

Spending Review 2021

The Impact of COVID-19 on State Supported Lending

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Executive Summary

This paper utilises loan scheme specific datasets to track developments in the Future Growth Loan Scheme (FGLS), Brexit Loan Scheme and SBCI COVID-19 Working Capital Scheme (SBCI Working Capital Scheme), Credit Guarantee Scheme (CGS), COVID-19 Credit Guarantee Scheme (CCGS) and Micro Finance Ireland (MFI).

MFI lend directly to businesses. The other schemes are risk-sharing state guarantee schemes in partnership with private lending institutions. Since the introduction of the *Credit Guarantee Scheme* in 2012, the objectives of state guaranteed lending have evolved from focusing on market failure and Brexit related uncertainty, to also acting as emergency fiscal support measures that look to provide working capital and liquidity to businesses adversely impacted by the COVID-19 pandemic.

Key Findings

Between the timeframes outlined below, 8,491 firms have availed of borrowing via state guarantee schemes; accounting for a combined €1.015 billion in approved state guaranteed loans. A further 3,339 firms have availed of MFI and drawn down €55.5m since 2012. Analysis in this paper is based on the following approved lending across schemes:

- FGLS: Inception (Jun 2019) to Dec 2020, €516m was sanctioned (64.5% of capacity) across 2,572 firms.
- SBCI WCS: Inception (May 2018) to Dec 2020, €184m sanctioned (55% of capacity) across 1,245 firms.
- CCGS: Inception (Sep 2020) to May 5th 2021, €282m sanctioned (14% of capacity) across 4,513 firms.
- CGS: Between Jun 2018 and Aug 2020, €33m sanctioned across 161 firms.
- MFI: Between 2012 and 2020, €55.5m drawn down across 3,319 firms.

Loan Size

The majority of FGLS and CGS loans granted were between €50,000 and €250,000 (60% and 73% of cases respectively). The most common loan size within the SBCI WCS and CCGS schemes was between €25,000 and €50,000; 60% of cases for each scheme. MFI loan sizes are relatively evenly distributed across the €2,000 and €25,000 range; 83% of loans granted are within the €5,000 - €25,000 band. Loans above €25,000 account for 8% of loans within MFI.

Firm Size

Firms exceeding 50 staff make up less than 10% of loan approvals across guarantee schemes. Between 2 and 5 employees is the most common firm size across all schemes apart from the CGS, for which between 11 and 25 is the most common firm size. Firms with 1 employee also account for over a quarter of firms under the FGLS and CCGS. Within all schemes except the CGS, average loan size is bigger for firms with more employees. All MFI loans were to firms with 9 employees or less.

Region

41% of guarantee scheme borrowers are located in Dublin (20.9%), Cork (12.8%) and Galway (7.6%). Within the BC-WCS, CGS, and MFI, the majority of lending activity is concentrated in Dublin, Cork and Galway. Compared to the other schemes, lending to CCGS and FGLS did not have as high a concentration in urban counties like Cork (13%) and Dublin (10%).

Loan Purpose

CCGS: approximately 50% of approved loans were for working capital, suggesting that a large portion of loans under the CCGS are acting as liquidity supports. SBCI WCS: all loans are recorded as working capital loans. To avail of lending, firms needed to demonstrate Research and Innovation and/or Product/Service Improvement. The most common innovation criteria that firms meet are research and innovation and new or improved product, process or service improvement. FGLS: all loans are used for investment purposes,

the most common investments being Businesses Expansion, Improvement of Performance and Sustainability, and Premises Improvement.

Sector Breakdown

While similar, the main difference in sectoral distribution between MFI and other schemes is that the agricultural sector features prominently within the FGLS (42% of loan approvals) and CCGS (17% of loan approvals). Wholesale and Retail, Manufacturing, Accommodation and Food, and Construction all account for large portions of lending under both MFI and the guarantee schemes. This is reflective of the overall Irish enterprise base and those sectors most severely affected by the COVID-19 pandemic. In the case of the COVID-19 WCS and CCGS, this suggests that schemes are being targeted appropriately.

Loan Schemes as Working Capital Supports

Credit market data published by the Central Bank indicates that the provision of credit to SMEs contracted as a result of the COVID-19 pandemic. This provides a rationale for the expansion and adaption of state supported lending schemes during this period. CBAs of some schemes (e.g. FGLS) carried out by DETE have indicated positive benefit to cost ratios based on projected cash flows, although the FGLS is not a working capital facility specifically targeted at firms exposed to the pandemic. Once observations of actual ex-post cash flows are available in a number of years, it will be possible to determine the net benefit of loans to SMEs and the economy as a whole compared to alternative enterprise supports such as wage subsidies or direct grants. Analysis of observed cash flows during the life of loan schemes, prior to their reaching maturity, could also be used. The benefit of State Supported Lending Schemes compared to other enterprise supports will ultimately be impacted by factors such as sector specific exposure to the pandemic, the speed of recovery, what working capital loans are used for, and the degree to which the debt burden of working capital loans potentially slows future productivity or results in loan defaults.

Research by DETE will evaluate the financial and economic additionality of state supported lending. This is expected to quantify the value of these schemes, aiding discussion regarding the rationale for future loan guarantee schemes. Importantly, the extent of state supported lending, and changes therein, must be viewed in the context of a suite of enterprise supports that currently exist as part of the national response to the COVID-19 crisis. Additional research being carried out by DPER will focus on evaluating the broader set of enterprise supports, inclusive of state supported lending schemes.

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1. Introduction

Building on the work of two previous spending reviews¹, this paper will review four credit guarantee schemes and one direct state lending scheme currently operational in Ireland;

- 1) Future Growth Loan Scheme (FGLS).
- 2) Brexit Loan Scheme and COVID-19 Working Capital Scheme. Collectively the SBCI Working Capital Scheme (SBCI WCS).
- 3) Credit Guarantee Scheme (CGS).
- 4) COVID-19 Credit Guarantee Scheme (CCGS).
- 5) Micro Finance Ireland (MFI).

Utilising datasets provided by the *Strategic Banking Corporation of Ireland* (SBCI) and *Micro Finance Ireland* (MFI), this paper will track developments in scheme design and uptake, frame the development of loan schemes in light of the COVID-19 pandemic and assess the sectoral targeting of the schemes.

State supported lending in Ireland has evolved considerably since 2012 when the first such scheme, the *Credit Guarantee Scheme* (CGS), was introduced. The onset of the COVID-19 pandemic has seen the increased deployment and adaptation of state supported lending in Ireland and across the EU. State supported lending now forms part of a broader suite of emergency enterprise support measures aimed at providing working capital to small and medium sized enterprises (SMEs) to cover pandemic related expenses/loss of revenue and to buffer against any potential credit constraints arising from the uncertainty of the COVID-19 pandemic. In contrast, prior to the COVID-19 pandemic, state supported lending in Ireland was primarily utilised as a policy response to address specific inefficiencies in the market for SME lending, increase the overall provision of credit to viable SMEs, address identified investment gaps, and as a support measure for firms exposed to Brexit related uncertainty.

Loan schemes present a reduced cost to the Exchequer when compared to other forms of emergency enterprise supports introduced since the onset of the COVID-19 pandemic, such as the pandemic unemployment payment and other grants, because risk and cost are shared between the exchequer, private lending institutions and, where relevant, counter guarantors.

This paper tracks developments in the use of state lending schemes given the economic restrictions of COVID-19 and the adaptations/expansion of various schemes to address access to finance for SMEs. Changes in the way state supported lending has been used has had a significant effect on scheme uptake, loan purpose as well as risk for the exchequer. A description of scheme recipients and sectoral

¹ Kirby (2019). <u>State Supported Loan Schemes: A Preliminary Analysis</u>, and Breen, Keogh & Gray (2020). <u>State Supported Loan Schemes</u>.

dimensions may provide insights as to whether these schemes are achieving their stated aims, be it providing liquidity supports to ailing businesses through economic challenges or addressing market failures and capital constraints for SMEs. Understanding the characteristics of scheme recipients, particularly throughout 2020 and 2021, will contribute to the discussion on whether these schemes are supporting enterprise and national policy goals, and supports are sufficiently targeted at sectors impacted by COVID-19 where access to credit may also be limited. The output of the paper will provide a baseline of information for which more in-depth analysis of loan schemes can build on in future spending reviews.

2. Data

This paper analyses data on state supported loan schemes from the *Strategic Banking Corporation of Ireland* (SBCI) and *Micro Finance Ireland* (MFI). The microdata provided on the five lending schemes includes loan and firm specific variables such as interest rate, loan purpose and enterprise region. The datasets contain information on successful applicants only. As noted in previous spending reviews on this topic, data on unsuccessful loan applicants would be useful for assessing scheme demand, effectiveness and additionality. The data required to assess the level of financial or economic additionality that schemes provide is not being analysed in this paper. Such analysis would require more detailed firm level data and rigorous evaluation methodologies that, for example, surveys firms in the broader SME credit market in an attempt to construct a comparison group.

For many schemes which are still ongoing, not enough time has elapsed to allow for sufficient data to become available on repayment defaults. Loan defaults are therefore not analysed in this paper, though credit grade information reported in section 8.4 provides some indication of default risk. Default rate data would allow for quantification of scheme costs to the exchequer, and possibly aid speculation on future costs. If loan defaults become a prominent feature of the loan schemes over time, analysis of loan default data in the future would allow for a description of the characteristics of firms that default. Findings could map the potential for future losses/claims given the characteristics of firms in any state supported lending portfolio. Further, such information could inform the design and targeting of any future loan schemes and other enterprise supports.

3. Overview of Schemes

Schemes are described below in table 1. The dates in this table reflect data utilised in this analysis. In most cases this lines up with when schemes were introduced except for the *Credit Guarantee Scheme*. In September of 2020 the *Credit Guarantee Scheme* was adapted into the *COVID-19 Credit Guarantee Scheme*. All subsequent activity from September 2020 onwards falls under this newly expanded scheme.

Table 1 – Available Data and Descriptions of Schemes

Scheme	Data Start Date	Description
Future Growth Loan Scheme (FGLS)	June 2019	Loans aimed at Irish SMEs, including primary producers, to support strategic long term investment.
Brexit Loan Scheme (BLS)	June 2018	Loans to address working capital requirements and fund innovation and adaption for SMEs affected by Brexit.
COVID-19 Working Capital Scheme (COVID-19 WCS)	March 2020	Loans to address working capital requirements and fund innovation and adaption for SMEs affected by COVID-19.
COVID-19 Credit Guarantee Scheme (CCGS)	September 2020	Loans to facilitate working capital and liquidity needs for SMEs adversely impacted by COVID-19.
Credit Guarantee Scheme (CGS)	June 2018	To address specific market inefficiencies that lead to undersupply of lending to SMEs.
Micro Finance Ireland (MFI)	October 2012	Small loans provided directly to microenterprises for a variety of purposes including start-up costs, cash flow requirements, and adaptation.

Microfinance Ireland (MFI) is a designated activity company which administers the microenterprise loan fund on behalf of the Department of Enterprise, Trade & Employment. The fund provides loans directly to enterprises consisting of less than 10 employees. Other schemes listed above are risk-sharing state guarantee schemes in partnership with private lending institutions. For the latter, a certain percentage of the losses (80% in most cases) that might be incurred by private lending institutions as a result of defaults is covered by a guarantee. Responsibility for the guarantees varies across schemes between the exchequer, European Investment Fund and the Strategic Banking Corporation of Ireland.

The Future Growth Loan Scheme (FGLS) is aimed at facilitating long term investment and allows for larger and longer loans compared to other schemes. The Department of Agriculture, Food and the Marine contribute to the funding of the scheme to provide access to primary producers. A common challenge for many young and new entrant farmers is a lack of adequate security, and the scheme was partly designed to address this issue. The scheme is demand led and up to 40% of the scheme's allocation is for the primary producers sector and food businesses. Following the onset of the COVID-

² The *Credit Guarantee Scheme* was first launched in 2012 and has gone through several revisions since then. In this paper it will be analysed during the period between June 2018 and September 2020.

19 pandemic the FGLS was expanded by €500 million to further support strategic long term investment.

The SBCI COVID-19 Working Capital and Brexit Loan schemes (SBCI WCS) are two separate schemes from the perspective of enterprises. In practice the two schemes are nearly identical and differ only in certain specific eligibility criteria requiring that an SME be exposed to either COVID-19 or Brexit. Thus they are grouped together in the below table and will be throughout the paper. Both schemes are aimed at providing working capital and funding innovation and adaptation that responds to either Brexit or the COVID-19 pandemic. This scheme originally comprised of only the Brexit Loan Scheme. In response to the COVID-19 pandemic this was adapted and the COVID-19 Working Capital Scheme was introduced alongside the Brexit Loan Scheme as an immediate response to provide working capital to SMEs impacted by the pandemic.

The *Credit Guarantee Scheme* (CGS) was originally introduced in 2012 to address specific inefficiencies in the market for credit that resulted in SMEs struggling to access loan facilities. These inefficiencies arose due to factors such as lack of adequate collateral or a novel market serving to increase the risk perception of SMEs in the eyes of private lending institutions. In 2020 the *Credit Guarantee Scheme* was adapted and expanded in the *COVID-19 Credit Guarantee Scheme* (CCGS). The main objective of the new scheme was to provide working capital and liquidity to firms adversely impacted by the economic restrictions imposed in response to the COVID-19 pandemic.

All schemes apart from the CGS contain an 80% guarantee on potential losses. This means that 80% of the cost incurred by banks due to defaults are refunded. Schemes differ with regard to which parties contribute to the guarantee. For the FGLS and SBCI WCS, the European Investment Fund (EIF) provides a counter guarantee as outline below in Table 2. EU counter guarantees mean that exchequer liability under the FGLS and SBCI WCS is limited to the "first loss", typically between 10% and 20% of the total size of the loan. The CCGS and CGS are the only schemes guaranteed entirely by direct exchequer funding. The CGS contains an 80% guarantee up to a portfolio maximum of 13% i.e., compensation is available to private lending institutions for 80% of every loan default up to a limit of 13% of the overall portfolio of lending. This portfolio cap was removed following the expansion of the scheme into the COVID-19 Credit Guarantee Scheme. Therefore, unlike the FGLS and SBCI WCS, CCGS is a direct guarantee between the state and the finance provider (80% uncapped) resulting in legal agreements between these parties, not the SBCI or EIF. The main characteristics of these schemes are outlined below in table 2.

Table 2 – Scheme Characteristics: Allocation, Guarantee, Loan Size, Term Length and Interest Rates

	FGLS	SBCI-WCS	CGS	CCGS	MFI
Available Funding	€800M	€337.5m	€150m pa.	€2bn	N/A
Credit Guarantee	80%	80%	80% up to a portfolio maximum of 13%	80%	N/A
EIF Counter Guarantee	64% (80% of 80%)	40% (50% of 80%)	N/A	N/A	80%
SBCI/ State portion of guarantee	16%	40%	80% up to a portfolio maximum of 13%	80%	20%
Loan Range	€25k - €3m	€25k - €1.5m	€10k - €1m	€10k - €1m	$2k - 25k^3$
Term Range	7 – 10 years	1 – 3 years	Up to 7 years	2 months – 5.5 years	Up to 5 years
Interest Range	Max 3.5%/4.5% for 6 months, then variable	Max 4%	Commercial rate + 0.5% for 12 months, then 1%	Reduced (below market) rate agreed by lender and DETE + premium rate of 0.15% - 1.4%	4.5% - 7.8%

4. Guarantee Scheme Eligibility Criteria⁴

This section will describe the eligibility criteria of the four guarantee schemes. MFI will be discussed in section 9. Eligibility criteria are the primary determinant of how schemes are targeted. They determine scheme accessibility, reflect the objectives of each scheme, and affect the kinds of businesses that can avail of state-backed lending.

Firm Requirements

Firm Requirements	Excluded Activities
• Fewer than 500 employees.	Finance of specific export operations in other
• Turnover of €50m or less.	States.
• Is independent and autonomous (not part of a	Finance of pure real estate.
wider group of enterprises).	Finance of pure financial transactions.
	 Refinance of existing loan or projects.⁵
	Firm is in Financial Difficulty.
	Firm is bankrupt, having affairs administered
	by courts or professional misconduct conviction.

³ Following the onset of the COVID-19 pandemic, MFI regulations were amended to allow for loans of up to €50,000 to be offered exclusively to microenterprises experiencing or expecting a minimum of 15% decline in turnover or profit as a result of exposure to COVID-19. This increased permissible value was discontinued following the introduction of the CCGS in September 2020.

⁴ These criteria are listed by SBCI: https://sbci.gov.ie/

⁵ In the case of the CGS, refinancing is allowed in cases where a bank is exiting the Irish market and there is insufficient collateral available to do so: https://sbci.gov.ie/annualreport/2016/Risk sharing.html

Scheme Targeting

FGLS	SBCI WCS	CGS	CCGS
• Loans must be used for long term investment.	 Exposure to either Brexit or COVID-19 equating to at least 15% of turnover. At least one of the below innovation criteria: Research and innovation. Entering a new product. Registering new technology. Early stage SME. Business/Product Improvement. 	• Business has insufficient collateral for additional credit facilities; or where a business is in a novel market, or technology which is perceived by finance providers as higher risk under current evaluation practices.	• Firms have or expect to have a reduction of minimum 15% in their turnover or profitability as a result of COVID-19 pandemic.

5. Rationale of State Guaranteed Lending

As noted by Holohan⁶, although state guarantee schemes are widely used internationally, their objectives and rationale can be vague. This can mean it is not always clear by which criteria to best measure their performance. Often state guarantee schemes are explicitly aimed at providing credit to SMEs that may struggle to access borrowing otherwise. However, beyond this objective, the rationale for state supported lending can be ambiguous because the underlying market dynamics that give rise to credit shortages among SMEs can be varied. The avoidance of crowding out, the ability to address moral hazard, and the degree of additionality that schemes bring about are often cited as standards by which to judge the effectiveness of state lending schemes.

In Ireland state loan schemes aim to alleviate barriers to SME lending and increase the overall provision of credit to enterprises. As illustrated in sections 3 and 4, various loan schemes attempt to do so in different ways. In addition, the rationale and objectives of each scheme differ. This section will give an overview of factors that can result in barriers to SME lending generally, then reflect on the rationale and objectives of the Irish schemes.

Difficulty accessing credit can be explained by a variety of factors. SMEs may lack the collateral requirements necessary for taking out a loan. Information asymmetry is another issue whereby SMEs may be unable to provide evidence of their credit worthiness; the same can apply to firms in a novel market. Coupled with smaller loan sizes relative to larger firms, this can make administrative costs

⁶ Honohan (2008). Partial Credit Guarantees: Principles and Practice.

associated with the evaluation and monitoring of SME loans more complex and costly for credit institutions on a per loan basis.

Another reason often cited for a lack of SME credit is *credit rationing* that arises from information asymmetry and adverse selection. Credit rationing refers to a scenario in which private lenders limit the supply of additional credit to borrowers who have a demand for loans at existing interest rates. Stiglitz and Weiss suggest that the demand for loanable funds can exceed the supply of credit when the market is in equilibrium. This is because in many cases the probability of default can rise as interest rates increase. High interest rates can therefore result in a less profitable lending portfolio for banks. Banks will adjust their interest rates to account for this possibility. Since SMEs are often riskier borrowers, they are not offered loans at the existing rate of interest. They are also unable to access credit at a higher rate of interest because of the associated increase in default probability. The result is that even when there is an excess demand for loans, banks will choose to ration credit.

Exogenous economic shocks such as Brexit and COVID-19 can serve to decrease the provision of credit to SMEs for a variety of reasons: the uncertainty caused by Brexit may serve to heighten the risk perception of SMEs who rely heavily on exports. In terms of COVID-19, a recent ESRI paper found that 70% of SMEs faced turnover declines as a result of the COVID-19 pandemic between March and October 2020⁹, with sectors most exposed to COVID-19 restrictions experiencing more severe reductions in turnover. Further, uncertainty regarding re-openings, consumer spending, and future performance could make access to credit more difficult even for firms in relatively strong financial positions. Indeed, as discussed later in section 10, data from the Central Bank's Lending Survey indicates a tightening of credit standards across various sectors following the onset of the pandemic, with "General Economic Situation and Outlook" and "Industry or Firm-specific Outlook" being the main contributors to this change.

Causes of SME credit shortages can range from specific market inefficiencies or disruptors to widespread economic shocks, and characteristics potentially inherent to credit markets. The fact that there can be numerous underlying drivers of SME credit shortages makes analysing state supported loan schemes challenging. Although the objective of government lending and credit guarantees is to provide loans to SMEs that would otherwise not have access to credit, the dynamics that give rise to credit shortages can be multifaceted. The underlying market dynamic giving rise to lending deficits

⁷ Such a scenario is distinct from a situation in which credit is unaffordable due to high interest rates.

⁸ Stiglitz & Weiss, "Credit Rationing in Markets with Imperfect Information", *The American Economic Review*, Vol. 71, No. 3 (Jun., 1981), pp. 393-410.

⁹ <u>Kren et al., "New Survey Evidence on COVID-19 and Irish SMEs Measuring the Impact and Policy Response", ESRI, Working Paper No.698, (April 2021)</u>.

has implications for scheme targeting and design. For example, if specific market inefficiencies are at play, such as early stage SMEs being perceived as overly risky, then the eligibility criteria ought to be tailored to address that specific problem. This might mean, for example, offering loans only to start-up SMEs. In this context, loan schemes could also be utilised temporarily as a way of introducing banks to SME lending and to give SMEs an opportunity to display their credit worthiness. If, on the other hand, following the argument of Stiglitz and Weiss (1981), credit rationing is characteristic of the overall market, it will likely have implications for how schemes are targeted as certain sectors may be perceived as riskier than others. This argument may also provide a rationale for implementing these schemes on a long-term ongoing basis. If credit shortages arise from exogenous economic shocks, the nature of the shock will have implications for how best to target loans schemes. Consideration would also need to be given to measuring if the effects of the shock are subsiding, when to rollback or end the policy; or if other policy and regulatory levers would be more appropriate long term solutions.

In the Irish case, prior to the COVID-19 pandemic, loan schemes were used to address specific market inefficiencies, and to prepare and mitigate against Brexit related uncertainty. When the *Credit Guarantee Scheme* (CGS) was first implemented in 2012 it was intended to address market failures that prevented lending to commercially viable businesses. These inefficiencies were described as i) insufficient collateral and ii) the nature of the sector, market or business model of an SME serving to increase the risk perception of growing or expanding firms in the eyes of private lenders.¹⁰

State guarantee schemes introduced after the CGS do not reference these kinds of market failures in the same amount of detail. For example, the *Future Growth Loan Scheme* (FGLS) is targeted at supporting strategic long-term investment for SMEs and mid-caps. This was motivated by a lack of long term unsecured SME credit facilities available in the private market. In addition, motivated by exposure to the UK market, at least 40% of the FGLS allocation is available to the primary agricultural and food business sectors. The CGS made explicit reference to overcoming credit market failures that might result in a lack of SME credit. While the FGLS claims to address specific market failures resulting in a lack of SME credit it can also be understood as an agricultural support that responds to Brexit and other dynamics of the agricultural sector which makes it difficult for smaller firms to access credit, such as price and income volatility.¹¹

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¹⁰ Credit Guarantee Scheme of Ireland Act 2012: <u>S.I. No. 360/2012 - Credit Guarantee Scheme 2012.</u> (<u>irishstatutebook.ie</u>)

¹¹ The Agricultural Cash Flow Supports Scheme was a state guarantee scheme aimed specifically at the agricultural sector that ended in 2018. One of its objectives was to support farmers experiencing price and income volatility. Among other roles, the FGLS may be fulfilling a similar function in the agricultural sector today if price and income volatility remain a barrier to lending.

The *Brexit Loan Scheme* can be understood as a response to an economic disruptor that resulted in a contraction of credit supplied to SMEs exposed to the UK market. The scheme was established to provide working capital to support businesses to adapt and mitigate against the impact of Brexit. This is reflected in its eligibility criteria which requires a fall of at least 15% in turnover as a result of exposure to Brexit and require that firms meet at least one innovation criteria.

Following the onset of the COVID-19 pandemic, the SBCI COVID-19 Working Capital Scheme was introduced as an immediate support measure available to enterprises adversely affected by the COVID-19 pandemic. Other schemes that saw adaptations in response to COVID-19 include the Future Growth Loan Scheme with a €500 million increase in its allocation, and MFI which saw its maximum loan amount increase from €25,000 to €50,000.

In March of 2020 the EU State Aid Rules¹² were revised to allow member states a greater degree of flexibility when implementing support measures in response to the COVID-19 pandemic. These have been extended until 31st Dec 2021. The *COVID-19 Credit Guarantee Scheme* operates under this State Aid Temporary Framework¹³ which allows for public guarantees on loans to ensure access to liquidity to undertakings facing a sudden shortage. In addition, loans can be used for both investment and working capital purposes. In contrast, other schemes operate under De Minimus State aid. Loans in these schemes are subject to the De Minimis State aid threshold of €200,000 per undertaking received in the last three-year fiscal period, i.e. the current year and the previous two years. For schemes not operating under the state aid framework, if an enterprise has received State aid during the period it may not be able to avail of the maximum loan amount of €1,500,000 but may be able to avail of a lower loan level. The Temporary Framework allows for SMEs to access the CCGS, regardless of the level of De Minimus State aid received in the previous years.

The SBCI WCS and the CCGS both require firms to have exposure to an exogenous shock. What sets them apart is the innovation criteria of the SBCI WCS. These were a mandatory criteria from the European Investment Fund (EIF) in order for Ireland to access the counter guarantee on this scheme and were intended to steer lending towards innovation activity. This was established in the context of the BLS which was set up a year in advanced of the first proposed Brexit deadline. These criteria aim to ensure that the loans add value. Loans used, for example, to fund innovation or enter a new product into the market will likely result in a greater degree of economic additionality compared to loans which act solely as working capital supports. However, the innovation criteria were also later found to be a

¹² Information on EU state aid rules available through DETE: https://enterprise.gov.ie/en/What-We-Do/EU-Internal-Market/EU-State-Aid-Rules/

¹³ European Commission (2020). <u>Temporary Framework for State aid measures to support the economy in the</u> current COVID-19 outbreak.

barrier to SMEs accessing the scheme. In contrast, the CCGS is a more general form of liquidity support with less restrictions placed on who can avail of loans. The CCGS is designed to address an immediate and significant decrease in economic activity.

The various expansions and adaptations of state supported lending in response to the COVID-19 pandemic have occurred as part of a suite of enterprise support measures also introduced throughout 2020. COVID-19 enterprise support measures have taken the form of direct income supports such as the Pandemic Unemployment Payment and Wage Subsidy Schemes. Direct Grants have also been highly utilised in a variety of ways to assist businesses who experienced losses in turnover. Other measures include commercial rates wavers, tax warehousing, sector specific supports and temporary VAT rate adjustments among others. From an exchequer perspective, credit guarantee schemes are unique because they allow for the capacity of private lending institutions to be utilised to support businesses. State guaranteed lending also involves less of a financial commitment when compared to something like a direct grant because risk and cost are spread between private banks, the exchequer, and any relevant counter guarantors.

6. Risks of State Supported Lending

The risks associated with state supported lending are discussed in detail in Breen, Keogh & Gray.¹⁴ These include crowding out, moral hazard, and financial/economic additionality. That paper also discussed the use of state supported lending used as an emergency fiscal support to meet the liquidity requirements of firms facing pandemic related losses. In general, the use of state supported lending in Ireland can be broadly understood in two ways;

- i) **Preserving Investment Capability:** Making credit facilities more accessible and buffering against a contraction in the supply of credit to firms with capital requirements for viable projects.
- Mitigating Reductions in Turnover: Supporting working capital and liquidity needs for firms facing pandemic related losses.

Data reported later in section 6.6 indicates the extent to which state lending to date has fallen into either category. In principal, the outcomes of policies that preserve investment capabilities will largely be a function of the degree of novel lending facilitated under the scheme, but will also depend on the kinds of projects loans are used to fund. Investment capital may even improve an enterprises ability to manage loan repayments if the funded project is successful. However, the same is not necessarily true of loans that cover liquidity needs. The outcomes of loans used to mitigate reductions in turnover

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¹⁴ Breen, Keogh & Gray (2020). State Supported Loan Schemes.

are apt to be more dependent on a firm's exposure to pandemic related restrictions and the speed of recovery. In this sense additional debt could potentially dampen the resilience and competitiveness of SME's, and loan repayments could prevent firms engaging in more productive future activities such as investment. However, these risks need to be balanced against other factors such as receipt of other enterprise support measures as well as the relatively lower cost to the exchequer that guarantee schemes represent because of partnership with private lending institutions.

7. Guarantee Schemes: Loan Characteristics

This section uses micro data provided by SBCI to give an overview of the kinds of loans that have been approved under the various guarantee schemes. MFI is not covered in this section and will be discussed in section 9.

7.1 Lending Activity

Table 3 – Guarantee Scheme Uptake: Sanctioned Lending and Number of Approvals

Scheme	FGLS	SBCI WCS	CGS	ccgs
Date	June 2019 – Dec 2020	Jun 2018 – Dec 2020	Jun 2018 – Aug 2020	Sep 2020 – May 2021
Number of Firms	2,572	1,245	161	4,513
Available Funding	€800m	€337.5m	€150m pa	€2bn
Approved Lending	€515,800,690	€184,262,513	€33,093,500	€281,898,143
Scheme Uptake	64.5%	54.6%	N/A	14.1%

Source: SBCI

A total of 8,491 firms have availed of lending under the above schemes accounting for a combined €1.015 billion in approved state guaranteed lending between the time periods described above. The FGLS has accounted for the most amount of lending by far. This is followed by the CCGS and SBCI-WCS. Within the two working capital schemes, €57.4m (31%) was approved under the Brexit Loan Scheme, while the remaining €126.7m (69%) was approved under the COVID-19 WCS.

In terms of the number of approvals, the take up of the original CGS is small relative to the other schemes. The CCGS has been the most popular scheme, followed by the FGLS, with the SBCI WCS seeing approximately half as many loan approvals as the FGLS. It should be noted that there was not a continuous availability of the FGLS as the scheme was closed to new applicants over a period of February to May 2020. Within the 1,245 firms availing of the two working capital schemes, 282 (22.7%) firms availed of the Brexit Loan Scheme, while 963 (77.3%) firms availed of the COVID scheme. The uptake of the COVID-19 working capital scheme slowed following the introduction of the CCGS, a tailor

made COVID-19 scheme intended to replace the COVID-19 WCS. The Brexit Loan Scheme uptake is relatively low compared to other schemes which is attributable to the changing deadline of Brexit and onset of the pandemic. The activity of these schemes over time is graphed out below in figure 1. The CGS and Brexit Loan Scheme are displayed on the left axis, while the remaining schemes are displayed on the right axis. Prior to 2021, the vast majority of approvals occurred in the second half of 2020. The CCGS has also seen very high uptake in the January to May period of 2021 relative to other schemes.

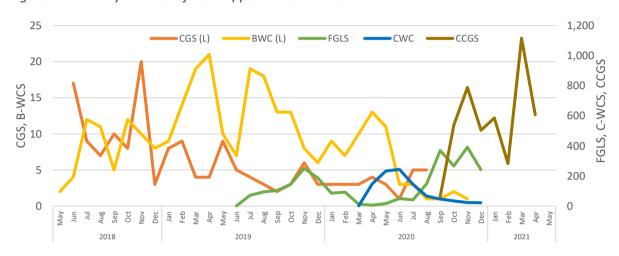


Figure 1 – Monthly Number of Loan Approvals over Time

Source: SBCI

As mentioned above, this paper is a point in time exercise and as such analyses data on these scheme up until the end of 2020, and May 2021 in the case of CCGS. In terms of more up to date data, SBCI publish weekly and quarterly reports which contains more up to date cumulative figures. As of August 5th 2021 weekly report, the CCGS has seen a total of 6,234 drawdowns for a combined €403.2m in sanctioned lending.¹⁵ A FGLS quarterly report from March 31st 2021 indicates that a total of 3,270 loans progressed to sanction at Bank level to a value of €679.3m.¹⁶ A Brexit Loan Scheme quarterly report from March 31st 2021 indicates that 289 loans have been sanctioned to a vale of €57.9m.¹⁷ Finally, a COVID-19 Working Capital Scheme quarterly report from March 31st 2021 indicates that 1,011 loans have been sanctioned to a value of €137.3m.¹⁸ This more recent data indicates that since the end of 2020, the CCGS and FGLS have seen the most amount of uptake during 2021.

7.2 Loan Size

The FGLS offers the largest loans ranging between €25k and €3m. The SBCI WCS offers loans between €25k and €1.5m, while both the CGS and CCGS offer relatively smaller loans between €10k and €1m.

¹⁵ CCGS Weekly Performance Report – 05 August 2021

¹⁶ FGLS Quarterly Report 31 March 2021

¹⁷ Brexit Loan Scheme Quarterly Report 31 March 2021

¹⁸ COVID-19 Working Capital Scheme Quarterly Report 31 March 2021

Table 4 below displays the proportion of firms availing of different loan sizes within each scheme. The colour gradient is used to highlight larger values.

Table 4 – Distributions of Loan Sizes across Guarantee Schemes

Loan Size	FGLS	SBCI-WCS	CGS	ccgs
€10,000	0.0%	0.0%	0.0%	5.6%
€10,001 - €25,000	2.6%	9.5%	1.9%	26.0%
€25,001 - €50,000	15.3%	30.6%	4.3%	30.4%
€50,001 - €100,000	28.1%	28.2%	21.1%	28.4%
€100,001 - €250,000	32.3%	16.5%	51.6%	8.0%
€250,001 - €500,000	18.5%	12.7%	18.0%	1.2%
€500,001 - €1m	1.7%	1.2%	3.1%	0.5%
>€1m	1.4%	1.3%	0.0%	0.0%
Total Firms	2,572	1,245	161	4,513

Source: SBCI

7.3 Term Length

The longest term length available within the BC-WCS, CCGS and FGLS have been the most popular. For the CGS there is more variation in term length, with the most common length being between five and six years.

Table 5 – Distribution of Term Lengths across Guarantee Schemes

Months	FGLS	SBCIWCS	CGS	CCGS
0 to 11			3.7%	0.2%
12 to 23		4.4%	15.5%	4.0%
24 to 35		1.8%	2.5%	4.7%
36 to 47		93.7%	9.3%	10.6%
48 to 59			4.3%	8.2%
60 to 71			33.5%	72.3%
72 to83			1.9%	
84 to 95	19.7%		29.2%	
96 to 107	14.9%			
108 to 119	1.6%			
120	63.8%			
Total Firms	2,572	1,245	161	4,513

Source: SBCI

7.4 Interest rates

The CCGS offers the lowest interest rate compared to other schemes, with most lending at between 2.5% and 3%. Most interest rates in the FGLS and SBCI-WCS range between 4% and 4.5%. Interest rates within the CGS tend to be higher than other schemes, with the majority of loans having an interest rate greater than 4.5%. As outlined above in Table 2, there are no premia payable to borrowers under the FGLS and SBCI WCS. The distribution of interest rates across schemes are outlined below in table 6, again the colour gradient is used to highlight larger values.

Table 6 – Distribution of Interest Rates across Guarantee Schemes

Interest Rate	FGLS	SBCI WCS	CGS	ccgs
<2%	0.00%	0.00%	0.00%	0.38%
2% - 2.49%	0.04%	0.00%	0.00%	0.11%
2.5% - 2.99%	9.33%	0.08%	0.00%	95.83%
3% - 3.49%	17.03%	1.20%	6.21%	0.82%
3.5% - 3.99%	5.17%	0.88%	9.94%	0.55%
4% - 4.49%	68.43%	97.83%	2.48%	0.09%
4. 5% – 5%	0.00%	0.00%	23.60%	0.33%
>5%	0.00%	0.00%	57.76%	1.88%
Total Firms	2,572	1,245	161	4,513

Source: SBCI

7.5 Debt to Income Ratio

Table 7 gives a breakdown of loan to turnover ratios across the guarantee schemes. Loan to income ratios for the FGLS tend to be slightly larger compared to other schemes. This is likely down to the larger and longer loans on offer under this scheme. Almost half of firms within the FGLS took out loans between 10% and 50% of annual turnover. For over half of firms in the other schemes, loans are between 5% and 25% of annual turnover.

Table 7 – Distributions of Debt as Proportion of Annual Turnover across Guarantee Schemes

Debt/Turnover	FGLS	SBCIWCS	CGS	ccgs
Excluded*	5.2%	1.3%	5.6%	0.1%
0% - 1%	0.5%	1.6%	0.6%	0.7%
1.1% - 5%	5.5%	25.9%	21.7%	13.4%
5.1% - 10%	12.6%	33.9%	23.0%	23.2%
10.1% - 25%	23.5%	22.7%	29.8%	40.0%
25.1% - 50%	23.8%	8.8%	8.1%	14.7%
50.1% - 75%	9.9%	2.2%	5.6%	3.4%
75.1% - 100%	6.0%	1.3%	1.9%	1.7%
100.1% to 500%	11.8%	1.3%	3.7%	2.4%
> 500%	1.2%	1.1%	0.0%	0.4%
Total Firms	2,572	1,245	161	4,513

^{*}To avoid misleading or missing values a proportion of firms were excluded from this calculation because their annual turnover figures were either missing from the available datasets or recorded as less than 1.

Source: Author analysis of SBCI data.

7.5 Loan Purpose

Loans under the state guarantee schemes are approved on the basis of funding being utilised for a specific purpose. Within the microdata provided by SBCI, the purpose of loans taken out under the four state guarantee schemes is recorded, however, the level of detail recorded on loan purpose varies between loan schemes.

Future Growth Loan Scheme

Within the FGLS there are a number of different loan purposes recorded. Business expansion is recorded as the most common loan purpose (33%). Beyond business expansion, the improvement of performance and sustainability (21%), premises improvement (14%), and infrastructure adaption or modernisation (14%) are the most common loan purposes recorded under the FGLS.

Future Growth Loan Scheme Loan Purpose

ratare Growth Loan Scheme Loan rai pose	
Business Expansion	852
Improvement performance and sustainability	546
Premises improvement	365
Infrastructure re development, adaptation and modernisation	363
Machinery or equipment	213
Improvement of environment, conditions welfare standards beyond EU standards	118
People and/or Systems	44
Investment in Innovation	20
Process innovation	19
R&D	17
Achievement of agri-environmental-climate objectives	8
Restoration/protection against natural disasters	3
Processing of agricultural products	2
Diversification/ Establishment of additional products	1
New establishment Set up	1
Total Firms	2,572

Source: SBCI

SBCI Working Capital Scheme

The SBCI-WCS microdata records exposure SMEs have to either Brexit or COVID-19. Of the 282 SMEs that availed of the *Brexit Loan Scheme*, exporters accounted for the largest share of loans (41%), followed by importers (23%) and

Firm Exposure	CWCS	BWCS
Brexit Impacted Exported		117
Brexit Impacted Importer		65
Brexit Impacted Combined		54
Indirectly Exposed to Brexit		46
COVID-19 Impacted	963	
Total	963	282

then firms exposed to both markets (19%). Firms indirectly exposed to Brexit accounted for the smallest share of loans under the Brexit Loan scheme (16%). The remaining 963 firms fall under the SBCI COVID-19 WCS.

The specific purpose of loans under the SBCI WCS is not recorded. As such all loans are categorised as working capital loans. However, in order to be eligible for loans under this scheme, firms must meet a specific innovation criteria on top of exposure to either Brexit or COVID-19. Across both the Brexit and COVID-19 cohorts, the most common recorded innovation criteria that firms meet are 80% of loan spent on research and innovation, product, process or service improvement, and that at least 10% of operating costs go to research and innovation in at least 1 of the past 3 years

Working Capital Schemes Innovation Criteria	cwcs	BWCS
80% of loan spend on R&I	611	56
Developing/implementing new or improved products, processes or services	156	78
SME R&I costs 10% of total operating costs in 1 of last 3 years	56	46
Entering a new product	54	48
Fast Growing – operating < 12 years with average employee or turnover growth >20%	37	15
p.a. over a 3-year period		
Operating < 7 years and R&I costs are 5% of total operating costs in 1 of the last 3 years	21	16
Received investment in the last 24 months from a venture capital investor, business angel	14	12
Received a grant, loan or guarantee from a European R&I scheme in the last 3 years	8	9
R&D or Innovation prize awarded by an EU Institution in the last 24 months	1	2
COVID-19 related investment	3	
Register one technology right in last 2 years	2	
MidCap R&I costs represent either a min. 15% of total operating costs in 1 of last 3 years		
Total Firms	963	282

Source: SBCI

Credit Guarantee Schemes

For CGS and CCGS working capital is recorded as the most common loan purpose. Loans are also used for the purchase of new equipment, new product or processes, and the fit-out of premises.

CGS Loan Purpose		CCGS Loan Purpose	
Working Capital	94	Working Capital	2,271
Other	40	Purchase of Equipment	843
Purchase of Equipment	18	New Product or Process	625
Product or Service Development	8	Fit-out of Premises	601
Purchase of Premises	1	Other	173
Total Firms	161	Total Firms	4.513

Source: SBCI

In terms of the role state supported lending has played in recent years the above data indicates that roughly half of the loans approved under the CCGS are working capital loans. This implies a large portion of loans under that scheme are acting as fiscal support measures. In contrast, although all loans under the BC-WCS are recorded as working capital, the innovation criteria suggests that research and innovation, and product or premises improvement account for a large portion of loan purpose. Within the FGLS, all loans are used for investment purposes. This suggests that the SBCI WCS and FGLS are not acting as pure liquidity support measures to the same extent as the CCGS.

8. Guarantee Schemes: SMF Characteristics

8.1 Region

Table 8 – Scheme Activity across Counties and the Distribution of Active Enterprises (2018)

	FGLS	BC-WCS	CGS	ccgs	Active Enterprises (2018)
Dublin	9.9%	37.2%	46.0%	21.9%	33.0%
Cork	13.3%	13.7%	14.3%	12.3%	11.2%
Galway	7.7%	4.5%	4.3%	8.7%	5.4%
Donegal	5.2%	4.6%	3.7%	5.3%	3.0%
Tipperary	6.6%	2.2%	0.6%	4.3%	3.0%
Mayo	4.9%	1.6%	0.6%	5.4%	2.7%
Limerick	3.8%	3.1%	5.0%	3.9%	3.5%
Meath	2.8%	3.4%	1.9%	4.5%	3.8%
Kildare	2.4%	3.2%	4.3%	4.2%	4.2%
Wexford	4.8%	2.7%	6.8%	1.9%	3.0%
Clare	3.7%	1.5%	3.1%	3.2%	2.6%
Kerry	3.7%	3.1%	1.9%	3.2%	3.3%
Wicklow	2.6%	3.2%	0.0%	3.1%	3.1%
Louth	2.7%	3.1%	0.6%	2.2%	2.5%
Waterford	3.1%	1.8%	0.6%	2.1%	2.0%
Kilkenny	2.7%	1.0%	1.2%	2.0%	1.7%
Offaly	3.1%	1.1%	0.6%	1.6%	1.3%
Monaghan	3.0%	0.9%	0.0%	1.1%	1.3%
Laois	2.1%	0.8%	1.2%	1.7%	1.2%
Sligo	2.1%	1.8%	0.0%	1.6%	1.2%
Cavan	2.6%	1.0%	0.0%	1.0%	1.5%
Carlow	1.9%	1.1%	1.2%	1.4%	1.1%
Roscommon	1.8%	1.2%	0.6%	1.2%	1.2%
Westmeath	1.7%	1.2%	1.2%	1.0%	1.8%
Longford	1.0%	0.2%	0.0%	0.6%	0.7%
Leitrim	0.9%	0.6%	0.0%	0.7%	0.7%
Total Enterprises	2,572	1,245	161	4,513	267,029

Source: SBCI & CSO

Table 8 above provides a breakdown of guarantee scheme activity by county and displays this alongside the regional distribution of active enterprises according to the CSO's 2018 business demography statistics. ¹⁹ The colour gradient is used to highlight larger values. Of the 8,491 SMEs to avail of the above guarantee schemes, Dublin (20.9%), Cork (12.8%) and Galway (7.6%) account for a combined 41% of activity. Within the SBCI WCS and CGS, the majority of lending activity is also concentrated in Dublin, Cork and Galway. In contrast to the SBCI WCS and CGS schemes, activity within the CCGS and FGLS is not as concentrated in these urban counties. The FGLS saw the most amount of lending occur in Cork (13.3%) followed by Dublin (9.9%), with the remainder spread relatively evenly throughout a lot of other counties. Comparatively more rural counties like Tipperary and Mayo also account for significant proportion of lending under the FGLS due to the fact that the FGLS is heavily utilised by the agricultural sector.

1

¹⁹ CSO: Business Demography NACE Rev 2 (BRA08)

8.2 Firm Size

Table 9 gives a breakdown of business size across the various loan schemes. 2 – 5 employees is the most common business size across all schemes apart from the *CGS*, for which the most common is 11 – 25 employees. Businesses with 1 employee also make up over a quarter of businesses under the FGLS and CCGS. The high proportion of farmers who access the FGLS could be an explanatory factor of the number of firms in the FGLS.

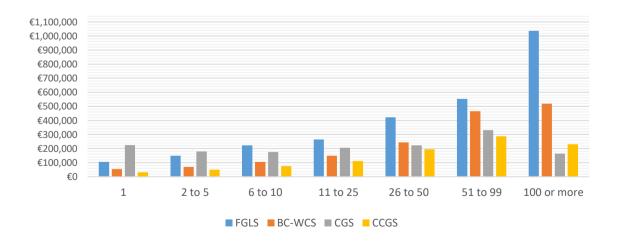
Table 9 – Distributions of Firm Sizes across Guarantee Schemes

Number of Employees	FGLS	SBCI WCS	CGS	ccgs
1	29.82%	6.43%	12.42%	29.98%
2 to 5	32.97%	29.32%	14.29%	39.35%
6 to 10	12.87%	21.20%	21.74%	15.38%
11 to 25	14.04%	22.73%	31.68%	11.01%
26 to 50	6.69%	12.69%	14.29%	3.19%
51 to 99	2.41%	4.82%	4.35%	0.78%
100 or more	1.21%	2.81%	1.24%	0.31%
Total	2,572	1,245	161	4,513

Source: SBC

The vast majority of enterprises in Ireland are micro enterprises with under 10 employees²⁰. Micro enterprises are not represented to the same extent within the guarantee schemes. The CCGS comes closest with roughly 85% of loans going to firms with 1 to 10 employees. Figure 3 below displays the average size of loans by firm size. The average size of loans tends to increase with the number of employees for the FLGS, SBCI WCS and CCGS. In comparison, average loan size within the CGS does not vary as much as firm size increases.

Figure 2 – Average Loan Size by Number of Employees across Guarantee Schemes



Source: SBCI

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²⁰ CSO, Business Demography Statistics, 2018.

8.3 Sector

Table 10 shows loan approvals within each scheme broken down by NACE Rev.2 sectors. Sectors are ranked by the volume of loans approved across all guarantee schemes. Within the FGLS, Agriculture, Forestry and Fishing accounted for 42% of approvals. Within the Agriculture, Forestry and Fishing portion of the FGLS, agricultural activities accounted for 98% of loans sanctioned. Within those loans that went to agricultural activities, 44.8% were raising of dairy cattle, and 18% were mixed farming. Across the other schemes, the Wholesale and Retail sector accounted for the most amount of loans taken out. Other sectors that saw a relatively large amount of approvals across all state guarantee schemes include Manufacturing, Accommodation and Food, and Construction.

Table 10 – Distribution of Loan Approvals by Sector across Guarantee Schemes

Sector	FGLS	BC-WCS	CGS	CCGS
Agriculture, Forestry and Fishing	42.0%	0.7%	1.9%	17.1%
Wholesale, Retail and Repair	12.7%	23.2%	16.8%	17.6%
Manufacturing	10.1%	16.9%	7.5%	8.0%
Accommodation and Food	4.1%	11.2%	11.8%	12.7%
Construction	5.5%	9.3%	10.6%	11.8%
Professional, Scientific and Tech	8.1%	7.7%	16.1%	5.4%
Information and Communication	2.3%	11.5%	5.6%	3.4%
Other	1.2%	2.2%	0.6%	6.7%
Administrative and Support Services	1.9%	3.6%	5.6%	4.1%
Transport and Storage	1.7%	2.0%	5.0%	4.5%
Human Health and Social Work	4.3%	2.9%	6.8%	2.4%
Arts, Entertainment and Recreation	1.2%	2.4%	9.3%	2.8%
Education	1.3%	2.0%	1.2%	1.3%
Financial and Insurance Activities	1.2%	1.2%	0.0%	0.8%
Water Supply, Sewerage and Waste	0.9%	0.9%	0.6%	0.3%
Real Estate Activities	0.5%	0.8%	0.6%	0.4%
Electricity, Gas, Steam and Air	0.4%	0.8%	0.0%	0.3%
Mining and Quarrying	0.5%	0.4%	0.0%	0.2%
Public Administration and Defence	0.2%	0.3%	0.0%	0.1%
Total Firms in Scheme	2,572	1,245	161	4,513

Source: SBCI

Table 11 below shows the total volume of lending sanctioned within each loan scheme across different sectors. Underlined values denote the sector accounting for the most amount of lending in each scheme. Within the FGLS, the Agriculture, Forestry and Fishing sector accounted for the highest amount of lending (25%), followed by Wholesale and Retail (18%) and then Manufacturing (13%). Within the SBCI-WCS, both the Manufacturing, and Wholesale and Retail sectors each account for approximately €47m (25%) in approved lending. The Information and Communication (14%), and Construction (8.8%) sectors also account for a high degree of lending under this scheme. In comparison to other schemes, Agriculture, Forestry and Fishing makes up a much smaller portion of lending for both the SBCI-WCS and the CGS. It should be noted that the primary producers are not

eligible to apply for the SBCI WCS. Within the CGS, Wholesale and Retail (18.4%), Manufacturing (13.2%), and Profession, Scientific and Technical Activities (12.7%) account for the largest amount of lending. Finally in the CCGS, Wholesale and Retail (19.5%) accounts for the largest portion of lending by far, followed by Accommodation and Food (13.9%), Agriculture (11.8%), and Construction (11.1%).

Table 11 – Lending Sanctioned between Sectors across Guarantee Schemes (€ millions)

Sector	FGLS	SBCI- WCS	CGS	ccgs	Total Lending in Sector
Wholesale, Retail and Repair	92.89	46.79	<u>6.10</u>	<u>55.18</u>	200.96
Agriculture, Forestry, Fish	<u>129.24</u>	0.76	0.81	33.28	164.09
Manufacturing	67.12	<u>47.24</u>	4.39	26.00	144.76
Construction	36.31	16.32	3.08	31.49	87.19
Professional, Scientific and Tech	50.22	11.83	4.24	16.70	82.98
Accommodation and Food	22.10	9.65	3.25	39.41	74.42
Information and Communication	27.22	25.93	2.33	12.40	67.89
Human Health and Social	28.32	3.73	1.71	5.67	39.44
Administrative and Support	10.06	3.66	2.10	16.45	32.26
Transport and Storage	9.33	3.77	1.47	11.68	26.25
Arts and Entertainment	5.60	2.02	2.80	9.28	19.70
Other	3.71	1.56	0.25	14.15	19.67
Financial and Insurance	8.99	3.36	0.00	2.26	14.61
Education	6.88	3.48	0.30	3.02	13.68
Water, Sewerage and Waste	11.22	0.84	0.11	0.80	12.98
Real Estate Activities	2.33	1.61	0.15	1.48	5.57
Electricity, Gas, Steam, Air	1.13	1.19	0.00	1.42	3.74
Mining and Quarrying	2.17	0.35	0.00	0.83	3.35
Public Admin. and Defence	0.96	0.18	0.00	0.39	1.53
Total Lending in Scheme	515.80	184.26	33.09	281.90	1,015.05

Source: SBCI

Sectors Exposed to the COVID-19 Pandemic

There has been large variation in sectoral exposure to economic restrictions imposed in response to the pandemic. Highly impacted sectors include hospitality, construction, retail, arts, and certain labour intensive parts of industry and manufacturing. Figures 3 and 4 below display the CSO's Services Value and Industrial Production Volume Indices.²¹ Figure 5 gives a breakdown of total new entrants to the Pandemic Unemployment Payment (PUP), Temporary Wage Subsidy Scheme (TWSS) and Emergency Wage Support Scheme (EWSS) broken down by sector between March 2020 and May 2021. Sectors are ranked in terms of total entrants across all three schemes.

²¹ CSO: Services Index (Base 2015=100) (MSI02) & Industrial Production Volume and Turnover Indices (Base 2015=100) (MIM04).



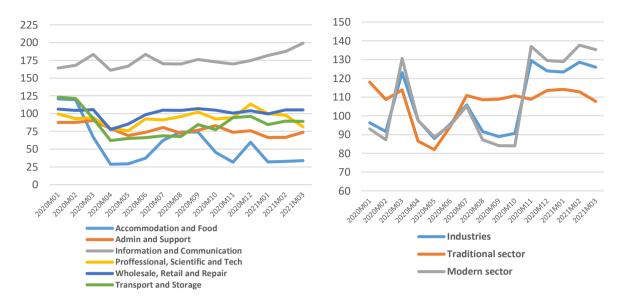


Figure 5 – Entrants to Pandemic Related Labour Market Supports by Sector (Mar 2020 – May 2021)

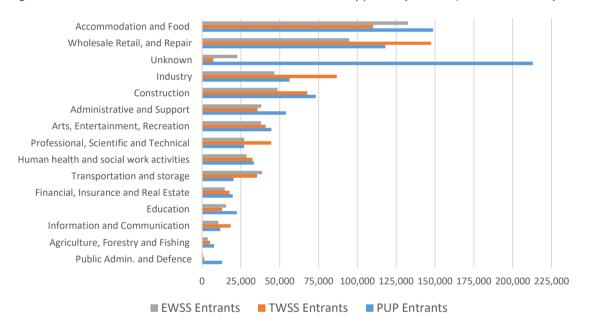


Table 12 below compares sectors between the number of approvals across loan schemes, indicators of the Irish enterprise base (full tables for each metric are available in Appendix 1), and exposure to the pandemic as measured by entrants to wage subsidy schemes. Depending on the nature of the sector in some cases there are large differences between the indicators of the Irish enterprise base. For example, the Accommodation and Food sectors accounted for 9.8% of enterprises and 11.0% of employees in 2018 but only 1.7% of GVA in 2019. As illustrated in figures 3 – 5, there is also significant variance in sector exposure to the COVID-19 pandemic. Comparing take-up of the CCGS and SBCI BC-WCS (77.3% of approvals fall under COVID-19 WCS) there is clear overlap between sectors accounting

for a large share of wage subsidy entrants and loan scheme activity. These include Accommodation and Food; Wholesale; Retail and Repair; Construction; and Manufacturing.

Table 12 – Share of Loan Scheme Approvals, Enterprise Base Indicators (Number of Enterprises 2018, Number of Employees 2018, Gross Value Added 2019) and Pandemic Wage Support Entrants (Mar 2020 – May 2021) across Sectors

Sector	FGLS	BC-WCS	CGS	CCGS	Enterprises (2018)	Employees (2018)	GVA (2019)	Wage Support Entrants
Accommodation and Food	4.1%	11.2%	11.8%	12.7%	9.8%	11.0%	1.7%	391,466
Wholesale, Retail and Repair	12.7%	23.2%	16.8%	17.6%	18.9%	21.1%	7.6%	360,443
Manufacturing/Industry	10.1%	16.9%	7.5%	8.0%	11.8%	13.1%	33.5%	189,628
Construction	5.5%	9.3%	10.6%	11.8%	5.7%	6.3%	2.6%	189,476
Administrative and Support Services	1.9%	3.6%	5.6%	4.1%			6.6%	127,980
Arts, Entertainment and Recreation	1.2%	2.4%	9.3%	2.8%	1.8%	2.0%	0.8%	123,618
Professional, Scientific and Tech	8.1%	7.7%	16.1%	5.4%	7.0%	7.7%	4.4%	98,750
Human Health and Social Work	4.3%	2.9%	6.8%	2.4%	11.5%	12.9%	4.6%	94,366
Transport and Storage	1.7%	2.0%	5.0%	4.5%	4.4%	4.9%	2.0%	94,295
Financial and Insurance Activities	1.2%	1.2%	0.0%	0.8%			5.8%	52,007
Education	1.3%	2.0%	1.2%	1.3%	8.5%	9.5%	2.6%	50,808
Information and Communication	2.3%	11.5%	5.6%	3.4%	5.5%	6.2%	14.9%	40,525
Agriculture, Forestry and Fishing	42.0%	0.7%	1.9%	17.1%	10.2%		1.0%	16,526
Public Administration and Defence	0.2%	0.3%	0.0%	0.1%	_		3.1%	15,009
Electricity, Gas, Steam and Air	0.4%	0.8%	0.0%	0.3%	0.5%	0.5%	1.0%	
Mining and Quarrying	0.5%	0.4%	0.0%	0.2%	0.2%	0.2%	0.2%	
Other	1.2%	2.2%	0.6%	6.7%	2.4%	2.7%	0.5%	
Real Estate Activities	0.5%	0.8%	0.6%	0.4%	1.1%	1.3%	6.9%	
Water Supply, Sewerage and Waste	0.9%	0.9%	0.6%	0.3%	0.5%	0.6%	0.4%	

Source: SBCI & CSO

8.4 Credit Grades

The SBCI data on loan guarantee schemes contains information on credit grades assigned by private lending institutions that reflect default risk. Each private lending institution uses different rating scales. For the purpose of this analysis, all credit grades assigned by private lending institutions were converted into the Moody's Credit Grade Scale²² for comparability. Figure 6 & 7 below displays the distribution of credit grades across the various Irish guarantee schemes. The measure of risk in these tables is the 1 year default probability (1Y DP). This is the likelihood that a borrower will not be able to make scheduled repayments over a 1 year period.

As illustrated below in figure 6, the distribution of credit grades among approved loans has an almost bimodal²³ character with a large proportion of enterprises grouped around the *A3* and *Baa1* category (0.4% - 0.12% 1YPD) and another large proportion of enterprises grouped around the *B2* category (7.16% - 9.12% 1YPD). This distribution of credit grades by loans sanctioned, as displayed in figure 7, is somewhat similar but has more of a skew towards higher default probabilities rather than a second mode.

Figure 6 – Credit Grades by Number of Enterprises²⁴



Moody's	Lower	Upper
Rating	1Y PD	1Y PD
Aaa -	0.00%	0.00%
Aa3		
A1	0.01%	0.01%
A2	0.01%	0.02%
A3	0.04%	0.05%
Baa1	0.09%	0.12%
Baa2	0.17%	0.26%
Baa3	0.42%	0.60%
Ba1	0.87%	1.16%
Ba2	1.56%	2.09%
Ba3	2.81%	3.62%
B1	4.68%	5.78%
B2	7.16%	9.12%
В3	11.62%	14.21%
Caa1	17.38%	21.25%
Caa2	26.00%	36.41%
Caa3	100.00%	100.00%

²² More information available here: https://www.moodys.com/Pages/amr002002.aspx

²³ i.e., a distribution with two values that appear most often.

²⁴ In some cases conversion to Moody's Rating Scale provided a range of values where there was previously only a single figure. For example, a private bank's rating of *1B may* assign a 0.59% probability of default. When converted to the Moody's Rating Scale, this is mapped to a *Baa3* rating which assigns a probability of default between 0.42% and 0.60%. In most cases this kind of rounding that resulted from the conversion did not alter the default probabilities associated with each loan in a significant way. However, one case in which the conversion did cause significant deviation was within the portion of CCGS firms displayed below as Caa3. In the above graphs the risk associated with these firms is being overstated. The probability of default assigned to these firms by the private lending institution was 40.5%. However, because the Moody's Rating Scale contains only a small number of categories to distinguish between higher default probabilities, the conversion resulted in these firms being assigned a 100% default probability. A small portion of loans (171) were not converted into the Moody's Credit Grade Scale because the information required to make the conversion was not available for this analysis.

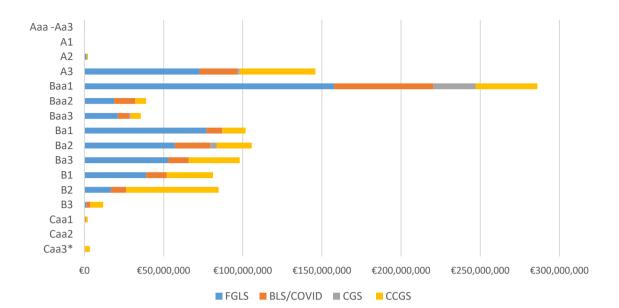


Figure 7 – Credit Grades by Lending Amount Sanctioned

Source: SBCI

The above figures indicate that a significant share of enterprises with higher default probabilities are contained in the CCGS. Although the CCGS has introduced risker enterprises into the overall portfolio of state guaranteed loans, risk to the exchequer in terms of potential cost has not increased to the same degree due to relatively smaller loan sizes within the CCGS. However, as outlined in Table 2, the CCGS is the only scheme for which the exchequer is liable for the entirety of the 80% credit guarantee. As loans mature, the increased proportion of lower credit grades within the scheme may contribute to a greater cost relative to other schemes.

State guarantee schemes are as much a credit market support as they are an enterprise support. By providing a guarantee that buffers against default costs, these schemes try to stimulate the provision of additional credit to SMEs. Credit grade data is useful because it gives an insight into the risk perception of private lending institutions. In principal one might expect that, if designed and targeted efficiently, the default probabilities of loans within state guarantee schemes would be higher on average compared to other overall stock of SMEs loans in the broader credit market. Although beyond the scope of this paper, given data availability, analysing data on the credit grades of SMEs loans across the broader market for credit in Ireland would make for a useful piece of future research on this topic. This would provide a measure of the impact that state guarantees have in the market for credit and, if matched with other firm specific data, could provide valuable insight into the underlying market dynamics that give rise to SME credit shortages in an Irish context, and inform the design and targeting of future guarantee schemes and other enterprise supports.

^{*}Overstated default probability due to rounding.

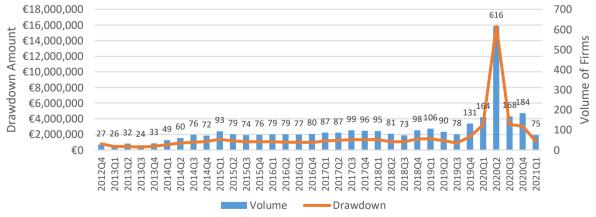
9. Micro Finance Ireland Activity

Micro Finance Ireland (MFI) was first set up in 2012 to promote job creation and to provide credit facilities to new or growing microenterprises across all industry sectors with commercially viable proposals that do not meet the conventional risk criteria applied by commercial banks. ²⁵ Currently loans are available for up to 5 years, and offer interest rates ranging from 4.5% to 7.8%. MFI originally offered a range of loans packages ranging from €2,000 to €25,000. Following the onset of the COVID-19 pandemic, MFI regulations were amended to allow for loans of up to €50,000 to be offered exclusively to microenterprises experiencing or expecting a minimum of 15% decline in turnover or profit as a result of exposure to COVID-19. This increased permissible value was discontinued following the introduction of the COVID-19 Credit Guarantee Scheme in September 2020 to avoid overlap between both schemes.

Private lending institutions play no role in the administration of the scheme and MFI is responsible for assessing loan applications and management of the loan book. MFI is not intended to act as a substitute for private lending but rather to address deficiencies in the market for credit. MFI was adapted following the onset of the COVID-19 pandemic to not only address market failures but to act as a support measure for firms facing turnover losses. This section will utilise MFI microdata to give a breakdown of loan and firm characteristics within the scheme. The reporting requirements for MFI have evolved over time. As a result some variables are unavailable for the first several years of MFI's operation.

Loan Approvals

Figure 8 - Quarterly Approvals and Drawdowns (2012Q4 – 2021Q1)



Source: MFI

²⁵ S.I. No. 343/2012 - Microenterprise Loan Fund Scheme 2012. (irishstatutebook.ie)

Between 2012 and March 2021, 3,364 firms have been approved for MFI loans, 45 of these firms have availed of a second loan, and in total €55,494,845 has been drawdown in lending under the scheme. As illustrated above in figure 8, much of this activity occurred following the onset of the COVID-19 pandemic, with €26,447,886 (46.8%) in lending across 1,207 (35.8%) firms occurring from 2020 onwards. Average loan size across the entire span of the scheme is €16,793. However, from 2020 onward average loan size is significantly larger at €21,912. A similar pattern can be observed in MFI take up when compared to the various state guarantee schemes, with a large increase in scheme uptake occurring after the onset of the COVID-19 pandemic and the adaption of MFI to provide loans to firms adversely affected by economic restrictions.

Loan Size and Term Length

Table 13 – MFI: Distribution of Loan Size and Term Length

Loan Size (€)	Firms	Months	Firms
<5k	9.5%	1 to 11	0.30%
5k - 9.9k	20.6%	12 to 23	0.70%
10k - 14.9k	15.3%	24 to 35	2.80%
15k - 19.9k	13.3%	36 to 47	75.40%
20k - 24.9k	15.7%	48 to 59	7.60%
25k	17.6%	60	13.20%
>25k	8.0%		
Total Firms	3,364	Total Firms	3,364

Source: MFI

Table 13 gives a breakdown of loan size and term length. MFI offer loans between €2,000 and €25,000, with up €50,000 available for firms impacted by the COVID-19 pandemic. Loan sizes are relatively evenly distributed across the €2,000 and €25,000 range with between €5,000 and €10,000 being the most common. Loans above €25,000 account for the smallest share of loans. In terms of maturity, MFI offer loans for up to 5 years. Between 3 and 4 years is by far the most common term length within MFI, with 75% of firms drawing down loans with this maturity.

Region

Figure 9 above presents a breakdown of MFI activity by region and displays this alongside the regional distribution of active enterprises according to the CSO's 2018 business demography statistics.²⁶ Enterprises in Dublin (22.27%) account for the largest single proportion of MFI loans, followed by Cork (8.17%), Wexford (5.25%), and Galway (5.25%).

²⁶ CSO: Business Demography NACE Rev 2 (BRA08)

35.00%
25.00%
20.00%
15.00%

10.00%

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Figure 9 – Regional Distribution of MFI Approvals

Source: MFI

Firm Size

MFI record the number of full and part time jobs within a firm at time of drawdown. MFI also conduct an annual survey which collects an updated figure on the number of employees a firm holds. The latest annual survey, as of this analysis, was conducted in 2019. One of the objectives of MFI is job creation and this survey makes it possible to track if firms have grown since taking out a loan. Due to changes in the data collecting process, data on the number of employees at the time of taking out a loan is not available between 2012 and 2016. However, for firms who availed of loans during this period, more up to date data on the number of employees is available through the 2019 annual survey. Without having the base years as a point of comparison it is not possible to fully measure changes in the number of employees between 2012 and 2016. However, data from the annual survey that reflects firm size as of 2019 gives some indication of the distribution of firm size among enterprises availing of MFI during this period.

Figure 10 below shows the distribution of firm size for enterprises availing of MFI between 2012 and 2016 as of the 2019 customer survey. This period accounts for 995 loans (29.5% of all 3,364 MFI loans). Although a base figure is not available for this period, since the maximum amount of employees a firm can have to avail of MFI is 9, we can conclude that at least 76 firms who availed of lending during this period have taken on additional employees since their MFI loan was taken out.

400 300 200 100

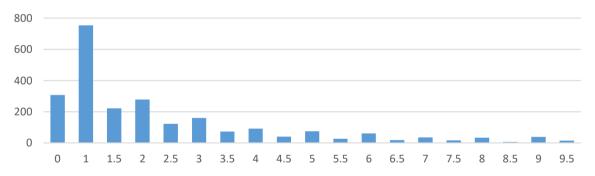
Figure 10 – Distribution of Firm Size as of 2019 survey for 2012 – 2016 MFI Users.

0

Source: MFI

A portion of firms are recorded as having 0 employees, this category reflects firms who have, as of the most recent 2019 MFI customer survey, ceased trading. To date a total of 770 firms (22.8% of all 3,364 businesses) have ceased trading. With regard to MFI activity from 2017 onwards, 2,369 loans were drawn down during this period. The distribution of firm size at time of drawdown is graphed below in figure 11. Part-time jobs are counted as 0.5 while full time jobs are counted as 1. The distribution of firm size is similar across both time periods. 1 employee is the most common firm size and as firm size increases beyond that the frequency of enterprises decreases.

Figure 11 – Distribution of Firm Size at Time of Approval for 2017 – 2021 MFI Users



Source: MFI

Since a base value is available for firms between 2017 and 2021, it is possible to measure changes in firm size. Changes in employee numbers according to the 2019 customer survey are displayed below in figure 12 for firms who availed of MFI from 2017 onwards. The 2019 survey shows that, of the 2,385 firms to avail of MFI from 2017 onwards, 168 (7%) reported having lower staff and 394 (16.5%) reported having higher staff. Of firms who continued trading, the overall net difference in employment is 226 jobs. This paper does not attempt to measure the extent to which these new jobs are attributable to an MFI loan. Given data availability, comparing the characteristics of micro enterprises who did and did not avail of an MFI loan to measure the impact on job creation could make for a useful piece of future research.

100 — 80 — 60 — 40

Figure 12 - Change in Employees following an MFI Loan: 2017 – 2019

-2

Source: MFI

9 10.5 13.5 15 17 21.5

Sector

20

Table 14 below provides a breakdown of MFI activity by sector. Wholesale and Retail Trade, Accommodation and Food Services, Construction and Manufacturing all account for the largest amount of drawdowns.

Table 14 – MFI: Firms, Drawdown Amount and Average Loan Size by Sector

0

Sector	Firms	Total Drawdown Amount	Average Loan Size
Wholesale and Retail Trade	18.4%	€11,719,283	€18,963
Accommodation and Food Services	10.3%	€6,751,393	€19,513
Missing*	9.9%	€4,993,570	€15,041
Construction	8.4%	€4,465,028	€15,890
Other	8.1%	€3,099,257	€11,311
Manufacturing	7.9%	€4,672,371	€17,500
Professional, Scientific and Technical Activities	6.0%	€3,290,697	€16,291
Arts, Entertainment and Recreation	5.1%	€2,642,356	€15,452
Administrative and Support Services	4.5%	€2,381,542	€15,772
Information and Communication	4.3%	€2,695,408	€18,589
Transport and Storage	3.9%	€2,225,294	€16,858
Human Health and Social Work	3.9%	€1,948,293	€14,872
Agriculture, Forestry and Fishing	3.8%	€2,263,047	€17,819
Education	3.4%	€1,773,296	€15,555
Financial and Insurance Activities	0.9%	€574,000	€19,793
Real Estate Activities	0.6%	€434,400	€22,863
Water Supply, Sewerage and Waste	0.4%	€371,416	€26,530
Mining and Quarrying	0.1%	€175,000	€35,000
Electricity, Gas, Steam and Air Conditioning	0.1%	€134,499	€26,900
Public Administration and Defence	0.0%	€18,000	€18,000
Total	3,364	€56,628,150	€16,834

^{*2012 –} Dec 2014

Source: MFI

Other Characteristics

Of the 3,364 MFI approvals, other noteworthy firm characteristics include:

- At time of drawdown 1,973 (58.6%) enterprises were pre-existing firms while the remaining 1,391 (41.3%) were start-up enterprises.
- 1,836 (54.6%) of were sole traders, 1,349 (40.1%) were limited companies and the remaining 179 (5.3%) were partnerships.
- 330 (9.8%) enterprises are recorded as being exporters, while 2,701 (80%) are not. Data on whether a firm is an exporter was not recorded between 2012 and 2014 which accounts for the remaining 333 (9.9%) firms.

10. Loan Schemes and Broader Market for SMF Credit

This section examines the broader market for credit with data reported by the Central Bank of Ireland on the proportion of new SME lending, as well as SME related questions within the bank lending survey.

10.1 SME Loan Stock

A trend report for Q3 2020 published by the Central Bank indicated that credit to Irish resident private sector enterprises declined by €1.4bn from the previous quarter. This represents the largest quarterly fall since Q1 2011. The following Q4 trend report noted significant sectoral differences in the amount of gross new lending. In addition, credit supplied to sectors like property and primary industries appeared to bounce back quicker when compared to sectors hit hardest by the pandemic such as hotels and restaurants.²⁷

Figure 13 below displays data published by the Central Bank on *Gross New Lending* to Irish SMEs for a selection of sectors. *Gross New Lending* refers to the amount of new credit facilities drawn down during the quarter by SME counterparties where the facility was not part of the outstanding amount of credit advanced at the end of the previous quarter. There is a sharp decline in credit advanced to SMEs following the onset of the pandemic in Q2 and Q3 of 2020.

²⁷ Trends in SME and Large Enterprise Credit and Deposits: Q3 & Q4 2020 - <u>SME and Large Enterprise Credit</u> and Deposits | Central Bank of Ireland

1,400 1,152 1,117 1,200 1,065 1.044 1,021 969 925 922 904 886 1,000 818 767 € Million 739 800 650 600 400 200 Dec-16 Sep-17 Mar-19 Jun-19 Jun-15 Sep-15 Dec-15 Mar-16 Jun-16 Sep-16 Mar-17 Mar-18 Jun-18 Sep-18 Sep-19 **Jun-20** Jun-17 Primary Industries Manufacturing ■ Construction Wholesale/Retail Trade & Repairs ■ Hotels and Restaurants Transportation and Storage Information and Communication ■ Business and Administrative Services ■ Total SME Credit

Figure 13 – Quarterly Gross New Lending to SMEs, 2015–2020²⁸

Source: Central Bank

Table 15 below displays the quarterly changes to *Gross New Lending* within different sectors since 2019. Construction, Whole/Retail & Repair, and Hotel and Restaurants fared the worst in terms of total reductions in gross new lending. In contrast, gross new lending in the primary industries, and businesses and administration sectors seem to show signs of bounce back in the final quarter of 2020.

Table – 15 Quarterly Sectoral Changes in Gross New Lending, 2019 – 2020 (€ Million)²⁹

Sector	Jun-19	Sep-19	Dec-19	Mar-20	Jun-20	Sep-20	Dec-20
Primary Industries	-22	-31	39	-16	-24	3	99
Manufacturing	-2	17	15	-22	-42	57	-4
Construction	-58	-16	-4	11	-14	2	15
Wholesale/Retail Trade & Repairs	-9	-53	56	-57	-38	21	49
Transportation and Storage	34	0	-38	29	-38	-19	17
Hotels and Restaurants	43	-27	61	-101	-13	-15	21
Information and Communication	-3	33	-30	-2	1	-6	14
Business and Administrative							
Services	8	-11	169	-136	-28	14	100
Other	56	-37	5	3	-50	1	72
Total Change	47	-125	273	-291	-246	58	383

Source: Central Bank

20

²⁸ Central Bank: SME and Large Enterprise Credit and Deposit Statistics. https://www.centralbank.ie/statistics/data-and-analysis/credit-and-banking-statistics/sme-large-enterprise-credit-and-deposits

²⁹ The blue colour gradient is used to highlight positive changes while the red gradient is used to highlight negative changes.

10.2 SME Results from the Bank Lending Survey of Ireland³⁰

The Bank Lending Survey of Ireland is a quarterly survey run by the Central Bank that was introduced in 2003. The survey tracks changes in the credit market.³¹ The survey includes questions that relate specifically to SME credit standards. By acting as a measure of credit standards, results from the survey can give an indication of how necessary state supported lending is at any given time.

Figure 14 below displays results for the SME category of question 1 in the survey;

"Over the past three months, how have your bank's credit standards as applied to the approval of loans or credit lines to enterprises changed? Please note that we are asking about the <u>change</u> in credit standards, rather than about their level"

The data reflects the average response across respondents and is not weighted to account for the size of banks responding to the survey. Banks with smaller market shares will therefore impact the result just as much as banks with larger market shares. Results are recorded using a five point scale, the interpretation of this scale is included next the below graph.

Note that for legibility the range on the ordinate has been reduced and the graph does not display the full 1-5 scale. Since 2003 the mean response to this question has fluctuated closely around 3, indicating credit standards have remained "Basically Unchanged". The most amount of change to occur during this time period happened in and around the 2008 financial crisis. The mean response to this question almost reached 2 during this period indicating credit standards to SMEs "tightened somewhat". Following the onset of the pandemic, mean responses to this question reach 2.6 indicating the credit standards to SMEs also "tightened somewhat" although not to the same degree as during the financial crisis.



Figure 14 – Changes in Credit Standards on Loans to SMEs

considerably

Tightened somewhat

Tightened

3 Basically unchanged

Eased Considerably

Eased Somewhat

Source: Central Bank

³⁰ Euro Area Bank Lending Survey: https://www.centralbank.ie/statistics/data-and-analysis/credit-and-banking-statistics/bank-lending-survey

³¹ Tracks supply and demand. The survey is qualitative in nature and respondents are only asked to give information about changes in different variables, rather than information on the overall level.

Question 2 of the survey asks banks to identify factors that contributed to changes in SME credit standards. Responses indicate that "General Economic Situation and Outlook" and "Industry or Firmspecific Outlook" were the two primary reasons for tightened SME credit standards during 2020. Reponses on both of these factors reach a value of 2.4 in 2020Q3, where 3 indicates "Contributed to basically unchanged credit standard" and 2 indicates "Contributed somewhat to a tightening of credit standards."

This data indicate both a decrease in the amount of gross new lending and a tightening of SME credit standards following the onset of the COVID-19 pandemic. From a credit market perspective, this suggests that expansion of schemes such as MFI and the CCGS to provide working capital loans to firms adversely affected by the pandemic was an appropriate policy response, though, without some kind of counterfactual analysis, it is difficult to measure the extent to which state supported lending mitigated reductions in SME lending and tightening credit standards. From an enterprise perspective, the functionality of loans as a support measure during a crisis is still unclear. Future research on this question would be necessary to determine if adapting schemes to provide working capital loans to businesses exposed to COVID-19 resulted in higher level of defaults, or if the debt burden associated with working capital loans had any significant negative impact on the ability to recovery from the pandemic.

Conclusion

Scheme Uptake

2020 and 2021 have seen higher levels of demand than previous years for state supported lending, particularly through the CCGS. As of May 2021 14.1% of the €2 billion CCGS allocation has been utilised. However, the headline allocation figure is not necessarily an appropriate benchmark by which to assess scheme demand or effectiveness, and the uptake to date may simply be a sign that the headline allocation was too large. There is evidence to suggest that this has been the case internationally. Reflecting on the use of guarantee schemes across Europe, Adnerson et al. note that there is no positive relation between the headline allocation of state guarantee schemes and their later take-up.³² However, one of the rationale for the large headline figure of the CCGS was to give confidence to the SMEs that credit was available. The high levels of scheme uptake following the onset of the COVID-19 pandemic and subsequent reductions in the supply of credit and tightening of SME

³² Anderson et al., (2020), Government-guaranteed bank lending in Europe: Beyond the headline numbers. Peterson Institute for International Economics.

credit standards suggests that these policies have acted as an alternative source of lending for firms who could not access credit via the private market.

The Rationale of State Supported Lending, Clarity of Objectives and Data Collection

A key finding of two previous spending reviews on this topic that bears repeating has been the importance of clarifying the objectives and rationale of supported loan schemes, and the need for appropriate data collection to facilitate scheme assessment.³³ This is something currently being explored further by DETE. The objectives and purpose of state supported lending in Ireland have evolved over time, with less reference to specific market inefficiencies or failures, and a shift toward using state supported lending as a form of liquidity support following the onset of the COVID-19 pandemic. As discussed in section 4, in principal there can be a variety of factors that result in an undersupply of credit to SMEs. While state supported lending may serve to increase the supply of credit to SMEs who may otherwise lack access to borrowing facilities in all cases, understanding the underlying market dynamic giving rise to the problem - be it features characteristic of SMEs such as lack of collateral, market failures such as asymmetric information, or exogenous economic shocks - is important for effective scheme design, targeting, and future evaluation. As noted by Breen, Keogh and Gray (2020), where state supported loan schemes have multiple objectives, these should be clearly outlined in programme documentation, in order to enable future evaluation. Kirby (2019) also recommended that any future State supported loan scheme should include an element of additionality, and data should be collected and recorded in appropriate way as to facilitate future assessment.

In the case of schemes aimed at providing working capital to firms affected by COVID-19, loan guarantees present a reduced cost to the Exchequer when compared to other forms of enterprise support, such as the pandemic unemployment payment and other grants, because, while they may not induce debt, they are at massively higher cost to the Exchequer. Loan schemes aim to reduce the cost to the Exchequer and share the risk with lenders and SMEs. Determining the appropriate mix of all these supports is difficult both in terms of minimising Exchequer costs while also supporting vulnerable but viable businesses.

There is evidence that the provision of credit to SMEs contracted as a result of the COVID-19 pandemic. From a credit market perspective, this provides a clear rationale for the expansion and adaption of state supported lending schemes during this period. However, from an enterprise perspective, although lending under these schemes has been concentrated in sectors most affected

³³ Kirby (2019). <u>State Supported Loan Schemes: A Preliminary Analysis</u>, and Breen, Keogh & Gray (2020). <u>State Supported Loan Schemes</u>.

by the pandemic, the net benefit of loans as a support measure during a crisis remains unclear. This will likely be a function of sector specific exposure to the pandemic, the speed of recovery, what working capital loans are used for, and the degree to which the debt burden of working capital loans potentially slows future productive activity or results in loan defaults.

Future Research

In terms of future research, this paper has highlighted several avenues that could be investigated further. The first involves analysing data on the credit grades of SME loans in the broader market for SME credit to establish a comparison to the credit grades of loans within the SBCI loan schemes. This would shed light on the extent to which state guarantees may be increasing the risk appetite of banks, and also inform the level of exposure the exchequer faces in terms of potential guarantee payments.

The second involves determining the extent to which an MFI loan contributed to job creation and would require similar firm level data on some kind of comparison group. One of the objectives of MFI is job creation and the MFI annual customer survey collects an updated figure on the number of jobs within each firm. While this paper reported changes to employee numbers among MFI firms utilising data from this survey, the degree to which an MFI loan contributed to an increase in firm size remains unclear. In the context of guarantee schemes, annual customer surveys could be useful and allow for similar analysis.

Finally, ongoing monitoring of these schemes is important for understanding how they are being used as well as the characteristics of firms availing of them. Guarantee schemes have seen increased use across Europe since the onset of the pandemic. As such there may be future insights to be gained from comparing international experiences of similar policies. Given data availability, a particular area of future interest is analysing firms that miss repayments or default on loans within the state supported loan scheme, although as of yet there is insignificant defaults for such analysis to be completed. This would shed light on whether adapting schemes to provide working capital loans to businesses exposed to COVID-19 resulted in higher level of defaults, as well as the factors that affect the survivability of businesses Perhaps most importantly, understanding the characteristics of firms who struggle with repayments could inform the design and targeting of future loan schemes and other enterprise supports, as well as how best to respond to future crisis.

Appendix 1 – Business Demography Tables³⁴

Table 1 – Active Enterprises by NACE Rev 2 Sector (2018)

SECTOR	NUMBER
CONSTRUCTION	57,626
WHOLESALE AND RETAIL TRADE, REPAIR OF MOTOR VEHICLES AND	47,789
MOTORCYCLES	
PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	43,635
TRANSPORTATION AND STORAGE	24,876
HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	20,451
OTHER SERVICE ACTIVITIES	19,813
ACCOMMODATION AND FOOD SERVICE ACTIVITIES	19,172
MANUFACTURING	16,542
INFORMATION AND COMMUNICATION	15,910
REAL ESTATE ACTIVITIES	14,913
EDUCATION	14,096
ARTS, ENTERTAINMENT AND RECREATION	11,535
WATER SUPPLY, SEWERAGE, WASTE MANAGEMENT AND REMEDIATION	1,046
ACTIVITIES	
ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	668
MINING AND QUARRYING	447

Table 2 – Number of Employees by NACE Rev 2 Sector (2018)

SECTOR	NUMBER
WHOLESALE AND RETAIL TRADE, REPAIR OF MOTOR VEHICLES AND	352,568
MOTORCYCLES	
MANUFACTURING	219,899
HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	215,196
ACCOMMODATION AND FOOD SERVICE ACTIVITIES	183,575
EDUCATION	159,354
PROFESSIONAL, SCIENTIFIC AND TECHNICAL ACTIVITIES	129,609
CONSTRUCTION	106,047
INFORMATION AND COMMUNICATION	102,960
TRANSPORTATION AND STORAGE	81,763
OTHER SERVICE ACTIVITIES	45,335
ARTS, ENTERTAINMENT AND RECREATION	33,826
REAL ESTATE ACTIVITIES	21,084
WATER SUPPLY, SEWERAGE, WASTE MANAGEMENT AND REMEDIATION	9,777
ACTIVITIES	
ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	9,096
MINING AND QUARRYING	4,020

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³⁴ CSO: Output and Value added ESA2010 (OVA05) & Business Demography NACE Rev 2 (BRA16).

Table 3 – Gross Value Added by NACE Rev 2 Sector, 2019 (OVA05)

SECTOR	GVA (€ MILLIONS)
MANUFACTURING INDUSTRIES	112,152
INFORMATION AND COMMUNICATION	49,848
WHOLESALE AND RETAIL TRADE; REPAIR OF MOTOR VEHICLES AND MOTORCYCLES	25,316
REAL ESTATE ACTIVITIES	23,032
ADMINISTRATION AND SUPPORT SERVICES	21,960
FINANCIAL AND INSURANCE SERVICE ACTIVITIES	19,346
HUMAN HEALTH AND SOCIAL WORK ACTIVITIES	15,527
PROFFESSIONAL, SCIENTIFIC AND TECHNICAL	14,692
PUBLIC ADMINISTRATION AND DEFENCE; COMPULSORY SOCIAL SECURITY	10,485
CONSTRUCTION	8,645
EDUCATION	8,574
TRANSPORTATION AND STORAGE	6,785
ACCOMMODATION AND FOOD SERVICE ACTIVITIES	5,710
AGRICULTURE, FORESTRY AND FISHING	3,264
ELECTRICITY, GAS, STEAM AND AIR CONDITIONING SUPPLY	3,198
ARTS, ENTERTAINMENT AND RECREATION	2,606
OTHER	1,631
WATER SUPPLY; SEWERAGE, WASTE MANAGEMENT AND REMEDIATION ACTIVITIES	1,403
MINING AND QUARRYING	540



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