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McGeever, McQuinn, Myers

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SME liquidity needs during the COVID-19 shock

Niall McGeever, John McQuinn, Samantha Myers[1]

Central Bank of Ireland

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Abstract

The recently enacted policies to contain the spread of COVID-19 have placed a temporary block between the consumption demands of households and the supply capacity of firms in many sectors. In the context of this shock, a number of firms are likely to need some form of external liquidity support if they are to re-open once these policies are eventually relaxed. We use a combination of sector- and bank-level data to estimate Small and Medium Enterprises (SME) liquidity needs over a three month period, under a range of scenarios. We estimate that non-agricultural SMEs in Ireland will need between €2.4bn and €5.7bn if their revenues are curtailed for three months. The banking system is one potential source of liquidity provision for these firms. We look at the degree to which banks are likely to have the incentives and capacity to provide this financing. In addition, we outline the possible intervention options available to policymakers to support short-term SME liquidity needs, should private sector liquidity provision prove insufficient. All intervention options involve delicate trade-offs, which must be carefully assessed.

1 Introduction

COVID-19 containment policies have required many businesses across entire sectors of the economy to close completely, implement social distancing between staff members, or cease physical contact with customers. Consequently, it has placed a temporary but indefinite block between the consumption demands of households and the supply capacity of firms in some sectors.

As a result of this block, many Small and Medium Enterprises (SMEs) are sustaining losses which could threaten their survival. SMEs are particularly important for job creation in Ireland. They account for over 1 million employees, or 68.4% of total employment in the Irish business economy (CSO, 2019). Some sectors will suffer directly due to mandatory closures, while others will be affected due to second round or transmission effects (see McCann and Myers, 2020, for a discussion of transmission effects through the domestic supply chain). While the significant supports announced by the Irish State in the week of March 23rd will ease the wage burden of affected SMEs, SMEs still have large volumes of non-payroll expenses which they will need to cover or reduce. Liquidity support to vulnerable SMEs can assist them in meeting these obligations during the crisis period, and helps to ensure they are in a position to support the post-crisis recovery.

Liquidity support is not the only policy that may be necessary to help support SMEs, or firms in general. While short-term liquidity support is likely to prove essential to some firms, others will likely fail even in the presence of liquidity support. In addition, the longer the period over which the containment measures last, the greater the likelihood that liquidity pressures may evolve into

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Email: niall.mcgeever@centralbank.ie; john.mcquinn@centralbank.ie; samantha.myers@centralbank.ie

solvency pressures. So additional measures may eventually be necessary to ensure that the debt burdens of firms are sustainable – though these are not the focus of this paper.

This paper will focus only on the issue of short-term liquidity support. We first estimate the amount of liquidity the SME sector is likely to need over a three month period under a range of assumptions around firms' ability to reduce their immediate obligations (Section 2). We do not analyse the potential financing needs of large corporate firms on the basis that their financing structure and potential policy interventions differ from those of smaller firms.[2] We compare our estimates with the availability of credit by the banking system at present (Section 3). Finally, we outline the role that fiscal supports can play in ensuring firms have access to credit (Section 4). While we note the interventions carried out by the Irish State by way of example, any attempt to provide an assessment of these programs is beyond the scope of this Note.

2 Estimating SMEs liquidity needs in the context of COVID-19

In this section, we estimate the liquidity needs for SMEs in response to COVID-19. We first consider the number and employment of SMEs who are likely to be directly impacted by COVID-19 containment policies, based on their sectors of operation (Section 2.1). We then consider the average non-personnel expenses for firms in those sectors, and estimate the needs of firms based on the degree to which these can be cut (Section 2.2). We compare these estimates to the level of liquidity currently available to determine the amount of additional liquidity that SMEs are likely to need (Section 2.3).

2.1 Who is affected by COVID-19 containment policy?

For the purpose of this analysis we have identified certain sectors of the economy that are more vulnerable than others to the effects of social distancing and containment policy. These include a substantial portion of the Wholesale and Retail sector and the entire Accommodation and Food sector.[3]

CSO enterprise statistics for 2017 show that there are approximately 96,000 firms in highly affected sectors with employment of 418,000 and 224,000 firms in moderately or highly affected sectors with employment of 768,000 (Table 1). Annual turnover in 2017 for highly affected sectors was €173bn (79 per cent of which relates to SMEs) and turnover for highly or moderately affected sectors was €382bn (59 per cent of which relates to SMEs).

SMEs are likely to be particularly vulnerable, as there is evidence they can be hard-hit by declines in aggregate demand (Sahin et al, 2011). Ensuring SMEs have sufficient liquidity support can have an impact on employment levels. Internationally, in the most recent recession, firms dealing with weak banks struggled to access credit and were more likely to reduce employment levels (Bentolia et al, 2018). Access to liquidity would also assist SMEs in reopening after the crisis, thereby supporting the recovery and helping to prevent industry-level capacity constraints from arising.

[2] We use the European Commission SME definition on staff headcount (based on persons engaged): https://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en

[3] See the Appendix for a detailed breakdown of affected sectors.

Table 1: The number and share of firms and employment in affected sectors by firm size

	Micro	Small	Medium	SME	Large	All
Number of firms	261,432	18,169	3,085	282,686	558	283,244
in highly affected sectors	85,527	8,914	1,369	95,811	157	95,968
in mod. affected sectors	122,594	5,108	664	128,366	140	128,505
% in highly affected sectors	33	49	44	34	28	34
% in mod. or highly affected sectors	80	77	66	79	53	79
Employment ('000s)	437	351	300	1,088	434	1,522
in highly affected sectors	154	152	113	418	103	521
in mod. affected sectors	168	94	88	350	160	510
% in highly affected sectors	35	43	38	38	24	34
% in mod. or highly affected sectors	74	70	67	71	60	68

Source: CSO (2017) Enterprise statistics on Industry, Construction and Distribution and Services; Central Bank calculations. Note: Number of firms (all firms including multinational enterprises) and employment (persons engaged) recorded in the business economy – NACE B-N excluding K but including subsectors 92, 93, 95 and 96. Sectors are defined based on NACE codes for calculation in this table, separate assessments of the vulnerability of firms and employment at the 2 digit level are used to apportion out section level data by size class before aggregating; not all firms are likely to be affected to same degree within each sector.

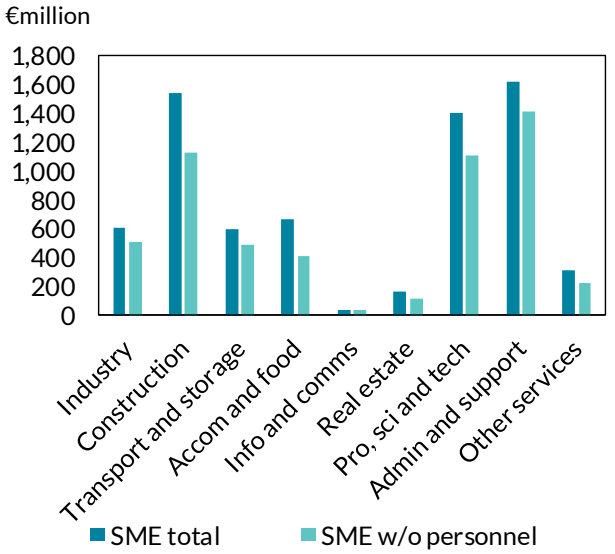
2.2 How much do affected firms need?

We use CSO data on SME expenses (Chart 1) to estimate the level of additional liquidity firms may require if their revenue fell to zero for a three month period.[4] Personnel costs make up a high proportion of total costs in many sectors (Chart 2). However, the significant supports announced by the Irish State in the week of March 23rd will have eased the wage burden of affected SMEs. We therefore focus on non-personnel expenses when calculating SMEs' demand for liquidity.

A key factor that will determine the overall demand for liquidity is the **ability of firms to reduce non-personnel expenses such as rent, rates, tax, insurance, trade credit, debt repayments and utilities**. The totals of many of these and other expenses are outlined in Table 3. The ability of firms to defer these items will also be determined by policy responses, while others will require bilateral engagement between firms and creditors. For example, many businesses have received tax payment deferrals from the Irish State, and some have received rate payment deferrals from their local councils. Some SMEs may also qualify for loan repayment breaks through their bank.

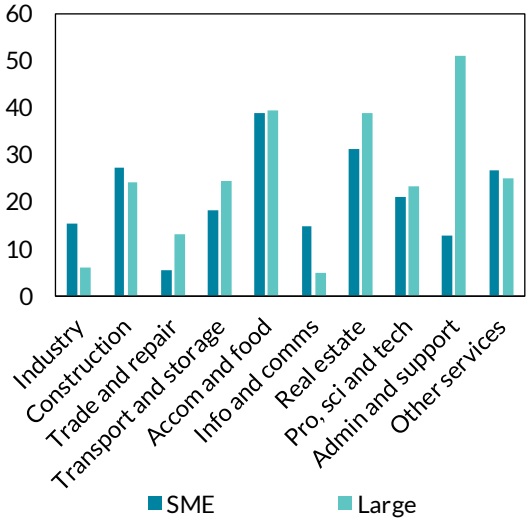
[4] Expenses consist of personnel and non-personnel expenses. Non-personnel expenses refers to expenditure on goods and services for resale or consumption, including materials (as well as ancillary materials such as office materials), energy products and industrial or non-industrial services (such as rents, insurance premiums, legal and accountancy fees, advertising, etc.) at purchase price including any non-value added type taxes and less subsidies. Bank charges are included in these expenses but interest payments are not captured by the available data.

Chart 1: Monthly expenses of SMEs by sector and by business size in 2017



Source: CSO (2017) Enterprise statistics on Industry, Construction and Distribution and Services
Note: Trade and repair sector expenses with and without personnel (not displayed in the chart above) amount to €8 billion and €7.6 billion respectively.

Chart 2: Personnel costs as a share of total expenses



Source: CSO (2017) Enterprise statistics on Industry, Construction and Distribution and Services

We use these data to estimate the quantity of funds that SMEs will need to cover their expenses over a three month period (Table 4).[5] Two key parameters drive our estimates. First, the average reduction in non-payroll expenses achieved by affected firms. This reduction is taken as an estimated proportion of total non-payroll expenses, as data on further expense breakdowns (for example the proportions of total non-payroll expenses paid as rent or taxes) are not available for Irish SMEs. The second parameter driving our estimates is the proportion of firms in the affected sectors that go on to seek external liquidity finance.[6]

Table 3: Monthly non-personnel expenses in €m by affected sector and size

	Micro	Small	Medium	SME	Large	All
Industry (B-E)	83	102	326	511	1,864	2,375
Construction (F)	728	266	132	1,125	124	1,249
Wholesale, retail trade and repair (G)	2,469	3,247	1,919	7,635	1,171	8,806
Transportation and storage (H)	134	134	223	490	453	943
Accommodation and food service activities (I)	96	163	152	410	71	481
Information and communication (J)	10	9	17	37	114	151
Real estate activities (L)	76	19	19	114	13	127
Professional, scientific and technical activities (M)	577	290	244	1,111	376	1,487
Administrative and support service activities (N)	729	492	191	1,413	132	1,545
Other service activities (92,93,95,96)	77	41	110	228	80	308

Source: CSO (2017) Enterprise statistics on Industry, Construction and Distribution and Services; Central Bank calculations. Data for Agriculture, Forestry and Fishing are unavailable.

[5] We exclude the expenses of Wholesale and Retail sector from our calculations due to both the high typical share of stock purchases in their costs and the presence of the sizeable grocery sub-sector.
[6] We do not model the possibility that all firms in affected sectors would seek liquidity assistance due to the existence of liquidity buffers at many firms. Industry engagement and internal estimates, while uncertain, suggest that around half of SMEs may have enough cash to cover three to six months' worth of expenses. However these estimates do not take account of any existing debt repayments or trade credit obligations. Failure to meet these obligations could lead to cascading effects through the supply chain (see McCann and Myers, 2020).

Each estimate below is the product of non-payroll expenses of moderately or highly affected SMEs over a three month period times the proportion of non-payroll expenses that remain after cuts times the proportion of firms that seek external liquidity.

For example, if 50% of vulnerable SMEs require external liquidity finance and can reduce their personnel expenses to zero and their non-personnel expenses by 70%, the total quantity of funding required would be around €2.4 billion. If 70% of vulnerable SMEs demand external liquidity and their non-personnel expenses can only be cut by 50%, this amount increases to €5.7 billion.

Table 4: Potential funds demanded in €m over a three month period based on assumptions of % of affected sector firms seeking liquidity finance and the % reduction in non-personnel expenses

% of firms requiring liquidity finance	Reduction in average non-personnel expenses		
	70%	60%	50%
50%	2,447	3,263	4,079
60%	2,937	3,916	4,895
70%	3,426	4,568	5,711

Source: CSO, CBI estimates.
Note: Personnel expenses are assumed to fall to zero. Excludes Agriculture, Forestry and Fishing, as data are unavailable.

3 SME access to finance

In this section, we consider how the liquidity needs of firms we examined in the previous section can be met. We first note that some firms entered the crisis with pre-approved access to credit through contingent credit lines (section 3.1). However, other firms may struggle to access credit, particularly if they have no existing lending relationship or lack collateral to support their application, or if bank risk appetites contract as in the previous crisis (section 3.2).

3.1 Access through contingent credit lines

The domestic banking system is an important source of liquidity for Irish firms. Committed undrawn credit lines offered firms some flexibility at the onset of the crisis. In June 2019, Irish resident SMEs had €2.7bn in undrawn credit available from Irish retail banks (Table 5). Of this, €490m was available to borrowers in the Wholesale and Retail sector, €303m in Manufacturing, and €134m in Accommodation and Food. Overdrafts are major component of undrawn SME credit.

Table 5: Balances in €m and utilisation rates (%) by borrower sector and size

	Outstanding	Undrawn	Utilisation
A - Agri/Forestry/Fishing	2,296	416	84.7
C - Manufacturing	1,007	303	76.9
G - Wholesale & Retail	2,076	490	80.9
I - Accommodation & Food	2,411	134	94.7
L - Real Estate	7,539	487	93.9
Q - Human Health	987	120	89.2
Other	3,501	760	82.2
Total	19,816	2,710	88.0

Source: Central Bank of Ireland loan-level data

The €2.7bn of undrawn SME credit is not spread evenly across borrowers within sectors. In fact, a relatively small set of borrowers account for a large majority of outstanding and undrawn balances.

80 per cent of undrawn balances were committed to just 10 per cent of borrowers. Another way of stating this is that most borrowers have relatively low outstanding and undrawn loan balances. The median limit on working capital loans is approximately €15,000 and the median utilisation rate for active working capital facilities is 51 per cent. Given this distribution across firms, existing bank credit lines are unlikely to be sufficient to cover the financing needs of all affected firms over a three month period.

3.2 Access to new or additional credit

New credit applications are expected to rise substantially in the coming weeks given our estimates of liquidity needs in Section 2.2 and the fact that the majority of firms have no outstanding bank debt. We further expect some firms to seek access to credit on a contingency basis, reflecting uncertainty over both the duration of containment policies and the timeframe for demand recovery.

However, some firms who currently do not have access to contingent credit lines may have difficulty obtaining sufficient liquidity through new loans. This is more likely for SMEs who do not currently have a lending relationship with a bank (as banks are the primary source of working capital for SMEs), and those who do not have collateral available to support their loans.

In Ireland, the number of SMEs with no debt has increased in number since the previous financial crisis to just under 60% of all SMEs as of September 2019. These SMEs are generally more resilient to financial-sector shocks (see FSR, 2019I and II) (chart 3). However, as a result they are much less likely to have a lending relationship with a bank. For instance, 80 per cent of SMEs with outstanding debt report also having a bank relationship manager compared to 62 per cent of SMEs which have no debt.[7] 21 per cent of SMEs have neither a bank relationship manager, nor any outstanding debt. Consequently, these SMEs may have greater difficulty accessing working capital lines than those with a lending relationship (Beck et al, 2018).

Firms in existing banking relationships may also face credit constraints if they need to find a new lender. Greenstone et al (2020) show that in the US SMEs have a difficult time finding a new lender if their bank limits their access to credit, while O'Donnell and McCann (2020) show that firms with a narrower set of banking relationships benefit less from accommodative monetary policy in France.

Another group who may have difficulty accessing the liquidity they require includes SMEs who do not have collateral to support their loans. Carroll and McCann (2017) show Irish banks use collateral for riskier loans. However, it is not clear that collateral is available to a large proportion of SMEs, particularly those who operate in service sectors out of rented premises. Over half of SME credit applications are unsecured, even in good times (chart 4).

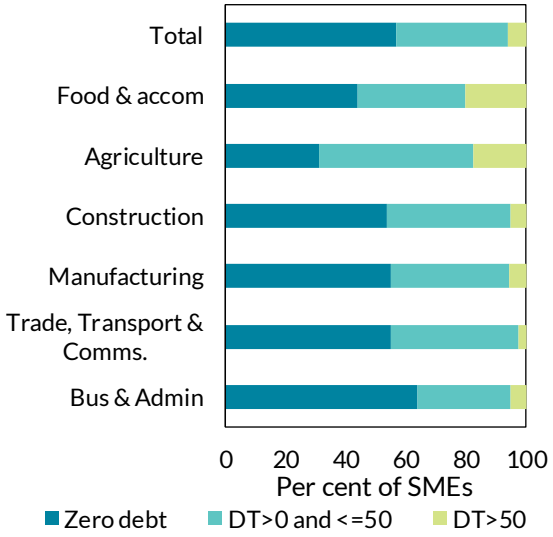
One final reason firms may have difficulty accessing credit is if the ability and willingness of banks to lend to firms declines. Considerable action has been taken to support banks' ability to lend during the current crisis. These includes monetary policy actions to support access to liquidity (see Holton et al. 2020), as well as the release of the Countercyclical Capital Buffer by the Central Bank of Ireland. These measures are acting to support the capacity of the banking sector to provide the required level of credit.

Nonetheless, as banks may choose to recalibrate their risk appetite given the changed business environment and particularly if the value of their loan books and other assets deteriorate. There is strong empirical evidence that during the last crisis banks reduced their risk appetite when they suffered negative shocks to their capital. Jimenez et al. (2017) and Santos (2011) show this for Spanish and US firms, respectively. Kelly et al. (2018) show that Irish banks displayed a much lower appetite for risk in their residential mortgage lending business during the last crisis. While likely due

[7] Department of Finance Credit Demand Survey, April to September 2019.

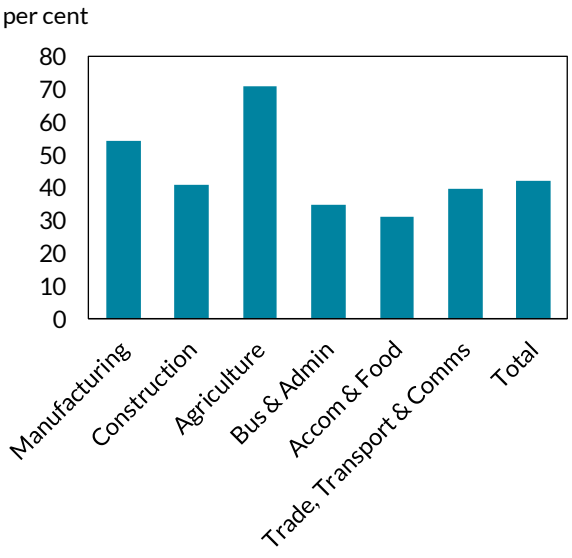
in part to the fact that it stemmed from the banking sector initially, any similar reduction in risk appetite during the current crisis would likely limit access to credit for more vulnerable SMEs.

Chart 3: Share of SMEs with various levels of debt to turnover



Source: Department of Finance SME Credit Demand Survey
Note: Observed as at September 2019

Chart 4: Share of collateralised SME credit applications



Source: Department of Finance SME Credit Demand Survey,
Note: Observed as at September 2019

4 Potential role for fiscal supports

In general, fiscal policymakers have three options for supporting SMEs' access to liquidity, in the event that private sector liquidity is insufficient to meet demand. These include credit guarantee schemes, lending schemes, and direct fiscal supports. We then consider the trade-offs involved in each type of intervention from a theoretical perspective. Each type of intervention incorporates very complex and delicate trade-offs in its optimal design and execution. Consequently, while we note the interventions carried out by the Irish State by way of example, any attempt to provide an assessment of the efficiency or adequacy of these programs is beyond the scope of this Note.

4.1 Credit guarantee schemes

Credit guarantee schemes can enhance the incentives of banks to lend. They are frequently used in many developed and developing economies to alleviate the constraints facing SMEs in accessing finance (European Investment Bank, 2014). If governments takes on a sufficiently large share of the risk, banks can be encouraged to lend despite retreating risk appetites. However, there is a trade-off: less risk-sharing creates larger contingent liabilities, and reduces banks incentives to assess firms' long-run viability. The optimal trade-off between supporting economic activity and constraining moral hazard can be difficult to pinpoint.

Credit guarantees can enhance the capacity of banks to lend. If a guarantee meets certain requirements,[8] it acts to reduce the regulatory capital risk weight of the loans issued with the guarantee, allowing the banks to issue more loans than would be the case otherwise. Further, it may reduce banks' demands for collateral, as some of their losses would be covered in the event of firm

[8] The relevant requirements are outlined in CRR Articles 201, 203, 213-215 and 235.

defaults. If necessary, this extended capacity can be funded through low-cost financing obtained from the ECB, through TLTRO-III for example.[9] A key implementation risk associated with this policy support is that lenders' operational capacity and appetite to lend determine much of the outcome.

The literature on the role of banks in the policy response to the US mortgage crisis in 2008 suggests that an over-reliance on banks as crisis response intermediaries may come with implementation risks, as banks tend to vary in their operational capacity and their appetite to participate in schemes (Agarwal et al., 2017). Larger schemes that include a wider set of bank and non-bank lenders are likely to lower these implementation risks.

Credit guarantees lower short-term fiscal costs, have limited administrative costs compared with direct lending, as the existing capacity of the banks to approve loans and raise and issue funds can be leveraged. However, they create a contingent liability, the long-run cost of which will depend on the length of time over which demand is constrained (resulting in losses for borrowing firms), the level of take-up, the ability of firms to repay given the economic outcomes after COVID-19, any fiscal stimulus undertaken and the risk-sharing arrangements as already noted.

Guarantee programs can help SMEs, such as those without adequate collateral, to obtain sufficient short-term liquidity and avoid insolvency, thereby retaining the capacity to recommence operations when demand resumes. However, this comes with a cost – the SME must expect sufficient profitability after the shock to repay the loan plus interest. Once again, a delicate balance exists between limiting the costs of finance to SMEs and ensuring that banks and the government providing the guarantee do not make substantial losses.

Many countries have implemented credit guarantee schemes for SMEs. Many of these schemes pre-date the onset of COVID-19, including the €150 million per annum Irish Credit Guarantee Scheme.[10] There is significant variation across Europe in the size of these schemes. The notional size of the Irish scheme is larger than that of many other pre-existing European programs once economy size is taken into account.[11] However, prior to COVID-19 the Irish scheme had very limited take up. According to a previous review of the scheme, this was likely due, at least in part, to the way in which the scheme caps the Irish State's credit risk exposure.[12] Other factors that may have played a role in the low take-up include the generally low demand for credit by SMEs, as noted in both of the Central Bank of Ireland's 2019 Financial Stability Reviews.

4.2 Lending schemes

The establishment and co-ordination of targeted lending schemes can boost access to finance for borrowers with acute liquidity needs. These can take form two types – on-lending schemes and direct lending schemes. On-lending schemes operate through the provision of funds to banks, who in turn lend those funds to customers. On-lending schemes can be designed with or without risk sharing, and with or without an additional loan approval process. Direct lending schemes, on the other hand, require government bodies to engage with borrowers directly, as well as manage approval processes and loan risk.

The major difference between on-lending schemes and guarantee schemes is the requirement for upfront fiscal capital. Otherwise, both schemes embody some similar trade-offs. For example,

[9] TLTRO III is the ECB's newest long-term refinancing operations (LTROs) and provides new lines of funding at a low rate of -50 basis points. An explicit aim of TLTRO III is to increase the volume of funds that banks can borrow from the ECB in order to provide credit to firms and households (Lane, March 2020)

[10] Under this scheme, the Irish State provides an 80 per cent guarantee to bank lenders for loans to SMEs allowing banks to claim up to 13% of their total portfolio of credit guarantee scheme lending. Loan amounts range from €10,000 to €1m, with terms of up to 7 years.

[11] Since then, some international programs have been expanded, specifically in France, the Netherlands, the UK and Sweden. These schemes range between €1.3 billion (the Netherlands) and €304 billion (the UK) in absolute size.

[12] See the 2013 external report on the scheme for details: https://dbei.gov.ie/en/Publications/Publication-files/Review-of-the-SME-Credit-Guarantee-Scheme-.pdf

policymakers face a trade-off between risk-sharing and incentives for lending. Likewise, these are likely to result in relatively low short-term costs, but a contingent liability that will depend on economic outcomes. Finally, while they improve SME access to finance, they also require policymakers to select interest rates that balance SMEs' interest liability with the cost of the scheme.

The Irish State has two major on-lending schemes which channel funding to affected borrowers through bank on-lenders. Both schemes are administered by the Strategic Banking Corporation of Ireland. The COVID-19 Working Capital Loan Scheme is a €450m scheme available to firms affected by the pandemic. Firms can borrow between €25,000 and €1.5m for up to 3 years. Second, the Future Growth Loan Scheme is a €300m scheme for long-term borrowing. Loans under this scheme can have balances of between €100,000 (€50,000 for primary producers) and €3 million, a maximum interest rate of 4.5 per cent, and terms of 8 to 10 years. Both schemes allow businesses can borrow up to €300,000 without the need to provide collateral.

Government bodies can also engage in lending to borrowers directly. While these direct lending schemes also embody many of the same trade-offs already discussed, they have an additional benefit in that they remove the concerns noted in section 4.1 regarding bank moral hazard. However, they do so at a cost. Governments must take on the entire risk for all loans issued, rather than sharing it with the private sector. It may also encounter higher administrative costs from these programs as direct lending programs require enhanced capacity to assess and administer loans.

Two direct lending schemes are currently in place in Ireland. Microfinance Ireland (MFI) lends to Irish micro enterprises. The maximum loan amount they offer rose from €25,000 to €50,000 as part of the Irish State's COVID-19 policy response and borrowers can avail a six-month interest-free payment moratorium. As MFI benefits from an EU-funded guarantee, its activity is a combination of direct lending with a state credit guarantee. It does, however, engage directly with micro enterprises and offers them an alternative source of finance from bank and non-bank lenders.

Enterprise Ireland is also involved in lending to firms. The Sustaining Enterprise Fund provides €180m in repayable advances to firms with over 10 employees operating in the Manufacturing or international service sectors. The maximum amount available is €800,000 with a 5 year term length for all advances and a 3 year grace period for repayments.

In addition to the formal schemes above, the Irish State is currently engaging in de facto lending to SMEs through extensions of taxation payment deadlines. Payment breaks for income taxes, VAT, PSRI contributions, and rates are, from the SME's perspective, economically identical to the provision of interest-free loans to cover those expenses. Taxation extensions have the benefit of being easy for policymakers to administer and to extend if necessary. However, these measures lead to a short-term contraction in government cash flow and it may be difficult to target firms on the basis of liquidity needs and viability.

4.3 Direct fiscal supports

The final method of providing liquidity is through direct fiscal supports, such as grants or tax offsets for example. These have benefits in their support to the economy, but raise issues regarding costs, targeting and moral hazard. They also blur the line between a liquidity support and a solvency support for firms.

One of the issues in the current environment is that traditional demand-side stimulus is likely to have limited short-term impact. Since many businesses are not operational, and others are negatively affected by behavioural changes resulting from COVID-19, stimulus in the form of payments to households may not reach the firms who are most vulnerable, at least until demand resumes. Thus direct fiscal supports would need to be made on the supply side, rather than the demand side in order to provide a useful form of liquidity support to firms in the current environment.

In the meantime, many governments have implemented programs to assist firms in paying some of their short-term costs. The most commonly targeted is payroll. Ireland, the UK, France, Denmark, the Netherlands, and others have announced schemes by which 70-90% of firms' wages (up to various caps) will be covered through direct fiscal supports. These schemes provide support to households, while also helping to preserve the employer-employee relationship and thereby increasing the likelihood of firms recommencing operations at the end of the crisis, and the speed at which they can do so. However, they come with a large fiscal cost.

There is also a trade-off with respect to the amount of the wage covered. If the amount is too low, businesses are more likely to close, due to the remaining wage costs, and, in some cases, the relative attractiveness of unemployment benefits. On the other hand, higher coverage can result in transfers from taxpayers to some private households.

A similar issue arises for rents. If direct fiscal support is provided to cover the entire rent payment, the incentive for SMEs to negotiate lower rates with their landlords is reduced. The support therefore could end up leading to a net transfer from taxpayers to owners of commercial property. On the other hand, if rents cannot be renegotiated, or if commercial property owners themselves become insolvent, SMEs could end up losing their premises and/or failing as the result of their inability to make rental payments, particularly in the absence of access to liquidity through other channels.

An important effect of SME failure is that supplier firms will likely face substantial losses and liquidity pressure. McCann and Myers (2020) estimate that firms in sectors that are highly affected by COVID-19 purchase around €40bn in goods and services annually from other firms, with around €15bn being purchases from firms in unaffected sectors. This represents a channel through which liquidity shocks can cascade through the economy even to businesses not thought to be directly impacted by the pandemic shock.

Trade-offs also exist for other expenses. If, at the extreme end, governments were to provide a 'blank cheque' for expenses incurred during this period, SMEs would have less incentive to reduce their variable costs. On the other hand, if no fiscal support is provided and costs cannot be cut, SMEs are more likely to experience liquidity shortages. Thus there is a delicate balance to be struck between ensuring firm survival and limiting government costs.

5 Conclusion

COVID-19 containment policy has placed a temporary block between the consumption demands of households and the supply capacity of firms in some sectors. Liquidity support to vulnerable SMEs is important to assist them in meeting their obligations during the crisis period, and helps to ensure they are in a position to support the post-crisis recovery.

In this Note we estimate the liquidity needs for SMEs in response to COVID-19 under different scenarios. By identifying the vulnerable subsectors of the economy and considering the level to which the expenses in these subsectors can be reduced, we estimate liquidity needs over a three month period could be between €2.4 billion and €5.7 billion.

There is some evidence to suggest that not all firms will be in a position to meet this liquidity need from internal resources, existing credit lines and new bank lending without additional support. Firms with weaker balance sheets due to COVID-19, SMEs who currently have no lender relationship with a bank, and those who have limited collateral to support their application may struggle to access finance, especially if there were to be a reduction in banks' risk appetite.

We consider the options available for policymakers to intervene. We identify three types of intervention – credit guarantee schemes, direct lending programs and direct fiscal supports. We note that all three involve delicate trade-offs in their selection and design to ensure that the overall costs do not outweigh the benefits.

In the longer run, additional interventions may be necessary to help firms re-open and manage any increase in their debt burdens. The costs and benefits of these additional interventions will likely form a core part of the public debate over the coming weeks and months.

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Appendix

Table A1: Estimated moderately or highly affected share of firm turnover by sector

	% moderately affected	% highly affected	% affected
Industry (B-E)	15.4	4.4	19.8
Construction (F)	92.3	0.0	92.3
Wholesale, retail trade and repair (G)	0.0	60.8	60.8
Transportation and storage (H)	86.3	0.0	86.3
Accommodation and food service activities (I)	0.0	100.0	100.0
Information and communication (J)	0.0	2.1	2.1
Real estate activities (L)	0.0	100.0	100.0
Professional, scientific and technical activities (M)	73.1	6.4	79.5
Administrative and support service activities (N)	93.2	0.0	93.2
Other service activities (92,93,95,96)	0.0	100.0	100.0

Source: Central Bank calculations

Table A2: Estimated moderately or highly affected share of firms by sector

	% moderately affected	% highly affected	% affected
Industry (B-E)	51.9	6.9	58.9
Construction (F)	97.3	0.0	97.3
Wholesale, retail trade and repair (G)	0.0	73.7	73.7
Transportation and storage (H)	88.7	0.0	88.7
Accommodation and food service activities (I)	0.0	100.0	100.0
Information and communication (J)	0.0	20.5	20.5
Real estate activities (L)	0.0	100.0	100.0
Professional, scientific and technical activities (M)	54.9	2.3	57.1
Administrative and support service activities (N)	90.2	0.0	90.2
Other service activities (92,93,95,96)	0.0	100.0	100.0

Source: Central Bank calculations

Table A3: Estimated moderately or highly affected share of firm employment by sector

	% moderately affected	% highly affected	% affected
Industry (B-E)	40.5	0.6	41.1
Construction (F)	92.3	0.0	92.3
Wholesale, retail trade and repair (G)	0.0	60.8	60.8
Transportation and storage (H)	86.3	0.0	86.3
Accommodation and food service activities (I)	0.0	100.0	100.0
Information and communication (J)	0.0	2.1	2.1
Real estate activities (L)	0.0	100.0	100.0
Professional, scientific and technical activities (M)	46.6	5.2	51.8
Administrative and support service activities (N)	93.2	0.0	93.2
Other service activities (92,93,95,96)	0.0	100.0	100.0

Source: Central Bank calculations

T: +353 (0)1 224 6000
www.centralbank.ie
publications@centralbank.ie
Bosca PO 559, Baile Átha Cliath 1, Éire
PO Box 559, Dublin 1, Ireland

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