Bank Lending to Euro Area Firms What Have Been the Main Drivers During the COVID-19 Pandemic?⁴⁹

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1. Introduction

The coronavirus (COVID-19) pandemic had a strong impact on firms' business plans and financing needs. In view of the importance of bank borrowing as a source of financing for euro area non-financial firms, 52 the banking sector has played a key role in facilitating the flow of credit to the corporate sector during the COVID-19 pandemic. This role has been crucially supported by the sizeable support measures by monetary, fiscal and supervisory authorities, which have so far acted as a backstop against the risk of an adverse feedback loop between the real and financial sectors. This article discusses the main drivers of bank lending to euro area firms during the pandemic. Understanding the relative role of credit supply and demand forces as well as the impact of the various policy measures is crucial for policy makers in order to draw appropriate conclusions with respect to the effectiveness of the implemented measures and the possible need for further action. Against this background, the article first focuses on the early stages of the pandemic, when acute emergency liquidity needs arising from the lockdown measures were satisfied by bank borrowing at very favourable conditions. Then, it examines bank lending dynamics in the second phase of the pandemic, which was

^{49.} The views expressed in this paper are those of the authors and do not necessarily reflect the views of the European Central Bank or the Eurosystem.

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^{51.} European Central Bank.

^{52.} For more details on bank lending to euro area firms in recent years, see Adalid et al. (2020).

characterised by abating liquidity needs, a continuation of the policy support measures, but also by the emergence of pressures on bank intermediation due to intensifying concerns about the deterioration of borrowers' creditworthiness. The article concludes by highlighting some of the risks to banks' credit intermediation capacity in the near future.

2. The first phase of the COVID-19 crisis: emergency liquidity needs met by favourable bank lending conditions amidst ample policy support

In the first months of the pandemic, the unprecedented nature of the shock led to a marked increase in bank lending to euro area firms. Demand from firms for bank loans soared to record levels in most euro area countries from March to May 2020 as firms scrambled to bridge liquidity gaps originating from the COVID-19 shock (Chart 1, left panel, and Chart 1A in the Appendix). This increase in demand was driven by a decline in the capacity of firms to finance their ongoing costs via operating cash flows, owing to a sharp fall in their revenues during the lockdown period in the first half of 2020. This situation resulted in acute liquidity needs to finance working capital, as also indicated in the euro area bank lending survey (BLS) (Chart 2)⁵³. Moreover, in a context of high uncertainty, firms drew their credit lines and applied for new loans, often with government guarantees, with a view to building up precautionary liquidity buffers, as suggested by the same survey (Chart 2A, left panel). This is also visible in the exceptionally large accumulation of bank deposits by firms in the first months of the pandemic (Chart 2A, right panel). The aggregated balance sheet of the corporate sector reveals that firms overcompensated the large decline in revenues with an even larger recourse to bank loans and market-based financing.

In March 2020, acute emergency liquidity needs were mainly satiated by the recourse to short-term loans by drawing down previously agreed credit lines. In later months, the substantial lending flows largely reflected the use of medium-and long-term loans (Chart 1, right panel), maturities which were typically backed by the public guarantee schemes implemented since April 2020 in most euro area countries. The flat yield curve, the perceived longer duration of the pandemic and the ensuing high degree of uncertainty have also contributed to the increase in

^{53.} The euro area bank lending survey (BLS) provides information on bank lending conditions in the euro area. It supplements existing statistics with information on the supply of and demand for loans to enterprises and households. The BLS is conducted four times a year, and published in January, April, July and October. For more details see Köhler-Ulbrich et al. (2016) and ECB (2021).

firms' demand for long-term borrowing. This maturity shift mitigated firms' rollover and liquidity risks that would have intensified had the new loans been granted in the form of short-term commitments. The increase in the demand for long-term loans contrasts with historical regularities, as acute liquidity needs for working capital are typically associated with higher demand for short-term loans, while long-term loans are used to finance fixed investment projects (Chart 3A).⁵⁴ In fact, as indicated by the BLS, in contrast with firms' financing needs for working capital, those for fixed investment declined sharply in the first half of 2020 (Chart 2),⁵⁵ mirroring the steep fall in business investment, which reflected either a reduction or a postponement of capital expenditure by firms, driven by the need to compensate revenue losses in a context of elevated uncertainty.

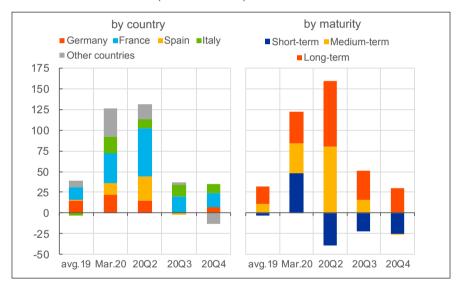


Chart 1. Bank loans to firms (flows in EUR bn)

Source: ECB (BSI) and authors' calculations.

Notes: (lhs panel) Bank loans to non-financial corporations adjusted for sales, securitisation and cash pooling activities. The term "Other countries" includes flows to other euro area countries as well as seasonal adjustment residuals to preserve the additivity to the total euro area flows. The term "avq.19" refers to the quarterly average flow recorded in 2019. (rhs panel) Bank loans to non-financial corporations non-adjusted for sales, securitisation and cash pooling activities. The term "ava.19" refers to the quarterly average flow recorded in 2019.

^{54.} For more details on the drivers of firms' loan demand in the euro area during the pandemic, see Falagiarda et al. (2020a).

^{55.} The fact that firms have used external financing mainly for inventories and working capital and less for fixed investment is confirmed by the Survey on the Access to Finance of Enterprises (SAFE) in the euro area. The SAFE provides information on the latest developments in the financial situation of enterprises, and documents trends in the need for and availability of external financing. The survey is conducted twice a year. For more details, see Bańkowska et al. (2020), ECB (2020) and Ferrando and Ganoulis (2020).

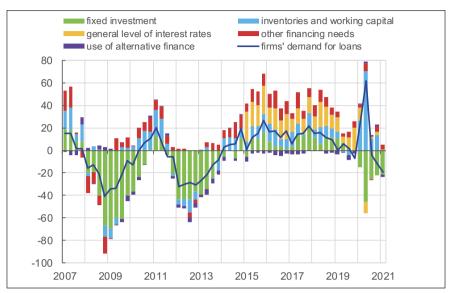


Chart 2. Changes in demand for loans to firms and contributing factors (net percentages of banks) ${}^{\circ}$

Source: ECB (BLS).

Notes: Net percentages are defined as the difference between the percentages of banks reporting an increase (contribution to an increase) and the percentages of banks reporting a decrease (contribution to a decrease). "Other financing needs" are an unweighted average of "M&A and corporate restructuring" and "debt refinancing/restructuring and renegotiation"; "use of alternative finance" is an unweighted average of "internal financing", "loans from other banks", "loans from non-banks", "issuance/redemption of debt securities" and "issuance/redemption of equity". "General level of interest rates" was introduced in 2015 Q1.

COVID-19-related concerns about physical contact and the concomitant lockdown policies caused a large loss of value added in trade, transport, accommodation and food service activities. Strict lockdowns, a lack of demand, interruptions to supply chains and high uncertainty also spilled over into large segments of the manufacturing sector. A comparison of financing needs across sectors shows that the increase in corporate lending in the first half of the year had been highest in these sectors, the hardest hit by the COVID-19 pandemic (Chart 4A), pointing to acute liquidity needs for firms in these segments. Firms in less affected sectors have also increased their borrowing in the first half of 2020, with a view to building up precautionary liquidity buffers in an environment of high uncertainty. Developments in sectoral activity are broadly in line with the evidence from the BLS, according to which, in the first half of the year, loan demand increased considerably in the manufacturing sector, services sector (excluding financial services and real estate) and wholesale and

retail trade sector (Chart 5A). Loan demand increased less in the construction sector, and more particularly in the real estate sector, where firms were less affected by the crisis. This can be attributed to the lower labour intensity and fixed costs of real estate activities, which resulted in smaller liquidity needs during the lockdown period in the first half of 2020.

A comparison across firm sizes shows that the surge in bank borrowing recorded in the first half of 2020 was more pronounced for small and mediumsized enterprises (SMEs) than for large firms. SMEs have benefited substantially from policy support measures for bank lending, such as the TLTRO III operations, as well as from public loan guarantees, which are typically targeted to this specific group of firms (see below for a more detailed discussion of the policy measures). In particular, the take-up of guaranteed loans has been significantly higher for SMEs and the self-employed than for large firms, reflecting their relatively larger emergency liquidity needs, smaller liquidity buffers, their greater dependence on banks for financing compared with large firms and overall easier and fast-track procedures in the provision of guaranteed loans for smaller amounts. The BLS confirms that the increase in the demand for loans (and, in particular, guaranteed loans) in the first half of 2020 was higher for SMEs than for large firms (Chart 3, left panel).

Over the first half of 2020 Over the second half of 2020 Expected over the first half of 2021 100 50 75 25 50 25 0 -25 -25 -50 -50 SMEs Large SMEs Large SMEs SMEs Large Loans with gov. Loans without gov. Loans with gov. Loans without gov. guarantees guarantees quarantees guarantees Loan demand Credit standards

Chart 3. Changes in firms' demand and credit standards for loans with and without government guarantees (net percentages of banks)

SourceSource: ECB (BLS).

Notes: (lhs panel) Net percentages are defined as the difference between the percentages of banks indicating an increase and the percentages of banks indicating a decrease; (rhs panel) net percentages are defined as the difference between the percentages of banks indicating a tightening and the percentages of banks indicating an easing.

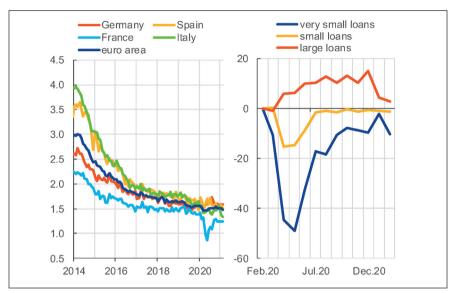


Chart 4. Bank lending rates on new loans to firms (lhs panel: percentages per annum; rhs panel: basis point changes since February 2020)

Source: ECB (MIR).

Notes: (rhs panel) Very small loans are loans up to Eur 0.25 million, small loans are loans of more than Eur 0.25 million and up to Eur 1 million and large loans are loans of more than Eur 1 million.

The surge in the demand for loans by euro area firms in the initial period of the pandemic was met by historically low bank lending rates and favourable bank lending conditions.⁵⁶ This is especially important in a strongly bank-based financial system like the euro area. Bank lending rates charged on loans to euro area firms have declined significantly in the first half of 2020, reaching new historical lows in many euro area countries (Chart 4).⁵⁷ The decline in rates was concentrated on those charged on very small loans, suggesting that SMEs benefitted the most from the favourable financing conditions over this period. At the same time, credit standards (i.e. banks' internal guidelines for their lending policies or loan approval criteria) for loans to firms, both to large

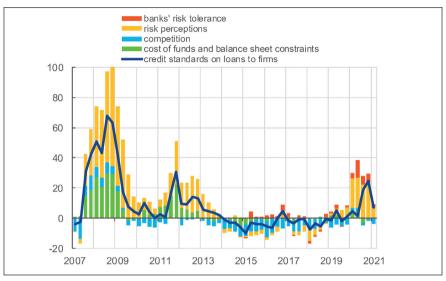
^{56.} For more details on bank lending conditions for euro area firms in recent years, see Burlon et al. (2019).

^{57.} Among the large euro area countries, very low interest rates have been recorded in France, reflecting the very favourable pricing conditions of guaranteed loans, the take-up of which was very large in second quarter of 2020. Notwithstanding the decline in euro area nominal lending rates, the disinflationary nature of the COVID-19 shock has put upward pressure on real lending rates, which have increased somewhat in 2020.

firms and to SMEs, tightened slightly in the first quarter of 2020, when support measures were still on their way and uncertainty was exceptionally high, but remained broadly unchanged at the euro area level in the second quarter when such measures were implemented (Chart 5). While some sectors were more affected than others (Chart 5A), banks' credit standards remained overall beneficial across sectors in the first half of 2020. Given the size of the pandemic shock, the continuation of favourable bank lending conditions was remarkable and very much in contrast with developments during the global financial and sovereign debt crises.

This notwithstanding, banks already indicated in the first half of 2020 increased concerns about economic developments, industry-specific risks and borrowers' creditworthiness for their lending policy, as reflected in the tightening impact of risk perceptions on their credit standards as well as in the tightening impact of banks' risk tolerance (Chart 5). At the same time, banks' balance sheet situation did not have a tightening impact, reflecting the persistent positive impact of pre-crisis improvements in the resilience of bank balance sheets as well as the effective policy support. In particular, following the global financial and sovereign debt crises, banks stepped up their capitalisation, partly related to stricter supervisory and regulatory requirements. In addition, banks, in particular in some jurisdictions, have cleaned their balance sheets and reduced their share of non-performing loans. This is a noticeable difference to the financial and sovereign debt crises, during which banks' balance sheets constraints were a relevant factor in the tightening of bank lending conditions.

 ${\it Chart 5: Changes in credit standards on loans to firms and contributing factors (net percentages of banks)}$



Source: ECB (BLS).

Notes: Net percentages are defined as the difference between the percentages of banks reporting a tightening and the percentages of banks reporting an easing. "Cost of funds and balance sheet constraints" are an unweighted average of "cost related to capital position", "access to market financing" and "liquidity position"; "risk perceptions" are an unweighted average of "general economic situation and outlook", "industry or firm-specific situation and outlook/borrower's creditworthiness" and "risk on collateral demanded"; "competition" is an unweighted average of "bank competition", "non-bank competition" and "competition from market financing". "Risk tolerance" was introduced in 2015 Q1.

Margins Other terms and conditions Margins, average loans (lhs) Non-int, rate charges Collateral requir. Margins, riskier loans (rhs) Loan covenants Size of the Ioan Lending rate spread (rhs) Maturity 200 25 100 25 20 0 0 15 -100 -25 10 -50 -200 5 -300 -75 -100 -400 -5 -500 -125 19Q4 20Q1 20Q2 20Q3 20Q4 21Q1 2014 2017 2020

Chart 6: Terms and conditions on loans to firms (left panel: cumulated net percentages of banks and cumulated basis points; 2014Q2=0; right panel: net percentages of banks)

Source: ECB (BLS and MIR).

Notes: Net percentages are defined as the difference between the percentages of banks indicating a tightening and the percentages of banks indicating an easing. "Margins" are defined in the BLS as the spread of lending rates over a relevant market reference rate; a widening of margins is defined as a tightening. The cumulated lending rate spread refers to the composite lending rate for firms minus 3-month OIS.

The benign developments in banks' credit standards in the first half of 2020 were consistent with banks' actual credit terms and conditions, as agreed between banks and borrowers in the loan negotiation process. In line with historically low bank lending rates and squeezed spreads of bank lending rates over market reference rates, margins on average loans remained narrow in the first half of 2020, while they tightened for riskier loans (Chart 6). Over the same period, nonprice terms and conditions tightened slightly. A comparison across firm sizes indicates that terms and conditions applied by banks on loans to SMEs were reported to have developed more favourably than for large firms in the first half of the year (Chart 6A), in line with actual lending rate developments. This evidence confirms that SMEs, which generally tend to be more at risk of becoming credit constrained during crisis periods, benefitted the most from the supportive lending conditions engendered by the strong policy response to the COVID-19 crisis.

In the first half of 2020, bank lending conditions for euro area firms remained beneficial in spite of the unprecedentedly large demand for loans and the deteriorating creditworthiness of many borrowers. This evidence points to the effectiveness of the response by monetary policy, fiscal policy and supervisory authorities to the COVID-19 crisis. Besides their direct impact on lending, these policies also provided assurance to the private sector on forceful counter-measures, thereby reducing overall macroeconomic uncertainty.

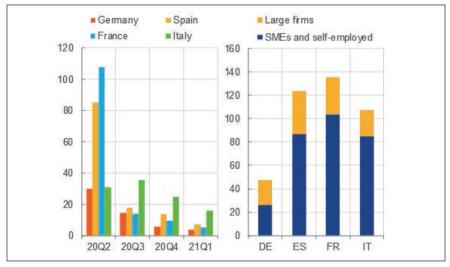


Chart 7. Take-up of loans covered by COVID-19-related public guarantees (EUR bn)

Sources: National authorities and authors' calculations.

Notes: The take-up data refer to approved amounts of guaranteed loans. As guaranteed loans can also be granted in the form of revolving credit facilities, the approved amount is higher than the amount actually disbursed. In the absence of a breakdown by firm size for Italy, it is assumed that guaranteed loans to SMEs are those granted via the Fondo di Garanzia, while quaranteed loans to large firms are those granted via SACE (the Italian export credit agency).

The monetary policy accommodation introduced by the Eurosystem in response to the crisis supported considerably euro area firms' financing conditions. First, under the Pandemic Emergency Purchase Programme (PEPP) announced in March 2020, the ECB's asset purchases were expanded and made more flexible by allowing fluctuations in the distribution of purchases over time, across asset classes and among jurisdictions. The PEPP, by impacting yields across the maturity spectrum, exerted significant downward pressures on lending rates. Second, the ECB's targeted longer-term refinancing operations (TLTRO III) have offered attractive bank funding conditions, which

banks passed on to their customers, thereby facilitating bank lending to euro area firms during the pandemic⁵⁸. Third, the ECB introduced temporary collateral easing measures in April 2020. These measures eased the conditions at which credit claims are accepted as collateral in the liquidity providing operations of the Eurosystem and facilitated the availability of eligible collateral to support the provision of credit via the Eurosystem's refinancing operations⁵⁹. Fourth, the ECB's negative interest rate policy (NIRP) contributed to historically low lending rates, thereby supporting bank lending.⁶⁰ Overall, according to banks' assessment, the ECB's monetary policy measures contributed positively to an increase in lending volumes and an easing of bank lending conditions during the COVID-19 period (Chart 7A).⁶¹

Besides monetary policies, also other policy domains provided critical support to the credit provision to euro area firms. The microprudential policy response to the crisis has provided important capital relief for banks, which created further space for bank balance sheet expansion. National fiscal policies have also been instrumental in providing liquidity support, thereby averting so far a potential wave of corporate bankruptcies. Schemes of public guarantees on bank loans were implemented by most euro area governments in April 2020 in order to help banks accommodate the surge in loan demand at favourable conditions. These programmes transferred some of the credit risk (in some cases the entire credit risk) and potential credit losses from banks to governments, thereby mitigating the costs for banks.⁶² The window for applying for loans covered by guarantee schemes was initially set to close at the end of 2020. In addition, public and private moratoria were introduced in

^{58.} The TLTRO III recalibrations in March and April 2020 increased further the attractiveness of the TLTRO III. Altavilla et al. (2020) show that banks' ability to supply credit would have been severely affected during the first phase of the pandemic in the absence of the funding cost relief associated with TLTRO III.

^{59.} Among other things, the eligible collateral was expanded to include very small loans and loans covered by COVID-19-related public guarantees.

^{60.} The NIRP has proven to be effective in easing financing conditions for euro area firms. For more details, including a discussion on the channels through which the NIRP may impact bank loan provision, see Boucinha and Burlon (2020).

^{61.} Other measures implemented by the ECB as a response to the COVID-19 crisis included a recalibration of the Asset Purchase Programme (APP) and the pandemic emergency longer-term refinancing operations (PELTROs).

^{62.} The features of the loan guarantee schemes vary across countries but they must all comply with the guidelines adopted by the European Commission (see Section 3.2 of the Communication from the European Commission on the "Temporary Framework for State aid measures to support the economy in the current COVID-19 outbreak"). For more details on COVID-19-related guarantee schemes in euro area countries, see Albertazzi et al. (2020), Falagiarda et al. (2020b) and Anderson et al. (2021).

most euro area countries to provide short-term relief through the suspension of principal and/or interest payments on loans.⁶³ These schemes avoided that loans to solvent corporates became non-performing due to temporary liquidity needs to bridge the pandemic.

Public loan guarantee schemes have played a key role in supporting corporate lending dynamics in the second quarter of 2020, thereby contributing to the surge in loan demand provided at favourable lending conditions to firms, as described above. The substantial lending flows recorded over this period largely reflected the take-up of loans covered by public guarantees, most of which were granted to SMEs (Chart 7). Gross flows of guaranteed loans were higher than overall net lending flows in all large euro area countries, implying a shift from non-guaranteed loans into guaranteed loans. Moreover, lending dynamics were proportionally stronger in countries with a higher take-up of guaranteed loans, such as Spain and France. In these two countries, where fiscal support for firms was delivered mainly via guarantee schemes, more than 60% of new business volumes in the second quarter of 2020 consisted of guaranteed loans. The impact of loan guarantee schemes was also reflected in the favourable developments of bank lending conditions. First, guarantees crucially contributed to the drop of lending rates to historically low levels, especially for small loans, the ones typically backed by these programmes. Moreover, they exerted considerable easing pressures on credit standards (Chart 3, right panel) and credit terms and conditions, particularly in the countries where the use of this type of loans was the largest.

3. The second phase of the COVID-19 crisis: liquidity needs abated, while incipient signs of tighter credit supply counteracted by continued policy support

As the spread of COVID-19 temporarily decelerated and lockdown restrictions were relaxed in mid-2020, activity started to rebound and firms' sales recovered. Firms' demand for credit started to abate correspondingly (Chart 1, left panel, and Chart 1A), also dampened by the significant

^{63.} These schemes were compliant with the guidelines of the European Banking Association (EBA).

precautionary liquidity buffers built-up over the period from March to May 2020. The marked moderation in bank borrowing by firms over the summer of 2020 was also reflected in the diminished demand for loans benefitting from a public guarantee (Chart 7, left panel). In the last quarter of 2020 and at the beginning of 2021, bank lending to firms stabilised at modest levels, in spite of the resurgence of the pandemic and the associated tightening of containment measures. The absence of a large surge in emergency borrowing reflected available liquidity buffers and direct government support measures, which shielded firms in affected sectors in an environment of renewed revenue shortfalls. In addition, at the aggregate level, the second and third waves of COVID-19 infections and the resultant containment measures have not been as disruptive to firms' sales and operating cash flows as during the first wave. This is because some economic sectors were less affected, partly as they profited from the recovery of the global economy. In addition, firms and customers seem to have adapted better to the new environment.⁶⁴ At the same time, loan demand continued to be dampened by the high uncertainty, especially for financing fixed investment in the sectors more affected by the pandemic. The use of other sources of financing by large firms in less affected sectors also weighed on loan demand over this period. Finally, some firms may have also become more reluctant to take on more bank debt because they might have had accumulated already significant amounts of debt.

In the second half of 2020, longer-term loans continued to support lending dynamics (Chart 1, right panel), reflecting their coverage under guarantee schemes and the flat yield curve. While the increase in corporate lending in the first half of the year had been highest in the sectors hardest hit by COVID-19, the deceleration in the second half of the year has been broad-based across activities (Chart 4A). In addition, bank lending dynamics displayed increasing heterogeneity across countries. Positive lending flows were recorded in France, Italy and to a lesser extent Germany, while net redemptions were recorded in Spain. In Italy, lending to firms continued to reflect the take-up of loans benefitting from a public guarantee. In this country, net lending was also supported by moratoria on loan repayments (i.e. implying temporarily less loan redemptions), as the usage of these schemes continued to be larger than in other countries.

^{64.} For more details, see Battistini and Stoevsky (2021).

The moderation in bank lending dynamics observed since the summer of 2020 is confirmed in the BLS by a net decline in firms' loan demand for the second half of 2020 and the first quarter of 2021, following the highest net balance ever recorded in the second quarter of 2020 (Chart 2). The net decline in loan demand was somewhat stronger for SMEs than for large firms, especially for non-guaranteed loans. In line with lower emergency liquidity needs and existing liquidity buffers, banks reported during this period overall lower financing needs for inventories and working capital than in the first half of 2020. Still, liquidity needs and precautionary buffers continued to be relevant factors for firms' demand for loans with public guarantee (Chart 2A, left panel). Importantly, firms' financing needs for fixed investment continued to dampen loan demand, suggesting that firms' long-term business plans have been put on hold due to the high uncertainty, especially in sectors more affected by the pandemic, which may postpone a sustained recovery.

After declining significantly since the outbreak of the COVID-19 pandemic, bank lending rates on loans to euro area firms have rebounded but remained around record lows in the second half of 2020 and in the first months of 2021 (Chart 4). Lending rates on very small loans displayed a marked U-shaped pattern, characterised by an increase since May 2020 that has been almost equally steep as the prior decline. This mirrors the developments in the use of guaranteed loans, the majority of which were granted to SMEs at very attractive conditions. Overall, the developments in lending rates support the view that the deceleration in credit dynamics observed in the second half of 2020 was largely driven by the reversal of the extraordinarily high demand for loans seen in the early stages of the crisis.

Despite bank lending rates remaining around historically low levels, banks became overall less forthcoming in their attitude towards credit expansion in the second half of 2020. Credit standards on loans to firms tightened both in the third and fourth quarters of 2020 (Chart 5). This was the first significant tightening in the last eight years and was above the historical average since 2003, while remaining considerably below the peak during the great financial crisis. It also remained below the euro area peak during the sovereign debt crisis, where only some countries were affected. The tightening of credit standards was driven by heightened concerns of banks about intensifying risks to borrowers' creditworthiness and possible loan losses in the future, in

particular in the sectors most affected by the pandemic. The tightening was stronger in the commercial real estate and in the trade sectors, while the services sector (that covers both those businesses which suffered and those which profited from the pandemic) and manufacturing were somewhat less affected (Chart 5A). Construction and residential real estate sectors were the least affected from tightening credit standards in the second half of 2020, reflecting the resilience of residential real estate markets to the COVID-19 shock. In the first quarter of 2021, a less pronounced tightening of credit standards was reported by banks in net terms, on account of a smaller contribution of risk, both in terms of perceived risk and risk tolerance of banks. This likely reflected the prolongation of fiscal support measures, the continued support from monetary policy and supervisory measures and the broader improvement in risk sentiment in the first quarter of 2021. Still, risk perceptions related to the economic and firm-specific situation and outlook continued to be the main factor contributing to the tightening of credit standards on loans to firms.

In line with the reduced use of guaranteed loans, the easing impact of these loans on credit standards was more limited during this period than in the first half of 2020 (Chart 3, right panel), while credit standards continued to tighten for non-guaranteed loans. In addition, in the fourth quarter of 2020, the tightening of credit standards became somewhat stronger for SMEs than for large firms, on account of a stronger net tightening of credit standards for non-guaranteed loans to SMEs, despite the continued presence of ample policy support, often tailored specifically towards SMEs. While this development became less acute in the first quarter of 2021, it may nonetheless signal that banks consider credit risks for SMEs being larger, in line with typical patterns of higher risks for SMEs being credit constrained given their more opaque balance sheets due to lower and later reporting requirements.

During past episodes of stress, the BLS indicator of credit standards has proved to be a reliable harbinger of future weakness in bank credit. Historical regularities suggest that credit standards tend to lead lending to corporates by around five quarters (Chart 8A). At the same time, the predictive information content of credit standards tends to be state-contingent, as it emerges more prominently in periods of stress. This is because, over these periods, a significant tightening in credit standards is typically associated with binding

supply constraints. However, unlike previous crisis episodes, the net tightening of credit standards for loans to firms in the second half of 2020 and in the first quarter of 2021 was not accompanied by a tightening contribution of banks' cost of funds and balance sheet constraints (which in fact had overall an easing impact in this period), a factor historically associated with worsening credit supply conditions. This reflected the more resilient state of the banking system, compared with the great financial and sovereign debt crises, as well as the policy response to the pandemic, which has been much more proactive than in prior crisis episodes. Both factors have been key to mitigating the adverse supply pressures originating from deteriorating risk perceptions.

At the same time, the favourable lending rate developments observed since the summer of 2020 might have concealed compositional effects, arising from a shift of new loans to lenders with a better credit risk profile as well as changes in the non-price terms and conditions of loans. Reflecting banks' increased concerns about the riskier loan segments, margins on riskier loans widened further in the second half of 2020 and in the first quarter of 2021 (Chart 6, left panel). Banks also intensified their tightening of non-price terms and conditions, in particular their collateral requirements (Chart 6, right panel), which reached in the last quarter of 2020 a level unseen since 2011 (although remaining well below the peak during the global financial crisis). This indicates that banks aimed to protect themselves against higher credit risks by demanding the pledging of assets as security. On more general grounds, banks often tend to adjust their non-price terms and conditions when they perceive higher credit risk, as this provides an opportunity, compared with changing the pricing of the loans, to reduce potential adverse selection issues in lending. Consistent with this, a comparison across firm sizes shows that bank lending policies, in particular as regards collateral requirements and margins on riskier loans, tended to become stricter especially for SMEs in the last quarter of the year (Chart 6A). This evidence confirms that banks' attitude towards SMEs may have become more cautious.

Banks' concerns about firms' debt servicing and repayment capacity and possible loan losses were also reflected in their indications on the impact of non-performing loans (NPL) on their bank lending conditions. Following a modest impact of NPL ratios on banks' credit standards in 2018 and 2019, the impact has increased in the course of 2020 (Chart 9A). At the same time, euro

area banks' actual NPL ratios remained broadly stable. Nevertheless, actual NPL developments should not be interpreted as a reassuring sign of unchanged credit risk on banks' balance sheets. First, according to the accounting procedure of NPLs, loans are considered as non-performing only if borrowers do not meet their agreed repayment arrangements for 90 days or more. Second, support measures such as moratoria on loan repayments have contributed to delays in NPL recognition, although credit risk was already materialising. The phasing out of these schemes could lead to an increase in NPLs. In fact, euro area banks have built up their provisions for loan losses, dampening bank profitability in the second half of 2020. The surfacing of new NPLs may constitute an important headwind to banks' intermediation capacity in 2021.

In order to prevent the emergence of bottlenecks in the provision of bank financing resulting from the economic fallout from the resurgence of the pandemic, policy support measures were prolonged and in part recalibrated in the second half of 2020 and in the first half of 2021.

On the monetary policy side, the ECB announced in December 2020 various measures, including: (i) a recalibration and prolongation of TLTRO III with the aim of preserving favourable funding conditions for banks and further incentivise their lending to the real economy, (ii) an increase of the envelope of its asset purchases under the PEPP, and (iii) an extension of the duration of the set of collateral easing measures adopted at the onset of the crisis.

Similarly, on the fiscal side, support measures were extended into 2021. After being phased out in September 2020, EBA's guidelines on moratoria were reactivated in December 2020. Besides setting the new deadline for application at the end of March 2021, a cap of nine months to the length of payment extension was introduced in order to mitigate the risk faced by banks. In addition, following the prolongation of the Temporary Framework for state aid measures by the European Commission in October 2020, the window for applying for loans covered by guarantee schemes has been extended by an additional six months until the end of June 2021 in most euro area countries. Some governments also loosened conditions on the original guarantee schemes, e.g. in the form of longer maturity and grace periods for repayments, or proposed programmes of participative loans. These loans will be still granted by banks and guaranteed by the state, but will be treated as equity, thereby improving firms' debt position. Finally, in view of the persistence of

the pandemic, in January 2021 the European Commission extended for additional six months until the end 2021 the Temporary Framework for state aid measures 65

4. Concluding remarks

The vigorous and prompt policy response to the COVID-19 shock has been key to keeping bank lending conditions favourable in the euro area, thereby supporting the financing of firms. While the anatomy of the moderation in bank lending dynamics since the summer of 2020 points to a preponderance of demand-side factors, incipient signs of tighter credit supply conditions have emerged. Moreover, the uncertainty surrounding the evolution of the pandemic and related containment measures continued to weigh on firms' demand for financing fixed investment, especially in the sectors more affected by the pandemic. In this environment, the expected further deterioration of the balance sheet health of borrowers and lenders may pose risks of adverse financial amplification effects. The continuation of a supportive policy environment will thus be crucial for staving off the risk of a deterioration in credit supply conditions. This would also improve the confidence that firms need in order to engage in long-term investment projects, on which a sustained recovery in economic activity depends.

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^{65.} The European Commission will also allow governments to convert guarantees granted under the Temporary Framework into other forms of aid, such as direct grants.

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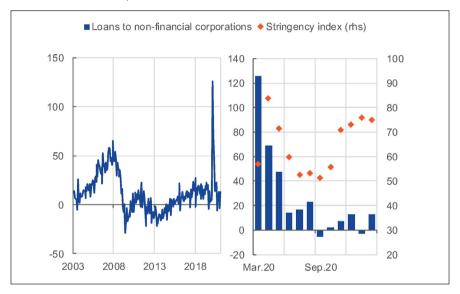
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APPENDIX

Bank Lending to Euro Area Firms - What Have Been the Main Drivers During the COVID-19 Pandemic?

Chart 1A. Bank loans to firms (lhs panel: monthly flows in EUR bn; rhs panel: monthly flows in EUR bn, index)



Source: ECB (BSI), University of Oxford and authors' calculations.

Notes: Bank loans adjusted for sales, securitisation and cash pooling activities. The stringency index is a composite index produced by the University of Oxford that captures the strength of government restrictions on social and businesses in response to COVID-19. The index for the euro area is the GDP-weighted average of the indexes for individual euro area countries. A level of 100 denotes the maximum level of restrictions.

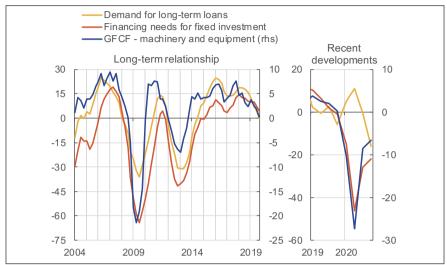
Purpose of loans ■ M3 deposits placed by firms ■For substituting existing loans Borrowing of firms ■For financing fixed investment As a precautionary liquidity buffer 300 For covering acute liquidity needs 200 250 150 200 100 150 50 100 0 50 -50 0 20H1 20H2 21H1 avg. 19 Mar. 20 20Q2 20Q3 20Q4 (expect.)

Chart 2A. Purpose of loans and firms' deposit inflows (lhs panel: net percentages of banks; rhs panel: flows in EUR bn)

Sources: ECB (BLS. BSI) and authors' calculations.

Notes: (lhs panel) Factors affecting the demand for loans or credit lines with COVID-19-related government quarantees. The net percentage refers to the difference between the sum of the percentages for "increased considerably" and "increased somewhat" and the sum of the percentages for "decreased somewhat" and "decreased considerably». Banks can select more than one factor that affects loan demand. Therefore, the sum of the net percentages can exceed 100 in this chart. (rhs panel) Borrowing of firms include bank loans and debt security issuance. The term "avg.19" refers to the quarterly average flow recorded in 2019.

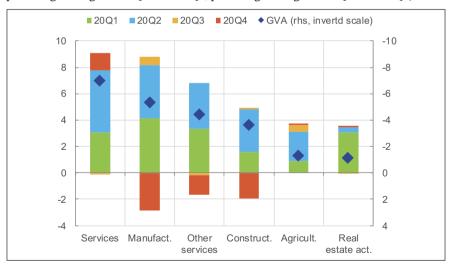
Chart 3A. Firms' financing needs for fixed investment and demand for long-term loans (lhs panel: four-quarter moving average of net percentages of banks, annual percentage changes; rhs panel: net percentages of banks, annual percentages)



Sources: ECB (BLS), Eurostat and authors' calculations.

Notes: "GFCF" stands for gross fixed capital formation. Demand for long-term loans and financing needs for fixed investment are net percentages of banks indicating an increase or a positive impact on firms' loan demand.

Chart 4A. Bank loans to firms and gross value added by sector (p.p. contributions to percentage changes 2020Q4 vs 2019Q4, percentage changes 2020Q3 vs 2019Q4)



Sources: ECB (BSI), Eurostat and authors' calculations.

Notes: Based on outstanding amounts of non-adjusted loans to non-financial corporations. Services include trade, transportation, accommodation, food service activities and ICT.

■ 2020H1 Credit standards 2020H2 Residential real estate Commercial real estate Wholesale & retail trade Services Construction Manufacturing -20 10 20 30 40 50 -10 Loan demand Residential real estate Commercial real estate Wholesale & retail trade Services Construction Manufacturing

Chart 5A. Changes in credit standards and loan demand across economic sectors (net percentages of banks)

Source: ECB (BLS).

Notes: Sectors are defined based on the NACE Rev. 2 classification. Construction (excluding real estate), services (excluding financial services and real estate). Net percentages for credit standards are defined as the difference between the percentages of banks reporting a tightening and the percentages of banks reporting an easing. Net percentages for loan demand standards are defined as the difference between the percentages of banks reporting an increase and the percentages of banks reporting a decrease.

10

20

30

40

50

-10

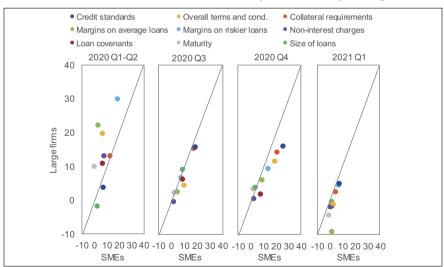


Chart 6A. Credit standards and terms and conditions by firm sizes (net percentages of banks)

Source: ECB (BLS).

Notes: Net percentages are defined as the difference between the percentages of banks indicating a tightening and the percentages of banks indicating an easing. "Margins" are defined as the spread over a relevant market reference rate.

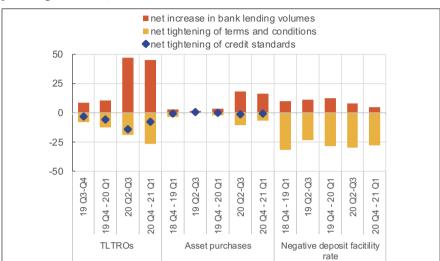


Chart 7A. Impact of the ECB's unconventional monetary policy on bank lending (net percentages of banks)

Source: ECB (BLS).

Notes: Net percentages are defined as the difference between the sum of the percentages of banks indicating a tightening or an increase and the sum of the percentages of banks indicating an easing or a decrease. "Net tightening of credit standards" is not available for the negative deposit facility rate.

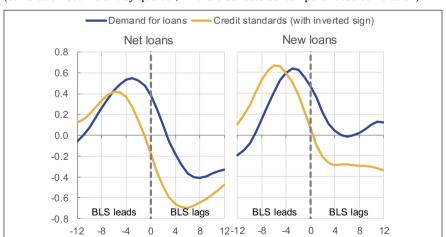
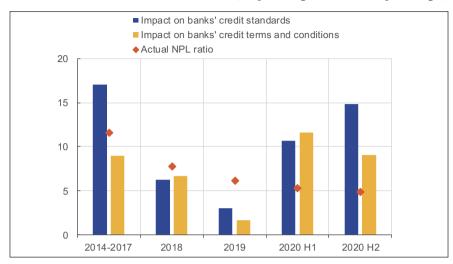


Chart 8A. Correlation at different leads/lags between loans to firms and BLS indicators (correlation coefficient by quarter, where 0 denotes contemporaneous correlation)

Source: ECB (BSI, BLS) and authors' calculations.

Notes: Correlation between 4-quarter moving averages of BLS indicators and annual growth rate of loans to non-financial corporations.

Chart 9A. Impact of banks' non-performing loan ratios on their lending conditions and actual NPL ratios for loans to euro area firms (net percentages of banks and percentages)



Sources: ECB (BLS and Supervisory banking statistics).

Notes: In the BLS, the NPL ratio is defined as the stock of gross non-performing loans on banks' balance sheets as a percentage of the gross carrying amount of loans. The actual NPL ratios refer to euro area significant institutions and are defined as the gross carrying amount of non-performing loans (and advances), as a percentage of total loans (and advances). They are calculated as an average over the respective periods. The first period for the actual NPL ratio refers to 2015 Q2 - 2017 Q4.