PART-TIME PAY PENALTIES ARE PERSISTING

by Lonnie Golden

Discussion – Etienne Lalé (UQAM)

LERA@ASSA
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WHAT IS IT ABOUT?

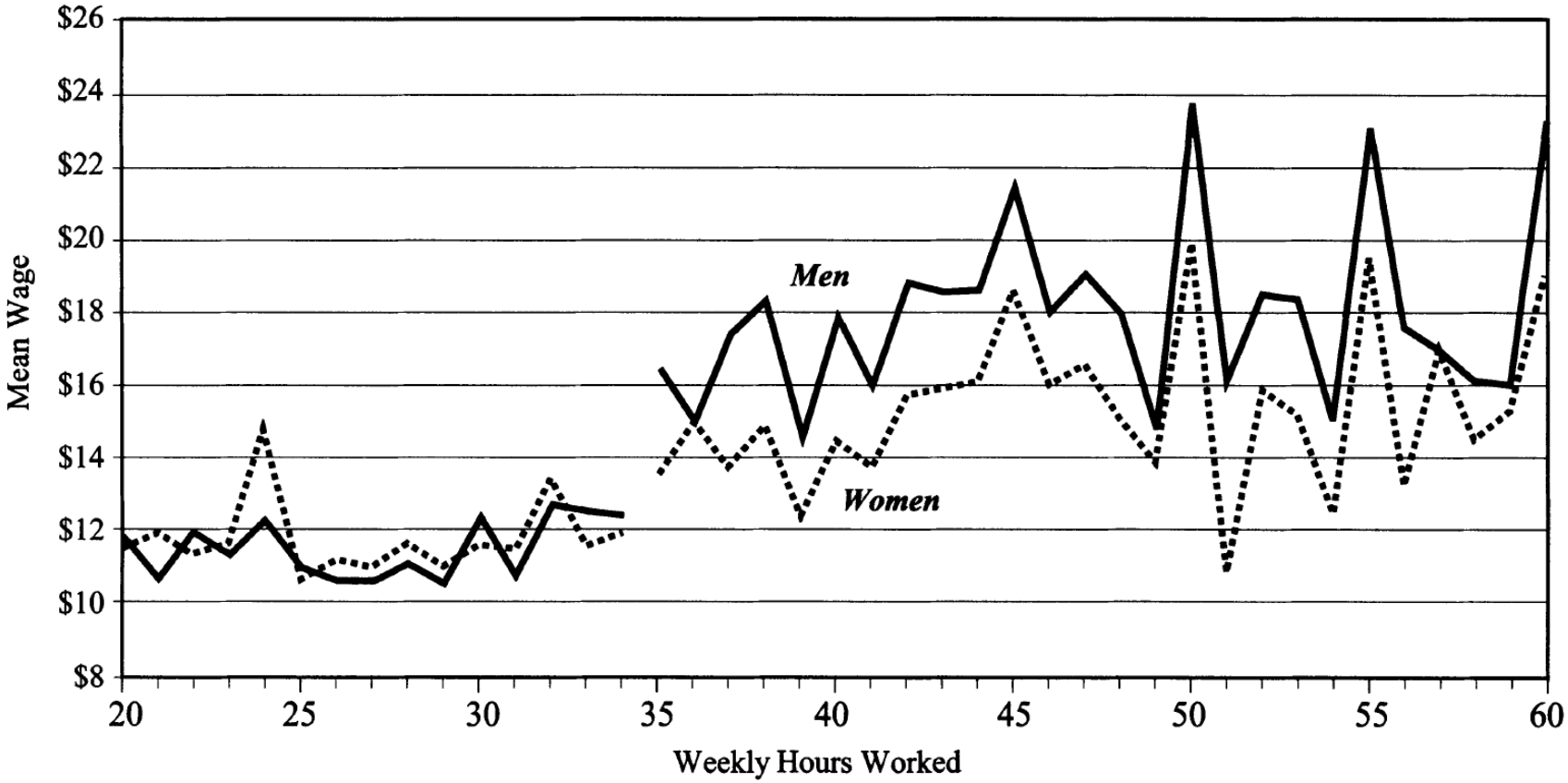

Fig. 1: Mean wage by hours worked, 1995–2002 (constant 2002 dollars)
(Source: Hirsch, *Industrial and Labor Relations Review*, Vol. 58, No.4, July 2005)

OUTLINE

1. Reviewing the empirical approach
2. Results – what's new compared to Hirsch (ILRR '05)
3. Relation to recent findings

EMPIRICAL APPROACH

$$\log W_{it} = X_{it}\beta + \theta PT_{it} + \varepsilon_{it} \tag{1}$$
$$\varepsilon_{it} = \eta_i + \upsilon_{it}$$

where:

- W_{it}: real hourly earnings
- X_{it}: individual and job characteristics (industry, occupations, etc.)
- PT_{it}: indicator for working part-time at time t

η_i is not measured directly, and therefore much of the focus is on estimating :

$$\triangle \log W_i = \triangle X_i\beta + \theta \triangle PT_i + \triangle \varepsilon_i \tag{2}$$
$$\triangle \varepsilon_i = \triangle \upsilon_i$$

EMPIRICAL APPROACH

When focusing on

$$\log W_{it} = X_{it}\beta + \theta PT_{it} + \varepsilon_{it}, \tag{1}$$
$$\varepsilon_{it} = \eta_i + \upsilon_{it},$$

the approach is to proceed in two steps :

1. Start with empty X_{it} to get the raw/unadjusted wage penalty
2. Feed in X_{it} (individual characteristics, job attributes) to compute the adjusted wage penalty

- How much of the wage penalty is "accounted for" by individual and job characteristics ?

EMPIRICAL APPROACH

$$\triangle \log W_i = \triangle X_i \beta + \theta \triangle PT_i + \triangle \varepsilon_i \tag{2}$$
$$\triangle \varepsilon_i = \triangle \upsilon_i$$

Potential concerns:

1. $\triangle PT_i$ only for those at the margin $\Rightarrow$ "treatment effect" among the treated
   Fine, but we might want to get estimates for randomly-selected workers

2. Changes in *PT* status are likely endogenous to wage offers
   e.g., switch from *PT* to *FT* when the full-time wage offer is unusually high

3. Assumes "symmetry": going from *FT* to *PT* = $-$ going from *PT* to *FT*
   This can be addressed easily by separating out the different types of transitions

EMPIRICAL APPROACH

Equation (2) is augmented further :

$$\begin{aligned} \triangle \log W_i &= \triangle X_i \beta + \theta \triangle PT_i \times IND/OCC_i + \triangle \varepsilon_i \\ \triangle \varepsilon_i &= \triangle \upsilon_i \end{aligned} \tag{3}$$

where IND/OCC_i are industry/occupation change dummies

- This new variable is meant to capture employer-to-employer changes
- ... and is supposed to alleviate concerns about measurement error in $\triangle PT_i$

EMPIRICAL APPROACH

Equation (2) is augmented further :

$$\triangle \log W_i = \triangle X_i \beta + \theta \triangle PT_i \times IND/OCC_i + \triangle \varepsilon_i \tag{3}$$
$$\triangle \varepsilon_i = \triangle \upsilon_i$$

Some additional remarks:

- Equation (3) is supposed to capture the "pure" wage penalty. Why?
- At least for occupations, there is concern about measurement error in IND/OCC_i
- Use of the "SAMEMP question" might be problematic too in CPS data for the period 2003–2018 – blank answers after 2007 are a serious problem

RELATION TO HIRSCH AND NEW FINDINGS

Baseline figure: "fully adjusted" wage penalty is 16 percent for women and 26 percent for men

How this figure varies depending on:

1. Whether part-time employment is voluntary or involuntary
   Involuntary part-time work makes up about 1/6 of overall part-time employment

2. Whether the worker is salaried or is paid by the hour
   During the period considered, 26 percent of workers are paid by the hour

3. Whether the worker's industry of employment uses part-time work (voluntary or not) more intensively than the rest of the economy

- Hirsch (ILRR '05) focuses much more on occupations. Hirsch uses O*NET variables

NEW FINDINGS

- Finding no. 1: Involuntary part-time workers suffer a larger wage penalty
- The overall 19 percent wage penalty is the average of :
  - 18 percent penalty for “voluntary” part-time employment
  - 22 percent penalty for “slack work” part-time employment
  - 29 percent penalty for “cannot find full-time job” part-time employment

NEW FINDINGS

- Finding no. 2: The part-time wage penalty is driven by hourly-paid workers
- Based on the "fixed effect" model (equation (3)), the part-time penalty is :
  - 13 percent for workers who are paid by the hour
  - Effectively 0 for salaried workers
- Finding no. 3: There is no clear relationship between the part-time wage penalty and whether an industry uses part-time work relatively extensively

PART-TIME WORK AT THE SAME EMPLOYER

In Borowczyk-Martins and Lalé (AEJ-Macro '19), we document that :

- Changes between FT and PT status (and their cyclical variation) occur at the same employer
- Are consistent with workers being "turned down" into lower hours with the understanding that they will be brought back to higher working hours when conditions improve

Is this consistent with the evidence about the part-time wage penalty ?

- Hirsch (ILRR '05) does find 0 wage penalty for those workers with $IND/OCC_i = 0$
- Patterns suggest that the wage penalty should be 0 for involuntary part-time workers

RELATION TO THE BUSINESS CYCLE

- How does the part-time wage penalty evolve over the business cycle?
  - Shift towards full-time workers who temporarily work short hours at no wage penalty
  - Lower bargaining power for part-time workers hired from unemployment
- Proba of moving from voluntary to involuntary part-time work jumps up during downturns
- Differences with Hirsch (ILRR '05) are not very large and likely driven by data covering the Great Recession period (see Figure 2)

RELATION TO THE BUSINESS CYCLE

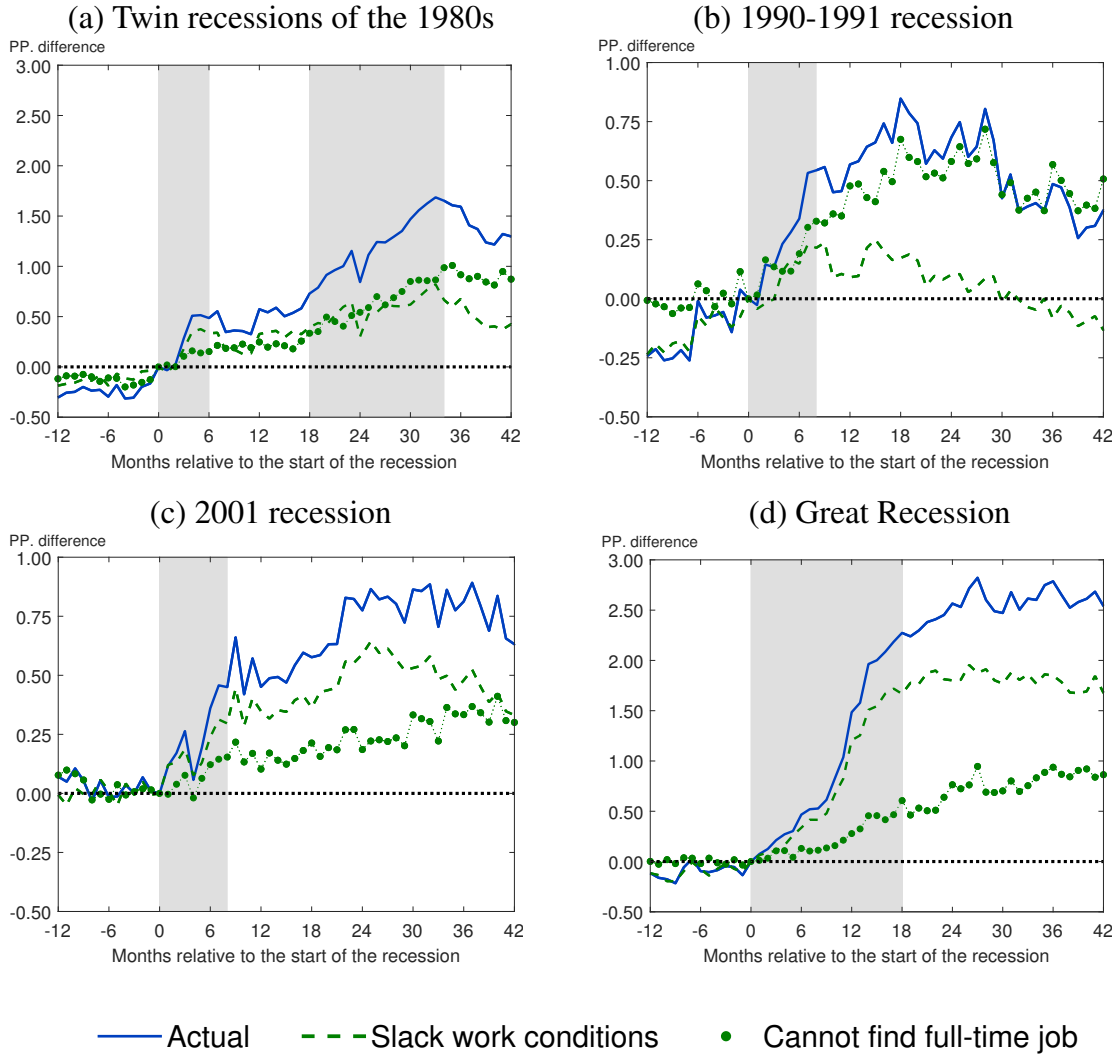

Fig. 2: Reasons for involuntary part-time employment during recessions
(Source: Borowczyk-Martins and Lalé, *The ins and outs of involuntary part-time employment*, 2019)

NON-WAGE BENEFITS OF PART-TIME WORK

- Pension coverage, paid time off, health insurance and other forms of insurance

- In data from the March supplements of the CPS, we see that part-time workers are less likely to receive non-wage benefits than full-time workers

- Data that would provide information about both "sides" of the part-time pay gap:
  - Total compensation gap for workers, *i.e.* the gap in earnings and non-wage benefits
  - Total cost difference, *i.e.* by how much the hourly compensation of labor changes when the worker is employed part-time instead of full-time

CONCLUDING REMARKS

- This is really interesting and useful work
  - Update of the evidence about the part-time wage penalty
  - Focus on several new dimensions, such as involuntary part-time work
- Part-time work seems to be becoming more common to adjust to negative shocks
- Useful discussion of the policy implications (“fair workweek”) of the findings