

Feature article

The economic cost of coronavirus lockdowns

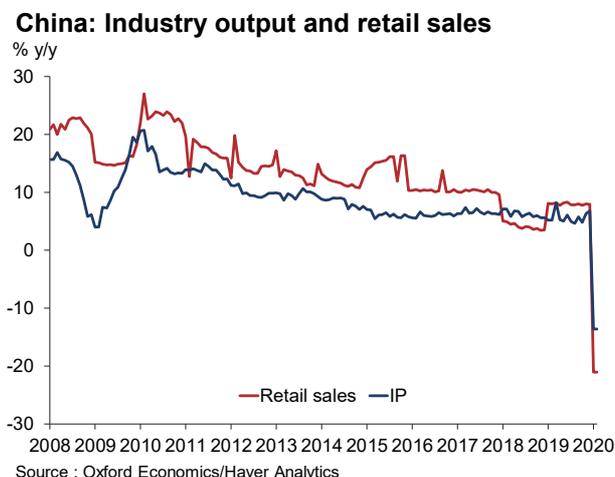
Economist

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- Widespread lockdowns and social distancing in economies affected by the coronavirus outbreak are set to cause a massive negative short-term impact on consumer spending and GDP.
- A large chunk of consumer spending is discretionary and so is very sensitive to being postponed or lost completely due to quarantines and social distancing.
- The early evidence from China supports the idea that up-front effects will be large, with retail sales down 20% y/y in January-February and industrial output over 13% lower, thanks to widespread factory closures.
- We estimate that a three-week lockdown affecting 50%-90% of a population would cut consumption in the three-month period featuring such a lockdown by 5%-8%, a six-week lockdown by 9%-16%, and a 12-week lockdown would slash it by 18%-32%.
- Full-year effects depend on how quickly postponed consumption revives as outbreaks come under control. But even quick recoveries imply big full-year losses: An initial 18% slump in consumption would still imply a full-year loss of 9%, even if spending recovered to pre-pandemic levels in four quarters. If recovery took eight quarters, the full-year loss would be an enormous 14%.

With a number of major industrial economies now instituting social distancing measures and/or lockdowns, large-scale near-term declines in economic activity are on the way, and a global recession is now our baseline. The early empirical evidence from China points the way, with a 13% y/y fall in industrial output and a 20% y/y fall in retail sales in January-February (Figure 1).

Figure 1: Early evidence from China shows a very large impact from the lockdown



China's coronavirus lockdown had massive effects on output. In January-February, industrial output was down 13% y/y and retail sales over 20% lower. We now expect Q1 GDP to show a contraction of 5% y/y.

Evidence from sensitive sectors in the advanced economies (e.g., restaurants and airlines) also points to a massive collapse in demand. And if we look at the likely effects of lockdowns and social distancing on consumer spending, we can see the overall economic impact will be very large.

About 40% of consumer spending is vulnerable to closures of businesses such as restaurants, hotels, and cinemas/theatres – or just to people avoiding crowds. A large chunk of this discretionary spending will be postponed, and some of it will be lost permanently.

Adapting the framework in Keogh-Brown et al., we can get a sense of how big the effects might be.¹ We adapt their assumptions about the share of spending in each category likely to be postponed or lost (**Figure 4**) and then flex a number of other assumptions, including the duration of lockdowns, the pattern of recovery after outbreaks come under control, and (crucially) the consumer shock factor, i.e. the share of consumers whose behaviour changes. The stronger the lockdown, the higher the latter will be.

Even relatively short-lasting lockdowns produce quite large effects. A three-week lockdown affecting 50%-90% of a population would cut consumer spending in the three-month period featuring such a lockdown by 5%-8%, a six-week lockdown would lower it by 9%-16%, and a 12-week lockdown would slash it by 18%-32% (**Figure 2**). With consumption typically 70% or so of GDP in advanced economies, GDP impacts would also be very large.

Full-year effects depend both on the length of lockdowns and on how quickly postponed consumption recovers after restrictions ease. Most models, and the evidence from past outbreaks (e.g. SARS) suggest much of the postponed consumption reappears quickly, i.e. in the quarter after outbreaks are contained. But even fairly quick recoveries can still imply big full-year losses: In some stylised scenarios, an initial 18% slump in consumption still implies a full-year loss of 9%, even if spending recovers to pre-pandemic levels in four quarters. If the recovery takes eight quarters, the full-year loss is an enormous 14% (**Figure 3**).

These stylised scenarios underline the scale of the challenge now facing policymakers – the more so as they abstract from second-round effects on spending caused by layoffs and business failures. Action taken by governments to backstop consumer incomes and tide over businesses will prove essential.

Figure 2: Wide range of short-term effects depending on duration and breadth of impact

Effect on consumption of pandemic over three month horizon %					
Duration (wks)	Consumer shock factor, % *				
	10	30	50	70	90
3	-1	-3	-5	-6	-8
6	-2	-6	-9	-13	-16
12	-4	-11	-18	-25	-32

Source: Oxford Economics

* Share of consumers who reduce discretionary spending

All figures relative to baseline

Figure 3: Pace of recovery also crucial in determining full-year effects

Year 1 impact on consumption of one-quarter pandemic, %					
Recovery**	Size of initial consumption slump, %*				
	-4	-11	-18	-25	-32
t+4	-2	-6	-9	-13	-17
t+6	-2	-7	-11	-16	-20
t+8	-3	-8	-14	-19	-24

Source: Oxford Economics

* In initial quarter, see Figure 3 line 3

** Quarter after initial output slump in which postponed spending reaches pre-pandemic quarterly average.

Scenarios assume 60%, 45% and 30% of postponed consumption reappears in first quarter after lockdown ends, the rest gradually after by t+4,t+6,t+8

All figures relative to baseline

Figure 4: Assumptions on impacts on different elements of consumer spending

Consumer items	Loss rate			Share of Consumption
	Total	Temporary	Permanent	
Food, drink and tobacco	0%	0%	0%	12.5
Housing, heating	0%	0%	0%	20
Other	0%	0%	0%	16
Clothing & Footwear	50%	50%	0%	5.8
Goods and services	80%	80%	0%	5.7
Restaurant/hotel	100%	50%	50%	13.1
Transport	66%	33%	33%	14.6
Recreation/Culture	60%	30%	30%	12.3

Source: Based on Keogh-Brown et al.

References

ⁱ Keogh-Brown et al (2009). 'The possible macroeconomic effect on the UK of an influenza pandemic'. University of Oxford Discussion Paper Series, May 2009.
https://www.economics.ox.ac.uk/materials/working_papers/paper431.pdf