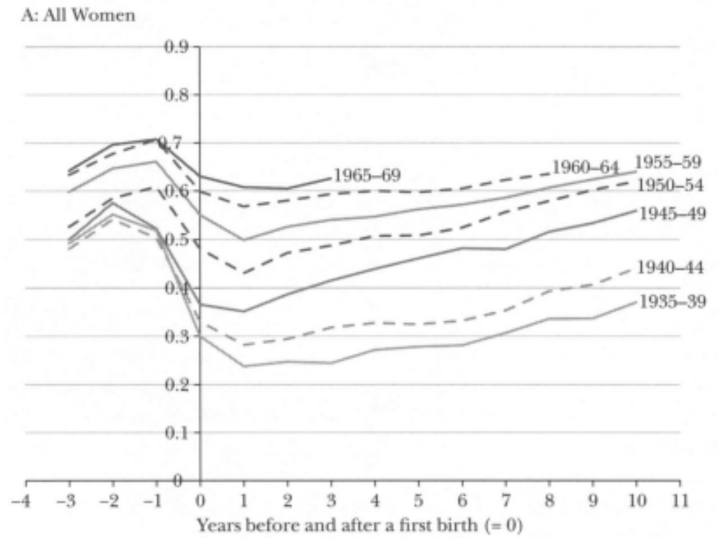
Childbirth and Life-Cycle Labor Force Participation

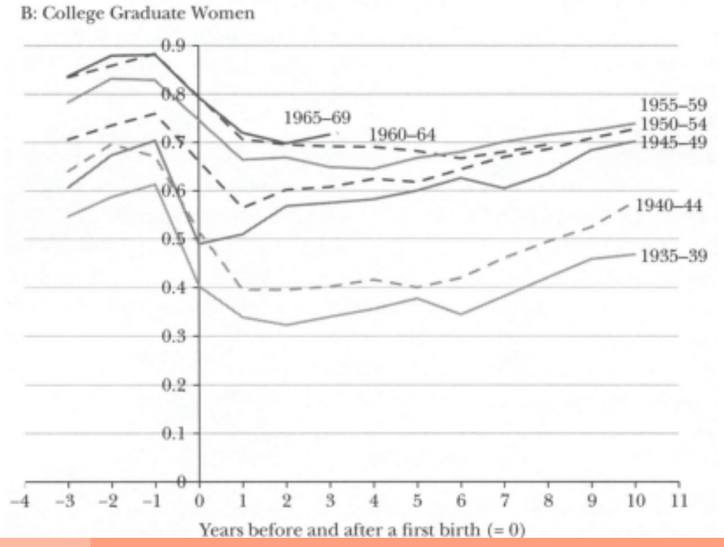
A transition of the new life cycle of women's employment

- Children were born by older mothers
- Fewer children were born than before

Figure 4

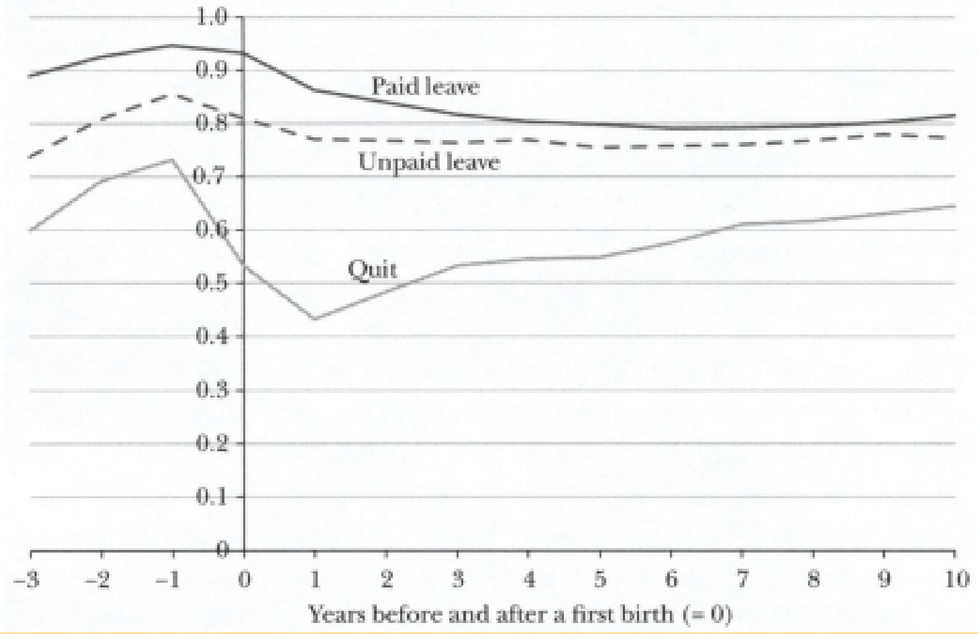
Labor Force Participation Before and After a First Birth, 1935 to 1969 Cohorts





Childbirth and Life-Cycle Labor Force Participation

Figure 5
Labor Force Participation Pre- and Post-Birth Years of First Child by SIPP Leave Status, 1990s



The figure shows the relationship between years before and after a first birth and labor force participation rate on the condition of :

- Paid leave
- Unpaid leave
- Quit

As the figure shows, paid leave has the highest employment rates before, during, and after pregnancy, followed by unpaid leave.

In every period, women have to participate less in the labor force to take care of their children.

Some International Comparisons

- Labor market participation rates of US women between the ages 25-54 years old are low compared to other OECD countries
- Paid and protected leaves leads to higher labor force participation
- For example, Austria, Denmark, Norway, and Sweden
- Low-hours women work can be the obstacles in their career path
- Firms will reduce demand for women in the age range who might adopt long protected leaves

CONCLUSION

- A new life cycle of women's labor force participation appears in women born in the 1950s with a flatter, higher, no hump, dip in the middle, and a phrase out
- High levels of female employment early in life
- Increase in participation by a succession of cohorts
- Longer and fulfilling carreer due to more realistic expectations of the future employment and investment in education
- Improvement of women's ability to control timing of childbirth by using contraceptive pills lead to increase in marriage age and a delay of births
- Unclear difference between the United Stat and other nations due to leave policy, childcare provision, or hours differences

CONCLUSION

- implication of the new life cycle of labor force participation for women cohorts entering their older years have;
  - more work experience
  - satisfying career rather than just jobs
  - more investment in their vocations
  - more of their identity bound up in their work
  - more steeply sloped earnings trajectories

THANK YOU

Papichaya jitsomboon 6304640920
Pariya foongladda 6304640946
pongpob punnara 6304641167
punnada Sridilok 6304641241
Runchida akarasrimachai 6304641340
Sittha Kengsakul 6304641456
Supawit wong-arun 6304641498