# Worker Rights In Collective Bargaining

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# MAIN IDEA OF THE PAPER

- Collective bargaining agreements (CBAs)
  - Specify **worker compensation** → studied extensively
  - Specify many **worker rights** → not yet studied extensively
- Challenge
  - Compensation is *numerical*
  - Other legal content of CBAs is *textual*
- Solution
  - Natural language processing (NLP) techniques

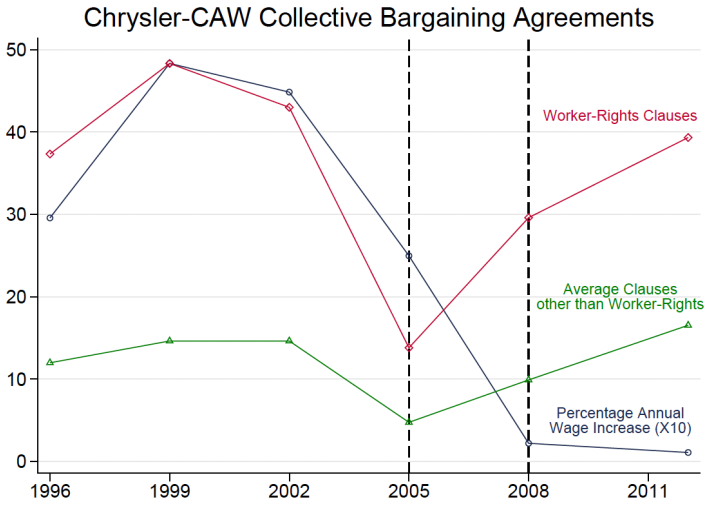
# APPROACH OF THE PAPER

- 30,000 Canadian CBAs from 1986 to 2015
  - Contracts written at the firm-level; about 7,000 unique firms
- Using NLP
  - Parse out clauses that are worker rights, worker obligations, firm obligations
  - Assign worker rights to topics, e.g. "parental leave" or "workplace safety"
- Merge with other data at the Province-year level
  - Income tax rates
  - Outside options (labor demand)

# SUMMARY OF FINDINGS

- Determinants of worker rights
  - Labor income tax $\uparrow \Rightarrow$ more worker rights
  - Workers' outside options $\uparrow \Rightarrow$ more worker rights
- Value of worker rights
  - 1 SD increase in worker rights valued at 5.7% of wages

# A FUN CHART


Chrysler-CAW Collective Bargaining Agreements
50
40
30
20
10
0
1996
1999
2002
2005
2008
2011
Worker-Rights Clauses
Average Clauses
other than Worker-Rights
Percentage Annual
Wage Increase (X10)

# MY THOUGHTS ON THE PAPER

*Disclaimer: I am not a labor economist*

1. NLP implementation is great
2. Left-hand-side measure in regressions is a bit crude
3. Do more to interpret results
4. Exploit firm-side variation more
5. Think about policy implications

## NLP

- Applied for well defined task, with clear goal
- Method is very transparent
- I commend the authors for resisting temptation to use blackbox methods
  - LLMs are nicely employed for validation
- Maybe also do some human validation?
  - Recommended for NLP tasks, eg by Ludwig, Mullainathan, and Rambachan (2025)
  - Though the authors provide some arguments against it
- Overall, this part of the paper is very convincing to me

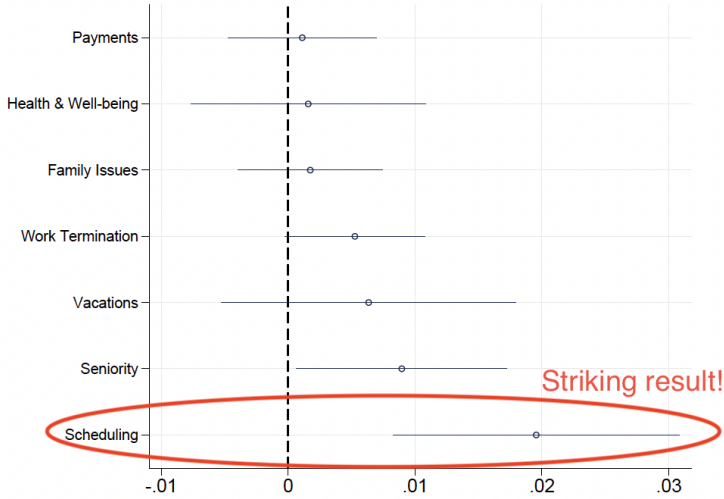
# LEFT-HAND-SIDE MEASURE

- Main outcome variable in regressions:

  #worker rights / #statements in contract

- A bit crude, given the sophisticated steps that come before the regressions
- I understand that constructing an intensive-margin measure is challenging
- I understand #worker rights itself does not work (contracts longer for larger firms)
- Still, some more robustness in this dimension would be welcome

# INTERPRETATION OF RESULTS



# INTERPRETATION OF RESULTS

- According to Table 3, the narrow topics related to "*scheduling*" are:
  - *Part-time employment, work hours, breaks, leaves of absence, over time, scheduling*
  - Why not check which of these narrow categories drive the results?
- Why is "*scheduling*" so responsive?
  - Easiest for firms to give concessions on?
  - Most valuable for worker on the margin?
  - Could further open up eg industry heterogeneity
- Answering this question might tell a clearer "story" behind results
- Also, results stand in an interesting contrast to gig workers
  - Typically no union protection, but lots of flexibility in scheduling

# FIRM INFORMATION IN DATA

- It would have helped me to know more about the firm sample
  - Is there selection into the data set, e.g. by larger or publicly traded firms?
  - Mean number of employees is 691; what is the median?
- Could also merge with more firm-level info (probably for another paper)
  - Include interaction terms with firm size?
  - Exploit repeated CBAs for a given firm somehow?
- All this could help with my previous comment, but is interesting more broadly

# POLICY IMPLICATIONS?

- Would love to hear the authors' view on policy related take-aways
- For example, we think of labor taxes as distortionary
- If more margins (worker rights) can adjust, are taxes less distortionary?

# CONCLUSION

- Important question and convincing use of NLP techniques
- Fascinating to read as non-labor economist; bodes well for general audience appeal
- I think the authors can still drill even deeper into the results

# BIBLIOGRAPHY

Ludwig, J., S. Mullainathan, and A. Rambachan (2025): "Large language models: An applied econometric framework," Tech. rep., National Bureau of Economic Research.