Female Employment in Japan

Mendeley group: (Saisawat)female-employment-japan

Parental leave policy

Parental leave policy is comprised of job protection and cash benefits. Job protection increases the probability of employment (Yamaguchi, 2016) but cash benefits have little effect. (Yamaguchi, 2016; Asai, 2012)

Nevertheless, early return to work after child birth still affects future probability of having full-time employment. (Kureishi et al., 2016)

Yamaguchi (2016)

- **Data**: Japanese Panel Survey of Consumers 1993-2012
- **Sample restriction**: Married women who completed schooling and are not self-employed
- **Y**: Female employment
- **X**: Parental leave policy (Job protection & Cash benefit)
- **Change in X**:
    - 1992: Job protection with no cash benefit for regular workers
    - 1995: Job protection with 25% cash benefit for regular workers
    - 2001: Job protection with 40% cash benefit for regular workers
    - 2005: Job protection with 40% cash benefit for regular/non-regular workers workers
    - 2007: Job protection with 50% cash benefit for regular/non-regular workers workers
- **Beta** (Counterfactual exercise):
    - One (Three) year of job protection increases the probability of work after child-bearing by 0.54 (0.53).
    - Cash benefits have little effect.

Asai (2012)

- **Data**: Japanese Employment Status Survey 1997-2002
- **Sample restriction**: Mothers with regular employment status 3 years before giving birth to first child
- **Y**: Mother's job continuity i.e. mother remains in regular employment with the same employer
- **X**: Reform eligibility
- **Change in X**: Amount of cash benefit was raised from 25% to 40% of wage in 2001. This paper compares outcomes of mothers before and after the reform.
- **Beta**: Increase in the amount of cash benefit did not increase job continutiy

Asai (2019)

- **Data**: Matched establishment-worker data from Basic Survey on Wage Structure and Economic Census.
- **Sample restriction**:
    - Workers with tenure less than two years
    - Firms and establishments with ten or more employees
    - Employees who are 18-60 years old
- **Y**:

    - Probability of permanent employment
    - Starting pay
- **X**: Interaction between
    - Employment costs of leave to the firm.
    - Probability that a working woman eligible for leave has a child and thus goes on leave,
- **Change in X**: Firm's cost to parental leave policy is lowered over the years through reforms
- **Beta**:
    - Reducing costs by the equivalent of a 100 thousand yen increases the probability of being hired as a permanent worker by 1.7 percent
    - and increases starting wages by 2.5 percent.

Kureishi et al. (2016)

- **Data**: Longitudinal Survey of Newborns in the 21st Century 2001, 2002, 2004, 2011
- **Sample restriction**: Babies born in 2001
- **Y**: Mother's future employment status
- **X**: Whether mother returns to work early
- **Change in X**:
    - Length of parental leave is instrumented by child's birth month
    - The deadline of application to accredited childcare facility is in December of every year. Children born after that must wait until the following year.
- **Beta**: Earlier return to work increases the probability of full-time employment

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Childcare Facility

Nishitateno & Shikata (2017) and Nishitateno (2019) find expansion of childcare facility increases maternal employment using municipality level data. However, Asai et al. (2016) finds no correlation with prefecture level data and provides evidence for substitution between formal childcare facility and childcare service provided by grandparents. Yamaguchi et al. (2018) find rationing rule favors mothers with stronger labor market attachment and childcare expansion improves employment for mothers with high propensity to use childcare.

Nishitateno & Shikata (2017)

- **Data**: Authors' own data set constructed at municipality level 2000, 2005, 2010 from Population Census and Survey of Welfare Institutions
- **Sample restriction**: Mothers with age 0-5 years
- **Y**: Maternal employment rate
- **X**: Daycare accessibility
    - Quota of daycare/population of children age 0-5
- **Change in X**:
    - 2001 "Zero Wait-listed Children" policy to increase quota of daycare
    - Accessibility increased by 7 percentage points from 2001 to 2010
- **Beta**: One percentage points increase in daycare accessibilty increases maternal employment rate by 0.11 percentage points

Nishitateno (2019)

- **Data**: Authors' own data set constructed at municipality level 2000, 2005, 2010 from Population Census and Survey of Welfare Institutions
- **Sample restriction**:
- **Y**: Maternal employment rate
- **X**: Privatization of daycare
    - measured by privatization rate in the municipality
- **Change in X**:
    - Daycare privatization rate increases from 47.7% in 2000 to 58.7% in 2010
- **Beta**:
    - One percentage points increase in privatized day care increases maternal employment rate by 0.02 percentage points.

Asai et al. (2016)

- **Data**: Prefecture panel data constructed from Japanese quinquennial census 1990-2010
- **Sample restriction**: Households with two parents and children under age 6
- **Y**: Maternal employment rate at prefecture level
- **X**: Childcare availability
    - measured by capacity data drawn from annual Report on Social Welfare Administration and Services and child population data from the Japanese quinquennial census 1990-2010.
- **Change in X**:
    - Since early 1990s, the government launched a series of policies to raise childcare capacity.
    - Variation comes from differential capacity across prefectures.
        - In large cities, capacity increased because of the policies.
        - In small cities, capacity remains almost constant because of the decline in number of child population.
- **Beta**:
    - There is no correlation between childcare availability and maternal employment.
    - This is because mothers substitute accredited childcare facility by informal childcare arrangement provided by grandparents.

Yamaguchi et al. (2018)

- **Data**: LSN21
- **Sample restriction**: Children born January 10-17, 2001, July 10-17, 2001, and May 10-24, 2010
- **Y**: Maternal labor market outcome
    - Participation
    - Hours worked
    - Job type
- **X**: Childcare use (instrumented by propensity score)
- **Change in X**:
    - Since early 2000s, the government has supported the expansion of subsidized childcare.
    - Local governments are responsible for the implementation.
    - Variation came from different timing of program rollout.
- **Beta**:
    - Mothers with large treatment effects have a weak unobserved propensity to use childcare.

Takaku (2019)

- **Data**: Japanese Panel Survey of Consumers 1993-2012
- **Sample restriction**: Mothers whose first-born went to daycare as pre-schoolers
- **Y**: Whether mother works
- **X**: Nuclear VS Three-generation household, timing of school entry of the child
- **Change in X**: (No particular policy change)
- **Beta**:
    - It is more difficult for mothers of nuclear families to work
    - The difference is more striking during the time of school entry

Nagase (2018)

- **Data**: LFS 2002-2015
- **Sample restriction**: Married women aged 25-54 years
- **Y**:
    - employment
    - permanent contract regular employment
- **X**: Abenomics indicator, as measured by interaction between
    - Indicator for having a 0-3 year-old child
    - Dummy for year 2013-2015
- **Change in X**:
    - Abe cabinet took office in 2012
- **Beta**: Abenomics increases employment (permanent employment) in women with young child by 0.03 (0.05) percentage points

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Working arrangement

More family-friendly working arrangement can increase female employment. (Kodama et al., 2018; Nagase, 2017)

Kodama et al. (2018)

- **Data**: Corporate Social Responsibility (CSR) Survey 2004-2014, Establishment and Enterprise Census 1996, 2001, 2004, 2006, 2009
- **Sample restriction**: listed companies, large non-listed companies, companies with 50 or more employees and the value of capital of at least 30 million yen.
- **Y**: Share of female workers
- **X**: Foreign affiliates VS Japanese firms
- **Change in X**: Affiliation with foreign firms, and timing of acquisition
- **Beta**:
    - Proportion of females becomes 7-9 percentage points higher in foreign affiliate firms two years after acquisition.
    - Foreign affiliates are more likely to offer flexible working arrangements, childcare facilities or childcare subsidies.

Nagase (2017)

- **Data**: Japanese Longitudinal Survey of Adults in the 21st Century 2002-2012

- **Sample restriction**: Women born from 1967 to 1982
- **Y**: Female employment
    - Measured by full-time permanent work status
- **X**: Work-life balance policy
    - Indicator for firm mandated by the government's work life balance policy
- **Change in X**:
    - The government mandated that firms with more than 300 workers would be required to set up action plans to better the work-life balance of their employees by 2005.
    - In 2009, the government announced that workers with children under three could request shorter work hours. This was applied to firms with 100 and more employees in 2010, and to all other firms from 2012.
- **Beta**:
    - Women at employed at firms with more than 100 workers were more likely to have up permanent employment after first childbirth.

Gender norm

Rodríguez-Planas & Tanaka (2018)

- **Data**: National Family Research of Japan Survey 1999, 2004, 2009
- **Sample restriction**: Women between 28-59 years old
- **Y**: Whether the person is working
- **X**: Share of women with non-traditional gender norms
    - Somewhat disagreeing with the statement *men should work outside and women should look after the family*
- **Change in X**:
    - Variation comes from different social norms between demographic groups.
    - Demographic groups are defined by birth cohort, educational attainment level, survey-year, and prefecture.
- **Beta**:
    - One percentage point increase in share of individuals with non-traditional beliefs increases the standard deviation of women’s decision to work by 0.016 percentage points.
    - No impact on decision to work part-time

Fertility

Griffen et al. (2015)

- **Data**: Longitudinal Survey of Newborns in the 21st Century,
- **Sample restriction**: Japanese babies born between January 10–17 and July 10–17, 2001.
- **Y**: Maternal employment
- **X**: Number of children
    - Number of children is instrumented by indicator for a twin birth.
- **Change in X**:
    - Since 2012, Abe government has attempted to raise fertility rate in Japan.
- **Beta**:

    - Number of children have little effect on maternal employment after instrumenting for twin occurrence.
    - Occurrence of twins increases maternal labor supply in the long run.
    - Effect seems to come from higher child cost and the absence of younger child in families with twins.

Regulation Targeting Women

Kato & Kodama (2014)

- **Data**: Population Census 1970-2010
- **Sample restriction**: (None)
- **Y**: Share of female in the job
- **X**: Overtime restrictions on women
    - Captured by a dummy variable on whether the job is exempted from overtime restrictions
- **Change in X**:
    - Since 1947, women had been prohibited from working over time more than certain amount.
    - In 1985, the restriction was lifted up for some occupations and industries.
- **Beta**:
    - Female employment increases by 3.6 percent.

Elderly Care

Kondo (2017)

- **Data**:
    - Population Census 2000, 2010
    - Survey of Institutions and Establishments for Long-term Care
    - Labor Force Survey 2002-2010
    - Employment Status Survey 2002-2010
- **Sample restriction**:
    - Individuals surveyed in October, November, or December (since the capacity of long-term care facilities is measured on October 1st)
    - Respondents who are 45-60 years old
- **Y**: Labor supply of middle-aged men and women
    - employment
    - full-time employment
    - regular employment
    - job separation within a year
- **X**: Long-term care capacity
    - Service (daycare, short-term stay, the specified institutions covered by the long-term care insurance system, other residential facilities) capacity per population over 75
- **Change in X**: regional variation in the supply of long-term care facilities
- **Beta**: No impact

Fu et al. (2017)

- **Data**: Comprehensive Survey of Living Conditions 1995-2013
- **Sample restriction**: Main caregivers age 30 or older to old persons age 65+
- **Y**: Labor force participation of caregiver
- **X**: long-term care insurance (LTCI)
- **Delta X**:
    - Introduction of LTCI in 2000
    - LTCI Amendment in 2006: some recipients became ineligible to some long-term care services.
- **Beta**:
    - beta coefficients are treatment effects from propensity score matching DID estimator. The propensity score is calculated based on
        - individual characteristics
            - age
            - marital status
            - whether the person is a regular outpatient
            - self-rated health
            - subjective symptoms
        - household characteristics
            - whether the person owns a house
            - whether the person is within a three-generation household
            - number of household members
            - monthly household expenditures
        - health status of the old-person being cared for
            - self-rated health statuses of old persons
    - Effects vary by gender and age
        - Introduction of LTCI (Table 5)
            - increases female labor force participation rate by 0.037pp ($p<0.01$)
            - increases labor force participation of 30-49, 50-64, 65+ years old by 0.087, 0.063, 0.051pp ($p<0.01$ for all estimates)
        - The 2006 Amendment (Table 6)
            - reduces female labor force participation by -0.077pp ($p<0.1$)
            - reduces labor force participation of 30-49, 50-64, 65+ years old by -0.214, -0.118 ($p<0.1$), -0.017pp ($p>0.1$)

Nishimura & Oikawa (2020)

- **Data**: Japanese Study of Aging and Retirement 2007, 2009, 2011, 2013
- **Sample restriction**: Married women aged 54 at first interview
- **Y**: Labor force participation, hours worked per week
- **X**: Informal care (instrumented by nursing care capacity)
- **Delta Z**: Nursing care capacity increases by approximately 20% (Tokuyo) and 10% (Roken) (Figure 3)
- **Beta**:
    - beta coefficient represents the IV estimate
    - First stage: 1pp increase in capacity of public nursing care homes reduces the provision of informal care by 1-3pp(Table 7).
    - Second stage: Informal care reduces the share of individuals working for pay by -0.101pp (OLS) and -0.112pp (IV, not statistically significant at 10%) (Table 10).

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