

# Work Less but Stay Longer: Mature Worker Response to a Flexibility Reform

ERIK HERNÆS

ZHIYANG JIA

JOHN PIGGOTT

TROND CHRISTIAN VIGTEL



Statistisk sentralbyrå  
Statistics Norway

# Labor supply at older ages

- Increasing the access age to increase labor supply at older ages:
  - Workers want to gradually reduce work; employers want to retain competence of experienced employees (Brown 2005; Ameriks et al. 2020)
- Introducing «flexible» pension schemes (pension benefits and labor income with no earnings test and actuarial adjustment of benefits):
  - Possibility of «dangerous flexibility», with a zero or negative effect on total labor supply (Börsch-Supan et al. 2018)

# Effect of flexibility on labor supply

The 2011 Norwegian pension reform

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Empirical approach

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Results

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Summary

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# The 2011 Norwegian pension reform

- Access age to old-age public pension reduced from 67 to 62:
  - With actuarial adjustments of benefits claimed as annuity (lump-sum not possible)
  - Contingent on minimum entitlements
  - Abolished earnings test on combining work and old-age pension benefits
- Automatic adjustments of benefits for changes in life expectancy
- New rules for accumulating pension entitlements



# The 2011 Norwegian pension reform

- We analyze the impact of introducing the flexible retirement option on the labor supply for individuals aged 62–66:
  - Allows those constrained to reduce work earlier (-)
  - Potential dynamic effect through allowing for a more gradual exit (+/-)
  - May reduce inflow to other types of labor force withdrawal, such as disability (+)



# Empirical approach

- Main measure of labor supply is labor earnings:
  - Changes in labor earnings reflect changes in type of job (responsibility, workload, etc.) better than changes in number of hours
  - Labor earnings capture multiple jobs in a convenient way
  - Limited information on the actual number of hours worked (only contracted)

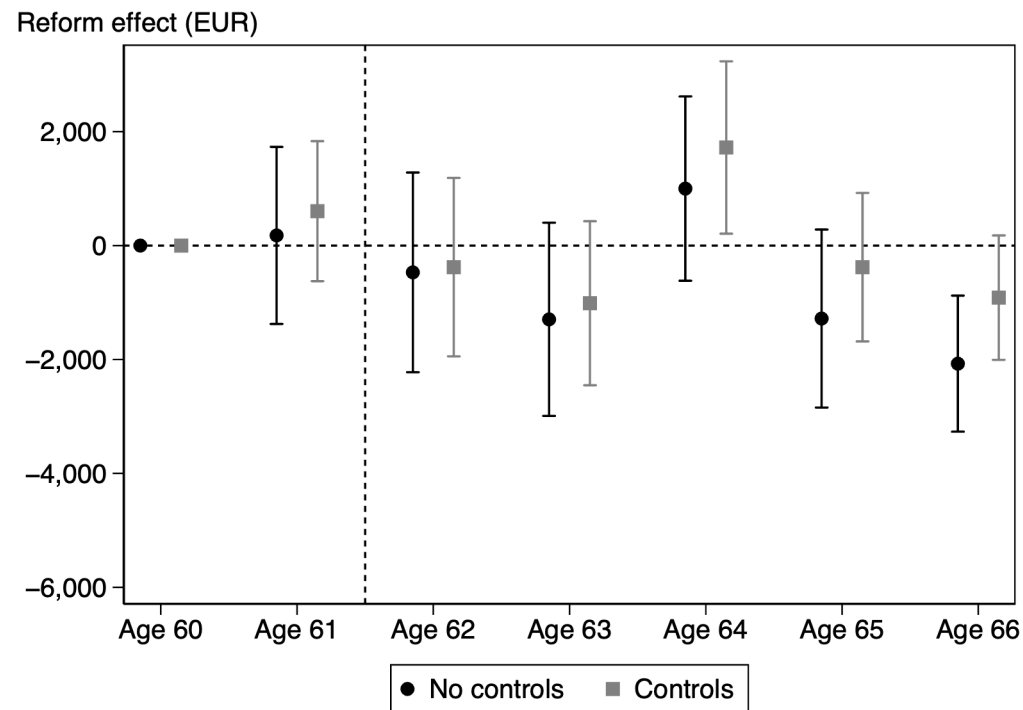


# Empirical approach

- Labor earnings of 1943–1958 birth cohorts over the years 2009–2014:
  - Control group: ages 60–61
  - Treatment group: ages 62–66
  - Treated: age 62 or more in 2011 or later
- Estimate the effect using an event-study type of approach:
  - Control for years of education, average earnings from age 30 to 59, net liquid wealth at age 59, and year- and age-fixed effects



# Average earnings



- Positive and statistically significant effect on labor earnings of around EUR 2,000 for age 64

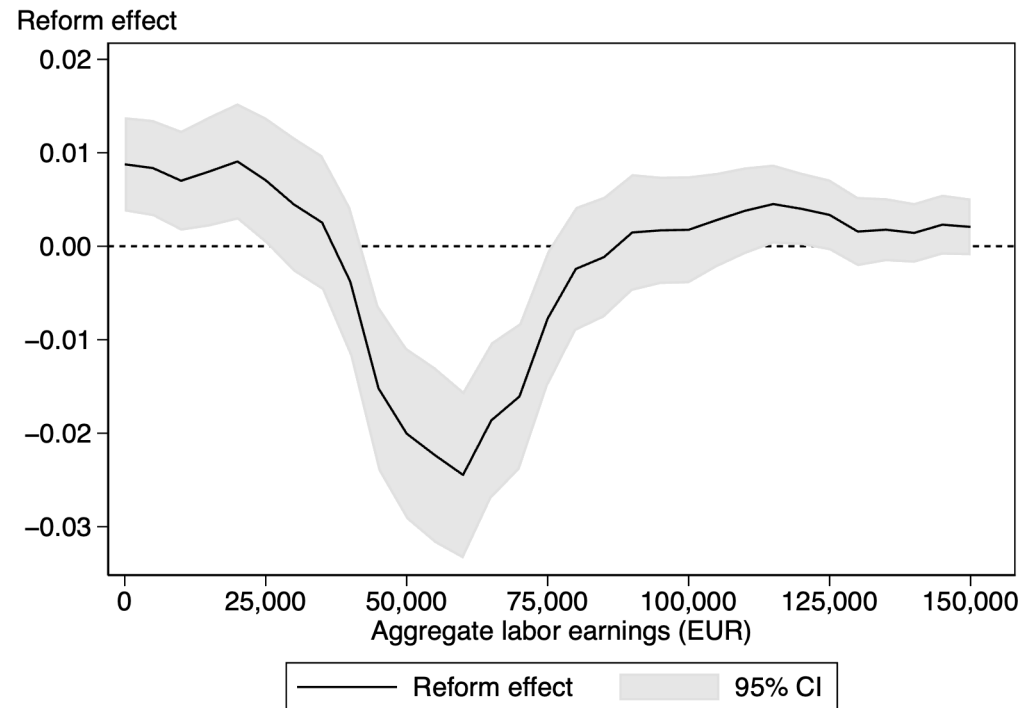


# Earnings distribution

- So far: average effect on labor earnings
- Uneven effects across distribution of labor earnings:
  - Extensive margin
  - Intensive margin



# Earnings distribution



- Positive effect on the extensive margin
- Increased probability of being within the interval EUR 0–60,000
- Decreased probability of being within the interval EUR 60,000–90,000

# Potential dynamic effects

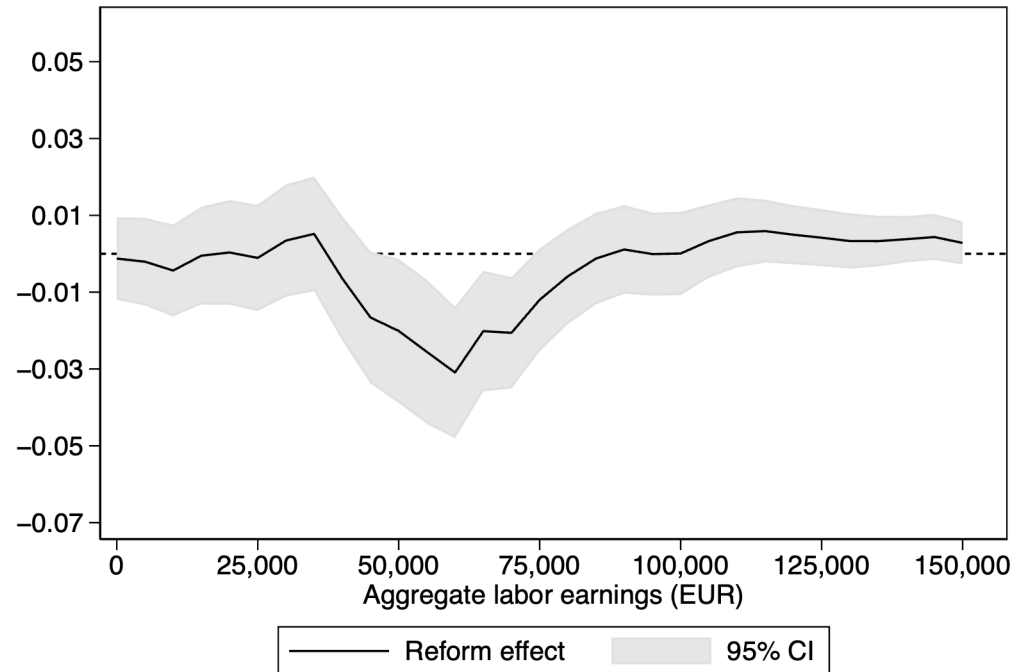
- Flexible retirement schemes may increase future labor supply
- For some workers: work less, but stay longer
- Hypothesis implies certain patterns on observed effects:
  - Negative effect on intensive margin, positive effect on extensive margin
  - Extensive margin response likely to materialize after intensive margin
  - Effects on earnings distribution will differ across ages



# Age-specific effects

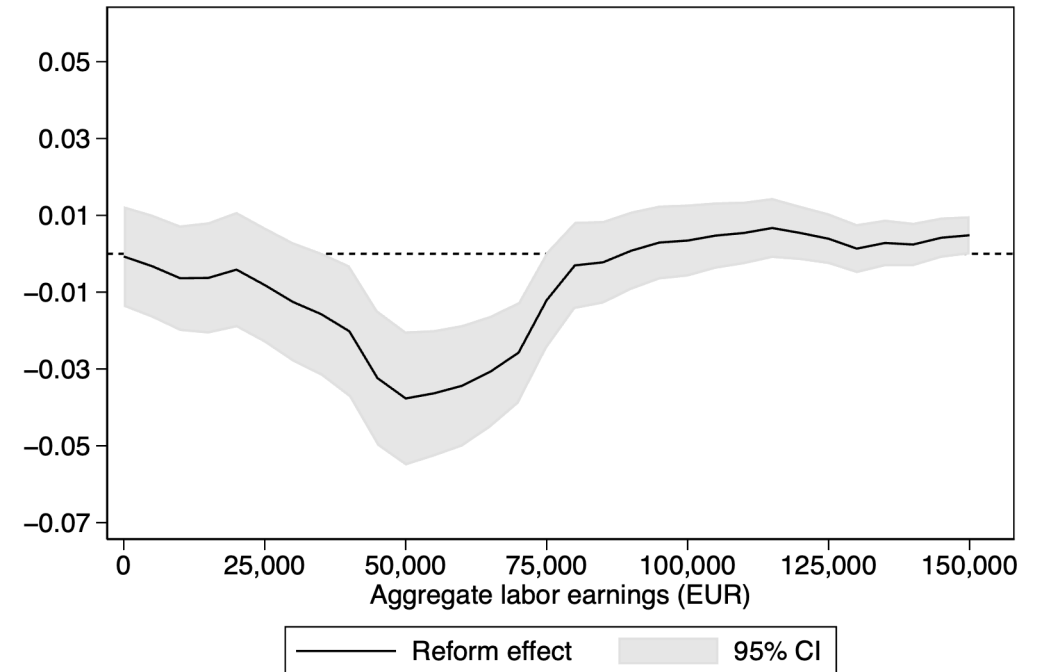
## Age 62

Reform effect



## Age 63

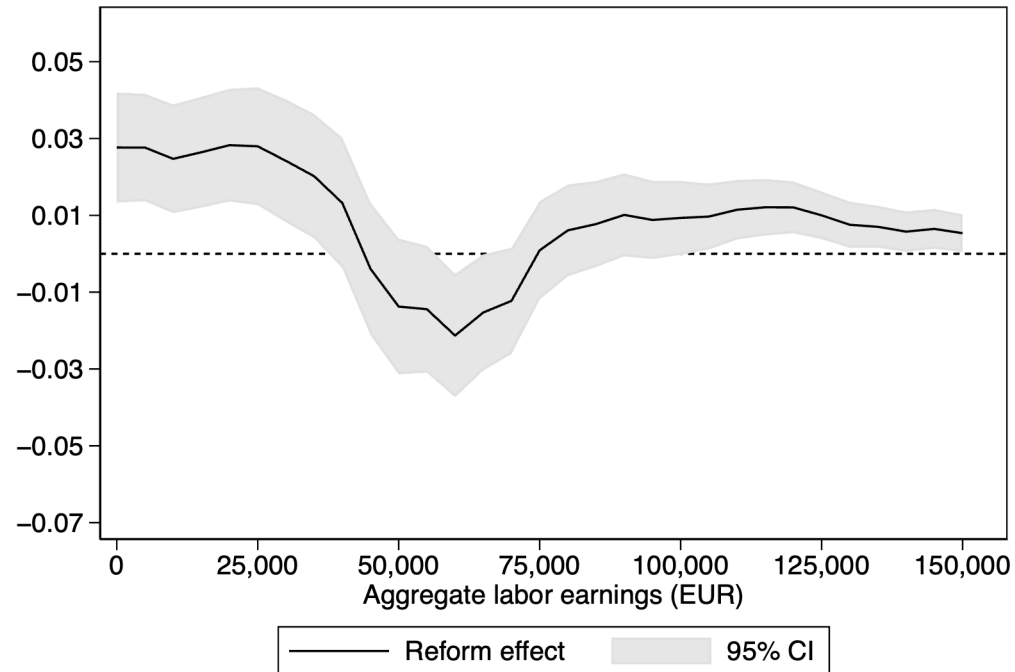
Reform effect



# Age-specific effects

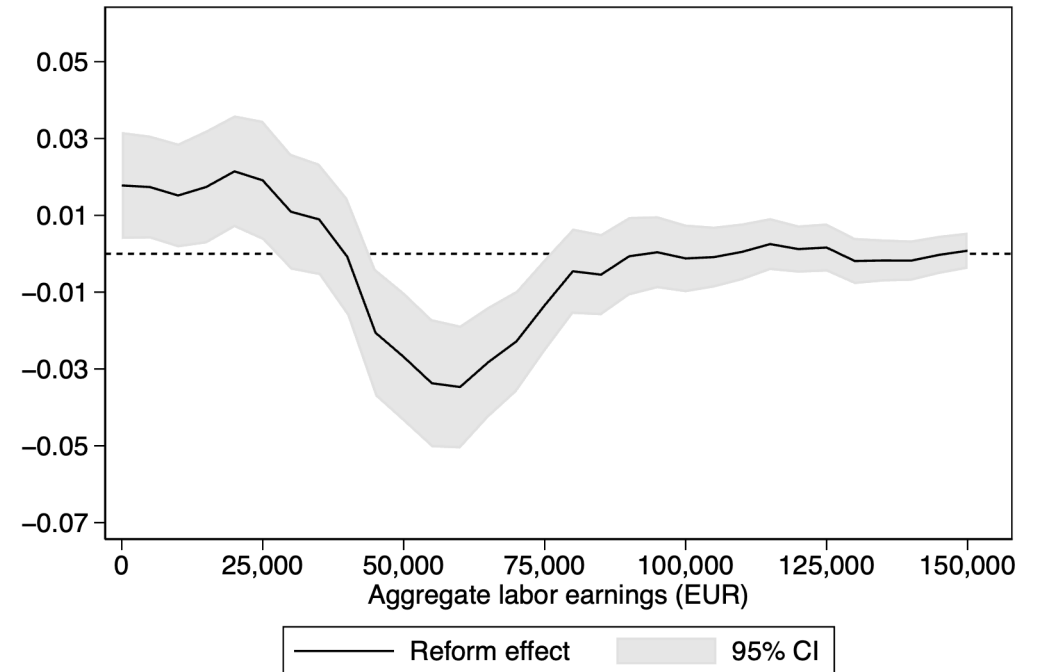
## Age 64

Reform effect



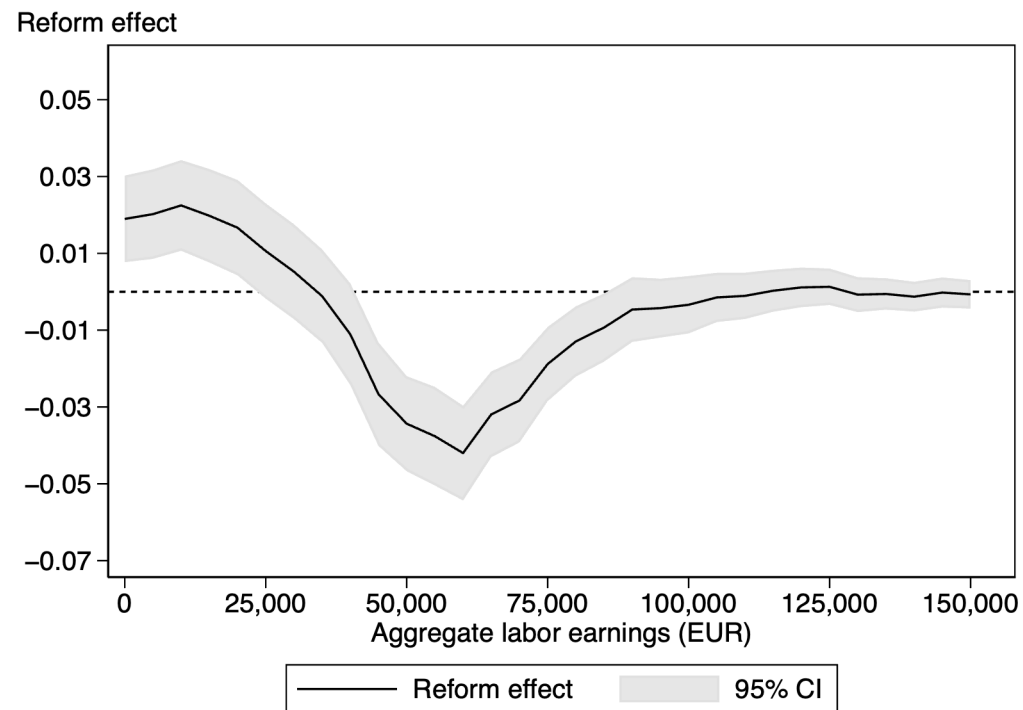
## Age 65

Reform effect



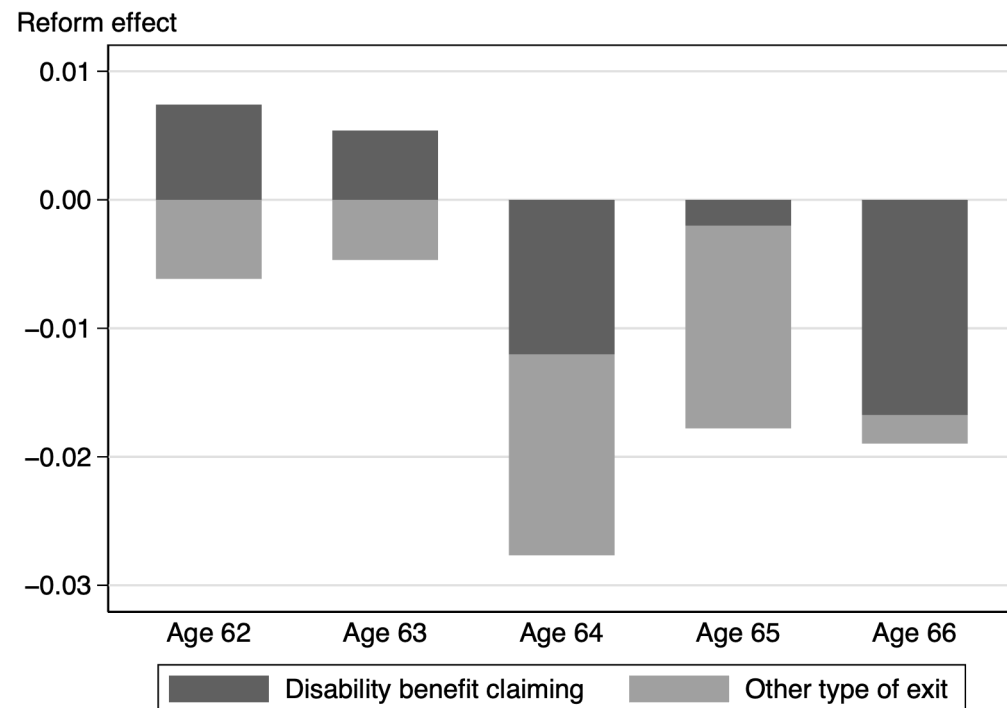
# Age-specific effects

## Age 66



- In sum, age-specific effects on earnings distribution show:
  - More individuals with below-average labor earnings and fewer with above-average labor earnings = decrease in the intensive margin labor supply
  - An increase in the extensive margin labor supply

# Decomposing effect on the LFP



- Decrease in exits by other means at age 64 and 65
- Decrease in the claiming of disability benefits at age 66

# Summary

- Net labor supply effect is small = reduction of 0.3 percent of annual labor earnings
- Policy implications:
  - Tax revenue change from labor earnings is small, and perhaps negative in the longer run
  - Welfare-improving reform – given regulatory policies that make jobs suitable for older and part-time workers

