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SEPTEMBER 2020

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The short-term impact of the COVID-19 pandemic on Portuguese companies

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Abstract
The COVID-19 pandemic and the necessary containment measures have caused a very severe shock on Portuguese businesses. This article uses the results of the Fast and Exceptional Enterprise Survey – COVID-19 (COVID-IREE) to characterise the short-term economic impact of the pandemic, in a context in which several support measures have been adopted by public authorities. The main results show a very significant decline in companies' activity in the second quarter of 2020, with very adverse effects on their liquidity. Accommodation and food services stands out as the most affected sector. In this period, the impact on employment was relatively contained. However, there were marked declines in effectively working staff, albeit partially offset by remote work and alternate presence schemes in companies' facilities. Finally, the survey reveals that companies in more fragile conditions were the ones that resorted the most to the support policy measures and that these measures played a very important role in safeguarding companies' financial sustainability and preserving employment.

JEL: D22, E65, I15

Keywords: COVID-19, pandemic, business turnover, employment, remote working, policy measures, firm survey.

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1. Introduction

The COVID-19 pandemic had a very severe adverse impact on economic activity in Portugal. The containment measures announced by the Government in order to mitigate the impact of the pandemic on public health affected the behaviour of economic agents both on the supply side – interrupting the normal functioning of companies and leading, in some cases, to temporary closures – and on the demand side, reflecting inter alia the mandatory confinement.[1] The general increase in uncertainty, prompted by the fast spread of the disease, heightened these effects. In April 2020, the negative impact of the economic shutdown reached an unprecedented scale, affecting companies of all sizes and sectors of activity. The gradual easing of containment measures since the beginning of May, with a phased reopening in retail and services, led to a gradual and differentiated improvement across sectors.

This article aims at illustrating the short-term impact of the pandemic on enterprises, in a context in which public authorities have adopted several policy measures to support their liquidity situation.[2] The analysis of the Portuguese business situation is conducted over time (throughout the second quarter and addressing the prospects until the end of 2020) and includes variables such as business turnover, employment, credit and prices. Possible sources of heterogeneity in companies' behaviour are also explored, namely in terms of their size and sector of activity. Additionally, the uptake of support policy measures is discussed, with a characterisation of the beneficiary companies and an assessment of its impact in mitigating the effects of the shock. It should be noted that this is a preliminary assessment and an in-depth analysis of the effectiveness of the adopted policy measures should be the subject of further research.

The analysis presented is based on the micro data of the Fast and Exceptional Enterprise Survey – COVID-19 (COVID-IREE), launched jointly by Statistics Portugal (INE) and Banco de Portugal in early April. The survey was prepared in a short period of time and was designed to assess in almost real-time the impact

1. In Portugal, the state of emergency was declared on March 18, 2020 (the closure of schools and universities occurred on March 16) and stood in effect until May 2. During this period a temporary suspension of a wide range of service activities, both public and private, was decreed. For more details, see Decree 2-A/2020, of March 20, 2020. The following period, known as the state of calamity, remained in place until June 30 and was characterised by the gradual lifting of the containment measures imposed during the state of emergency. The stores reopened gradually, bounded by store-size restrictions, as of May 4. On May 18, some classes at secondary schools were resumed and the day-care centres, cultural spaces, cafes and restaurants reopened. The reopening of shopping centres (except in the Lisbon Metropolitan Area) and the end of the general duty of home confinement took place on June 1.

2. Sizeable policy measures to support companies and households, with no match in recent history, were adopted across most advanced economies. The main European institutions, in particular the European Commission and the European Central Bank, also announced policy measures to support the economy. The Special Issue of Banco de Portugal's Economic Bulletin of May 2020 presents a brief analysis of the measures announced since March 2020.

of the pandemic on the Portuguese businesses, at a time when the information available was scarce. The high frequency of COVID-IREE allowed for a timely monitoring of the economic situation, contributing to the analysis of the impact of the adopted measures. The need for timely data on the impact of the pandemic was also felt in other economies, reflecting the global nature of the pandemic crisis. In particular, Germany, Belgium, Ireland, the United Kingdom, the United States of America (USA) and Australia have also launched surveys identical to COVID-IREE.

The main results show that the COVID-19 pandemic prompted a very significant drop in business activity in the second quarter. Accommodation and food services was the sector most affected by the pandemic in the short-term and the one where recovery is expected to be slower. The major and generalized decline in turnover in April (in many cases, exceeding 50%) severely affected the liquidity situation of companies, which, in the absence of support policy measures, could have jeopardized the survival of a large share of Portuguese businesses. The recovery in business turnover started in May, but at a very gradual pace. Despite the substantial impact of the pandemic on sales, most firms managed to maintain their employees. However, in a context where containment measures enforced social distancing and the confinement of the general population, there has been a substantial decrease in the number of people effectively working. These developments were mitigated by the implementation of remote working practices and alternate presence in companies' facilities. In turn, the immediate impact of the pandemic on prices appears to have been smaller. Finally, the importance of Government support measures in mitigating the adverse effects of COVID-19 should be noted. The companies that were most affected by the pandemic were also the ones that resorted the most to policy support measures, especially the simplified layoff scheme and tax and social contribution deferrals. Additionally, the results show that the policy measures were particularly relevant in ensuring the financial sustainability of companies and avoiding worker dismissals and closures of viable companies.

This article contributes to the growing list of empirical papers on the impacts of the COVID-19 pandemic on businesses. This literature is based mainly on information collected through surveys, whose timeliness and granularity have allowed to evaluate various features of the pandemic shock.[3] The conclusions achieved for Portugal are in line with the evidence found for other economies. The effects of COVID-19 on smaller companies in the USA are examined by Bartik *et al.* (2020), who highlight the significant proportion of closures, job cuts and fragile financial situation of firms. Based on a similar sample, Balla-Elliott *et al.* (2020) analyse the conditions necessary for the economy to reopen, arguing that

3. The review of this literature is outside the scope of this article. Nevertheless, some references deserve mentioning. A non-exhaustive list of related articles includes Barrero *et al.* (2020), Buffington *et al.* (2020), Ferrando (2020), Fairlie (2020) e Humphries *et al.* (2020). Despite the short period of time that has elapsed since the beginning of the pandemic, the economic literature on COVID-19 is already quite vast, covering very different topics. A compilation of some of these analyses can be found in Baldwin and Mauro (2020).

the disruptions may have very long-lasting effects on activity. Additionally, Bloom *et al.* (2020) show that the pandemic has generated a significant increase in uncertainty levels in the United Kingdom, with a deterioration in sales expectations in many companies, particularly those related to tourism and food services. Still in Europe, Buchheim *et al.* (2020) reveal that relatively weak pre-crisis firms in Germany were hit harder and tended to choose more drastic mitigation strategies, in particular employment and investment reductions. Finally, Bennedsen *et al.* (2020) find evidence that Government support policies announced in Denmark – similar to those in several European countries – were successful in curbing unemployment during the pandemic. These authors also show that the companies with the most pronounced falls in revenues were the ones that resorted to support measures the most.

The analysis of this article is structured as follows: the next section describes the COVID-IREE database, in particular the survey questions, the companies that comprise the sample and its representativeness. Section 3 explores the various dimensions of the pandemic's impact on companies and Section 4 explores the uptake of Government policy support measures, characterising the benefitting companies. The last section presents the conclusions.

2. COVID-IREE: Main features of the survey

The data explored in this article was collected through the Fast and Exceptional Enterprise Survey – COVID-19, launched by INE and Banco de Portugal in April 2020 with the aim of assessing in a timely manner the impact of the pandemic on non-financial corporations. The participation of companies was voluntary and responses to the survey were collected through an online platform. The micro database of the COVID-IREE is available to researchers and can be accessed through Banco de Portugal's micro data laboratory (BPLIM) or through INE.[4]

The survey started in the week of April 6-10 and was initially conducted on a weekly basis, having changed to a fortnightly frequency in May and June. In view of the evolution of restrictions resulting from the pandemic, the project was suspended after the edition of the first half of July (released on July 29).

The questions included in the various editions of the survey allow to identify some of the main effects of the pandemic on business activity. Specifically, topics such as the current trading status of firms (continuing to operate/closed), the impact on business turnover and on the number of employees effectively working and its drivers, and the uptake and impact of policy support measures. Due to the evolution of the pandemic crisis, changes were made to the survey questions and new dimensions of analysis, deemed relevant, were added to the survey. In some

4. Informative notes and tables relative to the various editions of the survey can be found on the websites of Banco de Portugal and Statistics Portugal. For detailed information on the survey methodology, see INE (2020).

editions of the survey, companies were asked about how long they could remain in business without liquidity support from policy measures, about the impact of the pandemic on prices, about difficulties in meeting sanitary requirements and about the number of people working remotely and under alternating presence schemes at the company's facilities. In the June and July editions, companies were also asked about their views regarding the expected time needed for turnover to return to a normal level, about the expected evolution of employment until the end of 2020 and about any intended changes to their activity in response to the pandemic.

The survey was aimed at a sample of micro, small, medium and large-sized enterprises[5] – totalling over 8 800 firms – representative of business turnover in the following sectors of activity: Industry and energy, Construction and real estate, Wholesale and retail trade, Transportation and storage, Accommodation and food services, Information and communication and Other services.[6]

Figure 1 illustrates the number of companies, employed personnel and turnover for each sector of activity, comparing the differences between the whole universe, the survey sample and the group of respondents. In the analysis, emphasis was given to the breakdown by sector and firm size.

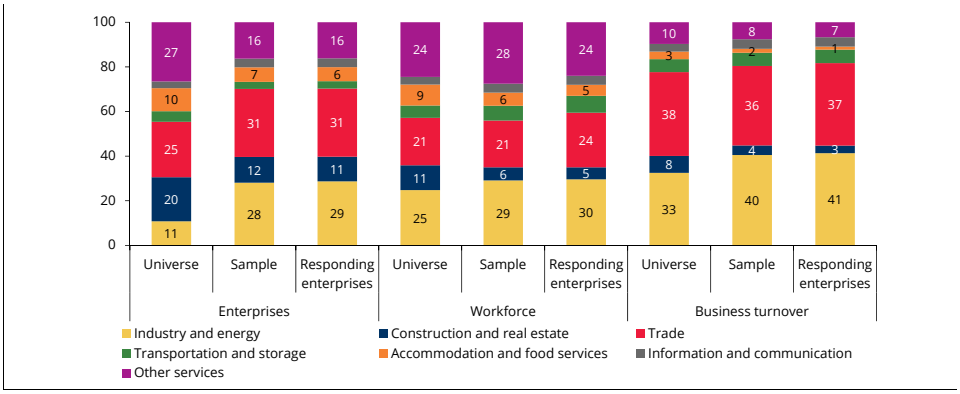

Figure 1: Universe, sample and responding enterprises – Breakdown by sector of activity | Percentage

The results presented in this article refer exclusively to companies that responded to each edition of the survey (about 5 500, on average, reflecting

5. The firm size classification criteria are as follows: Micro-sized firm – number of persons employed < 10 and turnover ≤ 2 million euros; Small-sized firm – number of persons employed < 50, turnover ≤ 10 million euros and not classified as micro-sized firm; Medium-sized firm – number of persons employed < 250, turnover ≤ 50 million euros and not classified as micro or small-sized company; and Large-sized firm – number of employees ≥ 250 or turnover> 50 million euros.

6. The sample was designed to represent approximately 80% the listed sectors' turnover. COVID-IREE does not cover Agriculture, forestry and fishing (Section A of CAE rev.3), Financial and insurance activities (Section K of CAE rev.3), Public administration and defence (Section O of CAE rev. 3), Activities of households as employers (Section T of CAE rev.3) and Activities of extraterritorial organisations and bodies (Section U of CAE rev.3).

an average response rate above 60%).[7] Additionally, companies that selected the option "do not know/do not answer" were excluded, so the effective response rate for each specific question may vary.[8]

The following caveats apply to the results. First, the information collected does not allow for the extrapolation of results to the whole economy since the survey does not cover all sectors of activity. In particular, the public sector, the financial sector and agriculture and fisheries are absent from the survey. Second, part of the non-response to COVID-IREE may reflect companies that have closed permanently, which could distort some of the results. Finally, it should be noted that the sample of companies surveyed is only representative of the covered sectors in terms of business turnover.

3. The impact of the pandemic on companies

Available quantitative indicators for the Portuguese economy confirm the very sharp negative impact of the COVID-19 pandemic in the second quarter of 2020. In this section, the information from the survey is explored at the firm level, aiming to describe changes due to the pandemic.

A first look at how companies perceived the crisis can be obtained through the comments section of COVID-IREE. In this optional section of the survey respondents could highlight whichever facts they considered relevant. Approximately 5 400 comments were collected over the entire period, with a significant decrease in the number of comments in each edition between April and July. As expected, pandemic-related terms were the most common (Figure 2). The simplified layoff scheme comes in second place, becoming more frequent throughout the various editions.

3.1. Firm closures

The new coronavirus pandemic and the ensuing containment measures led to the closure of many companies, the vast majority of which were temporary. The proportion of companies temporarily closed was significant in April (16%), having

7. In the first week of April, the second half of June and the first half of July, the response rate was lower (around 55%). The representativeness of the responding companies exceeds, on average, 75% and 65% when the responses are weighted by turnover and employed personnel, respectively. According to the technical note included in the COVID-IREE release, a more significant probability of non-response was detected in micro and small-sized companies.

8. As usual in surveys of this nature, the answer "do not know/do not answer" is included in most questions. Throughout the various editions of COVID-IREE, questions regarding future expectations and support policies were the ones with the highest percentage of "do not know/do not answer" responses. This percentage only exceeded 30% in two questions: the one relative to how long the firm could continue to operate in the absence of additional policy measures to support liquidity, and the one regarding options to take in August 2020, following the changes to the simplified layoff scheme.

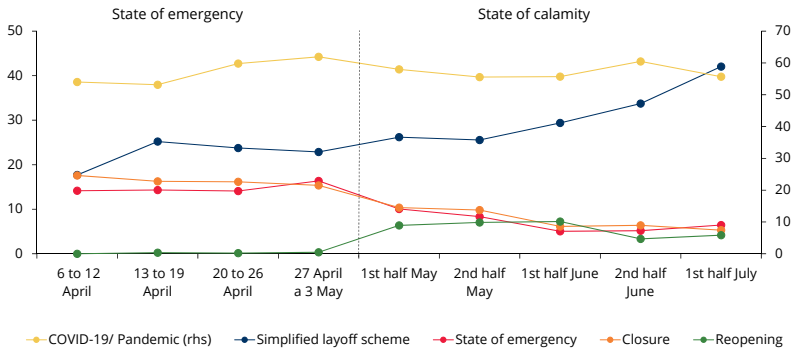

Figure 2: Most frequent words reported by enterprises in the comment section of COVID-IREE | Percentage of total comments

Notes: The number of comments (5400 in total) declined throughout the various editions of the survey, going from 900 comments in early April to around 250 in the first half of July. The figure includes only the most frequent terms (above 5%).

declined gradually since then (most notably from the first half of May onwards) (Figure 3). In the first half of July, only about 1% of the companies were temporarily closed.

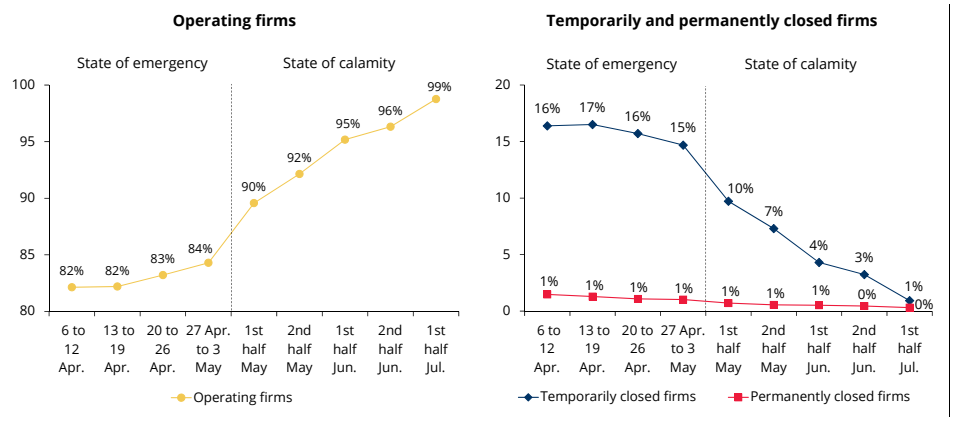

Figure 3: Operating and closed firms | Percentage of firms

Smaller-sized companies were the ones that closed the most. In April, about a quarter of micro-sized companies closed temporarily, which contrasts with 12% of large-sized firms. In the first half of July, the percentage of companies closed was similar across all firm sizes.

In a sectorial perspective, the proportion of closed companies in Accommodation and food services throughout April and May stands out (on

average, around 50%).[9] This result reflects the legal mandatory closure of most food services (excluding delivery services), the general duty of confinement and the closure of borders. In Arts, entertainment and recreation activities, the share of closed companies was also above average.

Temporary closures lasted, on average, around 5 weeks. Accommodation and food services was the sector where the average closure duration was longer (about 7 weeks), followed by the Wholesale and retail trade sector (5 and a half weeks) – reflecting the restrictions and changes in consumption patterns associated with the pandemic. In Industry and energy the average closure time was lower, less than 4 weeks. By size, only large-sized companies stand out with a slightly lower than average closure time (four and a half weeks).

As for the definitive closures, the evidence points to a very residual percentage of companies in this situation (around 1%), with emphasis on micro-sized firms and Accommodation and food services activities. Restrictions during the state of emergency and the drop in demand stand among the main reasons for the permanent cessation of activity. It should be noted that these results only reflect the situation of the respondent companies, therefore the group of permanently closed companies may be underestimated. The companies that reported being closed permanently in each edition did not answer any further questions, so they will be not considered in the subsequent analysis.

3.2. Impact on business turnover

The pandemic had a strong negative impact on firms' turnover. During the month of April, the vast majority of companies (80%) suffered a significant drop in sales, when compared to a scenario without the pandemic. Only a very small percentage of firms (around 4% of the total) registered a growth in turnover following the outbreak of COVID-19.

The negative impact on turnover was broad-based across firms of all sizes. By sector, the contraction was particularly deep in Accommodation and food services and in Transportation and storage (98% and 85% of companies, respectively). The drop in sales in April was also broad-based across operating status, having affected 72% of active companies and virtually all companies closed temporarily.[10]

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9. The percentage of companies temporarily closed was more significant in Accommodation than in Food services (64% and 42%, respectively, on average, from April to May). The improvement profile over the second quarter is quite marked in both sectors, having occurred slightly earlier in Food services activities. In the first half of July, only 9% of Accommodation firms and 4% of Food services firms remained closed.

10. In response to the challenges posed by the pandemic crisis, companies sought to adapt by finding alternatives to their way of functioning. In April, around 40% of the firms in operation chose to adjust their production process and almost 30% changed their distribution channels. The implementation of these strategies was slightly more frequent in enterprises that had registered significant drops in turnover. Industry and energy stands out as the sector with the smallest share of companies changing the way they operate, while at the opposite end are Wholesale and retail trade, Accommodation and food services and Information and communication.

The pandemic shock affected simultaneously the supply and demand sides of the economy, making it difficult to isolate both channels.[11] This topic is complex and has been debated in the literature, with no consensus among authors. The combination of effects is recognized by companies that associate the reduction in turnover with the decline in demand and the restrictions associated with the state of emergency (particularly relevant in the Accommodation and food services sector). These two reasons are mentioned conjointly by almost all companies – most of which find these reasons to be of great importance – illustrating the difficulty in distinguishing the different transmission channels.

The distribution of changes in business turnover confirms that the declines during the state of emergency, in addition to being generalized, were sizeable. In the companies that were closed temporarily, turnover recorded a collapse, while in operating companies there was a concentration in the declines of up to 50% (Figure 4).

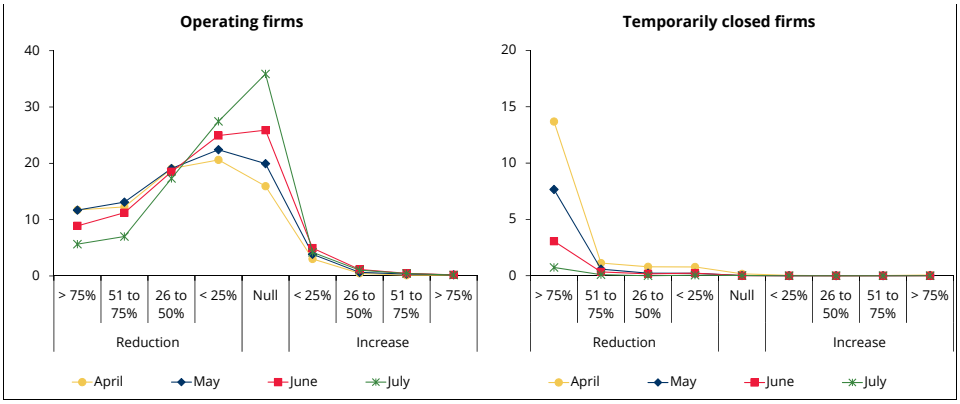

Figure 4: Distribution of changes in turnover compared to the expected situation without the pandemic | Percentage of firms

Notes: Each line represents the share in total responding firms (operating firms and temporarily closed firms) in each month. Monthly observations calculated as the average of weekly or fortnightly data.

In the following months, with the gradual easing of the containment measures, the percentage of companies reporting a reduction in turnover compared to a scenario without the pandemic decreased gradually, reaching below 60% in the

11. Box 3 of Banco de Portugal's Economic Bulletin of June 2020 presents a general equilibrium perspective on the evolution of Portuguese GDP (in the period 2020-2022) and concludes that the decline in 2020 is motivated both by demand and supply shocks.

first half of July.[12]This improvement was most noticeable in Construction and Wholesale and retail trade and in micro and small-sized companies.

The turnover recovery profile between May and July resulted, on the one hand, from the decline in the proportion of operating companies reporting decreases in turnover – illustrated by the shift to the right in the chart – and on the other hand, from the lower share of closed companies (Figure 4). It should be noted that, notwithstanding the fact that this share has been decreasing over time, the turnover of closed companies is practically non-existent. Additionally, the results indicate that the severity of the shock on turnover increases with closure time.

Taking the reported changes in turnover (considering the midpoint of the interval reported by each company and weighting by its turnover) it is possible to roughly quantify the decline in turnover in the set of companies covered by COVID-IREE. This calculation points to a 35% reduction in April. The drop was more significant in the group of micro-sized companies (over 40%) and, by sector, in Accommodation and food services (-72%) and in Transportation and storage (-62%).[13] Total turnover in surveyed companies recovered gradually in the following months, still standing around 17% below the expected level without a pandemic in the first half of July. In the most affected sectors, the recovery was slower.

This very gradual recovery scenario is expected to continue going forward. In fact, in June, 29% of companies estimated that the return of turnover to a pre-pandemic level should not occur until the end of 2020 (Figure 5). Large-sized companies and those in the sectors of Accommodation and food services and Transportation and storage stood out with expected longer periods of return to normality. In the same period, a smaller percentage of companies (4%) anticipated that their turnover would not return to normal. In contrast, 38% of the companies had already recovered their normal sales level in June, with emphasis on those of micro and small size and those in Construction and real estate activities.

The companies that remained closed in June had more adverse expectations, with the vast majority (82%) considering that their sales would remain below normal at least until the end of the year. Of these, about 24% stated that a return to a normal level would not be possible.

In this context of severe and lasting impacts on turnover, companies are expected to look for strategies to increase their resilience to shocks. The

12. The return to activity in May was gradual and accompanied by a new set of health and safety requirements. In order to assess the degree of difficulty of meeting these conditions, the May editions of COVID-IREE included a new question. Among the most difficult requirements to meet were providing individual protection material (masks, visors, disinfectant, etc.) and restrictions on physical space.

13. For a more detailed analysis of the impacts of the pandemic on turnover in April and May, see Box 2 of Banco de Portugal's Economic Bulletin of June 2020. Note that the estimates presented for the impact on turnover are subject to some inaccuracy and reflect only responding companies (no treatment was applied for non-response). Comparatively, according to the Services turnover index, in April 2020 the year-on-year fall was 81% in Accommodation and food services (-95% in Accommodation and - 76% in Food services) and 48% in Transportation and Storage.

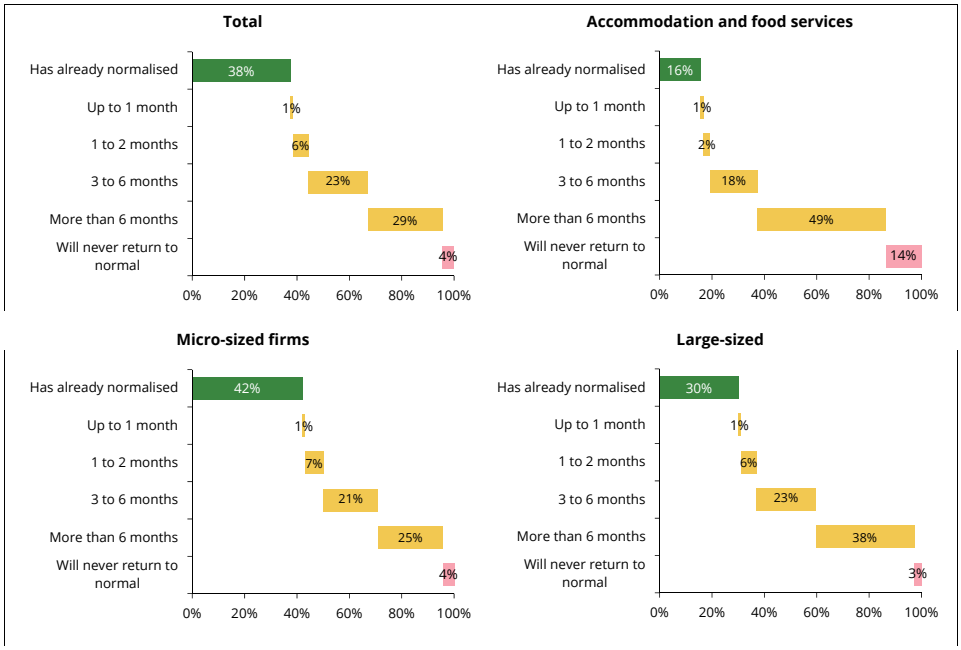

Figure 5: Time needed for turnover to return to normal levels | Percentage of firms

Note: These results refer to the survey responses of the first half of July 2020.

diversification of target markets, for example, could be a way to counter lower demand from specific customers. However, an assessment made in June points out that only a small portion of companies (16%) are considering changing their target markets due to COVID-19. This percentage is slightly higher in Accommodation and food services, where the decline in turnover was more pronounced and the recovery is expected to take longer.[14] This result may reflect, on the one hand, the global nature of this crisis, with a broad-based deterioration in activity across markets, and, on the other hand, the high uncertainty regarding the future developments of the pandemic, making such decisions more difficult.

14. The survey question regarding the likelihood of companies permanently changing their activity due to COVID-19 was posed only in the first half of June. In addition to redirecting target markets, companies were also asked about the likelihood of permanently changing: (i) the use of remote work, (ii) investment in information technology, (iii) the level of stocks, (iv) supply chains, (v) the range of products sold or services provided and (vi) the company's main activity. The results show that the share of companies considering it very likely to implement these changes was less than 10% for most of the transformations (the results of the first two changes are analysed in Section 3.5).

3.3. Impact on employment

The short-term impact of the pandemic on employment was relatively limited in view of the very sharp declines in turnover: up to the first half of July, three quarters of companies had not changed the number of jobs due to COVID-19. The support measures undertaken by the Government, in particular the simplified layoff scheme, were vital to this result (see Section 4). In the group of companies that reduced employment, large-sized firms and the Accommodation and food services and Transportation and storage sectors stand out, especially the share of firms with declines in employment larger than 20% in the former sector (Figure 6).

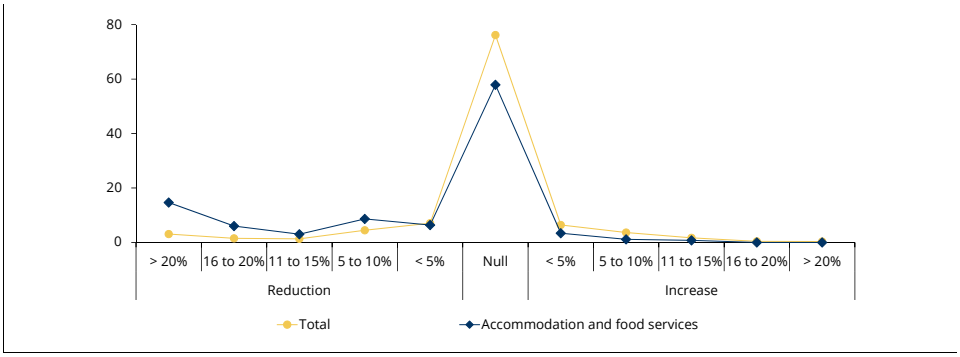

Figure 6: Distribution of changes in employment between the start of the pandemic and July 2020 | Percentage of firms

Notes: These results refer to the survey responses of the first half of July 2020. The spread of COVID-19 was classified by the World Health Organization as a pandemic on March 11, 2020.

According to business expectations, the relatively small impact on employment is expected to persist until the end of 2020. In July, 83% of companies had not anticipated changes in the number of jobs until the end of the year. This result is broad-based across firm size and sector.

Considering the firms that, in the first of July, anticipated changes in employment until the end of 2020, there is a balance between those that plan to increase the number of jobs and those that intend to reduce it. The analysis of the balances of extreme responses shows that the intention to reduce employment by the end of the year is more frequent in the companies most affected by the crisis. This result is visible both by size, with the balance being negative in micro and small-sized companies, and by sector (Figure 7). In the case of Accommodation and food services and Transportation and storage, the difference between the two groups of firms is much more significant than in the other sectors. In addition, companies that reduced employment during the pandemic show more intentions to reduce it further and those that increased jobs report more frequently intentions of further increases (note that, in both cases, the vast majority of companies intend to maintain employment unchanged until the end of the year).

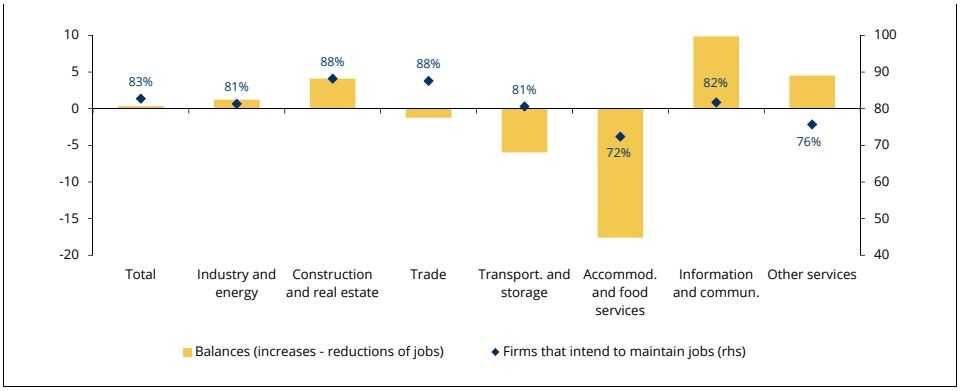

Figure 7: Outlook for employment until the end of 2020 | Balance of extreme responses and percentage of firms

Notes: These results refer to the survey responses of the first half of July 2020. The balance of extreme responses corresponds to the difference between companies that plan to increase and companies that pretend to decrease employment until the end of 2020.

As reversing worker dismissals quickly is difficult, it is usually a last resort cost-reduction decision, and is usually undertaken by companies with a more pessimistic outlook. Indeed, the majority of companies that intend to reduce jobs consider that their turnover will not return to normal at least until the end of 2020. In contrast, in companies that intend to maintain or increase employment, about 70% expect a full normalization of activity by the end of the year.

3.4. Impact on effectively working staff

The nature of the pandemic crisis prompted a negative, direct and immediate impact on effectively working staff, which contrasts with the employment evolution described above.[15] 60% of companies registered reductions in effectively working staff in April. These reductions were more frequent in larger-sized companies and in the Accommodation and food services and in Transportation and storage. These developments were associated with the adoption of the simplified layoff scheme and absences related to the pandemic (due to illness or family support), the former being the most relevant for the larger drops in the workforce and the latter for smaller reductions. Worker dismissals and the non-renewal of fixed-term contracts appear to be less relevant to the reduction in effectively working staff.

15. Effectively working staff includes all employees who were working in the premises or working remotely and excludes those who were absent for any reason (vacation, sick leave or family support leave, under simplified layoff or others). In this sense, the evolution of this indicator can be seen as a measure that better approximates the impact on hours worked than on employment.

As of May, the percentage of companies with declines in effectively working staff followed the loosening of containment measures, having decreased to 24% in the first half of July. The improvement was broad-based across firm size and sector.

When considering the breakdown by brackets of changes in effectively working staff, there is a very noticeable difference between companies in operation and closed companies, with the latter registering, in general, reductions in the workforce above 75% (Figure 8). In contrast, in operating companies, there is a high concentration of responses of null impact. This concentration is more obvious in smaller-sized companies, while in large-sized companies there is a significant share of companies with reductions of up to 25%. Increases in effectively working staff are almost non-existent between April and July.

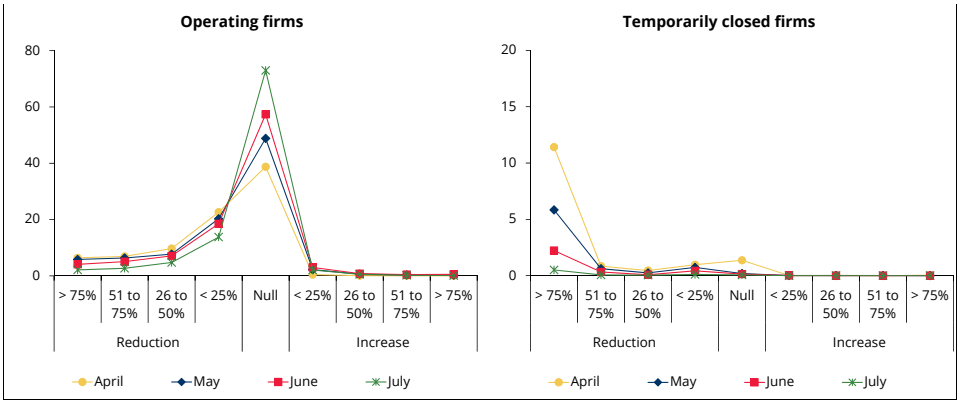

Figure 8: Distribution of changes in effective working staff compared to the expected situation without the pandemic | Percentage of firms

Notes: Each line represents the share in total responding firms (operating firms and temporarily closed firms) in each month. Monthly observations calculated as the average of weekly or fortnightly data.

This distinction between operating and closed firms also helps in explaining why companies with very significant reductions in the number of employees effectively working also report more pronounced declines in turnover. In the group of companies with no impact of the pandemic on the workforce, one third did not report changes in turnover and one quarter registered reductions lower than 25%.

Following an exercise similar to the one presented for the turnover analysis (taking the midpoint of the reported range for the change in effectively working staff and weighting by each companies' employment), the approximate decline in effectively working staff for all sectors included in COVID-IREE in April is almost 30%.[16] In addition to the lower impact on effectively working staff during the state of emergency compared to turnover, the improvement observed in May was also

16. See Box 2 of Banco de Portugal's Economic Bulletin of June 2020 for an analysis by sector of activity.

more noticeable. The recovery path continued in the following months. However, in the first half of July the number of people effectively working was still 9% below the expected situation without a pandemic.

3.5. Remote working and rotation schemes

Remote working and alternate presence schemes were strategies that allowed companies to keep their staff effectively working while following the new safety rules and distancing constraints.

The remote working scheme was used by about half of the firms during the second quarter, with a declining trend between April (58% of firms) and June (45%), in a context of gradual relief of containment measures. This strategy is inevitably limited by the production technology of each sector, with a greater adherence being expected in services (Figure 9). In fact, Information and communication, Transportation and storage and Other services were the sectors with the highest shares of companies adopting remote working schemes. Firm size also appears to play a role, with 90% of large-sized companies – but only a quarter of micro-sized ones – adopting this scheme.

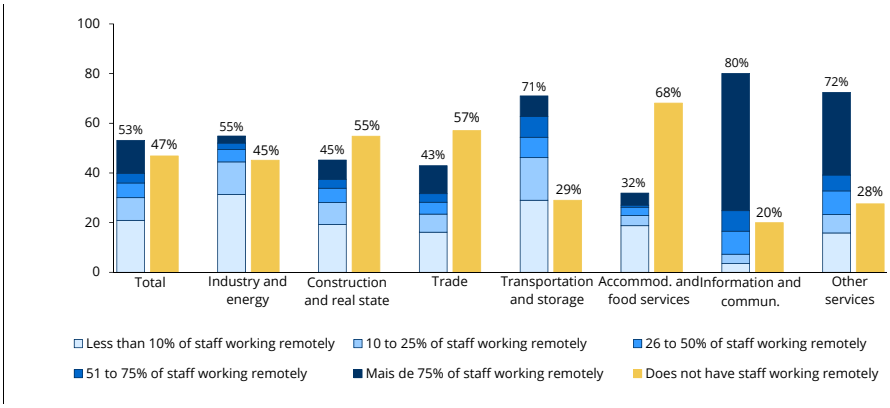

Figure 9: Remote work | Percentage of firms

Note: These results refer to average survey responses through the second quarter of 2020.

Using survey responses in brackets (taking the midpoint of the interval reported by each company and weighting by the total number of employees), it is possible to roughly estimate the percentage of total workers working remotely. The results indicate that, for the whole COVID-IREE sample, 21% of employees have worked remotely during the second quarter.[17] The percentage of workers in this situation

17. The estimate is in line with the results of the *ad hoc* module of the INE Labour Force Survey "Working from home" for the second quarter of 2020, which indicates that 23% of the employed population has always or almost always worked from home during this period (22% if we consider only the sectors covered by COVID-IREE).

was above average only in Information and communication and Other Services (77% and 34% of workers, respectively), with Education and Consultancy activities standing out in the latter.

In the first half of July, only 37% of companies had employees working remotely, and the number of workers working remotely also decreased (16% of total workers). Comparing with the average in the second quarter, the largest decreases were observed in Accommodation and food services and in Industry and energy.

The containment measures – in particular, physical distance constraints – have led many companies to increase investment in information technology and to resort to remote work. However, the percentage of companies that consider it likely to maintain these changes permanently is not very high (24% and 17%, respectively). This percentage is higher in large-sized companies. Additionally, almost half of the companies that intend to embrace remote working more permanently had more than 50% of their employees in this regime in the first half of June.

The relationship between the adoption of remote working schemes and the impact of the pandemic on effectively working staff is not very clear. On the one hand, the majority of companies with more than 50% of employees working remotely have not registered changes in effectively working staff, but on the other hand this is also true when considering companies that have not followed remote working strategies (remember that a significant portion of companies reported a null impact on effectively working staff). The absence of a relationship between remote work and the impact on turnover is also evident. Nevertheless, the implementation of remote work schemes, when possible, provided a solution for companies to continue to operate, thus mitigating some impact from the pandemic.

The option to put workers under alternate presence schemes on the premises was another way of overcoming the mandatory distance restrictions but may have, however, implied forced reductions in activity. This strategy was less used, having only surpassed 50% of companies in Transportation and storage, Information and communication and Other services and, by size, in medium and large-sized companies. In addition, the results show that many companies have chosen to combine the two strategies, with 70% of the firms with remotely working staff, simultaneously having employees alternating their presence in the company's facilities.

The calculation based on interval responses indicates that 13% of workers were in this regime between May and June. Wholesale and retail trade was the sector with the most workers alternating presence in the firms' facilities (20%, which compares with 14% working remotely), whereas in other sectors the proportion was close to that of the total sample. In Information and Communication and Other Services, the share of personnel alternating their presence in the company's facilities (13% and 9%, respectively) was significantly lower than that of personnel working remotely.

3.6. Impact on prices

The COVID-19 pandemic did not have a significant impact on prices in the short-term. The vast majority of companies (86%) kept prices unchanged between March and July, when compared to the expected situation without a pandemic.[18]

In the group of companies that altered prices in this period, the share that decreased prices is higher (11%). This proportion was higher in large-sized companies and companies from the Accommodation and food services sector. Price reductions may have occurred as a response to falling demand. In fact, the share of firms that lowered prices is higher in the group of companies who reported a negative impact on turnover. Moreover, price reductions were larger in firms that registered larger falls in turnover (Figure 10).

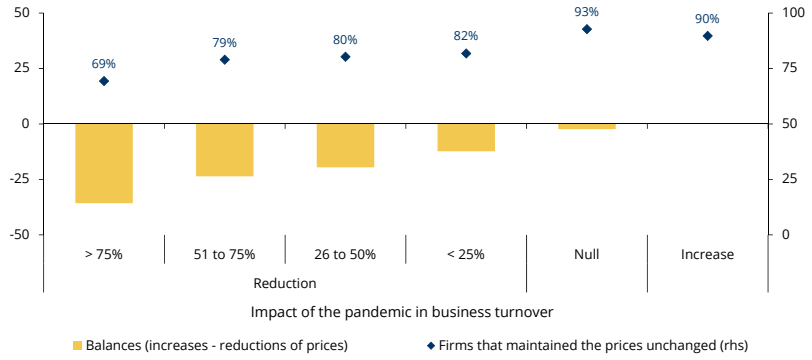

Figure 10: Price developments between the start of the pandemic and July 2020 and changes in turnover | Balance of extreme responses and percentage of firms

Notes: These results refer to the survey responses of the first half of July 2020. The survey question had five possible answers, four of which were relative to price increases or decreases and one for null changes. The balance of extreme responses corresponds to the difference between positive and negative answering options, weighted by the size of price changes (weights of 2 and 1 for large and small changes, respectively). The impact on turnover should be interpreted as the change vis-à-vis the expected turnover in the absence of the pandemic.

3.7. Impact on credit

External financing was a means for a small group of companies to face the pandemic shock (in April, 12% of the companies increased their credit and, in May, this share

18. Evidence of the relative price stabilization is supported by data from the Harmonised Index of Consumer Prices, which averaged, in year-on-year terms, -0.1% between March and July 2020. It should be noted that, in the April editions of COVID-IREE, companies were asked about their intentions to change prices in the week of the survey. The percentage of companies that reduced prices slightly during the state of emergency was lower than that reported in July (while a larger share of companies reported keeping prices unchanged).

grew to 15%). Larger-sized companies resorted more to credit in this period. By sector, Accommodation and food services firms were the ones that increased credit the most, in contrast to Construction and real estate activities, where the share of companies increasing credit was below average. Credit by financial institutions was the preferred method of financing, followed by supplier credit. In addition, new credits were largely granted under broadly the same conditions as prior to the pandemic crisis.

Temporary closure and the drop in business turnover drove companies to increase credit. In fact, the proportion of firms that resorted to credit is higher in the group of closed firms (21%, compared to 12% in operating companies), with this evidence being relatively broad-based across sectors and firm size. The share of firms resorting to credit was also higher in operating companies with turnover losses, increasing with the magnitude of the drop in turnover. Of the operating companies that reported a null or positive impact of the pandemic on their turnover, the share that resorted to credit was small.

At the same time, the percentage of companies that increased their level of indebtedness was higher among companies with more fragile liquidity conditions in April, across all dimensions and sectors of activity (Figure 11).

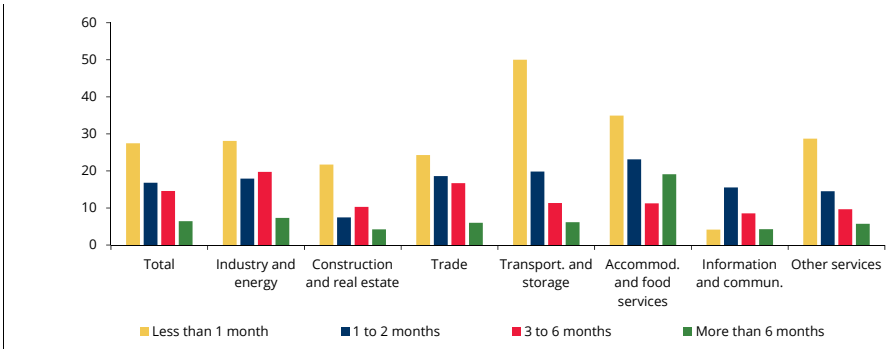

Figure 11: Share of firms increasing credit and how long they expect to remain in operation in the absence of additional liquidity support measures | Percentage

Note: These results refer to the survey responses of April.

4. Uptake of Government support policy measures: Characterisation of firms and impact analysis

In response to the pandemic shock, the Portuguese Government adopted a set of support policies that aimed to mitigate the short and medium-term impacts on economic activity. Among the measures analysed in the survey are the moratorium on principal and interest payments on loans, the access to subsidised credit and State guarantees, and deferral of tax and social contributions. Additionally, firms

could resort to the simplified layoff scheme (temporary furlough, with partial reduction in wages for employees and a split in costs between employers and Social Security). These measures supported companies' liquidity, allowing the preservation of productive capacity, and a faster recovery.

For simplicity, and given the COVID-IREE composition throughout the various editions, the three initial measures will be analysed together (Section 4.1) and the simplified layoff scheme will be studied separately (Section 4.2).

4.1. Support policy measures excluding the simplified layoff scheme – Subsidised credit and State guarantees, moratorium on existing loans and deferral of tax and social contributions

The percentage of companies benefitting from at least one of the three measures has increased over time, with the deferral of tax and social contributions being the most resorted to – closely followed by the moratorium – while the access to subsidised credit or state guarantees was the least used (Figure 12). The increasing uptake of these measures reflects, on the one hand, the time that some companies took to complete the request (in fact, the percentage of companies that planned to benefit from at least one of the measures decreased over the second quarter) and on the other hand, a more permanent and severe negative impact of the pandemic than anticipated in April. Even so, until July, most respondent companies had not benefitted from any of these measures. Only a relatively small share of firms reported not being eligible to benefit from the policy measures.

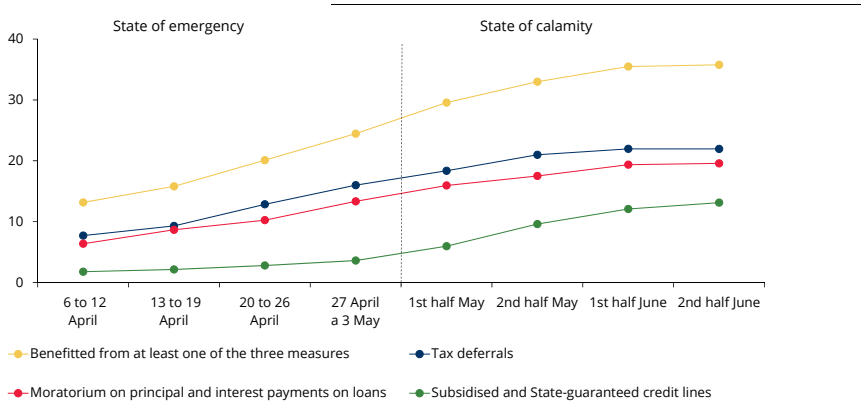

Figure 12: Support policy measures uptake | Percentage of firms

Note: The group of benefitting companies for each policy measure was defined according to responses to the question regarding whether or not firms had benefitted from each measure.

By size and sector, it appears that the share of benefitting firms was higher in small and medium-sized companies and in Accommodation and food services

(which was the sector most severely affected by the pandemic crisis in the short-term). At the opposite end were micro-sized companies and Construction and real estate activities.

In addition, a more detailed breakdown by firms' branch of activity suggests a negative correlation between changes in turnover and the percentage of companies benefitting from each of the measures, although relatively lower in the case of the moratorium and subsidised credits and guarantees from the State (Figure 13). Among the sectors with the most significant falls in turnover, the percentage of Accommodation companies resorting to the moratorium and the deferral of tax and social contributions, and the share of Air Transportation companies benefitting from the deferral of tax and social contributions stand out. It should be noted that the latter, which reached almost 70% in the second quarter, reflects the greater uptake of this measure in June (only 25% of companies in this sector had benefitted from this measure in April).

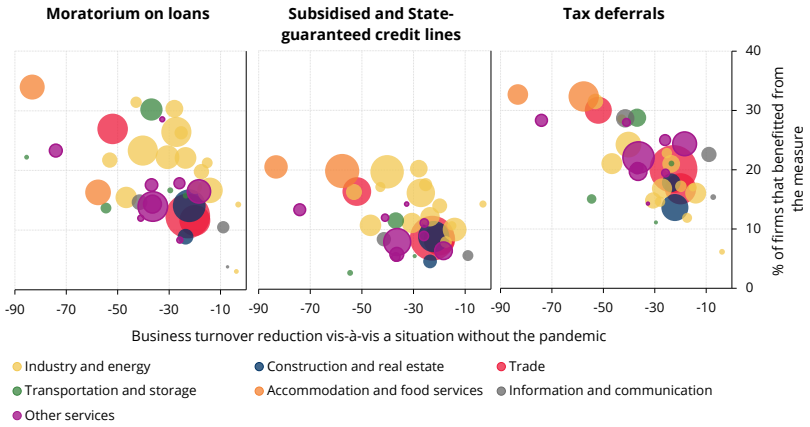

Figure 13: Support policy measures uptake and decline in turnover, by sector | Percentage of firms

Notes: Average values for the second quarter of 2020. In the right-hand chart there is an outlier (not shown in the chart) in the Transportation and storage sector, with 85% decline in turnover and 67% of firms benefitting from the deferral of tax payments and social contributions. The size of the circles in each chart represents the number of firms benefitting from the respective policy measure. For each sector, the A38 breakdown of activity was considered, except in Wholesale and retail trade, Transportation and storage and Accommodation and food services, for which a more detailed breakdown (A82) was used. The set of beneficiary companies of each policy measure is defined according to the responses to the survey question regarding whether or not firms had benefitted from each measure. The decline in turnover is calculated for each sector of activity and should be interpreted as the change vis-à-vis the expected turnover in the absence of the pandemic. For these results, the mid-point of each survey response bracket was considered, with the aggregate figure being calculated as the average of firms' responses weighted by their business turnover.

A description of companies benefitting from these policies shows that: (i) the share of closed companies was larger compared to the group that did not resort

to the policy measures (with no difference in the average duration of closures); (ii) declines in sales, employment and effectively working staff were more severe; (iii) these companies resorted more to credit and (iv) had, in April, a more fragile liquidity situation (Table 1). Regarding the last point, it should be noted that, in the group of benefitting companies, the proportion without sufficient liquidity to continue operating for more than two months was about 4.5 times higher than those with the capacity to continue operating for more than six months (in the group of companies that did not benefit from the measures, this ratio was 1.3).

		Benefitting firms	**Non-benefitting firms**
% of firms that did not close		75%	84%
Average duration of closure (weeks)		3.6	3.7
Change in business turnover		-39%	-22%
Change in employment		-5%	-3%
Change in effectively working staff		-26%	-15%
% of firms that increased credit		41%	10%
How long can the firm continue operating in the absence of additional liquidity supporting measures (April responses)	Less than 1 month	14%	8%
	1 to 2 months	47%	34%
	3 to 6 months	26%	27%
	More than 6 months	13%	31%

Table 1. Characterisation of firms benefitting from at least one of the three support policy measures

Notes: The classification of benefitting companies for each policy measures was defined according to responses to the question regarding whether or not firms had benefitted from each measures (COVID-IREE editions from April to June). The group of non-beneficiary firms includes companies that did not benefit from the policy measures, companies that were not eligible, and companies that had planned to benefit but did not do so until the end of June. The declines in turnover and effectively working staff should be interpreted as the changes vis-à-vis the expected levels in the absence of the pandemic. For these results, the mid-point of each survey response bracket was considered, with the aggregate figure being calculated as the average of firm's responses weighted by their turnover or workforce. Declines in employment should be read as declines since the beginning of the pandemic (this result reflects only answers from companies that responded to the first half of July edition of the survey, which included this question). Changes in employment were also based on the mid-point of each survey response bracket, except for the "larger than 20%" interval, for which a change of 40% was considered (aggregate figures were calculated as the average of firm's responses weighted by their workforce).

Increased credit financing was broad-based across companies that applied for these three policy measures (Figure 14). In the group of non-beneficiary companies, only about 10% increased credit between April and May, which compares with almost 30% in the group of companies that benefitted from at least one measure. As expected, this proportion is very high when analysing the group that resorted to new credits with subsidised interest and state guarantees. In the case of the moratorium and the deferral of tax and contributory obligations, the higher percentage partly

reflects the fact that some of the companies that benefitted from these measures have simultaneously accessed new credits with special conditions. Nonetheless, excluding this effect (that is, considering only companies that have not benefitted from subsidised credit), the percentage of companies increasing their credit remains higher.

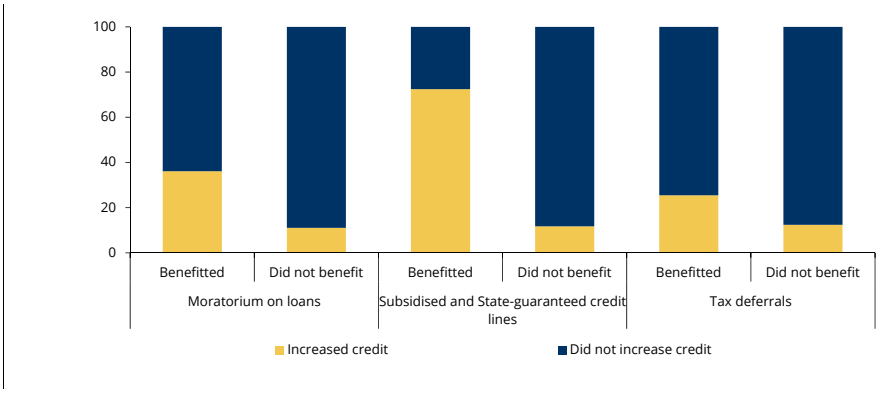

Figure 14: Credit increase and support policy measures uptake | Percentage of firms

Notes: The results reflect the average of responses during the 4 weeks of April and the 2 halves of May. The classification of benefitting companies for each policy measures was defined according to responses to the question regarding whether or not firms had benefitted from each measure (only answers from the April and May COVID-IREE editions were considered).

4.2. Simplified layoff scheme

The simplified layoff scheme was the policy measure that more companies resorted to during the period under analysis (35% of companies).[19] This measure allowed companies to reduce their labour costs amidst very pronounced sales declines.

The results show that the uptake rate was higher in the most affected sectors and in large-sized companies. Furthermore, the firms that benefitted from this measure were in a more unfavourable situation, being characterised by: (i) a higher share of closed companies and longer average closure duration, (ii) much more pronounced declines, on average, in sales,[20] employment and effectively working

19. The question that allows the distinction between companies that benefitted or not from the simplified layoff scheme was only included in the July edition of COVID-IREE (the response rate in this edition was 55%).

20. One sufficient condition for a firm to benefit from the simplified layoff scheme was to have recorded a drop of at least 40% in business turnover, in the 30 days prior to the submission of the application. In addition, companies that had closed completely or partially, either due to enforced closure (either by legislative or administrative ruling), interruption of global supply chains or suspension or cancelation of orders, could resort to this measure. For more details, see the DGERT webpage on this topic.

staff, (iii) having resorted more to credit and (iv) having, in April, a more fragile liquidity situation than the group of companies that did not benefit from this policy measure (among companies that benefitted from the simplified layoff, the share of companies lacking liquidity conditions to continue operating for more than two months was about six times higher than the share of companies with the ability to continue operating for more than six months) (Table 2).

		Benefitting firms	**Non-benefitting firms**
% of firms that did not close		58%	94%
Average duration of closure (weeks)		4.4	3.2
Change in business turnover		-49%	-17%
Change in employment		-7%	-2%
Change in effectively working staff		-35%	-8%
% of firms that increased credit		32%	14%
How long can the firm continue operating in the absence of additional liquidity supporting measures (April responses)	Less than 1 month	15%	6%
	1 to 2 months	49%	29%
	3 to 6 months	25%	28%
	More than 6 months	10%	37%

Table 2. Characterisation of firms benefitting from the simplified layoff scheme

Notes: The classification of companies benefitting from the simplified layoff scheme was defined according to responses to the question regarding whether or not firms had benefitted from this measure (July edition of the survey). The declines in turnover and effectively working staff should be interpreted as the changes vis-à-vis the expected levels in the absence of the pandemic. For these results, the mid-point of each survey response bracket was considered, with the aggregate figure being calculated as the average of firm's responses weighted by their turnover or workforce. Declines in employment should be read as declines since the beginning of the pandemic. Changes in employment were also based on the mid-point of each survey response bracket, except for the "larger than 20%" interval, for which a change of 40% was considered (aggregate figures were calculated as the average of firm's responses weighted by their workforce).

The fact that employment reduction during the pandemic was more frequent among companies that benefitted from the simplified layoff scheme (30% compared to 11% of non-beneficiary companies) highlights how difficult it was for these companies to cope with the pandemic shock and their need to reduce labour costs. It should be noted that since the companies receiving this policy support were not able to discharge their employees, employment reductions must have reflected, inter alia, the non-renewal of fixed-term contracts and the non-substitution of voluntary or programmed dismissals of workers (namely, for retirement).[21] Still, job losses

21. Specifically, employers benefitting from the simplified layoff scheme were not able to terminate employment contracts (through collective dismissal, job extinction or worker unsuitability) during the period in which they benefitted from this support measure and in the following 60 days. This restriction applied to all workers (whether or not under simplified layoff).

in the short-term would have been much more pronounced in the absence of the simplified layoff scheme (Figure 15). If these companies had not benefitted from this support measure, 77% of them would have reduced their jobs, which demonstrates the success of this policy measure in mitigating job losses over these months.[22]

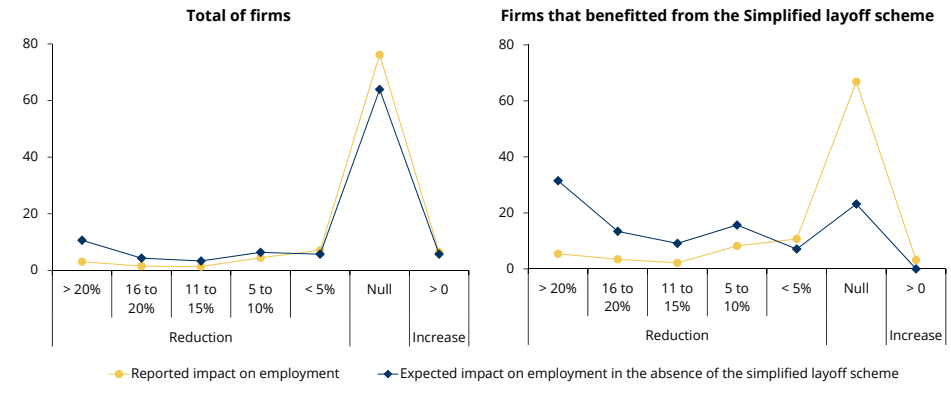

Figure 15: Impact of the pandemic on employment: observed versus expected in a scenario without the simplified layoff scheme | Percentage of firms

Notes: For firms that did not employ the simplified layoff scheme, the expected impact on employment in the absence of this measure matches the observed impact. The expected impact was based on a question from the first half of July edition of COVID-IREE in which firms were asked to estimate how the number of employees would have changed since the beginning of the pandemic in the absence of the simplified layoff scheme.

This result is confirmed when using the midpoint of the reported range of changes in employment (weighting by the number of employees in each company) to proxy the evolution of employment since the beginning of the pandemic.[23] According to this approach, between mid-March and the first half of July, employment declined by about 4% in the sectors covered by the COVID-IREE. In the absence of this policy support measure, the reduction in employment would have reached 8%. Estimates, which are surrounded by high uncertainty, point to a drop in employment of around 19% in benefitting companies in the absence of the simplified layoff scheme.

22. This result takes into account the answers to the question "Since the beginning of the pandemic and in the absence of the simplified layoff scheme, how do you estimate that the number of people employed in your company would have changed?" which appeared in the first half of July edition of COVID-IREE.

23. In addition to the uncertainty associated with the methodology used in these calculations, in the question regarding the evolution of employment the last response interval includes changes greater than 20%. Therefore, the approach that considers the midpoint of the interval seemed, in this case, unreasonable. After a sensitivity analysis, and taking into account the Labour Force Survey estimates for the second quarter of 2020, it was decided to affect a 40% average variation to companies in the last distribution interval for the purpose of these calculations.

Despite the importance of this measure in the containment of unemployment in the short-term, there is still uncertainty surrounding the impact that the pandemic may still have on the labour market, particularly when policy support measures cease. In this context, the Government presented, in July 2020, a set of measures aimed at ensuring a gradual transition from the simplified layoff scheme. In particular, companies were able to apply for the extraordinary incentive for activity normalisation or the support for a progressive recovery (in the first half of July, 68% of the companies that benefitted from the simplified layoff scheme intended to use one of these support measures as of August).[24] Both measures entailed restrictions to worker dismissals by benefitting companies.

4.3. Impact of the pandemic on firms' liquidity and the importance of policy support measures

The speed at which measures were taken to contain the pandemic (the state of emergency was declared on March 18th, 16 days after the first confirmed cases of COVID-19 in Portugal) implied an abrupt and very sharp drop in companies' business turnover (Section 3).

In April, in the absence of additional policy measures to support liquidity, almost half of the companies lacked conditions to remain in business for more than two months. This situation was more common in the group of companies that were closed during this period (72%, compared to 44% of the companies in operation) (Figure 16). In contrast, 47% of large companies had liquidity conditions that allowed them to continue operating for more than six months. In addition, as noted earlier, the liquidity situation in April was visibly more adverse in the group of companies that benefitted from support policy measures.

An assessment carried out in July shows that companies' liquidity situation has improved significantly compared to the beginning of the second quarter. These developments, which partly reflect the recovery in activity, occurred both in the companies that benefitted from the support measures announced by the Government and those that did not, but were more substantial in the first group (Figure 17). In fact, in July, less than a quarter of the companies that benefitted from the policy measures lacked liquidity conditions to continue operating for more than two months, which represents an improvement of 40 percentage points compared to April. In the group of companies that did not benefit from the support policy measures, the improvement in the liquidity situation was more moderate, but

24. The extraordinary incentive for activity normalization is a financial support measure that aims to support the resumption of business activity, following the conclusion of the simplified layoff scheme. The support for a progressive recovery aims to support the maintenance of jobs in companies with turnover losses above 40% and temporary reduction of the normal working schedule. This financial support measure covers only the payment of compensation of employees under reduced working hours.

only about 10% of companies were unable to continue operating for more than two months in July.

These results seem to confirm the important role that support policy measures played during the pandemic, ensuring the financial sustainability of companies and avoiding worker dismissals and closures of viable companies.[25]

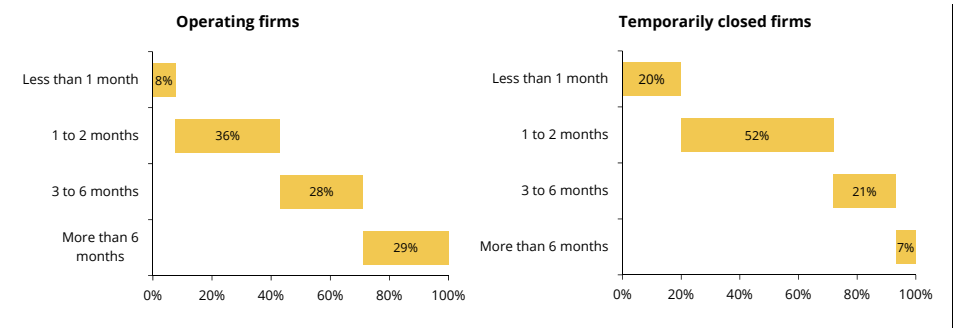

Figure 16: How long firms expect to remain in operation in the absence of additional liquidity supporting policy measures, in April | Percentage of firms

Note: This question appeared in the first three editions of April and in the first half of July edition of the survey.

25. The need for support policy measures and their importance during the pandemic was one of the takeaways from the Special Issue in Banco de Portugal's Economic Bulletin of May 2020, which highlighted the fact that the number of companies in Portugal with insufficient liquidity to face fixed costs increases non-linearly with the duration of declines in companies' activity.

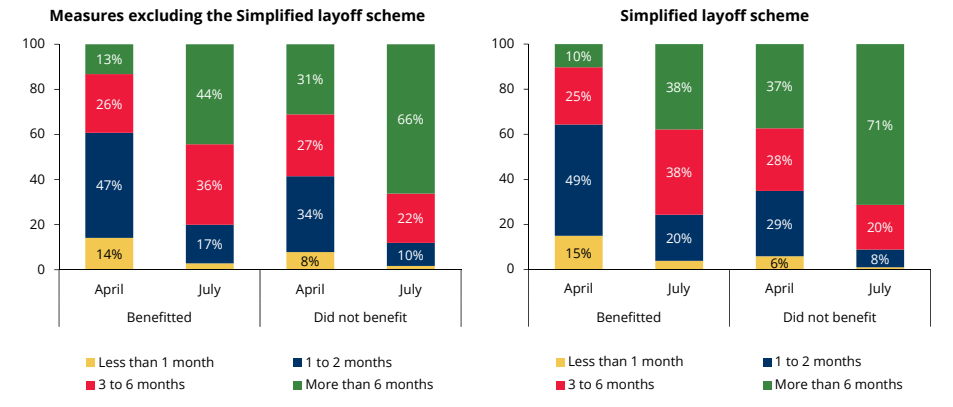

Figure 17: Impact of the policy measures on liquidity – how long firms expect to remain in operation in the absence of additional liquidity support measures | Percentage of firms

Notes: The classification of benefitting companies for each policy measures was defined according to responses to the question regarding whether or not firms had benefitted from each measure. Data for July correspond to the first half of July edition of the COVID-IREE.

5. Conclusions

The COVID-19 pandemic has caused a general disruption to business activity in Portugal and worldwide. This article analyses the short-term impacts of this crisis and the perceptions of enterprises regarding the support policy measures, based exclusively on the results of the Fast and Exceptional Enterprise Survey (a high-frequency survey conducted in Portugal, from April to July of 2020).

The pandemic and the containment measures imposed by the Government, including legislation on which sectors could continue to operate, led to the temporary closure of more than 15% of companies in April. In the following months, there was a gradual reopening, with the vast majority of companies already operating in July. The negative impact on business turnover was severe and widespread and, despite an improvement from May onwards, around 60% of companies continued to report sales levels below normal in July. In addition, more than half of these companies did not expect a return to pre-pandemic levels at least until the end of 2020. Comparatively, the impact on employment was relatively contained, with three quarters of companies reporting no changes in the number of jobs between March and July, on the back of the implementation of the simplified layoff scheme. The uptake of this measure explains, to a large extent, the marked reduction in effectively working staff in this period. In turn, remote working and rotation schemes were strategies that allowed some companies to keep their staff working. It is important to note that, despite the general reduction in activity indicators, Accommodation and food services was the sector where the impact of

the shock was most severe and where the recovery is expected to be very slow or incomplete.

The assessment of the uptake of the support measures announced by the Government in the context of the pandemic shows that about one third of the responding companies resorted to the simplified layoff scheme or at least one of the other three measures (the moratorium on loans, the access to credit with subsidised interest and state guarantees and the deferral of tax and social contributions). The companies that benefitted from policy support were in a relatively more fragile situation, both in terms of operating status (closures) and turnover losses in the period under analysis and in terms of liquidity conditions reported in April. In July, the liquidity situation of most companies had improved significantly – which is consistent with the evolution of activity – but this improvement was more noticeable in the companies that benefitted from the policy measures. Additionally, the results show that, in the absence of the simplified layoff scheme, there would have been much more significant falls in employment.

This evidence highlights the importance of support policies in preserving productive capacity and employment. Safeguarding these conditions is particularly relevant as it contributes to a faster recovery and mitigates the long-term impacts of the pandemic. The gradual pace at which the recovery of activity has taken place – in July, the level of sales was still below pre-pandemic levels in surveyed companies, especially in some specific sectors – suggests that policy measures will continue to be important to support a faster economic recovery. In order to ensure the effectiveness of this support, it is important to continue to monitor business developments and to adequately adjust these measures, both in terms of duration and targeted economic agents.

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