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## Purpose

Following on from our informal evidence session with the Treasury Committee on 3 December, this note summarises some of the research on the economic impact of Covid-19 suppression measures and voluntary social distancing due to fear. We also propose some questions the Committee may wish to ask of HM Treasury to clarify the Government's view.

## Introduction

On 30 November HMG published the document *Analysis of the health, economic and social effects of Covid-19 and the approach to tiering*. The document was produced in response to requests for a cost-benefit analysis of the tiered restrictions introduced in England on 3 December.

Central to any attempt to assess the costs and benefits of the restrictions now in place is an assessment of what would happen to health, social and economic outcomes in the absence of any attempt to control the spread of the virus, what economists call the "counterfactual." While the HMG document qualitatively explores the health consequences of not acting, it fails to address the central question of how the economy would perform under such an alternative. If people respond to the increased prevalence of the virus by avoiding social consumption – visiting shops, cinemas, theatres, pubs and restaurants etc. – so as to minimise their risk of catching the virus, controlling the spread may entail only limited economic damage and, in particular, less damage than what a naïve comparison of economic outcomes to their pre-pandemic level would suggest.

The document acknowledges this possibility: "[M]ore widespread infections and the consequences of pressure on the NHS would affect spending in the economy due to voluntary social distancing, effects to confidence and impacts on businesses". But it goes on to say that it is not possible to assess the scale of this 'fear effect'. The Treasury has effectively refused to clarify how important it believes voluntary behavioural responses to the pandemic to be and thus the extent to which there is any trade off between health and economic outcomes.

This is unfortunate since the question of how large such a trade off is (or whether it exists at all) determines the optimal policy response. If there is evidence of significant voluntary social distancing behaviour, then suppressing the spread of the virus is likely to be the optimal policy option once both health and economic outcomes are taken into account.

The relationship between people's fear of the virus, its prevalence and the consequences for the economy are complex and probably changing all the time. Nevertheless, in our view there is now sufficient evidence from recent months to make broad judgements. In particular the evidence suggests that people's fear of the virus would have had a significant negative impact on economic activity even in the absence of any lockdown restrictions.

## Suggested questions for HM Treasury

The evidence outlined here has important implications for how Covid-19 restrictions should evolve over the coming months. We suggest two questions that the Committee could ask of HM Treasury to establish the government's view of the problem:

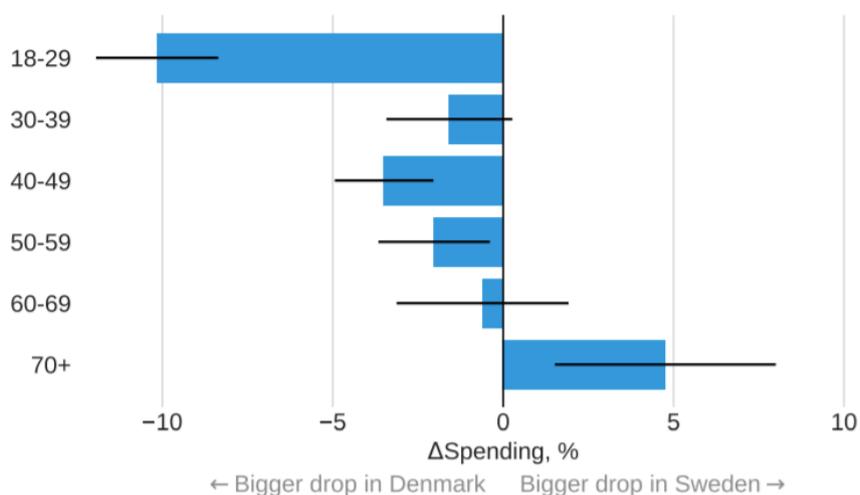
- Does HM Treasury believe that the unabated spread of the virus would have significant negative economic consequences?
- In light of the evidence presented here, can HM Treasury provide a scenario analysis of the possible economic consequences of a) lifting all Covid-19 restrictions and b) moving the country to Tier 1, based on projections for the path of the virus in each case from SPI-M?

### Andersen et al: lockdowns only make a small contribution to fall in consumption

Denmark and Sweden had very different responses to the first wave of the pandemic in March: despite similar health impacts (excess mortality was very similar in the two countries in March) Denmark imposed a very severe lockdown, whereas Sweden only banned gatherings of more than 50 people. [Andersen et al.](#) find that despite few restrictions on economic activity, consumer spending fell by 25% in Sweden between 11 March and 5 April. In Denmark, the reduction was 29% with a much more severe lockdown. This suggests that Swedes acted to reduce consumption out of concern about the virus, and that only a small proportion of the drop in consumer spending was the result of formal lockdown measures.

Indeed, spending fell by *less* in Denmark than in Sweden among the over 70s – the age group most vulnerable to Covid-19 (see figure below). Over 70s were more likely to spend money on public transport and in high street shops in Denmark than Sweden, perhaps because they felt more secure in these areas due to Danish restrictions. More generally, the Swedish approach does not seem to have been successful in minimising the economic impact of Covid-19 in the early stages of the pandemic – Denmark saw an 8.1% drop in GDP over the first six months of 2020 compared to 8.4% in Sweden – and health outcomes have been much worse. This suggests that without restrictions, the economic impact of the virus spreading unchecked could be severe.

*Fig. 1 Change in spending by age group at the start of the pandemic, Denmark vs Sweden*



### Goolsbee and Syverson: little of the decline in visits to retail outlets caused by 'shelter in place' orders

Other studies have exploited variation between counties in the US around the imposition of 'shelter in place' orders. [Goolsbee and Syverson](#) find that of the 60 per cent decline in visits to retail premises between 1 March and 12 April, only around 7 percentage points can be attributed to shelter in place orders. Neighbouring counties that did not have shelter in place orders had a drop in visits to retail establishments that was only 7-8 per cent smaller. These results are consistent with Andersen et al, suggesting that rapid spread of the virus poses a serious threat to the economy.

The paper also sheds light on the geographic level at which the fear factor operates. The authors find that the number of Covid deaths in a particular county does not explain much of the variation in activity: instead, reductions in mobility seem to have occurred across commuter zones at the same time, with no variation depending on the severity of the outbreak in a particular area. Similar results are found by [Coibon, Gorodnichenko and Weber](#) who find that consumer spending is only weakly related to the total number of cases in the county up to that point.<sup>1</sup> For the UK this suggests that the

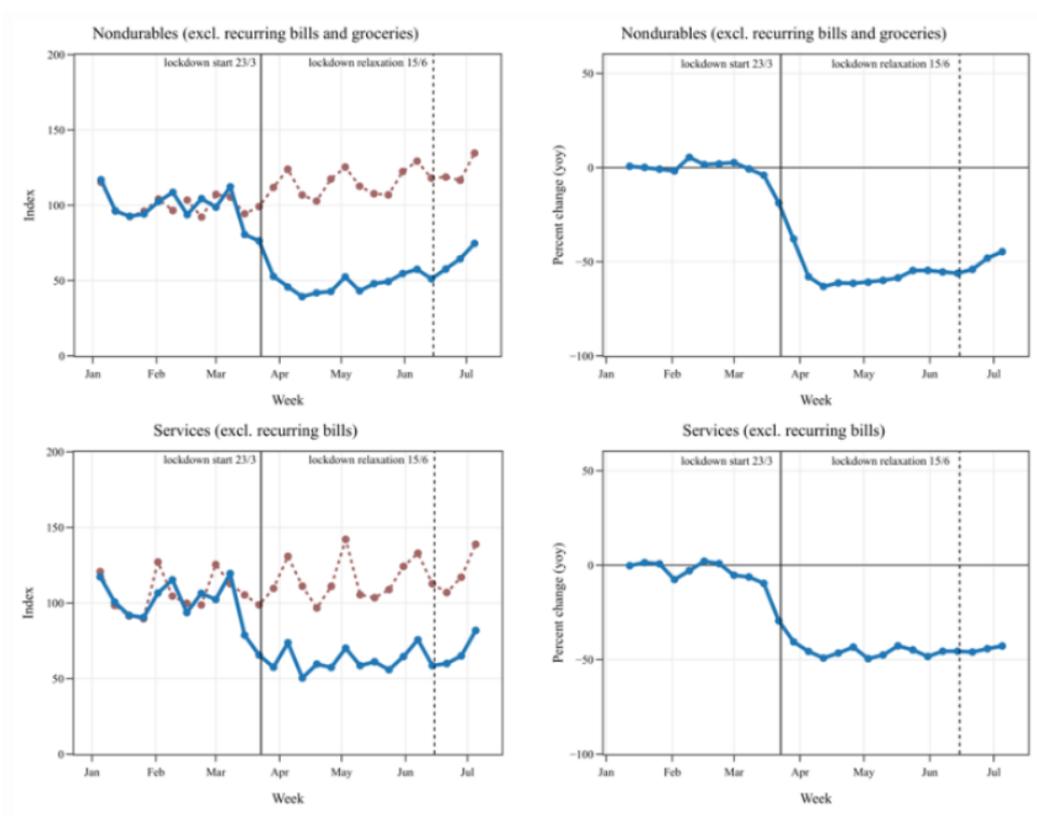
prevalence of the virus nationally may be more important than local prevalence in determining the degree of voluntary social distancing.

Hacioglu et al: fall in consumption in the UK occurred before March lockdown

Using data from a money management app, [Hacioglu et al.](#) show that spending on nondurable goods other than groceries and services starting falling in the UK before social distancing measures were formally introduced in March. Although spending fell further after the lockdown was introduced on 23 March, there was not a sudden increase in spending when measures were lifted in May and June.<sup>2</sup>

Similar results are shown for the US by [Chetty et al.](#), who use data on credit and debit card transactions to show that consumer spending started to fall before shelter-in-place orders were made, particularly in areas with higher Covid infection rates, and that there was no big jump in spending on reopening. This again suggests that much of the reduction in economic activity caused by the pandemic was the result of people deciding for themselves not to engage in social consumption rather than being prevented from doing so because of lockdowns. It is therefore unlikely that such consumption would recover if restrictions were removed and infection rates increased.

Fig. 2: Year-on-year growth in consumer discretionary spending categories (from [Hacioglu et al.](#))



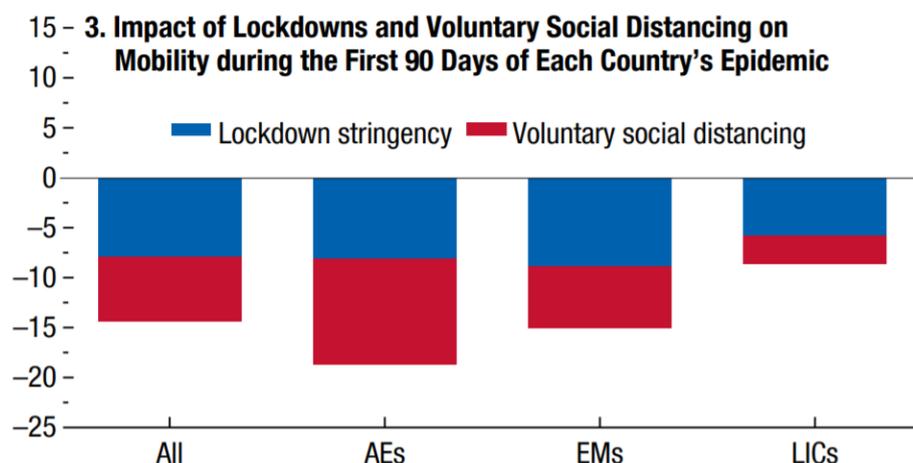
<sup>1</sup> Coibion et al. ascribe most of the reduction in spending to lockdowns but, as Goolsbee and Syverson show, it is more likely that a more general concern about Covid-19 would have led to reduced consumer spending whether or not lockdown orders had been in place. Since they only have two observations per person, one in January and one in April (after lockdowns were imposed), they cannot distinguish between the impact of lockdowns and a fear of Covid that is not directly related to the situation in the immediate locality.

<sup>2</sup> By contrast, in Spain there was a sharp drop in consumption when lockdowns were introduced, and a sharp increase again when restrictions were lifted (see [Carvalho et al., 2020](#)). This may be because Spain entered lockdown earlier than the UK, restrictions were tighter and by the time they were lifted the number of new cases was very small so it is harder to separate the two effects.

## IMF: Voluntary social distancing accounted for the majority of the fall in mobility in advanced economies

Using Google mobility data across 128 countries, the [IMF](#) estimates the impact of both lockdowns and an increase in the number of Covid infections on the number of people visiting locations other than their own homes including retail venues, parks and public transport hubs. They find that the majority of the reduction in mobility seen in advanced economies ('AEs' in the chart below) can be explained by the incidence of Covid rather than formal lockdowns. They also show that lockdowns have a smaller impact on mobility when cases are high as opposed to when cases are low; thus, if a relaxation of restrictions led to a high level of Covid infections, much of the reduction in mobility that restrictions would have brought about would occur in any event.

Fig. 3: Impact of voluntary versus policy social distancing on mobility (IMF)



The IMF also examine the impact of lockdowns and voluntary social distancing on job postings on the website "indeed" in 22 countries. They find that job postings in the most heavily affected sectors (hospitality, personal care and food) started to fall before lockdowns were announced, mirroring the findings of Aum et al. from Korea. This again suggests that voluntary social distancing was an important factor in reducing demand in these areas and that likewise a loosening of restrictions would not lead to a full recovery in demand.

## Aum et al.: without lockdowns, higher infections in an area lead to higher job losses in Korea

Unlike most Western countries, South Korea did not implement a lockdown in response to Covid-19 and was able to contain the virus with testing and contact tracing. Nevertheless, there was an outbreak in one province that was linked to a superspreading event at a religious service. [Aum et al.](#) show that a one per thousand increase in the infection rate led to a 2-3 percentage point decline in employment in that region relative to elsewhere in South Korea, driven by falls in employment in accommodation and food services, education, real estate and transportation industries (the same industries that have seen the biggest drops in employment in the West). This suggests that even with a small number of infections in an area, people cut back on certain areas of consumption by themselves. This suggests that even without restrictions, fear of the virus could weigh on the economy until either the virus is well under control, or vaccines or effective treatments are widely available

## Conclusions

These studies all suggest that during the early months of the pandemic, people's fear of the virus would have had a significant negative impact on economic activity even in the absence of any restrictions. They imply that we should not assume that relaxing social distancing requirements would lead to a return to normal activity while the virus is prevalent, since more risky social consumption

accounts for around one third of total consumption. A full economic recovery is therefore tied to ensuring people feel confident to resume social activity.

These conclusions raise two further important possibilities that we can only speculate on.

- First, we do not know how the fear factor responds as the prevalence of the virus changes. However, it would be reasonable to expect that the very high case numbers that would result from lifting the current restrictions might have a stronger negative economic impact than what we saw in the spring. SPI-M [projections](#) from late October suggested that without further intervention we could have seen peak daily deaths at double their rate in the first wave, remaining above that peak for several months. It would be reasonable to anticipate stronger voluntary social distancing, and therefore economic damage, under such a scenario.
- Second, we do not know how the fear factor may change over time as people learn more about the virus, or as treatments and vaccines become available. For example, once the most vulnerable groups are vaccinated, to what extent will a largely unvaccinated workforce resume normal activities?

### Further reading

- Speeches by Bank of England MPC members [Silvana Tenreyro](#) and [Gertjan Vlieghe](#), including Bank analysis on the relationship between ‘voluntary’ and ‘mandatory’ social distancing, and its economic consequences.
- Royal Society [DELVE report](#) summarising the evidence on voluntary social distancing – see in particular Section 2 of the report.
- [Summary](#) of a Centre for Macroeconomics survey of economists, which concludes that “the majority of the panel assessed that lockdowns have caused limited economic damage *beyond what the pandemic itself would have caused unabated*”
- Does the covid vaccine mean the government can ease measures soon? TBI [analysis blog](#)
- A [cross-country analysis](#) of interventions and health outcomes, which suggests that “controlling the virus is vital to mitigating GDP loss”.

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