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AMERICAN ECONOMIC ASSOCIATION ANNUAL MEETING  
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SIYING LIU

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# WORKPLACE BREASTFEEDING BENEFITS AND THE GENDER WAGE GAP

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# AGENDA

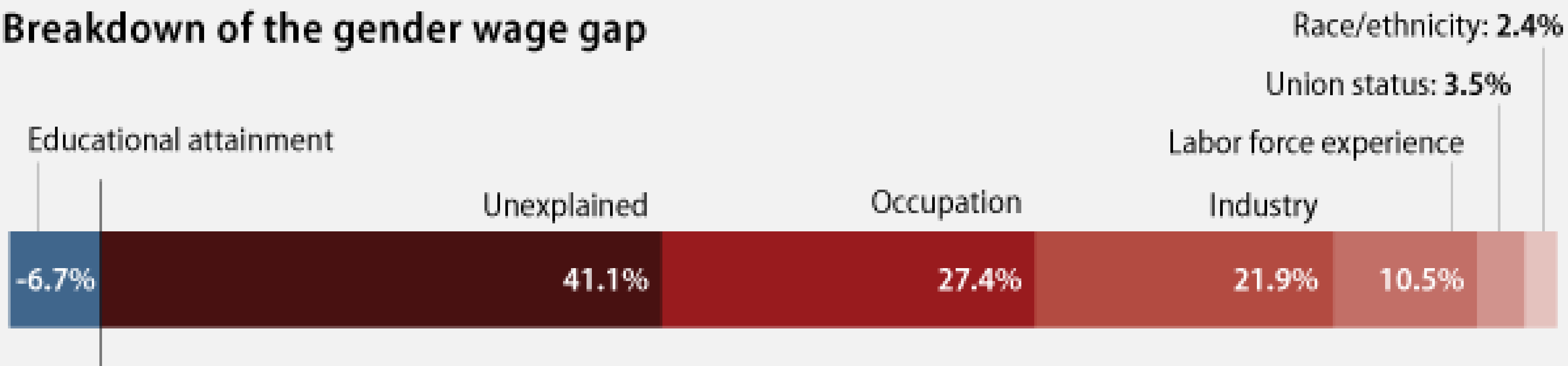
- ▶ Background
- ▶ Methods
- ▶ Main Results
- ▶ Channels
- ▶ Discussion

## BACKGROUND

# THE “UNEXPLAINED” GAP

FIGURE 1

## Breakdown of the gender wage gap



Source: Francine Blau and Lawrence Kahn, "The Gender Pay Gap: Have Women Gone as Far as They Can?", *Academy of Management Perspectives*, February 2007, pp. 7–23.

# QUESTION

- ▶ What is the impact of mandated breastfeeding benefits at the workplace on the labor market outcomes of female employees?
  
- ▶ Related literature
  - ▶ Effects of mandated benefits on labor market outcome (Summers, 1989)
  
  - ▶ Factors affecting the employment and wages of women with young children (Blau and Robins, 1988; Connelly, 1992; Acemoglu et al., 2004; Fernandez et al., 2004; Blau and Currie, 2006; Baker et al., 2008; Lefebvre and Merrigan, 2008; Cascio, 2009; Cortes and Pan, 2013; Black et al., 2014; Compton and Pollak, 2014; Bauernschuster and Schlotter, 2015; Hardoy and Schone, 2015)
  
  - ▶ Causal effects of labor market policies exploiting quasi-experimental legal changes (Gruber, 1994; Angrist and Evans, 1998; Klerman, 1999; Levine et al., 1999; Waldfogel, 1999; Bailey, 2006; Baker and Milligan, 2008; Rossin, 2011; Blau and Kahn, 2013)

## BACKGROUND

# LAWS ON BREASTFEEDING

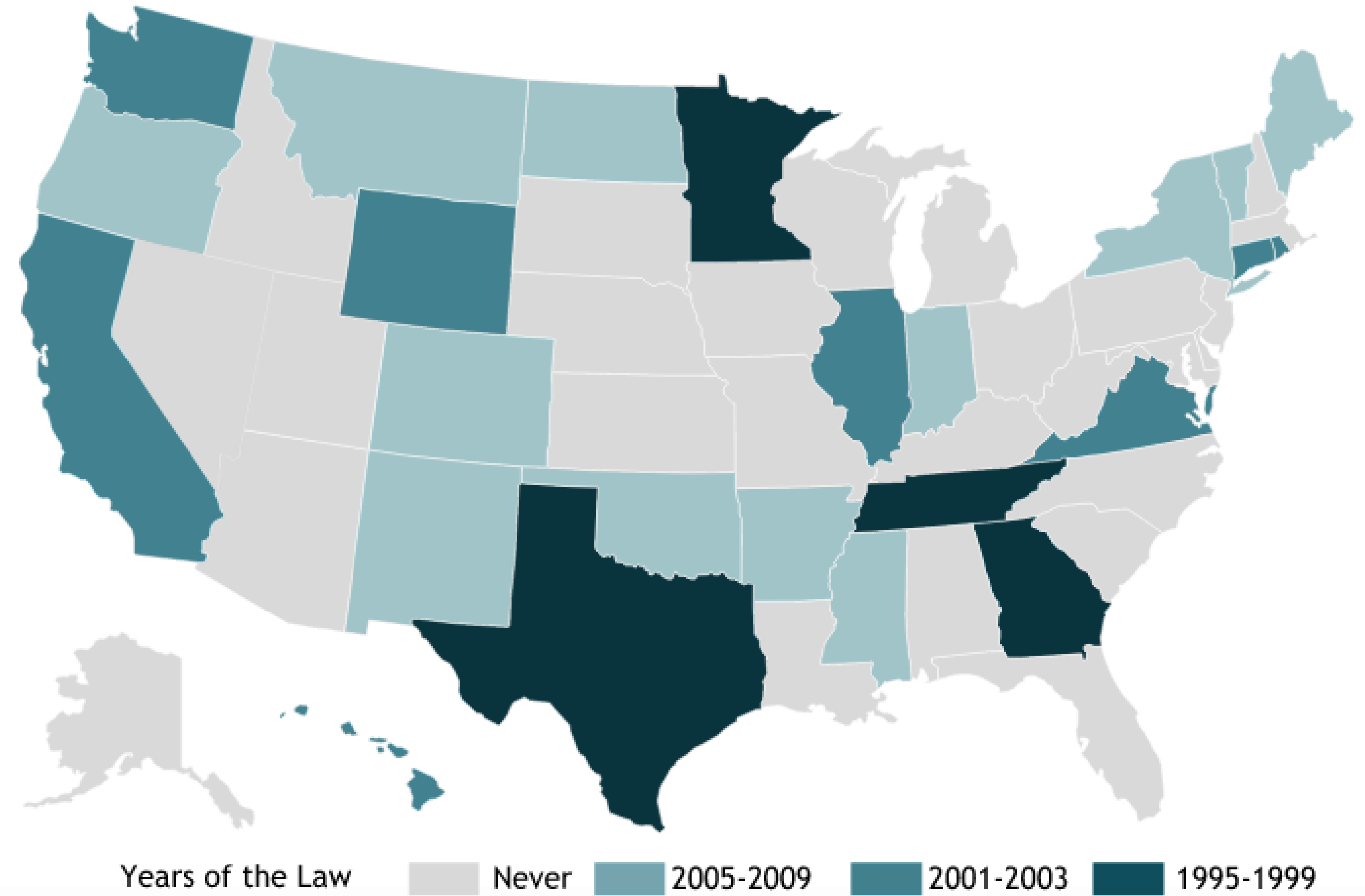
- ▶ Discrimination towards breastfeeding is not considered discrimination against gender, pregnancy, or disability
- ▶ Affordable Care Act's Nursing Mothers Amendment in 2010
- ▶ Only state-level mandates before 2010
  - ▶ 24 states and the D.C. mandated the provision in different years during the 1990s-2000s



## BACKGROUND

# STATE MANDATES

- ▶ Common features
- ▶ State-specific features
  - ▶ Longer period (5 states)
  - ▶ Breastfeeding & pumping (4 states)
  - ▶ No discrimination (9 states)
  - ▶ Retaliation protection (5 states)
  - ▶ Encouragement only (5 states)
- ▶ Plausibly exogenous variation in the passage and timing



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# METHODS

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# DATA

- ▶ Current Population Survey, 1990-2010
  - ▶ Labor market outcomes in the previous week
    - ▶ In the labor force, being employed, hours work per day, part-time (<35 hours per week), hourly wage
- ▶ DDD specification
  - ▶ Treatment group: mothers of infant children
  - ▶ Comparison group: male workers aged 25-44
    - ▶ Alternative control groups: males with infant children, females without children, etc.



# A QUASI-EXPERIMENT

- ▶ Compare the change of the outcome variables between mothers of infant children who have access to the benefits and mothers who do not have access to the benefits, relative to males
- ▶ Controlling for the omitted variables by adding the year fixed effects, state fixed effects, state-specific time trends, and/or census-region-by-year fixed effects, etc. (Altonji et al, 2005)
- ▶ Controlling for the culture towards breastfeeding: “*Any Place*”, “*Indecency Exemption*” and “*Jury Exemption*”
- ▶ Using the event-study frameworks with leads and lags to test for pre-trends

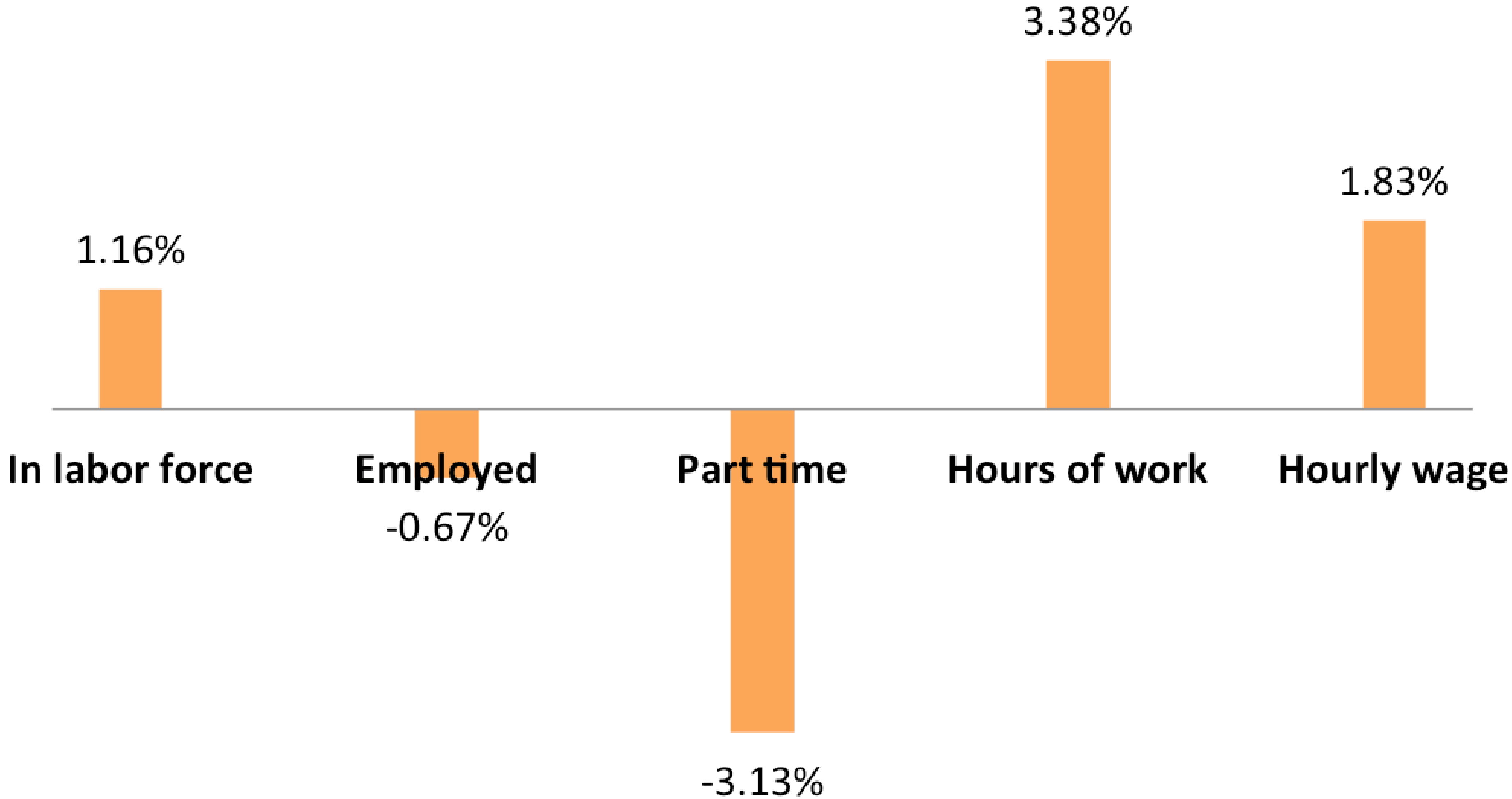
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# RESULTS

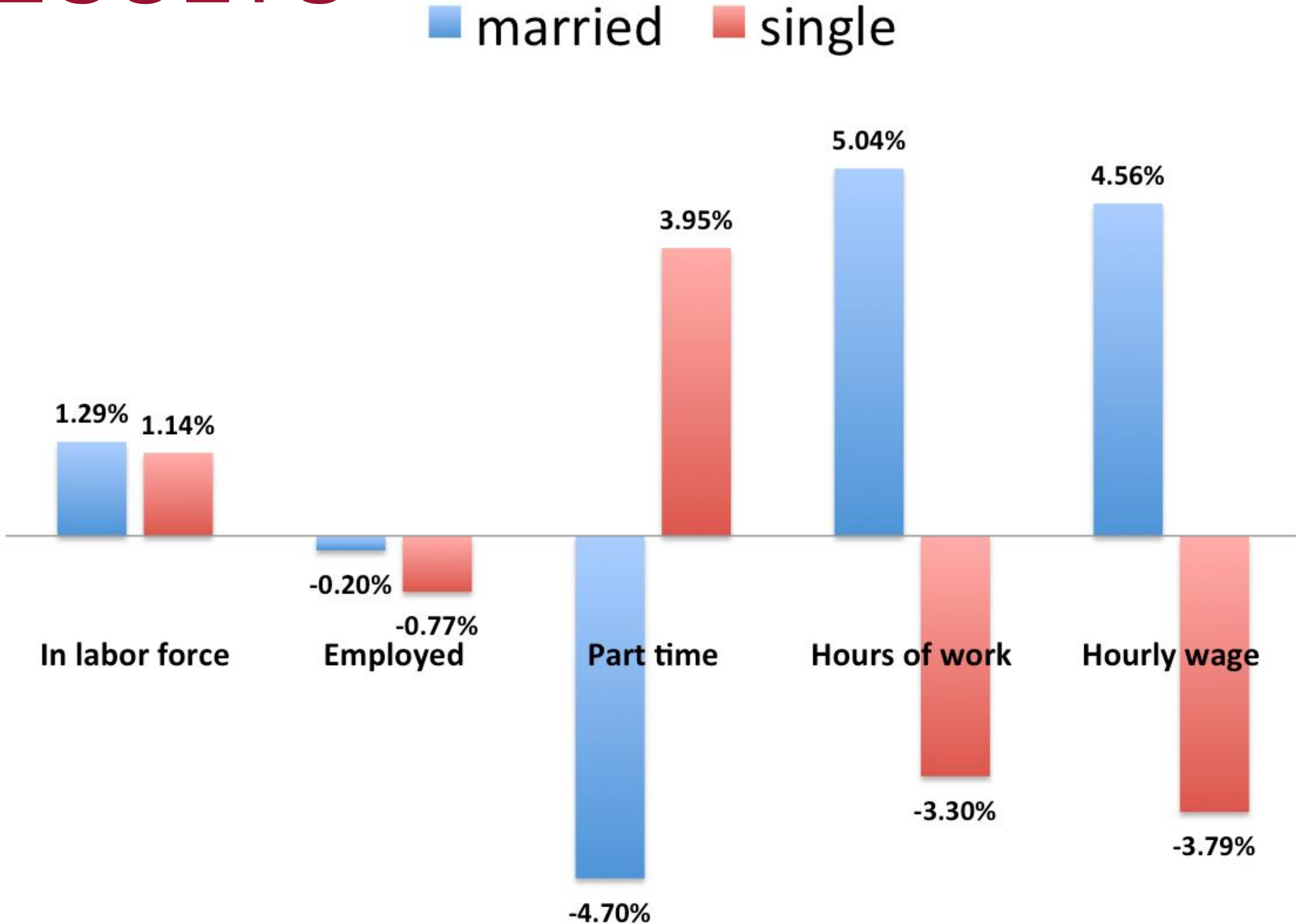
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# MAIN RESULTS

Law X Mom

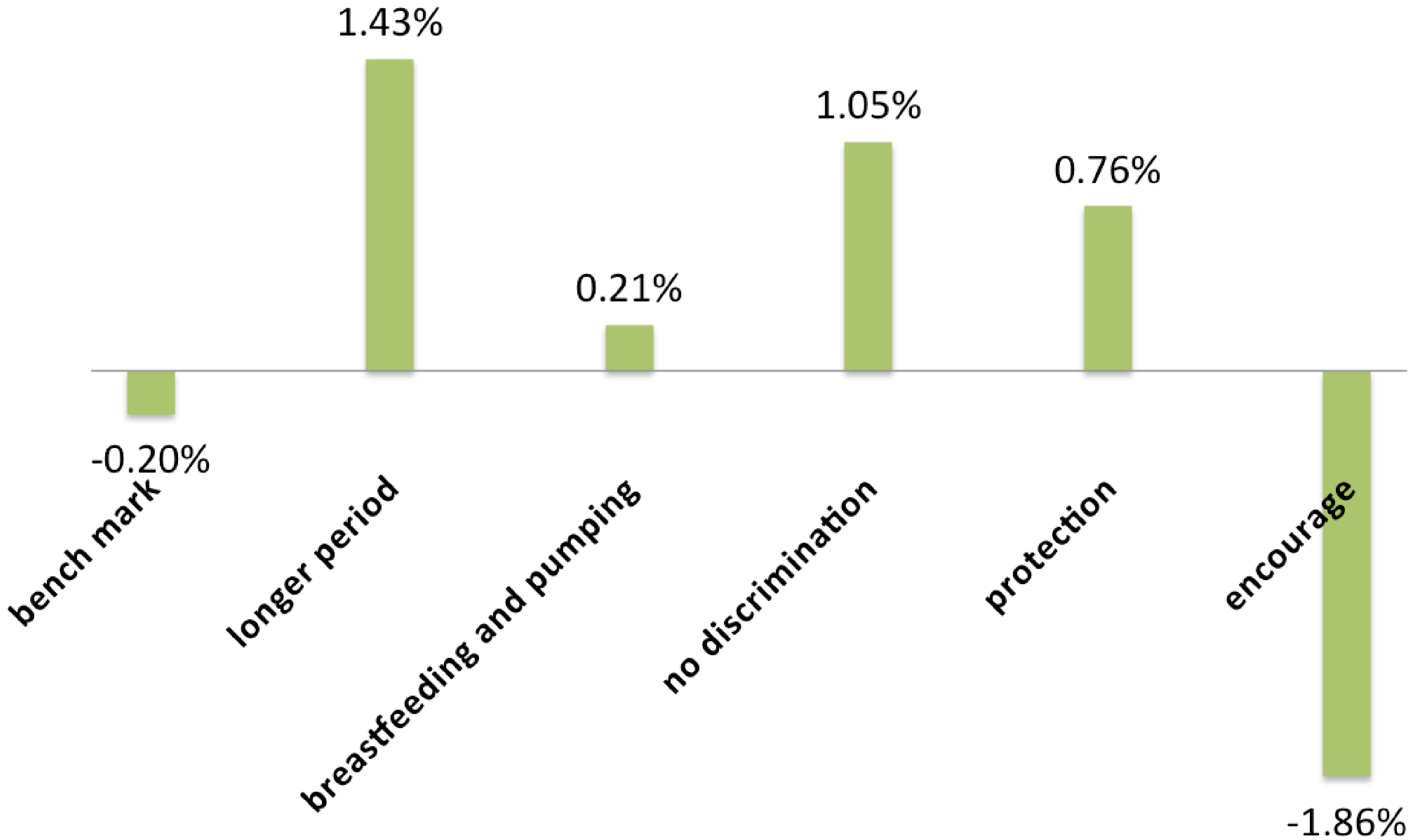


# MAIN RESULTS

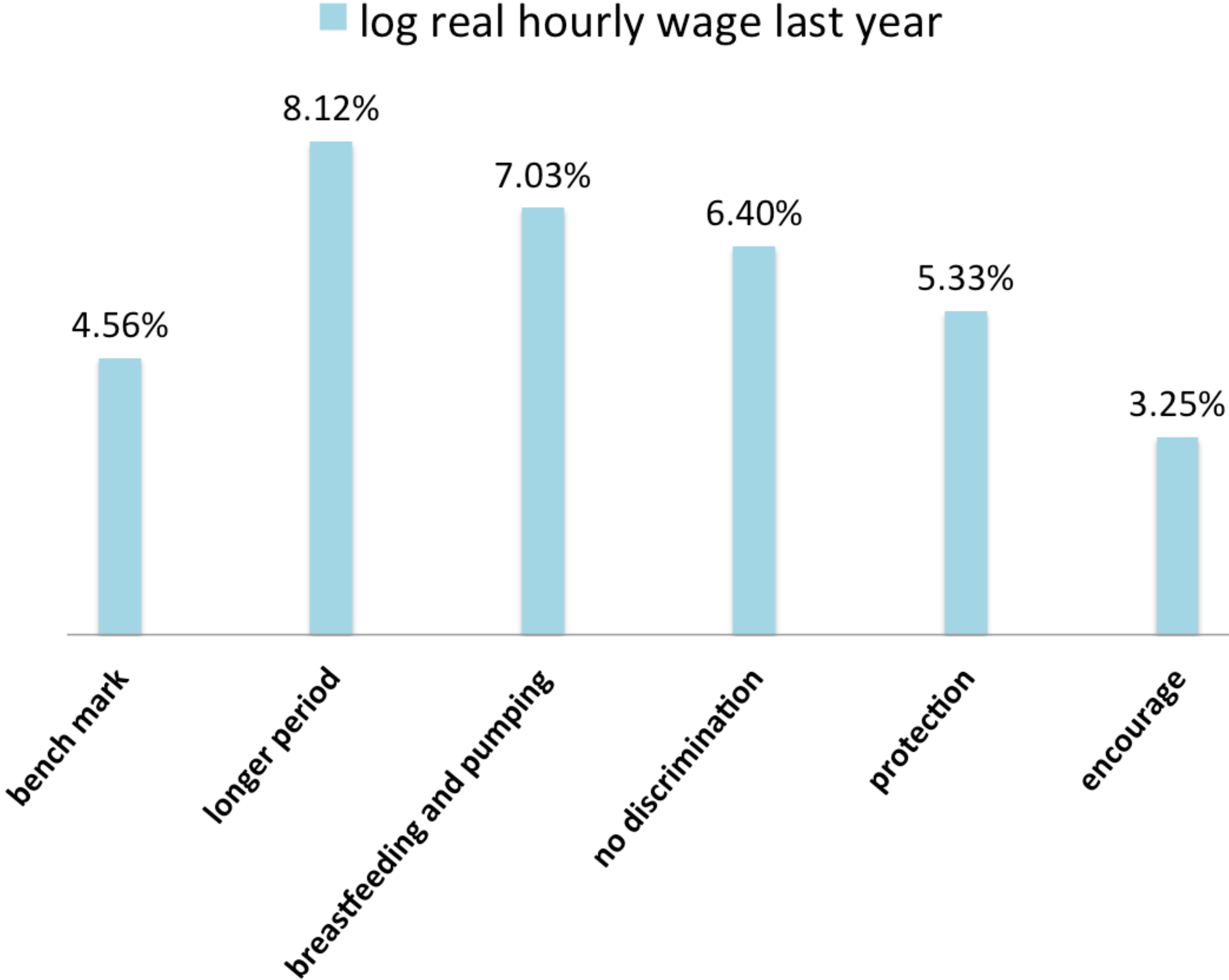


# STRONG VS. WEAK MANDATES

■ employed, if in labor force



# STRONG VS. WEAK MANDATES



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# CHANNELS

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# TEMPORAL FLEXIBILITY

- ▶ “Less Temporal flexibility” of occupations is defined as the average of the following five indices from O\*Net (Goldin, 2014)

Time pressure

Contact with others

Structured versus unstructured work

Establishing and maintaining interpersonal relationships

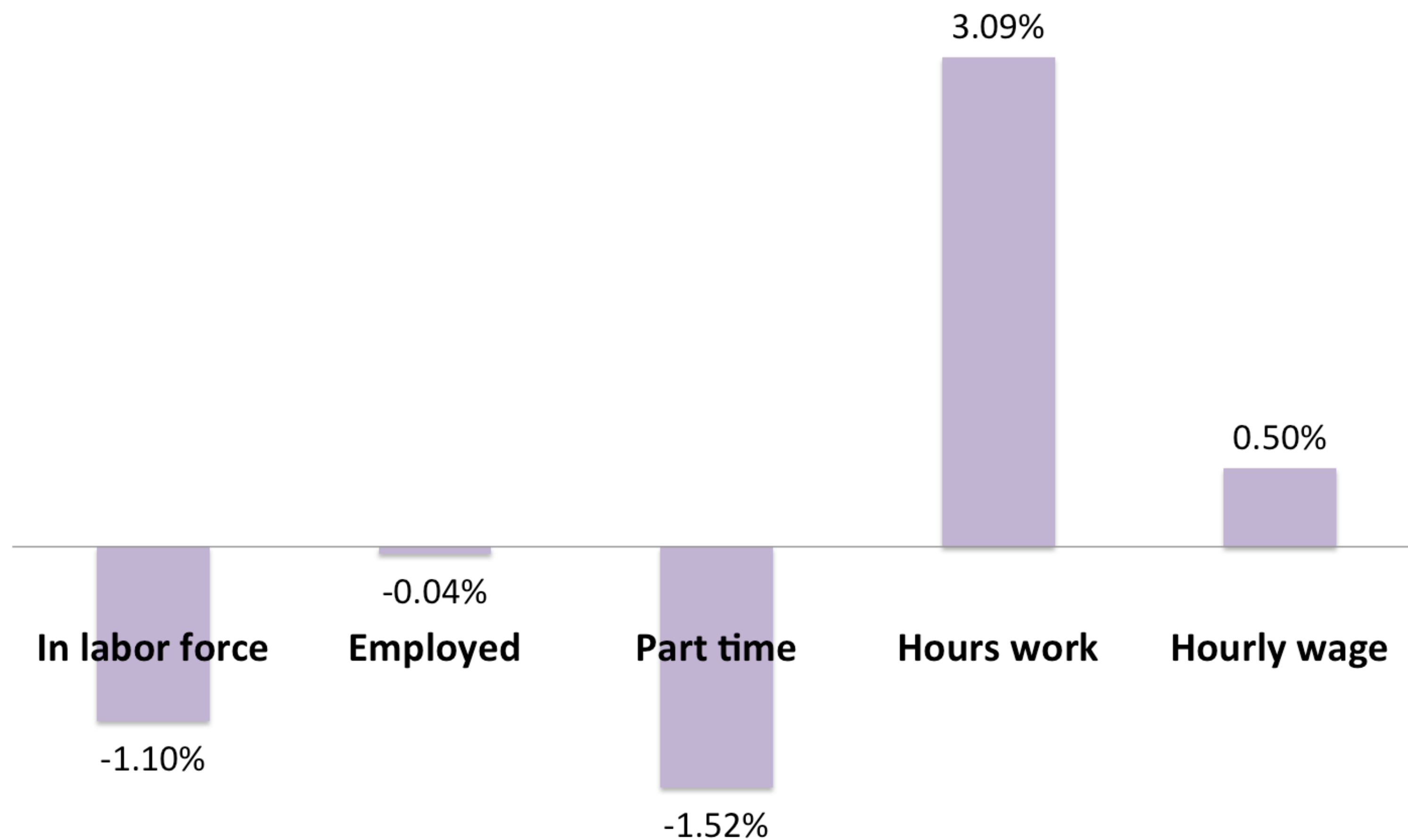
Freedom to make decisions



CHANNEL

# TEMPORAL FLEXIBILITY

■ Law X Mom X Non-flexible



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# DISCUSSION

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# CONCLUSIONS

- ▶ Firms' demand for the mothers of infant children increase due to stronger job attachment
- ▶ The impacts are stronger if the jobs have less temporal flexibility, characterized by time pressure, contact with others, establishing and maintaining interpersonal relationships, etc.
- ▶ The workplace breastfeeding benefits reduce gender inequality but increase inequality within young mothers.
- ▶ Imposing further requirements such as allowing longer period of benefits and prohibiting discrimination and retaliation may reduce the unintended consequences.



## DISCUSSION

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# QUESTIONS?

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