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Article

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How Belgian firms fared in the COVID-19 pandemic

by Ch. Piette and J. Tielens

National Bank OF BELGIUM
Eurosystem

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Ch. Piette
J. Tielens

Introduction

When the COVID-19 outbreak reached the European continent in March 2020, public authorities gave the utmost priority to the protection of human health and life against a novel virus already known for its high mortality rate. To this end, they had to make sure that hospitals' intensive care units were not overwhelmed by the admission of an excessive number of new patients. This involved limiting social interactions to impede the virus from spreading through the population. Therefore, at the onset of the first wave of the pandemic, the Belgian federal government decided to impose a lockdown that seriously affected citizens' social life, as well as economic activity. These measures included a temporary shutdown of non-essential businesses involving direct contact with consumers, such as most non-food retail trade, personal services like hairdressing salons, hospitality, and food services. Moreover, as in many other countries, citizens' social interactions and movement within the national territory were also severely constrained, and travelling abroad was forbidden except for compelling reasons. Finally, homeworking was made compulsory, except for occupations that required workers' on-site presence.

While these restrictions were effective at breaking chains of infection, they also had severe implications for businesses[1]. Many of those subject to closures and mobility restrictions were forced to scale down or suspend their activities, while their suppliers may have faced a slump in demand, and other firms suffered supply chain disruptions. The most immediate concern related to the potential liquidity issues resulting from the fall in firms' turnover. Indeed, while firms saw their revenue plummeting, they might still have to compensate their employees, pay their rent or honour financial commitments such as their trade, tax and social security debts. Should firms have an insufficient cash buffer to meet these obligations, a rise in bankruptcies was obviously to be expected.

A first assessment of the effects of the COVID-19 pandemic on the financial health of Belgian firms was conducted by Tielens *et al.* (2021), in the aftermath of the first wave of the pandemic. That study documents the significant impact of the lockdown on cash flows, but also shows that the impact was to a large extent cushioned by firms' use of bank lending and by the support measures put in place by the federal and regional governments. It also highlighted a rise in solvency risks for those firms that needed to replenish their cash reserves despite the support measures. If they had to meet that unexpected financing requirement by taking

1 In the context of this article, the words "businesses", "firms" and "enterprises", which we use interchangeably, all refer to non-financial corporations as defined by the European System of Accounts (ESA 2010). This definition does not include unincorporated enterprises operated by households.

on additional debt, rather than through recapitalisation, this could in certain cases raise firms' debt level to the point where they became insolvent, which would in fact make them ineligible for any bank loan.

However, at the time of publishing that study, there was scant information on the funding sources used by Belgian firms to cover the losses and cash deficits suffered during the first wave of the pandemic. This also made it extremely difficult to properly assess the extent of bankruptcy risks. This article aims to fill that gap using the latest data released in the meantime, in particular the annual accounts for the year 2020 that Belgian corporations filed with the Central Balance Sheet Office. These data provide a comprehensive view of firms' profits and losses and their balance sheet positions. They therefore provide a more accurate measurement of the losses incurred by firms in the first wave of the pandemic and during a large part of the second wave, and of the impact of those losses on their balance sheets. These data also make it possible to identify the financing sources used to offset those losses, where necessary. Furthermore, using the corporate credit register data assembled by means of the new Belgian Extended Credit Risk Information System (BECRIS), we can offer novel perspectives on the role played by the financial sector in supporting businesses that faced liquidity issues in the context of the pandemic, either via the State-guaranteed loans or the debt moratorium, or within the framework of standard lending.

This article is structured as follows. The first part gives an overview of developments in economic activity since the onset of the COVID-19 pandemic, with an emphasis on the sectors most affected by business closures, and on the various support schemes installed by the public authorities to alleviate the negative effects on corporate revenues and balance sheets. The second part assesses the impact of the crisis on firms' financial health and documents the various types of funding used by firms to cover their cash deficits during the first waves of the pandemic. The third part examines recent developments in insolvency proceedings. Section four analyses the various ways in which banks have supported firms throughout the pandemic, while section five takes a forward-looking view on corporate financial health through the lens of bank balance sheets. The last part concludes.

1. The economic impact of the COVID-19 pandemic

1.1 An unprecedented fall in corporate revenues

Imposed by the federal government in March 2020 to prevent intensive care units becoming overwhelmed, the first lockdown had an extremely severe impact on the economy, particularly for services involving direct contact with consumers. According to the data for April 2020, the hospitality sector and food services, together with personal services, were among the sectors most affected, with a median drop in turnover of 74 % and 57 %, respectively, compared to April 2019 (see chart 1). The end of the first lockdown in July enabled them to recover, albeit not completely, but the second lockdown imposed in the autumn to curb the second wave of the pandemic had a further serious impact. Their revenues picked up again in May 2021, after the third wave, and reached their pre-crisis levels at the end of the summer. After that, the restrictions enforced in the context of the fourth and the fifth waves became less stringent as hotels, restaurant and cafés remained open to customers in possession of a "COVID-safe ticket", certifying that they had been vaccinated or tested negative for coronavirus.

Some sectors suffered a greater and more prolonged impact. This applies to sport, cultural and recreational activities, which were subjected to more restrictive measures since they generally involve a higher degree of social interactions. Tourism and transport also suffered more persistent losses due to the restrictions on freedom of travel, whether enforced by the Belgian authorities or by other countries. By contrast, while retail businesses were disrupted by the very first lockdown imposed in the spring of 2020, they were relatively spared in the subsequent ones, with only a temporary forced shutdown in October and November 2020.

Overall, the impact of the COVID-19 pandemic has been extremely heterogeneous across sectors and across firms. For obvious reasons, the lockdowns did not apply to some activities, such as food retailers and pharmacies. Some businesses even benefited from changes in consumer habits. By way of illustration, bicycle dealers and e-commerce companies have flourished throughout the pandemic. In addition, as shown by the discrepancy between the first and the third quartiles reported in chart 1, some firms have fared better than others within each of the sectors considered. This might reflect the existence of different business models within a single industry, e.g. some restaurants offer a take-away service, which allowed them to keep operating during the lockdowns, while others do not. It could also be that some firms were simply better equipped to cope with the adverse situation, such as those that already had a web shop before the onset of the crisis[1].

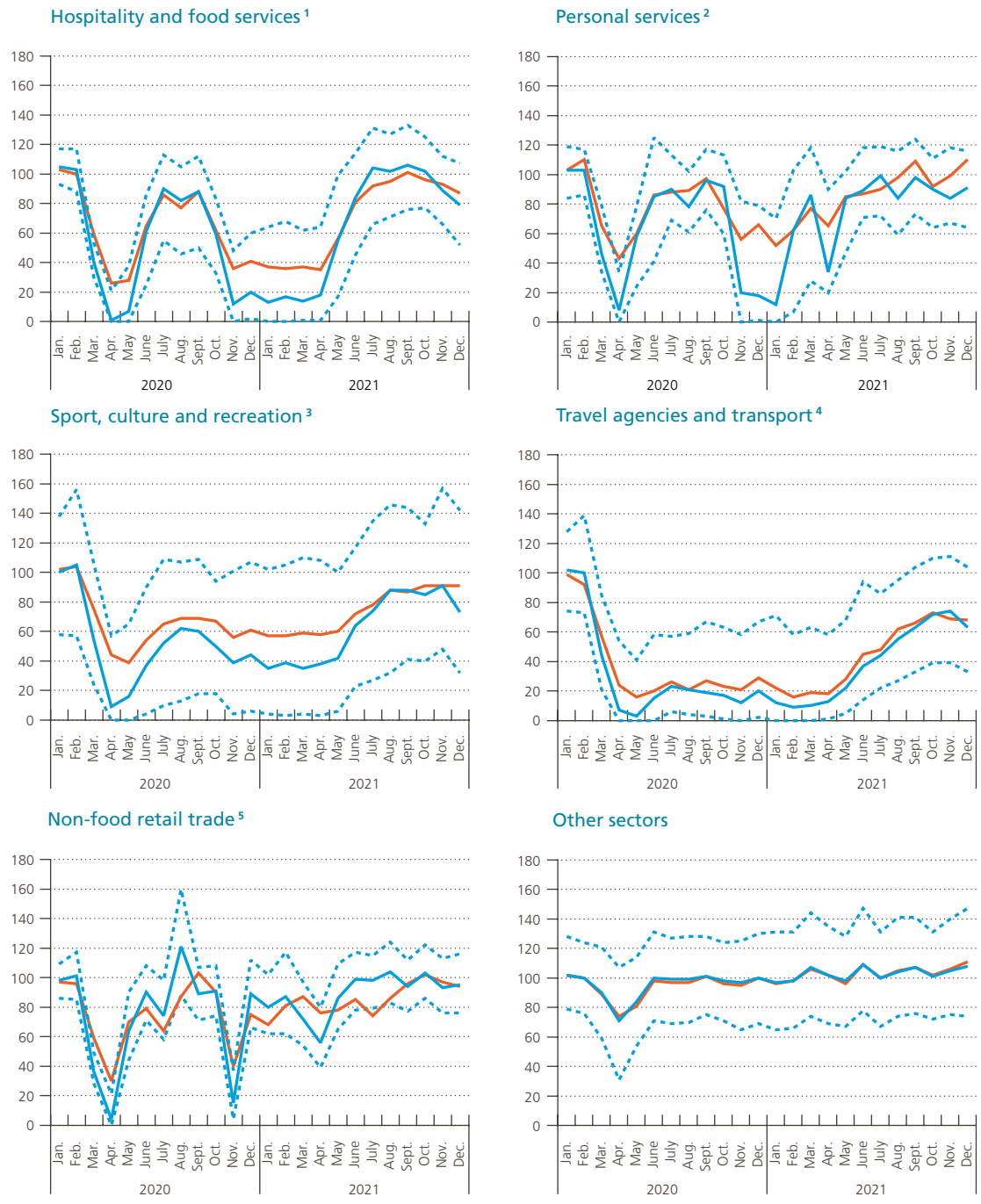
To cope with such a sharp decline in their turnover, and consequently in their cash inflows, it is vital for businesses to reduce their expenses so as to avoid a shortage of funds, which would make it impossible for them to meet their short-term financial obligations. The movements in median costs depicted by the red curves in chart 1 show that firms operating in the most affected sectors adapted their consumption of intermediate goods and services to the fall in revenue. However, they did not achieve a fully proportionate reduction in costs overall. Moreover, the picture given by chart 1, which is based on VAT returns, is likely to be incomplete, insofar as it only takes intermediate goods and services into consideration. It does not include other components of firms' cost structure that are potentially more difficult to adjust, such as rents and employee compensation.

As a result, when the first business closures came into force in March 2020, the concern was that cash reserves held by businesses would be drained quickly, and that could ultimately result in a surge in payment defaults and bankruptcies.

1 For an extended discussion of the heterogeneous impact of the COVID-19 crisis on firms' sales and costs, see Dhyne and Duprez (2021).

Chart 1

Impact of the COVID-19 crisis on firms' monthly sales and costs in a selection of sectors



Sources: Federal Public Service Finance (VAT declarations), NBB.

1 NACE BEL codes 55 and 56.

2 NACE BEL codes 9602, 9064 and 9609.

3 NACE BEL codes 59, 82300, 90, 91 and 93.

4 NACE BEL codes 49100, 49390, 50, 51 and 79.

5 NACE BEL codes 4771, 47599, 47650, 47721, 47786 and 47820.

1.2 An unprecedented policy response

To cushion the shock on firms' revenues and to alleviate the rising bankruptcy risks, the Belgian federal and regional governments rapidly took a number of support measures. Many of these aimed at preventing cash shortages, such as the facilitation of furlough arrangements for employees and the lump-sum allowances granted to firms that saw their revenues substantially reduced – or even halted – because of the lockdowns. The allowances were complemented by a set of tax exemptions, some sector-specific and others broad-based. For instance, restaurateurs benefited from exemptions from social security contributions, corporate tax reductions, and a temporarily reduced VAT rate for the purchase of food supplies. Broad-based tax exemptions included a deduction for the losses anticipated for 2020 and a deduction for investment. Lessors waiving the rent paid by businesses also qualified for tax concessions.

Since these allowances and tax exemptions were not always sufficient to offset the cash drains caused by the lockdowns, some firms required additional funding. If these financing needs were met by a loan rather than a recapitalisation, their indebtedness might have risen to an undesirable level. In other words, the liquidity issue caused by the business closures could turn into a solvency issue. To help businesses overcome this problem, regional investment companies immediately set up medium- or long-term subordinated loan schemes in 2020. Since the end of 2021, subordinated loans can now also be granted by the Belgian Recovery Fund, which is co-financed by the Federal Holding and Investment Company and by institutional investors. In Tielens *et al.* (2021), we underscored the importance of longer maturities for this type of loans since, once the crisis is over, businesses need to generate sufficient financial revenues to pay off their borrowing after the end of the crisis. In addition, some tax incentives were introduced to promote equity financing. This includes a tax exemption, equivalent to the losses incurred in 2020, on revenues generated between 2021 and 2023 if they are allocated to the reserve. Another tax reduction was granted to individuals who invested in the share capital of firms suffering significant losses between mid-March 2020 and the end of August 2021.

Furthermore, a moratorium on bankruptcies was established in the early weeks of the first wave the pandemic and reinstated in the second wave. In January, it was replaced by *de facto* moratoria on the payment of tax and social contributions due.

The financial sector also played an important role during the crisis, not only through its normal lending activities – existing credit lines, in particular, constitute an important element of firms' cash management – but also by implementing a moratorium on bank debt repayments and a State-guaranteed loan scheme. These aspects will be discussed in detail in section 4.

Overall, the government support offered to Belgian firms in the form of allowances and tax exemptions during the COVID-19 pandemic has been exceptional. The public expenditure on this in 2020 and 2021 totalled € 11.6 billion (1.2 % of Belgium's GDP over that period)[1].

2. The consequences in terms of profitability, solvency, and financing requirements

2.1 The impact of the first waves of the pandemic according to the annual accounts data

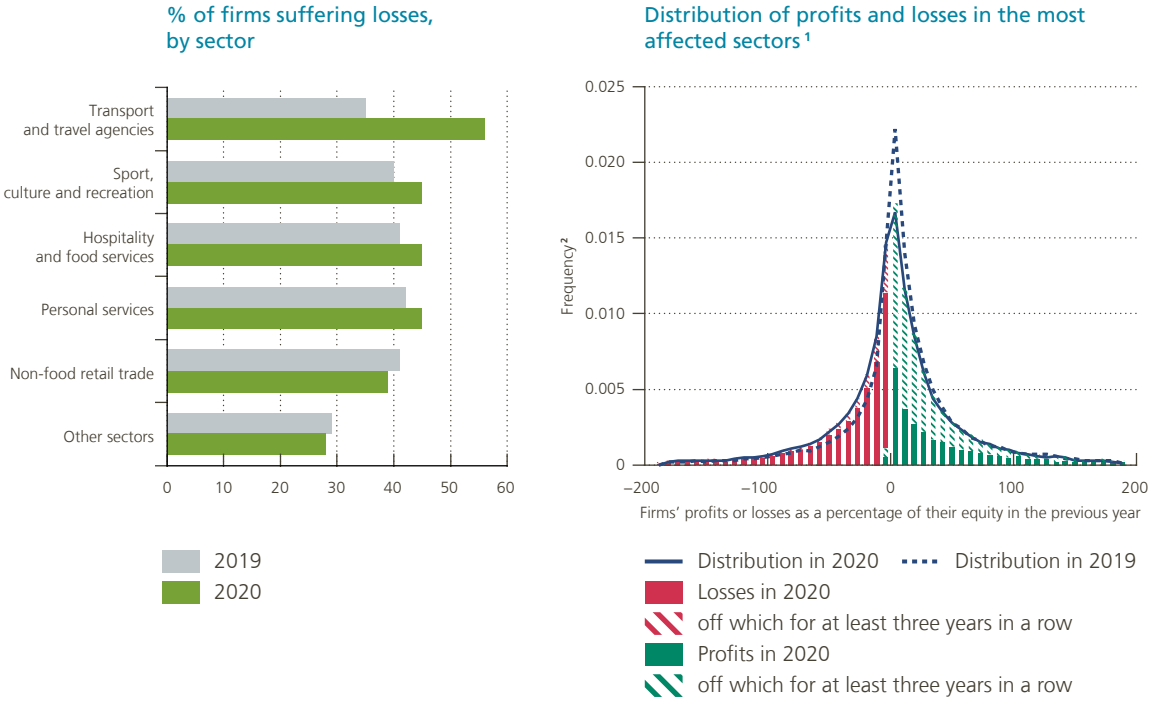
The substantial volume of lump-sum allowances received from the federal and regional governments, as well as the various tax exemptions, along with some firms' capacity to reduce their costs and/or to adapt their business model in the context of altered economic conditions, are all factors that helped to mitigate the impact of the pandemic on corporate earnings.

1 See NBB (2022, p. 178).

Nevertheless, in the sectors most affected by the business closures, the proportion of firms that reported a loss in their annual accounts increased strongly in 2020 compared to 2019. Based on the same simplified sectoral breakdown as in chart 1, the impact was more significant in the travel and transport sector, where the fraction of firms suffering losses rose from 35 % to 56 % (see the left-hand panel of chart 2). The pandemic has also taken a heavy toll on sport, cultural and recreational activities, which have been constrained longer by public health restrictions. In these industries, 45 % of firms suffered losses in 2020; that is an increase of 6 % compared to the previous year. The rise in the proportion of loss-making firms was smaller, albeit still substantial, in hospitality and food services (+4 %) and in personal services (+3 %). By contrast, fewer firms reported losses in the (non-food) retail trade sector, despite the temporary shutdowns imposed in 2020.

Chart 2

Distribution of corporate losses before and after the outbreak of the COVID-19 pandemic



Source: NBB (annual accounts data).

1 Based on the pattern emerging from the left-hand graph, the sectors considered to have been affected the most by the COVID-19 crisis are transport, travel agencies, sport, culture, recreation, hospitality, food services and personal services.

2 The frequencies depicted by the distributions (represented in the right-hand graph by means of Kernel densities) and the histogram are normalised in such a way that the integrals of the two curves are equal to one, as is the sum of the areas of the bars of the histogram.

The heterogeneity of the impact of the pandemic across firms is also worth noting. While the share of loss-making firms increased in the sectors hit by the lockdowns in 2020, which translates into a shift to the left in the distribution of firms' profits and losses illustrated in the right-hand panel of chart 2, most firms had a sufficient equity buffer to absorb the shock. Besides, most of these losses were not "structural", in the sense that the large majority of loss-making firms found themselves in that situation at most for the second time. The impact on earnings was severe for a relatively small fraction of firms, but seldom to the point of consuming more than 100 % of their equity. This threshold has a particular significance: if the accumulated losses reported on the liability side of a firms' balance sheet exceed the amount of funds supplied by its partners or shareholders, that also means that the volume of the debt incurred on account of these losses exceeds the book value of the assets. In other words, the firm in question becomes "insolvent" in the sense that, in the event of a bankruptcy, the proceeds of the liquidation of its assets would not be enough to repay all its creditors.

In 2020, only 4 % of firms suffered losses so large as to consume their entire equity. This figure tallies with what was observed in 2019. In view of the extent of the pandemic's effect on firms' revenues depicted in chart 1, this suggests that the various support measures taken by the public authorities to mitigate the impact on their earnings have been effective in averting serious solvency issues. It must, however, be noted that these data do not account for those firms that did not manage to remedy their liquidity gaps during the pandemic and consequently had to file for bankruptcy. In addition, we are not able to quantify the share of businesses that avoided a cash deficit or an insolvency problem thanks to the government support. This is because the annual accounts filed with the Central Balance Sheet Office do not provide sufficient details on the composition of firms' operating income (where lump-sum allowances should be recorded) and on the corporate tax paid (the item from which tax exemptions are to be deduced). Likewise, these data do not enable us to distinguish the reduction in the operating costs attributable to moratoria on rent payments possibly agreed between entrepreneurs and lessors.

As a result, the proportion of "insolvent" firms – i.e. firms with a debt-to-assets ratio (DTA) greater than one – in the total population of non-financial corporations did not change significantly in 2020. Neither did the overall distribution of indebtedness, which is represented in the form of box plots in the left-hand panel of chart 3. Strikingly, the share of insolvent firms was already significantly higher before the COVID-19 pandemic in the most affected sectors. They account for 28 % of the total number of firms operating in these industries, against 12 % in others. This is an indication that they generally tend to accumulate larger losses relative to their capitalisation.

However, the fact that a firms' debt exceeds its assets at a certain point in time does not necessarily mean that it cannot survive in the long run. Indeed, losses that might cause severe impairment of the balance sheet are

Chart 3

Firms' solvency before and after the outbreak of the COVID-19 pandemic

Source : NBB (annual accounts data).

1 This graph depicts the distribution of the debt-to-assets ratio in the form of box plots. The lower and the upper limits of the boxes correspond to the first and the third quartiles of the distribution, respectively. The bar within the box stands for the second quartile, i.e. the median, of the distribution. The extremities of the "whiskers" represent the minimum and the maximum values of the distribution once outliers are disregarded.

2 Transport, travel agencies, sport, culture, recreation, hospitality, food services and personal services.

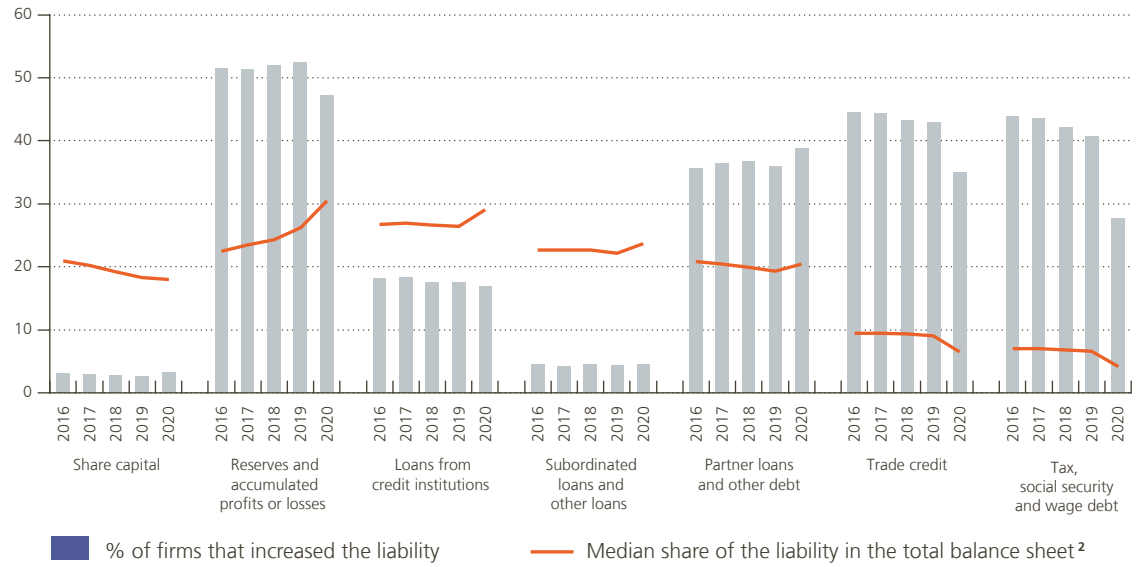
seldom structural by nature, as is evident from the data depicted in the right-hand panel of chart 2. Furthermore, it appears from closer examination of the annual accounts data of firms with a DTA ratio greater than one that the value of one specific category of liabilities, namely the so-called "other debts", represents a substantial proportion of their balance sheet total. For 52 % of them, it even accounts for at least half the total debt. In other words, this is the main financing source used to offset the losses accumulated by these firms.

This item on the liability side of the balance sheet consists mainly of a firm's debts towards its owner, its partners, or its shareholders. In particular, it includes advances on current accounts. This source of financing can be used to provide additional funds to businesses in need of cash without resorting to a capital increase. Its main advantage compared to the latter option is that it is not subject to the same lengthy legal process. In particular, a capital increase might require convening a general meeting, and must in any case entail a deed executed by a notary. One drawback of advances on current accounts is that they appear as a short-term debt on the balance sheet and are supposedly payable before other types of debts, including bank debt and subordinated loans. Obviously, this characteristic will probably deter other potential lenders from granting a loan to a firm relying excessively on this kind of funding. Nevertheless, advances on current account are likely to be the best solution to replenish cash reserves in an emergency, and in the absence of other available credit lines. In such cases, business owners might also run the risk of losing a part of their own financial wealth if the losses that they seek to offset with the lending have rendered the firm insolvent (i.e. a situation where the DTA ratio is greater than one). As mentioned earlier, in the event of liquidation, the value of the assets would in that case be insufficient for them to recover the whole of their funds.

This type of financing has been used more extensively in the context of the COVID-19 crisis to solve the liquidity problems caused by the business closures, while injections of additional share capital have not been more substantial than in the previous years, in all likelihood for the reason mentioned above. In 2020, 39 % of the firms operating in the most affected sectors increased the amount of that liability – henceforth referred to as "partner loans and other debt" for the sake of clarity – which is 3 % more than in 2019 (see chart 4).

Chart 4

Financing sources used in the most affected sectors [1]



Source : NBB (annual accounts data).

1 Transport, travel agencies, sport, culture, recreation, hospitality, food services and personal services.

2 The median is calculated excluding zero values.

By contrast, other liabilities were used to a lesser extent than before the pandemic, and the same is true for internal financing through the build-up of reserves and the accumulation of profits. This is naturally connected with the losses suffered by a larger number of firms in 2020. Despite this, it appears that firms that managed to generate a profit were more inclined to reinforce their equity than before, as the median value of this balance sheet item suggests. The fraction of firms increasing the amount of their trade, tax, wage or social security debts also declined in 2020. This can be largely ascribed to the contraction of activity and revenues during the lockdowns, which in turn led to a fall in purchases of intermediate goods and services, as well as lower income tax paid in 2020. In addition, the facilitation of temporary unemployment clearly exerted downward pressure on remuneration and social security contributions. According to the profit and loss statements of the firms considered in chart 4, this type of expenses decreased by 19 % overall between 2019 and 2020[1].

As far as bank loans are concerned, the proportion of firms that received funds from a credit institution in 2020, either in the form of new lending or by drawing on existing credit lines, did not change significantly compared to 2019. However, the amounts of loans taken out were larger overall than in the previous years. The median share of bank loans outstanding in the total balance sheet increased from 26 % in 2019 to 29 % in 2020, which also reflects the payment deferrals authorised under the debt moratorium applied by the banking sector, as well as the predominance of the "intensive margin" in the amount of new credit granted during the pandemic (see section 4.1 for further detail). Lastly, subordinated loans, which include those granted by regional investment companies and by individuals eligible for the tax deduction schemes offered by the regional governments (i.e. "win-win leningen in Flanders, "prêts coup de pouce" in Wallonia and "prêts proxy/proxyleningen" in Brussels) also gained ground in 2020, even though the proportion of firms using this financing source did not increase significantly.

The financing sources used by firms tend to differ significantly depending on their characteristics, such as profitability and solvency. This is illustrated in chart 5, which compares the distributions of each category of liabilities in 2019 and 2020 using the box plots placed next to the X- and Y-axes of the graphs. The graphs themselves consist of scatter plots where each dot represents a firm operating in one of the most affected sectors. Their purpose is to depict the movement within the liability distributions. In particular, the 45-degree diagonal line allows us to distinguish between the firms for which the value of a given liability remained virtually unchanged throughout 2020 (i.e. the dots located on or around the diagonal line), those for which it increased (dots above the diagonal line) and those for which it declined over the same period (dots below the diagonal line). Moreover, the different colours separate profitable firms from those that suffered one-off or more structural losses. The right-hand graphs identify insolvent firms based on the same definition as in chart 3, i.e. firms characterised by a debt-to-asset ratio greater than one.

The pattern that emerges for changes in share capital in the top panel of chart 5, i.e. the concentrations of dots on the diagonal line, simply reflects the fact that only a marginal number of firms increased the outstanding amount of this type of financing between 2019 and 2020. As for the other equity components, namely the reserves and the accumulated profits (represented in the second row of the chart), they naturally increase only for firms generating earnings, while they decline for those suffering losses[2].

Moving to the third row of chart 5, the box plots do not show any significant change in the overall distribution of loans granted by credit institutions across the population considered. The scatter plots, however, reveal a clear relationship between the changes in the outstanding amounts of that liability and firms' financial health. Bank credit was mainly granted either to businesses that generated some profits in 2020 or to those that suffered non-structural losses, that is those that had been profitable in previous years but endured a setback during the pandemic. By contrast, firms that made losses for at least three years in a row, and those that were

1 This figure is calculated for the total population of firms operating in the most affected sectors and filing annual accounts both for 2019 and 2020.

2 Some firms that report a negative balance in their profit and loss statement can nonetheless replenish their reserves if the partners decide to intervene to cover the loss at the closing of the annual accounts.

already considered insolvent in 2019 based on the DTA criterion, mostly saw a decline in their outstanding bank loans. Moreover, a number of firms took out a subordinated loan in 2020 (see fourth row). It can be assumed that part of these loans was granted by regional investment companies to reinforce the long-term financing of firms whose balance sheet was impaired in the first waves of the pandemic. On the other hand, most profitable firms reduced their reliance on that type of liabilities.

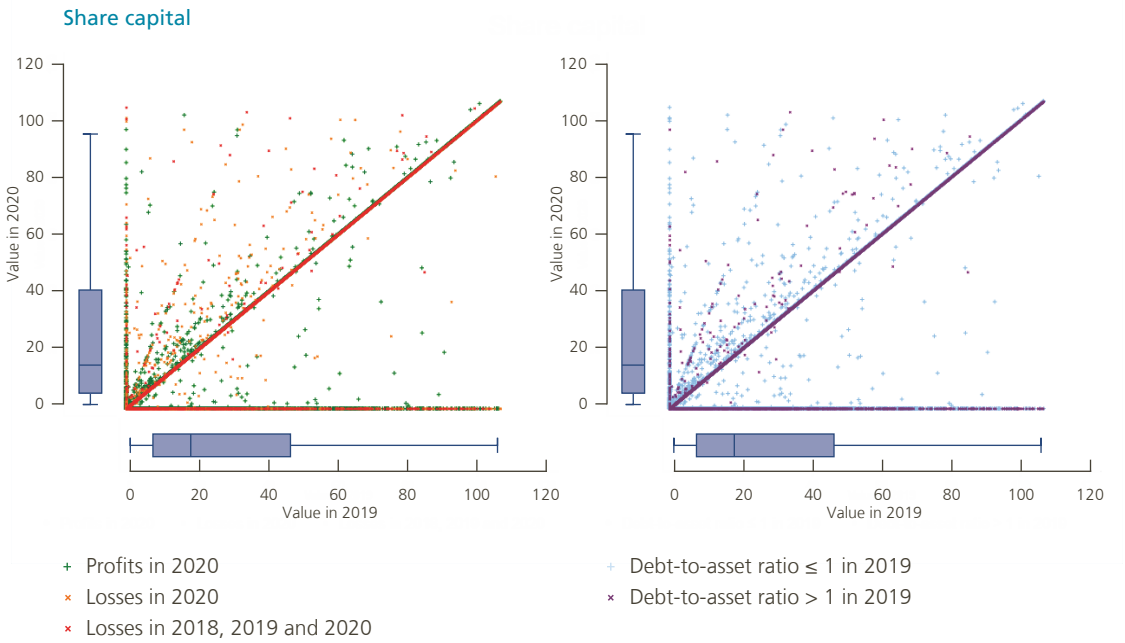
Partner loans and other debts emerge as a financing source often used by firms with a profitability issue. In the fifth row of chart 5, firms that suffered losses, either intermittently or structurally, represent a significant share of those that increased the amount of that liability in 2020 (i.e. the dots above the diagonal line). In that respect, the pattern observed for partner loans is therefore quite the opposite of that for bank lending. This is a clear indication that businesses whose weaker financial health precluded a bank loan during the pandemic had to rely on an additional injection of funds from their owners to meet their financing requirement.

Finally, the firm-level changes in the liabilities considered in the last two rows of chart 5, namely trade credit and tax, social security and wage debt, are far more heterogenous. Nonetheless, the patterns in the scatter plots tend to confirm that the amount of this liability typically declines for loss-making firms.

Chart 5

Changes in liabilities between 2019 and 2020 and firms' characteristics in the most affected sectors[1]

(data in % of firms' assets in 2019)



Source: NBB (annual accounts data).

Note: The box plots placed next to the X- and Y- axes represent the distribution of the values for 2019 and 2020, respectively, of the liability concerned within the population of firms considered. The lower and the upper limits of the boxes correspond to the first and the third quartiles of the distribution, respectively. The bar within the box stands for the second quartile (i.e. the median) of the distribution. The extremities of the "whiskers" represent the minimum and maximum values of the distribution once outliers are disregarded. These outliers, as well as firms for which the value of the liability concerned was zero in both 2019 and 2020, are not represented in the scatter plot.

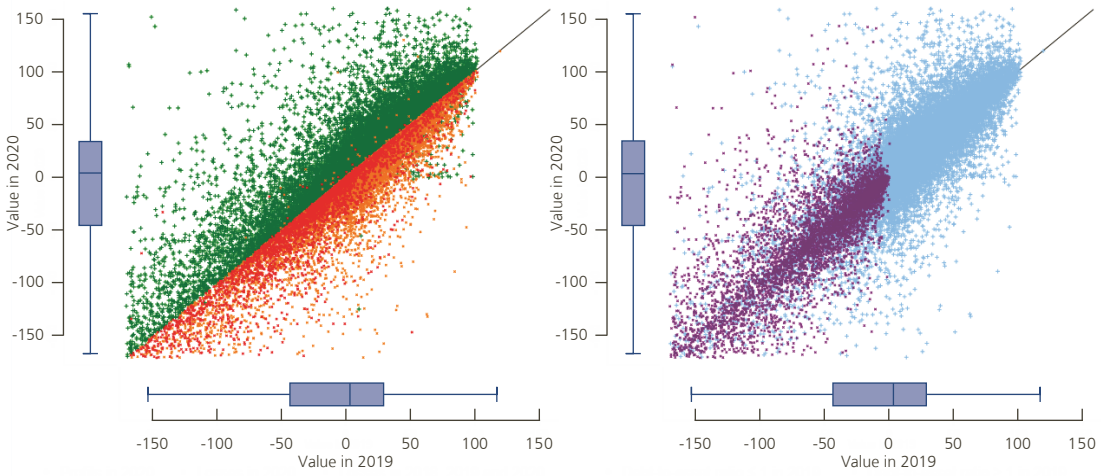
1 Transport, travel agencies, sport, culture, recreation, hospitality, food services and personal services.

Chart 5 (continued)

Changes in liabilities between 2019 and 2020 and firms' characteristics in the most affected sectors [1]

(data in % of firms' assets in 2019)

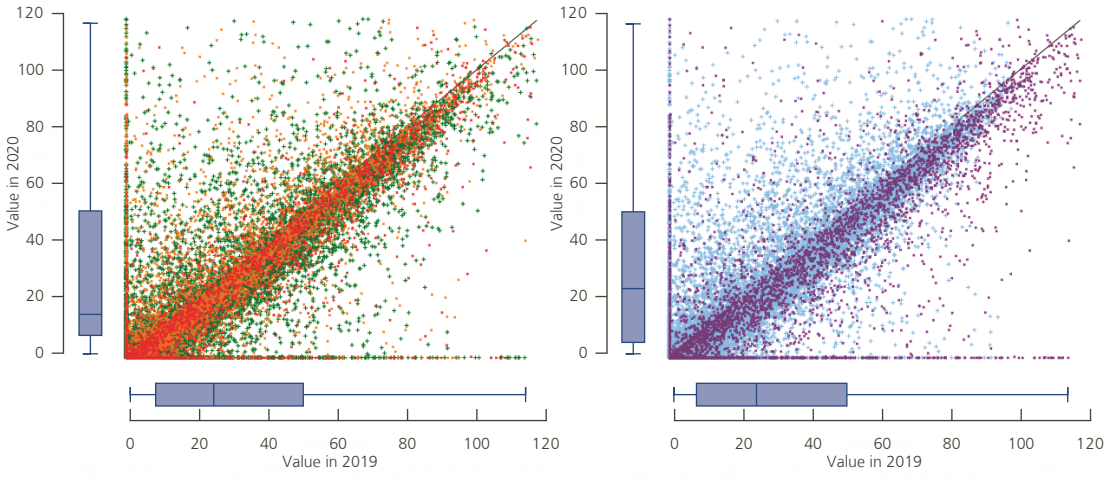
Reserves and accumulated profits or losses



+ Profits in 2020
× Losses in 2020
× Losses in 2018, 2019 and 2020

+ Debt-to-asset ratio ≤ 1 in 2019
× Debt-to-asset ratio > 1 in 2019

Loans from credit institutions



+ Profits in 2020
× Losses in 2020
× Losses in 2018, 2019 and 2020

+ Debt-to-asset ratio ≤ 1 in 2019
× Debt-to-asset ratio > 1 in 2019

Source: NBB (annual accounts data).

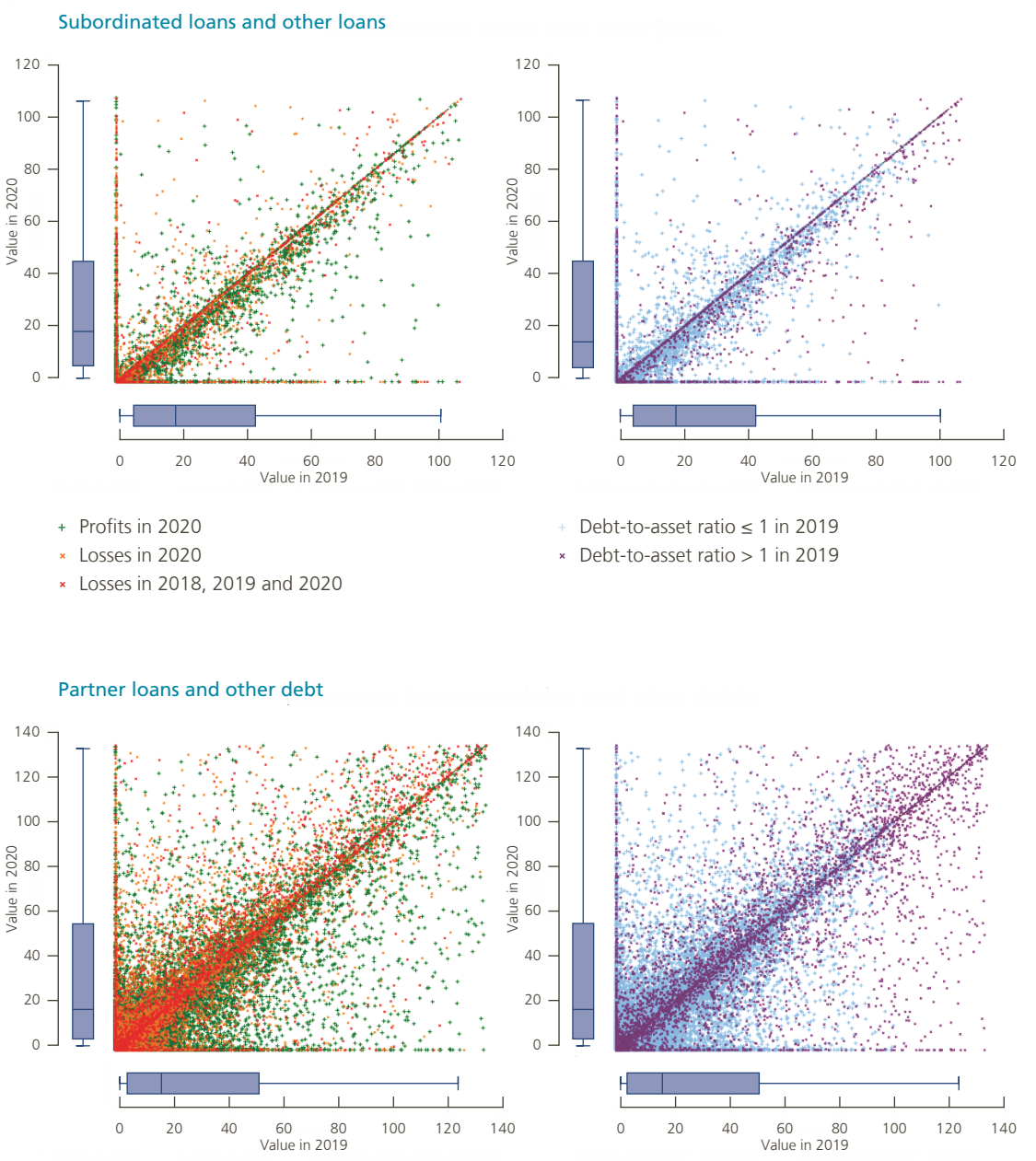
Note: The box plots placed next to the X- and Y- axes represent the distribution of the values for 2019 and 2020, respectively, of the liability concerned within the population of firms considered. The lower and the upper limits of the boxes correspond to the first and the third quartiles of the distribution, respectively. The bar within the box stands for the second quartile (i.e. the median) of the distribution. The extremities of the "whiskers" represent the minimum and maximum values of the distribution once outliers are disregarded. These outliers, as well as firms for which the value of the liability concerned was zero in both 2019 and 2020, are not represented in the scatter plot.

1 Transport, travel agencies, sport, culture, recreation, hospitality, food services and personal services.

Chart 5 (continued)

Changes in liabilities between 2019 and 2020 and firms' characteristics in the most affected sectors [1]

(data in % of firms' assets in 2019)



Source: NBB (annual accounts data).

Note: The box plots placed next to the X- and Y- axes represent the distribution of the values for 2019 and 2020, respectively, of the liability concerned within the population of firms considered. The lower and the upper limits of the boxes correspond to the first and the third quartiles of the distribution, respectively. The bar within the box stands for the second quartile (i.e. the median) of the distribution. The extremities of the "whiskers" represent the minimum and maximum values of the distribution once outliers are disregarded. These outliers, as well as firms for which the value of the liability concerned was zero in both 2019 and 2020, are not represented in the scatter plot.

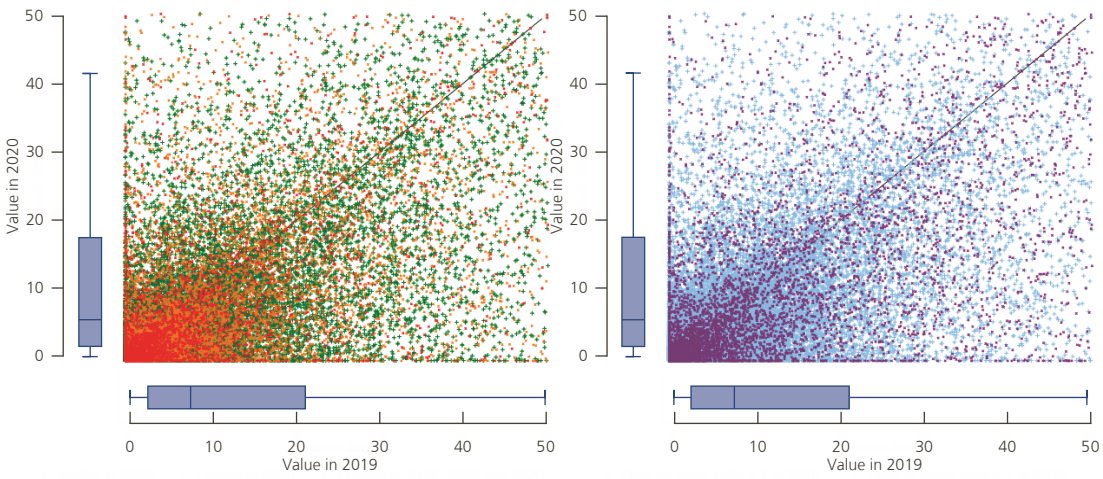
1 Transport, travel agencies, sport, culture, recreation, hospitality, food services and personal services.

Chart 5 (continued)

Changes in liabilities between 2019 and 2020 and firms' characteristics in the most affected sectors[1]

(data in % of firms' assets in 2019)

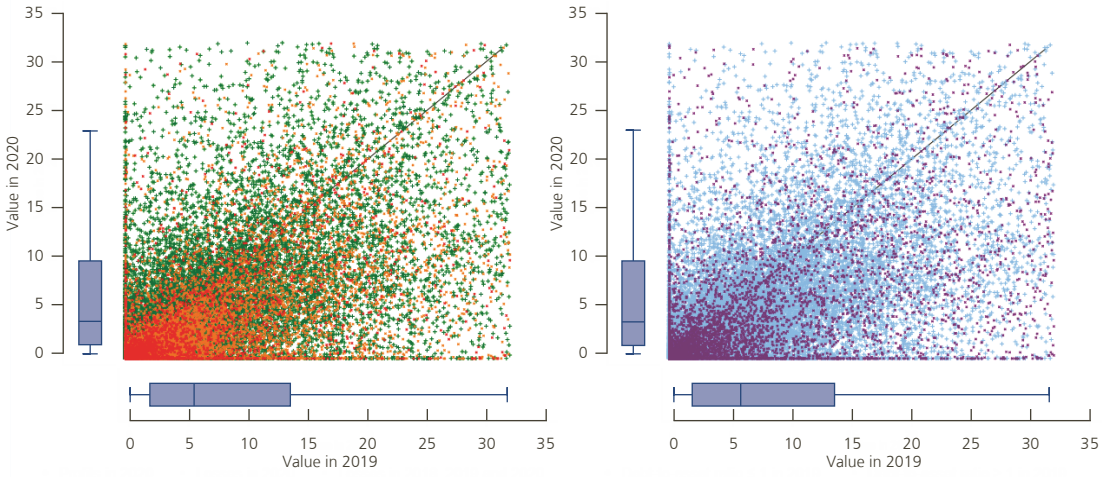
Trade credit



+ Profits in 2020
× Losses in 2020
× Losses in 2018, 2019 and 2020

+ Debt-to-asset ratio ≤ 1 in 2019
× Debt-to-asset ratio > 1 in 2019

Tax, social security and wage debt



+ Profits in 2020
× Losses in 2020
× Losses in 2018, 2019 and 2020

+ Debt-to-asset ratio ≤ 1 in 2019
× Debt-to-asset ratio > 1 in 2019

Source: NBB (annual accounts data).

Note: The box plots placed next to the X- and Y- axes represent the distribution of the values for 2019 and 2020, respectively, of the liability concerned within the population of firms considered. The lower and the upper limits of the boxes correspond to the first and the third quartiles of the distribution, respectively. The bar within the box stands for the second quartile (i.e. the median) of the distribution. The extremities of the "whiskers" represent the minimum and maximum values of the distribution once outliers are disregarded. These outliers, as well as firms for which the value of the liability concerned was zero in both 2019 and 2020, are not represented in the scatter plot.

1 Transport, travel agencies, sport, culture, recreation, hospitality, food services and personal services.

2.2 Firms' solvency beyond the first waves

The previous subsection draws on the latest available annual accounts data to study the state of corporate financial health at the end of 2020. While the results reveal that, on average, the incidence of "insolvency" among firms remained stable throughout 2020, the pandemic kept significantly impeding business operations in various segments of the economy throughout 2021 (see chart 1). In order to sidestep the considerable reporting lag involved when inferring solvency metrics from annual accounts data, we further trace the impact of the pandemic using the procedure set forth in Tielens *et al.* (2021)[1]. Such a simulation allows us to project profit and loss (P&L) statements and implied solvency positions for December 2021. Importantly, provided that the principal items of the P&L statement for 2021 are readily available from various – more timely – data sources other than the annual accounts (e.g., VAT declarations, the corporate credit register, etc.), such a simulation necessitates few assumptions.

Following Tielens *et al.* (2021), and in line with the criterion used in the previous subsection, we classify a firm as insolvent if its debt-to-assets ratio exceeds one (i.e., negative equity) on the assumption that no external capital has been injected. Such an assumption paints an extreme scenario, i.e. we document the incidence of insolvency without capital injections by owners and/or other outside investors, assuming that financing requirements are entirely met by means of debt instruments, which, as discussed in section 2.1, can take the form of bank loans or subordinated loans, as well as partner loans[2]. This also implicitly entails the assumption that all firms suffering from a cash deficit at a certain point in time succeed in finding the funding they need to ensure their survival. This means that the projected fraction of insolvent firms may actually include businesses that filed for bankruptcy before the end of the projection horizon.

Chart 6 shows that, for the aggregate economy, 10.3 % of firms were classed as insolvent in December 2020 and are projected to have remained in that state at the end of 2021[3]. Many of these firms had already been insolvent prior to the start of the pandemic. 3.4 % managed to repair their balance sheet during 2021 while – mainly due to continued/renewed restrictions on operations – 3.6 % slipped into insolvency in 2021 (although they were solvent at the end of 2020). Echoing the revived turnover pattern (see chart 1), a significant number of establishments in "Personal services", "Hospitality and food" and "Non-food retail trade", returned to solvent positions while being classed as insolvent at the end of 2020. Conversely, many entities in "Travel agencies and transport" continued to face subdued activity levels, further adding to the number of insolvent firms in that sector while only a few returned to solvent positions. In terms of employment, firms classed as insolvent at the end of 2021 accounted for 12.4 % of total employment in the economy.

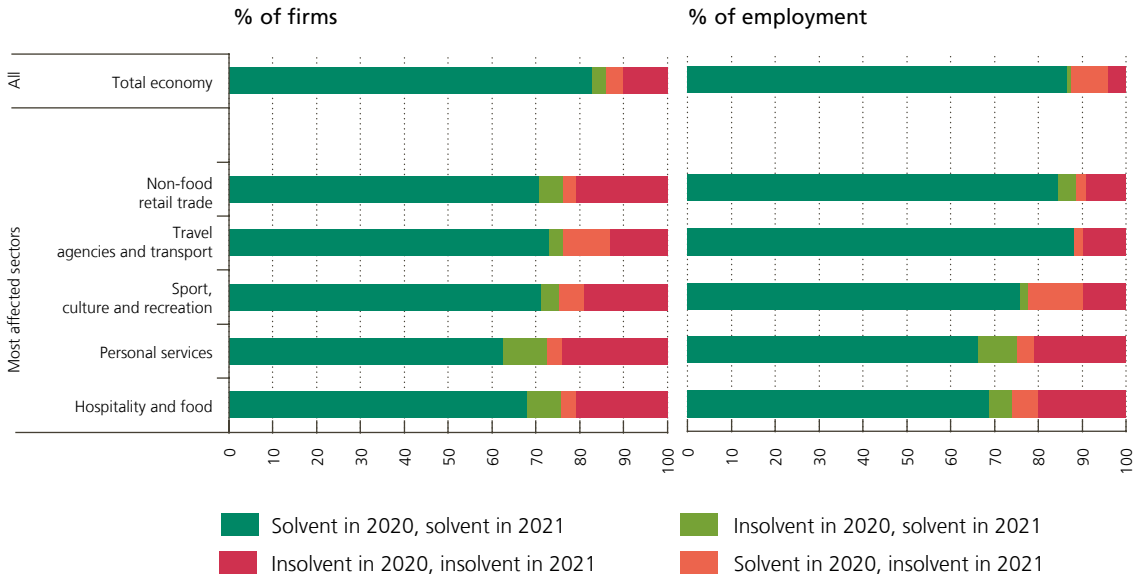
1 This work is essentially similar to that of the OECD (2020), the European Commission (2020) and the IMF (2021) but makes substantial use of the more timely and granular data available within the NBB.

2 We also ignore the role of support measures, which further adds to the pessimistic nature of our projections.

3 The simulation exercise in this subsection draws on a combination of various data sources. Due to imperfect and incomplete reporting across the various datasets, the underlying narrow sample of firms does not aggregate up to the population of firms analysed in section 2.2. This, in turn, causes small discrepancies in shares of (in)solvent firms reported across both sections.

Chart 6

Projected solvency developments between December 2020 and December 2021



Source: NBB.

3. The wave of bankruptcies that did not come

As stated in the introduction, the main concern raised by the shutdown of a large part of the economy imposed at the onset of the COVID-19 crisis revolved around the risk of ensuing liquidity shortages and, consequently, a potential upsurge in bankruptcies. In the previous parts of this article, we have pointed to various factors that mitigated the rising bankruptcy risks, namely firms' ability to adapt their costs to a sharp decline in sales, the government intervention to reduce the impact on their profit and loss balances, the loans provided by credit institutions and regional investment companies and, lastly, the loans extended by entrepreneurs themselves.

However, these mitigating factors alone cannot explain the very low numbers of insolvency proceedings observed since 2020, with a contraction in every sector and in every firm age bracket, irrespective of the number of loss-making years (see chart 7). Yet, the COVID-19 crisis did make a dent in firms' operating margins in 2020. This is evident from the annual accounts data shown in chart 2, which are moreover likely to underestimate the extent of the shock since they only reflect the situation of those firms that managed to weather the first waves of the pandemic, at least long enough to close the accounting year so that they appear in the population covered by the data.

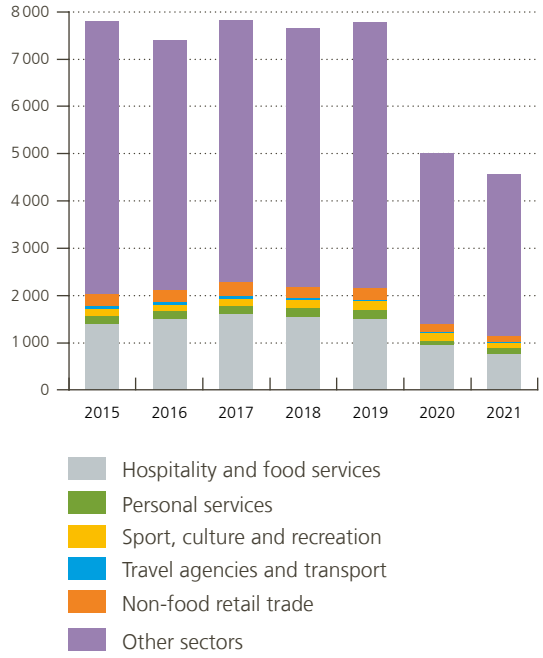
A key explanation for the broad-based decline in bankruptcies therefore lies in the various moratoria implemented throughout the pandemic. The first one concerned insolvency proceedings. It was introduced soon after the outbreak in April 2020 and ended in June. It was reinstated in November 2020, in the wake of the resurgence of infections, until January 2021. Subsequently, the tax authority and the National Social Security Office (NSSO, the Belgian federal institution that collects social security contributions from employers) applied *de facto* moratoria on the payment of overdue tax and social security contributions, meaning that they would not open insolvency proceedings against businesses failing to meet their obligations in these matters. The moratorium implemented by the NSSO ended in the autumn of 2021 and that of the tax authority early in 2022. This is when the number of insolvency proceedings picked up. The low level of bankruptcies during the COVID-19 pandemic was not peculiar to Belgium. A similar picture emerged in other EU countries as well, likewise partly as a result of moratoria on insolvency proceedings.

Chart 7

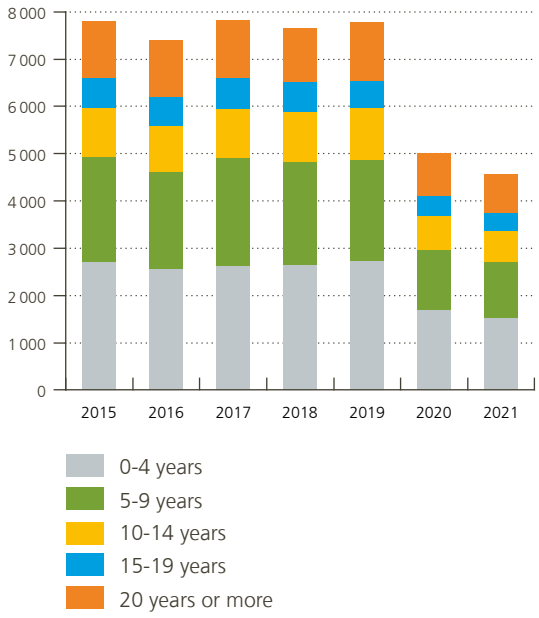
Bankruptcies among Belgian non-financial corporations

(number of insolvency proceedings started)

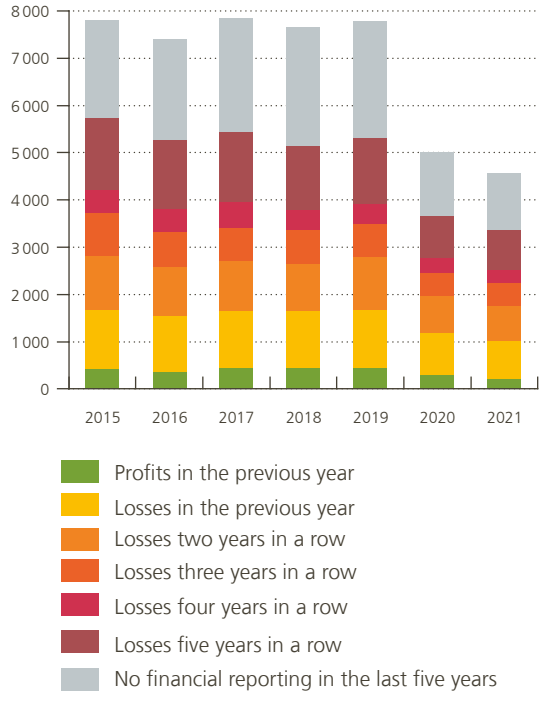
Bankruptcies by sector



Bankrupties according to firms' age

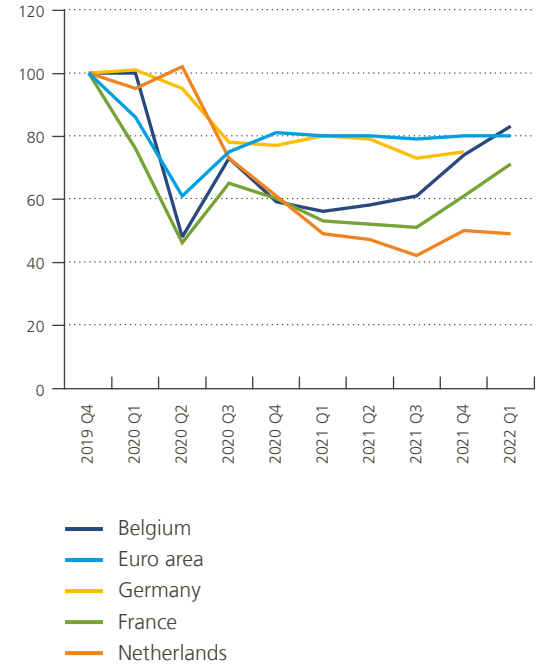


Bankrupties according to firms' profitability



Comparison with other EU countries [1]

(2019 Q4 = 100)



Sources: Eurostat, FPS Economy, NBB.

1 These series include both corporates and self-employed individuals.

Despite the government support and the moratoria on insolvency proceedings, some firms nonetheless filed for bankruptcy in 2020 and in 2021. We do not have detailed data on the creditors taking the decision to start an insolvency proceeding against businesses failing to meet their payment terms but, while the tax authority and the NSSO were applying their moratoria, the creditors could still include suppliers, banks, and lessors in the case of businesses that rent their premises. Furthermore, as in the preceding years, insolvency proceedings in 2020 and 2021 also involved some profitable firms.

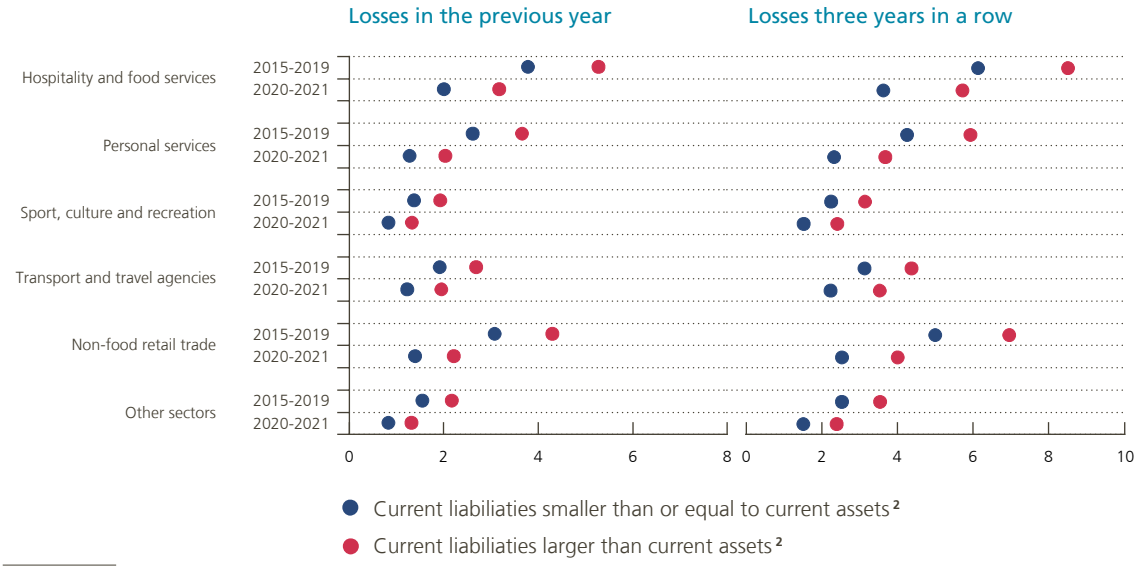
Profitable firms are therefore not entirely immune to bankruptcy, and in that regard, the importance of a sturdy liquidity position can also be underscored. In particular, the availability of sufficient cash can be paramount in the event of a sudden halt in incoming cash flows, such as that experienced by businesses operating in sectors subject to the closures imposed at the onset of the pandemic. In such a situation, a firm should be able to rely on its most liquid assets (such as its short-term trade claims, its cash reserves, or other easily marketable assets) to meet its short-term payments, since its diminished revenues would not be enough for that purpose.

To corroborate the extent to which the amount of liquid assets can mitigate bankruptcy risks in the event of a temporary setback, we estimate a discrete choice model, relating the probability of bankruptcy of a given firm to its sector, its profitability, and its liquidity position. The latter is proxied by the ratio of current assets to current liabilities. Such an approach makes it possible to pinpoint the effect of each individual variable. In addition,

Chart 8

Estimated probabilities of bankruptcy [1]

(in %)



Source: NBB.

1 Estimates obtained from an econometric regression specified as $P(Bankruptcy_{i,t}) = (\beta_0 + \gamma_0 Crisis) + (\beta_1 + \gamma_1 Crisis) Profitability_{i,t} + (\beta_2 + \gamma_3 Crisis) Liquidity_{i,t-1} + (\beta_3 + \gamma_3 Crisis) Sector_i + \varepsilon_{i,t}$ where $P(bankruptcy_{i,t})$ stands for the probability of bankruptcy for firm i in year t. $Profitability_{i,t}$. is a categorical variable used to account for the profitability status of firm i. The profitability categories correspond to those reported in the bottom-left panel of chart 7 (i.e., "profits in the previous year", "losses in the previous year", losses two years in a row, etc.). $Liquidity_{i,t-1}$ is a dummy variable equal to one if the last observed value of the firms' current liabilities is larger than its current assets and otherwise equal to zero. $Sector_i$ i is another categorical variable that represents the firms' sector (the sectoral breakdown used here is the same as in the previous charts). $Crisis$, finally, is a dummy variable equal to one in the years marked by the COVID-19 crisis, i.e. 2020 and 2021. The equation is estimated for the period 2015-2021 by means of the complementary log-log method, which is typically used when one of the two possible outcomes (in this case bankruptcy) is relatively rare compared to the alternative (i.e. survival). All the β coefficients were found to be significant at the 1 % level. As far as the γ coefficients are concerned, only those pertaining to the constant (γ_0) and to the liquidity dummy (γ_2) emerged as significantly negative, for the former, and positive, for the latter.

2 Current liabilities include both financial, commercial, tax and social security debt with a maturity of at most one year, as well as longer-term debt maturing within the next 12 months. The current assets considered here are inventories, trade credit and other loans, current investments and cash reserves.

the model is specified in such a way that its coefficients differ according to two subperiods, namely the five years that preceded the COVID-19 crisis, on the one hand, and the two years marked by the pandemic (2020 and 2021) on the other. Unsurprisingly, the probabilities of default predicted by the model, depicted in chart 8, are generally lower for that later period, reflecting the pattern that had already emerged in chart 7. Chart 8 also contains the estimated probabilities of default for firms that suffered losses for one year (on the left-hand side) and for three years in a row (on the right-hand side). Of course, the probability of failure is higher in the second category. More importantly, the results reported here confirm the significance of the relationship between the liquidity position and the risk of bankruptcy, even for firms with non-structural losses. By way of example, in the case of an enterprise operating in the hospitability sector or in food services that suffered a loss in only one single year, a weak liquidity position increased the odds of a bankruptcy by 40 % before the pandemic and by 58 % during the pandemic.

The corollary of the significant effect of a strong liquidity position on the probability of a firm's survival is the relevance of access to additional liquidity when the available reserves might not suffice to meet the next payments. This is where the credit lines provided by the banking sector and its flexibility in rescheduling debt repayments, when necessary, can play a crucial role. These aspects are discussed in the next section.

4. With a little help from my friends: surviving through bank support

Section 2.1 described how the financial sector served as one of the bulwarks against the predicted wave of corporate bankruptcies, which had not materialised at the time of writing. The purpose of this part is to further analyse the nature of banks' supporting role during the pandemic. In particular, section 4.1 tracks how policy support was channelled through the financial sector via State-guaranteed loans and a corporate debt moratorium. While the former support scheme increased the scope for fresh liquidity, the latter aimed to reduce the cash drain that stems from ongoing legacy debt contracts. Section 4.2 examines the support provided by banks through ordinary (market-based) financial intermediation. In parallel to policy support schemes, we look at the incidence of fresh liquidity drawn from new/incumbent credit facilities and concessions offered for legacy debt facilities.

4.1 Policy support through the financial sector

In March 2020, on the initiative of the Minister of Finance and with the support of the NBB, the federal government drew up an agreement with the financial sector to help attenuate the impact of the coronavirus pandemic on firms' liquidity position through the introduction of two support schemes: a debt moratorium (for pre-COVID-19 existing credit facilities) and State-guaranteed loans (for new facilities). In order to monitor uptake of both schemes, the NBB maintains an exhaustive list of all credit under moratorium and new credit facilities granted under the State-guarantee scheme. These new data complement the Belgian Extended Credit Risk Information System (BECRIS), already in place prior to the pandemic, which records all debt instruments provided by banks to non-financial corporations. Jointly, these data allow us to quantify the extent to which the corporate sector has benefited from both policy support schemes.

4.1.1 Corporate debt moratorium

Under *Charter I* of the Belgian corporate debt moratorium, viable firms could apply to their institutional lenders for a deferral of repayments on their business loans for a maximum of six months. The suspension only applied to the principal: the interest on these loans remained due. Once the deferral period had lapsed, payments had to resume. The duration of the loan was extended by the deferral period, and borrowers would finish repaying their loan a maximum of six months later than the original deadline. Not all firms could ask for a moratorium

on their debt, as important eligibility criteria applied (in particular, viability prior to the pandemic and suffering a(n) (in)direct impact from the pandemic)[1].

Right from its inception in April 2020, the moratorium was often solicited by Belgian firms. The top left-hand panel in chart 9 reveals that, by September, a little over 8 % of all Belgian bank-borrowing entities had at least one of its eligible debt instruments placed under moratorium. Uptake was disproportionately skewed towards self-employed and micro/small SMEs, i.e. sub-populations known to have smaller pre-pandemic liquidity buffers and lower ability to cut costs in the face of declining revenues (Tielens *et al.*, 2021).

Charter I of the corporate moratorium was drafted in April 2020 and was initially scheduled to terminate by the end of October 2022. However, as the pandemic unfolded, policymakers needed to consider whether, when and how to extend, amend or unwind this support measure. Such a decision was not straightforward in the face of an uncertain outlook for the pandemic and its effects on the economy. Removing the safety net for firms before their income sources are sufficiently restored could trigger the inefficient bankruptcy of intrinsically sound businesses. Conversely, there were risks involved in withdrawing the debt moratorium too late. First, extending the moratorium for too long risks postponing necessary structural adjustments in the economy (Di Mauro & Syverson, 2020). More precisely, some of the changes in demand brought about by the pandemic are likely to be permanent : e.g. travel and tourism patterns (less business travel), household consumption behaviour (shift from onsite to online) and supply chain restructuring (more local procurement or in-house production). Such structural shifts are expected to last beyond the pandemic. Protracting lifelines discourages affected firms from adapting to this new normal. Second, the lack of periodical debt repayments is likely to hamper monitoring by banks, as they would find it harder to distinguish between reliable and unreliable borrowers in the absence of periodical cash flows from both borrower categories (Beck *et al.*, 2021).

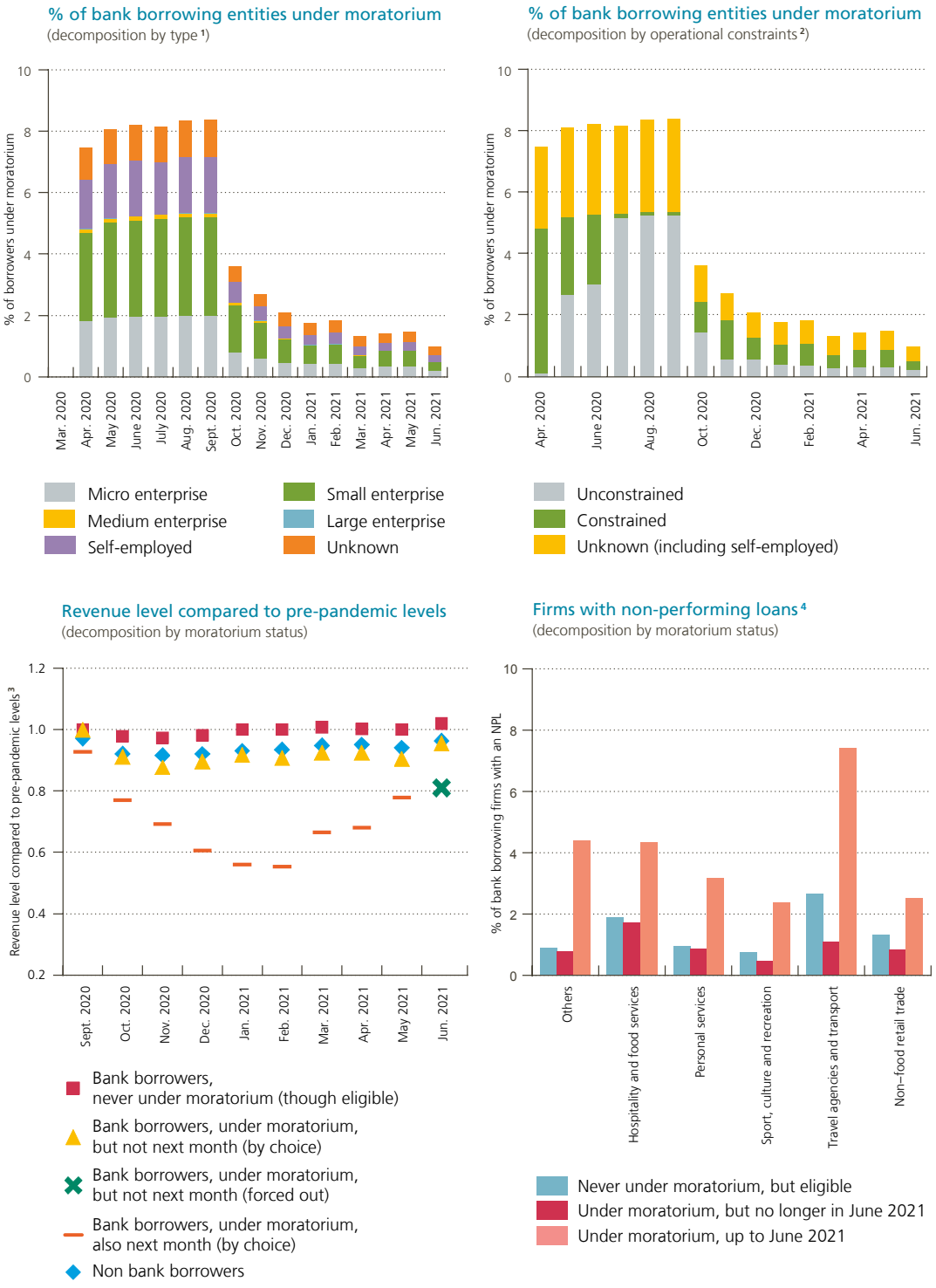
Belgian policymakers took the view that the costs of premature withdrawal of support could outweigh the costs of maintaining support for too long. Hence, in September 2020, once it became apparent that the crisis would last longer than expected, the initial option to defer payments up to the 31st of October 2020 (as outlined in Charter I) was extended twice. First, until the end of 2020 (Charter I bis, Febelfin (2020a)) and, subsequently, up to June 2021, provided the total combined deferral period did not exceed nine months (Charter II, Febelfin (2020b)). Nevertheless, the top left-hand panel in chart 9 shows that many businesses with debt instruments under moratoria in September did not have their moratorium extended. However, the top right-hand panel reveals that many firms that opted into the moratorium extensions were constrained by restrictive legislative measures that were reinstated to help soften the impact of the second (and subsequent) waves of the pandemic.

How did the firms under moratorium fare ? The bottom left-hand panel shows monthly sales levels vis-à-vis the same month in 2019 for various categories of firms. Three patterns emerge. First, firms that deliberately never applied for the moratorium typically operated close to pre-pandemic activity levels throughout 2020-21 (red squares). This (partly) reflects the eligibility criteria at work : only entities affected by the crisis were entitled to the moratorium. Second, the yellow markers reveal that firms deliberately not opting into moratorium extensions were in relatively good shape one month prior to dropping out. Moreover, the entities that did not apply for the September 2020 extension reported operating revenues close to pre-pandemic levels. Conversely, firms that continued to rely on (all possible extensions of) the moratorium typically had significantly subdued business activity. Finally, from 30 June (2021) onwards, the Belgian debt moratorium ended and firms were instructed to turn to their lenders for case-by-case solutions (Febelfin, 2021). Overall, firms that remained under moratorium up to the deadline in June were only operating at 80 % of their pre-pandemic level, suggesting that their operations were only partly restored before they were forced off this lifeline by the end of the month (green marker).

1 The criteria include, inter alia, that the requesting entity must not have been in arrears on 1 February 2020 with its outstanding loans, tax or social security contributions (see NBB (2020) for details). In addition, applicant firms should have payment problems attributable to the COVID-19 crisis, i.e., through (i) a drop in turnover or activity, (ii) recourse to (temporary) unemployment, or (iii) the legal obligation imposed by government authorities to close the company or organisation.

Chart 9

Uptake and decomposition of the corporate debt moratorium



Sources: Federal Planning Bureau, Federal Public Service Finance, NBB (BECRIS).

1 Entities encompass both firms and self-employed.

2 A firm is classed as constrained if it operates in a sector on which regulatory restrictions are imposed by a ministerial decree. Such constraints range from relatively mild (e.g., no room service in the hotel sector) to pervasive (e.g., closure of the establishment). The state of being constrained cannot be determined for self-employed as its sector is not stored in BECRIS.

3 The vertical axis indicates the ratio of current monthly revenue levels to revenue levels for the same month in 2019.

4 A firm is considered non-performing if it has (at least) one non-performing loan in December 2021.

Various commentators voiced a concern that the moratorium expiry date could ignite payment difficulties among firms that remained under moratorium until the end date. The bottom right-hand panel in chart 9 provides some grounds for this concern. It shows the December 2021 share of non-performing loans (NPLs)[1] among firms that (a) remained under moratorium at the expiry date in June 2021, (b) had never been under moratorium (even though eligible) and (c) had been under moratorium but dropped out voluntarily before the June closure. The pattern reveals that the incidence of non-performance in category (a) significantly exceeds that of other firms, whatever the sector considered. While the rise in NPLs for this segment of firms is remarkable, it only represents a limited number of firms (approximately 3 500 firms and self-employed remained under moratorium in June 2021) and, in volume, accounts for only a marginal share of the corporate banking portfolio.

4.1.2 State-guaranteed loans

Two State-guarantee (SG) schemes were activated for all new loans and credit lines that banks granted to resident firms for their activities in Belgium. The first SG scheme initially covered loans granted between March and October 2020, but was eventually extended until the end of December 2020. It covered loans with a maximum term of 12 months to viable non-financial corporations, SMEs, self-employed workers and non-profit organisations. The second SG scheme was set up in July 2020 and originally ran until the end of 2020, before it was extended until the end of June 2021. At first, it covered new loans with a term of between 12 and 36 months to non-financial SMEs, but the maximum term of these loans was subsequently increased to five years starting from January 2021.

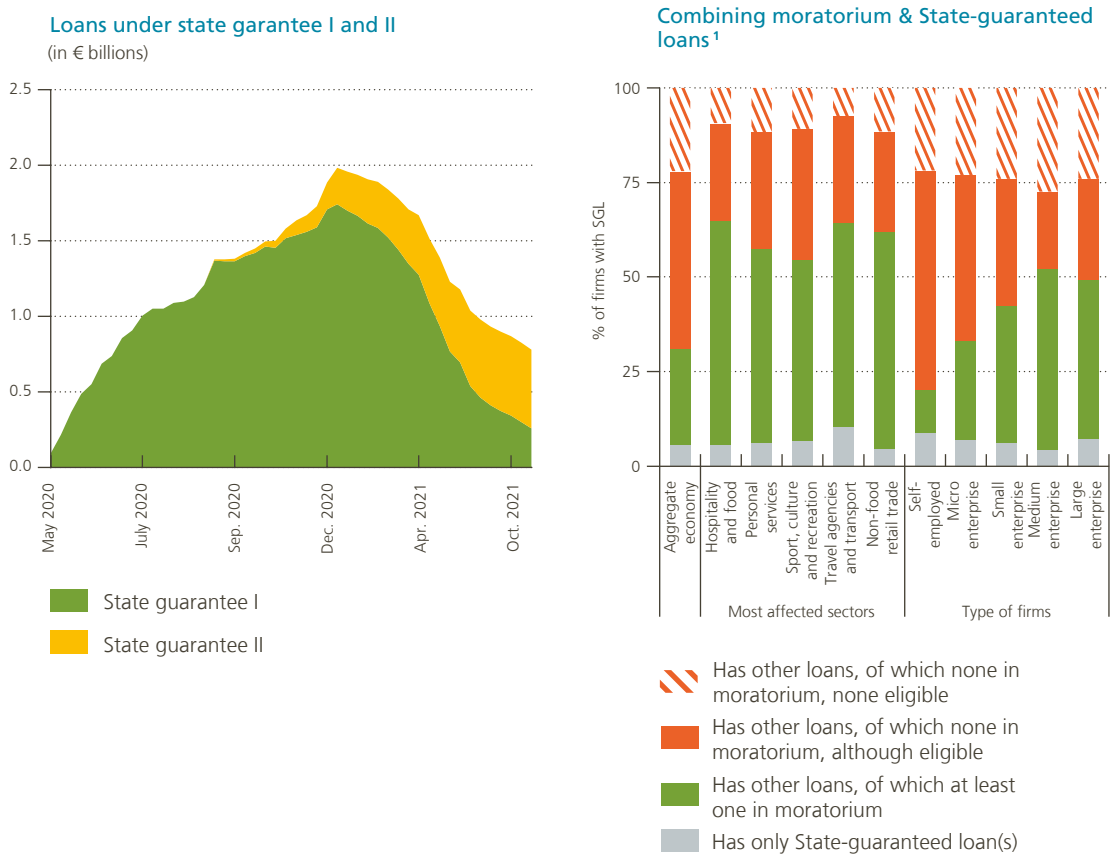
From the scheme's inception up to December 2021, approximately 27 000 debt facilities were backed by the State (chart 10, upper left-hand panel). Nonetheless, uptake of this support measure has remained relatively modest, suggesting that banks had sufficient confidence in the viability of candidate/incumbent borrowers to grant loans not covered by the SG scheme. Most entities taking out SG loans (SGLs) were self-employed, micro and small enterprises. In terms of volume, the bulk of the envelope, however, was skewed towards larger firms, as financing requirements are typically proportional to the scale of operations.

SGLs were often offered in conjunction with the corporate debt moratorium. The right-hand panel of chart 10 shows that 25 % of all entities obtaining State-backed credit had at least one other credit facility under moratorium. 47 % had other facilities eligible for moratorium, but deliberately did not apply. For 6 %, the SG credit was the only credit facility at their disposal. In the most affected sectors, combining the two support measures was a dominant strategy; for example, in travel and transport, 55 % of corporations with an SGL additionally applied for a moratorium on legacy debt facilities. Similarly, larger firms opted into both support measures. The limited traction of the SG programme is in part attributable to the widespread uptake of the moratorium.

1 Non-performing loans are loans that may not be repaid due to their borrower getting into financial trouble, or that are already in arrears.

Chart 10

State-guaranteed loans: uptake & decomposition



Source: NBB (Ad hoc reporting scheme during the COVID-19 crisis, BECRIS).
1 For the period in which the debt moratorium was in place.

4.2 Plain vanilla financial intermediation

While the previous subsection documented the uptake of the corporate debt moratorium and SGLs, the question remains to what extent market-based (as opposed to policy-coordinated) financial intermediation has supported firm operations. This question is important, since considerable policy action had been taken to support the capacity of the banking sector to fulfil that role, e.g. through monetary policy measures (see Boeckx *et al.*, 2020) and macroprudential intervention through the release of the full Pillar 2 Guidance buffer, the capital conservation buffer (ECB, 2020) and the countercyclical capital buffer (NBB, 2020c). In this section we investigate to what extent banks have injected fresh liquidity into the system and/or offered out-of-court concessions to legacy debt facilities.

4.2.1 "New money": credit inflows

This subsection studies the extent to which extra bank credit has been channelled into corporations since the start of the pandemic (March 2020). In particular, we classify each firm according to whether it obtained a new credit facility (extensive margin) or whether it drew on a pre-existing credit facility (intensive margin). We additionally decompose the intensive margin into two components; (a) firms that only *partly* drew on existing credit facilities vs. (b) firms that *fully exhausted* existing credit lines. Similarly, we break the extensive margin down into its two

subcomponents: (c) firms that did not have an active banking relationship prior to the start of the pandemic but subsequently started up a relationship, and (d) firms that already had an active banking relationship ex ante, but opened an additional credit facility. In principle, (a) and (b) purely reflect banks' prior commitments and therefore only indicate firms' liquidity demand. Conversely, components (c) and (d) are in part driven by banks' lending behaviour and deal directly with the question whether banks actively helped to shore up firms' liquidity positions. Corporations that do not fit into one of these categories (e) either did not rely on bank credit (both ex ante and ex post) or (f) did not draw on incumbent facilities to which they had access[1]. We take a short-run and a long-run view. The short-run relates to the early phase of the pandemic, i.e. March-April 2020[2]. The long-run encompasses the whole pandemic and covers the period from May 2020 to December 2021.

In the short-run, across the board, 69 % of corporates did not resort to additional bank credit (the majority had existing facilities but did not draw on them). 23 % of firms drew on incumbent credit facilities, and half of them had fully exhausted their limits by the end of April. The latter result bears an important policy implication: to quantify the liquidity resilience of the corporate sector, early (policy)work during the pandemic relied extensively on ex-ante liquidity positions, as inferred from pre-pandemic balance sheet data[3]. Chart 11 reveals the shortcomings of such an approach in view of the large incidence of off-balance sheet access to bank credit that can (and effectively was) readily be tapped into. The large minority of firms that opened up new credit facilities did so in the context of a previously established banking relationship (the number of non-bank borrowers establishing a first-time bank relationship is negligible). The limited incidence of the extensive margin in the early phase of the pandemic has three origins. First, the success of the debt moratorium: a freeze on capital repayments had proved sufficient to help dampen the initial cash drain. Second, a well-established result in the corporate finance literature dictates a pecking order in which firms prefer to soak up internal liquidity before turning to outside creditors such as banks. Third, as highlighted in section 2.1, a significant number of firms received loans from their owners.

The aggregate short-run results mask some heterogeneity across categories of firms. First, firms that filed for bankruptcy in the short run mostly exhausted their incumbent bank debt facilities (shaded yellow) or did not draw on these facilities at all (shaded blue area). The key reason is that the latter facilities were typically fully maxed out prior to the start of the pandemic (not shown in the chart). Second, firms that suffered significant revenue losses also relied on incumbent credit lines (more than the less affected firms). Finally, structurally non-profitable firms had less access to bank credit prior to the pandemic, a pattern that remains true shortly after the start of the pandemic. The latter result echoes that of section 2.1, which revealed prudent and conservative lending strategies by banks.

In the long-run (bottom panel of chart 11), the role of the extensive margin comes to the forefront: on aggregate, 5.5 % of corporates resorted to bank credit while not having borrowed from banks prior to the pandemic. In addition, 13 % opened a new credit facility in the context of an existing bank relationship. Importantly, a key pattern that emerges is that of a combined strategy: many firms drew on old credit facilities in addition to new loans to address liquidity concerns (category in green). These extensive margin categories (both green and red) reflect the active role that banks have played as lenders of first resort (Tielens *et al.*, 2021). Importantly, firms that exited between March 2020 and December 2021 only rarely received additional debt facilities following the start of the pandemic. Such risk aversion by banks is more generally true: most ex-ante non-profitable firms remain non-borrowers throughout the pandemic while their profitable peers start to take up additional bank credit. Finally, and continuing the trend observed in the short run, bank support has become an important liquidity solution for firms suffering heavy revenue losses.

1 Either because (a) these lines were already fully exhausted, (b) there was no need for drawdowns, (c) these credit facilities did not allow for drawdowns, (d) drawdowns were too expensive, etc.

2 This period is based on aggregate BSI statistics, which reveal that aggregate corporate lending spiked in these two months before abating thereafter.

3 See e.g. OECD (2020), European Commission (2020) and IMF (2021).

Chart 11

Drawing on (new) credit facilities in the short and long run

Sources: FPS Economy, NBB (annual accounts data and BECRIS)

1 Firms that did not rely on bank credit (both ex ante and ex post)

2 Firms that did not draw on incumbent facilities to which they had access.

3 Firms that did not have an active banking relationship prior to the start of the pandemic but subsequently started up a relationship.

4 Firms that already had an active banking relationship ex ante, but opened up an additional credit facility.

5 Firms that only partly drew on existing credit facilities.

6 Firms that fully exhausted their existing credit lines.

7 Firms that increased their credit lines through the extensive and intensive margins.

8 Transport, travel agencies, sport, culture, recreation, hospitality, food services and personal services.

4.2.2 "Old money": forbearance & renegotiated legacy contracts[1]

While the previous subsection showed that firms made heavy use of existing/new debt facilities to alleviate liquidity stress, old legacy contracts potentially exacerbate a cash drain during an economic downturn, in particular due to periodic loan repayments. Banks can alleviate this source of financial stress by offering concessions on such incumbent debt facilities (e.g., a modified interest rate below market conditions, a higher committed amount, a deferral of repayment, etc.) for debtors facing (or about to face) financial difficulties in meeting their commitments. Proactively offering such contract modifications to viable but over-indebted companies allows banks to minimise losses and avoid unnecessary defaults that would otherwise be detrimental to the financial sector itself.

This subsection documents the extent to which banks have offered concessions to firms throughout the pandemic. In keeping with BECRIS reporting, we distinguish between two categories: (a) legal modifications and (b) moratorium modifications. We define the former to cover forbearance in accordance with EU Regulation No 680/2014 (e.g., if the modified interest rate is lower than competitive market interest rates) on top of other modifications to the debt contract (e.g., if the interest rate was renegotiated because other banks are offering a lower rate). Category (b) reflects debt instruments that are classified as forborne because they have been placed under moratorium for more than 9 months (see EBA (2021)). The former category is driven by bank supply and firm demand interactions. The latter exclusively reflects firm demand since it covers the automatic reclassification of a support scheme to which firms were entitled if certain pre-defined criteria were met (see above). We additionally investigate whether the firm was already in arrears when its debt contract was revised. Such an additional decomposition allows us to distinguish between *pro-active* behaviour by banks (i.e., devising workable solutions *before* repayment problems materialise) and *remedial* behaviour (where the bank only revises credit conditions *after* payment problems emerge).

In the short run (top panel of chart 12), we observe that banks have only to a limited extent offered contract concessions to firms (only 1.4 % of NFCs had their contract terms revised). Part of this limited commitment reflects the fact that, during the time frame under consideration, firms simultaneously had access to a broad-based moratorium scheme (supra) for their legacy debt contracts. Chart 12 additionally reveals that contract revisions were not offered proactively in the short run, as typically half of the modifications arose at a time when the debtor was already in arrears. Such *remedial* behaviour is unlikely to be a first-best strategy. For example, while the top panel in chart 12 reveals that bankrupt firms disproportionally received more concessions than their surviving peers, most of these adjustments were made at a time when the (soon-to-become-bankrupt) firm was already running late on payments. Across various firm categories, contracts were renegotiated disproportionately more with firms operating in the most affected sectors.

During the medium-to-long run, the level of contract revisions had picked up significantly. Overall, 7.8 % of firms had their debt contract modified during the pandemic. 2.3 % relate purely to a passive reclassification (moratorium modification), whereas 5.5 % had their debt contracts revised through active interaction with their lender. In contrast to the short run, the bottom panel reveals that banks behaved in a relatively pro-active manner: legal modifications were typically offered at a time when the firm was still performing and not in arrears. Across firm categories, legal modifications were offered relatively more to firms that (a) were structurally profitable prior to the pandemic, (b) suffered large declines in turnover, and (c) operated in the most affected sectors. Moratorium modifications were mostly associated with firms seriously affected by the crisis (an automatic outcome since these firms typically opted for the moratorium extensions, see above). Finally, while in the short run debt concessions were offered disproportionately more to firms that would later exit, this pattern reverses in the long run. One potential explanation is that a shift to a proactive forbearance strategy effectively prevented bankruptcies (or that banks' lending policy tends to favour viable firms).

1 In this section we focus on "new" concessions throughout the pandemic (and ignore whether the firm had already benefitted from those measures prior to the pandemic).

Chart 12

Forbearance and debt restructuring in the short and long run

Sources: FPS Economy, NBB (Annual accounts data and BECRIS).

1 Transport, travel agencies, sport, culture, recreation, hospitality, food services and personal services).

5. Looking ahead through the lens of bank balance sheets

Throughout parts 1 to 4, this article has taken a retrospective view of corporate financial health. In this final section we look to the future through the lens of banks' balance sheets. More precisely, we focus on credit facilities classified as "unlikely to pay", a statistic that inherently reflects the risk assessment of the financial sector.

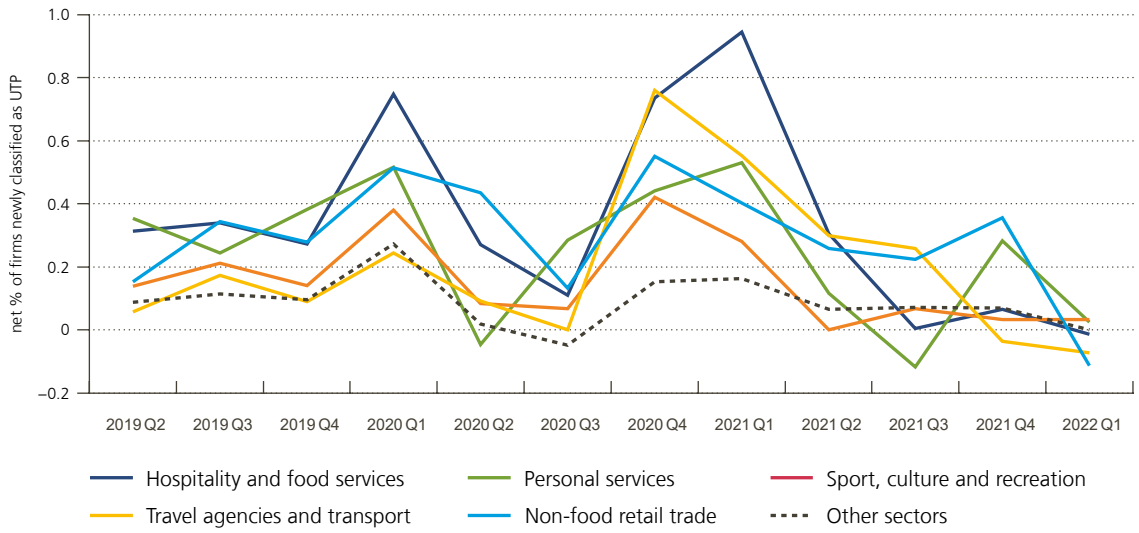
Generally, NPLs are exposures to debtors that are no longer able to meet all or part of their contractual obligations because economic circumstances and their financial health have deteriorated. The three subcategories of NPLs are "bad loans", "unlikely-to-pay exposures" and "overdrawn and/or past-due exposures". More specifically:

- **Bad loans** are exposures to debtors that are insolvent or in substantially similar circumstances.
- **Unlikely-to-pay exposures** (aside from those included among bad loans) are those in respect of which banks believe the debtors are unlikely to meet their contractual obligations in full unless action is taken, such as the enforcement of guarantees.
- **Overdrawn and/or past-due exposures** (aside from those classified among bad loans and unlikely-to-pay exposures) are those that are overdrawn and/or past-due by more than 90 days and exceed a predefined amount.

While the first and third categories reflect established non-performance, the second category quantifies banks' pessimistic expectations which have yet to materialise. Chart 13 plots the net share of debtors flagged as unlikely to pay (vis-à-vis the previous quarter) for various firm categories. The pattern reveals that, while a significant number of debtors were reclassified as unlikely to pay (UTP) throughout the pandemic, the rate of reclassification has abated recently and reverted to pre-pandemic levels. Moreover, the sectors that had been the most affected by the pandemic are apparently on the same recovery trajectory as their less-affected peers.

Chart 13

Firms with credit facilities classified as "unlikely to pay"



Source: NBB (BECRIS).

Conclusion

The coronavirus pandemic led to a sharp fall in economic activity in Belgium. Throughout 2020 and 2021, many businesses were forced to suspend or severely scale down their operations due to public health measures, or the resulting slump in demand combined with supply chain disruptions. Early policy work has documented the significant short-run impact on firms' liquidity buffers in Belgium (Tielens *et al.*, 2021). As the pandemic unfolded, policy attention shifted towards solvency concerns. Closer scrutiny of firms' liability structures was warranted, as the losses caused by the COVID-19 crisis were likely to erode many firms' equity, and replenishing cash reserves would involve a substantial rise in indebtedness in the absence of alternative financing sources. Moreover, the deteriorating financial position of the hardest hit businesses was expected to usher in a surge in corporate bankruptcies.

At the time of writing, the predicted "wave of bankruptcies" has not materialised. Three factors contributed to this result. First, moratoria on bankruptcies, and on tax & social security debt, offered firms on the verge of collapse additional time to regain viability, automatically postponing the inevitable bankruptcy proceedings. Second, policy support – both broad-based and targeted – was generous and successfully alleviated cash outflows, offering firms a respite to strengthen their solvency positions. Finally, businesses themselves have taken significant corrective action to weather the storm. In particular, they have demonstrated a significant ability to cut costs in tandem with the decline in revenues. The residual pressures on liquidity positions were subsequently eased by the mobilisation of private savings (mainly through advances on current accounts), subordinated loans (including those granted by regional investment companies), bank credit and – to a limited extent – equity injections.

This article also looks at the role of the banking sector in supporting the real economy throughout the pandemic. This question is important, since considerable policy action had been taken to support the capacity of the banking sector for that purpose. The analysis reveals that banks have played a dual role: first, by offering new liquidity through existing credit facilities in the early months of the crisis and, later, via new loan arrangements. In addition, firms' ongoing legacy contracts potentially exacerbate their cash drain during an economic downturn. Banks have cushioned this source of financial stress by offering concessions on incumbent debt facilities to debtors facing (or about to face) financial difficulties in meeting their contract commitments. In addition, banks' overall lending strategies were prudent, as new credit and concessions to legacy contracts were typically offered to firms that were structurally profitable prior to the pandemic.

Finally, while crisis periods typically have a cleansing effect by driving out structurally unviable firms, the current crisis has not delivered that outcome. Overall, the financial health of surviving firms did not deteriorate significantly throughout 2020. In particular, in the most affected sectors, only 4% of firms suffered losses so large as to consume their entire equity. This figure tallies with what was observed in 2019. Furthermore, anticipating future data releases covering 2021, a projection exercise reveals a similar status quo for the broader economy. This pattern echoes the revived economic activity which has allowed some firms to regain solvency, whereas continued low levels of activity in some sectors have rendered other firms insolvent. Nevertheless, it can be concluded that Belgian businesses have overall managed to weather the economic impact of the pandemic (very) well.

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List of abbreviations

Abbreviations

€	euro
%	per cent
e.g.	*exempli gratia* (for example)
et al.	*et alia* (and others)
etc.	*et cetera*
i.e.	*id est* (that is)
vs	versus

BECRIS	Belgian Extended Credit Risk Information System
BSI	Balance Sheet Items
COVID-19	Coronavirus disease-19
DTA	Debt-to-assets ratio
EBA	European banking authority
ECB	European Central Bank
EU	European Union
FPS	Federal Public Service
Febelfin	Fédération belge du secteur financier
GDP	Gross domestic product
IMF	International Monetary Fund
NACE	Nomenclature of economic activities of the European Community
NBB	National Bank of Belgium
NPL	Non-performing loan
NSSO	National Social Security Office
OECD	Organisation for Economic Cooperation and Development
P&L	Profit and Loss
SG	State guarantee
SGL	State guaranteed loan

SME	Small and medium sized enterprise
UTP	Unlikely to pay
VAT	Value added tax

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