Does the fall in the stock market risk amplifying the crisis?

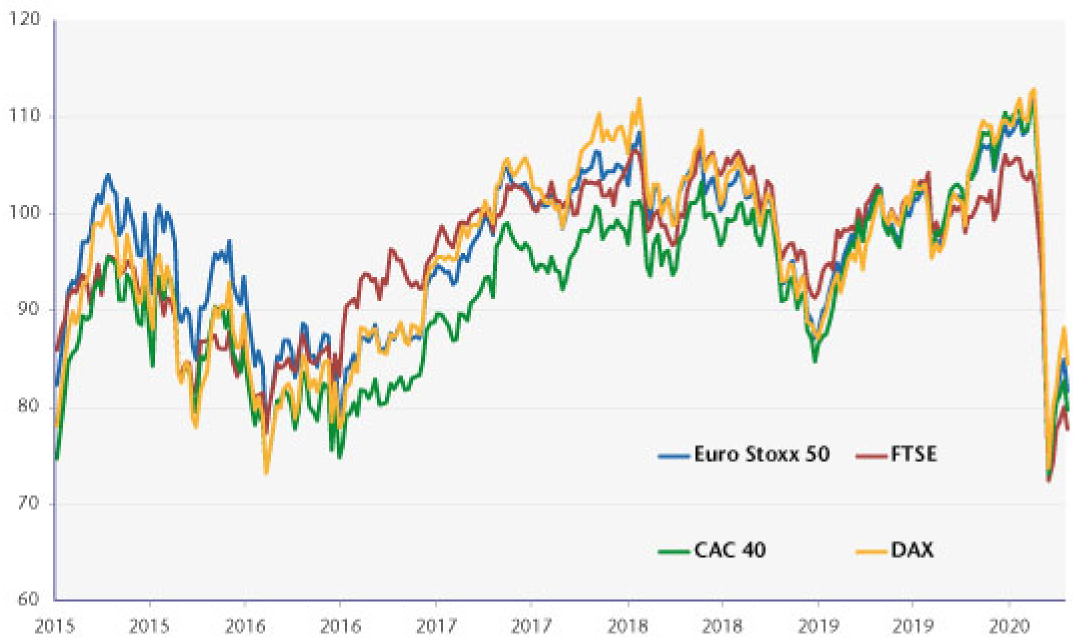
By Christophe Blot and Paul Hubert

The Covid-19 crisis will inevitably plunge the global economy into recession in 2020. The first available indicators – an increase in the unemployment rolls and in partial unemployment – already reveal an unprecedented collapse in activity. In France, the OFCE's assessment suggests a 32% cut in GDP during the lockdown. This fall is due mainly to stopping non-essential activities and to lower consumption. The shock could, however, be amplified by other factors (including rises in some sovereign rates, falling oil prices, and capital and foreign exchange movements) and in particular by the financial panic that has spread to the world's stock exchanges since the end of February.

Since 24 February 2020, the first precipitous one-day fall, the main stock indexes have begun a decline that accentuated markedly in the weeks of March 9 and 16, despite announcements from the Federal Reserve and then the European Central Bank (Figure 1). As of 25 April,

France’s CAC-40 index had
fallen by 28% (with a low of -38% in mid-March), -25% for the German index and nearly
-27% for the European Eurostoxx index. This stock market crash could revive
fears of a new financial crisis, only a few years after the subprime crisis. The
fall in the CAC-40 in the first few weeks was in fact steeper than that
observed in the months following the collapse of Lehman Brothers in September
2008 (Figure 2).

Figure 1. Changes in the main stock market indexes

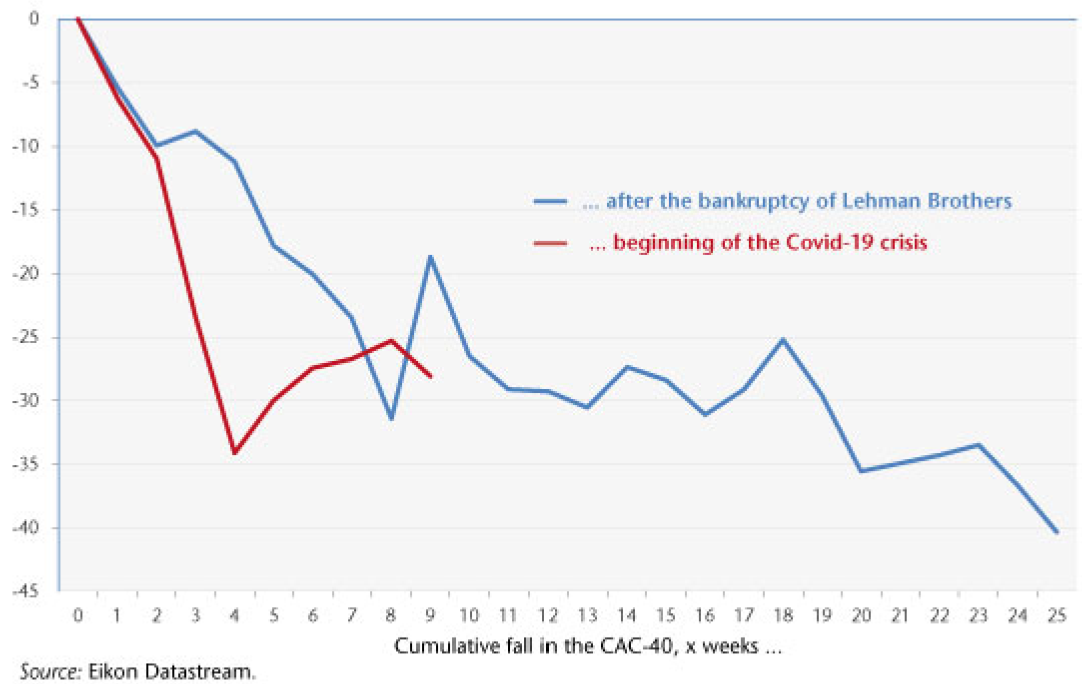


Source: Eikon Datastream. Base 100: average for the year 2019.

While the short-term impact
of the Covid-19 crisis could prove to be more severe than that of the 2008
financial crisis, the origin of the crisis is very different – hence the need
to reconsider the impact of the stock market panic. In the financial crisis,
the origin was in fact a banking crisis, fuelled by a specific segment of the

US real estate market, the subprime market. This financial crisis then caused a drop-off in demand and a recession through a variety of channels: higher risk premiums, credit rationing, financial and real estate wealth effects, uncertainty, and so on. While some of these elements can be found today, they are now being interpreted as the consequence of a health crisis. But if there is no doubt that this is at the outset a health and economic crisis, can it trigger a stock market crash?

Figure 2. Fall in France's CAC-40 index in the Covid-19 crisis compared with the post-Lehman Brothers collapse



Source: Eikon Datastream.

Another way of posing the question is to ask ourselves whether the current stock market fall is due entirely to the economic crisis. Share prices are in fact supposed to reflect future changes in a company's profits. Therefore, expectations of a recession, as demand – consumption and investment – and supply are constrained, must result in a reduction in turnover and future profits, and therefore a fall in share prices.

However, the financial shock could be magnified if the fall in stock prices is greater than that caused by the decline in corporate profits. This is a thorny issue, but it is possible to make an assessment of a possible over-adjustment of the stock market, and thus of a possible financial amplification of the crisis. The method we have used is to compare changes in profit expectations (by financial analysts) since the beginning of the Covid-19 crisis with the fall in equities. Focusing on CAC-40 companies, profit expectations for next year have been cut in the last three months by 13.4% [1]. This reduction should therefore be fully reflected in the change in the index. In fact, the fall there was much larger: -28%. This would result in an amplification of the financial shock by just under 15 percentage points.

This over-adjustment by the stock market can be explained by, among other things, the current prevailing uncertainty about the way lockdowns around the world will be eased, and thus about an economic recovery, as well as uncertainty about the oil shock that is unfolding concomitantly, with determinants that are both economic and geopolitical. This over-adjustment may therefore not be wholly irrational (with regard to the supposed efficiency of financial markets), but the fact remains that it has led to major variations in the financial assets of consumers and business.

Variations like these are not neutral for economic growth. On the consumer side, they contribute to what are called the wealth effects on consumption: additions to a household's assets give it a sense of wealth that drives it to increase its consumption [2]. This effect is all the greater in countries where household assets are in the main financialized. If a large portion of household wealth is made up of equities, then changes in share prices strongly influence this wealth effect. The portion of shares (or of investment funds) in financial assets is quite similar in France and the United States, respectively 27% and 29%. However, these assets account for a much larger share of the disposable income of American households: 156%, compared to 99.5% in France. As a result, French households are less exposed to changes in share prices. Empirical studies generally suggest a greater wealth effect in the United States than in France [3].

As for business, these changes in stock market valuations have an effect on investment decisions through collateral constraints. When a company takes on debt to finance an investment project, the bank demands assets as collateral. These assets can be either physical or financial. In the event of an increase in equity markets, a company's financial assets increase in value and allow it greater access to credit [4]. This mechanism is potentially important today. At a time when companies have very large cash requirements to cope with the brutal shutdown of the economy, the sharp decline in their financial assets is restricting their access to lines of credit. While the financial amplification factors are not reducible to the financial shock, the recent changes in the prices of these assets are nevertheless giving an initial indication of how the financial system is responding to the ongoing health and economic crises.

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[1] The data comes from Eikon Datastream, which for each company provides analysts' consensus on the earnings per share (EPS) for the coming year and the following year. We then calculated the weighted average using the weight of each CAC-40 company in the index of the change in these expectations over the past three months. The fact that a 13.4% decline in profit expectations for the next year will give rise to a 13.4% decline in the stock price is made on the assumption that profits beyond the next year are not taken into account, or, in other words, that their current net value is zero,

which is to say that investors' preference for the present is very strong today.

[2] More formally, we can speak of a propensity to consume that increases as wealth increases. Wealth effects can be distinguishable according to whether they are purely financial assets or also include property assets.

[3] See Antonin, Plane and Sampognaro (2017) for a summary of these estimates.

[4] See Ehrmann and Fratzscher (2004) and Chaney, Sraer and Thesmar (2012) for empirical assessments of this transmission channel via share prices or property prices, respectively.

The Covid-19 passport and the risk of voluntary infection

By Gregory Verdugo

Covid-19 has made it risky to have a job that cannot be done remotely and requires contact with the public. Given the danger of infection facing frontline workers, employers confront the risk of legal consequences in the event of insufficient protection. This new risk could lead to changes in the characteristics of the workers being hired, as the threat of lawsuits creates an incentive to discriminate by choosing workers who are least at risk for these positions. As long as the Covid-19 virus is in circulation, we could therefore witness the rise of a powerful new source of discrimination in the labour market based on the risk of serious infection. But according to some epidemiologists, the virus could be circulating and creating episodic outbreaks for 18 to 24 months [1], with the result that Covid-19 could leave a lasting imprint on the job market.

Which workers are least at risk? First, there are those with no apparent co-morbidities, which means that individuals who are obese may face even more pronounced discrimination on the labour market [2]. However, the main easily identifiable group at lower risk are the young, since the under-30s face a very low risk of developing a serious form of Covid-19 [3]. This situation is unprecedented – for the first time, we're experiencing a recession where young people are less affected than more senior employees!

But while the young are less at risk, there is one group of individuals for whom the risk could be even lower. Experience with other viruses suggests that individuals who have previously contracted Covid-19 gain at least temporary immunity from future infection [4]. Although such immunity remains uncertain and controversial [5], some employers may want to test their employees, especially those in at-risk positions, to rule out the danger of infection attributable to their professional activity.

Information on the state of an employee’s immunity could therefore be very valuable for an employer – so much so, in fact, that it could lead to the development of low-quality private tests and a risk that false immunity certificates could proliferate. To avoid these risks, many countries are considering creating immunity passports certifying that a worker has already contracted Covid-19 and is, at least in the short term, safe from the risk of infection [6]. Chile has announced that it is implementing such a policy, and it is under discussion in various European countries.

An immunity passport is expected to provide high wages in labour markets wracked by Covid-19, particularly in high-risk jobs, including those requiring close contact with infected people, such as in hospitals. In turn, in an economy in crisis, an immunity passport guaranteeing well-paid employment could generate high demand for voluntary infection among those in direst need.

This possibility of self-infection when immunity is socially valued or economically profitable is not merely a theoretical question. In an article published in 2019, historian Kathryn Olivarius of Stanford University showed that there are numerous historical precedents [7]. Being recognized as having immunity was in particular an essential condition for economic integration during the colonization of tropical zones, where infectious diseases were decimating the colonists. In the early 19th century, immigrants recently arriving in New Orleans were said to be “non-acclimated”, and sought to quickly suffer and survive yellow fever, which at that time had an estimated mortality rate of about 50%, which is well above that of Covid-19, currently estimated at between 0.3% and 1%. To integrate, you had to prove that you survived the infection and thus became “acclimated”. Only after becoming “acclimated”, with the risk of early death being ruled out, did it become possible to have access to the best jobs in the local labor market, to get married and to access credit from local banks.

If a Covid-19 immunity passport is developed, it will in a similar manner foster a dangerous temptation to become infected in order to gain access to jobs where the risk of infection is high but wages are also high. The temptation to self-infect would be even stronger in the case of Covid-19, the consequences of infection are usually benign. But voluntary infection could lead to risky behaviour:

one can imagine individuals trying to get infected, and in doing so spreading the disease around them, especially if they remain asymptomatic.

Alex Tabarok, a professor of economics at George Mason University, argues that the issue of immunity passports by the public authorities would also imply the need to regulate the demand for voluntary infection that this would give rise to. So the public authorities should offer the possibility of infection in moderate doses, in a medical setting and by ensuring medical follow-up during a period of quarantine following voluntary infection.[8]

The supervision of a voluntary infection motivated by the desire to obtain an immunity passport clearly poses ethical problems. First, it would be individuals in the most precarious situations, especially those most affected by the recession, who would volunteer. Furthermore, it is not certain that medical supervision reduces the risk of death or serious sequelae. Above all, voluntary infection contradicts the apparent policy goal today, which is to curb the epidemic as much as possible, as the possibility of achieving collective immunity seems distant. So such an approach is for the moment dangerous.

To be consistent with the goal of suppressing the epidemic, it therefore appears necessary to discard the policy of immunity passports, which give value to having been infected. As is set out in the French protocol for lifting the lockdown [9], it is also necessary to ensure that the private market does not fuel this demand and that companies don't create their own immunity passports or try to acquire information about immunity through other means. While a rule like this might seem paradoxical, the risk of self-infection can be eliminated only if a non-discrimination rule is imposed that prohibits employers from using or requesting the results of serological tests to employ workers in high-risk positions and that also bars employees from revealing their immunity status.

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