

A century before Coronavirus, the economic lessons from Spanish Flu

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Along with the medical and health fears over the current Coronavirus outbreak, there are also growing concerns about the economic impact of a pandemic on the world. In 1918 and 1919, at the end of World War I, the so-called 'Spanish Influenza' killed close to 18 million people. Yet the impact it had on the world economy at the time is poorly understood. Mediapart's Romaric Godin examines what lessons the deadly Spanish flu outbreak might hold for us today.

On October 11th 1918 the city morgues in Philadelphia were overflowing. The day before 759 people had died from the Spanish Influenza or Spanish Flu which had been ravaging the city and other parts of the United States for more than a month. Bodies were piled up in the corridors and the city had to make use of improvised communal graves to bury the unfortunate victims.

These medieval images, which recall those of the Black Death that struck Europe from 1348 to 1349, highlight the frailty of human organisations when faced with the most severe outbreaks of disease.

Amid fears now of a new pandemic, of the Covid-19 virus, and at a time when there is a great deal of speculation about its likely economic impact, it is instructive to look back at that episode from a century ago to see if there are any lessons to be learned.

There are, from the outset, problems with this approach. Going by newspaper headlines the main problem caused by a Coronavirus pandemic would be its impact on economic growth. France's minister for the economy and finance Bruno Le Maire has acknowledged that growth is likely to be hit by at least 0.1 of gross domestic product (GDP) compared with his previous forecasts.

Economic models are being deployed to come up with estimates of the likely impact. But these models are working in a vacuum as it is impossible to factor in an illness whose direct and psychological effects are still uncertain and which might evolve. The task is made harder by the fact that the only modern reference point for such a pandemic is the 1918-1919 Spanish Flu outbreak about which little has appeared in economic literature.



A sign from October 1918 at the Navy Yard in Philadelphia warning people not to spit. © DR

There are few studies about the economic consequences of that pandemic, and those that do exist are generally quite localised. In general there has been academic indifference towards the issue. In economic history texts dealing with that period Spanish Flu is treated, at best, like a passing phenomenon cited just for the sake of completeness. At worst it is ignored.

Professor Adam Tooze's *The Deluge: The Great War, America and the Remaking of the Global Order, 1916-1931* [1], deals exactly with this period after World War I, on the economic realignment and the construction of the new world order that it led to. The academic details the economic disorder that followed the war and its lasting effects. But he says nothing at all about the Spanish Flu.

On the face of it, this indifference to the economic effects of that outbreak seems curious. The Spanish Flu, which emerged - probably in China - in the spring of 1918 and then spread across the planet in three waves, was extremely deadly, in particular in the autumn of 1918 and to a lesser extent the spring of 1919. It bears the name 'Spanish' because Spain, which was not involved in the war and was at peace, was where the first official cases were noticed and the name stuck.

Estimates vary as to how many people the outbreak killed. The lowest and most recent, which was published in 2018 [2], estimates that the flu killed 17.8 million people out of a total global population estimated at 1.8 billion. In other words it killed close to 1% of the world population. But studies in 2002 came up with estimates of a death toll that ranges from 50 million to 100 million [3].

Calculations of life expectancy certainly show a real falling off in 1919, in particular in countries that were neutral in or spared by the war. So on one view the pandemic was almost as deadly over two years as WWI was over more than four years, in which around 20 million people perished. So why is it regarded as an anecdotal detail in economic history?

This indifference to the flu's impact only appears to be a paradox, however. For the reality is that at the time that the pandemic hit hardest, in the autumn of 1918, the world economy was already in complete disarray.

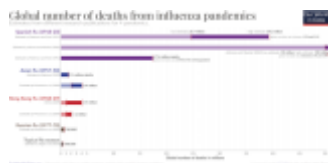
The Armistice to end the war was signed on November 11th 1918 but ever since the previous month the fate of the empires involved in the war had been clear. War-time Germany's economy had no more outlets left. Its allies, the Ottoman and Austro-Hungarian empires, were falling apart. Troops from the Triple Entente - Russia, France and Britain - had invaded the Balkans and the Middle East, creating new jurisdictions there which immediately cut commercial and economic ties with their former Austrian, Hungarian and Turkish trading partners.

At the same time Russia, which had been one of the main 'emerging' countries before the war, and which had been cut off from its wealthier territories after the Treaty of Brest-Litovsk in March 1918 [4], was plunged into a civil war between the 'Whites' and the 'Reds'.

Finally, all this took place in a global economy which had been weakened by a long war, a conflict which had led to a reorganisation of production and consumption, and which now had to deal with the return of peace. At the same time class conflicts emerged which had a major impact in some societies.

In other words, when the pandemic arrived the economic situation was already very complex. That is what makes it hard when trying to evaluate the direct economic effects of the outbreak. According to figures from Project Maddison [5] - which continues economist Angus Maddison's aim to calculate GDPs from history - the GDP per head in Western Europe fell by 3.38% in 1918 and by 5.86% in 1919 before growing by 4.01% in 1920. So over two years GDP per head plummeted by 7.78%.

No study has been able to calculate what part the flu pandemic played in this contraction, as opposed to the problems caused by the transition from wartime to peace, by social movements and the disruption of trade.



A graphic detailing the number of deaths from various flu epidemics. © Max Roser/ Our world in data

An additional problem is the fact that data on the issue is scarce and what does exist is based on sparse and sometimes doubtful information. Trying to isolate the effect of the pandemic in these circumstances is very complex. Yet the 'shock to demand' and the 'shock to supplies' that we fear today also existed during the Spanish Flu episode.

Unlike Covid-19, it seems that the Spanish Flu killed in particular otherwise healthy adults with strong immune systems. So it directly hit the available labour force as well as individual consumers, affecting both the provision of services and production of goods and their consumption.

In the countries at the centre of the fighting, such as France, Belgium, Italy and Germany, wartime death and destruction had already provoked a double shock to the economy. So the losses caused by the flu could have been passed by unnoticed or been looked upon as 'normal'. But that is not the case in those countries which were not directly and massively hit by the conflict such as the United States.

In Philadelphia [6] a total of 150,000 people became ill out of a population of 2 million, in other words 7.5% of the population, and 0.75% of the city's residents died, and it had a brutal impact on the economy. Some of the events then remind us of the panic we see today.

In a work published in November 2007 entitled '*Economic Effects of the 1918 Influenza Pandemic - Implications for a Modern-day Pandemic*' [7] Thomas Garrett, who was vice-president and economist at the Federal Reserve Bank of St. Louis, quotes several newspapers from the Midwest from October 1918. On October 19th that year traders in Little Rock, Arkansas, registered a 70% fall in their turnover. Their daily losses were put at 10,000 dollars, the equivalent of 200,000 dollars in 2006 when Garret was writing.

At Memphis in Tennessee half of all telephone operators were off work on October 5th and more than a quarter of public transport employees. On October 18th there were reports that production in Tennessee coal mines had fallen by 50% and there was talk of their possible closure. But Thomas Garrett's work does not go much further than these observations.

Furthermore, the growth figures from the Maddison Project do not show a recession linked to Spanish Flu in countries such as the United States. The overall GDP per head of the British dominions - Australia, Canada and New Zealand - and the United States shows a growth of 6.1% in 1918. That makes sense because at the time their industries were at full tilt trying to ensure an Allied victory.

But in 1919 the GDP per head there fell by just 0.1%. It was only in 1920 and 1921 that the crisis came, with falls in GDP per head in those areas of 2.5% and 4.3%. The US economic crisis of 1920 to

1921 is often interpreted as the result of the reorganisation of the country's economy after the war.

But when you look at the 1918 and 1919 figures it is hard to see a direct, measurable and indisputable impact caused by the pandemic even though the US, Canada and Australia were very badly hit by the illness. The data suggests that the Spanish Flu did not directly cause a recession.

Possible comparisons

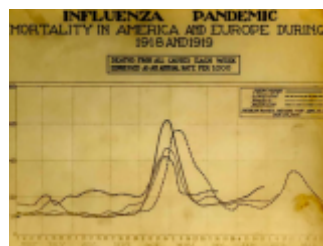
The only measurable effects are sometimes contradictory, as they are limited to just one region. In a 2013 study [8] three researchers, Martin Karlsson, Therese Nilsson and Stefan Pichler, sought to identify the consequences of the Spanish Flu on Sweden's "economic performance". Sweden is an interesting country to study in this respect because it was neutral in WWI. Its workforce was not affected by the fighting and some regions saw mortality rates much higher than others, because of the flu outbreak. This allows one to 'isolate' certain impacts of the outbreak.

Two conclusions are clear: capital revenue was heavily affected and with it the income of the wealthiest which, according to the authors' calculations, fell by 5% during the pandemic and by 6% afterwards.

The stock market panic that we have seen in recent days seems to confirm that this Coronavirus could have the same effect. Some in the US, such as Dean Baker [9] from the Center for Economic and Policy Research (CEPR), do not seem too troubled by this, while at the same time they criticise the inequalities of the US health system.

The Swedish study shows that at the same time as the wealthiest people's income was falling, the level of poverty in that country began to explode from 1920, mostly after the end of the epidemic. The researchers estimate that each death from Spanish Flu led to four new admissions to the "poorhouses" that then existed in Sweden to look after people no longer able to fend for themselves.

This could be explained by the fact that the victims' families suddenly found themselves without any means to live on, but also by poverty linked to the overall fall in revenue in society. In other words the two extremes in society, the wealthiest and the poorest, seem to have been affected.



The mortality rate in several Western cities during the Spanish Flu pandemic of 1918-1919. © DR

Meanwhile there is no answer to one big question: by killing some of the available workforce, did the flu outbreak push up wages in the long term? That was the conclusion of another study, carried out by Elizabeth Brainerd and Mark Siegler in 2006, which compared the changes in salaries in different US states and which showed that those states which had been hit hardest by the pandemic had seen a bigger increase in salaries than in those states which were spared.

To put it another way, the shock of the 1918 pandemic may have temporarily destroyed some jobs but the subsequent difficulty in finding staff might have led to salary rises and thus had a positive

impact on the economy. This did not however prevent the violent economic correction that took place in the United States in 1920 and 1921, nor the growth driven by debt and the financial markets that then took place until 1929.

But the Swedish study casts doubt on this conclusion, as it identifies no impact on work income from the pandemic. Its authors think the Spanish Flu led to a reorganisation of work in the country and a growth in the employment levels of women and children, which in turn led to a reduction in wages in some sectors and thus balanced out any positive effect on salaries.

Overall, as Thomas Garrett wrote: "Most of the evidence indicates that the economic effects of the 1918 influenza pandemic were short-term." There was especially a very negative impact on services and leisure. However the long-term impacts, mainly linked to the drop in available labour, are very unclear.

Should this reassure us about the likely impact of the Coronavirus outbreak? If a pandemic such as the Spanish Flu had a relatively minor impact on the world economy from 1918 to 1919, is it not likely that the Covid-19 virus – which is unlikely to be more devastating – will have even less of an economic effect?

That is certainly one possibility. Yes, we know that the Black Death of 1348 to 1349 and the plague of 1720 had very negative long-term economic effects. But the economic organisation of feudal society, in which those outbreaks took place, was very different from that of a capitalist economy. The mobility of labour and the diversification of the economy were very different.

There are also examples of devastating epidemics which did not ravage the economy, such as the cholera outbreak in 1831-1832 which left 18,000 Parisians dead in six months, plus the prime minister Casimir Perier, but which did not impede the economic recovery from the terrible crisis of 1827 – one of the first in capitalism – from taking hold in subsequent years.

Clearly all comparisons with the past are tricky. We do not yet know the real mortality rate of the Covid-19 virus as well as the profiles of who will be most affected. But, in favour of the view that it will just have a short term effect on the economy, it is worth noting that Covid-19 is a very different illness from Spanish Flu. At the moment its mortality rate is particularly high among older people and so is only partly affecting the working age population. The impact on production and service provision could thus be very different from Spanish Flu, though of course this Coronavirus might mutate and become more dangerous.

Current standards of hygiene and health are also of better quality than in 1918, especially given that in some countries at that time the war had already led to problems in the health system. That said, austerity measures have hit modern health services in many Western countries recently and the Coronavirus is affecting France as it suffers a hospital crisis, the result of under-investment and austerity over the last decade. This factor should not be under-estimated.

September 28th 1918, which accelerated the spread of Spanish Flu in the city. © DR
Finally, while the means of communication are more developed now than in 1918, it must not be forgotten that the Spanish Flu nonetheless spread across the planet, affecting even Pacific islands and Alaska. The real difference, as French economist Pierre-Cyrille Hautcœur wrote in *Le Monde*, was the veil of silence that accompanied the disease and took the public completely by surprise.

In Philadelphia, for example, a parade to promote Liberty Loans – government bonds issued to pay for the war effort – went ahead on September 28th 1918 even though there had already been cases of the Spanish Flu in the city. At least 200,000 people gathered for the procession, which accelerated

the spread of the disease in the population.

Few precautions were taken in Sweden either. Historian Hans Jacobsson has written that at Östersund, in the central province of Jämtland, the area worst hit by the pandemic: "The catastrophic spread of the Spanish flu in 1918 was in no small part down to the authorities' bewilderment and often clumsy reactions."

So far the authorities in Western countries seem to have adopted a very different approach, with more openness and more preventative measures. That has not stopped there being delays, mistakes and a lack of preparedness, as seen with the shortage of face masks in France, which could have very serious consequences.

Despite all this, there are factors that suggest the current outbreak could have a more severe impact on the world economy. In 1918-1919 the Spanish Flu might have been, given the circumstances, just a passing detail in economic terms. In a world economy that was already undergoing major change, and facing intense social struggles and a redistribution of trade routes and links, the halting of some business activity for a few weeks had few consequences over the long term.

In other words, and as horrible as it sounds, the economy at the time had more serious challenges to face than the pandemic. There were also some areas of significant growth: the development of the second industrial revolution – the internal combustion engine and electricity – had still not been entirely completed and the consumer society had not yet taken shape.

But the situation is not the same today. First of all, the structure of the economy is different. What are known in economics as industrial 'value chains' – made up of the activities needed to create a product from start to finish – are much more international and for reasons of profitability operate on a just-in-time basis. Some sectors, such as tourism, have become very important and these will be hit hard and doubtless for some time.

Moreover, the economy today is more based on services than on industry and agriculture as it was in 1918-1919. And as Thomas Garrett pointed out, it was this sector which was the most affected by the Spanish Flu. Unlike 1918, the financial industry today plays a predominant role in economic growth.

And the double shock caused to both supply and demand by the Coronavirus could destroy the narrative according to which future growth of the financial markets is based on a future acceleration of the financial industry. For the global economy today has few prospects, as its productivity inexorably slows. Current growth is based just on technological and financial bubbles which become weaker by the day.

It could just take one small push to bring this house of cards tumbling down. And the sole response from the authorities is the same as it was in 2008 and 2012: the use of monetary policy to stop speculative bubbles from bursting. It is a policy that has become largely ineffective.

That is indeed the paradox of our times: unlike 1918 there is no major economic shock today, but rather a slow and inexorable deceleration. This makes the economy much more sensitive to external shocks, like those of a pandemic and, via the financial markets, to the fears that accompany them.

What history has taught is that we must first of all worry about access to healthcare for the most fragile and, through that, care about inequalities. That will doubtless require more than monetary controls and a minister of the economy who is, as he puts it, "standing shoulder to shoulder with company bosses".

Romarc Godin

P.S.

- MEDIAPART. MARCH 8, 2020:
<https://www.mediapart.fr/en/journal/international/080320/century-coronavirus-economic-lessons-spainish-flu?onglet=full>

- English version by Michael Streeter.

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Footnotes

[1] https://en.wikipedia.org/wiki/Adam_Tooze

[2] <https://academic.oup.com/aje/article/187/12/2561/5092383>

[3] <https://www.jstor.org/stable/44446153?read-now=1&seq=1>

[4] https://en.wikipedia.org/wiki/Treaty_of_Brest-Litovsk

[5] <https://www.rug.nl/ggdc/historicaldevelopment/maddison/releases/maddison-project-database-2018>

[6] <https://www.bloomberg.com/opinion/articles/2020-03-03/coronavirus-history-lesson-learning-from-1918-s-flu-epidemic?sref=fo6OHuy7>

[7] https://www.stlouisfed.org/~media/files/pdfs/community-development/research-reports/pandemic_flu_report.pdf

[8] <https://www.sciencedirect.com/science/article/abs/pii/S0167629614000344>

[9] <https://cepr.net/coronavirus-the-stock-market-and-the-economy/>