

**Discussion:**  
**Sticky Wages on the Layoff Margin**  
Davis and Krolikowski

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# Summary and Roadmap

**This is a fantastic, important, careful, rich, and clear paper.**

**Provides a fresh and compelling perspective on old, core, and open research questions:**

- Could wage cuts have prevented (some) layoffs?
  - And hence in that sense, did wage rigidity cause layoffs?
- Why didn't those wage cuts occur?
- Are (some) layoffs bilaterally inefficient?
- Which share?
- Of what kind?

**Roadmap** for the remaining 9min:

1. Bird's eye view of the paper in literature
2. Highly selective summary: recap three main facts
3. Zoom into the paper's discussion of implications for **efficiency of layoffs**

# My Bird's Eye View of Paper

Why layoffs rather than wage cuts? Bewley and follow-up work—interviewing employers—left open whether perhaps workers would reject pay cuts

- **New fact from worker interviews:** workers at risk of layoff (ex post state that they) *would* have been willing to accept large wage cuts
  - ⇒ Strong evidence against “elastic firm-specific labor supply curve” rationales (quits)
- **New fact:** *discussions* about wage cuts essentially never happen during layoffs!
  - ⇒ Hard to square with “asymmetric info” rationale of wage rigidity at layoff margin
- **New fact:** about a quarter of separations could have saved the job (acc to worker)
  - ⇒ Substantial room for bilateral inefficiency at layoff margin due to wage rigidity

**Overall, authors' interpretation** points away from narrow bilateral view of jobs, wage setting, production and separations,

**Instead** leaving room for (but not constructively establishing):

- Efficiency wage (productivity, sabotage) view of wage cuts (beyond individual match)
- Wage setting beyond bilateral bargaining

**Main Fact 1/3:** Laid-off workers had large rents AND were willing to accept large wage cuts.

*Would you have been willing to stay at your last job for another 12 months at a pay cut of X percent?*

Table 3:

Size of proposed pay cut	5%	10%	15%	20%	25%
Permanent layoffs	60.6	52.3	43.7	38.4	32.4

Rejections: better other job available (50%), leisure preferred (20%), 38% find it insulting.)

**Main Fact 2/3:** Wage cuts are essentially never discussed leading up to layoff—topic came up in 3% of cases only!

*“Before your employer let you go, was there any discussion about possible cuts to pay, benefits or hours to save your job?”*

Table 5:

	Mean	S.E.	Count
<i>Overall</i>	2.8	0.3	2,567
<i>Type of layoff (p-value: 0.03)</i>			
Permanent	2.4	0.3	2,070
Temporary	4.2	0.9	497

**Main Fact 3/3:** Many workers (38%) don't know why there was no discussion. 36% say it wouldn't have saved the job.

*"If you had to guess, why do you think your employer did not discuss any kind of cuts in pay, benefits or hours?"*

Table 6:

(1) It would lead the best workers to quit	(2) It would undermine morale	(3) It would not have prevented my layoff	(5) It would violate minimum wage laws	(6) Benefits cut would violate the law	(7) It would upset the employer's pay scale	(8) Don't know	(9) Other
8.4 (0.6)	8.0 (0.5)	36.3 (1.0)	0.9 (0.2)	1.5 (0.2)	2.4 (0.3)	38.9 (1.0)	9.4 (0.6)

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### 3. Background: Layoffs are Bad—But Are they Inefficient?

#### **Pervasive and influential paradigm (esp. in macro-labor modeling):**

Job separations—including layoffs, including those that look very costly to displaced workers—are efficient.

In model, firm and worker would exploit all gains from trade through a flexibly set wage—hence no surplus could have been left. There was nothing the parties could or should have done to continue the match.

#### **Properties of a bilaterally inefficient layoff:**

Value of job to firm/worker with an appropriately set wage would have exceeded the parties' outside options

↔ Positive joint surplus of job

↔ Reservation wage of firm weakly exceeds res wage of worker



## Many Empirical Challenges

### How would one diagnose inefficiency in separations empirically?

- (Joint) job surplus is not observable
- Let alone counterfactual surplus of a terminated job (where factors must have shifted due to shock—hard to measure that shock)
- Post-separation outcomes (e.g., displacement costs from job loss) need not be informative of bilateral efficiency
- Pre-separation wage behavior usually not informative (in theory, anything goes within the bargaining set; rich e.g. dynamic, compensation schemes)

These empirical challenges have shielded the bilateral efficiency hypothesis from a test.

The only two dedicated empirical tests I am aware of:

- **Davis and Krolkowski (2023)**—a neat, compelling and concise test on **3 pages in Section 5.3** (but its spirit permeates the paper)
- Jäger, Schoefer, Zweimüller (RESTUD 2023)—a perhaps indirect, specific and (overly!) complicated test on **130** pages

# Maximally Simple Model

(I'd have appreciated such a toy model in paper.)

Worker's and firm's reservation wages:  $r^W, r^F$

Joint surplus:  $S = r^F - r^W$

Condition for a viable job (provided parties set bilaterally efficient wages):

$$S \geq 0 \Leftrightarrow r^W \leq r^F \quad (1)$$

“Coasean” assumption: exploit all gains from trade  $\Rightarrow$  maintain all  $S \geq 0$  jobs via wage in bargaining set:

$$w \in [r^W, r^F] \quad (2)$$

A separation occurs iff  $S < 0 \Leftrightarrow r^W > r^F$ —all separations are efficient.

**Bilaterally inefficient separation: job would have met condition (1)!**

Q to ask in model: would surplus have been negative  $\Leftrightarrow$  would there have existed a wage in bargaining set,  $w \in [r^W, r^F]$ ?

**This paper's ingenious idea: put these Q to layoff participants in reality.**

# The Test in My Toy Model

## Roadmap of Test:

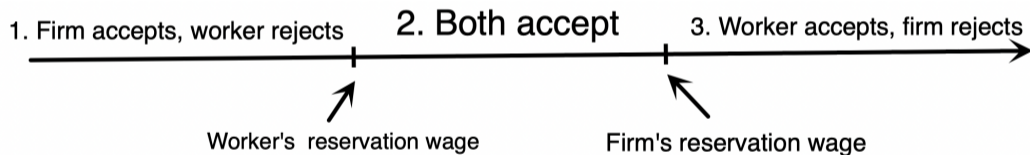
Among laid off workers,

1. Elicit **worker's reservation wage**  $r^W$  (or wage **cut**).
2. Elicit **firm's reservation wage**  $r^F$  (or wage increase).
3. Test for inefficiency of separation: **check whether**  $r^W \leq r^F$ .

## From Model to Research Design 1/3: Coarse $X$ s $\Rightarrow$ Miss Inefficiencies

Next, formally highlight subtle issue w/ elicitation: **draw only one candidate wage (cut)**

**Positive-surplus job** ( $r^W < r^F$ ) that should not have separated (but did), three regions:



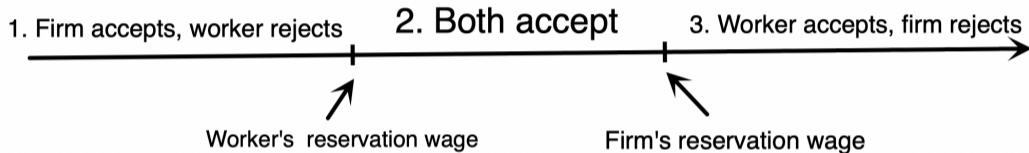
Diagnose inefficient separation only if the randomly drawn wage is lucky to place in Region 2.

- **Miss ineff sep's:** if draw too low (Reg 1) or too high (Reg 3). (See next slide 2/3.)

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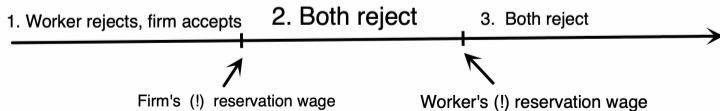
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- **Miss efficient sep's** if draw too low (Reg 1) or too high (Reg 3). (See next slide 2/3.)

**Efficient separations get never miscounted** as no wage is bilaterally acceptable (provided firm's reservation wage is measured correctly, see slide 3/3)



## From Model to Research Design 2/3: Coarse $X$ s $\Rightarrow$ Miss Inefficiencies

**Recap of roadmap:** Among laid off workers,

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**Implementation in paper:**

1. *Would you have been willing to stay [...] at a pay cut of  $X\%$ ?*

Randomly draw one  $X$  from  $\{5, 10, 15, 20, 25\}$  per individual—to give **bound** on  $r^W$ .

“No”  $\Rightarrow r^W > y (= X \cdot w \text{ where } w \text{ is the old wage})$  — STOP

“Yes”  $\Rightarrow r^W \leq y$ —PROCEED

- 2+3. **Trickier. Idea: among worker-yeses ( $r^W \leq y$ ), check if firm's res wage  $r^F \geq y$ .**

“Yes”  $\Rightarrow$   $\overbrace{r^W \leq y}^{\text{Step 1 "yes"}} \wedge \overbrace{y \leq r^F}^{\text{Step 2}} \Rightarrow \overbrace{r^W \leq r^F}^{\text{Step 3}} \Leftrightarrow \text{Diagnosis: INEFFICIENT}$

“No”  $\Rightarrow r^W \leq y \wedge y > r^F \Rightarrow r^W > r^F \Leftrightarrow \text{Diagnosis: can rule out this } y, \text{ but not all } y' < y!$

**Better:** should loop through lower candidates  $y' < y$  until firm's “Yes” or worker's “No”. Survey doesn't loop.  **Tempting alternative:** elicit job-specific  $(r^W, r^F)$  directly—not coarse  $X$  cutoffs.

## From Model to Research Design 3/3: Firm Reservation Wage

The paper has a **clever and effective** way to conduct the firm check. To understand, contrast with the ideal way to elicit firm reservation wage:

- Elicit reservation wage level  $r^F$  as such—*vs. whether  $r^F$  above/below  $y$  (slide -1)*
- Ask employer directly—*vs. eliciting worker belief about employer's  $r^F$*
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(1)	(2)	(3)	(5)	(6)	(7)	(8)	(9)
It would lead the best workers to quit	It would undermine morale	It would not have prevented my layoff	It would violate minimum wage laws	Benefits cut would violate the law	It would upset the employer's pay scale	Don't know	Other
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Indirect flag: worker answering *“It would not have prevented my layoff.”*



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Indirect flag: worker answering *“It would not have prevented my layoff.”* OR *“don't know”* (bound).

# Summary of Main Comments on Test of Bilateral Efficiency

I would find a simple toy model useful to clarify research design and mapping from model to implementation (including weaknesses).

The paper's approach to the check on bilateral efficiency is clever, pragmatic and compelling.

Still, I do believe that eliciting reservation wages as such (rather than coarser cutoffs)

- is feasible, Mui, Schoefer (2022)
- would conceptually strengthen the link to model objects,
- would strengthen the quantification of inefficiencies:
  - Quantity: counting inefficient layoffs
  - Quality: joint surplus in wage units Jäger, Schoefer, Zweimüller (2023, Appendix F)

And, would have preferred a more direct and explicit check of firm's reservation wage.

## Wrap-up

**This is a fantastic, important, careful, rich, and clear paper.**

Among its many contributions, I focused on its assessment of bilateral efficiency of layoffs.

**Looking ahead to follow-up work** (beyond this paper, which seems very much done!):

Two-pronged (worker/employer) survey (see conclusion of paper).

I would be very intrigued about eliciting these questions not just ex post (from both parties), but while the layoff is occurring.

The paper's key fact—no discussions about pay cuts in reality—raises another intriguing question:

**What if these discussions did happen?**