



A user guide to Covid-19

part iii – economics for dummies



European Research Council
Established by the European Commission

[london.edu](https://www.london.edu)

Paolo Surico and Andrea Galeotti
Professors of Economics at London Business School

Financial support from the European Research Council and the Wheeler Institute is gratefully acknowledged.

Part III – economics for dummies

What we do

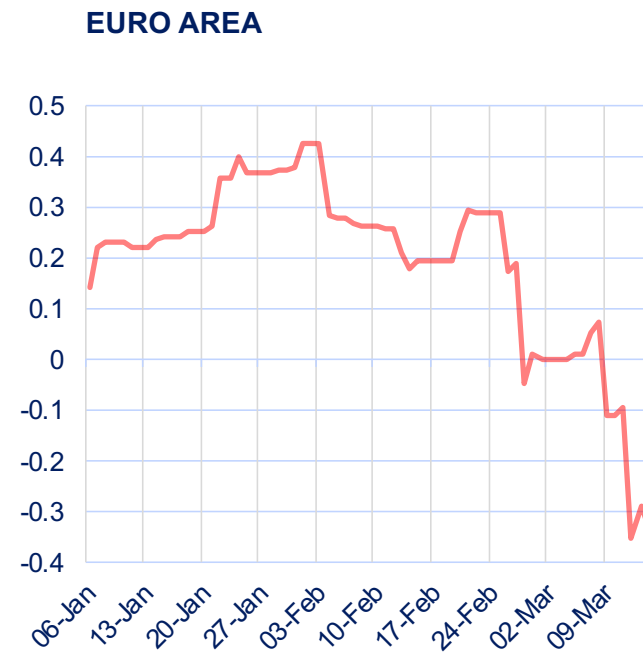
- Present evidence of initial economic costs
- Illustrate the working of the economy using a simple supply-demand framework
- Present evidence on the dependency of firms' investment and household spending on cash flows.

What you learn

- Use initial evidence to guess the size of the total economic costs
- Understand the role of uncertainty & panic in shaping economic costs dynamically
- Understand the central role of cash flows shortages in spiralling the health crisis into an economic crisis.

CHINA and EURO AREA – FORECAST FOR Q2 2020

In real-time, everyday! Quarterly GDP growth, year-on-year, %

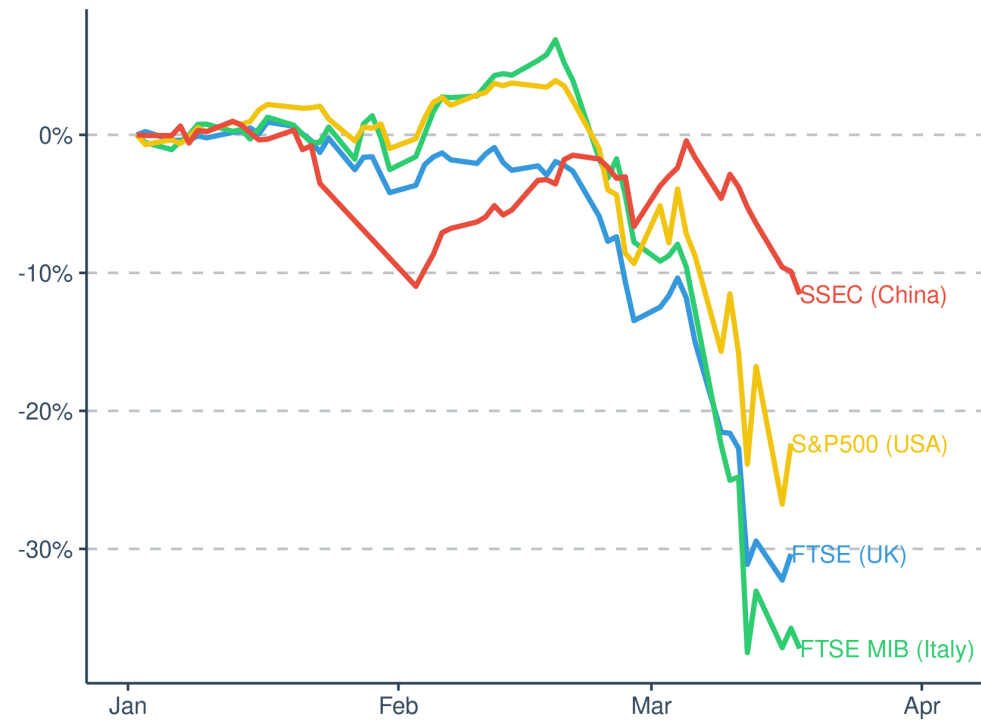


Source: live Now-Casting model, Reichlin (19th March 2020)

Impact on stock markets

Large declines in the stock markets in 2020

% change since beginning of 2020



Last update: 2020-03-18

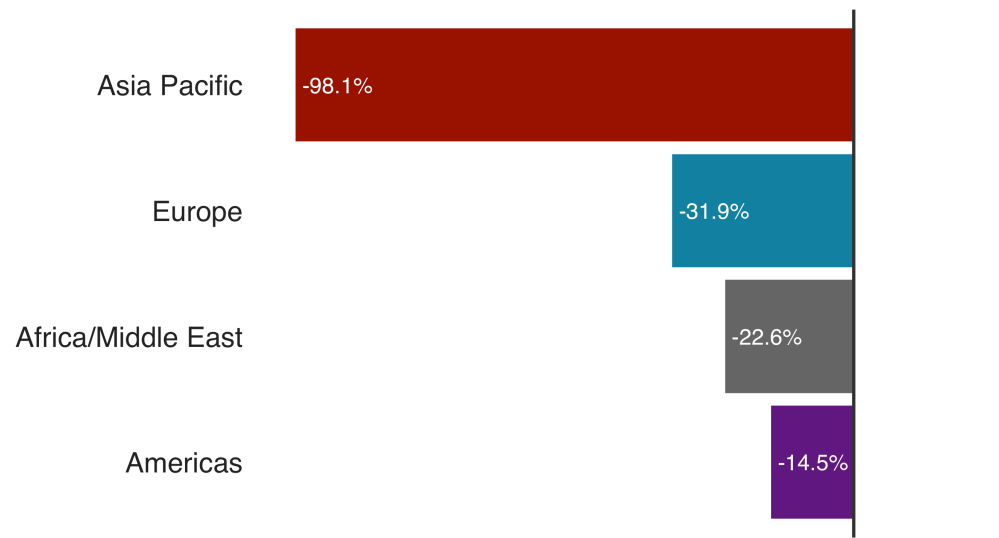
Source: Yahoo Finance, Investing.com, own calculations.

Impact on services

Travelling

US flight bookings to all regions of the world have fallen sharply

Change in bookings 6 January to 8 March, year on year



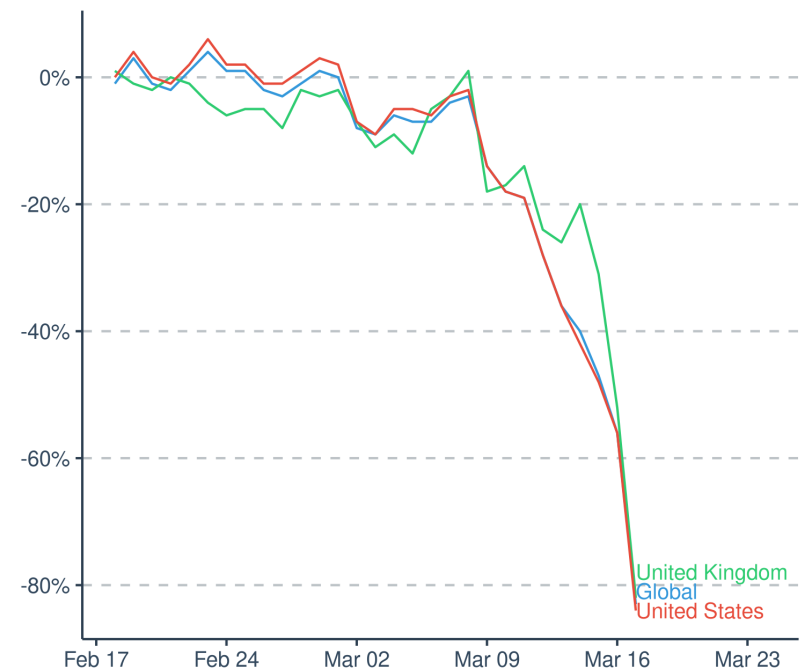
Source: ForwardKeys

BBC

Restaurants

Large declines in the restaurant industry

Year-on-year chg. restaurant reservations + walk-ins on OpenTable



Source: OpenTable.

Impact on durables expenditure

In face of negative income shocks, one of the first and strongest response of households with high marginal propensity to consume is to postpone vehicle purchases. Increase in uncertainty is likely to have a similar effect that works via a precautionary motive.

Evidence (from projects funded by ERC grants):

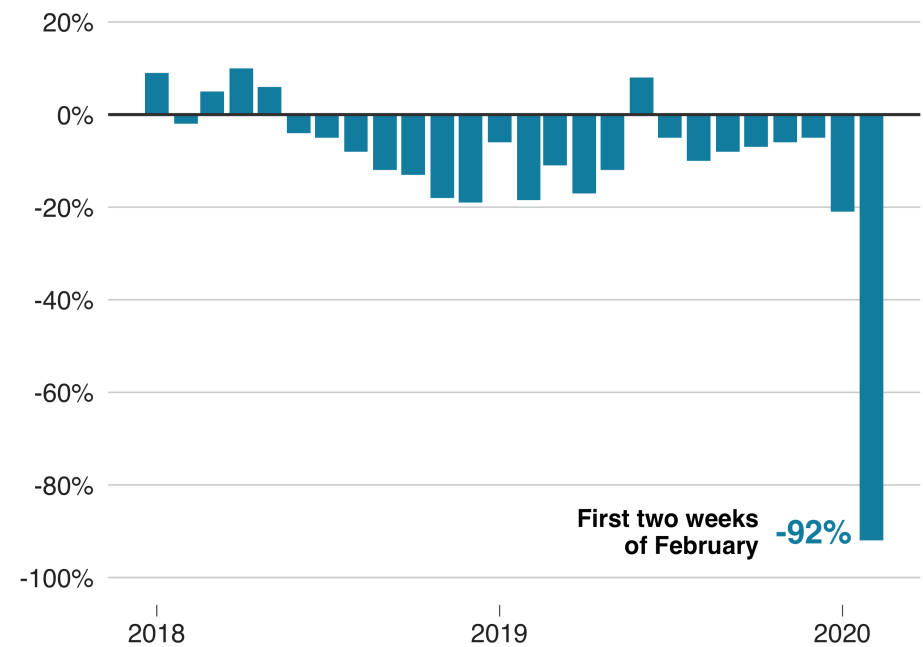
U.S. - Misra-Surico (2014, AEJM),

Italy - Surico-Trezzi (2019, JEEA),

U.K. - Cloyne-Ferreira-Surico (2020, ReStud)

Data on China suggests overall impact will be extraordinary large! Unfortunately, this is only the direct effect. More on this later.

Car sales in China have fallen sharply



Source: China Passenger Car Association

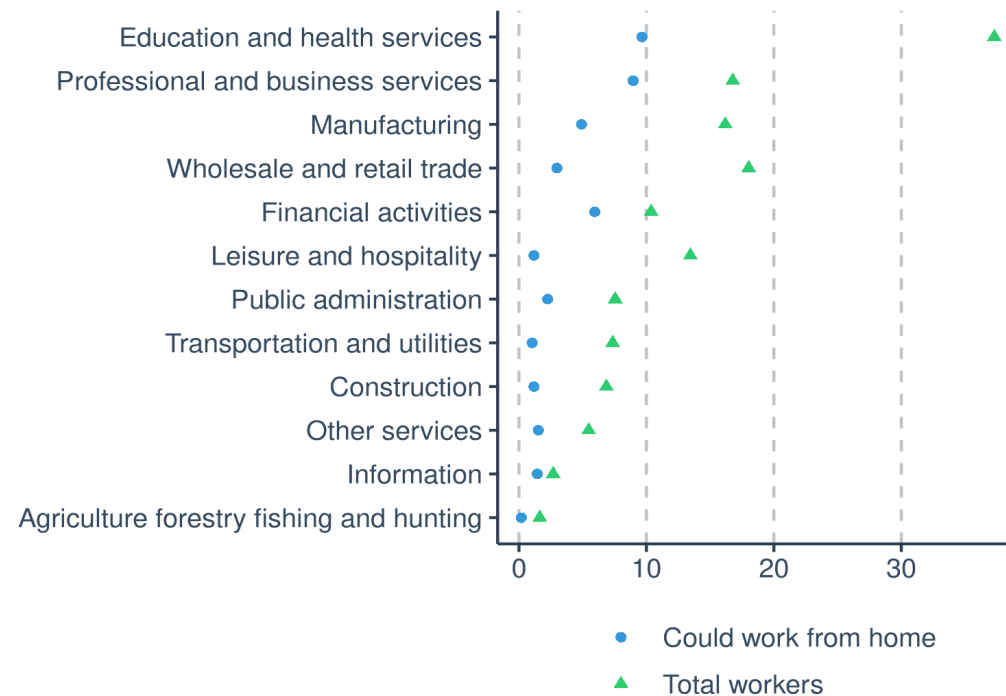
BBC

Strong heterogeneity across sectors

Most workers in manufacturing, retail, leisure, construction and transportation and utilities can hardly work from home.

Not everyone can work from home

US, Million workers per industry, 2017-18



Source: Bureau of Labor Statistics

Source: BLS (<https://www.bls.gov/news.release/flex2.t01.htm>)

The race between supply and demand

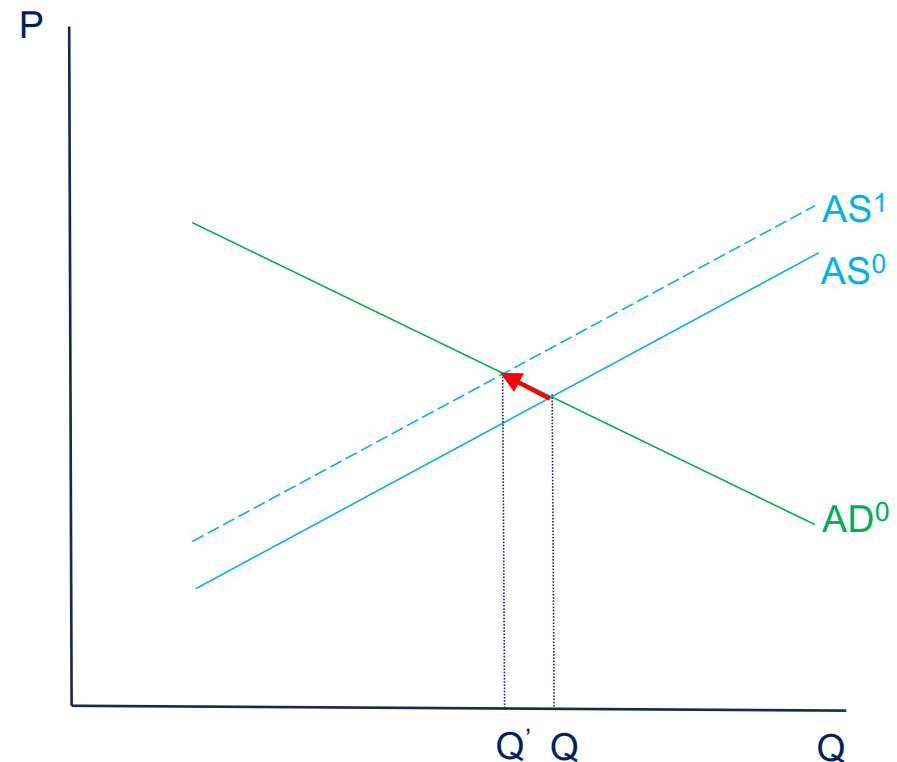
At first, covid-19 may look like a supply shock:

- Disruption in global supply chains
- Quarantine and social distancing across the world decreasing labour supply

Aggregate Supply (AS) move from AS^0 to AS^1

Different from previous crises:

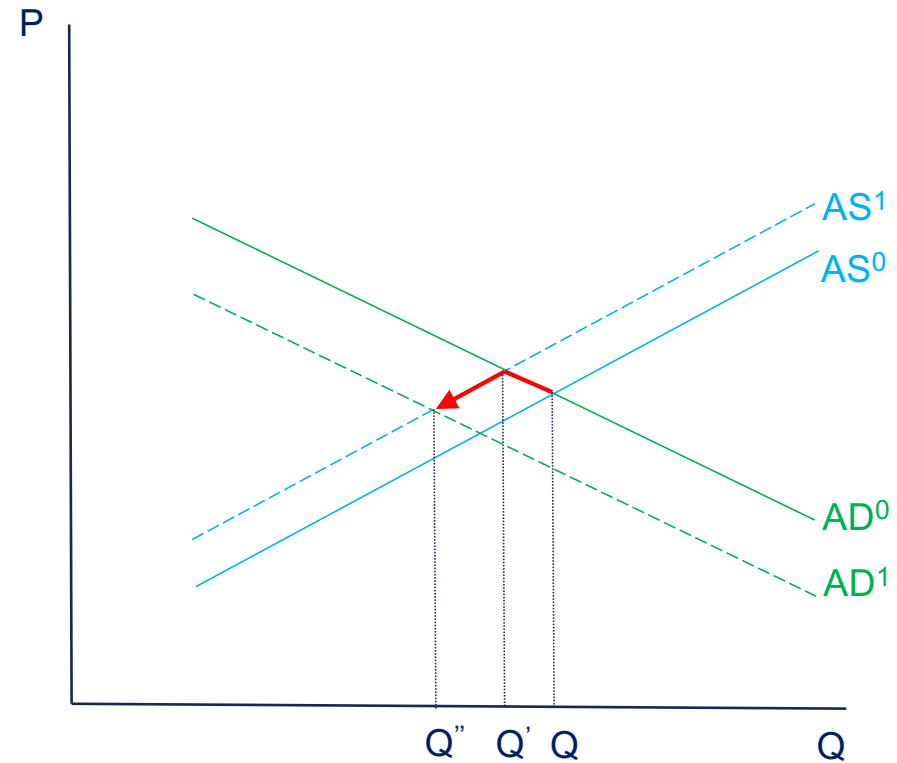
- Great recession of 2007-09: origin of supply shock was in the financial sector
- War/natural disaster: origin of the supply shock is destruction of infrastructure or large-scale permanent loss in labour force.



The race between supply and demand

Then, demand effects materialize:

- Uncertainty about the progress of disease
- Uncertainty about economic policies that will alleviate
- Non-permanent workers will lose income, particularly in affected industries (e.g. hospitality, manufacturing)
- Households increase precautionary savings
- Firms wary of investing until situation clears; also lack liquidity to do so



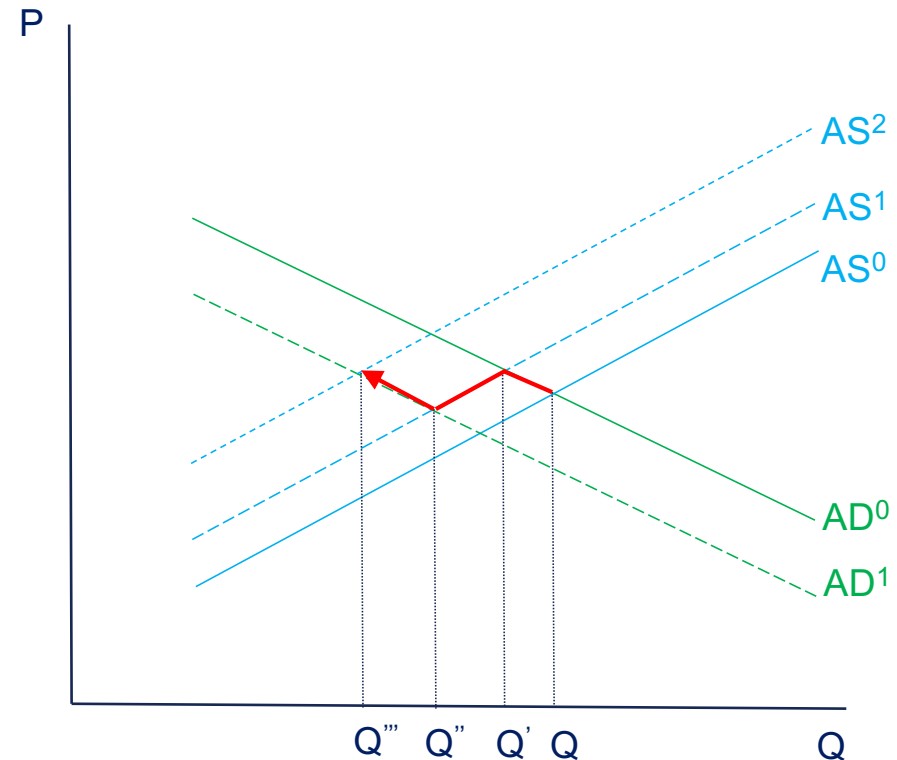
The race between supply and demand

Feedback loop into supply:

- Firms (especially those more dependent on cash flows) lack liquidity to fulfill commitments while facing lower demand and thus are forced to file for bankruptcies.

Demand and supply loop similarly to financial crisis, though uncertainty is about the disease.

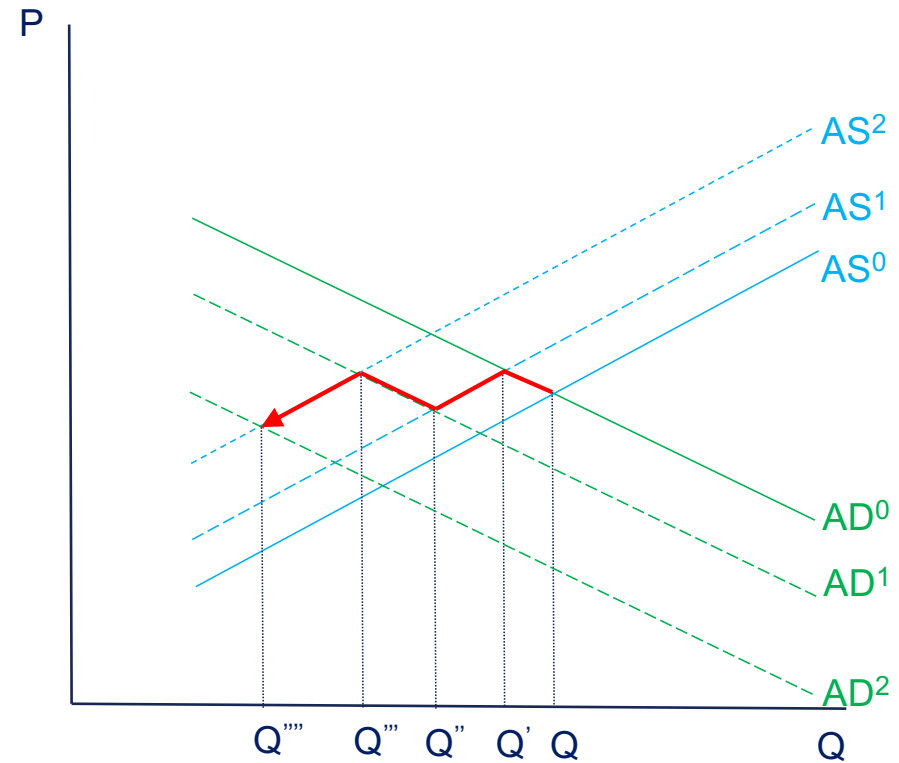
Different from war/disaster: there, demand might increase as governments redirect war efforts towards fight/rebuild and so potentially inflationary.



The race between supply and demand

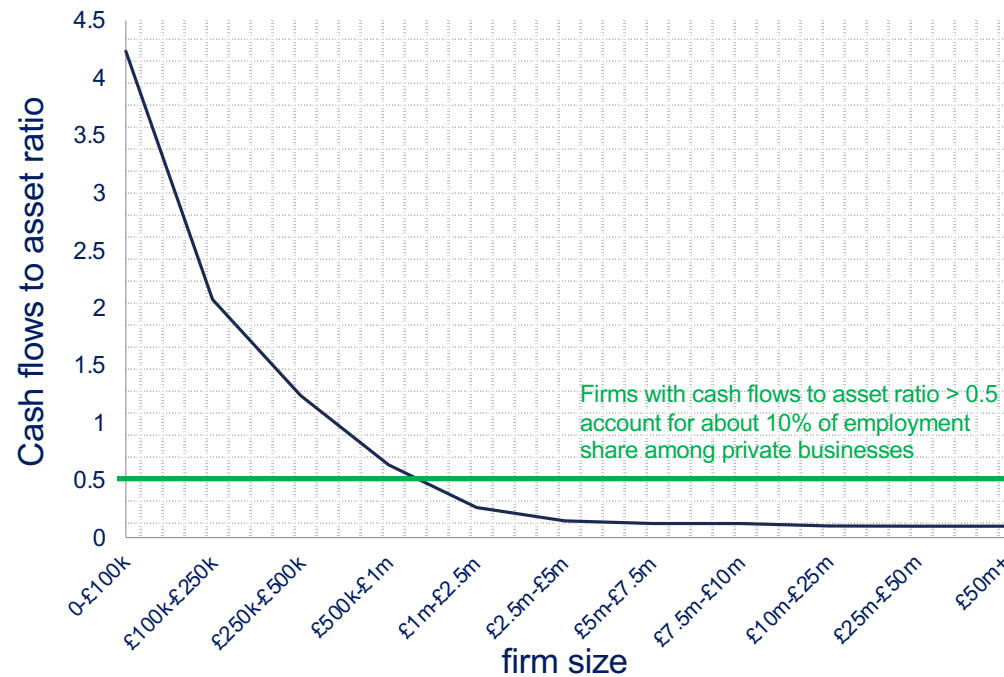
Feedback loop into demand:

- Workers who lose jobs from closing businesses do not have an income anymore and therefore lower consumption, eventually depressing aggregate demand.



Many small businesses rely on cash flows

Cash Flows to Asset Ratio By Firm Size

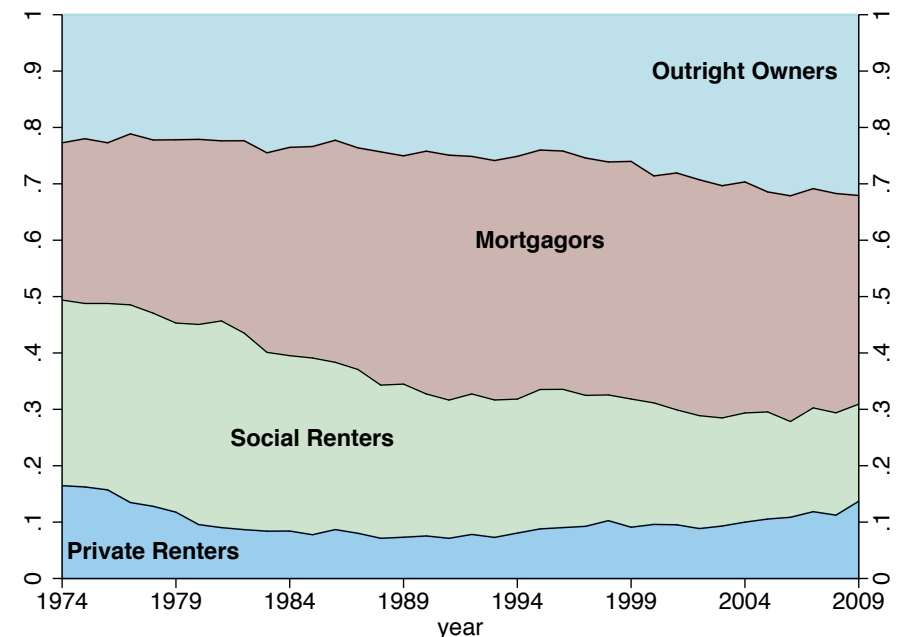


Source: based on calculations from Bahaj, Foulis, Pinter and Surico (2019) on the universe of private non-financial firms in the U.K.
The research in this paper has been funded by an ERC Consolidation Grant, whose support is gratefully acknowledged.

Many mortgagors and renters hold little liquid wealth

	UK BHPS: 2005	
	Median	[p25 , p75]
Net Liquid wealth		
Outright owners	3,050	[0 , 17,034]
Mortgagors	0	[-3,250 , 5,000]
Renters	0	[-455 , 500]
Net Housing wealth		
Outright owners	150,000	[100,000 , 220,000]
Mortgagors	97,000	[56,250 , 152,000]
Renters	0	0

Figures in the table refer to £pounds value at 2005 prices



Source: Cloyne, Ferreira and Surico (2020) on the U.K. household data

The research in this paper has been funded by an ERC Consolidation Grant, whose support is gratefully acknowledged.

Summary

- Global recession seems inevitable, possibly in emerging markets too.
- Overall, demand effects probably much larger than the initial supply shock.
- Uncertainty, panics and lock-down policies key to drive large drop in demand.
- The investment of many firms (esp. *small* and *young*) and spending of many households (esp. *renters* and *mortgagors*) depend largely on cash flows.
- Large drop in demand thus force these firms to close. This leads to a rise in lay-offs and a further drop in consumption. Economy enters a depressing loop!

Full set of slides available at <https://sites.google.com/site/paolosurico/covid-19>

Next video: *A user guide to Covid-19. Part iv – policy options*