

# **Bankruptcy-Monitoring for Switzerland:**

## **Will the Corona Crisis Induce a Wave of Bankruptcies?**

**A Joint Project of Bisnode D&B and KOF Swiss Economic Institute of the ETH Zurich**

**Florian Eckert, Heiner Mikosch and Markus Stotz<sup>1</sup>**

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*We present unique company bankruptcy data for Switzerland and assess the current bankruptcy trend using the concept of excess mortality. The Corona Crisis is not causing a wave of bankruptcies for the time being, but it is still too early to give the all-clear.*

### ***Politicians and media worry about corporate bankruptcies***

The Corona Crisis hit the Swiss economy hard. Survey results show that corporate profits and demand expectations collapsed and uncertainty about future business prospects has risen sharply (e.g. KOF, 2020). These factors increase the risk of a rise in corporate bankruptcies. Accordingly, there is currently much debate in politics and the media about the emergence of a "bankruptcy wave". The president of economiesuisse, Heinz Karrer, made a very clear statement in this regard, stating that «Switzerland is facing a huge wave of bankruptcies and unemployment such as we have not seen since the Second World War» (Tagesanzeiger, 2020).

### ***Strong fluctuations make assessment difficult***

The number of corporate bankruptcies in Switzerland fluctuates very strongly and shows distinct seasonal patterns. In addition, the development of bankruptcies is influenced by trends and structural breaks. It is therefore not easy to assess the bankruptcy development at the current edge. For instance, are the 576 corporate bankruptcies in June 2020 a cause for concern? After all, this figure is significantly higher than the average number of bankruptcies in all June months of the past 20 years (456).

### ***Assessing firm bankruptcies with the excess mortality criterion***

We propose to assess the frequency of corporate bankruptcies over time using the concept of excess mortality. This concept is generally used to estimate the mortality rate in human populations (e.g. EuroMOMO, 2020). However, methodological adjustments are necessary to calculate the excess

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<sup>1</sup> Florian Eckert (eckert@kof.ethz.ch), Heiner Mikosch (mikosch@kof.ethz.ch) and Markus Stotz (markus.stotz@bisnode.com). Please cite this article as follows: Florian Eckert, Heiner Mikosch and Markus Stotz (2020): *Bankruptcy-Monitoring for Switzerland: Will the Corona Crisis Induce a Wave of Bankruptcies?*, Bisnode D&B and KOF Swiss Economic Institute, ETH Zurich (originally published on [www.oekonomenstimme.org](http://www.oekonomenstimme.org), August 10, 2020).

mortality of companies. In Eckert, Mikosch and Stotz (2020), we discuss these adjustments and describe the methods and models used in detail.

### ***Data for cantons and economic sectors***

Our empirical analysis is based on time series prepared by Bisnode D&B on the number of company bankruptcies recorded in the Swiss Official Gazette of Commerce (SOGC). The SOGC covers all bankruptcies in Switzerland, so the data set covers the entire population of bankruptcies.<sup>2</sup> For the present article we use time series with a monthly frequency for the whole of Switzerland, the seven major Swiss regions and various economic sectors from 2006 onwards. Eckert, Mikosch and Stotz (2020) also present bankruptcy series at the cantonal level and data on company formations.

We seasonally adjust the time series and then break them down into a medium-term trend and a cyclical component, which is, therefore, the difference between the seasonally adjusted number and the expected number of bankruptcies. In line with the above-mentioned literature on mortality in human populations, we refer to this difference as excess mortality.<sup>3</sup> We also calculate a range around the trend in which the number of bankruptcies lies with a certain probability (e.g. 90%). A significant excess mortality (or under-mortality) is present in a period when the seasonally adjusted number of bankruptcies is above the upper limit (or below the lower limit) of the fluctuation range.

### ***No wave of bankruptcies so far***

Figure 1 shows the number of corporate bankruptcies in Switzerland as a whole and in the major regions over time. The legal freeze ordered by the Federal Council (19 March to 4 April 2020) and the subsequent suspension of debt collection (until 19 April) resulted in a historically unprecedented slump in the number of bankruptcies in April. Between March and July 2020, bankruptcies were on average 21% lower than in the same period of the previous year. The slump was felt in all major regions, although to varying degrees. While bankruptcies were almost 50% lower in Ticino, they were only 10% lower in Central Switzerland. In June, the number of bankruptcies at the national level was slightly above trend and in July it was below trend again. At the cantonal level, only in the canton of Valais was the bankruptcy frequency well above trend in the past two months, although there was no significant excess mortality. In sum, there are currently no signs of a wave of bankruptcies in Switzerland.

One reason for the currently low number of company bankruptcies might be the COVID-19 credit program of the Swiss Confederation. Under this program, from 26 March to 31 July 2020, companies were able to obtain loans secured in whole or in part by the Confederation from private banks at

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<sup>2</sup> The bankruptcy of a company is sometimes recorded in the SOGC with a certain time lag. About half of the bankruptcies are published within 7 days of the opening of the bankruptcy proceedings, the vast majority within the first 4 weeks.

<sup>3</sup> For the purposes of this definition, excess mortality can also be negative (namely when the seasonally adjusted number of bankruptcies is lower than the trend). Negative excess mortality is also called under-mortality.

favourable conditions within a short period of time. The purpose of the loans is to cover the companies' running costs.<sup>4</sup>

*Figure 1: Number of corporate bankruptcies in Switzerland and its regions over time*



### ***Bankruptcies below trend in the hospitality, leisure and entertainment industries so far***

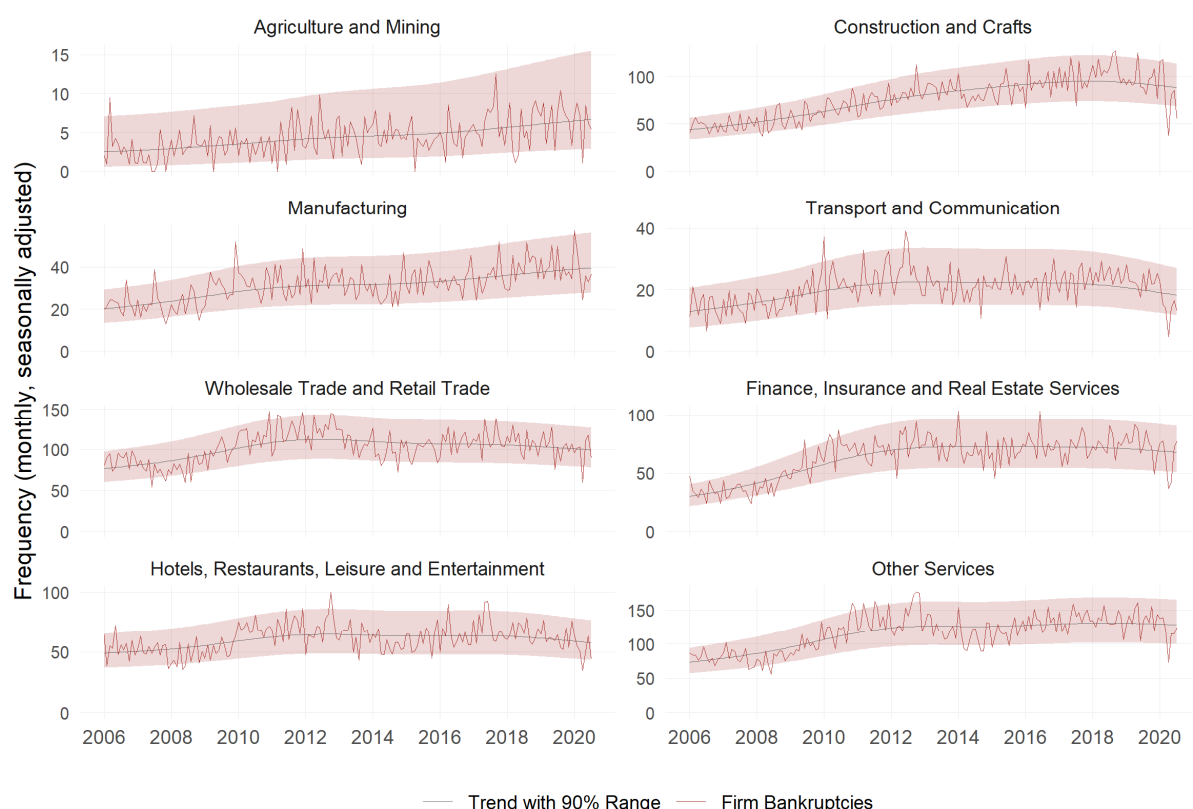
How are the bankruptcy figures developing in the various sectors of the Swiss economy? Chart 2 shows the number of corporate bankruptcies over time in various sectors of the economy, grouping together several small sectors. To date, no sector has shown a trend towards significant excess mortality; a significant under-mortality has been recorded much more frequently. In the transport and communications sector, bankruptcies between March and July were on average 43% lower than in the same period of the previous year, while in the construction sector they were still 32% lower. By contrast, the Corona Crisis was barely noticeable in agriculture and mining. In the wholesale and retail sectors, bankruptcies jumped up in May and June, but still did not make up for the sharp slump in April. Further, the July figure was again close to the trend, so that bankruptcies were still 7% lower than in the same period of the previous year. One argument against a sharp increase in bankruptcies in the coming months in the wholesale and retail sectors is that sales have returned to normal after the

<sup>4</sup> 100% guarantee and interest rate at 0% up to a maximum of CHF 500,000 or 10% of annual turnover. 85% guarantee and interest rate of 0.5% per annum on the guaranteed portion of the loan from CHF 500,000 up to a maximum of CHF 20 million or 10% of annual turnover. Term of 5 years or 7 years in cases of hardship. See <https://covid19.easygov.swiss>.

lockdown (see the indicators presented in Eckert and Mikosch, 2020). However, the situation will likely be different if Switzerland experiences a strong second wave of infections.

There are also no worrying developments so far in the hospitality industry (restaurants, hotels, etc.) or in the leisure and entertainment industry, which were hit particularly hard by the slump in sales during the Corona Crisis.

*Figure 2: Number of company bankruptcies in the economic sectors over time*



### ***Cumulative excess mortality as an additional assessment criterion for firm bankruptcies***

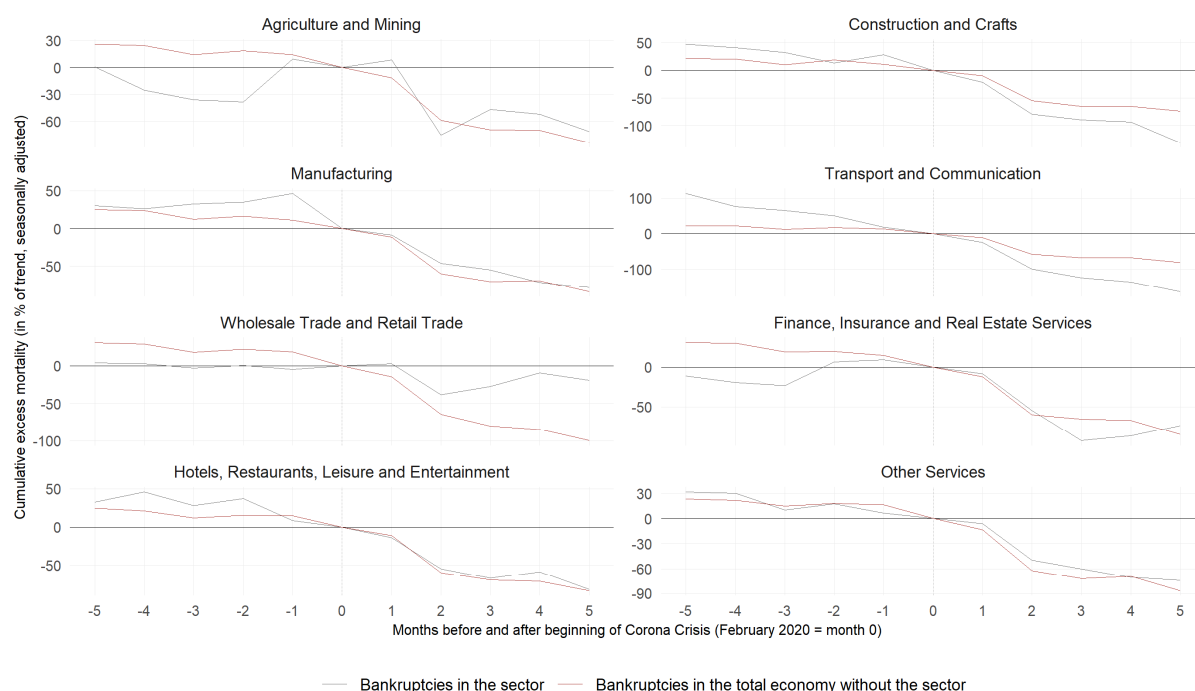
Although no economic sector tends currently towards significant excess mortality, the Corona Crisis has an uneven impact on the bankruptcy dynamics in the individual sectors, as can be seen from the analysis of cumulative excess bankruptcy frequencies. If the bankruptcies are above trend over several months, this drives the cumulative excess mortality upwards even if the (non-cumulative) excess mortality is never significant during this period. Thus, cumulative bankruptcy figures are a complementary assessment criterion in addition to excess mortality.

### ***Wholesale and retail trade more affected than other sectors***

As can be seen from Figure 3, the cumulative excess mortality in the wholesale and retail trade industries was below that of the Swiss economy as a whole (excluding wholesale and retail trade) in the months prior to the outbreak of the Corona Crisis, but it has been significantly higher since the

beginning of the crisis.<sup>5</sup> This is an indication that the Corona Crisis has so far had a much stronger impact on the incidence of bankruptcies in wholesale and retail trade than in the rest of the Swiss economy. Interestingly enough, the hospitality and leisure/entertainment industries have not been affected to a greater extent than the rest of the Swiss economy. This might also be due to the fact that companies in these industries frequently made use of the credit program.

*Figure 3: Direct comparison of corporate bankruptcies in economic sectors*



### ***Expectation of a sudden wave of bankruptcies contradicts past crisis experiences***

A look at the bankruptcies of companies during past crisis periods is helpful for assessing the current development of bankruptcies. Figure 4 shows the excess mortality in Switzerland for the period before and after the start of the Corona Crisis compared with the crisis periods during the Great Recession and the Swiss franc shock. The start (= month 1) of the respective crisis period is always at the beginning of the quarter in which Switzerland's gross domestic product was negative.

During the Great Recession, excess mortality increased significantly. The difference between the mean values (indicated by the blue dotted lines) up to month 0 and from month 1 onwards is statistically highly significant. After the Swiss franc shock, excess mortality also increased, but not to a statistically

<sup>5</sup> Cumulative excess mortality can also decrease or be negative, namely when the seasonally adjusted number of bankruptcies is lower than the trend. For the construction of the figure, we first index the number of bankruptcies to zero for the month before the outbreak of the Corona Crisis in Switzerland (= February 2020). For all other months, we calculate the excess mortality (= difference between the seasonally adjusted number of bankruptcies and the trend value) and accumulate it forward from March and backward from January. For example, the cumulative excess mortality for the month +5 (= July 2020) or for the month -5 (= September 2019) is the sum of excess mortality numbers for the months March to July 2020 or for the months September 2019 to January 2020.

significant extent. As the figure also shows, excess mortality on average over the 18 months before the Corona Crisis was significantly higher than on average over the 18 months before the Great Recession or before the Swiss franc shock. However, after the outbreak of the Corona Crisis, excess mortality did not rise further, but fell sharply on average, resulting in a significant under-mortality. This is also the case if one excludes the slumps in March and April caused by the legal freeze and the debt collection holidays.<sup>6</sup> Against this background, a noticeable increase in corporate bankruptcies this year and next would be in line with past crisis experiences. The figure also shows that corporate bankruptcies did not rise abruptly in the wake of the Great Recession or the Swiss franc shock, but only gradually over time. The widespread expectation of a sudden wave of bankruptcies following the Corona Crisis is therefore not covered by past crisis experience.

*Figure 4: Comparison of corporate bankruptcies in Switzerland before and after crisis periods*



***Interim conclusion: No wave of bankruptcies, but also no all-clear***

The preceding analysis results in the following interim conclusion (data as of July 2020): In none of Switzerland's major regions or economic sectors has the number of firm bankruptcies in recent months been significantly above trend. On the contrary, between March and July 2020, the number of bankruptcies in Switzerland was on average 21% lower than in the same period last year. At the

<sup>6</sup> The patterns described for the Great Recession and the Swiss franc shock, as well as the comparison between the above-mentioned crises and the Corona Crisis are not only evident at the national level, but are also prevalent in the major regions and economic sectors of Switzerland (see Eckert, Mikosch and Stotz, 2020).

cantonal level, only the canton of Valais recorded a bankruptcy frequency that was well above trend in the past two months, although there was no significant excess mortality. A comparison between economic sectors indicates that the Corona Crisis has had a much stronger effect on the bankruptcy frequency in the wholesale and retail trade industries than in the rest of the Swiss economy. By contrast, the hotel and restaurant industry and the entertainment industry have so far been surprisingly little affected, either in absolute or relative terms, compared with other economic sectors. One reason for the overall low level of bankruptcies is likely to be the federal government's COVID-19 credit program, which gave smaller companies easy and cheap access to (bridging) loans. However, there is still no reason to give the all-clear. One reason for this is that at least some bankruptcies were probably only postponed by the program. Further, past economic crises did not induce a sudden but a gradual increase in the frequency of bankruptcies.

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