

WHY FIRMS LAY OFF WORKERS INSTEAD OF CUTTING WAGES: EVIDENCE FROM LINKED FIRM SURVEY-ADMINISTRATIVE DATA

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WHY FIRMS LAY OFF WORKERS INSTEAD OF CUTTING WAGES

During crises firms lay off a large number of workers. The subsequent search and matching process and hiring and recruiting activities are time-consuming and costly

- ▶ Can layoffs be avoided?
- ▶ Can pay cuts save layoffs?
- ▶ Why or why not firms use pay cuts?

THIS PAPER

- ▶ We design and field an innovative survey of firms
- ▶ We link our survey data with the administrative data to study:
 - ▶ How firms adjust labor during crisis - via layoffs or pay cuts
 - ▶ Reasons behind the prevailing adjustment margin
 - ▶ How labor adjustment approaches differ by firm characteristics

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5. Morale considerations are not important for layoff but play a role in pay-cut decisions

RELATED LITERATURE

- ▶ Closely related is Bewley (1999)'s survey of 300 firms in 1992-1994
- ▶ Davis and Krolkowski (2023) study sticky wages on the layoff margin in a survey of the unemployed workers
- ▶ Wage adjustment is studied by Card and Hyslop (1997) (household survey), Elsby and Solon (2019), Grigsby, Hurst, and Yildirmaz (2021), Kurmann and McEntarfer (2019) (admin data), many others
- ▶ Restructuring during recessions studied by Koenders and Rogerson (2005)

We study employer perceptions about layoffs *and* pay cuts
in a *large* representative sample of firms
and *link* firms responses to administrative data

LINKED SURVEY-ADMINISTRATIVE DATA

FIRMS SURVEY DESIGN

We designed a firm survey containing 70+ questions (yes/no, multiple choice, open-ended questions, the degree of agreement) to study

1. Impact of the pandemic on firms
2. Human resources strategies in 2020—pay and number of employees
3. Questions about layoffs:
 - ▶ Layoff-related considerations
 - ▶ The role of public policies and worker representation
4. Questions about pay:
 - ▶ Firm wage policy in normal times
 - ▶ The extent and reasons behind wage cuts
5. Hiring process
 - ▶ Firm searching process
 - ▶ Hiring cost
 - ▶ Recruiting intensity

SURVEY DATA COLLECTION

- ▶ We sent the survey to the population of all Danish firms
 - ▶ Survey was administered online via a private firm
 - ▶ Survey was sent in May 2021 (week 19), the response period closed in July 2021
- ▶ Response rate is 12%—high for a non-mandatory online survey.

SURVEY DATA LINKED WITH ADMIN DATA

We link our survey data with rich admin data via firm identifiers

- ▶ Firm-level admin data (income statements (FIRM), balance sheets (FIRE))
- ▶ Employer-employee matched dataset (BFL)
- ▶ Dataset on the firms' use of the government assistance programs during the pandemic

Survey sample after restrictions: 2,488 firms

KEY ADVANTAGES OF OUR LINKED SURVEY-ADMIN DATA

- ▶ In the survey we ask “what” and “why”
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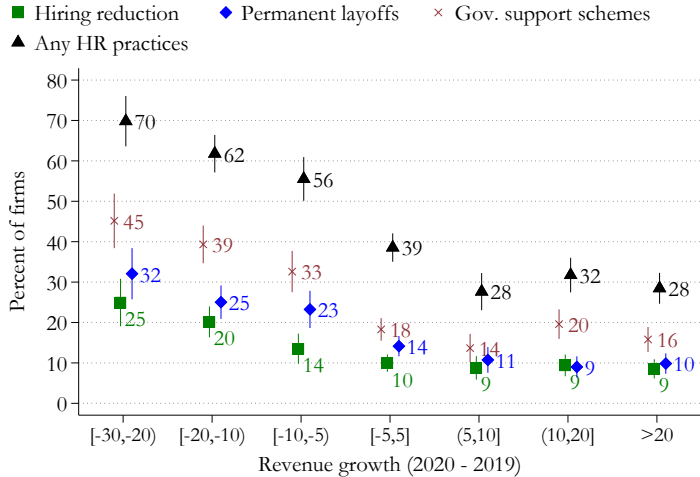
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- ▶ Data quality: We perform a number of exercises to check for internal validity of survey responses

DENMARK DATA: INSTITUTIONAL AND ECON CONTEXT

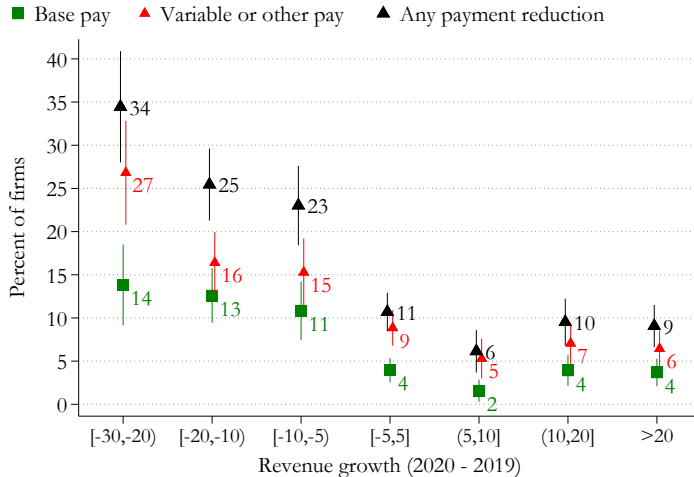
- ▶ Institutional:
 - ▶ Wages and hours are (mostly, 80%) set at the firm- and not industry-level
 - ▶ Flexicurity: relatively low employment protection (Kreiner and Svarer (2022))
- ▶ Economic context in 2021:
 - ▶ Not-so generous “furlough” programs during the pandemic (low take-up of job retention scheme)
 - ▶ When we fielded the survey (July 2021), the pandemic was declared under control

HOW FIRMS ADJUSTED LABOR IN THE 2020 CRISIS

REDUCTION IN THE NO. OF WORKERS, BY FIRM GROWTH



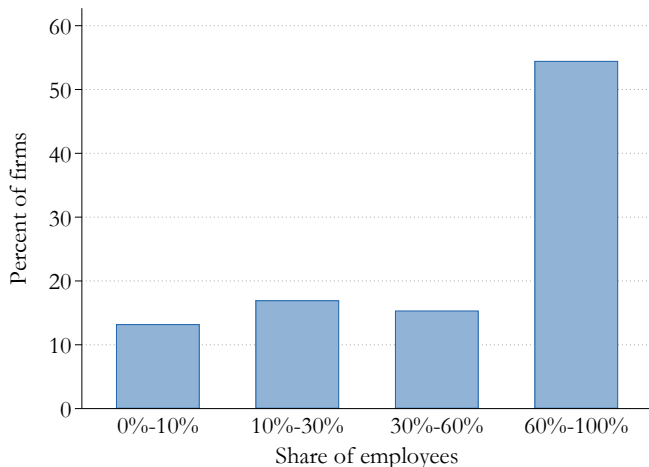
REDUCTION IN WORKER PAY, BY FIRM GROWTH



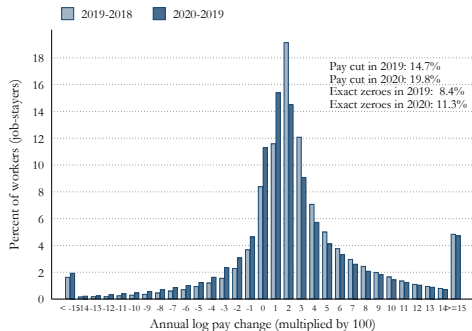
HOW FIRMS ADJUSTED LABOR IN THE 2020 CRISIS

PAY CUTS ARE NOT RARE

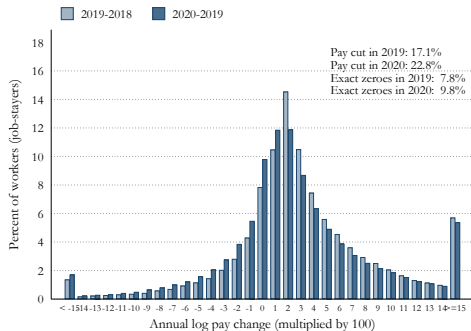
DISTRIBUTION OF FIRMS BY THE % OF EMPLOYEES AFFECTED BY PAY CUTS, CONDITIONAL ON PAY CUT



NOMINAL PAY GROWTH (MANDATORY FIRM SURVEY)



(a) Base hourly pay

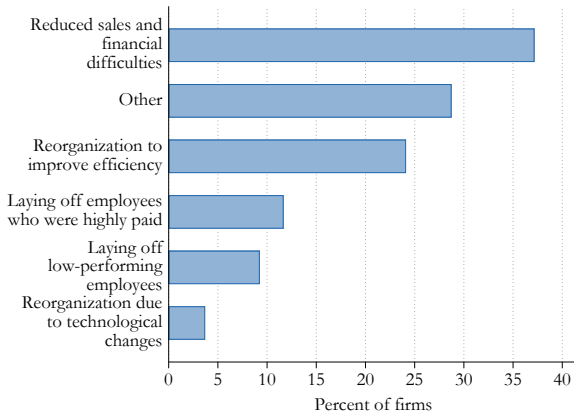


(b) Total hourly pay

$\simeq 20\%$ of pay cuts over 2020-2019. $\simeq 15\%$ over 2019-2018

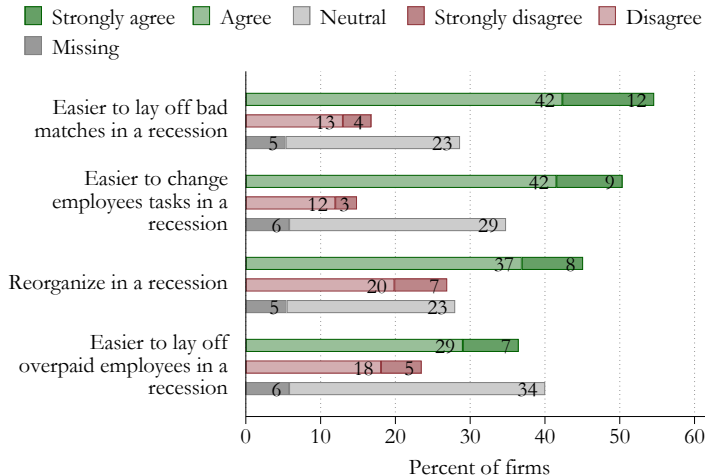
EMPLOYER CONSIDERATIONS AT THE LAYOFF MARGIN

REASONS FOR LAYOFFS

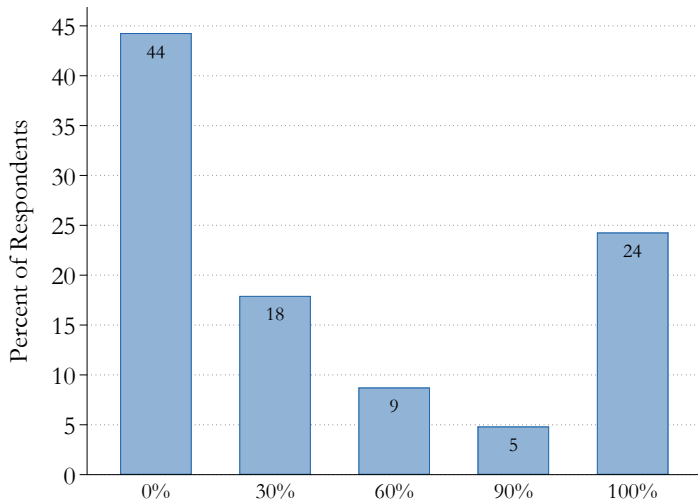


- ▶ Only 35% of firms marked "Reduced sales and financial difficulties"
- ▶ The rest of the respondents marked other reasons

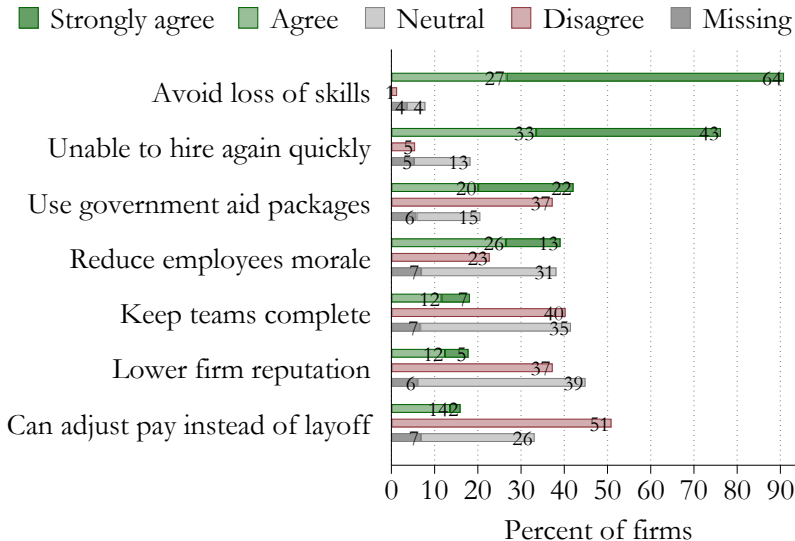
IS CRISIS AN OPPORTUNE TIME FOR LAYOFFS?



HOW MANY OF THE LAYOFFS WOULD HAVE HAPPENED IN 2020 OR THE NEXT 2 YEARS IF NOT FOR THE PANDEMIC?



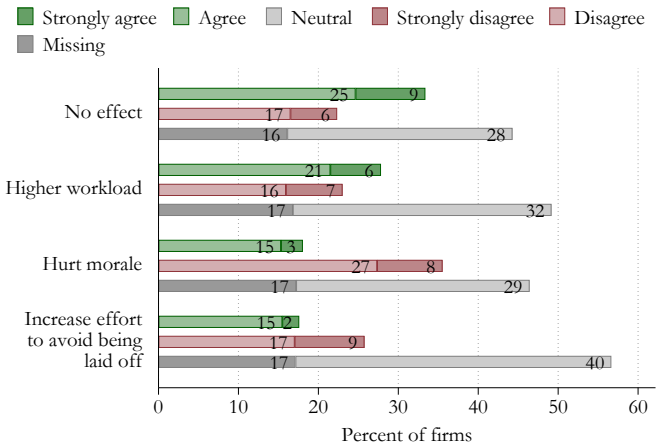
WHY RETAIN WORKERS DESPITE REVENUE DROP?



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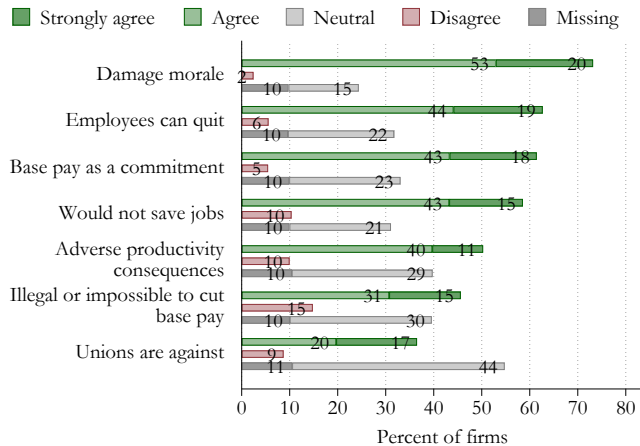
1. The most important reason for retaining employees is avoiding the skill loss
2. Another important reason is not being able to hire quickly when needed during the recovery (80% of respondents agree)
3. Wage cuts or reduction in variable pay is not an alternative to layoffs
4. Morale concerns are not the first-order concerns in the layoff decision

PERCEIVED EFFECT OF LAYOFFS ON REMAINING WORKERS



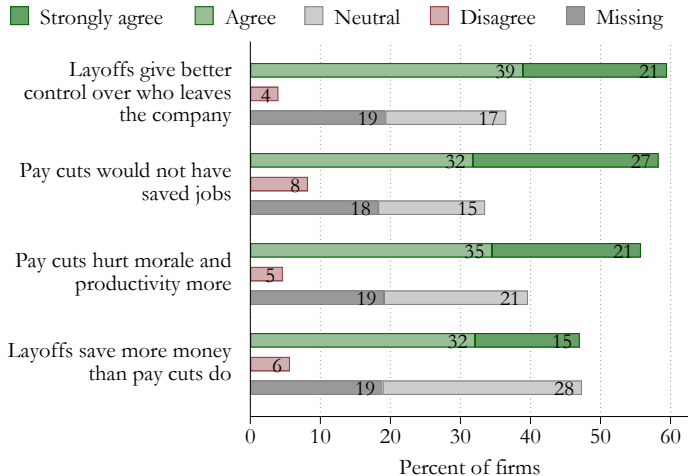
WHY EMPLOYERS ARE RELUCTANT TO CUT PAY

REASONS FOR NOT LOWERING THE BASE PAY

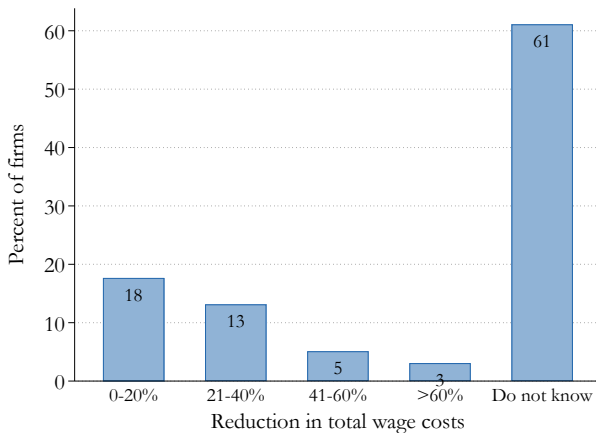


Reasons are related to morale and labor market competition (via quits)

WHY NOT LOWER PAY INSTEAD OF LAYING OFF WORKERS?



WHAT REDUCTION IN THE TOTAL PAY COST COULD HAVE PREVENTED LAYOFFS?



This question is conditional on answering that the firm did not use pay cut

RESULTS BY FIRMS CHARACTERISTICS, PERFORMANCE MEASURES, LABOR MARKET CONDITIONS

We also study how firms' labor adjustment approaches vary with the firm size, value added per worker, labor cost per worker, capital per worker, liquid assets per worker, percent of unionized workers in firm, or the average tenure of the workers

- ▶ Higher value-added per worker firms are much less likely to cut base pay
- ▶ Higher labor costs per worker firms are more likely to cut base pay

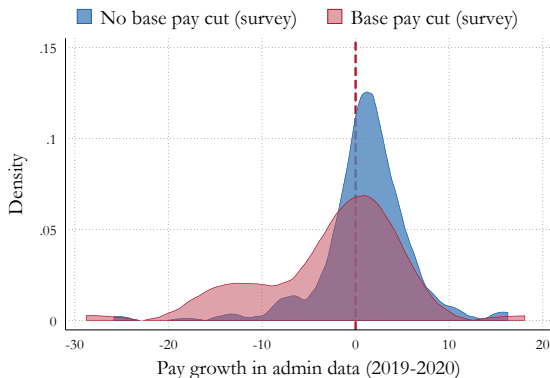
CONCLUSIONS

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Using our original large-scale survey of firms linked to the admin data, we find the following regarding how firms adjust labor in response to adverse shocks:

- ▶ Layoffs are much more prevalent than pay cuts
- ▶ But pay cuts are not rare
- ▶ Worker skills and search and matching costs are important considerations in layoff decisions
- ▶ Morale considerations are not important for layoff but play a role in pay cut decisions
- ▶ Firms do not consider pay cuts as a viable substitute for layoffs during crisis
 - ▶ A crisis is an opportune time for firms to lay off low-productivity workers
 - ▶ Firms resist cutting pay for other workers to avoid quits

BASE PAY CUT IN THE LINKED SURVEY-ADMIN DATA



(a) Pay growth in admin. data, by survey pay cut report

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