



Macroeconomic Outcomes and COVID-19: A Progress Report

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September 24, 2020

Brookings Papers on Economic Activity

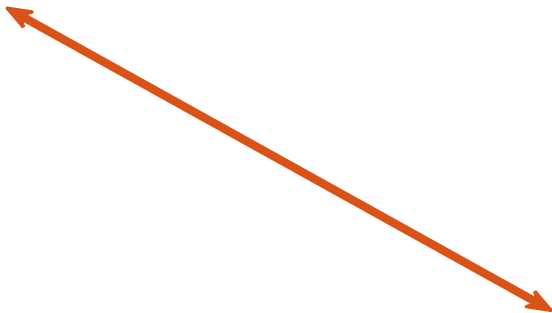
Overview

- Data on Lost GDP and Covid Deaths
 - No simple tradeoff
 - Complicated interaction: policy, history, luck, and timing
- Outline
 - Simple framework
 - Cumulative losses across countries, cities, and states
 - Dynamics

Short-Term Trade Off

GDP LOSS (PERCENT)

Shut down economy



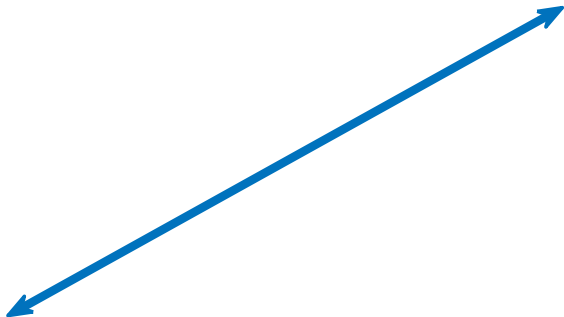
Keep economy open

COVID DEATHS PER MILLION PEOPLE

Dynamics, Policy, and Luck Can Shift the Tradeoff

GDP LOSS (PERCENT)

Bad policy
or bad luck



Good policy
or good luck

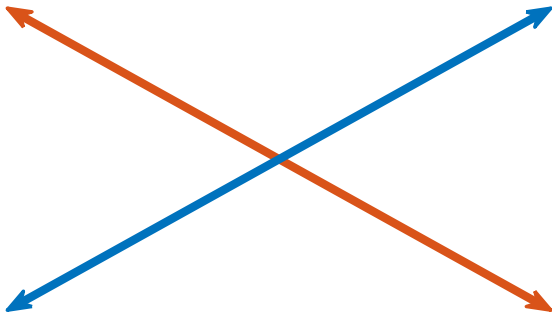
COVID DEATHS PER MILLION PEOPLE

Putting together...

GDP LOSS (PERCENT)

Shut down economy

Bad policy
or bad luck



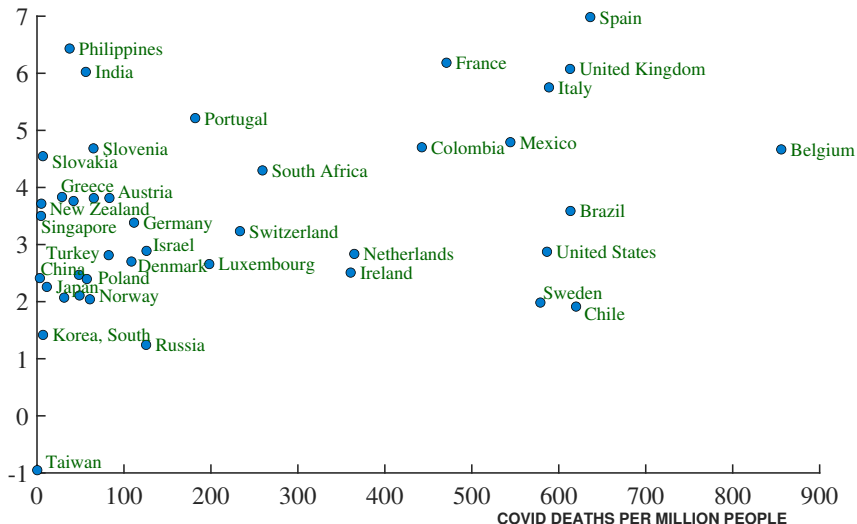
Good policy
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Keep economy open

COVID DEATHS PER MILLION PEOPLE

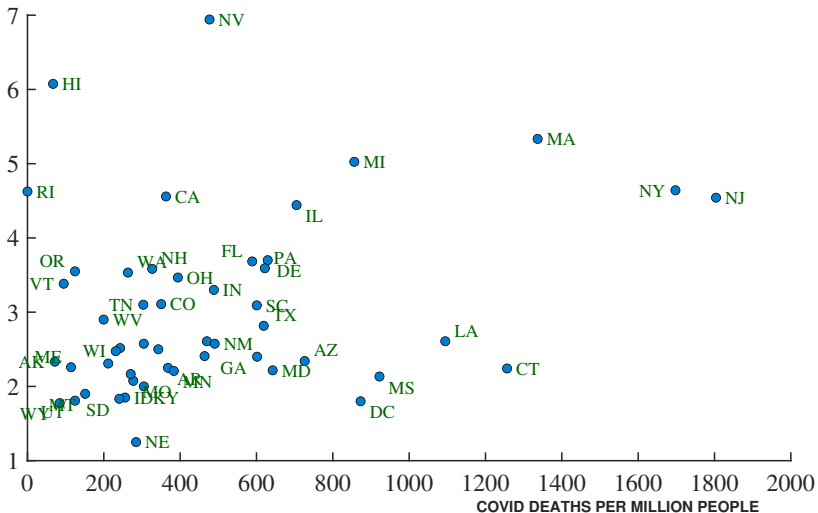
International Covid Deaths and Lost GDP, 2020

GDP LOSS (PERCENT YEARS)



U.S. States: Covid Deaths and Cumulative Excess Unemployment

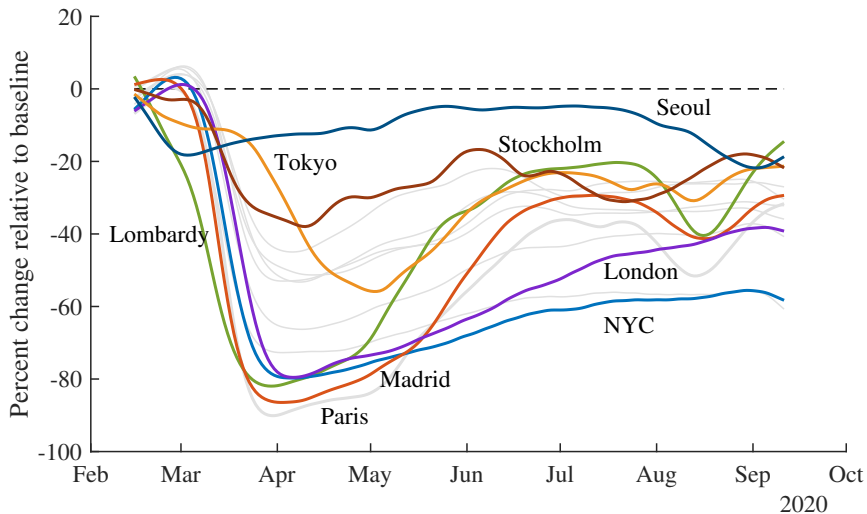
CUMULATIVE EXCESS UNEMPLOYMENT (PERCENT YEARS)



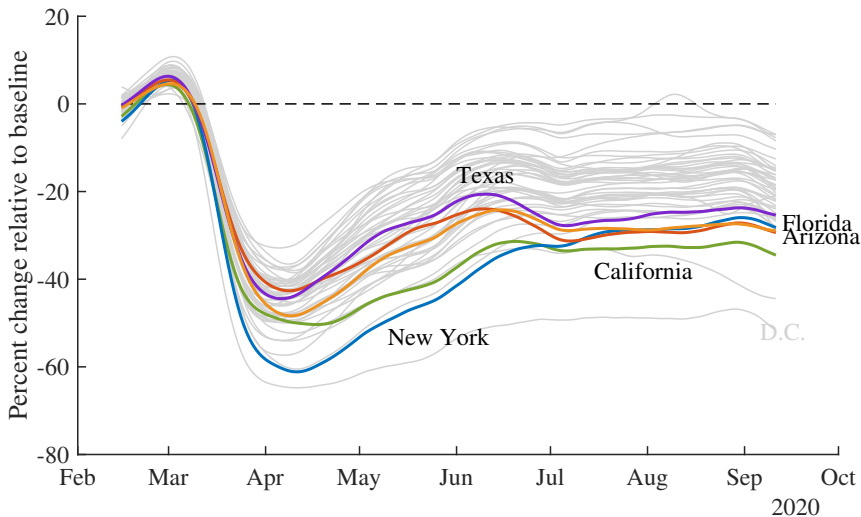
Google Mobility Reports Data

- Available daily, very disaggregated geographically, up to date
 - In contrast to GDP and unemployment
- Use the retail and restaurants component
- Good correlation with other measures
 - Correlation with GDP loss = 0.68
 - Correlation with state excess unemployment = 0.69

Google Activity Data for Key Global Cities

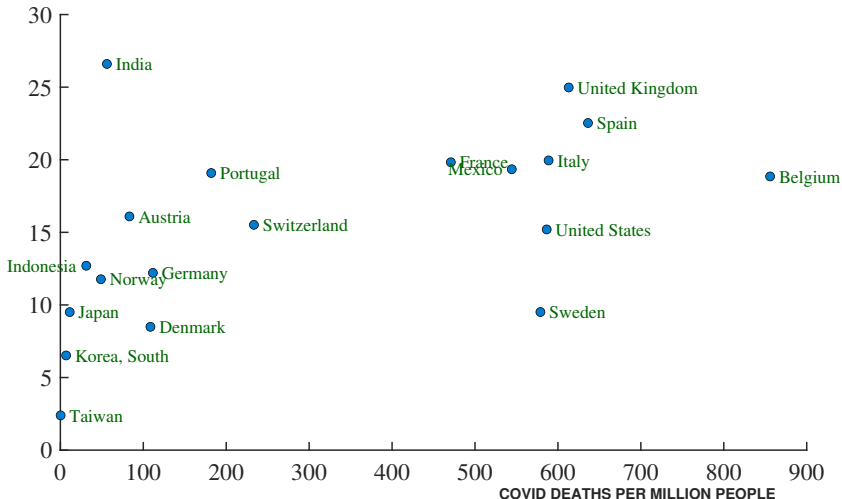


Google Activity Data for U.S. States



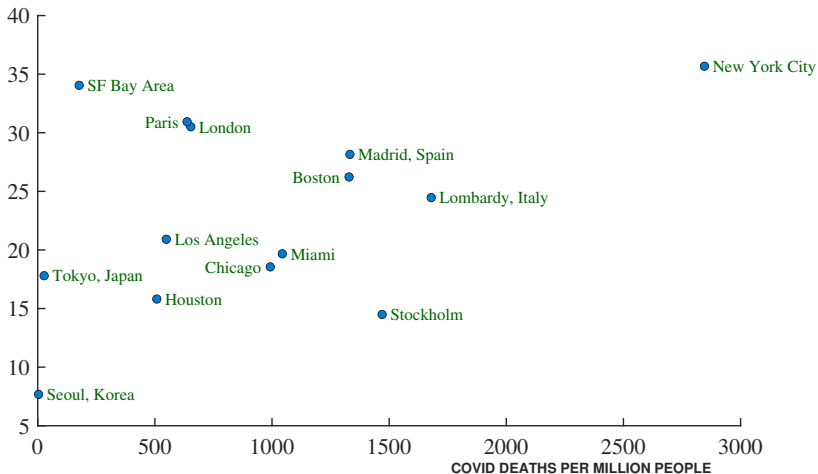
Covid Deaths and Cumulative Google Activity

CUMULATIVE REDUCED ACTIVITY(PERCENT YEARS)



Global Cities: Covid Deaths and Cumulative Google Activity

CUMULATIVE REDUCED ACTIVITY(PERCENT YEARS)

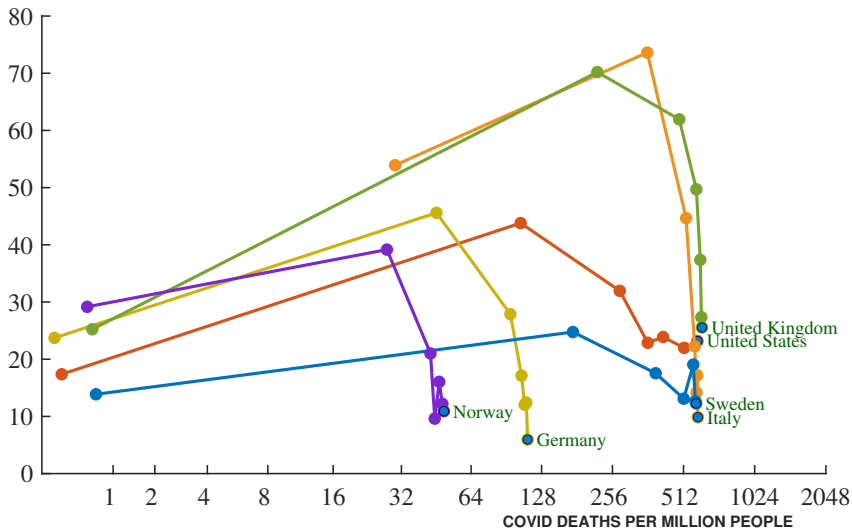




Dynamics: Outcomes over Time

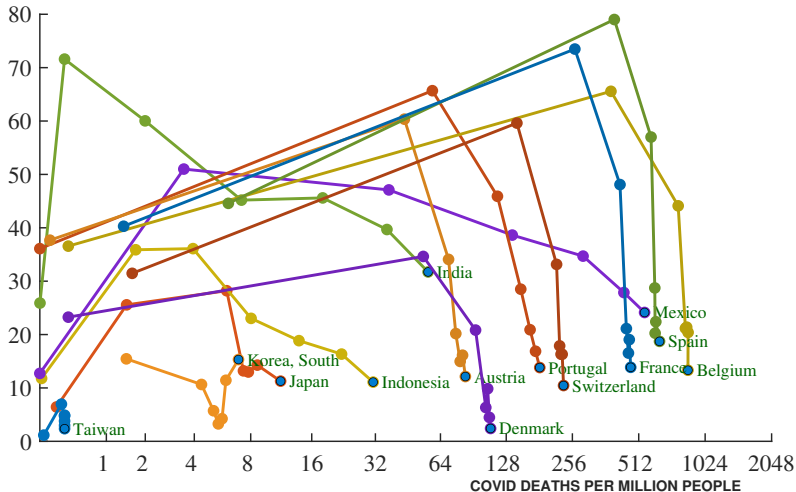
Countries: Monthly Evolution from March to September

REDUCED ACTIVITY (PERCENT)

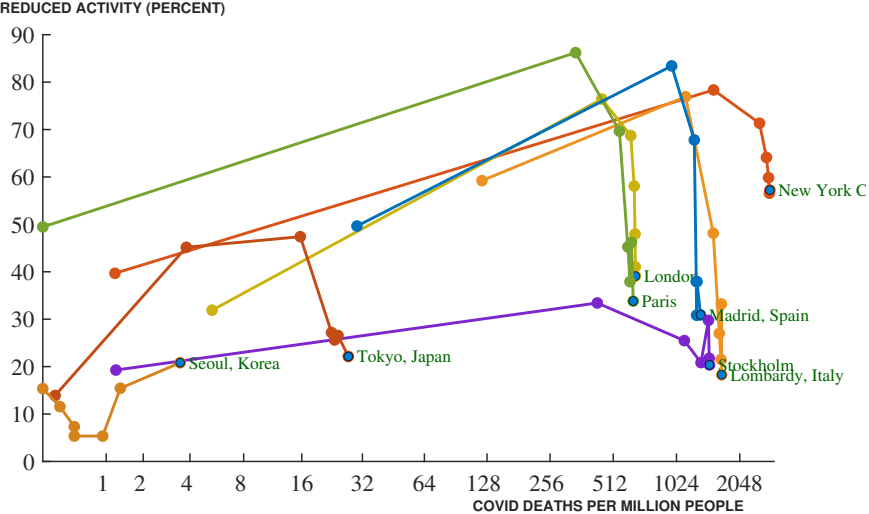


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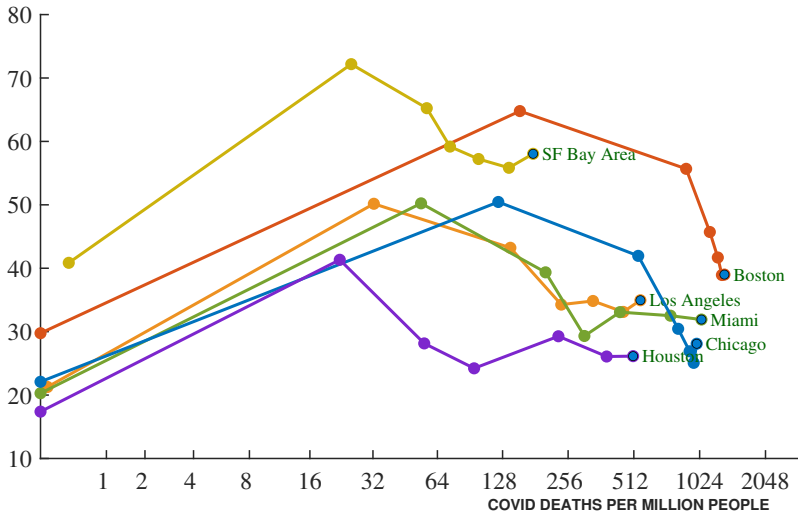


Global Cities: Monthly Evolution from March to September



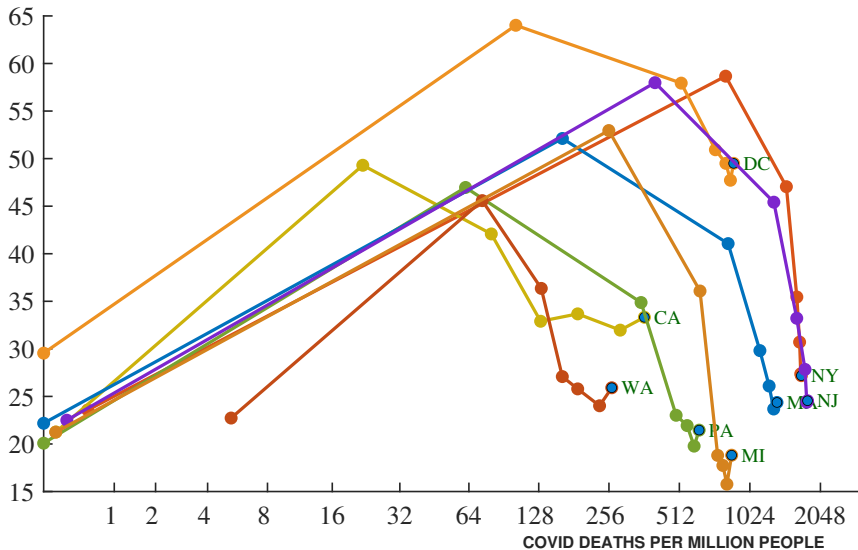
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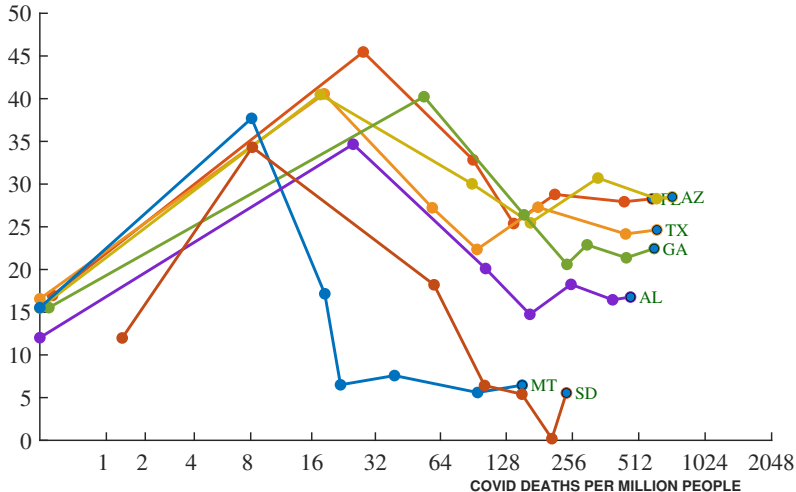
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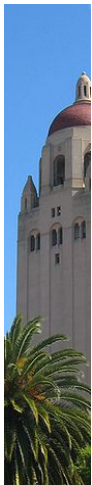
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U.S. States: Monthly Evolution from March to September

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Concluding Remarks

Summary

