

Free exchange | The ravages of time

Throughout history, pandemics have had profound economic effects



PANDEMICS ARE the inevitable attendants of economic progress. Interconnected trade networks and teeming cities have made societies both richer and more vulnerable, from the empires of antiquity to the integrated global economy of the present. The effects of covid-19 will be very different from those of past pathogens, which struck populations far poorer than people today, and with less knowledge of things like viruses and bacteria. The toll should be on a different scale than that exacted by the Black Death or Spanish flu. Even so, the ravages of the past offer some guide as to how the global economy may change as a result of the coronavirus.

Though the human costs of pandemics are dreadful, the long-run economic effects are not always so. The Black Death carried off an astounding one-third to two-thirds of the population of Europe, leaving lasting scars. But in the wake of the plague there was far more arable acreage than workers to farm it. The sudden scarcity of workers raised labourers' bargaining power relative to landlords and contributed to the breakdown of the feudal economy.

It seems also to have ushered parts of north-west Europe onto a more promising growth path. Real incomes of European workers rose sharply following the pandemic, which struck the continent from 1347 to 1351. In pre-industrial times, higher incomes usually enabled faster population growth, which eventually squeezed incomes back to subsistence levels (as observed by Thomas Malthus). But in parts of Europe, Malthusian rules did not reassert themselves after the pandemic receded. Nico Voigtländer, of the University of California, Los Angeles, and Hans-Joachim Voth, now of the University of Zurich, argue that the high incomes induced by plague led to more spending on manufactured goods produced in cities, and thus to higher rates of urbanisation. The plague effectively shoved parts of Europe from a low-wage, less urbanised equilibrium on a path more congenial to the development of a commercial, and then an industrial, economy.

Something similar occurred in the aftermath of the Spanish flu, which killed between 20m and 100m people from 1918 to 1920. The industrial economies of the early 20th century were no longer bound by Malthusian constraints. Even so, reckon Elizabeth Brainerd, now at Brandeis University, and Mark Siegler, of California State University, American states harder hit by the disease grew

faster in its aftermath. After controlling for a range of economic and demographic factors, they find that one additional death per thousand people was associated with an increase in average annual growth of real income per person over the next decade of at least 0.15 percentage points. Though the toll of covid-19 is likely to be too low to boost real wages, it may force firms to embrace new technologies in order to operate while warehouses and offices are empty, with lasting effects on growth and productivity.

More often, though, a pandemic's economic consequences are unambiguously negative. Trade links which spread a pathogen can themselves be undone by its effects. During the Roman Empire, a high degree of specialisation and trade lifted incomes to levels that would not be reached again for more than a millennium. Alas, the same links facilitated the spread of disease. The Roman economy was dealt a blow in the late second century AD, when an outbreak of what is thought to have been smallpox ravaged the empire. A century later, the Plague of Cyprian, which may have been a haemorrhagic fever, emptied many Roman cities and coincided with a sharp and permanent decline in economic activity, as measured by numbers of shipwrecks (a proxy for trade volumes) and levels of lead pollution (generated by mining activity). Reduced trade fed a cycle of falling incomes and weakened state capacity from which the western empire never recovered.

More recently, trade may well have tumbled as a result of Spanish flu, had the first world war not already brought a curtain down on the industrialised world's first great era of globalisation. Covid-19 also strikes at what may be the tail end of a long period of rapid global integration, which is likewise threatened by great-power competition. The circumstances are not identical, and trade is unlikely to suffer as badly as it did in the 1910s. Still, it would not be surprising if historians identify the pandemic as one of several consequences of globalisation that eventually precipitated a new era in global trade.

Just as pandemics have a way of demarcating historical eras, they can also pinpoint shifts in the fortunes of some places relative to others. The Black Death lifted real incomes across Europe. But the fortunes of Europeans subsequently diverged, and disease again played a role. Plague returned to the continent in the 17th century in several deadly waves. The effects of these outbreaks varied greatly across Europe, argues Guido Alfani, of Bocconi University in Milan. Though at most a tenth of the population of England and Wales was lost to plague, for example, more than 40% of Italians may have died from the disease over the course of the century. While Italy's population stagnated and rates of urbanisation tumbled, north-west Europe continued to benefit from growth and urbanisation despite the pandemic. The fiscal capacity of Italian states suffered badly, as did the textile industries of northern Italy, and northern and southern Europe embarked on quite different economic trajectories.

Disease is not destiny

In the battle against covid-19, countries' fates are in their own hands to a far greater degree than in the pre-industrial past. Governments know much more about how epidemics can be managed. Different experiences with the disease are as much an indicator of underlying state capacity as a cause of future economic divergence. Still, history reveals how pandemics nudge societies listing in one direction or another in a decisive and consequential direction. We cannot know what long-run effects covid-19 may have, but we can feel reasonably sure there will be some.

~ quite different ~

打击, 流行 H1N1

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