

# Economics and the pandemic – what will we have learned?

Samuel Bowles (Santa Fe Institute) and  
Wendy Carlin (UCL and Santa Fe Institute)

International Science Council webinar  
25 November 2020

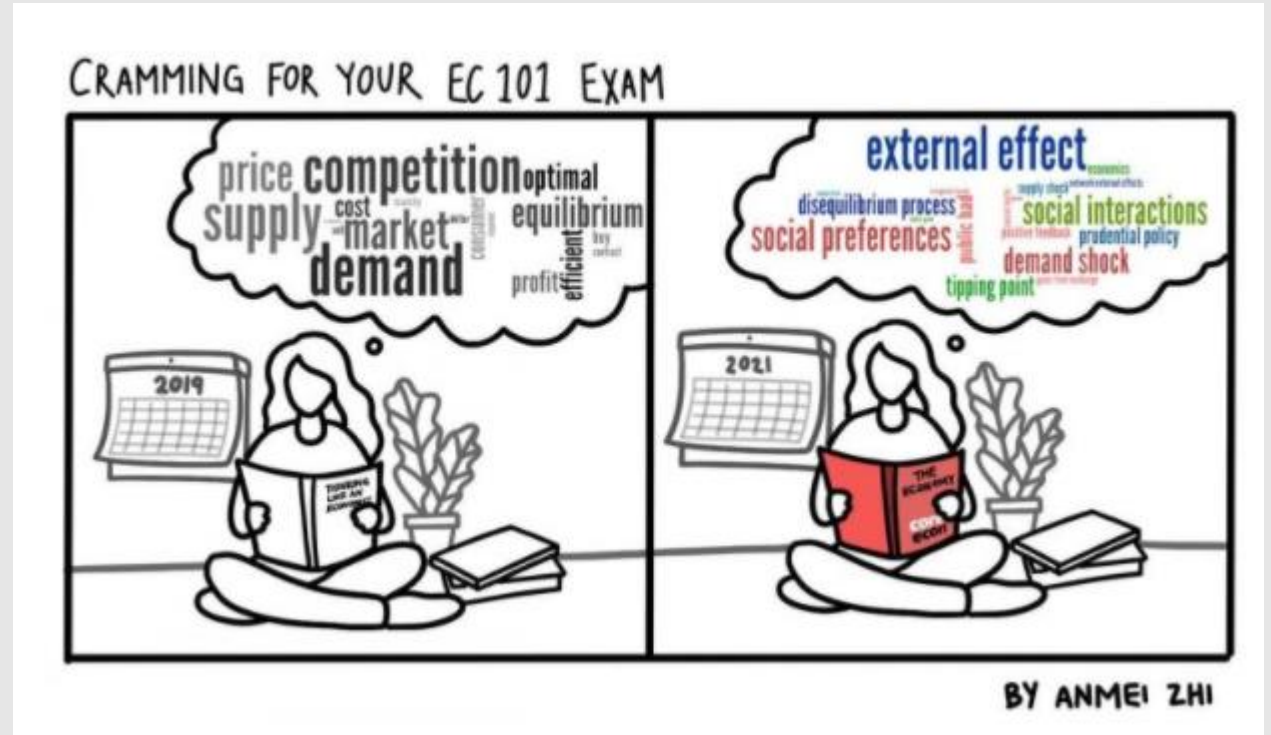


A Sicilian fresco from 1445. NYT May 11 2020 Credit...Werner Forman/Universal Images Group/Getty Images



## Economics, economists, and COVID-19

- As has been the case with epidemiologists, computer scientists, network scientists and others; a great many economists dropped everything to address the pandemic
- Fundamental changes in economics over the past 3 decades were the basis of an impressive response from our discipline
- The pandemic will accelerate acceptance of a new paradigm in economics (see cartoon!)




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## Covid Resilience Ranking

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# The Covid Resilience Ranking The Best and Worst Places to Be in the Coronavirus Era

By [Rachel Chang](#), [Jinshan Hong](#) and [Kevin Varley](#)  
24 November 2020

Not a prescription for individualism,  
harnessing self interest as the main idea  
of public policy, and limited government

	ECONOMY	BLOOMBERG RESILIENCE SCORE	1.
<b>1</b>	New Zealand	85.4	
<b>2</b>	Japan	85	
<b>3</b>	Taiwan	82.9	
<b>4</b>	South Korea	82.3	
<b>5</b>	Finland	82	
<b>6</b>	Norway	81.6	
<b>7</b>	Australia	81.2	
<b>8</b>	China	80.6	
<b>9</b>	Denmark	77	
<b>10</b>	Vietnam	74.3	
<b>11</b>	Singapore	74.2	
<b>12</b>	Hong Kong	73.6	
<b>13</b>	Canada	73.2	
<b>14</b>	Germany	71.2	

## New tools appropriate for the challenge

- The spread of an epidemic is the epitome of an external effect until recently routinely ignored in the dominant paradigm.
- Fortunately, economics had already abandoned a model-world in which “non-market social interactions” (read, contagion) are ruled out.
- Policies to combat the epidemic – from mask-wearing to basic research – exemplify public goods.
- The uncompensated external effects – in this case benefits – of contributing to public goods now play an important part in economics.
- Economists were able to respond to the pandemic because most had abandoned the old paradigm based on amoral and self-interested buyers and sellers who exchanged goods under complete contracts (excluding external effects)
- There will be resistance to a new paradigm in economics

# The battle for the post-COVID-19 narrative is already underway

- *The Economist* sounds the alarm: “Big government is needed to fight the pandemic. What matters is how it shrinks back again afterwards. ... A pandemic government is not fit for everyday life.” March 26<sup>th</sup> 2020
- The *Financial Times*’ editorial board does not agree – “Radical reforms – reversing the prevailing policy direction of the last four decades – will need to be put on the table. Governments will have to accept a more active role in the economy. ... Policies until recently considered eccentric, such as basic income and wealth taxes, will have to be in the mix.” April 3<sup>rd</sup> 2020

navirus

South Korea sheds jobs at fastest rate since Asian financial crisis



Coronavirus latest: UK scientists join hunt to find genetic link to Covid-19



Asia stocks dented by pandemic fears and US-China tension

Opinion **The FT View**

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## Virus lays bare the frailty of the **social contract**

Radical reforms are required to forge a society that will work for all

**THE EDITORIAL BOARD**

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Volunteers pull carts full of food donations in London.

A new narrative may bring in a third pole – community or civil society – expanding the state space for policies by drawing on ethical motivations of solidarity and duty that underpin community and going beyond material gain and compliance with governmental fiat.

# Messages: Prices cannot do the work of morals

Guidance

## Critical workers who can access schools or educational settings

Updated 5 May 2020

UK Department for Education defines who can access schools during lock-down

### Health and social care

doctors, nurses, midwives, paramedics, social workers, care workers,

### Education and childcare

childcare  
support and teaching staff  
social workers

### Key public services

those essential to the running of the justice system  
religious staff  
charities and workers delivering key frontline services  
those responsible for the management of the deceased  
journalists and broadcasters who are providing public service broadcasting

### Food and other necessary goods

This includes those involved in food: production processing distribution sale and delivery

### Utilities, communication and financial services

postal services and delivery  
payments providers  
waste disposal sectors

Ethical, generous and trusting norms:

- have been essential to successful anti-pandemic responses
- are absent from the conventional economics paradigm



# Words: Narrative, Vernacular, Policy paradigm

*Narrative* : A particular way of explaining or understanding events

- Example: A social democratic-New Deal narrative
  - “The Great Depression occurred because workers weren’t paid enough to buy all the goods they produced.
  - It ended because of war induced deficit-spending by the government.”
  - The “golden age of capitalism” that followed was sustained by the spending of high wage trade union workers and the welfare state.

*Vernacular*: Everyday speech common among the general population

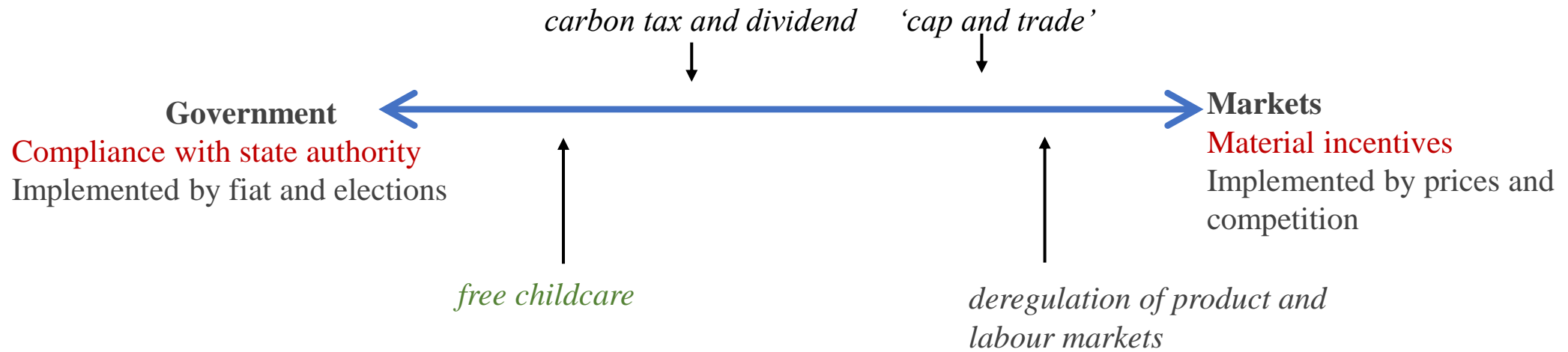
- Example: A neoliberal vernacular:
  - “There is no such thing as society”
  - “Labour unions are special interest groups”

*Policy paradigm*: comprising four mutually reinforcing levels 1) ethical commitments 2) an economic model 3) emblematic policies and 4) vernacular economics

- Example: classical liberalism
  - 1) e. g. equal dignity
  - 2) e.g. division of labour, specialization, comparative advantage
  - 3) e.g. end to chartered monopolies, anti-tariffs
  - 4) “it’s all done by everyone minding their own business” (Alice (in Wonderland) to the Queen, 1865)



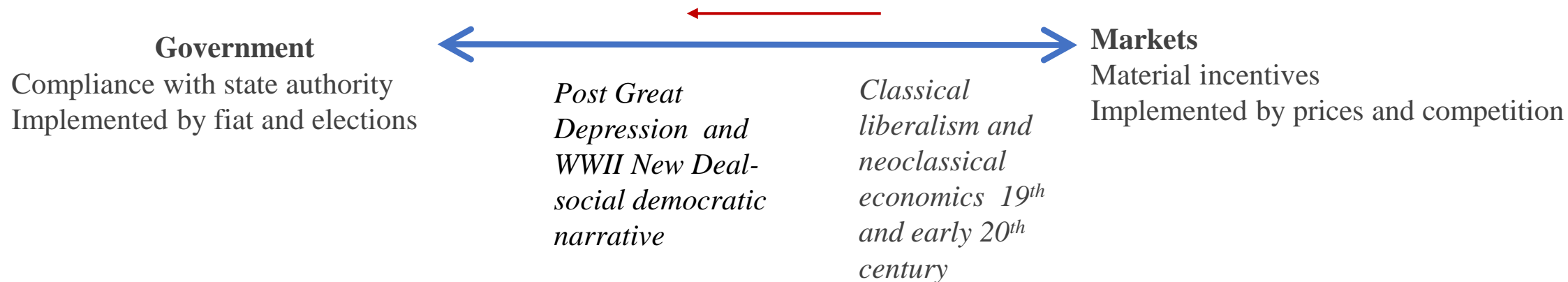
# The new narrative will not be limited to “government – markets” continuum



- A pole – here ‘government’ or ‘market’ – refers to both the institution or ‘**rules of the game**’, and to the **motivations and social norms** that make those rules work well
- Policies like ‘carbon tax and dividend’ and ‘cap and trade’ use the **complementarity** of state capacity and market mechanisms differently weighted

The narrative has changed before: The Great Depression and the Second World War provided a narrative that changed both the vernacular and the paradigm.

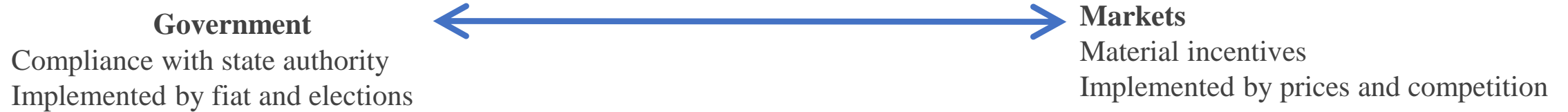
- Along the blue line



- U.S. President, FDR, 1936. *“Heedless self interest is bad economics”*
- A new model and vernacular economics encapsulated in Paul Samuelson’s 1948 textbook, *Economics*

**COVID 19 and climate change provide an opportunity for a similar shift**

# Summary: state capacity and market signals remain essential but insufficient



## The one-dimensional continuum

- presumes both private and governmental actors have sufficient information to design mechanisms – contracts and regulations – adequate to address global pandemics and climate change
- overlooks the social character of people, which provides **opportunities for solutions** along a third dimension – complementary to governments and markets
- ignores the information and behavioural revolutions in economics
- As a result, it abstracts from the important role of **social norms** and the **private exercise of power** and social goals that go beyond liberty and shared affluence



What we will have learned from the pandemic is anticipated in recent economic research

- *Good laws and good incentives are no substitute for good citizens.* If citizens are amoral and self-interested, market signals and government fiat no matter how cleverly designed may backfire, and are not sufficient to address challenges like this pandemic (or climate change)
  - Research on mechanism design (Nobel's in economics of 2007)
- *There are plenty of good citizens.* People facing extraordinary risks and costs have indeed acted with generosity and trust on a massive scale
  - A lesson consistent with the last 3 decades of behavioural economics
- Our regard for the well being of others (altruism, reciprocity) also includes hostility to outsiders, for which the pandemic may provide fertile ground (the 'Chinese' virus). **Tribalism** not cooperation is a possible outcome.
- These reach beyond academic issues...

Learning about economic interests and other values from recent surprises in politics in the US, UK and around the world.

- People care deeply about things that are mostly absent from our discussion about inclusive prosperity, especially identity, community, autonomy, and dignity.
- The most famous quote from the *Wealth of Nations*:

which we stand in need of. It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to

Learning about economic and other values from recent surprises in UK and US politics.

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- From the *Wealth of Nations*: markets as a way of promoting equal dignity

which we stand in need of. It is not from the benevolence of the butcher, the brewer, or the baker, that we expect our dinner, but from their regard to their own interest. We address ourselves, not to their humanity but to their self-love, and never talk to them of our own necessities but of their advantages. Nobody but a beggar chuses to depend chiefly upon the benevolence of his fellow-citizens.

- Making these concerns – identity, community, autonomy, and dignity – central to economics will be a challenge for a new paradigm



# What can we learn from past paradigms?

A successful policy paradigm ...

Policy paradigm	<b>Normative foundations</b> (Level 1)	<b>Economic model</b> (Level 2)	<b>Emblematic policies</b> (Level 3)	<b>Vernacular economics</b> (Level 4)
<b>Classical liberalism</b>				
<b>Keynesian social democracy</b>				
<b>“Neo liberalism”</b>				
New paradigm				

# Neoliberalism

Policy paradigm	<b>Normative foundations</b>  (Level 1)	<b>Economic model</b>  (Level 2)
<b>“Neo liberalism”</b>	Freedom <b>from</b> government interference, procedural justice (fair rules define fair outcomes)	Self-interest (individuals & government officials) and competitive markets.

# Neoliberalism

<b>Policy paradigm</b>	<b>Normative foundations</b> (Level 1)	<b>Economic model</b> (Level 2)	<b>Emblematic policies</b> (Level 3)	<b>Vernacular economics</b> (Level 4)
<b>“Neo liberalism”</b>	Negative (formal) freedom, procedural justice	Self-interest (individuals & government officials) and competitive markets.	Laissez-faire, school vouchers, “negative income tax”	“The government that governs best, governs least.” Labour unions are special interest groups. “There is no such thing as “society””.



## Learning from others

- The need to integrate philosophy and economics
- The neoliberal success based on some credible contributions to economics (e.g. Becker's work on interest groups, Buchanan's on public choice, Hayek's on the nature of equilibrium and the competitive process, Friedman's on the limits of the Keynesian model) that were synergistic with their normative precepts.
- Integrating a set of egalitarian and democratic norms with an economic model requires as a first step to challenge the idea that liberty, fairness and efficiency are the sole ethical standards for evaluating economic outcomes...
- ... this restricted normative framework, we will see, stems from a now outdated still influential view of the exchange process.

## Framing economic interactions as a *morality free zone*

- David Gauthier: *the presumption of free activity ensures that no one is subject to any form of compulsion, or to any type of limitation not already affecting her actions as a solitary individual. ...[Thus] morality has no application to market interaction under the conditions of perfect competition*
- Kenneth Arrow: *Any complaints about [the market system's] operation can be reduced to complaints about the distribution of income ...[and] the price system itself determines the distribution of income only in the sense of preserving the status quo*
- Aside from concerns about distributive justice, then, prices would do the work of morals

# Messages: Abusive exercise of unaccountable power by private actors

Private exercise of power:

- may violate democratic norms
- is absent from the conventional economics paradigm
- only becomes salient when economics recognizes that **information is limited** (Friedrich Hayek, 1945, Herbert Simon, 1950, Ronald Coase 1937)



▲ Workers at Tyson's Camilla, Georgia, poultry processing plant. Photograph: Tyson/AP

**'We're modern slaves':  
How meat plant workers  
became the new frontline  
in Covid-19 war**

## The authoritarian politics of the work-place (and how it was disappeared)

- Once upon a time, power was recognized as intrinsic to some economic interactions
  - Ronald Coase (1937): *the character of the contract ... [the worker] for certain remuneration agrees to obey the directions of the entrepreneur.*”
- The vanishing act, starring complete contracts
  - Oliver Hart: *What does it mean to put someone ‘in charge’ of an action or decision if all actions can be specified in a contract*
- The vanishing act, supporting role: market clearing (itself a consequence of complete contracts)
  - The fact that the employer can terminate the worker’s job does not constitute power over the worker because she can get another identical job instantly (that is what supply = demand means)

## The economic model becomes part of everyday conversation

- From a prominent textbook (Alchian and Allen, 1969)
  - *One could call the employee the boss because he orders the employer to pay him a specific sum if he wants services performed. But words are words.*
- Political consequences of excluding power from our understanding of economic interactions:
- It made advocating an expansion of workers' political rights in the workplace as difficult as it would have been to advocate unemployment insurance, or other “automatic stabilizers” had the concept of aggregate demand not become part of everyday conversations about the economy...
- ... or advocating a libertarian stance towards government in the absence of the perfectly competitive economic model supporting the idea of Smith's invisible hand



The economic model shielded the “private government of the firm” from democratic or even libertarian critique, and it came to dominate economics ...

- Abba Lerner (AER, 1972): *An economic transaction [expressed in a contract] is a solved political problem ... Economics has gained the title Queen of the Social Sciences by choosing solved political problems as its domain*
- But in the real economy, the domain [of complete contracts] was never large...
- ... and appears likely to be even smaller in the future, as more of the economy is composed of hard to measure services – care, knowledge production and distribution, leisure services, security.

Where the contract is incomplete (in credit markets, labour markets and the firm) **power and social norms** become essential to the functioning of the economy

- The principal (lender, employer) exercises power over the agent (borrower, worker)
- This power may be abused (sexual harassment, racial insults, mini aggressions) at no cost to the principal
- Social norms (truth telling, work ethic, intrinsic motivation, reciprocity) are essential to sustaining the exchange.
- Allocations are Pareto-inefficient

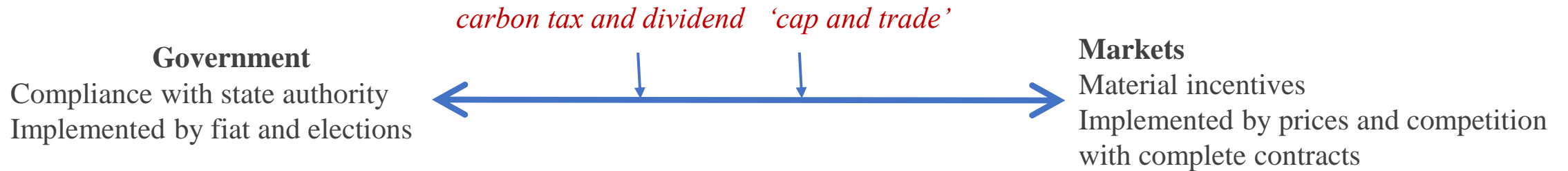
New economic results → a richer set of normative claims and political opportunities

- The principal (lender, employer) exercises power over the agent (borrower, worker) **The accountability of this power** (through ownership, bargaining, co-determination, cooperatives) enhances democracy.
- This power may be abused (sexual harassment, racial insults, mini aggressions) at no cost to the principal **Stronger individual rights at work** enhance dignity and equal status.
- Social norms (truth telling, work ethic, intrinsic motivation, reciprocity) are essential to sustaining the exchange **Greater equality of reward and voice** are essential to mobilizing and cultivating these social norms.
- **Allocations are inefficient** And can be improved upon by the three sets of demands above (including, but not necessarily, in the Pareto efficiency sense).

A new paradigm in the making?

- Recall, successful policy paradigms combine a set of ethical values with a model of how the economy works, a property of which is that the pursuit of those ethical values contributes to the performance of the economy as represented in the model *and* in the empirical economy

# Foundations of a new paradigm

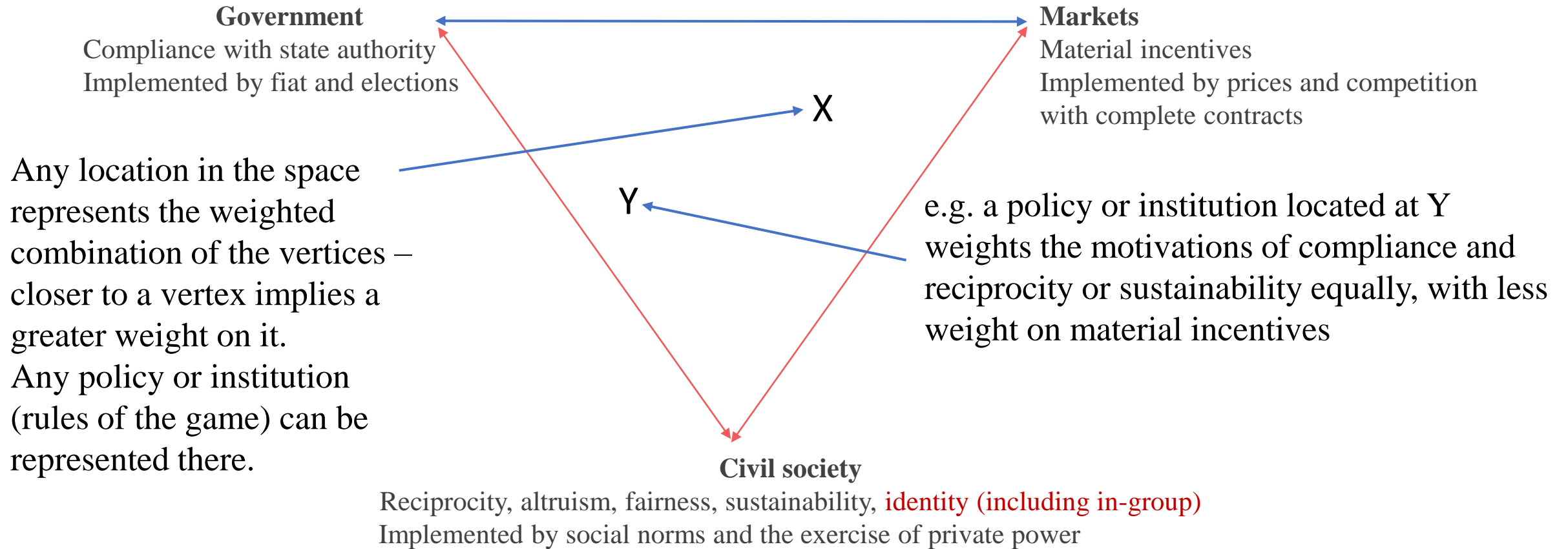


## What is missing?

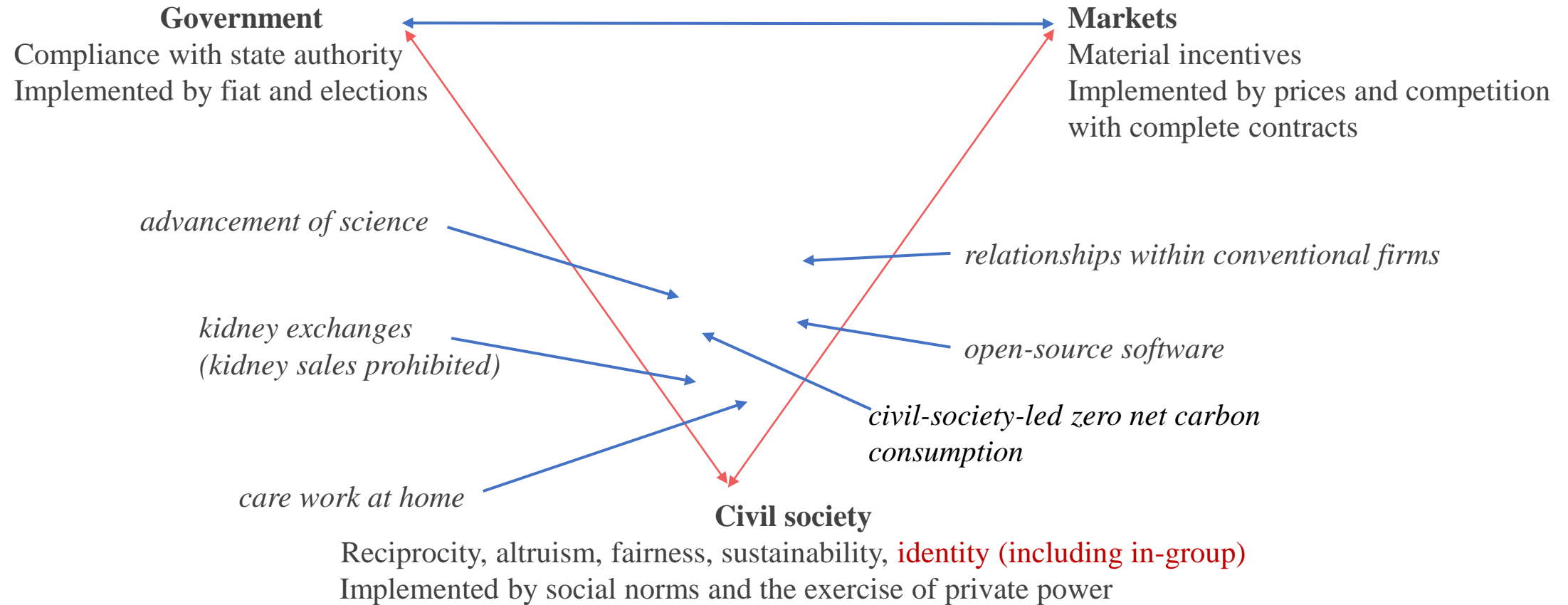
- What we call civil society (or the community) provides essential elements of a strategy to kill COVID-19 without killing the economy.
- The dual elements of the new theory – the **limits of private contract** and **governmental fiat**, along with a new view of a **(sometimes) socially oriented economic actor and citizen** – open up a space in economic discourse for a critique of the **private exercise of power** and for the essential role of **social norms**



# The third pole – opens up a new space for policy and rules of the game

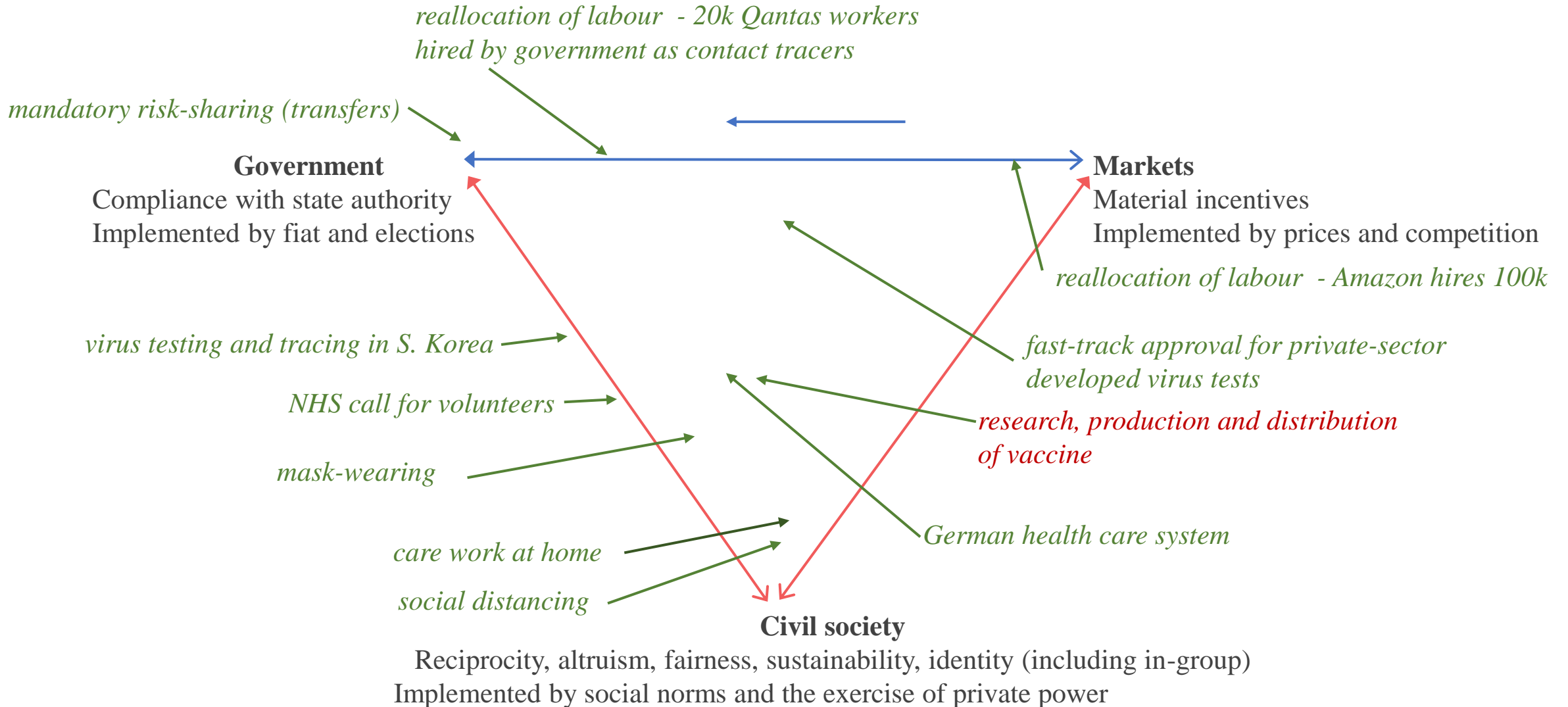


# The third pole – opens up a new space for policy and rules of the game



With its new tools, economics is now able to characterize both the opportunities for better policies and dangers associated with them e.g. tribalism in this expanded space

# Testing the framework with COVID-19



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## Mark Carney: 'We can't self-isolate from climate change'

“What is the most pressing issue that economists should address?”



1<sup>st</sup> year introduction to  
economics students, UCL  
September 2019





# A response: transforming economics education – the CORE project

a global collaboration of researchers volunteering their time to create free on-line research-based instructional material in use by over 125,000 students each year globally in more than 350 universities

## 3 innovations

- Bringing a new benchmark model to students: the new economics
- A novel way of producing and distributing knowledge: open science
- A new pedagogy to transform who economists are and how they learn

Table 3 in Bowles and Carlin (2020) Benchmark representations of the economy in introductory textbooks

	<b>Conventional benchmark</b>	<b>New benchmark – CORE's</b>
<b>People</b>	<i>Homo economicus</i> is far-sighted and self-interested.	People are also cognitively limited and have motives other than self-interest, including social norms of fairness and reciprocity, and 'us' versus 'them' thinking.
<b>Nature</b>	external to the economy	Economy is part of the biosphere; its sustainability is in question.
<b>Social interactions</b>	Buying and selling in price-taking markets	... also non-market and strategic, including collective action: epidemic diffusion and climate change – not just buying and selling
<b>Information</b>	is complete and verifiable.	is often incomplete, asymmetric, and non-verifiable.
<b>Contracts</b>	are complete and enforceable at zero cost.	are incomplete in labor and credit markets, missing markets (congestion, knowledge).
<b>Institutions</b>	Markets, private property, and government are exogenous	Modeled generically as 'rules of the game', including informal rules (norms), endogenous
<b>Technology</b>	Exogenous, decreasing returns	Endogenous; constant or increasing returns
<b>Competition</b>	'Perfect' among price-taking agents	Monopolistic, monopsonistic, among price-making firms; winner take all
<b>History</b>	largely ignored except to illustrate models.	provides modeling challenges to understand alternative rules of the game and the process of changes.

# A novel way of producing and distributing knowledge

[www.core-econ.org](http://www.core-econ.org)

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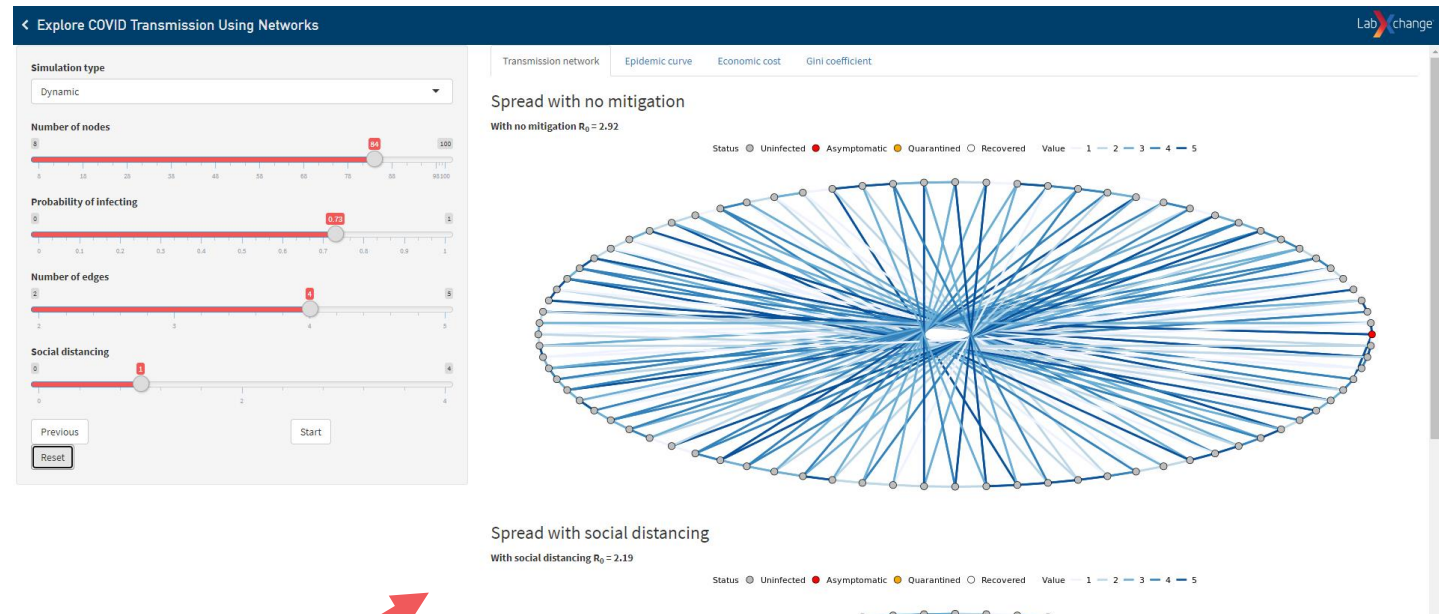
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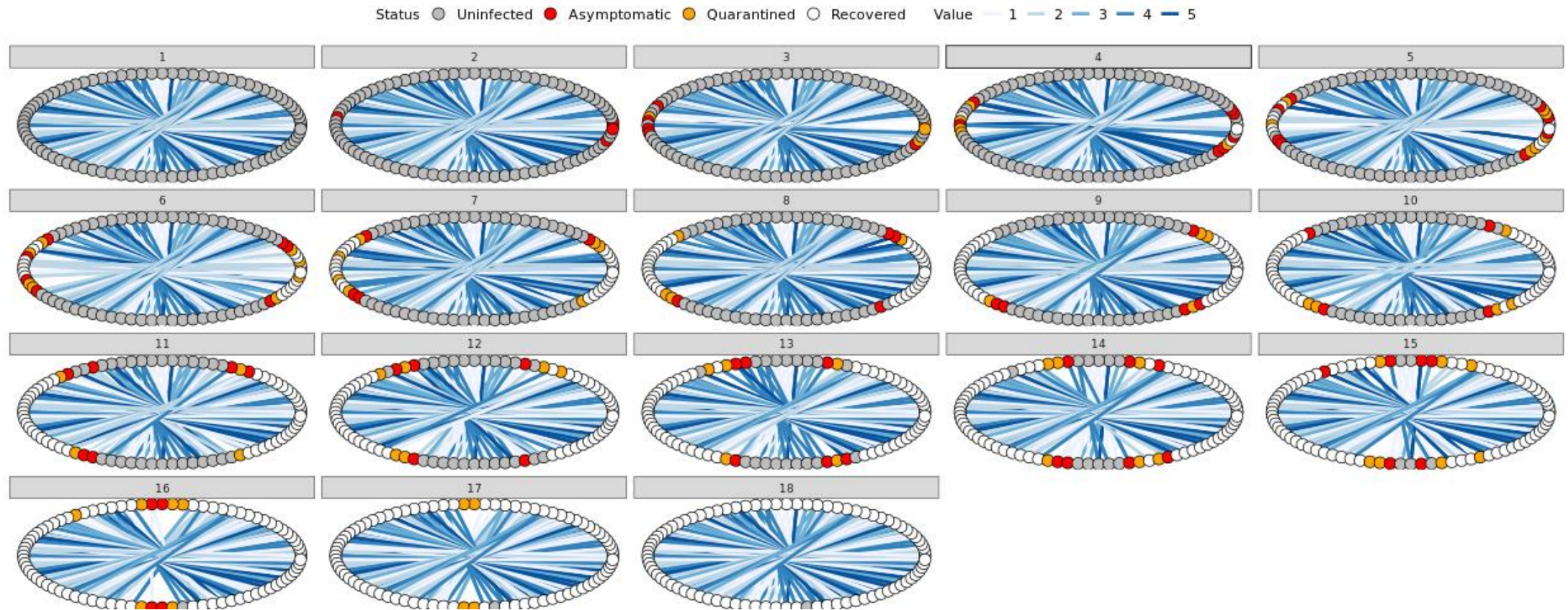


A new pedagogy of active learning

# Disease transmission and economic gains from trade networks

## No mitigation

With no mitigation  $R_0 = 2.96$



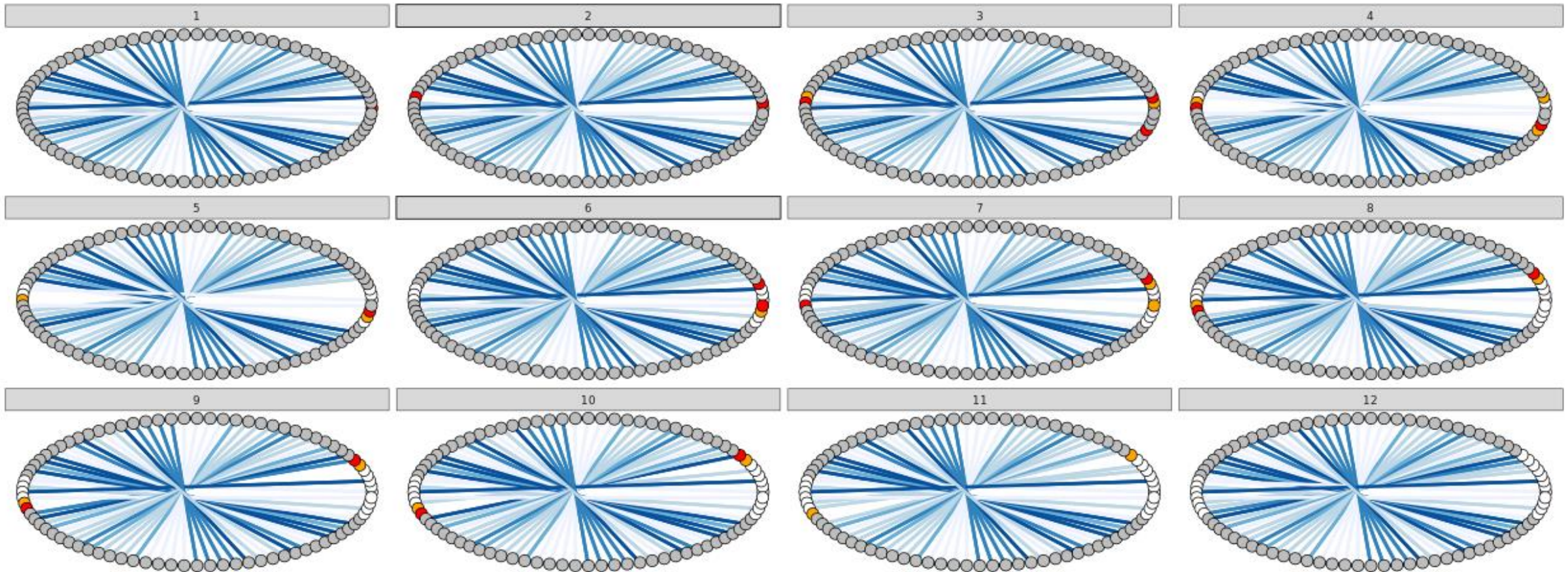


# Disease transmission and economic gains from trade networks

## Social distancing

With social distancing  $R_0 = 2.22$

Status ● Uninfected ● Asymptomatic ● Quarantined ○ Recovered Value 1 2 3 4 5



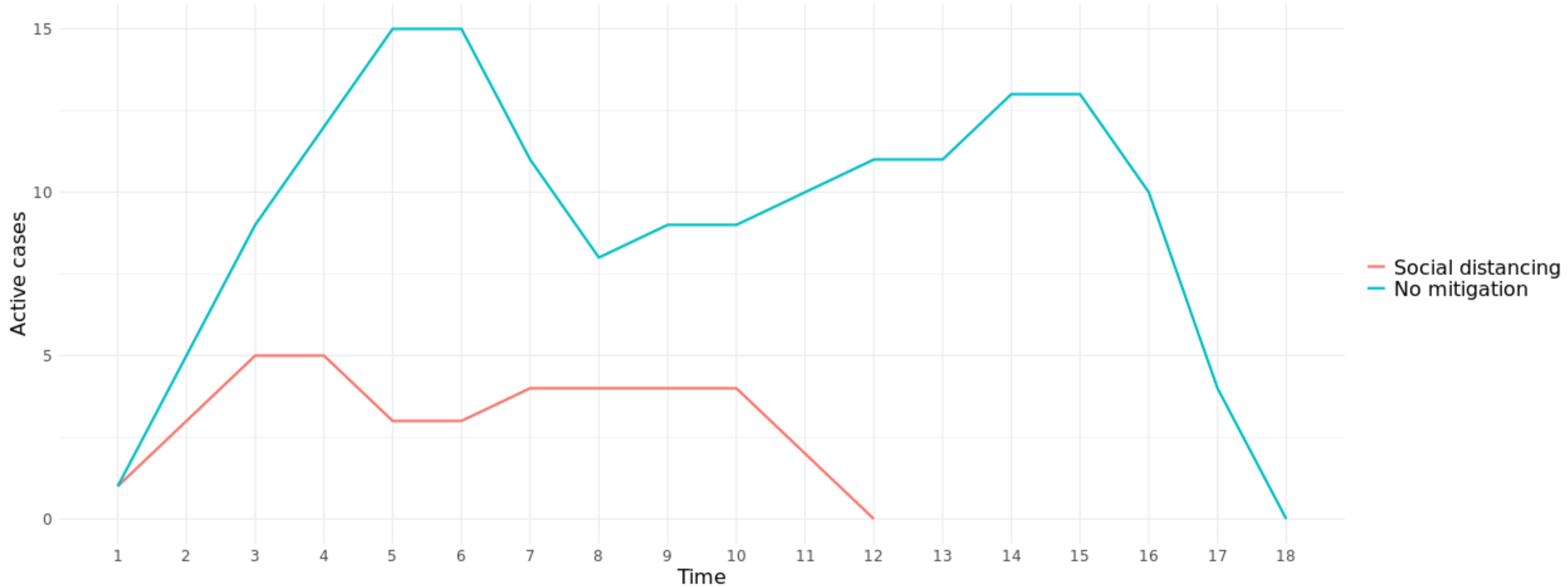


# Explore COVID-19 transmission using networks

Simulate the effect of social distancing policies on virus transmission, the

Active cases - individuals who are either asymptomatic or quarantined.

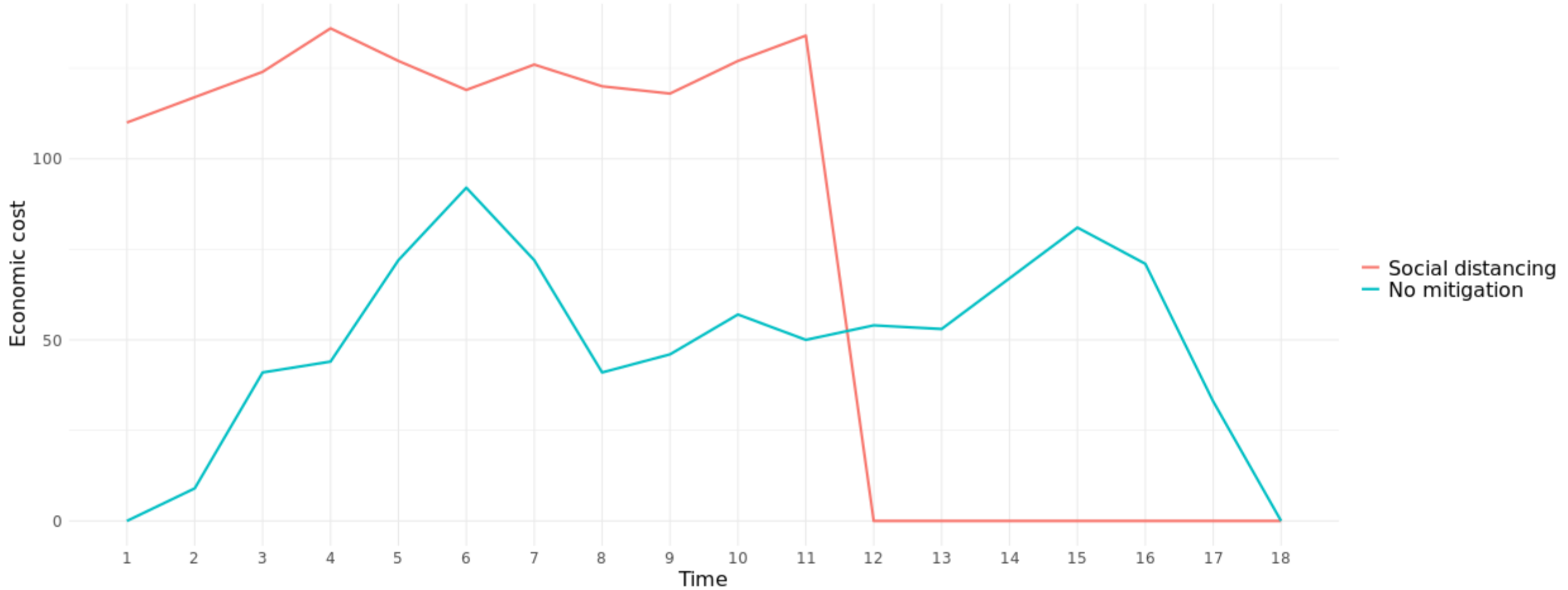
## Epidemic curve



# Explore COVID-19 transmission using networks

Simulate the effect of social distancing policies on virus transmission, the economy, and income inequality

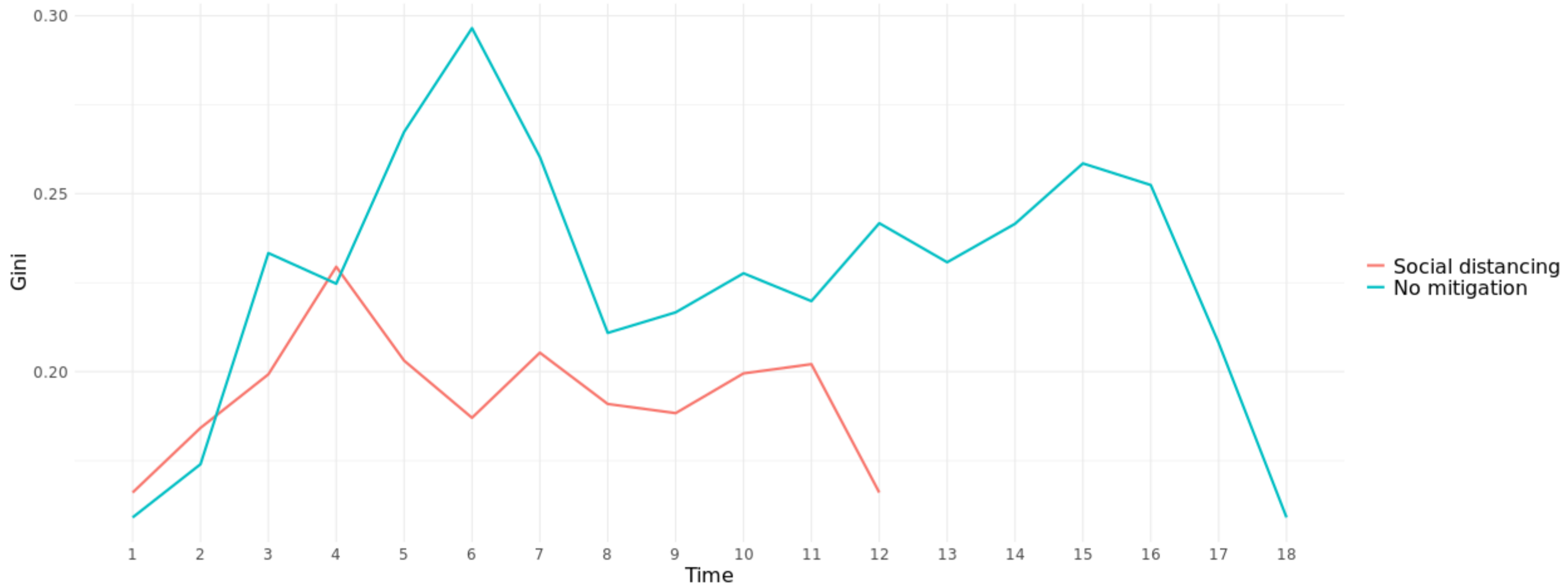
## Economic cost



# Explore COVID-19 transmission using networks

Simulate the effect of social distancing policies on virus transmission, the economy, and income inequality

## Gini coefficient



# Shrinking Capitalism<sup>†</sup>

By SAMUEL BOWLES AND WENDY CARLIN\*

*AEA Papers and Proceedings 2020, 110: 1–6*  
<https://doi.org/10.1257/pandp.20201001>



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## What Students Learn in Economics 101: Time for a Change

Samuel Bowles  
Wendy Carlin

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Samuel Bowles, Wendy Carlin 10 April 2020

<https://voxeu.org/article/coming-battle-covid-19-narrative>

<https://www.aeaweb.org/articles?id=10.1257/jel.20191585>

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 24 November 2020

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