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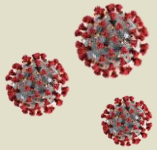
The Economics of the COVID-19 Pandemic

Externalities, Intervention, and Recovery

Suggestions for Giving Students the Economic Perspective

Presentation Contents



How do we Provide Students with Historical Context?

Did Governments Get the Cost-Benefit Analysis Correct?

Estimating the Costs of the Pandemic

Negative Externalities and Multiple Equilibria as Justifications for Lockdowns

How Quickly Will Employment and the Economy Recover?

A Great Essay for Historical Context

THE GLOBE AND MAIL OPINION SUBSCRIBE LOG IN

OPINION

Growing up in Quarantineland: Childhood nightmares in the age of germs prepared me for coronavirus

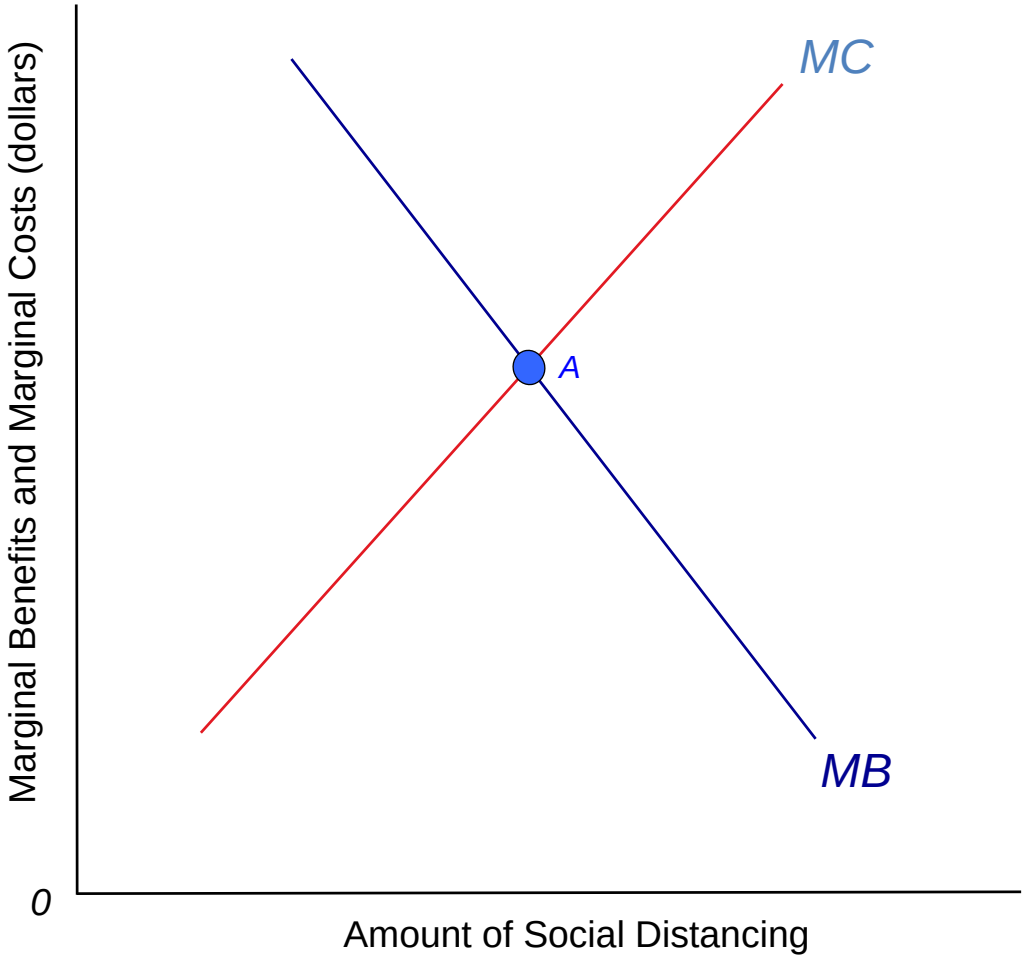
Canadians raised in the 1940s remember the signs being everywhere. 'Scarlet fever.' 'Diphtheria.' Do not enter. Do not touch. But we endured – and we can do it again

MARGARET ATWOOD
SPECIAL TO THE GLOBE AND MAIL
PUBLISHED MARCH 28, 2020

https://www.theglobeandmail.com/opinion/article-growing-up-in-quarantineland-childhood-nightmares-in-the-age-of-germs/

Toronto, 1947: Ignoring a polio warning sign, children from the quarantined J Block at Stanley Barracks – a military depot converted to emergency housing – play with children from another block. Several more would be infected that summer at Stanley Barracks, one of many fronts in a nationwide wave of polio that reached every province from 1946 to 1953.

Cost Benefit Analysis is Hard Without Good Data on Costs and Benefits



In February, Governments Were Still Trying to Get Answers To Basic Questions, Such As...

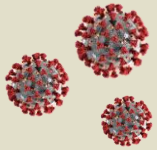
How lethal is the SARS-CoV-2 virus?

How transmissible is the SARS-CoV-2 virus?

To what degree should social distancing and lockdowns be imposed?

How long will social distancing and lockdowns have to last?

In Recent Months, Much Has Been Learned

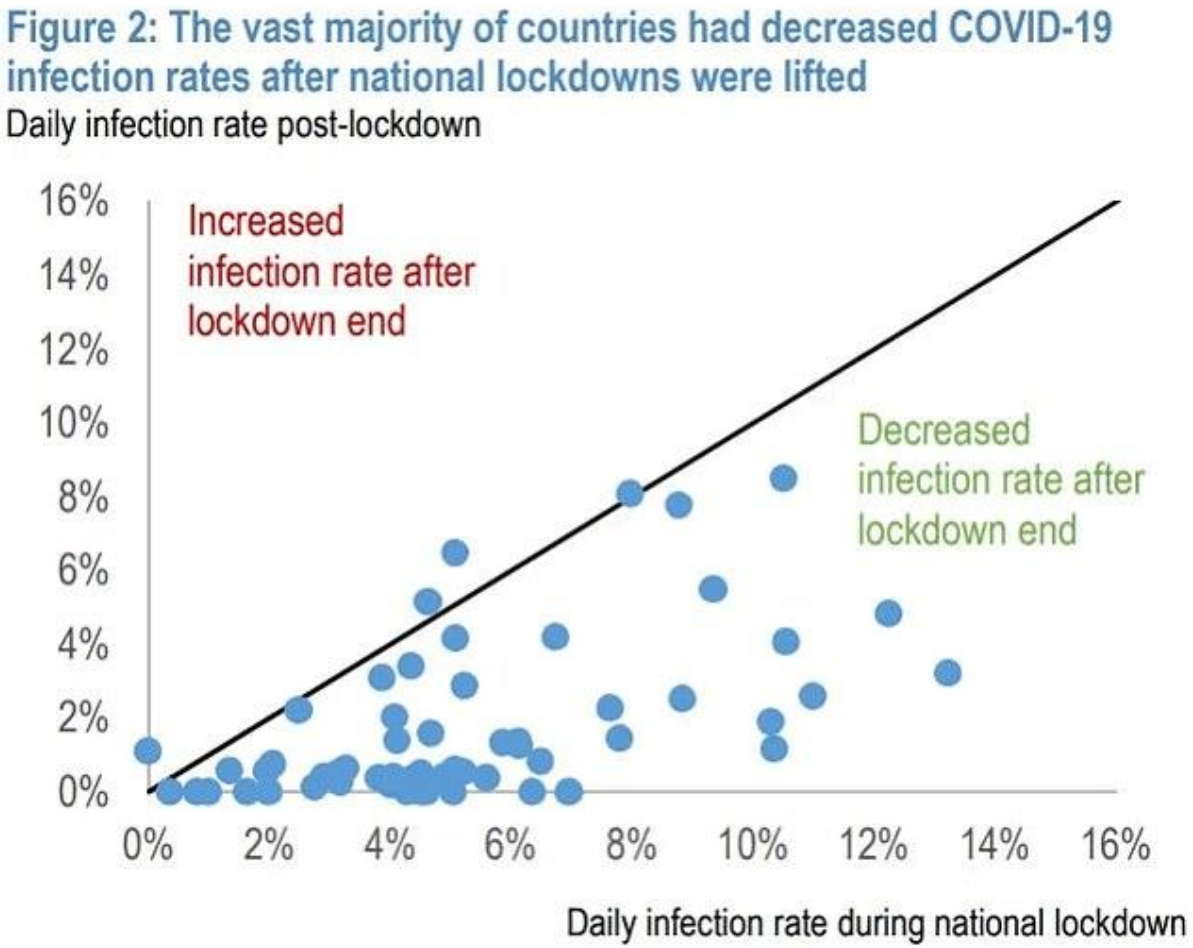


Key Fact: Super-spreader events may be responsible for 80 percent or more of transmissions.

- Super-spreader events have occurred disproportionately often when people are close together and using a lot of lung capacity.
  - Choir practices and singing loudly with others
  - Intense exercise indoors in close quarters that involves breathing hard
  - Loud, tightly packed bars in which people have to shout to be heard

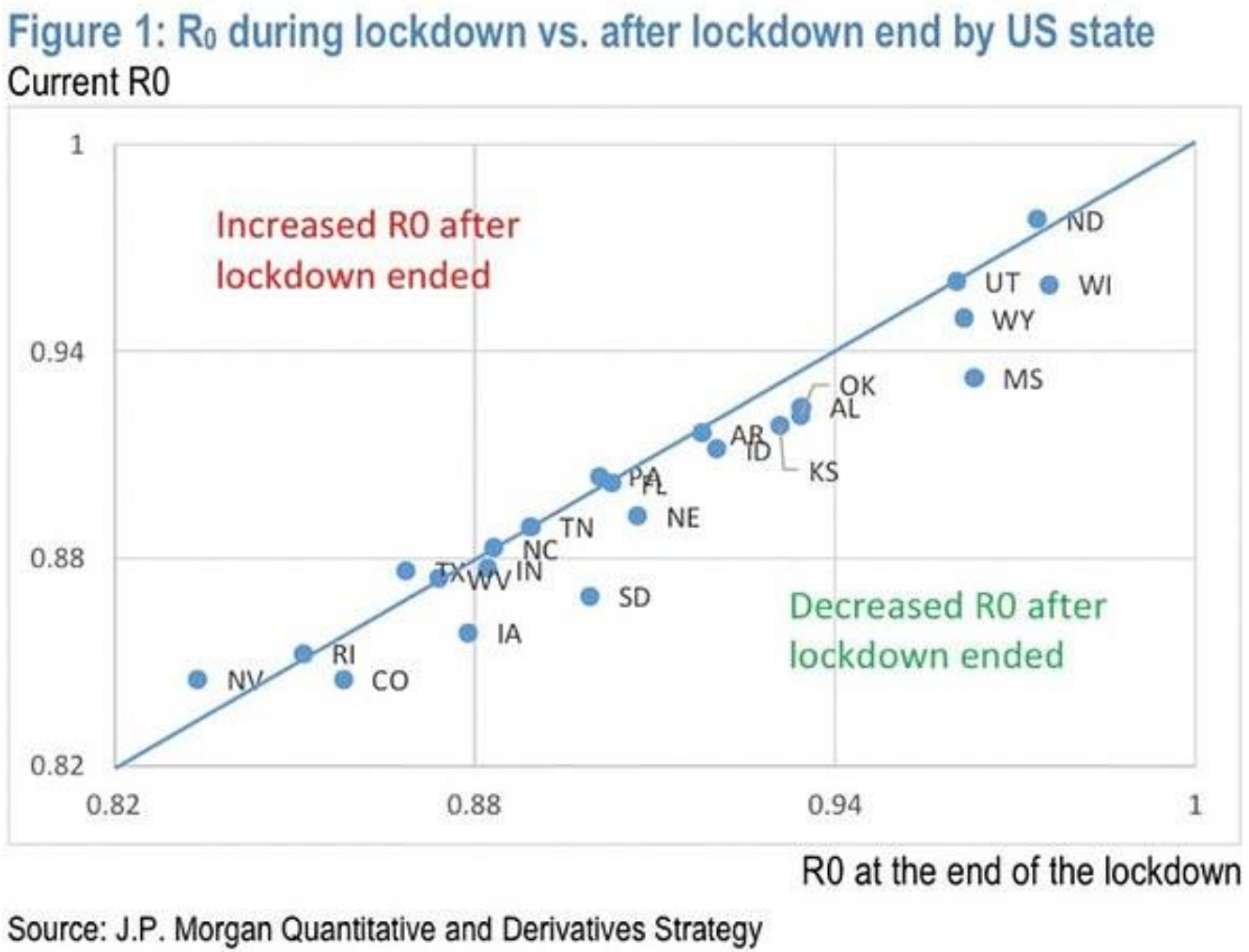
The New Data Suggests that Lockdowns Didn't Work as Advertised for Infection Rates

Figure 2: The vast majority of countries had decreased COVID-19 infection rates after national lockdowns were lifted



Source: J.P. Morgan Quantitative and Derivatives Strategy. Infection rate measured with a 7-day lag to allow for testing lags

The New Data Suggests that Lockdowns Didn't Work as Advertised for R_0 (the Basic Reproduction Number)



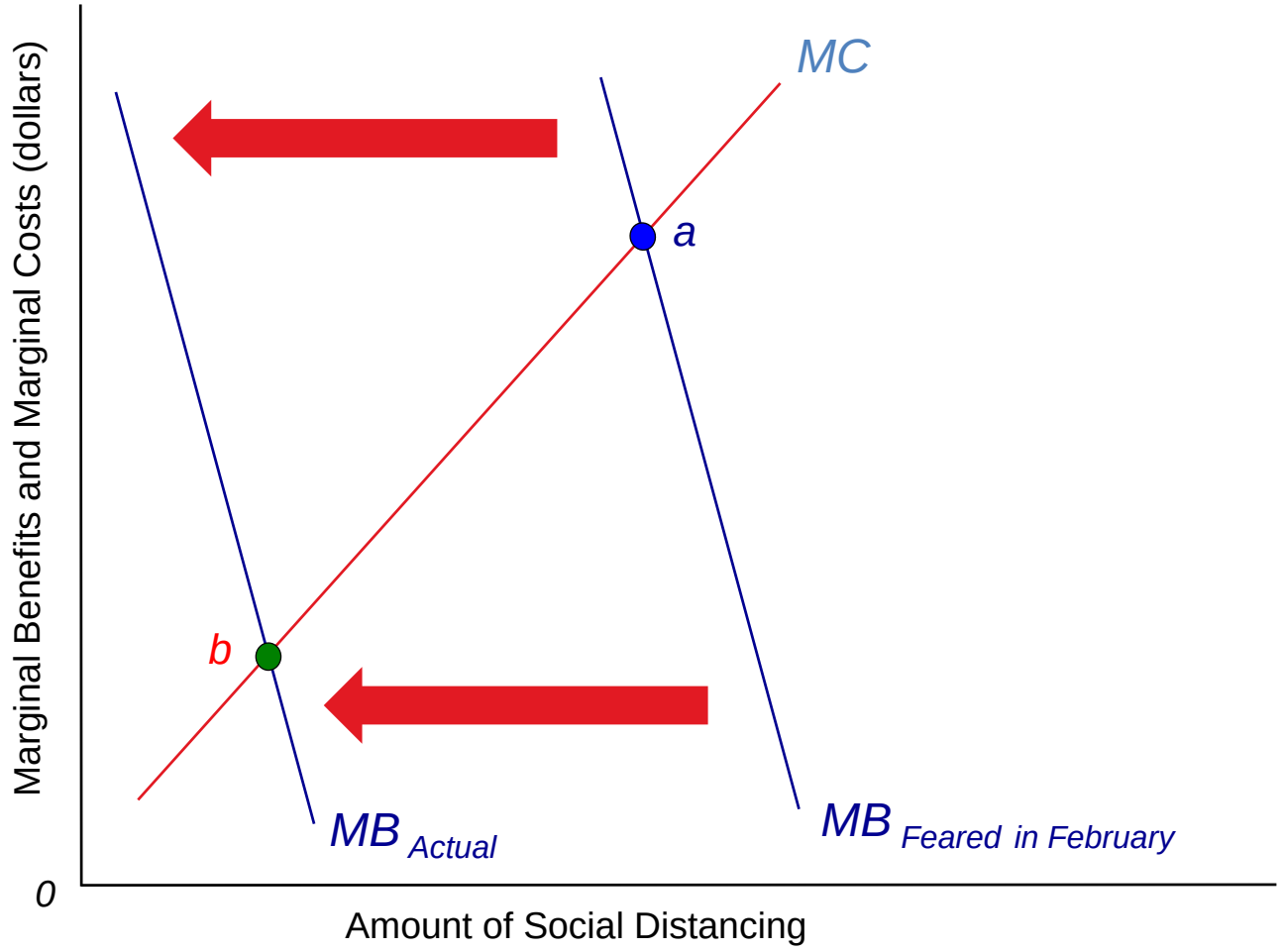
Source: J.P. Morgan Quantitative and Derivatives Strategy

The New Data Suggests that Lockdowns May Have Been a “Too Extreme” Form of Social Distancing

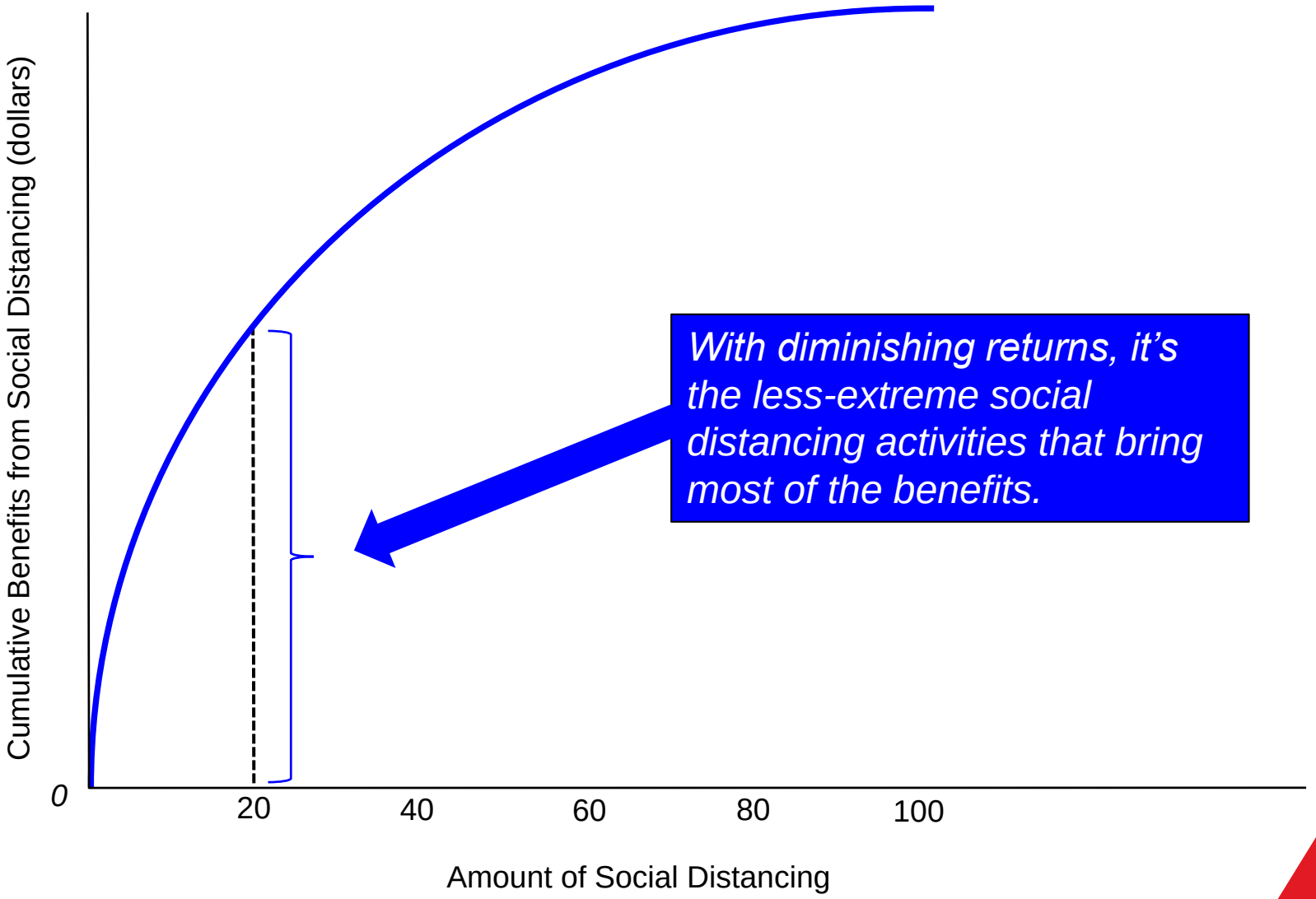
Governments may have been able to achieve 80 percent of the possible declines in caseloads by merely banning large gatherings, choir practices, intense gym workouts, and tightly packed bars.

But the lockdowns *were* imposed nearly everywhere, and we now have to figure out how to deal with the economic damage, especially unprecedentedly high rates of unemployment.

The Cost-Benefits Analysis of Whether Governments Went Too Far with Social Distancing & Lockdowns



Diminishing Returns also Provides a Useful Perspective About how Governments May have Gone too Far



U.S. Data on the Economic Costs of the Pandemic is Grim

Approximately 40 million U.S. workers (out of about 160 million) have become unemployed.

Current estimates of U.S. GDP are down almost 30 percent year-on-year.

By May 19th, estimated COVID-19 costs in the U.S. totaled $1.3 trillion.

- That's equivalent to $10,385 per U.S. household.
- By comparison, median U.S. household income is about $64,000 per year.

Great Data on U.S. COVID-19 Costs Can be Accessed at PandemicCosts.com

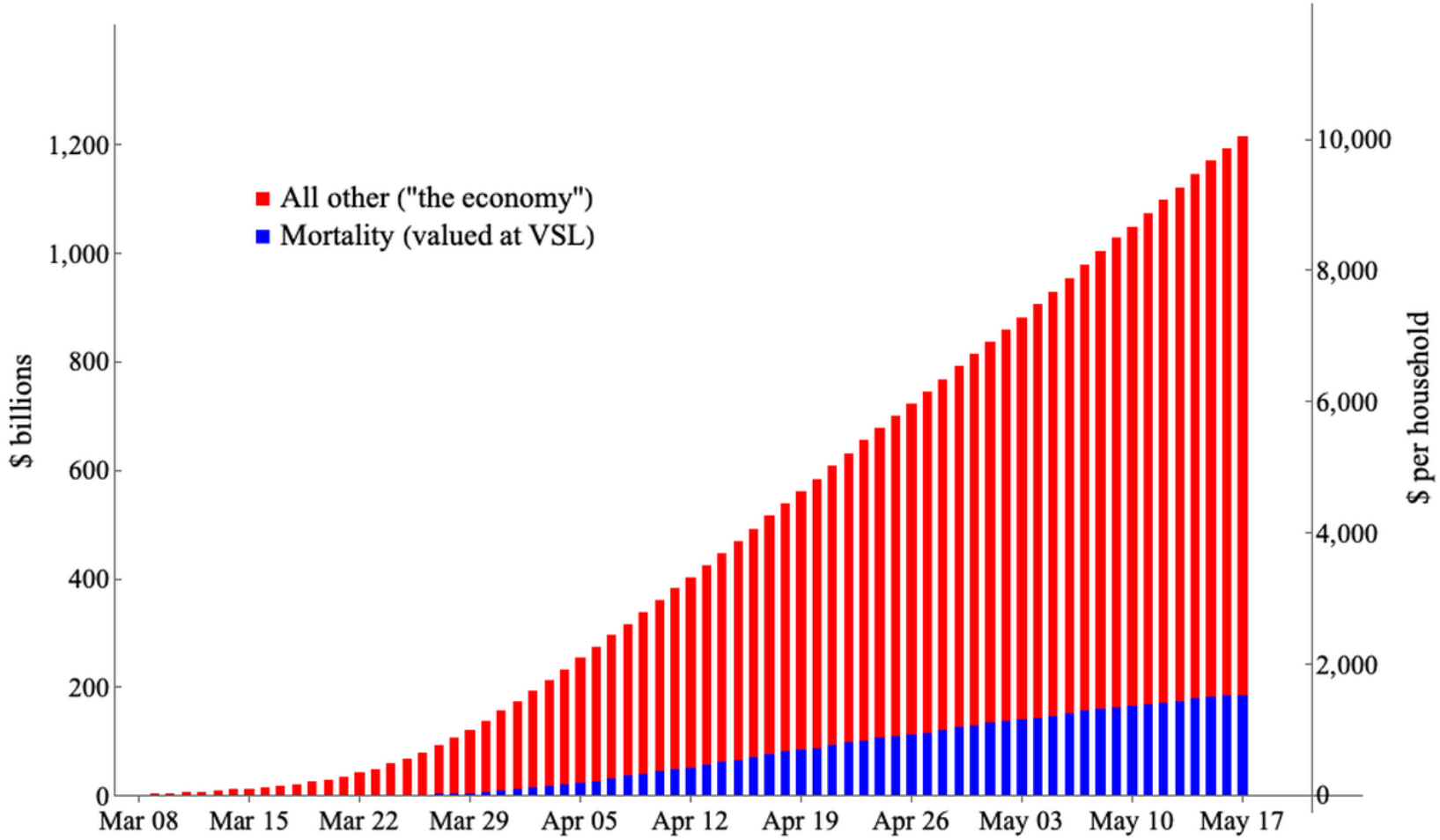
The data is by Casey B. Mulligan of The University of Chicago.

The data and diagrams are updated daily.

They indicate that the economic damage is both intense and widely distributed.

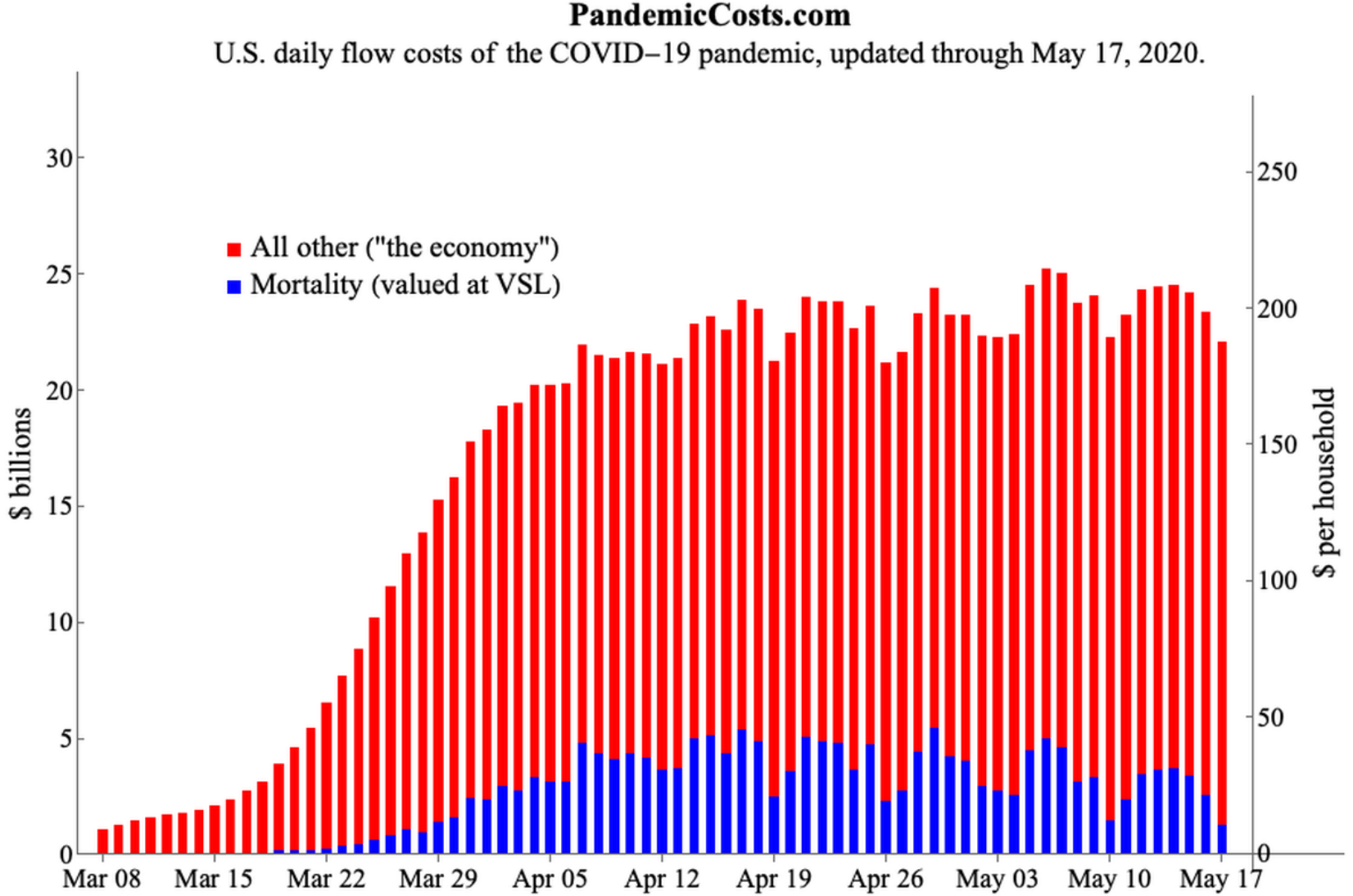
PandemicCosts.com

U.S. daily cumulative costs of the COVID–19 pandemic, updated through May 17, 2020.



Value of a Statistical Life (VSL) puts a dollar value on each COVID-19 death. This figure uses a VSL of $4.3 million per deceased.

Sources: Mulligan (2020), BLS Employment Situation, DOL Initial Claims reports, Bick and Blandin (2020), Google Trends, Johns Hopkins, Coibion, Gorodnichenko, and Weber (2020). Subject to revision as new data becomes available.



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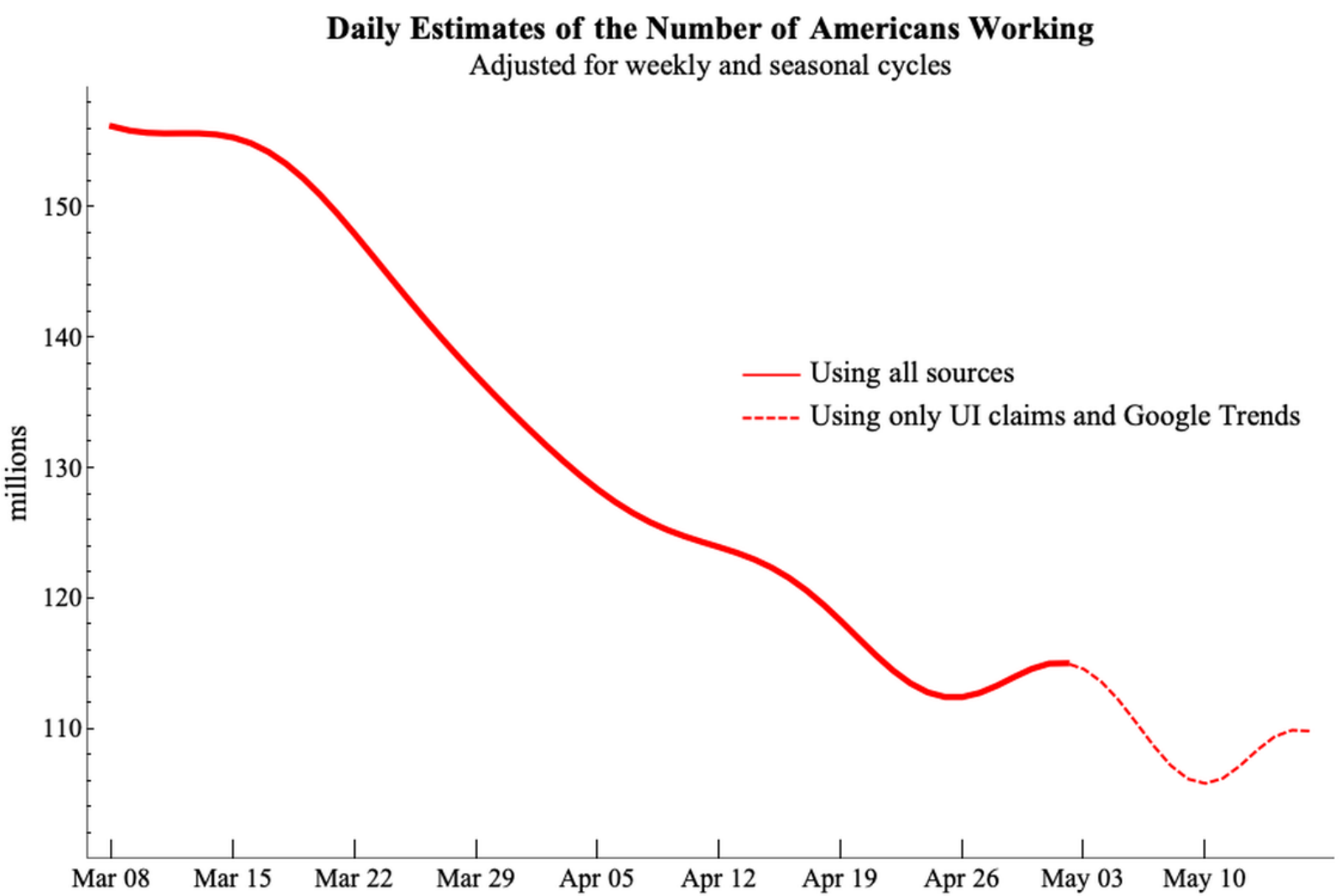

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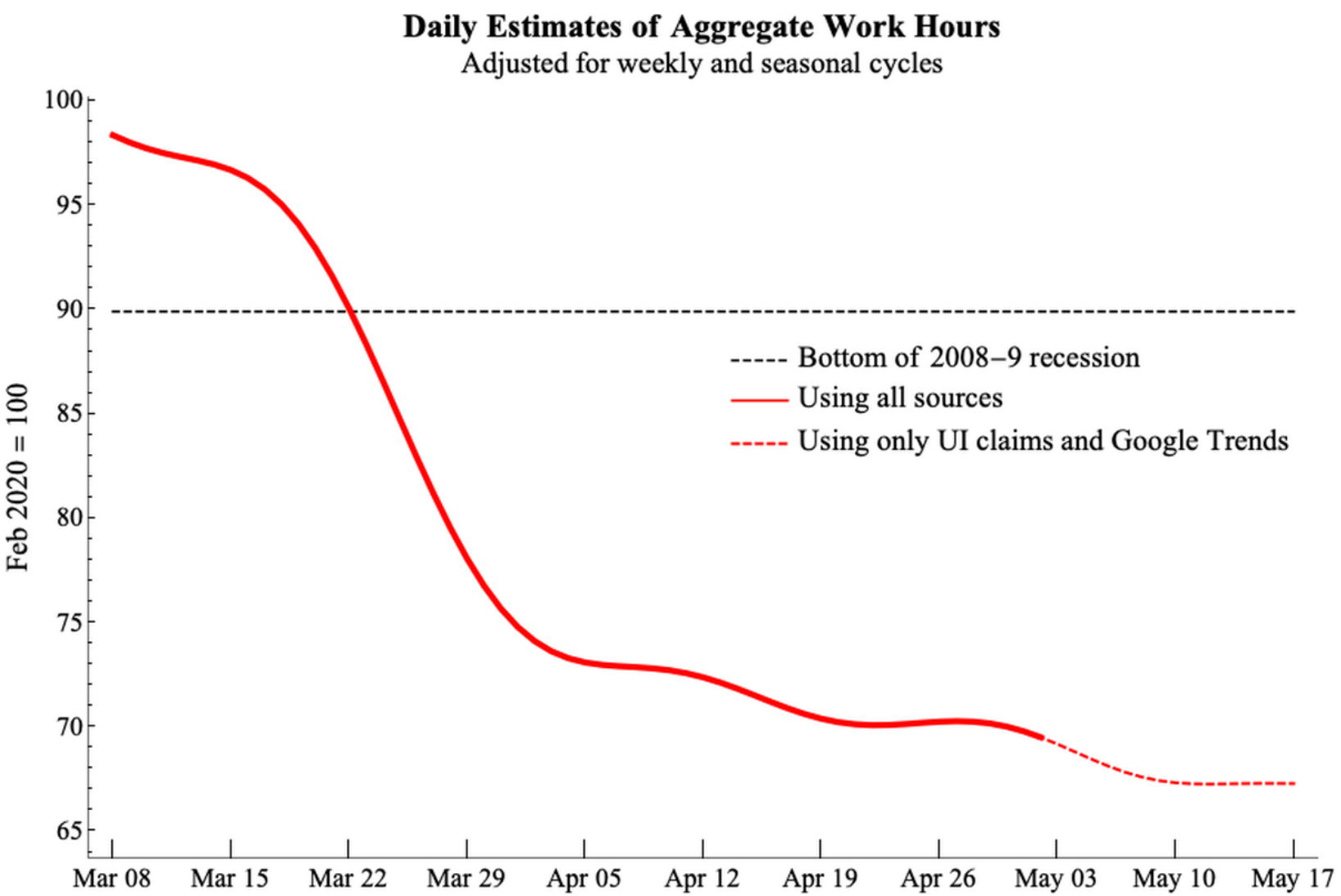
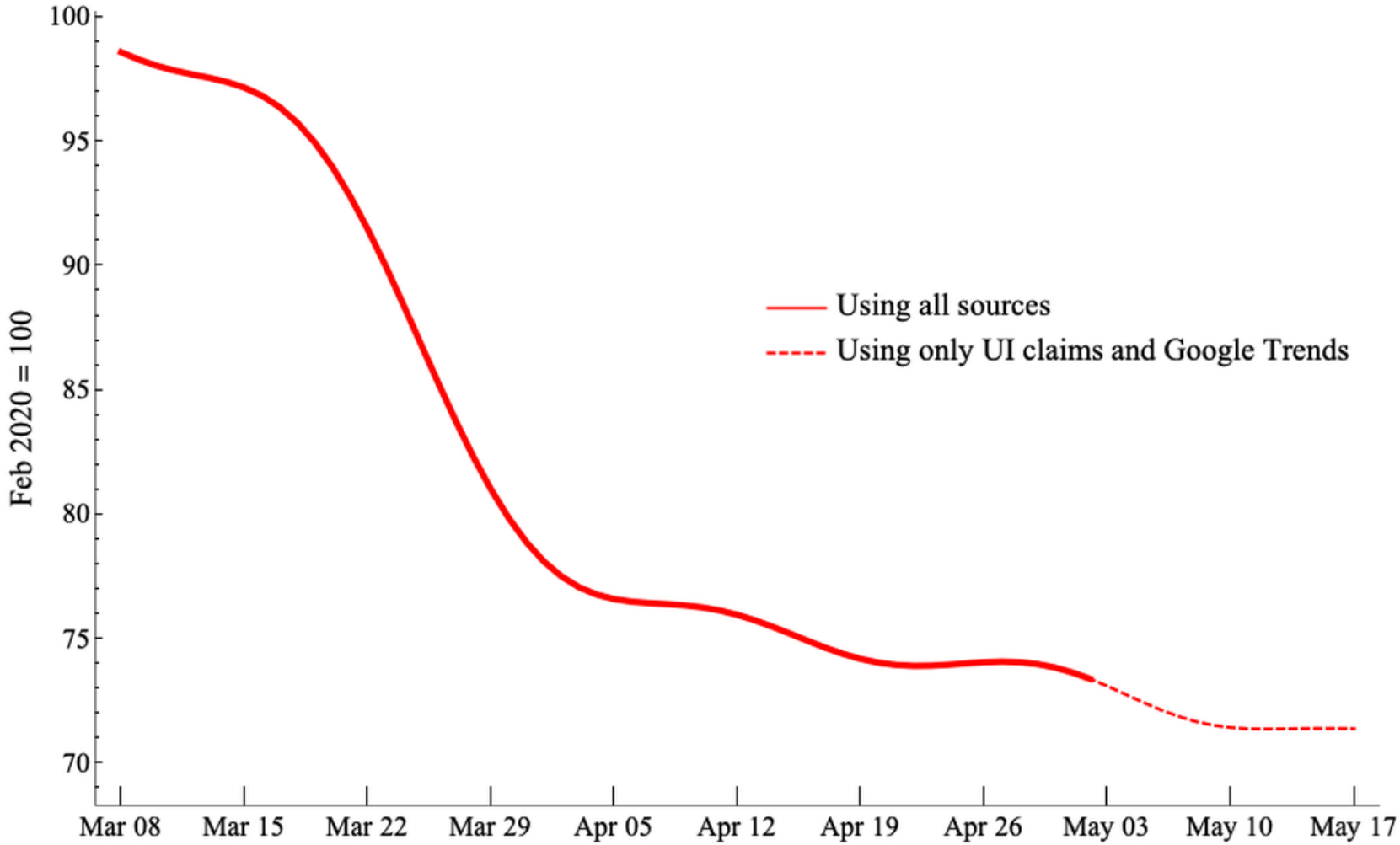


Sources: BLS Employment Situation, DOL Initial Claims reports, Bick and Blandin (2020), Google Trends, Coibion, Gorodnichenko, and Weber (2020), calculations by Casey B. Mulligan. The 2008–9 recession is measured with December 2007 = 100.

Daily Estimates of GDP

Adjusted for weekly and seasonal cycles



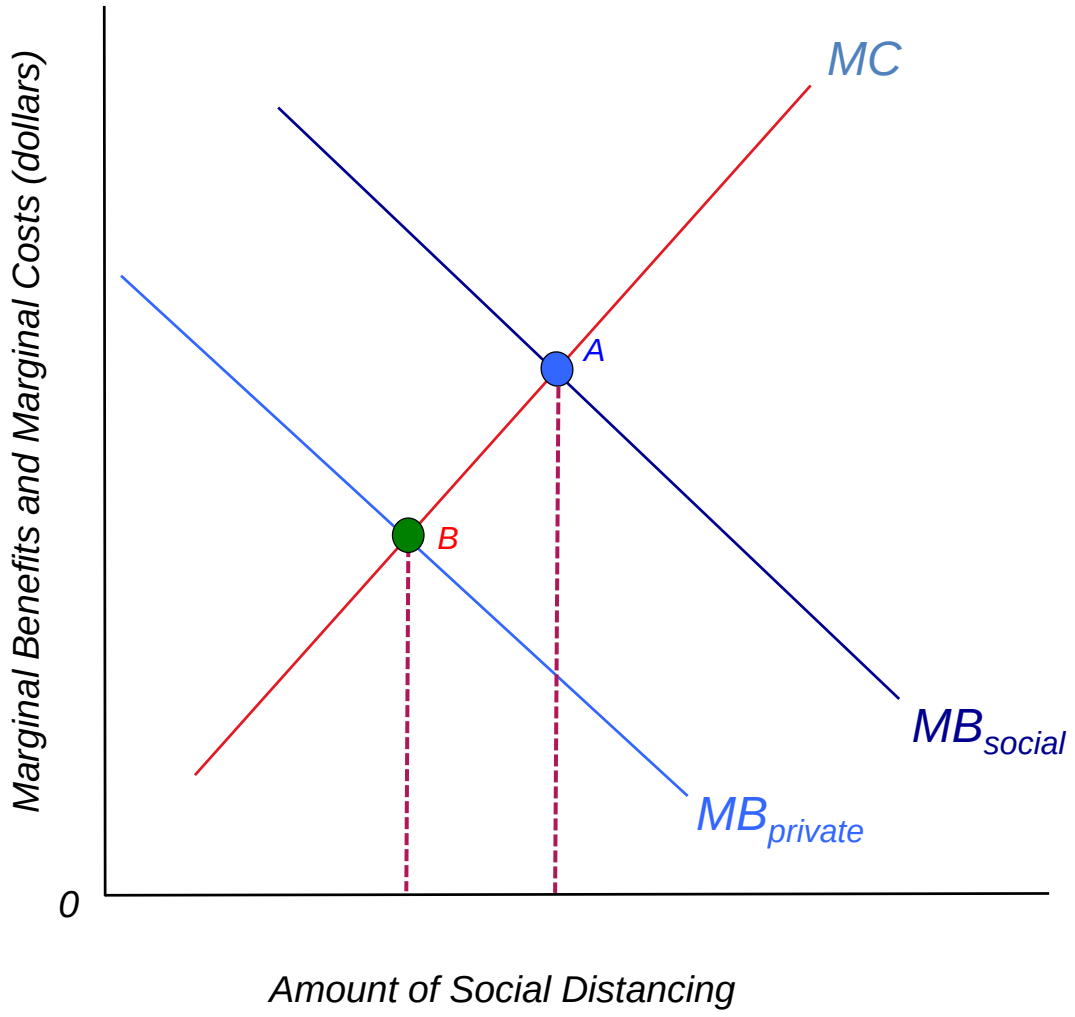
Sources: BLS Employment Situation, DOL Initial Claims reports, Bick and Blandin (2020), Google Trends, Coibion, Gorodnichenko, and Weber (2020), calculations by Casey B. Mulligan. Subject to revision as new data becomes available.

The Push for Lockdowns was Framed in Terms of Two Standard Methods of Economic of Analysis

Negative externalities imply that people will not spontaneously engage in enough social distancing. So the government, it is argued, must intervene.

A game-theory perspective indicates that there may be two types of **pooling equilibria**, one involving government-mandated lockdowns and another involving individual decisions that are not centrally coordinated. If the former is superior to the later, then government interventions to impose lockdowns would be called for.

The Argument for High Levels of Social Distancing Depends on the Extent of Positive Externalities



There is Also a Pooling-Equilibrium Argument for Imposing Intense Social Distancing Rules (1 of 2)

Choosing which side of the road to drive on has two utility-maximizing pooling equilibriums—everybody driving on the left, or everybody driving on the right.

All the other possible equilibria involve lots of additional traffic accidents and lower utility levels.

So it makes sense for the government to intervene to make everybody drive either on the left (as in Japan and the United Kingdom) or on the right (as in most other countries).

That is, the government should intervene to push society towards a clearly-superior pooling equilibrium.

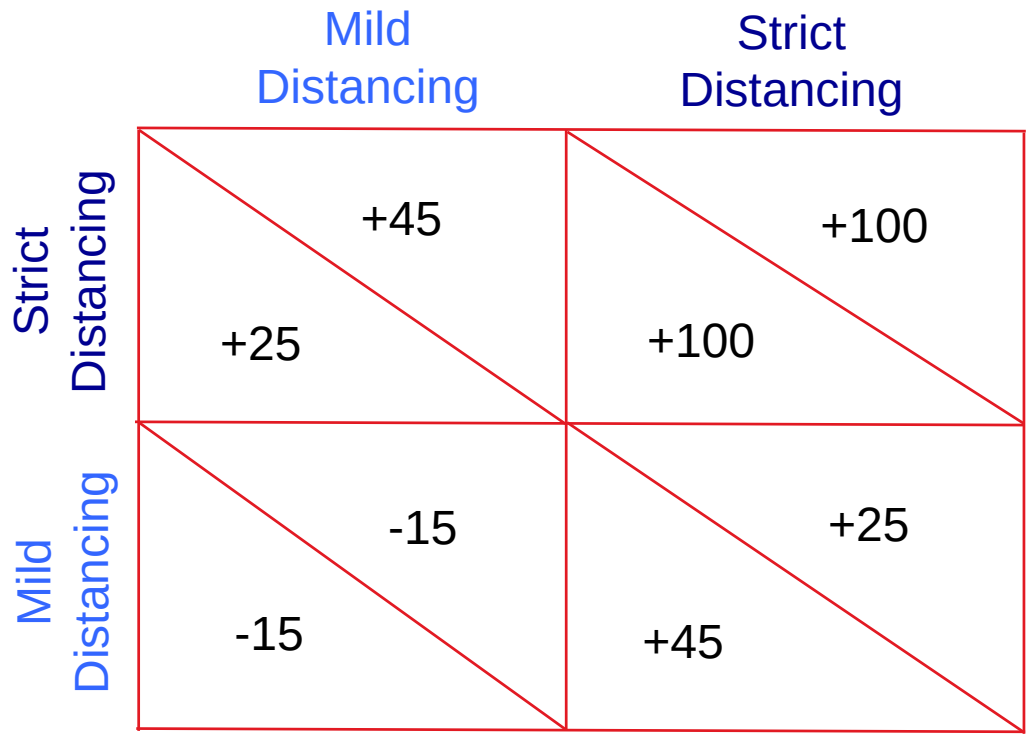
There is Also an Multiple-Equilibria Argument for Imposing Intense Social Distancing Rules (2 of 3)

With respect to social distancing, there are an infinite number of potential equilibria depending upon the extent to which people social distance.

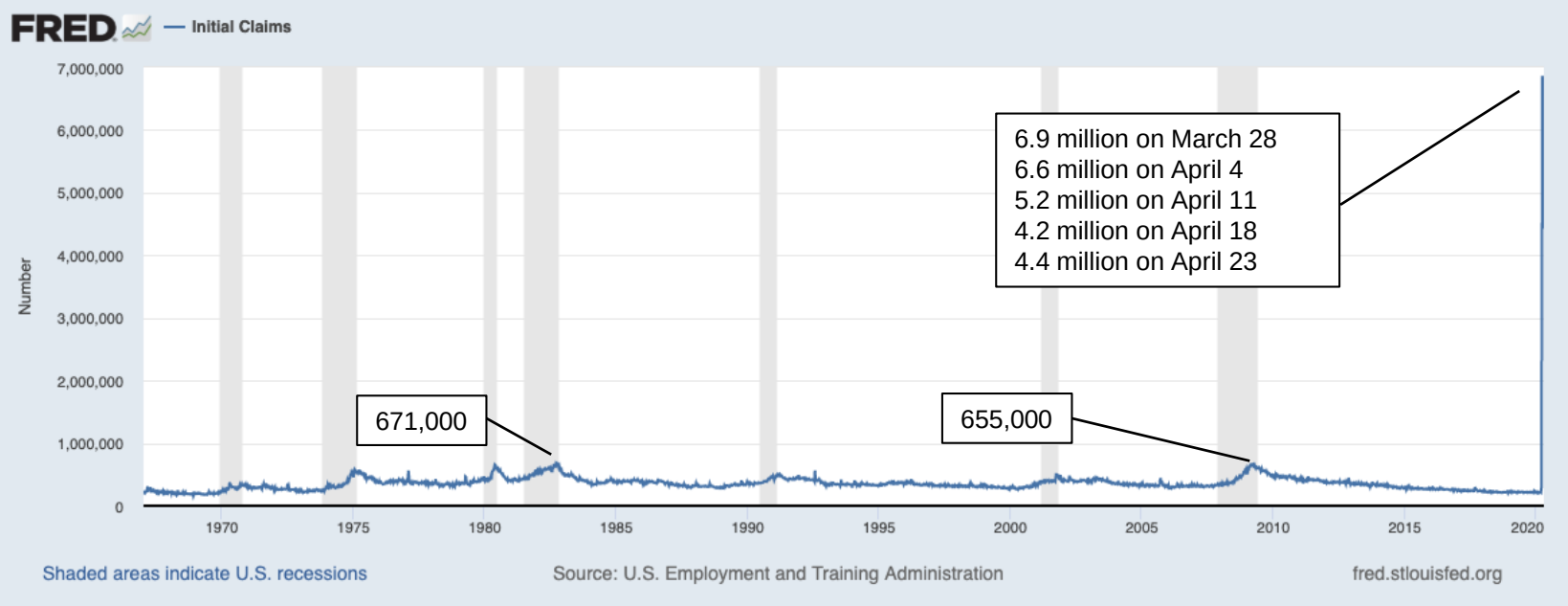
Some of the best equilibria may involve high levels of social distancing that would not spontaneously occur without government intervention.

So one can argue that the government should intervene in order to force everybody to social distance if doing so would get us to one of the better equilibria.

We Can Identify the “Better Equilibrium” in this 2x2 Payoff Matrix



Whether or not Lockdowns Were a Good Idea Overall, They Have Definitely Generated Some High Costs

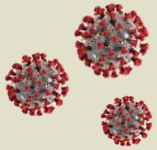


Before Covid-19, weekly first-time unemployment claims in the United States had never exceeded 671,000 in any given week.

But when COVID-19 began putting millions out of work in late March, first-time unemployment claims shot up to 6.9 million for the week—and then stayed in the millions for weeks afterward.

As a result, 27.3 million first-time unemployment claims were filed between March 28 and April 23.

Major Fiscal and Monetary Stimulus Has Been Initiated to Help Offset Some of the Damage to the Economy



U.S. Fiscal Stimulus

1. $483 billion Paycheck Protection Program (PPP)
2. $2.3 trillion CARES Act
3. $192 billion Families First Act
4. $8.3 billion Coronavirus Response Act

U.S. Monetary Stimulus

1. Commercial Paper Funding Facility
2. Primary Dealer Credit Facility
3. Money Market Mutual Fund Liquidity Facility
4. Primary Market Corporate Credit Facility
5. Secondary Market Corporate Credit Facility
6. Term Asset-Backed-Securities Loan Facility
7. Paycheck Protection Program Liquidity Facility
8. Municipal Liquidity Facility
9. Main Street Lending Program
10. Central Bank Liquidity Swaps
11. Temporary Foreign and International Monetary Authorities Lending Facility

Contradictory Fiscal Stimulus Programs May Exacerbate Unemployment in the Short-Run

The Paycheck Protection Act loans money to small businesses so that they can continue paying their employees.

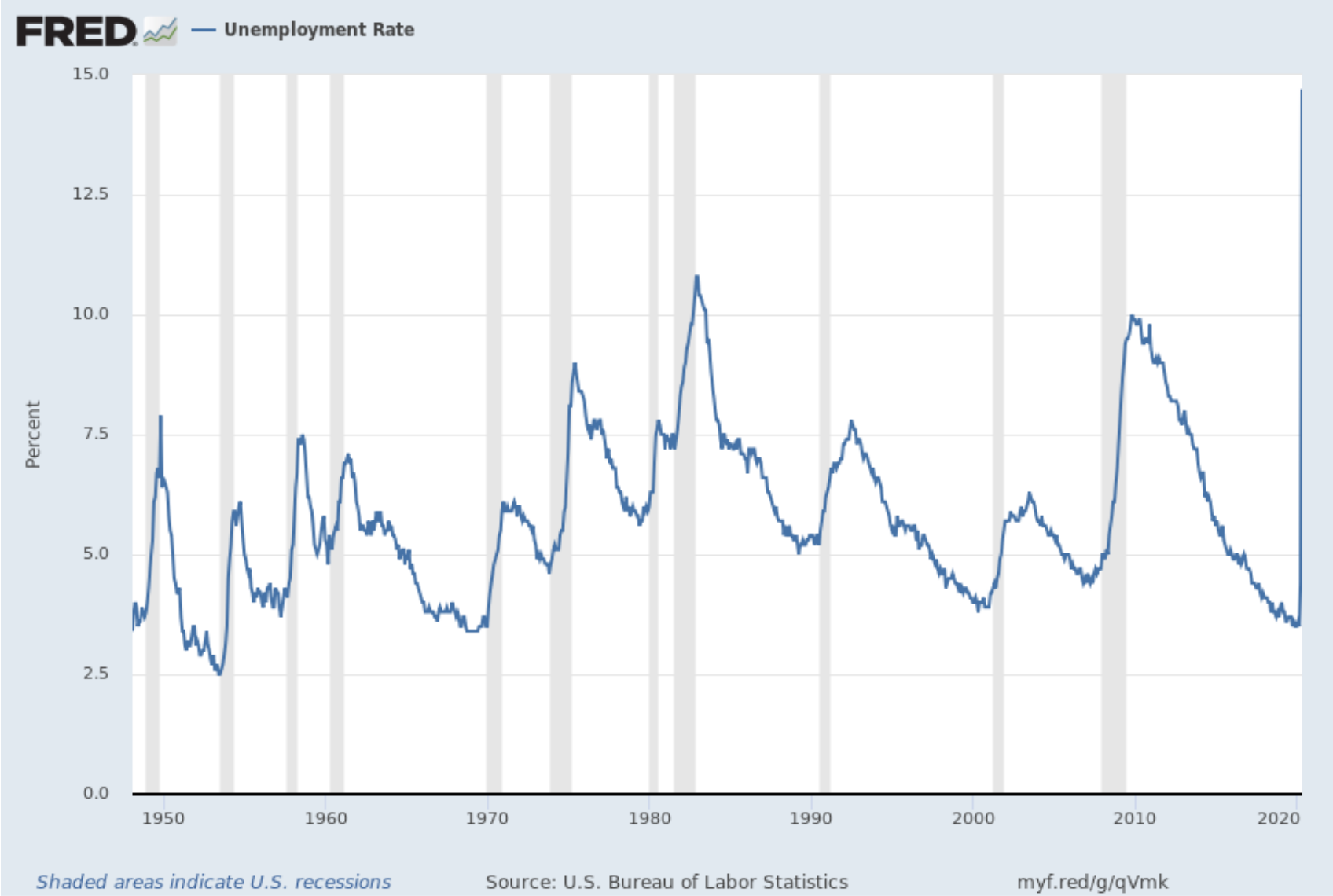
But to qualify, businesses have to show that the workers are on the job and getting paid.

Unfortunately, the $600 per week supplemental unemployment benefits voted in by Congress are, for an estimated 68% of hourly employees, higher than their working wages.

Thus, millions of laid-off workers are now avoiding phone calls from employers to come back to work.

Jamie Black-Lewis' Employees Refused to Return to Work

How Fast Will Unemployment Fall? That is the Question!



Historically, Unemployment Declines Linearly Over Time

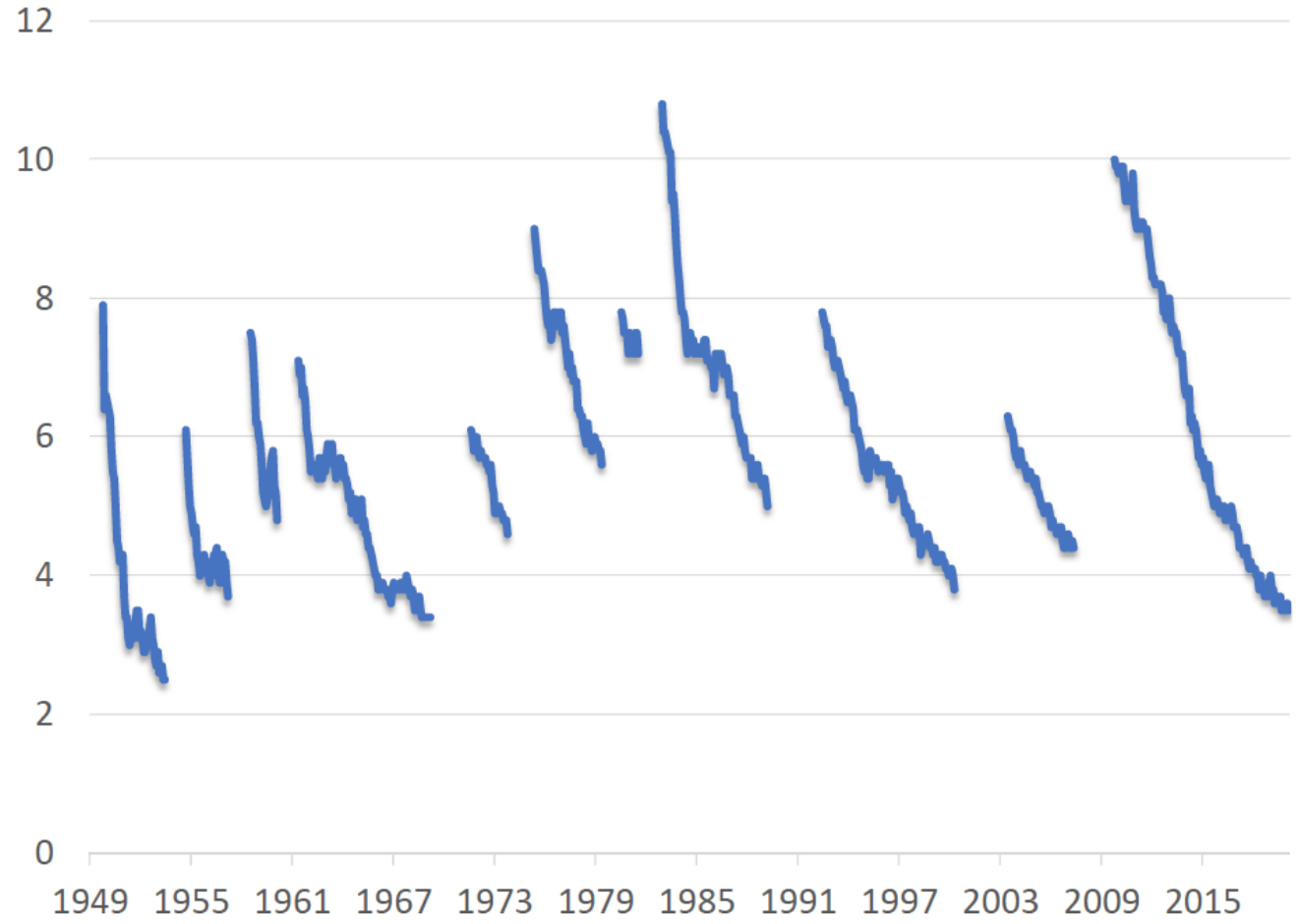


Figure 4: The Paths of Unemployment During Recoveries

The rate of decline in the unemployment rate is about 0.55 percentage points per year in all cases even though monetary and fiscal policy varied massively over these 11 recoveries.

Will the Upcoming Decline in Unemployment Be Typical?

If we assume that the unemployment rate will peak at 30 percent of the labor force before falling by 0.55 percentage points per year, it will take nearly 50 years to get back to the 3.5 percent unemployment rate that the U.S. enjoyed at the start of 2020.

But the likely reason behind unemployment declining at about 0.55 percent per year is because it is costly and slow for employers to sort through applicants and match particular workers with specific jobs.

That is good news because what we are dealing with now is something vastly different—a situation in which to get everybody back to work we only have to get them back to their old jobs at firms that already know them and thus do not have to bear any costs sorting through applicants to match unemployed workers with vacant positions.

Questions?
Please Contact Sean Flynn

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