

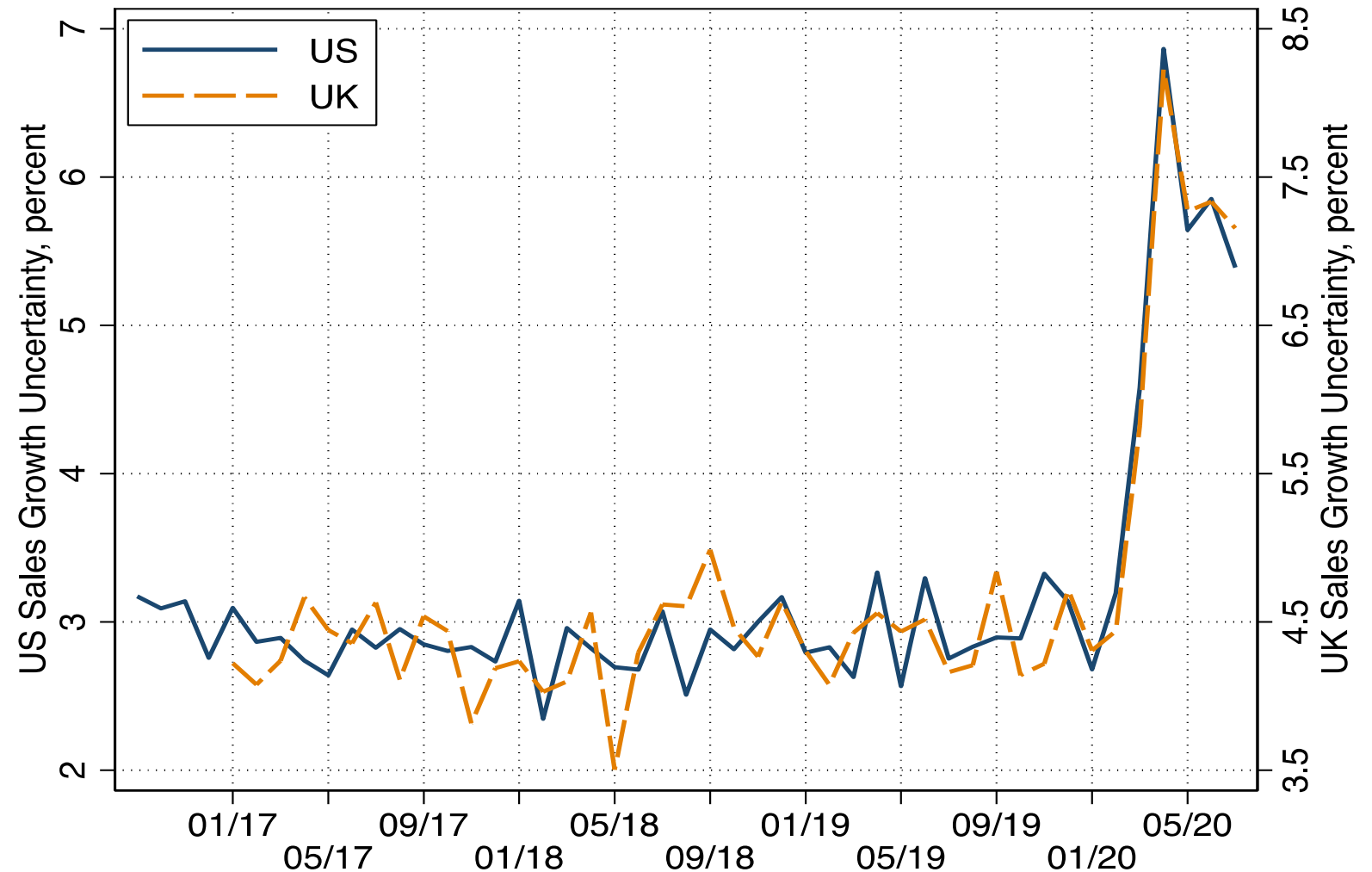
"Will Productivity and Growth Return After the COVID-19 Crisis?"

Paul Mizen

University of Nottingham

How economic, health and social crisis from COVID-19 has reshaped economies around the world

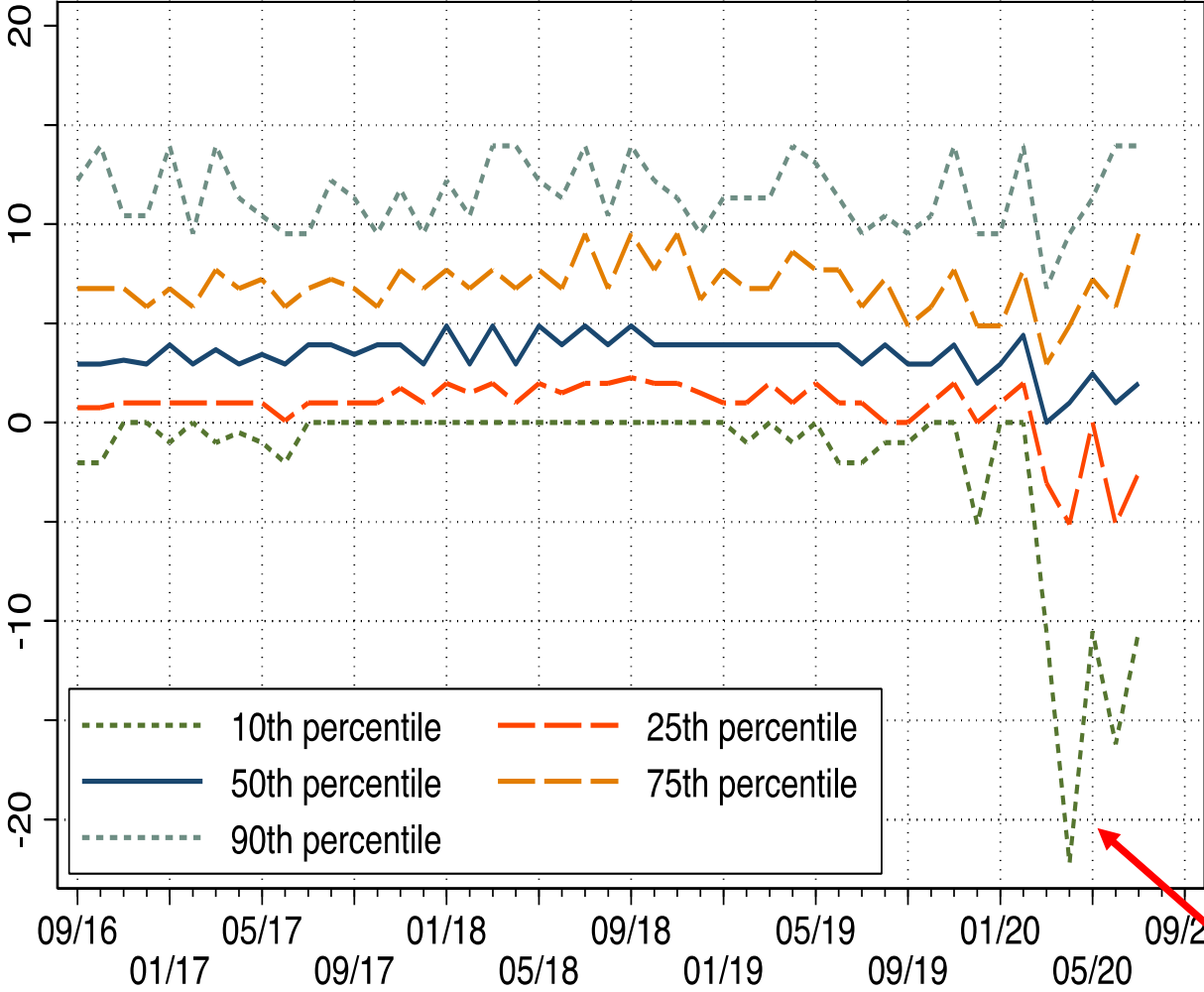
- *UK (& US) Firm subjective sales uncertainty doubled due to COVID*
- *Covid-19 largest shock to hit the world economy for decades.*
- *Global effect, passed from East to West Jan 2020 – Mar 2020*
- *By second quarter it hit a peak.*



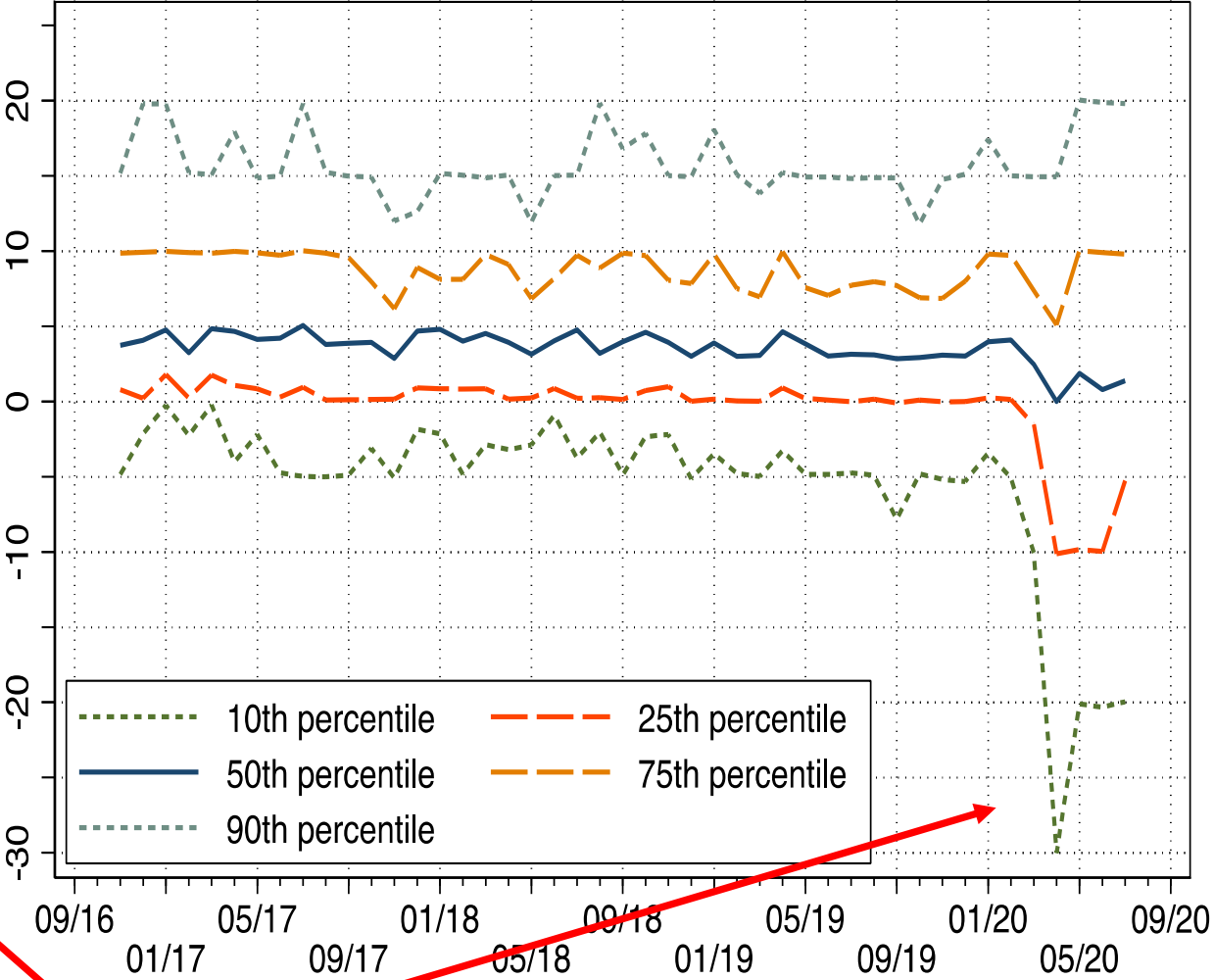
Source: Altig et al. (2020). Survey of Business Uncertainty, and Decision Maker Panel

How economic, health and social crisis from COVID-19 has reshaped economies around the world

US Future Sales Growth Distribution



UK Future Sales Growth Distribution

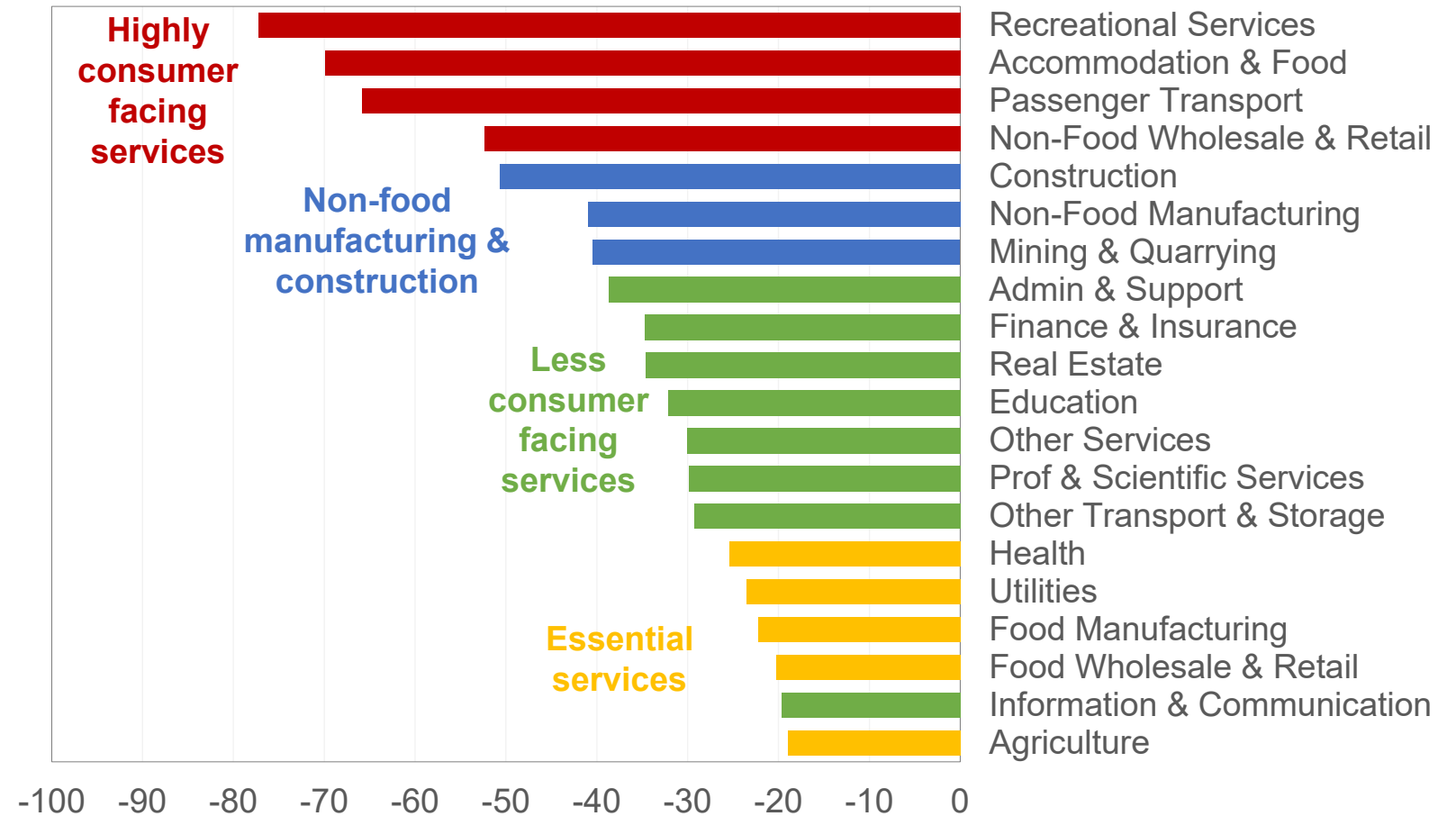


Source Altig et al. (2020), Survey of Business Uncertainty and Decision Maker Panel

This generated extensive downside tail-risk for UK & US firms

How economic, health and social crisis from COVID-19 has reshaped economies around the world

- *Asymmetric effects across business sectors:*
- *hardest hit sectors had most social contact in consumption*
- *Least hit sectors were essential services*

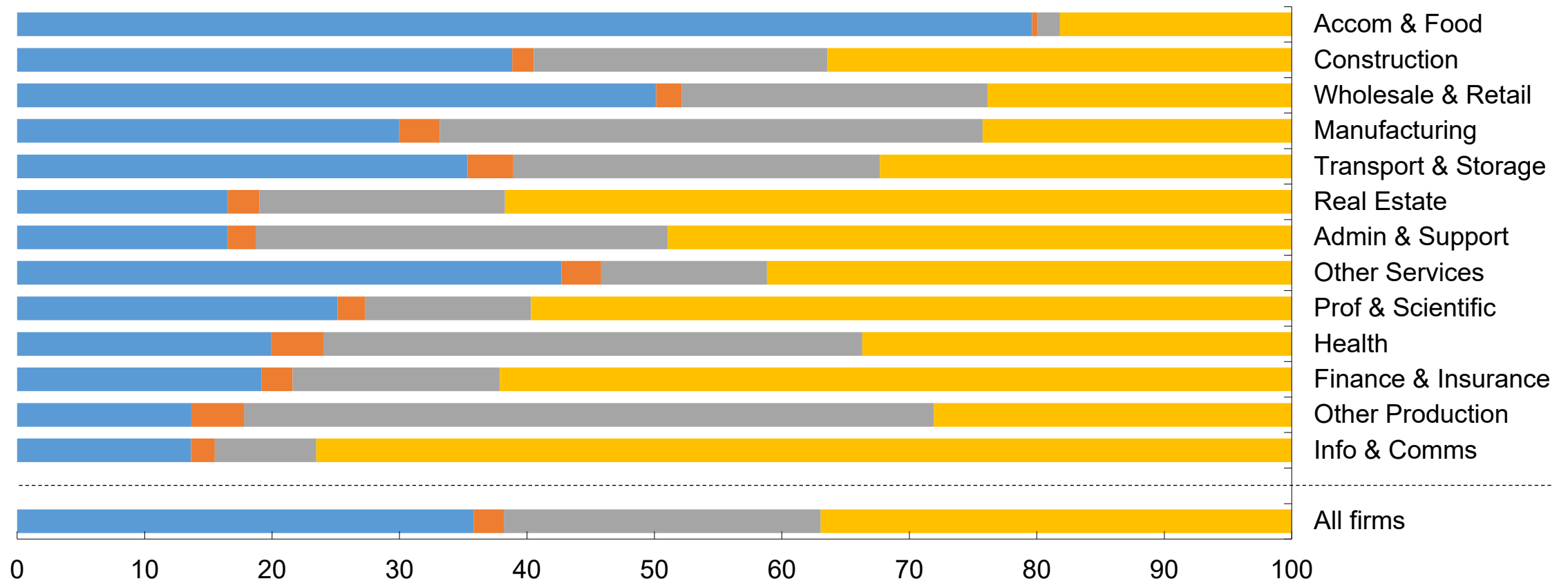


Source: Decision Maker Panel. Percentage impact of Covid-19 on sales in 2020 Q2

How economic, health and social crisis from COVID-19 has reshaped economies around the world

Impact of Covid-19 on UK employees, May 2020

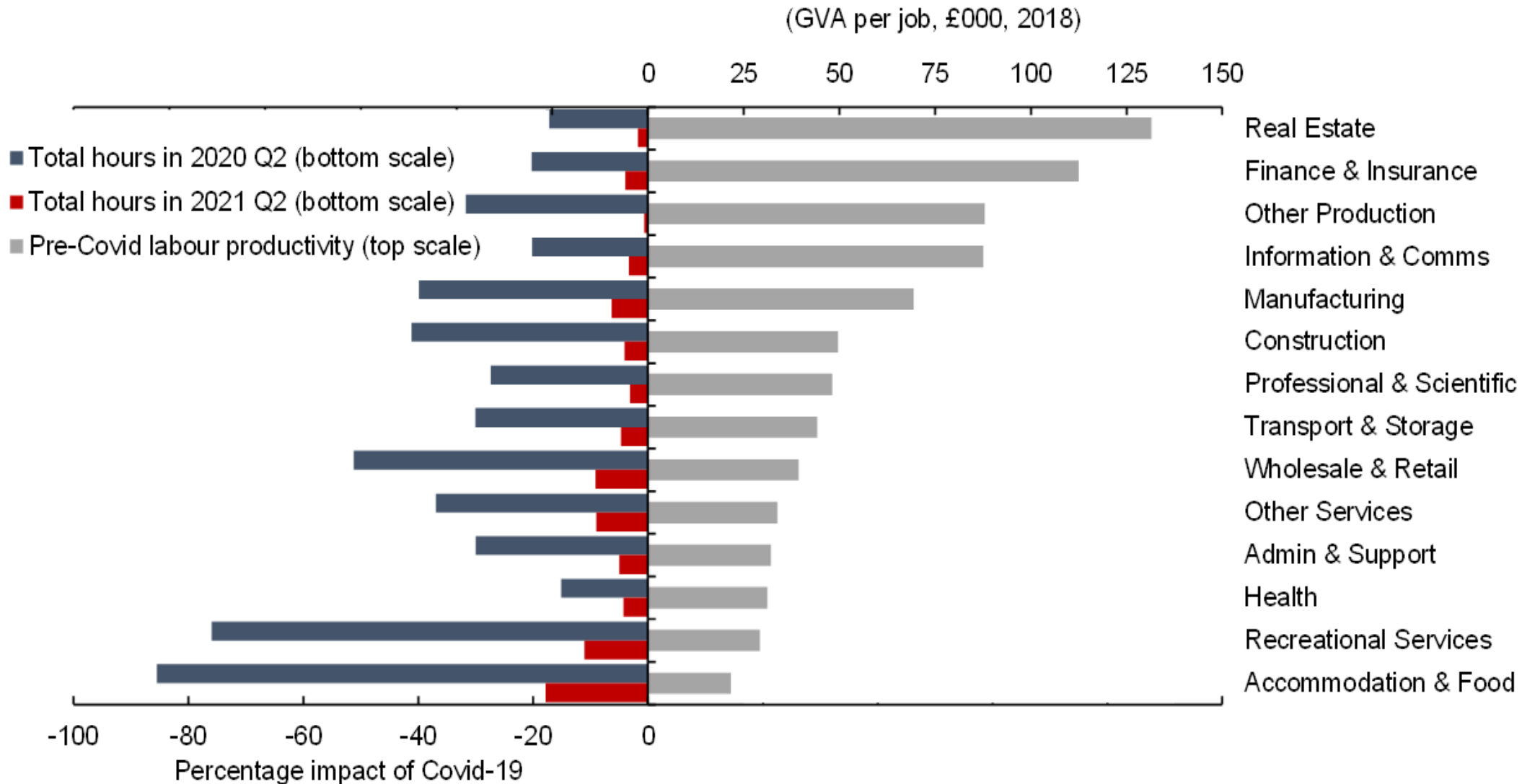
■ Furloughed ■ Unable to work (eg sick, self isolating) ■ Working on business premises ■ Working from home



Source: Decision Maker Panel.

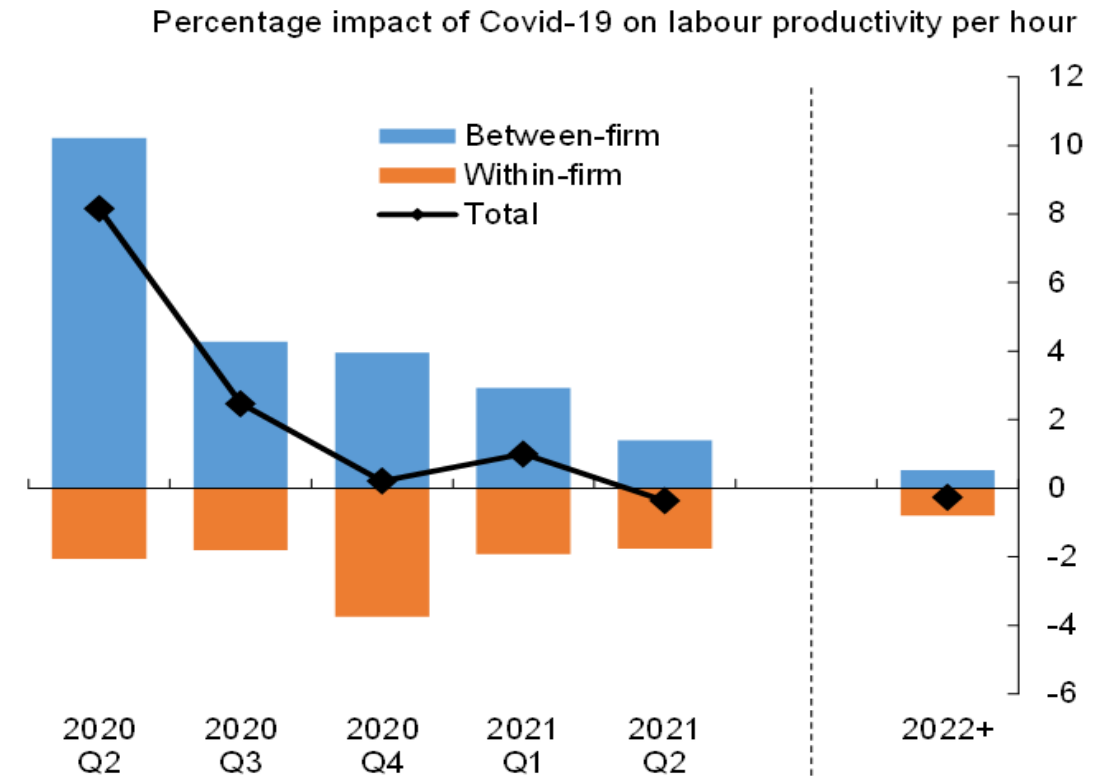
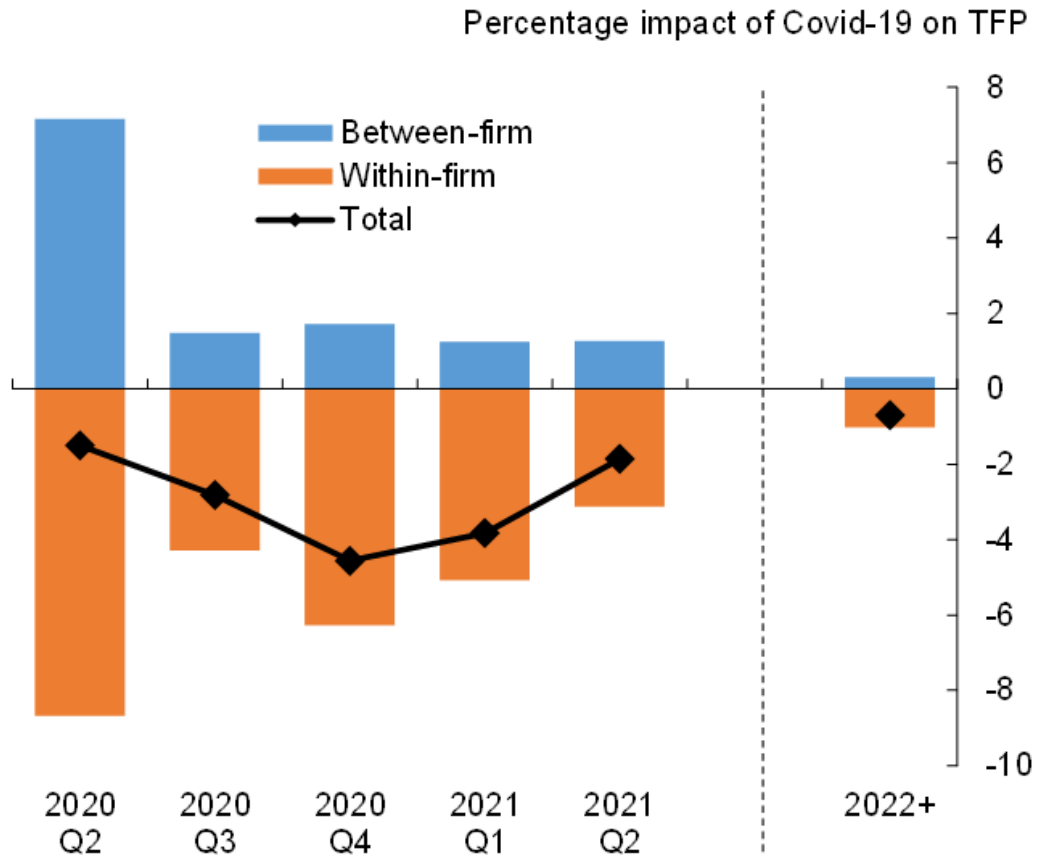
Percentage of employees

Firms in low productivity sectors recorded largest drop in hours worked



Source: Decision Maker Panel.

Impact on aggregate productivity growth

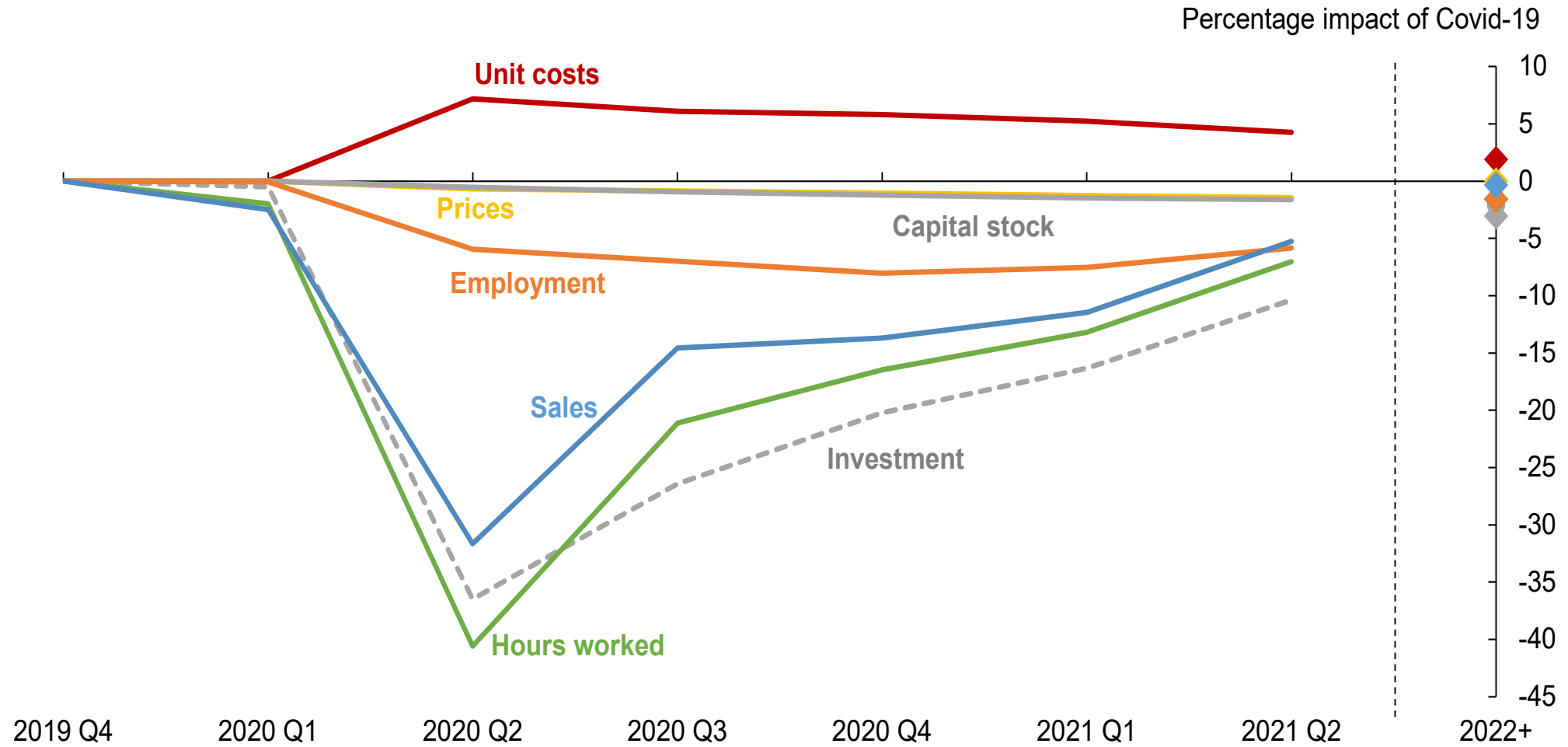


Source: Decision Maker Panel, Bloom et al (2020) NBER wp.

The within effect measures the contribution of changes in firm-level productivity for a given allocation of labour across firms, affected by new costs 7% – for PPE, screens etc., and the impact on costs from social distancing reducing capacity.

The between effect is the impact on total productivity of a reallocation of inputs towards firms with higher levels of productivity. Batting average effect.

Impact on costs, employment/hours and sales



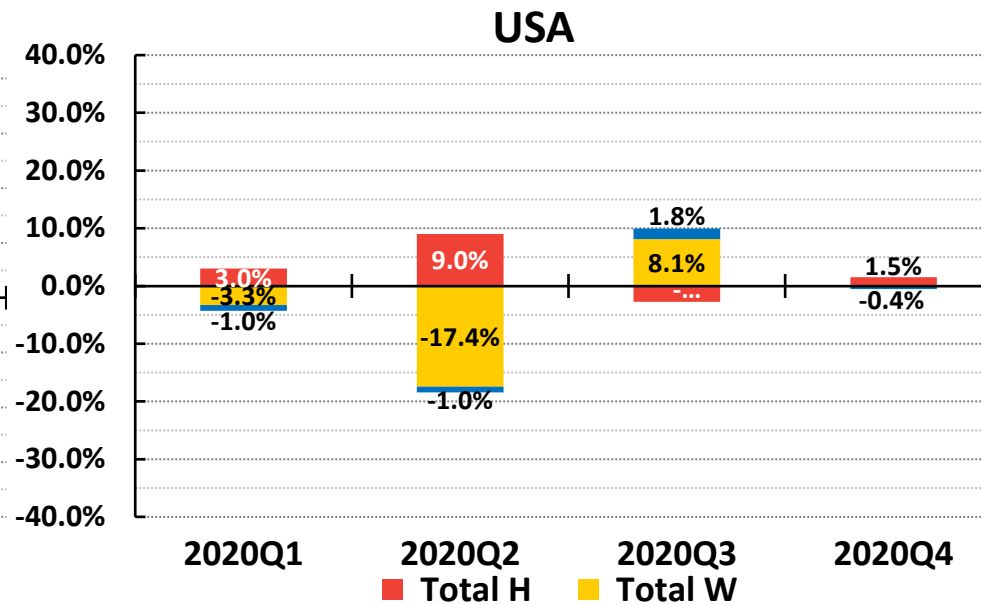
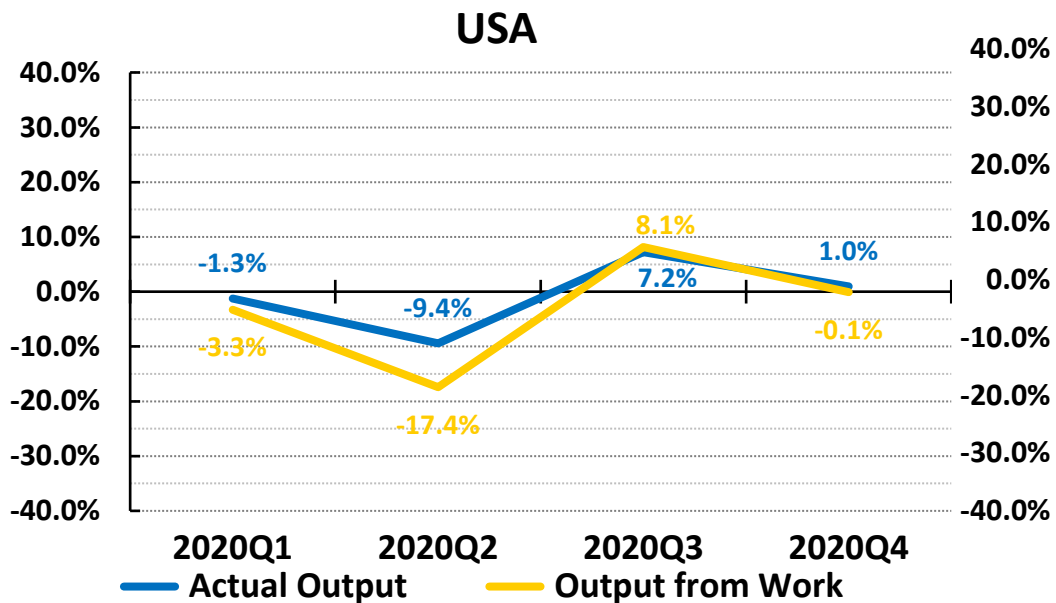
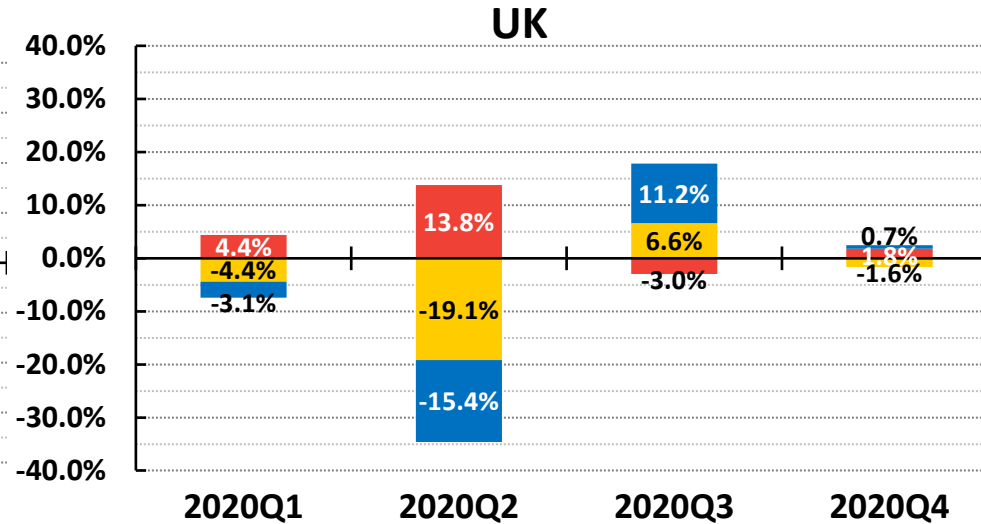
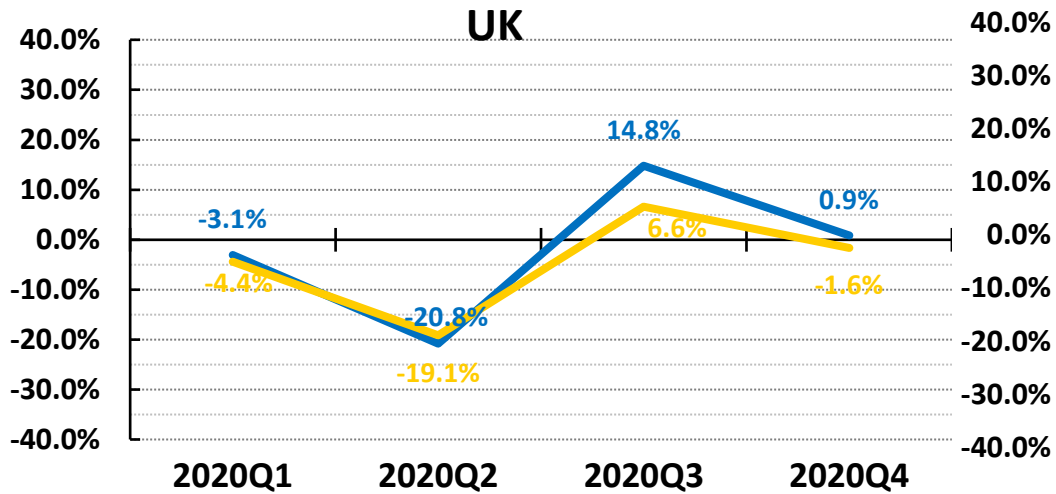
Source: Decision Maker Panel.

Potential Capital and WFH

- Awful as it has been, the historic collapse in output would have been much worse, were it not for *potential capital and WFH*
 - Potential capital = capital not utilized but made available by digital technology
 - Residential/dwellings repurposed for work use (like Uber and Airbnb)
 - And connected through the internet
- Work from home has been much-reported
 - In the UK, the number of employees reporting working from home rose from 14% (Q4 2019 and steady previously) to 35% in Q2.
 - The pandemic solved the ‘collective action problem’ – we all had to work from home.
 - We learned how to work more productively as time went on.

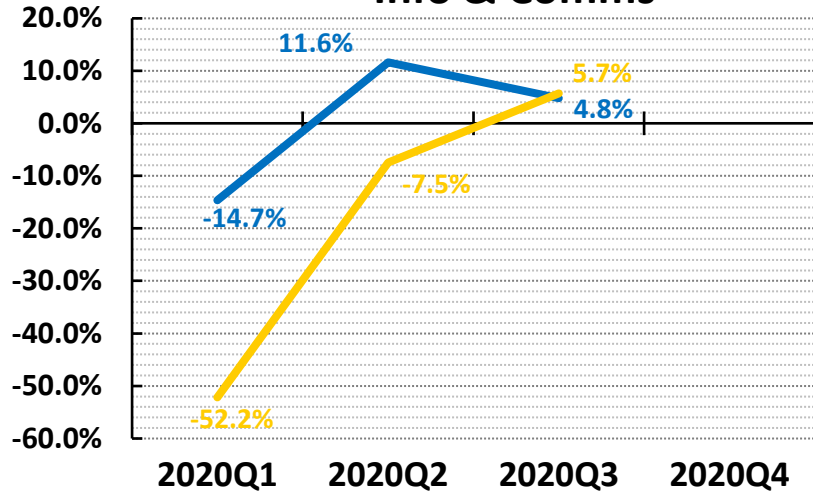


Potential Capital and WFH has changed things

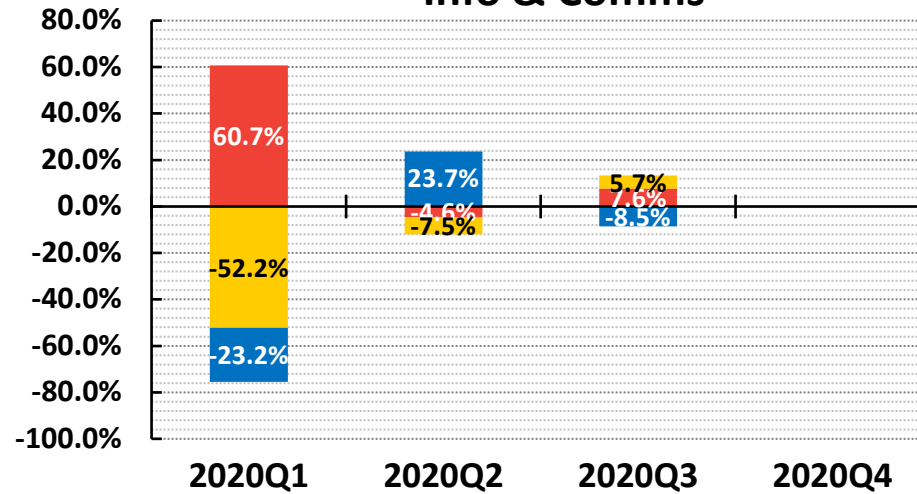


Winners - WFH - UK

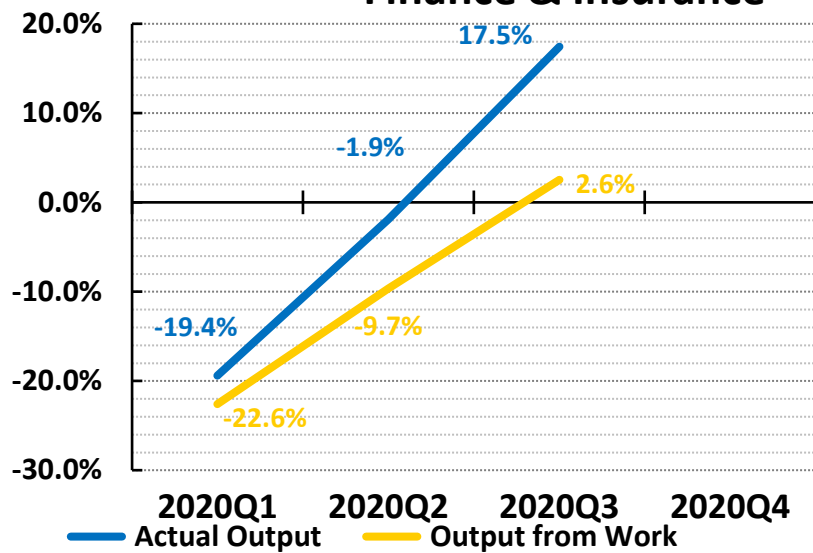
Info & Comms



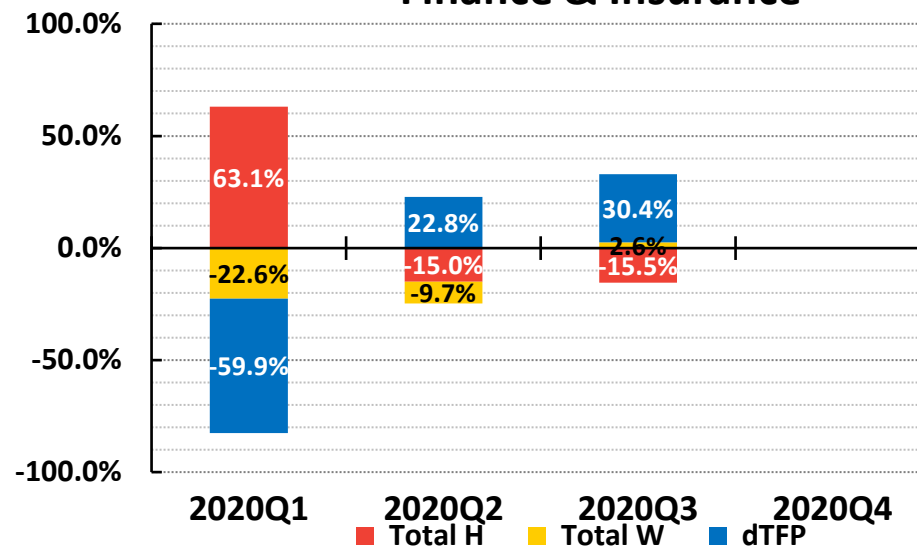
Info & Comms



Finance & Insurance

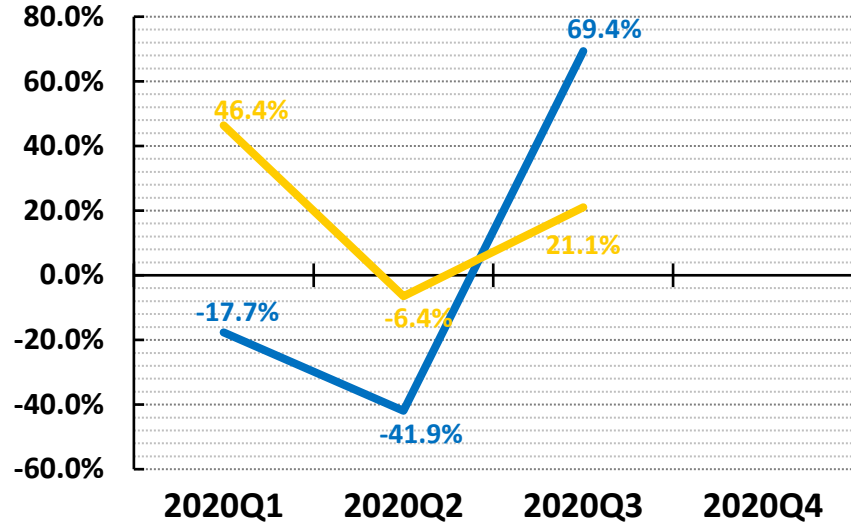


Finance & Insurance

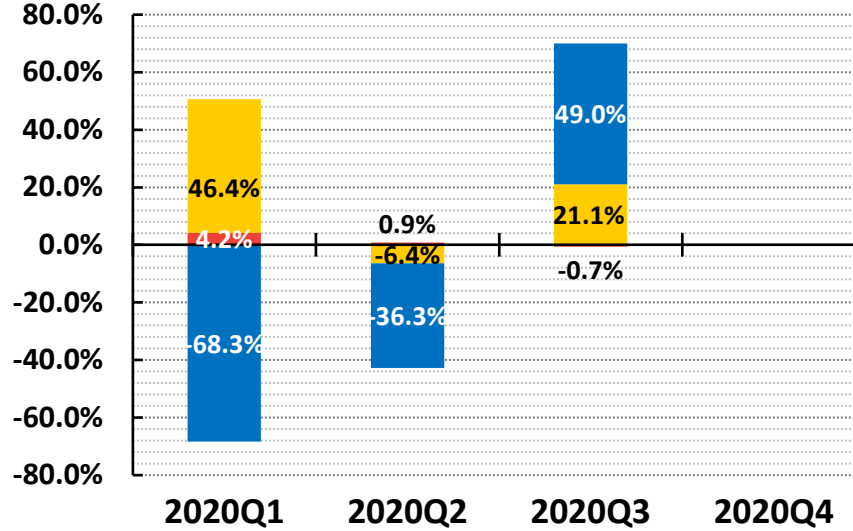


Losers - hardly any WFH - UK

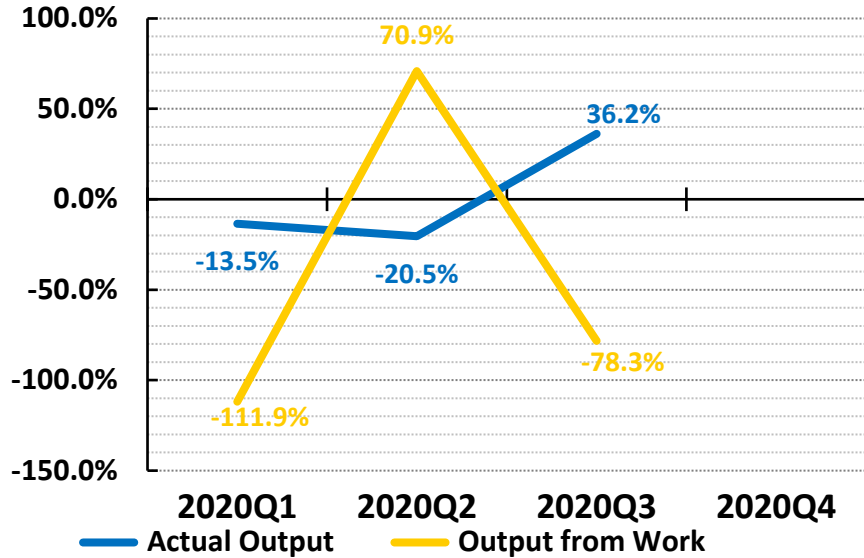
Accommodation & Food



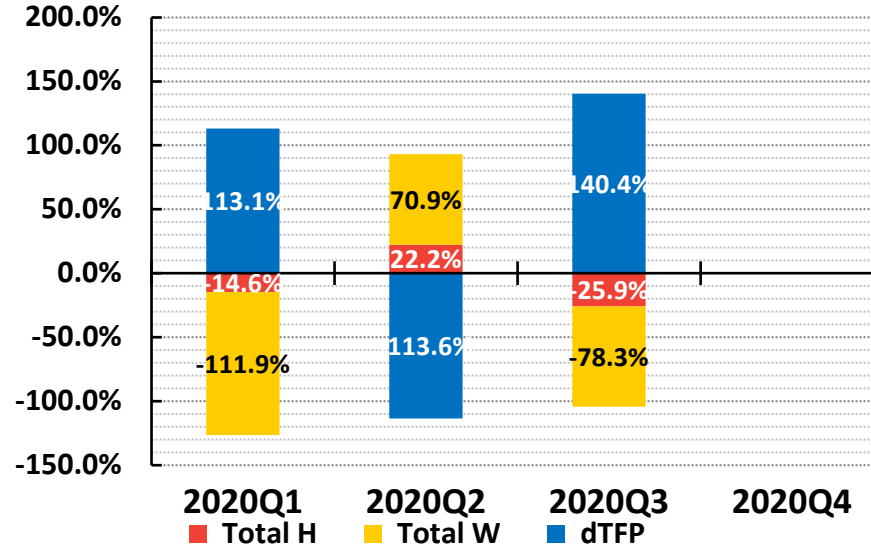
Accommodation & Food



Wholesale & Retail



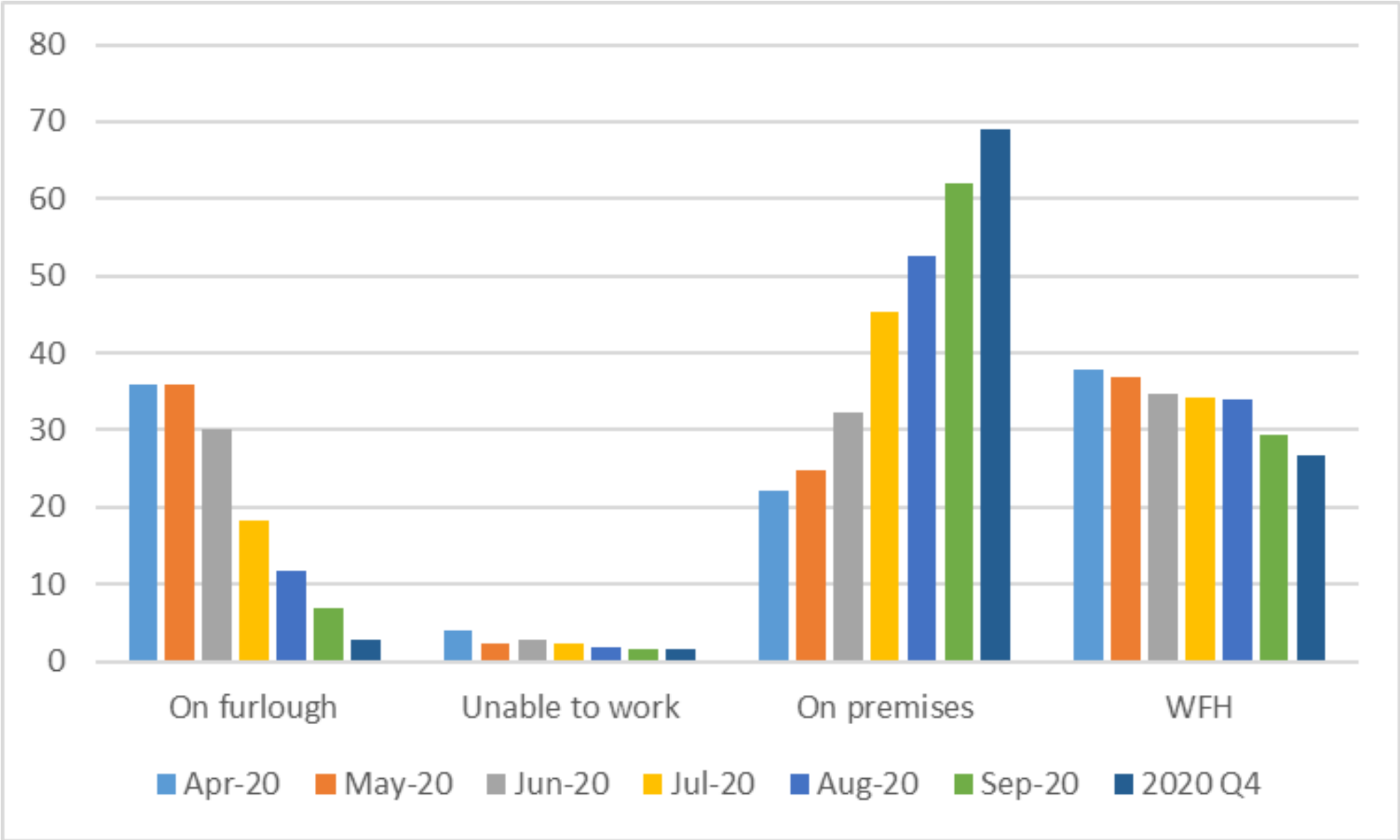
Wholesale & Retail



— Actual Output — Output from Work

■ Total H ■ Total W ■ dTFP

Forward look - working arrangements due to Covid-19



WFH post-COVID? ... persist or reverse?

Depends on why WFH grew in 2020

- **Relative prices:** work on premises was expensive
 - PPE, health risks => will at least partially reverse
 - DMP suggests average unit costs were 7% 2020Q2 and Q3, falling to 5% by 2021Q2 and to 2% by 2022+.
- **Collection action:** Work from home was not accommodated pre-Covid
 - Large shock forced, large scale WFH => solved the collective action problem and will persist
- **Learning:** Work from home was not understood
 - Learning over the pandemic improved its use => will persist

Potential Capital implications

- **Productivity**

- Perhaps the internet is not a disappointment after all – resilience rather than ready growth
- If the pandemic provoked 10+% of GDP in a crisis, what else may there be?
- Contributions calculated for UK as ~3.5% from home capital alone, and 13% from labour.

- **Distributional implications**

- More resilient on average
- Not more resilience for everyone (restaurants, in-person services)

What should governments do to support and cushion?

- **Offer tax deductibility for employees to invest in ‘potential capital’**
 - Internet connections for work use
 - Work-related ICT, office equipment
- **Support ‘resilience’, boost productivity using potential capital**
 - Upgrade high speed internet infrastructure
 - Offer education and training in IT skills
- **Support the trend towards online retail** (UK: 35% of total sales, up from 20% in February 2020)
 - Facilitate transition from high street to online
 - Retraining for employees in negatively affected sectors