

**Economic consequences of the Black Death**  
**Sheilagh Ogilvie, University of Cambridge**  
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**Note:** Adolf Ceska asked me to write 1-3 paragraphs on the economic consequences of the Black Death in the context of the current Covid-19 pandemic. His question was a big one and I couldn't really cover it in a few paragraphs; even writing an entire book wouldn't be enough. Here are some rough notes, presented with a 'health warning' – they only skim the surface and much more research needs to be done.

**Some similarities between Black Death and Covid-19:**

- animal to human transmission (bubonic plague by rats and fleas, Covid-19 probably by bats and/or pangolins)
- spread was facilitated by migration and trade (Mongol Empire and Italian merchants on Silk Road for Black Death, ski tourists and migrant workers for Covid-19)
- led to some official barriers to human movement (e.g. quarantine regulations in the rich Italian city-states during the Black Death, border closures and internal lockdowns in many countries during Covid-19)
- triggered conspiracy theories, scapegoating, discrimination, and persecution (e.g. Jews and foreigners for Black Death, Asians and homosexuals for Covid-19)
- generated superstitious beliefs about causes of the pandemic (toad spit or the position of the planets for the Black Death, 5G mobile phone networks or global warming for Covid-19)
- desperate people resorted to bogus treatments (rubbing body with chopped pigeon for Black Death, drinking cow urine for Covid-19)

**But also many differences:**

- Black Death (bubonic plague) was caused by a bacterium, Covid-19 by a virus
- Black Death mortality rate much higher (80% of victims died) than Covid-19 (0.8-3.5% of victims die as far as we know)
- Black Death killed c. 50% of the total European population so it had a very large and direct effect on labour supply; Covid-19 is killing a not-yet-measured but clearly very much lower percentage of the total population, so the direct effects on labour supply are smaller (although indirect effects on labour supply from policies pausing non-essential production are higher)
- Black Death mostly didn't spread person-to-person (only rare pneumonic version did, much more common bubonic version was spread via flea bites)
- Black Death took place in a primarily agricultural economy, and was also worse in the countryside than in the city because vectors were rats, so most of the economic effects were on the agricultural sector; Covid-19 takes place in economies where industry and services

are far more important (and involve a lot more human contact and concentration inside buildings), and is also worse in cities than the countryside because vectors are humans

- Black Death took place in an era when transportation costs were high, so it was transmitted more slowly than Covid-19; restricting mobility had lower economic costs in 1350 than in 2020
- Black Death took place at a time when medicine was pre-scientific (so there were even more bogus treatments than with Covid-19) and there was no hope of a vaccine or treatment (or even knowledge that they existed)
- Black Death took place in societies whose welfare systems were much less developed, so there were many fewer institutional mechanisms for helping those affected by a big epidemiological shock (although medieval societies with community and/or church welfare provision did a bit better than ones without); in contrast, Covid-19 hits most high- and medium-income societies with welfare systems that can help victims – it would benefit the economy (as well as being morally right in human terms) if they did so
- epidemic disease is one situation in which public action can make a big difference because of the spillover effects of individual decisions on everyone in society – Black Death hit societies in which governments had very low capacities, in contrast to Covid-19 which is hitting societies which mostly have governments with more revenue, information, expert advice, and executive power, giving them the possibility of taking action to reduce the spread of disease, relieve the victims, and maintain the long-term viability of the economy

### **Economic effects of Black Death:**

- three major economic effects of Black Death:
  1. reduce supply of labour relative to land, raising wages and lowering land-rents;
  2. create incentives to shift from arable agriculture (growing crops) to pastoral agriculture (raising animals)
  3. improve women's wages relative to men's
- let's look at each of these in turn

#### **1. Reduction in supply of labour relative to land:**

- it's sometimes argued that fall in labour supply was good for the economy because it made wages rise and – in some accounts – even led to the disappearance of serfdom
- this is based on the idea that where workers and landlords bargained freely, owners of labour (small peasants, day-labourers) could demand higher wages, employers (mostly landlords, but also big peasants) had to pay higher wages or offer better conditions (e.g. abolition of forced labour services owed by serfs to landlords)
- also the fall in land-rents and the many empty farms meant that peasants had 'exit options' because they could find farms of their own so they could threaten to emigrate if their own landlord didn't offer higher wages or better conditions

- however, whether the fall in labour supply and increase in land supply actually had this effect in practice depended on the starting conditions – i.e. the way each particular society was organized
- there were several possible outcomes, with 3 major ones being:
  1. in England, peasants and landlords bargained more or less freely, landlords did offer higher wages and abolish forced labour services, and serfdom did decline after the Black Death – though even in England, the ruler issued laws trying to prevent workers from demanding higher wages (fortunately these laws proved hard to enforce)
  2. in many parts of central and eastern Europe, the landlords used force (and got support from rulers) to prevent peasants from emigrating and to make them do more forced labour services (since in a situation of labour scarcity, labour is more valuable to the landlord, so it gives him a stronger incentive to coerce his peasants if he is able to do so)
  3. in societies that were already very sparsely populated (Ireland, Spain, Egypt), the plague killed so many people that the whole agricultural system broke down (e.g. in Egypt rural depopulation caused the irrigation system to collapse), and not even peasants could benefit despite their labour being in high demand
- the basic point is that the Black Death, by reducing labour supply, changed the prices facing *everyone* in the economy
- the power relations of that society decided whether the peasants or the landlords benefited more
- the initial level of population decided whether the whole agricultural infrastructure could survive at all

## **2. Shift from arable to pastoral agriculture:**

- this happened because using land for raising animals required only about 1/5 of the human labour required to use the same amount of land for arable cultivation – since labour was scarce, people shifted towards producing things that used less labour
- it's sometimes argued this favoured landlords (because they had more pasture than peasants)
- again, what actually happened depended on the existing organization of society and the institutions governing access to pastoral land or the permission to convert it from crop-growing to animal-raising
- in England, both landlords and peasants moved into pastoral production, but peasants did so more than landlords, because English landlords couldn't force peasants to work on their land, so instead they leased it out to peasants for pastoral uses; also sheep and cows had higher survival rates in peasant herds because of better monitoring of disease and grazing by peasants than by the unmotivated managers employed by big landlords
- however, there were many parts of Europe where landlords had much more coercive power so they could legally prevent peasants from buying or leasing pasture, confiscate the existing peasant pastures, or force peasants to work on landlord pastoral farms; where that was the case, the shift to pastoral favoured landlords

### **3. Improving women's wages:**

- a further effect of the shift to pastoral was to increase women's labour productivity relative to men's – this was because tending animals required less upper-body strength than field cultivation (e.g. ploughing), so women were more productive relative to men, their wages increased, and more females moved into the labour market
- it is sometimes argued these higher wages caused women to marry less universally and later in life in order to stay in the labour market, leading marriage and fertility rates to fall permanently – some even argue that the Black Death had the beneficial effect of freeing human societies from the Malthusian tendency towards over-population
- however, higher pastoral earnings also made peasant women richer, so they could afford to marry more universally and at lower ages, and earn money either doing pastoral production as peasant housewives or hiring themselves out as pastoral labourers (we know married women did work in the market in the medieval period)
- so there was an income effect making people marry more and a substitution effect making women marry less – we don't know which predominated
- the only thing we can conclude is that Black Death, by causing shift from arable to pastoral agriculture, raised women's wages relative to men's
- we can't conclude that it caused women to avoid or delay marriage, and thus freed society from Malthusian population pressures

### **General conclusions:**

- there are no universal effects of pandemics – at least in the case of the Black Death, the economic effects of the disease shock varied across societies
- this was because the response to the shock depended strongly on the existing organization of society – the power of rulers, peasants, landlords, communities, the church, and many more social institutions
- response to pandemic also depended on how labour markets worked and what influence powerful groups had on them – could workers bargain freely with employers or did the ruler support employers in coercing workers? could women actually demand higher wages, or did the authorities try to prevent them?
- it depended on how well other markets worked – e.g. for land, food, medical care
- it depended on welfare provision (by communities, the church, and individual charity), which could mitigate both the human and the economic harm of epidemics
- it depended on the effectiveness of the political authorities ('state capacity'), what rulers' incentives were to use that capacity, and whether they got good advice (or listened to it)
- it depended on the availability of good scientific and technical advice (from medics, biologists, and even economists and historians) and the willingness of governments and individual citizens to listen to such advice