



**October 2020 WEO – Chapter 2**

# **The Great Lockdown: Dissecting the Economic Effects**

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Francesca Caselli, Francesco Grigoli (co-lead),  
Weicheng Lian, and Damiano Sandri (co-lead)

With support from Jungjin Lee and Xiaohui Sun

## Introduction

- To contain the COVID-19 pandemic most countries imposed stringent lockdowns
  - Meanwhile, economic activity contracted very sharply
- Against this backdrop, this chapter tackles the following questions:
  - To what extent was the economic contraction driven by lockdowns rather than by people voluntarily avoiding social interactions?
  - Can we expect an economic rebound when lockdowns are lifted?
  - Did lockdowns have uneven effects across segments of the population?
  - Did lockdowns help to contain the spread of COVID-19?
  - Did tighter lockdowns perform better than milder ones?
- These answers not only provide a retrospective analysis of the crisis but can also inform current policy decisions as the virus continues to spread

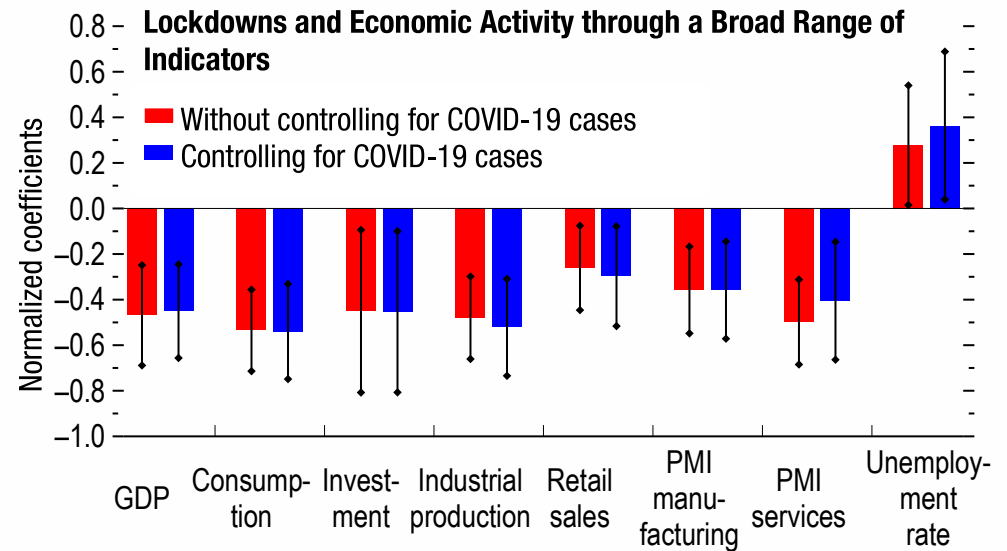
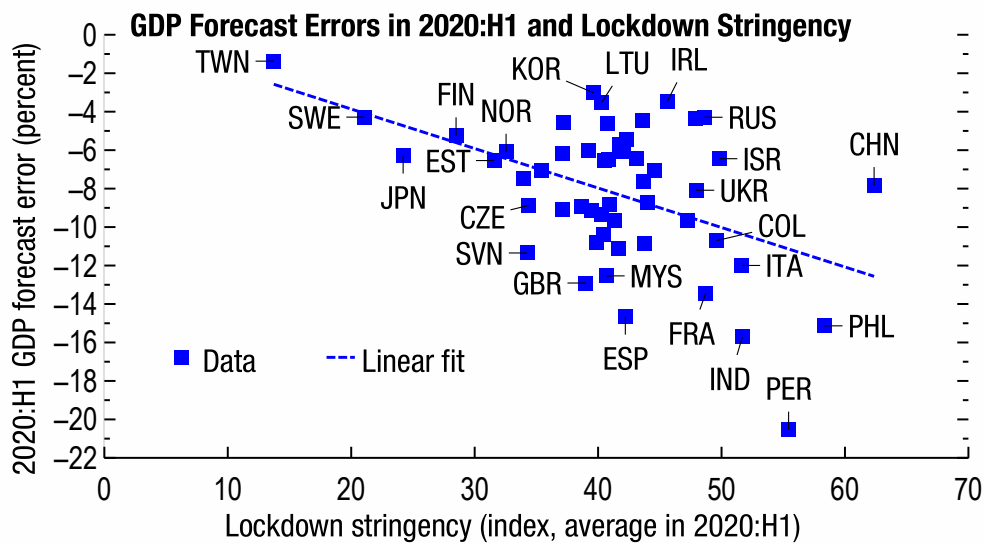
## Takeaways from the literature

- Some papers highlight the role of voluntary social distancing in driving the recession  
Alcott et al. 2020, Andersen et al. 2020, Aum et al. 2020, Bartik et al. 2020, Born et al. 2020, Bricco et al. 2020, Chen et al. 2020a, Chetty et al. 2020, Goolsbee and Syverson 2020, Kahn et al. 2020, Maloney and Taskin 2020
- Other studies document significant effects from lockdowns  
Baker et al. 2020, Beland et al. 2020, Carvalho et al. 2020, Chronopoulos et al 2020, Coibion et al. 2020a, 2020b, Deb et al. 2020b, Gupta et al. 2020
- Lockdowns impact especially the most vulnerable (minorities, less educated, women)  
Alon et al. 2020a, Alstadsæter et al. 2020, Beland et al. 2020, Borjas and Cassidy 2020, Cajner et al. 2020, Chetty et al. 2020 , Del Boca et al. 2020, Fairlie et al. 2020, Papanikolaou and Schmidt 2020, Shibata 2020
- Lockdowns tend to reduce COVID-19 infections  
Born et al. 2020, Chernozhukov et al. 2020, Dave et al. 2020a, Deb et al. 2020a, Fang et al. 2020, Friedson et al. 2020, Imai et al. 2020, Jinjarak et al. 2020, Mellan et al. 2020, Vollmer et al. 2020, and Yilmazkuday 2020

# **Preliminary evidence on the impact of lockdowns using cross-country data**

# Lockdowns are associated with lower economic activity

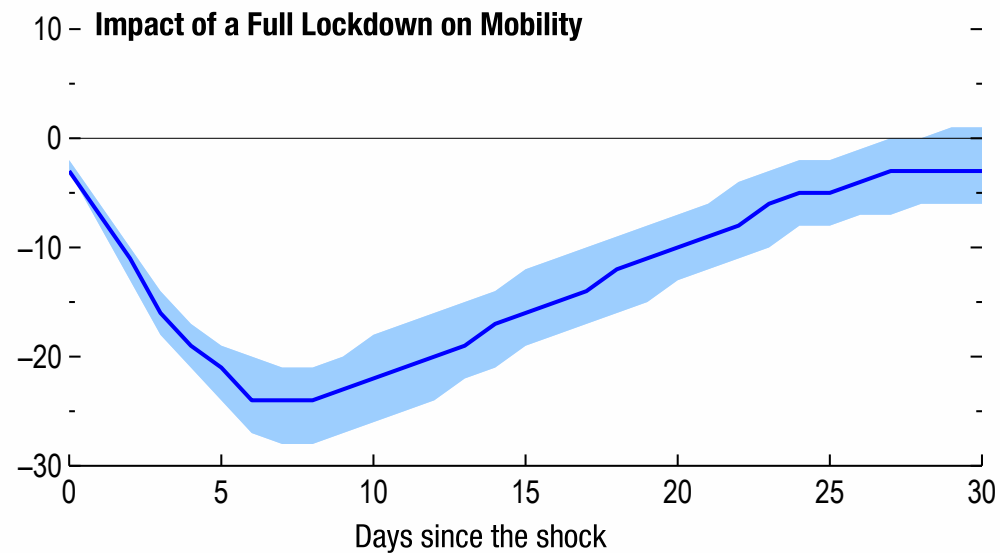
- Countries with more stringent lockdowns experienced weaker economic activity
  - across a broad set of indicators
  - even after controlling for COVID-19 confirmed cases



# **Impact of lockdowns on mobility as a high-frequency proxy for economic activity**

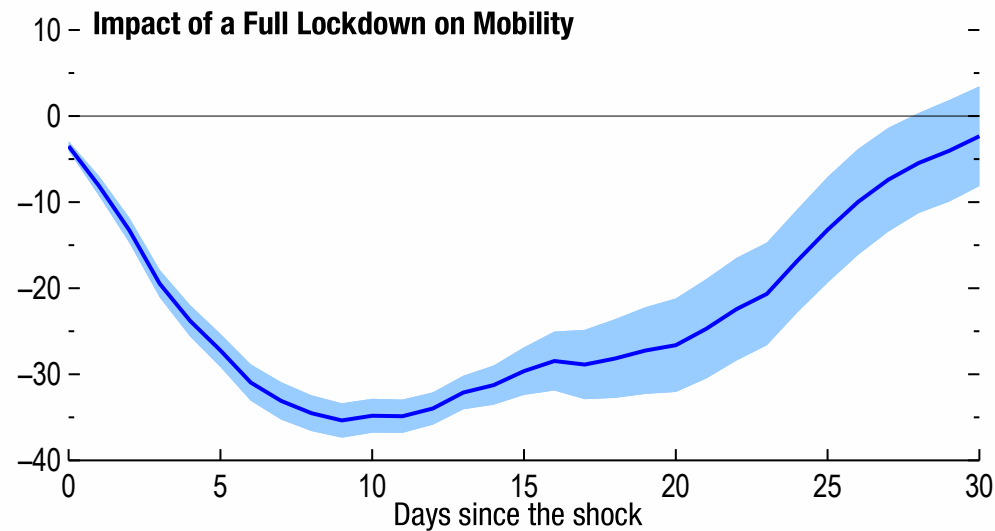
## Lockdowns significantly reduce mobility

- We estimate the impact of lockdowns on mobility using national data for 128 countries
- Mobility declines by about 25 percent a week after the lockdown
  - The effect dies out over time as the lockdown stringency declines



## Similar results are obtained with subnational data

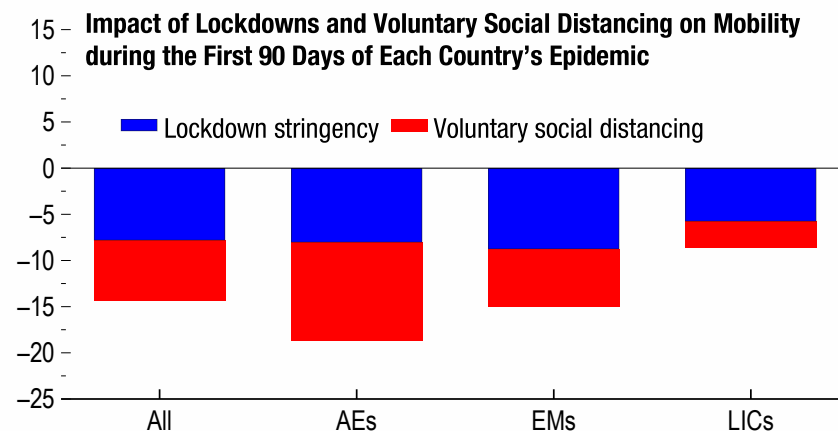
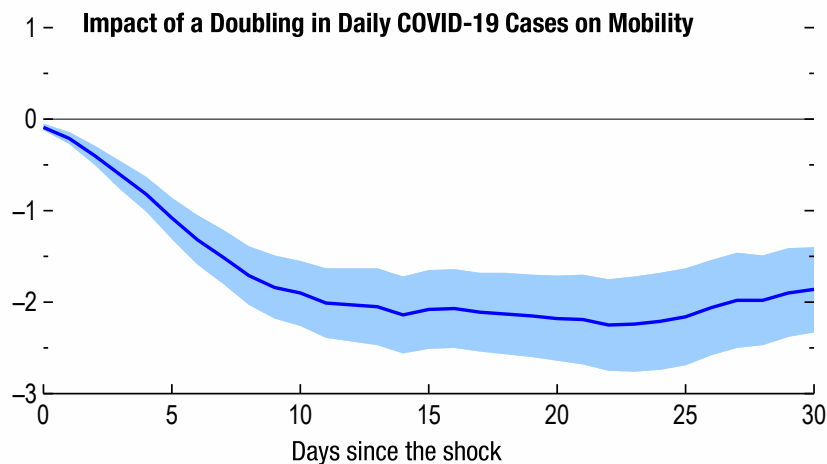
- We test for the robustness of the negative effect of lockdowns using subnational data
- We consider regions less affected by the virus in countries that imposed national lockdowns
  - Better identification since lockdowns were largely exogenous for these regions
  - However, the analysis is limited to 15 countries (422 subnational units)
- The results confirm a substantial negative impact of lockdowns on mobility





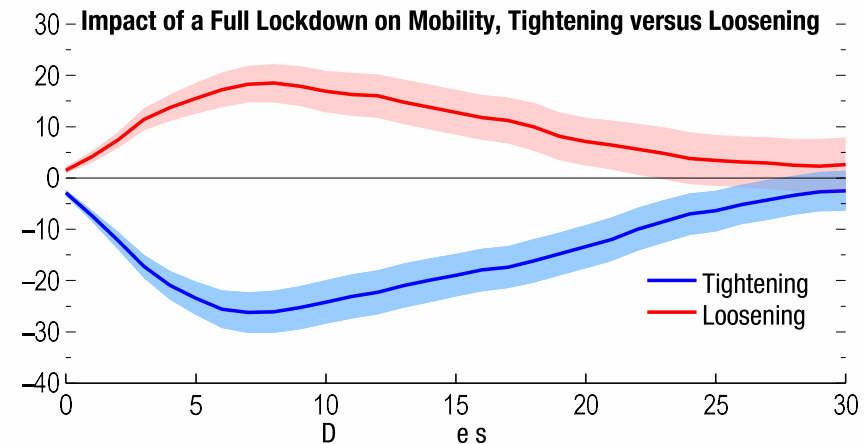
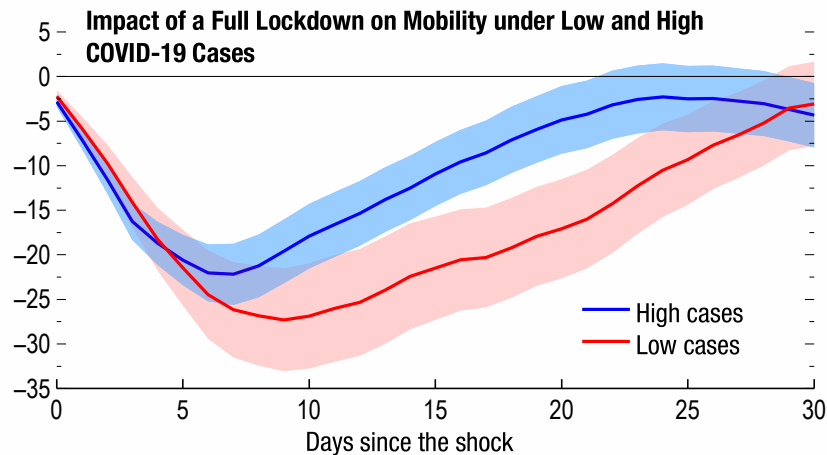
## Voluntary social distancing is also important

- We also analyze the response of mobility to COVID-19 cases controlling for lockdowns
  - Higher cases lead to a considerable drop in mobility
  - This response likely reflects voluntary social distancing
- Lockdowns and voluntary social distancing played a similar role in reducing mobility
  - Voluntary social distancing was stronger in advanced economies



## Lifting lockdowns leads to only partial recovery

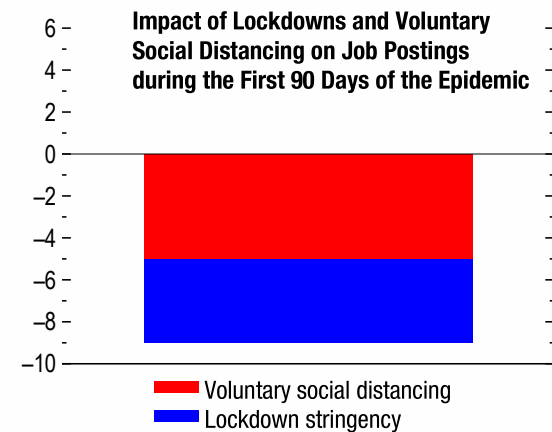
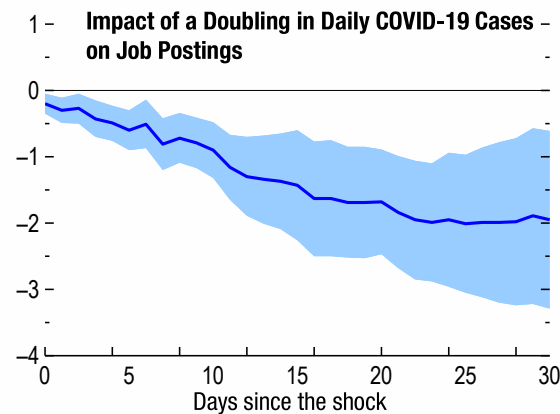
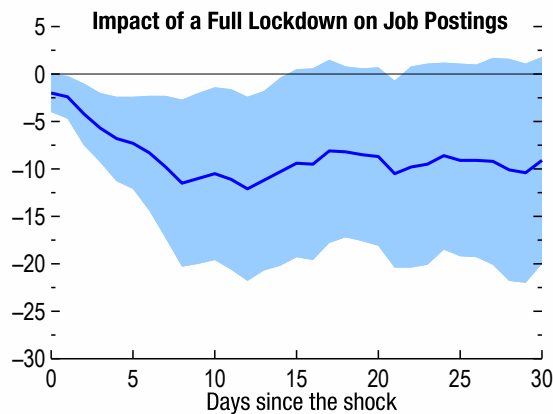
- Can we expect an economic rebound when lockdowns are lifted?
  - The impact of lockdowns is weaker when COVID-19 cases are higher
  - Lifting lockdowns prematurely is unlikely to provide a decisive economic boost
- A lockdown loosening tends to increase mobility, but the effect is smaller than from a lockdown tightening



# **Impact of lockdowns on job postings**

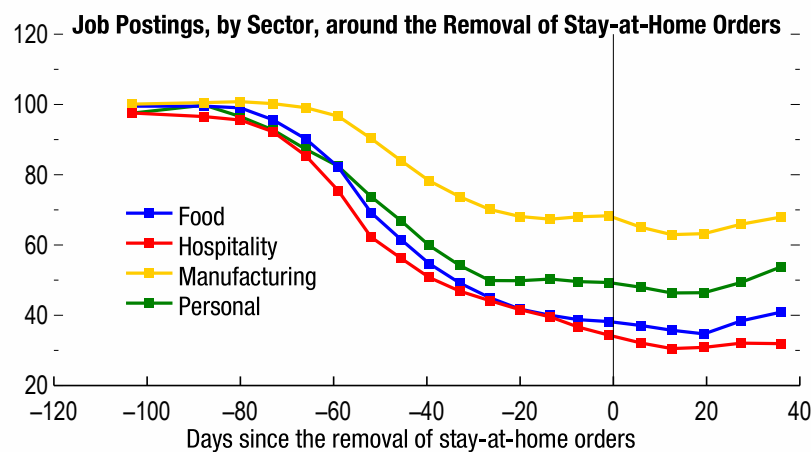
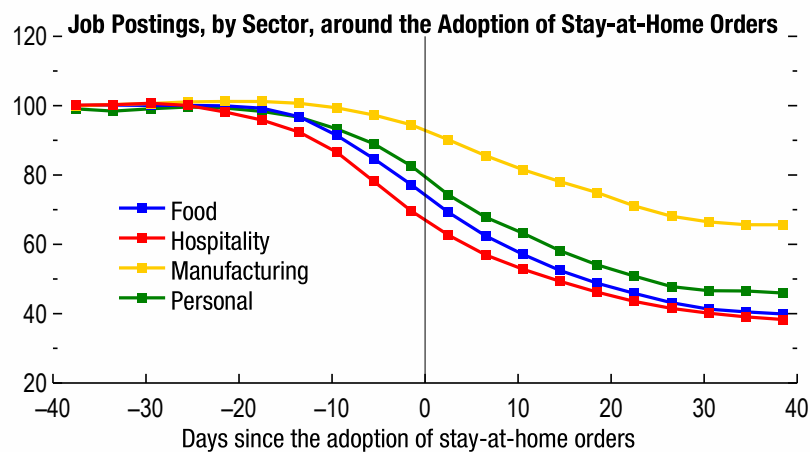
## Lockdown effects are also visible in job postings

- Consistent with the analysis of mobility, job postings data from Indeed reveal that
  - Lockdowns have a significant negative impact on job postings
  - Lockdowns and voluntary social distancing contributed similarly to job declines
- The impact of lockdowns on job postings appears more persistent than on mobility
  - Possibly reflecting permanent scarring in labor markets



## Analysis of sectoral jobs supports previous findings

- Analysis of job categories shows importance of both lockdowns and voluntary distancing
  - Jobs in contact-intensive sectors declined before lockdowns
  - Manufacturing jobs declined around the adoption of stay-at-home orders
- Job postings have recovered very marginally since the lifting of stay-at-home orders



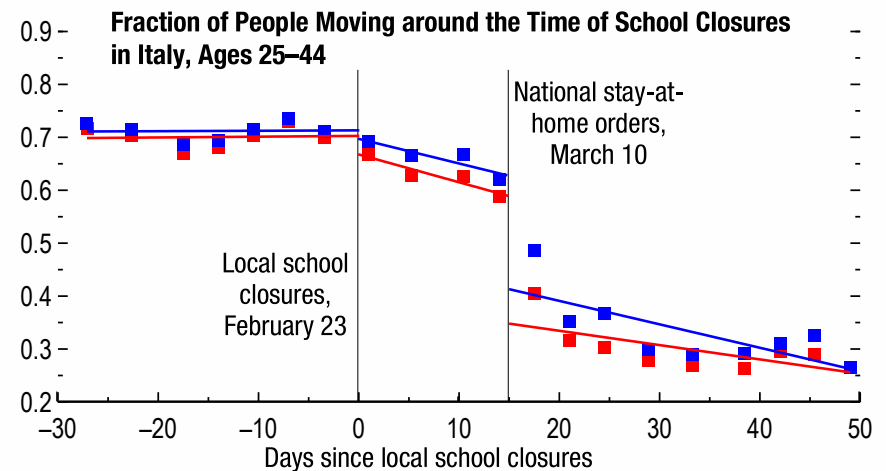
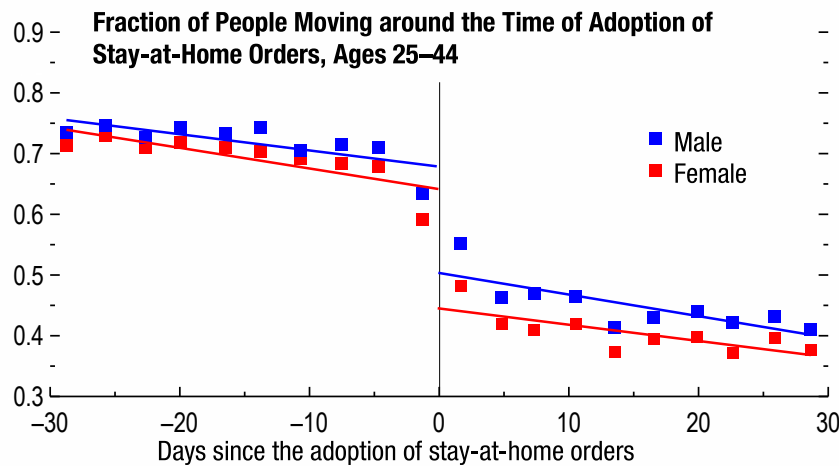
# **Impact of lockdowns across gender and age groups**

## The COVID-19 crisis is having unequal effects

- Different from previous recessions, the current crisis is affecting **women** disproportionately
  - The most affected sectors have predominant female employment
  - Schools closures impact especially working mothers
- We examine these issues using anonymized and aggregated mobility indicators differentiated by gender provided by Vodafone for provinces in Italy, Spain, and Portugal
- We leverage the richness of the Vodafone data to also test if lockdowns have different effects across **age** groups

# Young women are more affected by lockdowns

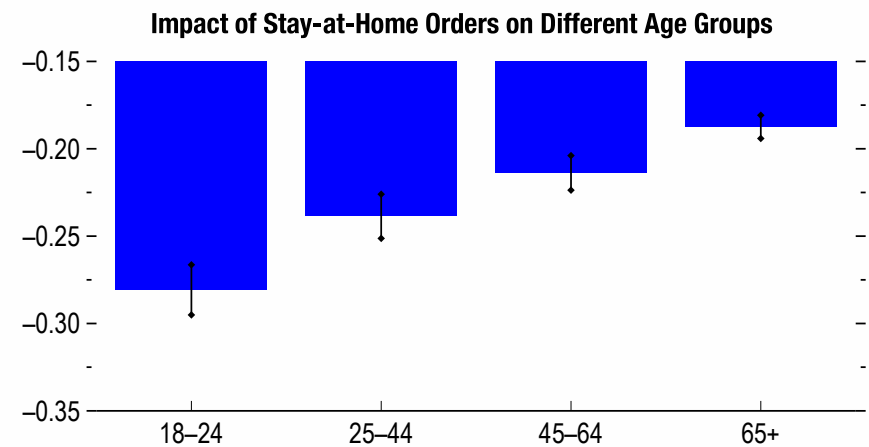
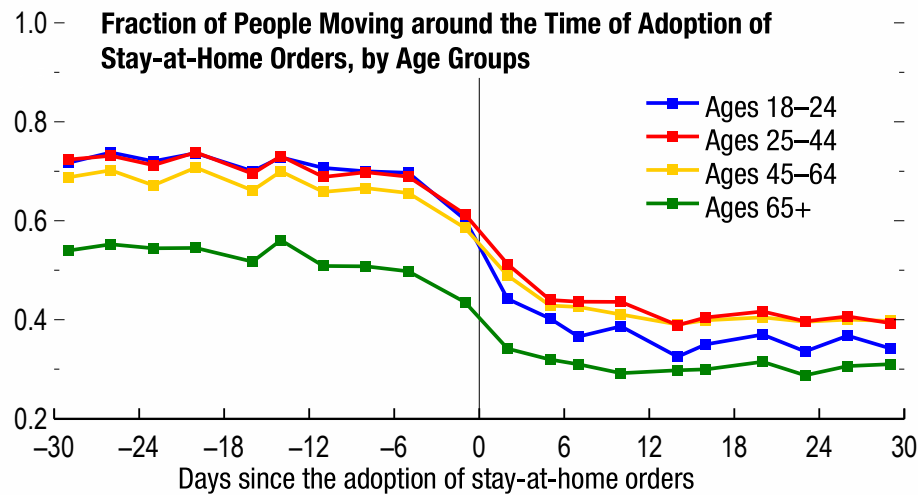
- Regression discontinuity design around the time of lockdowns
- 25-44 year old women experienced a larger decline in mobility than men around lockdowns, especially school closures
  - Smaller gender difference in 45-64 year old group (less likely to have young kids)





# Lockdowns have a stronger impact on the young

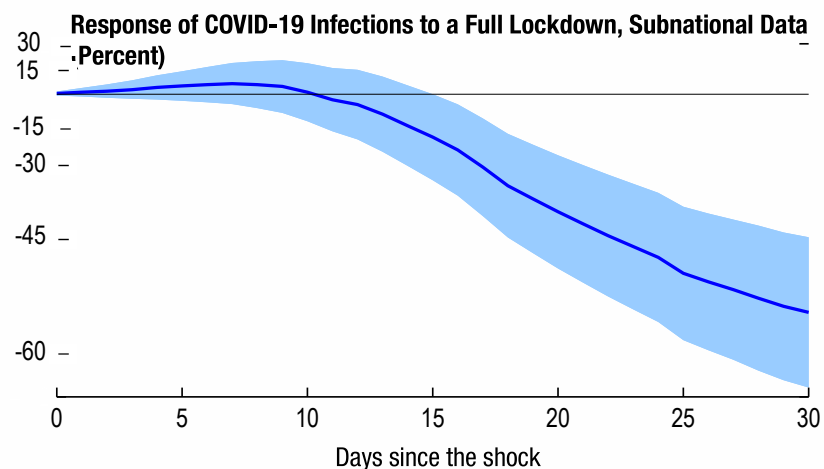
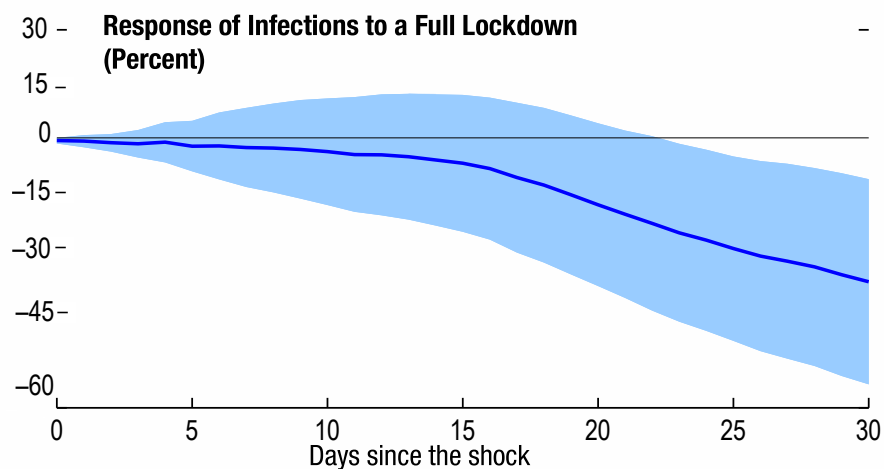
- Lockdowns reduced mobility across all age groups
- But the effects were significantly more pronounced on the young
  - Likely to worsen inequality since the young rely on labor income and have less stable jobs



# **Lockdowns and COVID-19 infections**

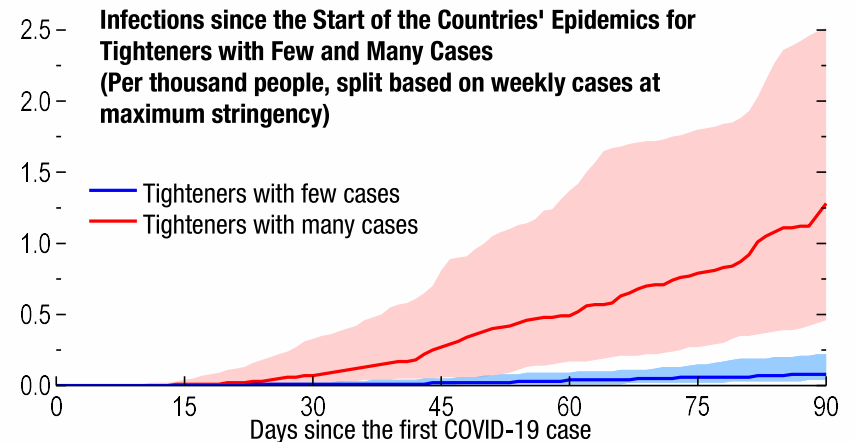
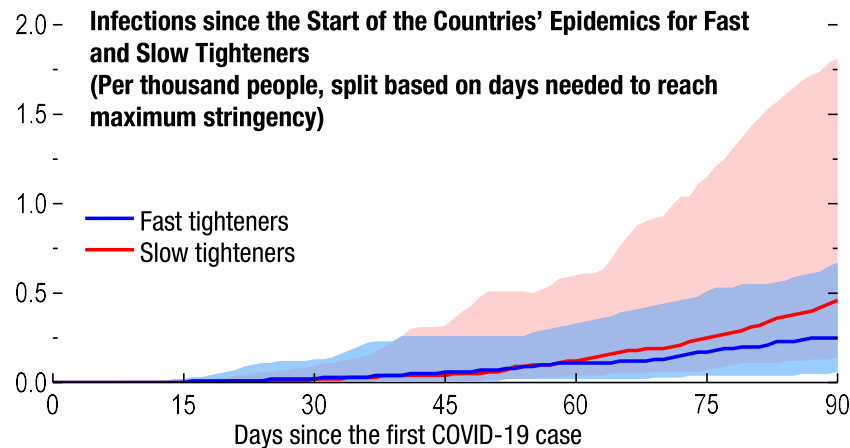
## Impact of lockdowns on infections

- We estimate the effectiveness of lockdowns in reducing infections
- COVID-19 cases start declining 3 weeks after the adoption of a lockdown relative to a no-lockdown scenario; after 30 days, cases are about 40 percent lower
  - Results are similar using subnational data and excluding the most affected regions



## Early lockdowns appear to pay off

- Countries that adopted lockdowns early had better epidemiological outcomes
  - Left chart differentiates countries based on the number of days between the first case and the maximum lockdown stringency
  - Right chart differentiates countries based on the number of per capita weekly cases at the time of maximum lockdown stringency



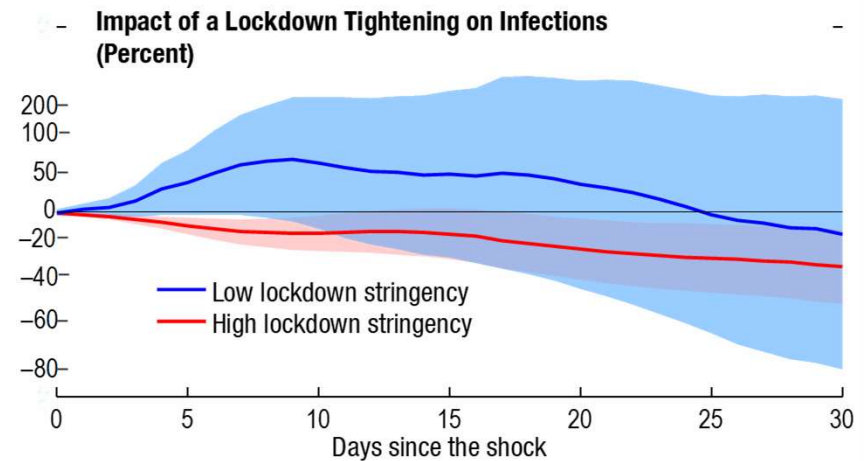
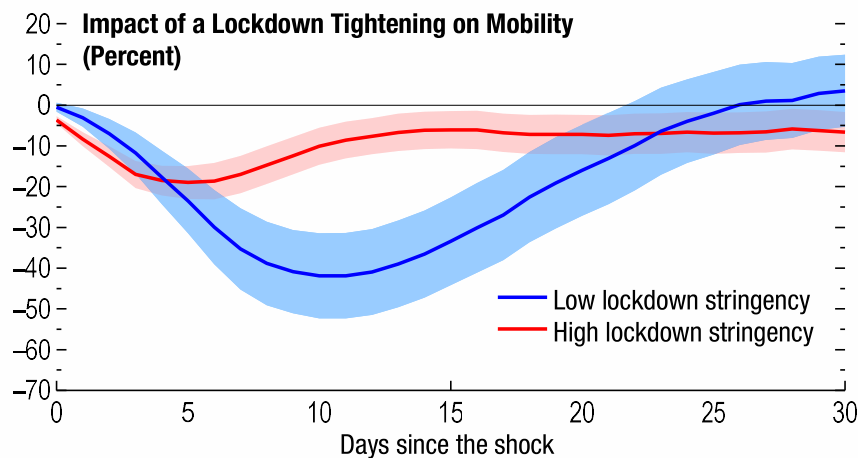
## Do lockdowns entail a trade-off?

- Prevailing narrative is that lockdowns entail a trade-off between saving lives and supporting livelihoods
  - True in the short-run, but possibly misleading once we factor in medium-term effects
- The analysis highlights the economic cost of voluntary social distancing
- By reducing infections and thus the extent of voluntary social distancing, lockdowns may pave the way to a stronger and more sustainable economic recovery
  - The short-term costs of lockdowns could be compensated by faster medium-term growth

# **Nonlinear Effects of Lockdowns**

## Stringent lockdowns seem preferable to mild ones

- We examine if more stringent lockdowns continue to have similar marginal economic and epidemiological effects. As they become more stringent, lockdowns have:
  - marginally weaker negative economic effects
  - marginally stronger positive effects in reducing infections
- Stringent and short-lived lockdowns seem preferable to mild and prolonged ones



## Conclusion

- Lockdowns and voluntary social distancing are both key determinants of economic activity
  - Economies are unlikely to return to full potential while health risks remain
  - Policymakers should be wary of removing policy support too rapidly
  - Need to find ways to support economic activity consistent with social distancing: enhance WFH, promote new technologies to limit contacts, facilitate reallocation to less contact-intensive sectors
- Lockdowns tend to have more severe effects on the mobility of women and the young
  - Targeted policy intervention is needed, for example strengthening unemployment benefits for vulnerable categories and supporting paid leave for parents
- Early and tight lockdowns are powerful instruments to contain infections
  - But need to also find less costly ways to contain infections: face masks, cleaning protocols, isolate vulnerable people
- Short-term costs vs medium-term gains
  - By containing infections and reducing voluntary social distancing, lockdowns may lead to stronger economic recovery