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State-Supported Loan Schemes

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Key Findings

Origin and Evolution of the Schemes

There are 5 State-supported loan schemes in operation in Ireland. While initially constituting a smaller share of enterprise supports, their expansion has arisen in the context of the economic recovery following the 2008 recession, Brexit, instability in agricultural markets and the emergence of the COVID-19 crisis.

All State-supported loan schemes apart from Microfinance Ireland (MFI) are in partnership with private lending institutions and operate on the principal of a state-guarantee mechanism, whereby the Exchequer agrees to take on a given percentage of losses incurred by private lenders. MFI is a government established not-for-profit responsible for lending directly, sans private lending institutions, to eligible microenterprises using funding from the Microenterprise Ireland Fund.

Exchequer exposure

- Over the period 2012-2020 (April), the total value of State-Supported Loan Approvals (minus lending through Micro Finance Ireland[1]), ran to approx. €527.4 million[2]. The level of Exchequer-exposure associated with loans approved under the schemes was approx. €125.6 million in total.
- State-guaranteed financing available to firms at the outset of 2020 came to approx. €475.6 million. The level of exchequer-exposure associated with available financing, if all of the schemes were to have been fully subscribed in that period, would have been approx. €127.2 million.
- 2020 has seen an increase in financing available through State-Supported Loan Schemes. The combined value of loans approved to date plus financing currently available (minus lending through Micro Finance Ireland), amounts to €3.4 billion[3]. The level of cost the state ultimately incurs as a result of this exposure will be a function of the degree of uptake of State-Supported financing by firms and the level of repayment default that arises.
- The main drivers of the increase in State-exposure from State-Supported Lending are the increase in financing made available through the Credit Guarantee Scheme (+ €2 billion) and the removal of the 13% portfolio cap that had previously been in place under the scheme.

Scheme Uptake and Distribution

As of April 2020, the combined number of loans approved under all schemes (excluding MFI) was 6,189.

Since inception of the various State-Supported Loan Schemes (up until April 2020), the following proportions of available financing under each scheme have been translated into loan approvals:

- Credit Guarantee Scheme (2012): 9% (€108.3 million) of available financing (€1.2 billion) converted into approved loans.
- Brexit Loan Scheme (2018): 18% (€52.5 million) of available financing (€300 million) converted into approved loans.
- Future Growth Loan Scheme (2019): 74% (€221.9 million) of available financing (€300 million) converted into approved loans.
- Agriculture Cash-Flow Supports Loan Scheme (2017): 96% (€144.7 million) available financing (€150 million) converted into approved loans.

Region

State-supported lending can be unevenly distributed across regions. 45% of loan approvals under the CGS were to enterprises in Dublin. In contrast, the Agriculture Cash-Flow Supports Loan Scheme (ACSLS) saw only 0.2% of approved loans arising in Dublin, with the concentration in the South-west (23%), South-east (18%) and the Mid-west (15%). The Future Growth Loan Scheme (FGLS) shows a more even distribution across regions.

Interest Rates

There is heterogeneity in interest rates across schemes. For example the ACSLS had an interest rate of 2.95% while at the opposite end of the scale Micro Finance Ireland loans had a rate of 7.8%. Interest rates can have implications for attractiveness of schemes to borrowers, and therefore, can impact the level of deadweight loss[4] associated with a scheme.

Sector

100% of loan approvals under the ACSLS and 26% of those under the FGLS are for enterprises in the Agriculture, Forestry and Fishing sector. The majority of loan approvals under the Brexit Loan Scheme (BLS) are for enterprises in the Manufacturing sector (44%). Under the CGS, the lending is spread relatively evenly across sectors.

Term conditions

The BLS focuses on loan terms in the 1 month to 3 year range, with 94% of loans taken for the maximum time horizon of 2 plus years. The FGLS caters for loan terms in the 8 to 10 year range, with 73% of loans taken for the maximum time horizon of 9 to 10 years. Lending under the CGS and the ACSLS are spread more evenly across loan terms, with a 6 year term maximum on the ACSLS and a 10 year maximum on the CGS. The highest concentration of CGS loans are for the 5 year time horizon (37%).

Additionality and Scheme Evaluation

State-Supported lending is primarily intended to address credit market failures and to achieve financial and economic additionality[5]. Recent work by the Evaluation Unit at the Department of Business, Enterprise and Innovation has assessed the Future Growth Loan Scheme for the potential additionality of increases in financing through the Scheme in 2020. Due to the absence of Irish administrative and survey data on Irish SMEs, estimates of deadweight loss and financial/economic additionality were extrapolated from CBAs of UK State-Supported Lending Schemes. The Unit is examining the Covid-19 Working Capital Scheme and Brexit Loan Scheme in the same manner and is liaising with the CSO to source administrative and survey data on Irish SMEs for use in future evaluations. Access to such data will greatly improve the Unit's capacity to determine the effectiveness of State-Supported Lending in addressing market failure and generating additionality.

[1] Data from the Microenterprise Loan Fund was requested but not forthcoming due to due to unprecedented demand, resource constraints and a number of other separate reviews being undertaken at the time of the request.

[2] Approximate values reported due to inclusion of miscellaneous administrative costs in figures.

[3] Available and approved financing by Microfinance Ireland in 2020 amounts to €100 million, increasing the combined value of loans approved to date plus financing currently available (under all schemes) to €3.5 billion.

[4] Deadweight loss in this context refers to State-Supported lending that crowds out private lending. Any lending that would have arisen through purely private means but that takes place through the State-schemes, can be considered as deadweight loss.

[5] Financial/economic additionality in this context refers to firm-level borrowing, employment and economic growth which would not have arisen without a State-Supported lending mechanism.

Contents

1. Introduction

State-supported loan schemes have become an increasingly popular policy intervention in Ireland in the past decade. This follows an international trend, whereby public credit guarantee schemes, a particular type of State-supported loan scheme, have expanded internationally in the last few decades, particularly since the 2008 financial crisis, as a way for governments to extend financial access to small enterprises.[6] More recently, due in part to the leverage effect[7] and the fact that such schemes give rise to contingent liabilities for the State rather than upfront expenditure, public credit guarantee schemes have been a common feature of many countries' economic response packages to COVID-19 to ensure businesses have access to adequate liquidity. This Spending Review paper covers five State-supported loan schemes in Ireland: the Agriculture Cash-Flow Supports Loan Scheme (ACSLS); the Brexit Loan Scheme (BLS) / COVID-19 Working Capital Loan Scheme (WCLS); the Future Growth Loan Scheme (FGLS); the Microenterprise Loan Fund scheme; and the SME Credit Guarantee Scheme (CGS). These five loan schemes fit into two broad categories: risk-sharing schemes and direct lending. The ACSLS, BLS, FGLS, and the CGS are all risk-sharing schemes, whereby the State takes on a portion of the risk of a bank's lending portfolio. The CGS is a public credit guarantee scheme and is distinct from the other risk-sharing schemes because costs are contingent rather than provided up front. The Microenterprise Loan Fund scheme is a direct lending scheme. In response to the COVID-19 pandemic, all of these schemes, with the exception of the ACSLS, have either been extended or re-positioned by the Government as supports for businesses.

This paper reviews the specifics of these schemes to clarify their stated objectives, to examine the profile of recipients, to assess the approaches and data needed for comprehensive evaluation, and to determine the potential implications of scheme design for the incentives of private lending institutions and borrowers. The paper reviews the economic literature on these policy interventions in credit markets in order to assess the Irish schemes. Since these schemes are supplementary to the lending function of private banks, their raison d'etre can be understood as attempting to fill in the gaps of the private lending market; i.e. to address market failures. Indeed, it is a State aid requirement that these schemes target a market failure. We analyse SBCI loan scheme data to quantify the uptake of lending from these schemes and analyse the characteristics of granted-loans and recipient borrowers[8]. It is

[6] Honohan (2008). Partial Credit Guarantees: Principles and Practice. http://www.tara.tcd.ie/bitstream/handle/2262/31746/%20Partial+Credit+Guarantees+-+Principles+and+Practice.pdf?sequence=1

[7] Also commonly referred to as the multiplier effect, so called because funds provided by the state/EIF through loan schemes are matched multiple times over by private lending institutions.

[8] Microfinance Ireland data was requested but could not be accessed in the timeframe due to unprecedented levels of demand.

beyond the scope of this paper to measure the effectiveness of these schemes in achieving their targets (which is usually to create novel lending and economic growth that would not otherwise have taken place). However, we identify shortfalls in the data collection processes for these schemes, which if addressed, would allow the efficacy of each scheme in addressing market failures to be evaluated comprehensively.

2. Overview of State-supported Loan Schemes

This section of the paper provides a detailed overview of the policy context, scheme design, and governance of the five State-supported loan schemes. The costs to and overall exposure of the Exchequer arising from these loan schemes is also analysed.

Policy Context

The policy context for the development and implementation of the schemes dealt with in this paper can be broadly categorised into three distinct phases. The first is the phase of economic recovery emerging from the financial crisis. This period is defined by a depressed risk appetite from highly indebted financial institutions which in turn reduced access to finance for many SMEs and start-ups to the point of market failure.

The other significant contextual event which influenced the development of further State-supported loan schemes was the result of the UK referendum on EU membership in June 2016. The subsequent uncertainty and market volatility that arose following the UK's decision to leave the European Union was a key factor in establishing the case for State intervention in this area, as there was an expectation that the credit supply may tighten in the aftermath of the referendum. While the ACSLS was launched in 2017, the main factors driving its development were cash flow difficulties for some agricultural sectors due to lower commodity prices, as well as a Russian ban on imports of agricultural products and foodstuffs originating in the EU. The depreciation of the sterling following the Brexit referendum added to cash flow difficulties in the sector.

More recently, the Irish government has responded to the economic impacts of COVID-19, and the public health measures adopted nationally to control its spread, with fiscal measures to alleviate the liquidity problems which businesses have incurred. As part of the fiscal policy response for enterprises, many of the existent loan schemes have been expanded to provide access to debt for firms impacted by the COVID-19 pandemic.

Recovery Phase (2008)

Key contextual factors, such as the economic recovery, Brexit preparedness, and market failures in the provision of credit to SMEs, have been drivers of the policy direction regarding State-supported loan schemes in Ireland. The Action Plan for Jobs 2012 called for the introduction of both the Microenterprise Fund and a "temporary partial credit guarantee scheme for SMEs". This ultimately led to the establishment of Microfinance Ireland to administer the Microenterprise Fund, as well as the launch of the Credit Guarantee Scheme by SBCI.

The introduction of both schemes was introduced in an environment of post-recession recovery with a view to supporting job creation and sustaining employment. The CGS was developed in order to ensure a sustained flow of credit to SMEs during a period when credit refusals were high by international comparisons and there were concerns that the absence of such a scheme may put Irish enterprises at a competitive disadvantage as similar schemes were available in other countries.[9]

Microfinance Ireland's primary objective on establishment was to lend money to create employment in the microenterprise sector with applicants supported from all industry sectors with commercially viable proposals that did not meet the conventional risk criteria applied by commercial banks[10]. The perceived difficulty encountered by microenterprises in accessing finance during this period is supported by the Department of Finance's SME Credit Survey which showed that in March 2012, surveyed microenterprises had a 30% credit rejection rate. This compared to 22% for small organisations and 19% for those defined as medium-sized.[11] Further evidence of market failure in SME market for credit is described in the literature review section of this paper.

Brexit Uncertainty and Ireland's Enterprise and Agri-Food Strategy

From 2016 Brexit became a significant contextual factor that drove the deployment of State-supported loan schemes in both the enterprise and agricultural sectors. The BLS was deployed as a direct response to Brexit and FGLS was developed as a response to a market failure in the market for longer term lending, although the FGLS also supported firms to grow in the economic context of Brexit.

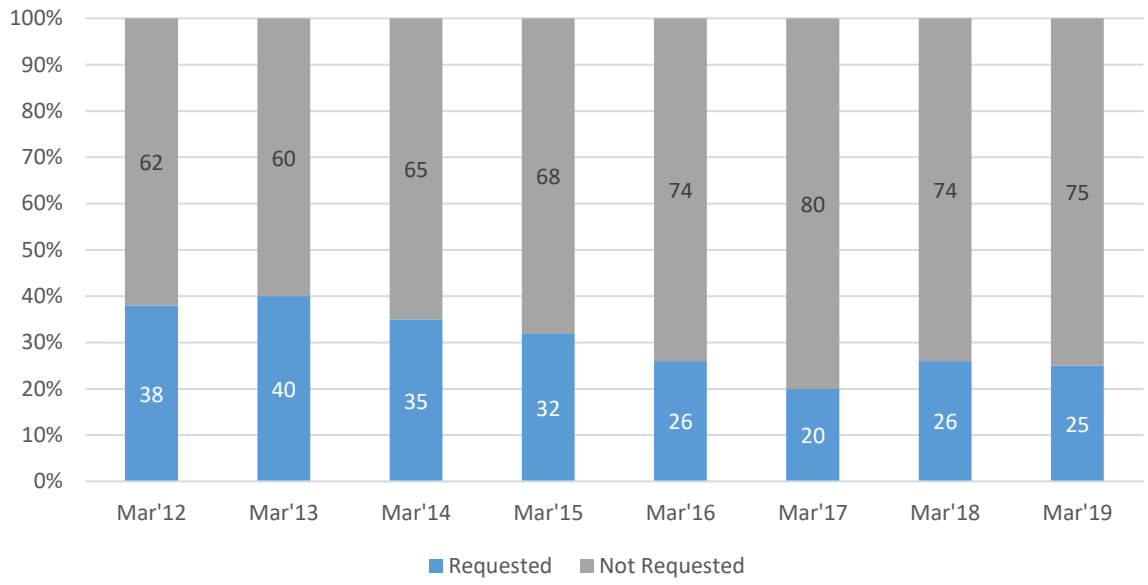
The BLS aims to provide liquidity to enterprises facing adverse effects of Brexit and the FGLS aims to supports SMEs, including farmers and fishers and small mid-caps to access financing for investment purposes. This includes businesses investing to mitigate against Brexit impacts but is not limited to

[9] DBEI (2012) – Action Plan for Jobs 2012 p.50. https://dbei.gov.ie/en/Publications/Publication-files/Action-Plan-for-Jobs-2012.pdf
[10] Microfinance Ireland (2014). Microfinance Ireland Annual Report and Accounts, page 10.
[11] Fitzpatrick Associates (2019) – Department of Finance SME Credit Demand Survey October 2018-March 2019, page 58.

Brexit impacted businesses. The BLS provides working capital loans of up to €1.5m to enterprises that satisfy both Brexit criteria (15% direct/indirect exposure on imports/exports) as well as innovation criteria. The FGLS provides enterprises with loans ranging up to €3m on 8-10 year terms differentiating itself with the BLS as a method of financing longer term undertakings.

The ACSLS was developed in response to some agriculture sectors experiencing cash flow difficulties due to lower commodity prices. The EU milk sector experienced market disturbance due to worldwide over-supply, which was exacerbated by the Russian ban on the import of agricultural products and foodstuffs originating in the EU. The ACSLS was the first publicly funded risk sharing loan scheme in Ireland, which used Exchequer funds to leverage EU Commission funds. It is part-funded through EU Exceptional Aid (Commission Delegated Regulation (EU) 2016/1613).

Figure 1 SMEs seeking finance in previous six months (applies to all cases for credit sought)



(Source – DOF Credit Demand Survey p.38)

Despite the introduction of these schemes, credit demand in the market continues to be persistently low. While in March 2014, 35% of SMEs were applying for bank finance, this had decreased to 25% in March 2019. Uncertainty surrounding Brexit and worldwide trade disputes may have contributed to this low demand in what was an expanding economic context[12]. Furthermore, the average interest rate for new SME lending is 5.7%, which is high compared with similar loans in other parts of Europe where the interest rates are on average 2.5%.[13] Despite a decrease in application rates for finance,

[12] Fitzpatrick Associates (2019) – Department of Finance SME Credit Demand Survey October 2018-March 2019, page 8
[13] Central Bank of Ireland. SME Market Report 2019.

new lending to SMEs has increased in recent years. Central Bank of Ireland data show that gross new lending to Irish SMEs has increased in recent years, from €2.2bn in 2013 to €5.4bn in 2019.[14]

COVID-19

The outbreak of the COVID-19 pandemic and the subsequent restrictions on economic activity that were imposed by the Irish Government in mid-March represent a profoundly altered economic context than existed at the beginning of 2020. Towards the end of April there were almost 600,000 people in receipt of the pandemic unemployment payment and unemployment was at its highest level historically.[15] There appears to be some evidence that suggests COVID-19 has had an impact on the SME's access to finance. Central Bank of Ireland data show that credit standards on loans to SMEs tightened in Q2 2020. That said, the proportion of rejected loans did not change from seasonal patterns. Furthermore, SMEs' demand for loans increased in Q2 2020, while large enterprises' demand for loans decreased, with a modest fall in demand in total.[16] Demand varied by type of loan, with an increase in demand for loans for debt restructuring and working capital, but a decrease in demand for loans for fixed investment and mergers and acquisitions. Credit standards are expected to tighten again in Q3, but SMEs' loan demand is expected to increase further. Additional evidence from the Central Bank of Ireland's SME Market Report 2020 shows that 72% of SMEs reported no change in access to finance as of May 2020. 6% of SMEs reported access to finance declined, though this was 9 percentage points higher in March and April 2020.[17] Therefore, a considerable share of SMEs have reported declines in access to finance since the outbreak of COVID-19, though these are a minority share of borrowing enterprises. One of the aims of this paper is to provide an overview and preliminary assessment of the changes made to the schemes since the outbreak of the pandemic.

Scheme Design

This section of the paper provides detail on the design of the five loan schemes and how the design of the schemes has changed over time, in particular since the outbreak of COVID-19. Table 1 *and*

Table 2 below summarise the details and main objectives of the various State-supported loan schemes evaluated in this paper. The schemes in Ireland vary according to the size of the loans provided under the scheme, the interest rate, term of the loan, and other aspects of scheme design. But there are also some similarities between the loan schemes.

[14] Business Credit and Deposits, Table A.14.1.
[15] Government website. Pandemic Unemployment Payment.
[16] Central Bank of Ireland (2020). Bank Lending Survey July 2020 Survey Results.
[17] Central Bank of Ireland (2020). SME Market Report 2020.

Table 1 Details of State supported loan schemes (pre-COVID-19)

SCHEME	LOAN SIZE	TERM	INTEREST RATE	TARGET
FGLS	€100,000 - €3m	8 – 10 years	Max 4.5% for first 6 months	SMEs & small mid-caps
BLS / WCLS	€25,000 - €1.5m	1 – 3 years	Max 4%	SMEs & small mid-caps
ACSLS	Up to €150,000	1 – 6 years	2.95%	Primary Producers
CGS	€10,000 - €1m	Up to 7 years	Commercial rate + 0.5%*	SMEs
MFI[18]	€2,000 - €25,000	Up to 3 years	7.8%	Microenterprises

* 0.5% for a period of 12 months, and then the premium will revert to 1%

Table 2 Stated objectives of State supported loan schemes

Scheme	Objectives
FGLS	To support strategic long-term investment by SMEs and small mid-caps.[19]
BLS	To provide competitively priced access to finance for working capital to SMEs and small mid-caps to innovate, adapt, or change to mitigate the impacts of Brexit.
WCLS	To provide competitively priced access to finance for working capital to SMEs and small mid-caps to innovate, adapt, or change to mitigate the impact of COVID-19.
ACSLS	To support farmers experiencing short term financial pressure due to price and income volatility.
CGS	To address specific market inefficiencies that lead to undersupply of lending to SMEs.
MFI	To provide loans to microenterprises, facilitating job creation and retention in all microenterprises with commercially viable proposals that do not meet the conventional risk criteria applied by commercial banks.

For a summary of changes in the extent of financing available to firms through State-Supported Lending in 2020, jump to Table 3 on page 23.

Future Growth Loan Scheme[20]

The FGLS was launched in 2019, making €300m in long-term financing available to eligible businesses and the primary agriculture and seafood sectors to support strategic long-term investment to improve competitiveness, innovation, and productivity. The FGLS was designed to address a specific market failure in Ireland whereby longer term loans for investment purposes were not available for SMEs

[18] MFI have made significant changes in the terms of their loans in response to COVID-19, including increasing the maximum loan size to €50,000 and reducing the headline interest rate to 5.5%.
[19] DBEI website (2019). Notice of FGLS.
[20] Unless otherwise stated, information on the scheme is from this website https://sbci.gov.ie/products/future-growth-loan-scheme

(except for asset-backed loans, i.e. leasing). The scheme was designed to support Brexit-impacted businesses as well as businesses not impacted by Brexit. At least 40% of the financing is reserved for the primary agriculture and seafood sectors.[21] The FGLS was almost fully subscribed within 10 months of the launch of the scheme, following which discussions were initiated in DBEI and DAFM in relation to an expansion of the FGLS. These discussions and subsequent negotiations with the European Investment Bank Group were accelerated with the onset of COVID-19. The Government approved an expansion of €500m of the FGLS on June 19th 2020 making the total size of the fund €800m. The new FGLS funding will provide access to longer term lending for investment purposes to businesses that have been both negatively and positively impacted by COVID-19, and businesses that were considering investing before the pandemic.

Eligibility for the schemes depends on two main conditions. Firstly, eligible applicants must be a SME or small mid-cap (including enterprises in the agriculture and seafood sectors). Secondly, the loan must be used for one of a number of purposes. The loan purpose criteria differ for the enterprise and agricultural sectors. For the enterprise sector, the purpose of the loan must be for one of the following investments: machinery or equipment; research and development; business expansion; premises improvement; process innovation; or people and / or systems. For agricultural applicants, the purpose of the loan must be for one of the following: 'improvement of the overall performance and sustainability of the agricultural holding; the improvement of the natural environment, hygiene conditions, or animal welfare standards, provided the investment goes beyond EU standards; the creation and improvement of infrastructure related to the development, adaptation, and modernisation of agriculture; the achievement of agri-environmental-climate objectives; or the restoration of production potential damaged by natural disasters, adverse climatic events, animal diseases, plant pests, and the prevention of damage caused by those events.'

Loans under the FGLS range from €100,000 (€50,000 for farmers) to €3m for eligible businesses, with loans of up to €500,000 unsecured.[22] The policy goal of supporting longer term investments is evident in the term lengths offered under the scheme, with 8 year terms offered as a minimum extending to a maximum term of 10 years. The Minister for Public Expenditure and Reform stated in 2019 that no market offerings with these loan terms were available at the time.[23] The initial maximum interest rate, for the first six months, is capped at 4.5% for loans of up to €249,999 and 3.5% for larger loans. Subject to the caps, the interest rates thereafter are variable and dependent on the cost of funds at a point in time, though the credit margin component of the price is capped. The interest rate has three

[21] DBEI website (2019). FGLS.
[22] There may be changes to this with the expanded FGLS.
[23] DBEI website (2019). Notice of FGLS.

components: the cost of funds for banks; the guarantee fee; and the credit margin. The interest rate includes a guarantee fee of 0.58% that goes to the EIF. The credit margin will remain fixed for the duration of the scheme, while the cost of funds may vary.

The SBCI provide a guarantee of 80% on the loans under the FGLS, and this guarantee is uncapped at the portfolio level.[24] This means that, given the portfolio of the original FGLS of €300m, SBCI guarantee up to €240m of the fund. The European Fund for Strategic Investments (EFSI) then provide a counter-guarantee of 80% on this €240m, which accounts for €192m (64% of the fund). Therefore, the EIF hold 64% of the risk, or €192m, and SBCI hold the remaining 16%, or €48m. The final 20% of the risk resides with the participating commercial lenders. The cost to the Exchequer of the €300m fund is €62m over a 5 year period, €55m of which has been provided to SBCI and the EIF to cover the expected loss[25]on the loans, with a further €1m for EIF management fees. Expected loss refers to the model whereby the Exchequer contributes the financing up front to pay for the expected losses on the loan portfolio. The expected loss is calculated by the EIF. The SBCI then provide a guarantee on all loans. If loan losses on the portfolio exceed the amount provided under the expected loss arrangement, then the SBCI and EIF are liable for these losses. If loan losses are less than the expected loss contributed by the Exchequer, these funds are returned once the scheme ends. The Exchequer has provided €44m to cover expected loss on the EIF counter-guarantee and €11m to cover expected loss for SBCI.[26] As previously stated, SBCI's maximum contingent liability associated with the scheme is €48m (€300m*80%*20%). Any further losses beyond the €11m provided to SBCI have to be absorbed by SBCI's balance sheet. €7m was also provided to SBCI to cover operating and administrative costs. There is no contingent liability to the Exchequer associated with the scheme, beyond the provisions for first loss in SBCI and EIF. DPER has sanctioned €11.5m for the €200m expansion of the FGLS in response to COVID-19, and the Government has approved an additional estimated €30m.[27]

Brexit Loan Scheme / COVID-19 Working Capital Loan Scheme[28]

The Brexit Loan Scheme was launched in 2018, making €300m available to eligible Irish businesses (the primary agriculture and seafood sectors were excluded, due to state aid rules). 40% of the fund is available for food businesses given the unique exposure of the agri-food sector in the context of

[24] EY (2019). Strategic Banking Corporation of Ireland. External Strategic Review.
[25] The terms "expected loss" and "first loss" can be used interchangeably. The EIF calculate the expected loss whereas scheme documentation can refer to the first loss. We opt for the EIF's terminology as it more accurately reflects the fact that the figure is an expected value based on historical data.
[26] Memo for Government.
[27] Parliamentary Budget Office (2020). The COVID-19 Pandemic: Government Supports for Business.
[28] Information in this section comes from the following website, unless otherwise stated https://sbci.gov.ie/products/brexit-loan-scheme

Brexit, and DAFM have contributed 40% of the costs of the scheme for this purpose.[29] Eligible businesses are defined as viable businesses with up to 499 employees that are exposed to current or potential impacts of Brexit, and meet the scheme criteria (one Brexit criterion and one innovation criterion). The loans must be used to fund future working capital requirements to fund innovation, change, or adaptation of the business to mitigate the impact of Brexit. In response to COVID-19, the Government adapted the BLS and relaunched it as the COVID-19 Working Capital Loan Scheme, with a fund of €200m diverted from the BLS. The Government is also diverting a further €50m from the BLS to the COVID-19 scheme, and a new tranche of lending of €125m is currently in progress, bringing the total to €425m. This scheme has the same terms as the BLS, but the Brexit criteria were replaced with a COVID-19 criterion.[30]

The loans offered are between €25,000 and €1.5m, with loans of up to €500,000 unsecured. The term of the loans are between 1 and 3 years and there is a maximum interest rate of 4%, but lenders can compete below this level. The terms and price of the financing provided under the scheme are more favourable than market comparators.[31] The scheme was launched by DBEI and DAFM, and it is delivered by SBCI through three lending banks. Companies may avail of a three-month interest-only period under the scheme.

SBCI has provided a guarantee of 80% on each loan, with no portfolio cap on losses.[32] This means that 80%, or €240m, of the original €300m fund is guaranteed. The EIF provides a counter-guarantee of 50% on this €240m, which accounts for €120m. Therefore, SBCI's maximum exposure on the original BLS is €120m (€300m*80%*50%). SBCI have estimated a contingent liability of €9.6m resulting from the original fund, which is offset by a counter-guarantee by the EIF of €4.8m, leaving a contingent liability of €4.8m for the SBCI.[33] The EIF charge a guarantee fee to SBCI for the scheme, which is funded by the Exchequer and not passed on to the banks.[34] The upfront Exchequer cost of the BLS was €23m.[35] Of this €23 million, €17.4 million covers expected loss and €5.6 million covers operational/management fees.[36] The SBCI has its own balance sheet and capital to absorb further losses (Kirby, 2018). The risk is covered by the SBCI and the European Investment Fund and the lenders, leaving no residual risk to the Exchequer, beyond the money already provided by the

[29] Kirby (2018). State-Supported Loan Schemes: A Preliminary Analysis.
[30] https://sbci.gov.ie/products/COVID-19-working-capital-loan-scheme
[31] In 2019 the interest rate for non-financial corporation loans of less than €0.25 million at 5.7%.
[32] EY (2019). Strategic Banking Corporation of Ireland. External Strategic Review.
[33] Ibid.
[34] Correspondence with DBEI.
[35] Kirby (2018). State-Supported Loan Schemes: A Preliminary Analysis.
[36] Information provided by the Department of Business, Enterprise, and Innovation.

Exchequer. The subsequent €125m expansion of the scheme in response to the COVID-19 outbreak has required Exchequer funding of €21m (€12.6m from DBEI and €8.4m from DAFM). This provision for expected loss is higher than the original scheme and reflects the increased risk of default.[37]

Agriculture Cash Flow Support Loan Scheme[38]

The Central Bank's SME Market Report provides data on lending to non-financial SMEs. New lending to the agri food sector has remained fairly consistent since 2010 and the Primary Industries sector accounted for the highest levels of new lending since then, only recently being overtaken by the "Wholesale, Retail, Trade, Repairs" sector. Annual new lending in 2019 was €830million, which was a decrease of 3% compared with 2018 (both at the end of Q1).

Excluding Financial Intermediation and Property Related Sectors, the sector accounted for 24% of all new SME loans in 2018 (primary agriculture accounts for €741m, down from €790m in 2017, or 21% of total lending). During the same period, new lending to Food and Beverage companies was €104m, or 3% of the total. This is down on the 2017 figure of €189m. There has been a downward trend in the amount of loans outstanding in the sector, with the figure standing at €3.509 billion at the end of Q1 2019, a 31% decrease since 2010 when the figure was over €5billion.

DAFM launched the ACSLS, delivered through SBCI, in 2017, providing financing of €150m to the agriculture sector. The scheme provided farmers with a low cost, flexible source of working capital, with the intention of ensuring the economic sustainability of farm enterprises.[39]

Loans of up to €150,000 were available under the scheme, for a term of 1 to 6 years. The interest rate on the loans was set at 2.95%, which was facilitated by a 2% subsidy from the Exchequer.[40] The scheme was oversubscribed within two months. Responsibility for the appraisal of loan applicants resided with the banks. The banks appraised each loan application according to their normal terms and conditions, which included a review of the farmer's credit rating, a review of farm accounts for the previous three years, and a confirmation of an applicant's tax affairs.[41]

SBCI provided a guarantee of 80% on all loans up to a portfolio maximum of 15%, and a counter-guarantee of 50% was provided through EFSI - COSME. In the case of a valid claim within the portfolio

[37] Information provided by DBEI.
[38] Information in this section comes from the following paper, unless otherwise stated https://www.agriculture.gov.ie/agri-foodindustry/agri-foodandtheeconomy/agri-foodbusiness/agriculturecashflowsupportloanscheme/
[39] Department of Agriculture, Food, and the Marine (2018). Agriculture Cash Flow Loan Support Scheme.
[40] Kirby (2018). State-Supported Loan Schemes: A Preliminary Analysis.
[41] Department of Agriculture, Food, and the Marine (2018). Agriculture Cash Flow Loan Support Scheme.

cap, the SBCI pay the claim and subsequently claim from the EIF. There was a once-off cost to the Exchequer in 2016 of €25m (€13.9m in Exchequer funding and €11.1m in EU Exceptional Adjustment Aid), which covered the interest rate subsidies (€12.8m[42]), operational costs, and cash to cover the guarantee.[43] There is no contingent liability to the Exchequer arising from the scheme. SBCI has a maximum exposure of €9m (€150m*80%*50%*15%) relating to potential credit losses. Beyond this maximum exposure, all further losses would be incurred by the partner banks.[44] There is also the potential for unused guarantee funding to be returned to the Exchequer at the end of the scheme. According to DAFM, €4.6m has been designated as unused to date, and this will contribute towards the funding of the proposed expansion of the FGLS.[45] Therefore, the actual cost to the Exchequer of the scheme will only be known once the loan terms on all approved loans have expired.

Credit Guarantee Scheme[46]

The CGS was launched in 2012 'to address specific market inefficiencies that lead to undersupply of lending to SMEs', and it was subsequently revised in 2015 and 2017. The current legislation is S.I. No. 70/2017 – Credit Guarantee Scheme 2017.[47] The scheme aims to 'assist viable SMEs, which under normal lending criteria are unable to borrow from their bank'. The scheme is designed to address specific barriers to lending: those where a business has insufficient collateral for additional credit facilities under participating finance providers' credit policies; or where a business is in a novel market, sector, or technology which is perceived by finance providers as higher risk under current risk evaluation practices.[48] Eligible SMEs must meet at least one of these conditions. Analysis of CGS shows that all the borrowers for whom loans were approved between 2017 and 2020 stated they had inadequate collateral.[49]

The scheme provides guarantees on term loans, demand loans, and performance bonds. Under the CGS, facilities from €10,000 to €1m are available, for a term of up to 7 years. The participating lenders are AIB, BOI, and Ulster Bank. The lenders are responsible for the credit risk evaluation, lending decisions, and lending management. As part of the scheme, the borrower pays a premium to access the state backed lending. The maximum permissible premium is 2%, but it is currently 0.5% for a

[42] Correspondence with DAFM, June 12th 2020.
[43] EY (2019). Strategic Banking Corporation of Ireland. External Strategic Review.
[44] Government website (2018). ACSLS Spending Review.
[45] Correspondence with DAFM.
[46] Information in this section comes from the SBCI website, unless otherwise stated https://sbci.gov.ie/products/sme-credit-guarantee-cgs
[47] Irish Statute Book (2017). Credit Guarantee Scheme.
[48] Ibid.
[49] Authors' analysis of data provided by SBCI.

period of 12 months, and it will then revert to 1%. The interest rate on the loans is the commercial rate of the participating bank plus the premium.

The CGS contains an Exchequer guarantee of 80% on each loan up to a portfolio maximum of 13%. This means that the Exchequer compensates the banks for 80% of every loan that defaults, up to a limit of 13% of the overall portfolio of lending. Previously, the guarantee on each loan was 75% and the portfolio limit was 10%.[50] The Exchequer faced a maximum contingent liability of €6.3m on the SME Credit Guarantee Scheme as of 31st December 2019.[51] This represents the maximum cost to the Exchequer if all loans currently lent out (up to 13% of the portfolio) defaulted. There is an annual contingent liability cap of €15.6m for DBEI.[52] The Government is repurposing the CGS in response to COVID-19 to provide counter-guarantees to the banks, mitigating credit risk and the need for collateral.[53] The scheme will be expanded by €2bn and the portfolio cap will be removed, pending a Government decision. Thus the maximum Exchequer exposure would be €1.6bn on this €2bn (€2bn*80%). The expanded CGS will be a time-bound scheme, whereby loans will have to be drawn down by 31st December 2020, in line with the European Commission's Temporary State Aid Framework.[54] As a result of COVID-19 a further alteration to the scheme is a reduction in the premium to 0.25% for year 1, with a 0.5% premium in years 2 and 3, and a 1% premium in years 4 – 6.

Microfinance Ireland

Microfinance Ireland was established by the Government in 2012 as a not-for-profit lender to deliver the Microenterprise Loan Fund. The fund was established to 'provide loans to newly established or growing microenterprises across all industry sectors with commercially viable proposals that do not meet the conventional risk criteria applied by commercial banks'.[55] MFI have 5 types of loan on offer, including a COVID-19 loan.[56]

MFI provides loans of between €2,000 and €25,000 for commercially viable proposals. The maximum loan size has been increased to €50,000 for businesses affected by COVID-19 (where projected turnover or profit is at least 15% lower as a result of COVID-19). MFI loans are normally for a term of up to 3 years, with the exception of the expansion loan package, with terms of up to 5 years. MFI's normal interest rate is 7.8% APR and 6.8% if a firm applies though an application partner (local

[50] DBEI (2013). Review of SME Credit Guarantee Scheme.
[51] SBCI (2019). 4th Quarter Report of 2019 of the Credit Guarantee Scheme.
[52] Parliamentary Budget Office (2020). The COVID-19 Pandemic: Government Supports for Business.
[53] SBCI website.
[54] European Commission (2020). Temporary Framework for State aid measures to support the economy in the current COVID-19 outbreak.
[55] DBEI (2015). Review of Microfinance Ireland 2015.
[56] Microfinance Ireland (2020). Our Loan Packages.

enterprise offices, local development companies, and banks). The interest rate on the COVID-19 loans is 5.5% or 4.5% if a firm applies through an application partner. There is also a six months interest-free period and a deferral of payments for six months on the COVID-19 loans. MFI also offer free mentoring on many of their loan programmes.

MFI initially had two main funding streams, which were outlined in the Microenterprise Loan Fund Act 2012. The Social Finance Foundation could borrow up to €25m at any one time to lend to MFI, lent in turn to microenterprises. Secondly, the Minister for DBEI provided monies to MFI, and the original legislation capped this at €25m. This Exchequer finance payed for salaries, operating costs, and a significant portion of loss cover. The Microenterprise Loan Fund Amendment Act 2020 has amended the limits on Exchequer funding and the borrowing powers of MFI, raising the Exchequer funding limit to €95m[57]. There was also an increase to the legislative ceiling on outstanding borrowings by Microfinance Ireland from €25 million to €100 million. In total, MFI have drawn down €34.8m in Exchequer funding, €14.8m of this in 2020 alone. MFI also benefit from an Employment and Social Innovation (EaSI) guarantee under the EIF which facilitates a higher risk profile of lending.

A major difference between MFI and other State-supported loan schemes is that MFI conducts loan application assessment, loan approval and decline, management of the loan book, and recovery of loans, rather than commercial banks. When MFI was established, all loan applicants had to provide evidence that they were rejected by a bank for a loan before they were deemed eligible for a MFI loan. This was a safeguard against crowding out the private sector, by ensuring the lending was additional. Following DBEI's 2015 Review of MFI, the refusal requirement for loan applicants was removed. The interest rate on the loans remains above average however. According to the Department of Finance SME Credit Demand Survey, the average interest rate on outstanding loans for microenterprises is 5.38%.[58]

[57] DBEI (2020). Legislation to enable major expansion of Microfinance Ireland Covid-19 Loan Fund and SBCI Future Growth Loan Scheme.
[58] Department of Finance (2019). SME Credit Demand Survey – October 2018- March 2019.

3. Insights from the economic literature on the design and evaluation of State-supported loan schemes

This section of the paper outlines the evidence from the academic and international policy literature on best practice in the design, monitoring, and evaluation of public credit guarantee schemes[59]. While the CGS is the only 'public credit guarantee scheme' in operation in Ireland, the other risk-sharing schemes, such as the FGLS and WCLS, contain State guarantees. The difference between these schemes and the CGS is that costs are provided upfront, to cover the expected loss on the portfolio, rather than costs being contingent as in the CGS. Nevertheless, the literature on public credit guarantee schemes is relevant for these other risk-sharing schemes, because they represent significant State interventions in the credit market and contain sizeable guarantees. Understanding how these schemes should be designed and evaluated is especially important given the unprecedented expansion in these supports in the wake of the pandemic, as well as the previous expansion of these schemes in Ireland in the aftermath of the financial crisis[60].

Beck et. Al. (2010), in their assessment of partial credit guarantees, find that there is wide variation in the design of schemes internationally, in terms of the role of the government and private actors, organisational structure, and risk management and pricing mechanisms.[61] Honohan (2008) offers an insightful discussion on the design of public credit guarantee schemes.[62] Given the evidence of market failure in the provision of credit to SMEs, Honohan argues that a 'well-designed and well-targeted policy intervention *might* improve welfare.' First of all, a well-designed policy intervention ought to have clearly defined objectives, but the experience internationally shows that the objectives of public credit guarantee schemes are often vague and diverse. A lack of clearly-defined objectives poses a major barrier to the proper evaluation of schemes ex-post, as it is not clear what the scheme intended to do at the outset. Secondly, given the risk of moral hazard and distortions of incentives that can result from State intervention in the credit market, attention to the design and operation of schemes is particularly important. Considerations include the respective roles of the State and commercial lenders, who conducts credit risk appraisal, the level of guarantee, the pricing of the scheme, whether premiums and fees are charged and whether there are penalties for lenders with higher default rates. In general, some of the best-regarded schemes, according to Honohan, leave the responsibility for credit risk appraisal with the commercial lenders. This is generally more cost-effective, and it makes sense if the guarantor (the State, in this case), does not have an informational advantage over the

[59] Further comment on the Irish schemes features in the discussion section.
[60] Further evaluation is offered in the discussion section.
[61] World Bank (2008). The Typology Of Partial Credit Guarantee Funds Around The World.
[62] Honohan (2008). Partial Credit Guarantees: Principles and Practice.

commercial lender. The risk of a commercial lender assigning the more risky borrowers in a portfolio to the guarantee scheme can be mitigated by charging penalties for high claim rates. Furthermore, the rate of guarantee has important implications for the incentives of commercial lenders and the costs to the State. The evidence suggests that a guarantee of between 70% and 80% is the norm. Low guarantee rates generally fail to attract lenders to the scheme. But if a guarantee rate is too high, banks may not have an incentive to conduct robust credit risk appraisal. Beck et. Al (2010) explain that guarantees can be provided at the level of the individual loan, or the level of the portfolio, and that the former are more costly for the guarantor though they may allow for better screening and risk management. Finally, the lending criteria or eligibility criteria are an important consideration of scheme design, and there is a wide variation in the criteria across schemes internationally, from broad criteria to more narrowly defined criteria. Some schemes, such as the US SBA, have an additionality criterion where lenders must determine that the borrower's need for credit cannot be met without the guarantee. In general, the trend has been towards less complicated criteria over time, but this increases the probability of deadweight loss. This increase in risk of deadweight loss arises from removing the burden of proof from lenders to demonstrate that the borrower could not access credit through traditional, private, means. On the other hand, more narrow eligibility criteria may increase bureaucratic costs, limit take-up, and distort the market (Beck et al, 2010).

The literature also shows that ex-ante financial appraisal of the costs of public credit guarantee schemes is challenging. The costs of public credit guarantee schemes are contingent and in the future. Their true fiscal costs are generally unclear and can often be under-stated at the outset. This is true for the CGS. It should be noted, however, that there are important differences between the CGS and the other risk-sharing loan schemes in Ireland with respect to costs. Funding for 'expected loss' are provided upfront for the ACSLS, FGLS, and WCLS. The actual costs of all schemes, however, only become evident over time as loan losses begin to emerge. Therefore, ex-post evaluation of the costs of the schemes is possible once the portfolio matures and losses are realised. According to Honohan (2008), in relation to public credit guarantee schemes, it is widely accepted that policy-makers should have systems in place to anticipate losses, create financial reserves, and channel funds in a transparent way to clearly demonstrate the costs of guarantees, but this is difficult to do in practice, given the uncertainty inherent in the schemes. Appraisals of costs must be conscious of the risk of over-optimism in this context of uncertainty. Ultimately, the cost of the schemes will depend on factors such as scheme design, take-up, default rates and the economic context, and the net cost of schemes

internationally varies widely. Therefore, it is important that each loan scheme is monitored and evaluated regularly, as defaults will tend to increase with time[63].

There is broad agreement in the literature of the need for monitoring and evaluation of public credit guarantee schemes. According to the OECD (2017), there is no internationally agreed set of best-practice methods to evaluate the performance and cost-effectiveness of public credit guarantee schemes.[64] Beck et al (2010) state that there is a lack of evidence to inform the design, implementation, and evaluation of these policy instruments. The lack of adequate data is a barrier to the evaluation of these schemes. The OECD (2017) find that although national systems to monitor policy inputs and intermediate outcomes (number of firms receiving loan guarantees) for credit guarantee schemes have been improving over time, a challenge remains in terms of evaluating policy outcomes. Firm-level data and SME credit statistics are essential. The OECD recommends that the operators of credit guarantee schemes should provide disaggregated, firm-level, data for the purpose of evaluation, which include information on both successful and unsuccessful applicants. Ideally, these data would allow evaluators to design a counterfactual impact analysis to evaluate the programmes. The microdata are essential in this context to establish the pre-existing similarities and differences across firms. Where one data source is not sufficient, operator data may need to be linked with administrative and commercial data. The OECD and World Bank principles of these schemes recommend that evaluations of these schemes take place regularly or periodically (OECD, 2017).

The evidence in the literature on the additionality of the schemes is mixed. Additionality can be thought of in terms of financial additionality or economic additionality (Abraham and Schmukler, 2017). Financial additionality refers to whether the schemes increase credit and improve credit conditions for targeted firms. There is some evidence of schemes that demonstrate financial additionality. For example, 67% of loans guaranteed by the Canada Small Business Financing Programme have been granted to SMEs that would not have obtained credit otherwise. There is also evidence of schemes that do not demonstrate financial additionality, such as schemes in Germany that led to excessive risk taking by banks. Economic additionality refers to whether the firms who benefitted from the schemes improved their growth (number of jobs, investment etc.). There is some evidence of schemes which demonstrate economic additionality, such as in the US where guaranteed loans have been found to increase employment. The evidence also suggests that there has been a

[63] The evaluation unit at the Department of Business, Enterprise and Innovation is in the early stages of carrying out these analyses for the various Schemes. For example a CBA was carried out for the €500 million increase to the financing of the FGLS, and similar analyses for other Schemes are to follow.
[64] OECD (2017). Evaluating Publicly Supported Credit Guarantee Programmes for SMEs.

mixed experience in terms of the financial sustainability of schemes, with some schemes, for example, requiring constant financial support from government.

4. Data and Methodology

This section provides an overview of the data used in the paper. We use data made available to the IGEES Unit and DBEI Vote in DPER by the Strategic Banking Corporation of Ireland (SBCI) and Microfinance Ireland (MFI) for the purpose of this analysis. SBCI provided data on the FGLS, BLS, WCLS, ACSLS, and the CGS. Data from the MFI on their loans provided under the Microenterprise Loan Fund scheme was requested but was not supplied.

The microdata from the SBCI is made up of loan-specific and firm-specific variables, and includes data on successful applicants only. Data on unsuccessful loan applicants is not available. Such data would be useful to determine scheme effectiveness in addressing market failure and the additionality provided. Businesses in receipt of loans under State-supported loan schemes are receiving State Aid, and as part of this State Aid businesses might be required to agree to their data being used for evaluation purposes. SMEs that are rejected for loans under State-supported loan schemes do not receive State-Aid and have not have made any agreement for any organisation to review and process data related to their business. Data on unsuccessful applicants could be collected using survey and administrative data held by the CSO, which would require significant resources.

The SCBI microdata is for 2012-2020 (depending on the year of scheme creation) and includes information on variables such as firm size (number of employees, turnover, and balance sheet), region (county, NUTS code), and sector (NACE code). The data also include information from the loan application forms in terms of what eligibility criteria were met by the firms, the purpose of the loans, project costs, and other specifics. Financial information on the loans such as the interest rate, term, and lender is also provided.

For each loan scheme, we report the total value, number, and average size of loans sanctioned to 30th April 2020; the breakdown of sanctioned loans by region, sector, and firm size (as a percentage of the total value of sanctioned loans); the eligibility criteria that were satisfied; and the loan purpose. Financial information on the loans is also summarised, including the interest rates, terms, and size of the loans sanctioned. Finally, we report the proportion of the enterprise base accounted for by each region, sector, and firm size, so that the profile of borrowers under each loan scheme can be compared with the general profile of the enterprise base across these variables. Furthermore, where possible, the paper provides information on the profile of SME borrowing in general.

The data required to assess the impact of the schemes and the level of financial and economic additionality they provide are not available. This would require more detailed firm-level data and more sophisticated evaluation methodologies. Furthermore, many of these schemes have not been in operation for long enough to allow for comprehensive impact evaluation. The absence of data on unsuccessful loan applicants and its importance for the reliable evaluation of the efficacy of State-supported loan schemes is addressed in the discussion section of the paper. The paper provides an assessment of the current data with a view to how it could be improved to facilitate such evaluations in the future.

5. Data Analysis and Results

This section provides a summary of all loans that have been sanctioned under the various schemes, since their inception, by sector, region, firm size, interest rate, and maturity. This analysis does not include loans sanctioned since the outbreak of the COVID-19 pandemic for most of the schemes, as the data are not available at this time. Future work is intended to address this omission. Kirby (2018) previously stated that it would be useful to analyse the sectoral and regional breakdown of loan approvals and drawdowns under the BLS in order to assess whether the scheme targeted the firms most exposed to Brexit.

Loan Approvals, Financing and Liability

Table 3 summarises all loans sanctioned to 30th April 2020 under each scheme by the total value of all loans sanctioned, the number of loans sanctioned, and the average loan size under the scheme. It also shows revised amounts of financing under the schemes in 2020. If the total volume or quantity of lending is considered to be the output of the schemes, the FGLS is the loan scheme with the highest output in terms of the value of lending (€221.9m) and the ACSLS is the loan scheme with the highest output in terms of the number of loans sanctioned (4,241 loans). Take-up of loans varied widely across schemes. For example, under the ACSLS, almost all of the €150m of loans were lent out within a month. Similarly, take-up of the FGLS was relatively strong, with the €221.9m of lending approved to the end of April 2020 out of a total of €300m. The BLS, however, experienced very low take-up, with only €52.5m of lending approved. It appears that many businesses applied to the scheme at eligibility stage but did not proceed to drawing down lending, perhaps due to uncertainty around Brexit. Similarly, take-up of loans under the CGS has been much lower than expected, with only €108.3m of lending approved to the end of April 2020. It was envisaged at the outset of the scheme that there would be an annual lending portfolio of €150m, but this never transpired.

Different levels of Scheme uptake can be driven by a range of factors. Awareness of firms about the Schemes through dissemination of Scheme information and marketing have not been considered in the analysis but could have a bearing on uptake. Scheme characteristics such as interest rate and loan term will influence firms' demand for a Scheme, while the extent of the guarantee and portfolio cap will determine the attractiveness of the schemes to banks and influence their level of engagement. For example, SMEs may be attracted to longer loan terms. The FGLS, which had high uptake, offers the longest loan term of all Schemes (10 years). In comparison, the BLS/WCLS, which had very low uptake, has a much shorter loan term (3 year max). Interest rates are important to firms to maintain low repayment costs, and the ACSLS had rates (2.95%) well below the market rate (between 5% and 6%), which may go some of the way to explaining the rapid uptake of that Scheme. The CGS, while offering an 80% guarantee, capped this at 13%, greatly reducing the level of exposure the State was removing for banks. This may have undermined bank engagement in the scheme, and indeed, only one bank actively engaged in the Scheme from 2012-2020. The recent removal of the portfolio cap in the CGS scheme is likely to significantly increase bank-engagement in the Scheme.

Table 3 Summary of financial details of State-supported loan schemes (loan amounts, guarantees)

	BLS/WCLS	FGLS	MFI	CGS	ACSLS
Maximum available initially (€)	€300m	€300m	€50m	€150m per year	€150m
Approved increase (€)	€125m	€500m	€50m	€2,000m	
SBCI guarantee	80%	80%	N/A	80%	80%
EIF counter-guarantee	50%	80%		N/A	50%
Portfolio cap	0%	0%		13%*	15%
Value of approvals (€)	€52.5m	€221.9m		€108.3m	€144.7m
Number of approvals	257	1,043		648	4,241
Average (€)	€0.20m	€0.21m		€0.17m	€0.03m

Note: * portfolio cap will be removed for temporary CGS until December 31st 2020

The total value of State-Supported Loan Approvals (minus lending through Micro Finance Ireland), ran to approx. €527.4 million over the life of State-Supported Lending since 2012. The level of Exchequer-

exposure associated with loans approved under the schemes was approx. €125.6 million in total. State-guaranteed financing available to firms at the outset of 2020 came to approx. €475.6 million. The level of exchequer-exposure associated with available financing, if all of the schemes were to have been fully subscribed in that period, would have been approx. €127.2 million.

As shown in the second row of Table 3, 2020 has seen an increase in financing available through State-Supported Loan Schemes. The combined value of loans approved to date plus financing currently available (minus lending through Micro Finance Ireland), amounts to €3.4 billion. The BLS/WCLS and FGLS both require upfront payment of the State-guarantee on the expected loss; therefore this represents cost of €170 million and €128 million respectively. The ACSLS has been fully subscribed and no additional financing has been brought about in 2020 under the scheme. The CGS operates through a contingent liability framework therefore the eventual costs of the State-guarantees will be dependent on the scale of loans approved by banks, drawn down by firms, and the level of default that then arises within the portfolio.

Region

Table 4 provides the percentage breakdown of total loan values by NUTS 3[65] region. The proportion of the total enterprise base, Gross Value Added (GVA), and employment accounted for by each region is also represented in the rightmost columns. The regional distribution of lending under each scheme should be considered according to the objectives of the different schemes. For example, 40% of lending under the FGLS is for the agriculture sector, which will be mostly outside Dublin. The drawdown of Brexit Loan Scheme lending will likely be in regions more impacted by Brexit. It is clear from the table that under some of the schemes, certain regions are under or over-represented, compared with their share of the overall enterprise base, GVA, or employment. For example, where the Border region accounts for 7.8% of the enterprise base in the business economy, it accounts for 16.2% of the value of loans sanctioned under the FGLS. The comparison with the regional distribution of enterprises does not hold for the ACSLS, as it is the regional distribution of farms that is relevant in this case.[66]

[65] NUTS refers to a terrestrial geocode system used in Ireland and refers to the Nomenclature of Territorial Units for Statistics. NUTS 3 divides Ireland into regional subdivisions

[66] DAFM (2018) reflect that a total of 36% of funds were drawn down in the BMW region, while the Mid-East, Mid-West, South-East, and South-West accounted for the remaining 64% of loans.' The paper concludes that the ACSLS was indirectly targeted at regions exposed to Brexit.

Table 4 Regional distribution of total loan values

	BLS	FGLS	MFI	CGS	ACSLS	Enterprise base	GVA	Employment
Border	11.2%	16.2%		2.1%	14.3%	7.8%	3.2%	5.8%
Dublin	33.8%	15.3%		45.0%	0.2%	32.8%	41.0%	46.6%
Mid-east	16.9%	8.2%		11.3%	8.4%	13.6%	8.7%	10.1%
Midlands	3.8%	9.3%		4.4%	11.4%	5.0%	2.7%	3.5%
Mid-west	3.8%	11.9%		11.9%	15.0%	9.2%	N/A	7.3%
South-east	7.4%	10.7%		4.9%	17.5%	7.8%	5.4%	6.5%
South-west	12.6%	13.8%		13.1%	22.7%	14.5%	N/A	12.4%
West	10.5%	14.6%		7.0%	10.6%	9.3%	4.1%	7.1%
Blank				0.2%				0.7%
Total	**100%**	**100%**		**100%**	**100%**	**100%**	**100%**	**100%**

Source: SBCI provided data on loan schemes. Information on the regional distribution of the enterprise base, GVA, and employment is from the CSO Statbank.

Sector

Table 5 provides the percentage breakdown of total loan values by NACE sector. The percentage refers to the total value of lending sanctioned under the schemes, rather than the total number of loans. The proportion of enterprises accounted for by each sector is also provided. Under the BLS, the three sectors that account for the largest proportion of lending are: manufacturing (44%), ICT (22%), and Wholesale and Retail (18%). Under the FGLS, agriculture, forestry, and fisheries is the largest sector in terms of the value of loan approvals, accounting for 25.5% of lending. The Wholesale and retail sector and the manufacturing sectors are the next largest sectors in terms of loan approvals under the FGLS, accounting for 19.1% and 12.5% of the value of loan approvals respectively. The wholesale and retail sector accounts for the largest proportion of all lending under the CGS since 2017, representing 17% of lending on the scheme, followed by professional, scientific and technical activities which represent 14% of all lending under the scheme. The uptake of Schemes more aligned to sectoral needs appear to have more successful rates of uptake (ACSLS, FGLS) compared to the more broadly targeted schemes (CGS, BLS/WCLSL).

Table 5 Sectoral distribution of total loan values

	BLS	FGLS	MFI	CGS 17-	ACSLS	Enterprise Base	GVA	Persons Engaged
Accommodation And Food Services	0.25%	5.88%		9.62%		5.7%	1.8%	9.2%
Administrative And Support Service Activities	0.91%	1.80%		7.15%		5.5%	6.2%	6.9%
Agriculture, Forestry, And Fishing	0.67%	25.49%		2.79%	100%			
Arts, Entertainment, Recreation, And Other Service Activities		1.86%		10.04%		9.5%	1.4%	4.9%
Construction	6.55%	5.38%		9.95%		16.9%	2.8%	6.7%
Education	1.83%	2.00%		0.56%		4.3%	3.0%	8.0%
Electricity, Gas, Steam, And Air Conditioning Supply	0.21%	0.23%				0.2%		0.5%
Financial And Insurance Activities	0.17%	0.95%				2.4%	13.5%	5.0%
Human Health And Social Work	0.08%	5.04%		6.39%		6.2%	4.6%	11.0%
Information And Communication	22.21%	5.56%		5.34%		4.7%	12.1%	5.0%
Manufacturing	43.54%	12.50%		12.45%		4.9%	36.5%*	10.7%
Mining And Quarrying	0.10%	0.59%				0.1%		0.2%
Professional, Scientific, And Technical Activities	3.42%	10.23%		13.73%		12.9%	4.1%	7.1%
Public Administration And Defence; Compulsory Social Security		0.31%						
Real Estate	0.11%	0.26%		0.56%		4.5%		1.4%
Transportation And Storage	1.80%	0.81%		3.69%		7.6%	2.5%	4.9%
Water Supply, Sewerage, Waste Management, Remediation	0.05%	2.00%		0.41%		0.3%		0.5%
Wholesale And Retail	18.12%	19.13%		17.32%		14.3%	7.5%	18.0%

Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Source: SBCI provided data on the loan schemes. Information on the sectoral distribution of the enterprise base, GVA, and employment is from the CSO statbank. Note: * Represents industry rather than manufacturing alone but manufacturing accounts for vast majority of industry GVA

Firm Size

Table 6 illustrates the percentage of the value of loans sanctioned under each scheme by the firm size of the recipient. The table also shows the percentage of the enterprise base accounted for by each firm size category. The vast majority of lending under the schemes has been to micro-enterprises and small enterprises. There is no information available on the profile of market lending to Irish SMEs by firm size to compare this profile with. It is assumed, however, that smaller enterprises are less well-served in the credit market than large enterprises. Enterprise 2025 Renewed states that Government will support the development of SMEs through strengthening aspects of the business environment, such as by addressing the investment gap for SMEs.[67]

Table 6 Distribution of total loan values by size of recipient firms

Firm size	BLS	FGLS	MFI	CGS	Enterprise base
Microenterprise	23.0%	52.4%		36.4%	92.1%
Small enterprise	54.0%	36.0%	N/A	51.8%	6.5%
Medium enterprise	23.0%	11.4%	N/A	9.6%	1.2%
Small mid-cap		0.2%	N/A	N/A	
Other				2.2%	
Total	**100%**	**100%**		**100%**	**99.8%***

Source: SBCI provided data on loans. Information on the distribution of enterprises by firm size is from CSO statbank. Note: * Remainder accounted for by large enterprises (includes small mid-caps).

Interest Rates

Table 7 summarises the proportion of loans (number of loans) under each scheme that have been sanctioned in various interest rate bands. While 100% of ACSLS loans were sanctioned at a rate of 2.95% (according to the scheme design), and 97.7% of loans under the BLS have been sanctioned at a rate of 4%, there is more variation in the interest rates of loans sanctioned under the FGLS and the CGS 2017. 60.7% of loans sanctioned under the CGS since 2017 have been at interest rates of 5% or over. This is closer to the average market interest rates than the other schemes.

[67] Government of Ireland. Enterprise 2025 Renewed. Page 13.

Table 7 Distribution of loans granted by interest rates

Interest rate	BLS	FGLS	MFI	CGS 17 -	ACSLS
2% - 3%		4.7%			100%
3% - 4%	100%	30.5%		9.6%	
4% - 5%		64.8%		29.6%	
5%+				60.7%	

Source: SBCI data

Loan Term

Table 8 shows the percentage of loans (number of loans) that have been sanctioned by loan term. It is clear that some of the schemes are clearly differentiated from each other in terms of the loan terms available. For example, the FGLS is the only loan scheme providing loans at terms of greater than 7 years. It is also clear that within certain loan schemes, there are terms that are most common, for example a term of 9 – 10 years under the FGLS.

Table 8 Distribution of loans granted by loan terms

	BLS	FGLS	MFI	CGS	ACSLS
1 -12 months	3.9%			19.0%	19.1%
13 – 24 months	2.3%			6.5%	17.7%
25 – 36 months	93.8%			13.9%	12.4%
37 – 48 months				4.5%	6.2%
49 – 60 months				36.7%	24.8%
61 – 72 months				1.7%	19.8%
73 – 84 months				16.0%	
85 – 96 months		25.9%		0.2%	
97 – 108 months		1.4%			
109 – 120 months		72.7%		1.1%	
120+ months				0.3%	
Unknown				0.2%	0.0%

Source: SBCI data

Purpose of Loans

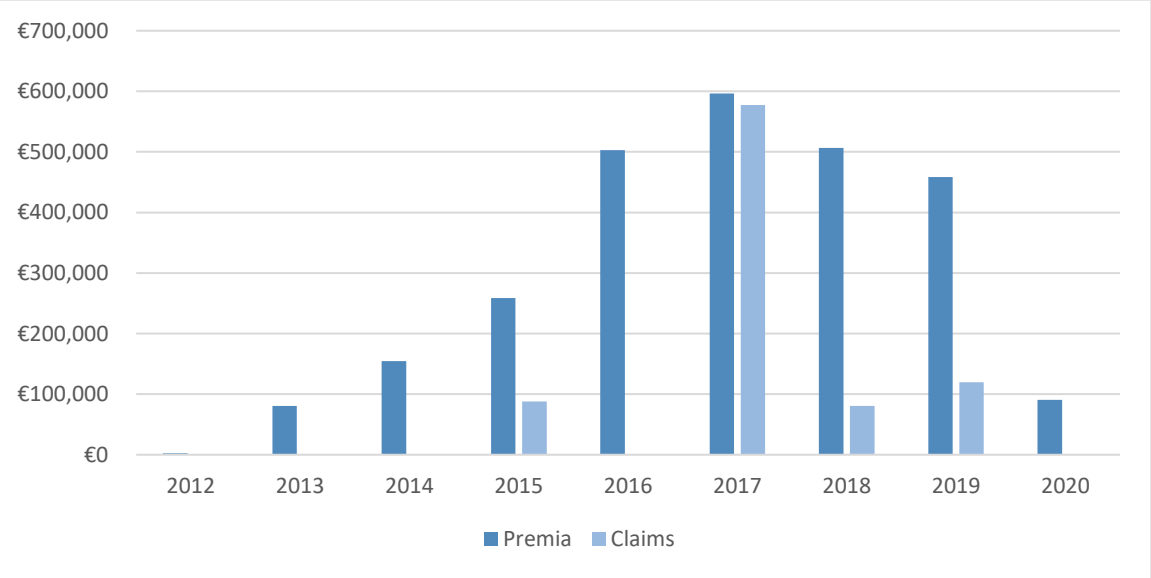
Loans approved under each of the five loan schemes are approved on the basis of the loans being used for a specific purpose, which is outlined in the application forms for the schemes. The loan-level microdata from SBCI contains information on the purpose of each loan sanctioned under the schemes. Business expansion is the purpose that accounts for the largest proportion of loans approved under

the FGLS. 47.9% of loans approved (in value terms) under the FGLS are for business expansion purposes. Premises improvement is the second largest reason. All of the loans approved under the BLS are for working capital. Over 60% of the value of loans sanctioned under the CGS have also been for working capital. Finally, all of the loans sanctioned under the ACSLS were for working capital for farmers. While it is useful to know what the agreed purpose of the loans was for, it would be valuable to have audit information on what the loans were actually used for, to assess whether there is a risk that they are used for purposes other than those agreed at the outset. Kirby (2018) points out that loans sanctioned under the BLS are subject to audit, in part to determine whether finance accessed under the scheme was used for the intended purposes as well as to what extent the firm was impacted by Brexit. Audit information would be a valuable input into future ex-post evaluations of State-supported loan schemes.

CGS: Premiums and Financial Sustainability

The CGS is unique amongst the schemes analysed in this paper, as it includes a premium which is paid by the borrowers on top of the interest rate in order to contribute towards the cost of the guarantees. During the years 2012 – 2019, premia of €2.56m were paid on the CGS. Annual collections of premia ranged from €2,410 in 2012 to €596,543 in 2017. The purpose of charging the premium is to contribute towards the cost of the guarantee. Therefore the premium is a critical element of the scheme from the perspective of financial sustainability. From this perspective, ideally, in any given year, the fund would generate enough premiums to meet the costs of claims resulting from defaults. The CGS Quarterly Reports provide information on the scheme's contingent liability and claims. There had been no claims to the end of 2019 on the most recent CGS scheme (2018). On the legacy schemes, however, a number of claims were made between 2012 and 2019.[68] In 2017, there were €577,168 worth of claims on the legacy schemes. The premia collected in 2017 was €596,543. In every year the amount of premia collected has exceeded the amount of claims made.

Figure X: The Value of Premia Collected Annually by DBEI & claims on the CGS, 2012 – 2019 (€)



Source: SBCI Data

[68] SBCI (2019). 4th Quarter Report of 2019 of the Credit Guarantee Scheme.

6. Discussion

The following discussion is based on insights from the overview of Irish state supported loan schemes, the reviewed literature on design, monitoring, and evaluation and the analysis of available data in previous sections.

Clarity of Objectives

In order to justify state intervention in the market for credit through State-supported loan schemes, it is important that there is clear evidence of specific market failures that the schemes can address (Kirby, 2018). Honohan (2009) points to clear evidence of the existence of market failures in SME lending in general. The difficulty for SMEs in gaining access to debt arises due to SMEs being what Grunert and Norden (2012)[69] refer to as "informationally opaque and bank dependent"[70]. It is a requirement of EU State Aid rules that any intervention in the market for credit addresses a market failure. In this respect, all of the Irish schemes address market failures in the SME market for credit. This analysis was not in a position to assess the specific market failures that the various schemes are addressing, such as the level of long-term lending available to SMEs or the level of finance available to microenterprises, as the data was not available to do this.

It is important that State-supported loan schemes have clearly defined and distinguishable objectives. Where State-supported loan schemes have multiple objectives, these should be clearly outlined in programme documentation, in order to enable future evaluations. For example, while the FGLS responds to a market failure in long-term lending, it is also being deployed to help businesses grow amidst the economic fallout from the COVID-19 pandemic. Secondly, there may be a risk of duplication in scheme design, whereby multiple loan schemes provide a similar intervention to the same enterprises, potentially leading to higher aggregate scheme costs and complicating the process of monitoring and evaluating effectiveness. This outcome arises because the EU commission funds various schemes which are made available to all countries within the EU. This means that the scale of the funding can be limited within each scheme, requiring further schemes to be set up at the domestic level, to avail of future commission funding streams.

The CGS, BLS/WCLS, MFI loans, and FGLS have all been expanded to improve access to finance for SMEs during the pandemic. The combined value of loans approved to date plus financing currently available through the schemes (minus lending through Micro Finance Ireland), amounts to approx.

[69] Small Business Economics (2011). Bargaining power and information in SME lending.

[70] Firms can have unmet credit demand due to reasons other than market failure. The viability of a firm or a project are also relevant. Market failures in SME financing arise from informational asymmetries, a lack of competition or under-capitalisation amongst the banks, or the existence of positive externalities

€3.4 billion. The CGS operates through a contingent liability framework, therefore the guaranteed amount for which the state is liable is not known, or paid, until the losses are incurred. The ultimate cost to the State of the CGS guarantee in 2020 will depend the scale of loans drawn down by firms and the performance of the loan-portfolio, in terms of repayment/default rates. The objectives of these schemes remain similar in that they are still addressing an apparent market failure in the access to credit for SMEs, but due diligence is required to ensure this is the case. It will be critical that as private incentives to provide lending recover, the schemes are withdrawn/downsized accordingly.

Loans vs Grants

The significant expansion of State-supported loan schemes in response to COVID-19 can be largely explained by their cost characteristics as compared to business supports based on direct payments or grants. Liquidity shortages due to the COVID-19 crisis can prohibit investment and business activity and cause lasting damage to the economy. While counter-cyclical policies increase government spending during periods of low demand, the scale of spending required to resolve the potential liquidity crisis, either through business grants, equity initiatives or other direct payments, would be unprecedented. Direct supports mean greater upfront costs to the state. These would have to be funded through tax receipts or through borrowing on capital markets. In contrast, State-supported loan schemes either avoid these upfront costs, or reduce them significantly, by providing state guarantees instead of direct payments. Insofar as loan repayment rates within the schemes can be expected to remain in line with those forecast, the State supported loan schemes have the potential to save the state significant costs, while still acting to improve the liquidity environment for Irish businesses.[71]

Market distortions and scheme design

Information asymmetry, i.e. the lack of access lenders have to information on SMEs, increases lender perception of SME default-risk. For example, small start-ups applying for credit may have binding contracts with other businesses to meet certain targets. While the specifics may impact the firm's viability, the bank may not be able to access this information. When the state intervenes to improve SME access to credit, they are essentially demonstrating a lower risk aversion and a willingness to accept losses, under the assumption that the wider economic benefits will outweigh the costs of potential loan-defaults and wider economic costs associated with these schemes. State intervention

[71] The risk-sharing schemes leverage a much larger amount of lending than the costs provided up front by the Exchequer, in the case of the ACSLS, BLS, and FGLS. The CGS leverages lending by providing a guarantee, with all costs contingent rather than upfront.

alters the distribution of risks and costs and raises questions of moral hazard[72] and the distortion of private lender incentives. The literature identifies these questions and suggests that they can be addressed through prudent scheme design and operation.

Commercial lenders have established expertise in credit appraisal, and the literature suggests that some of the most well-regarded public credit guarantee schemes internationally are those that involve state-private partnering, leaving responsibility for credit risk appraisal and loan management with the commercial lenders. Such an approach has certain benefits. It is generally more cost-effective if there is no reason to think that a State actor would have any informational advantage over a commercial lender and it can support the building of relationships between lenders and SMEs, whereby lenders build up their knowledge of the sector.

In the case of the Irish schemes, there are examples of both state-private cooperation (ACSLS, BLS, FGLS, CGS), where the banks are responsible for risk appraisal and loan management, and a uniquely state operated scheme (MFI), where MFI bear these responsibilities. With respect to the state-private schemes (FGLS, BLS, etc) there may be a risk that commercial lenders will assign the more risky borrowers in a portfolio to the guarantee scheme, selecting lower risk borrowers for purely private portfolios. The literature cited the use of penalties for high claim rates to offset this potential behaviour. None of the Irish schemes include such penalties. However, the ACSLS and the CGS both include loan-level guarantee caps of 80% and portfolio caps, of 15% and 13% (before COVID-19) respectively. These loan-level and portfolio caps are intended ensure that commercial lenders retain a significant fraction of risk, to act as a disincentive for overly risky lending. Regular monitoring and evaluation of these schemes is necessary in order to clarify whether the predetermined portfolio-caps successfully achieve this aim. Sufficient data collection in this regard would allow for analyses that explore the responsiveness of lending decisions (and default rates) to variations in the extent of portfolio caps.

The literature showed that internationally, many schemes provide 100% guarantees, and suggested that this is not in line with providing incentives to lenders to properly risk assess borrowers. If a guarantee rate is too high, there is a risk that banks may not have an incentive to conduct robust credit risk appraisal, as they would if they held more of the risk. Overall, loan-level guarantees of 70% - 80% appear to be the norm; any lower, and the guarantees generally fail to attract lenders.

[72] Moral hazard refers to a situation where an entity has an incentive to take on risk but does not bear the full extent of the downsides to taking that risk. In this case, it refers to the incentive for banks to lend to excessively high-risk borrowers if State-guarantees are too generous.

The SBCI provides guarantees of 80% on individual loans under the BLS, FGLS, ACSLS, and CGS. The CGS provides a guarantee of 80% on all loans up to a portfolio limit of 13% and the ACSLS contains a portfolio limit of 15%. This means that in practice, under the CGS and ACSLS, the majority of the overall risk resides with the commercial lenders, even though there is a guarantee of 80% on individual loans. On the other hand, the BLS and the FGLS contain no portfolio limit, though they do contain a counter-guarantee from the EIF. Therefore, on these schemes, the SBCI and the EIF hold the majority of the risk, rather than the commercial lenders. On the BLS, the SBCI and the EIF hold 40% of the risk each, and the lenders hold 20% of the risk. This demonstrates the wide variation in scheme design of State-supported loan schemes in Ireland. Further work should explore the implications of these various designs for lender incentives.

The new temporary CGS will have no portfolio cap, which is a major change from the pre-existing scheme which had a portfolio cap of 13%. The maximum lending under the new CGS is €2bn, compared with €108m of lending under the pre-existing scheme since 2012. The removal of the portfolio cap of 13% may have implications for lender incentives. The lenders, however, retain 20% of the risk on each loan which is intended to act as a disincentive for risky lending practices. As attested to in the literature, the existence of penalties for losses, or substantial exposure to potential portfolio losses, is a prerequisite to ensuring risk-averse lending on the part of private lenders. The removal of the pre-existing portfolio cap may increase the likelihood of risky lending and subsequent default rates. The systemic nature of this risk may be compounded by the fact that the loan recipients will be operating in a recessionary environment, which will increase the likelihood of business closures and loan defaults. Combining this systemic risk with an 80% state-guarantee on €2bn of lending with no portfolio cap has the potential to give rise to significant costs to the state. That said, if the scheme is an effective means of extending essential credit to businesses in the current economic environment, preventing closures of otherwise viable businesses, the benefits may outweigh the costs of the scheme.

If conservative portfolio caps are to be replaced by more liberal ones, then the benefits of doing so need to be clearly laid out against the costs, the impacts on incentives and state exposure to potential losses. Earlier, we alluded to the fact that State supported loan schemes have the potential to save the state significant costs as liquidity supports, compared to upfront costs like business grants and equity. This outcome is contingent on whether or not losses under the various schemes are realised. In the case of the CGS it is possible that encountered losses could be greater than those anticipated, either through risky lending practices or macroeconomic downturn. Such an outcome may undermine the advantage in avoidance of upfront costs, as significant costs would still have to be borne by the state.

State supported loan scheme interest rates

Sections 2 and 5 of the paper showed that considerable interest rate heterogeneity exists across and within schemes. Some schemes, such as the WCLS, FGLS, and the ACSLS, provide loans at interest rates below the market rates, which is a condition of the EIF. In the case of the ACSLS, interest rates were significantly below the market rate. On the other hand, the CGS and MFI loans are designed to provide loans at interest rates higher than market rates. Loan scheme interest rates have implications for deadweight loss. If State supported loan scheme rates undercut commercial rates, firms that are typically able to access credit using private lending facilities are incentivised to access State-supported loans, thereby increasing the risk of displacement. Lower than market interest rates on State-supported loan schemes require a plausible justification. One justification is that the EIF require banks to pass the benefits of state aid onto borrowers, and thus interest rates have to be kept at specific levels.

The issue of interest rates and passing on state-aid benefits to consumers relates to the points made earlier on concerning the importance of clarity in scheme objectives. Assuming the intention is to address the market failure of excessively high rejection rates, then the goal is to provide credit to firms that cannot access it. Firms that typically struggle to access credit should rationally expect to pay a higher premium, so there is little justification for providing credit at interest rates that undercut commercial rates. If the intention is to support ailing businesses by providing credit at affordable rates, then the implications for the costs and benefits of the schemes, as well as factors like deadweight loss and incentive distortion, require evaluation as outlined above. Given that the state aid framework requires state aid address a market failure, it could be argued that the decreased willingness of lenders to lend during a crisis constitutes a specific market failure which the updated loan schemes are attempting to address. It is not clear, however, whether the benefits of passing on state-aid benefits to borrowers outweighs the potential costs of higher deadweight loss that result from relatively lower interest rates. Future work should investigate the relationship between interest rates and deadweight loss.

Section 5 illustrated the proportion of lending under each scheme by interest rate. In order to assess the risk of displacement on each scheme, it would be useful to have granular information on the interest rates on SME lending on the private market that included information on the sector, region, and firm size of borrowers. Otherwise, one can compare average interest rates, but this might mask important variation of interest rates across sectors etc.

Table 7 raises important questions for the design of future schemes and for further analysis. Firstly, the interest rate of 2.95% on the ACSLS stands out as particularly low, when compared with the other

schemes. The ACSLS was also over-subscribed within two months. It is unknown to what extent the comparatively low interest rates on the scheme drove strong uptake through displacement of private lending, but this is an important question for evaluators. Secondly, the vast majority of lending under the BLS and WCLS has been at the maximum interest rate of 4%, while the schemes are designed to facilitate competition below this level. Future research should explore why this competition has not necessarily transpired.

Overall, the interest rates of loans sanctioned under the schemes vary significantly across schemes, as well as within a number of schemes. The interest rate is an important component of scheme design which must strike a balance between attractiveness and minimising deadweight loss.

Lending criteria and demonstration of credit shortages

Lending and eligibility criteria are a very important component of scheme design. Ensuring loan applicants demonstrate prior rejection for credit allows the existence of financial additionality to be observed. This had initially been a feature of both MFI loans as well as the CGS loans, upon their establishment. Following reviews by DBEI this requirement was removed from both schemes.[73] Firms applying for credit under the FGLS, BLS, and ACSLS do not have to provide such evidence. The rationale behind removing this requirement for MFI was that it was too burdensome on applicants, and was reducing the number of applicants to the scheme, since borrowers had a perception that being rejected would reduce their credit score. In the case of the MFI, where the interest rates on loans are generally higher than market comparators, it is likely that the rate of displacement is minimised. This said, the absence of any rejection requirement means the deadweight loss arising from the scheme cannot be quantified. In the case of the CGS, the inclusion of a premium in the interest rate acts to reduce the risk of displacement. However similarly to the MFI, the removal of the rejection requirement on the CGS adds to the uncertainty around the financial additionality of the scheme. This concern holds also for the FGLS, BLS, and ACSLS, where there is no refusal requirement. Within each loan scheme, data on rejected loan applicants is needed, as well as more detailed data on average interest rates and lending by loan type, firm size, and sector.

Appraising and evaluating the costs of State-supported loan schemes

Monitoring and evaluation are essential in order to better understand the true costs of State-supported loan schemes in Ireland. This information could be used to inform ex-ante appraisal of future schemes and to assess the cost-effectiveness of these policy levers. As discussed in the

[73] For the CGS, see https://dbei.gov.ie/en/Publications/Publication-files/Minister%E2%80%99s-findings-and-conclusions-on-the-external-review-of-the-Credit-Guarantee-Scheme.pdf and for MFI see https://dbei.gov.ie/en/Publications/Publication-files/Review-of-Microfinance-Ireland-2015.pdf

literature review, Honohan (2008) points out that ex-ante, the cost of public credit guarantee schemes is generally unknown, as the costs are contingent and lie in the future. The CGS is unique amongst the State-supported loan schemes in Ireland in that it is a classic partial credit guarantee scheme, where the costs are contingent rather than upfront. The CGS contains a premium which is a critical feature of the scheme's financial design. To date, the annual collections of premia have exceeded the cost of claims in every year. This suggests that the Exchequer has not been called upon to cover any claims arising from the CGS to date. The expansion of the CGS to €2bn, with a removal of the 13% portfolio cap, and a reduction in the premium to 0.25% represents a profound transformation in the contingent liability for the Exchequer. Careful consideration should be given to the potential costs that may eventually be borne by the Exchequer given this expansion and how these costs can be managed over time.

Although the ACSLS, BLS / WCLS, and FGLS are also risk-sharing schemes with a guarantee, the costs for these schemes were provided upfront by the Exchequer, with no further contingent liability for the Exchequer. The 'expected-loss' contribution was based on the expected loss on the portfolio of each scheme, and the estimates were based on EIF / SBCI modelling. Nevertheless, the actual costs of the schemes for the Exchequer may be lower than the upfront cost provided, and in that case funds can be returned to the Exchequer in the future. Importantly, however, it is possible that in a scenario where there were higher than expected loan losses, and where the balance sheet of SBCI would assume excess losses, SBCI might have to be re-capitalised to balance the equity to debt ratio. Effectively, while there appears to be a maximum Exchequer exposure on each scheme, which is the provision for expected loss, there is additional, unknown risk that the Exchequer faces with these schemes.

Future steps for scheme evaluation and data collection

To determine the effectiveness of state supported loan schemes, estimation of several key parameters is required. Chief amongst these are the degree of financial and economic additionality. The ideal is to be able to accurately estimate the amount of lending that takes place that would otherwise not have taken place without a State-supported loan scheme. Following this, it is necessary determine the level of business growth, increased turnover and increased employment that arise directly from this "new" lending. Accurate estimation of both financial and economic additionally is made difficult by the fact that in an applied context, the counterfactual is difficult to observe. For example, the Department of Finance's SME Credit Survey showed that in March 2012, surveyed microenterprises had a 30% credit rejection rate, compared to 22% for small organisations and 19% for those defined as medium-sized. While such information highlights the possibility of a market failure and may support

the implementation of a State-supported loan scheme, further evidence of market failure is desirable and there is little clarity on the efficacy of any one scheme in efficiently supplying credit to those in the high rejection-rate bracket, and the extent of novel economic growth that has arisen as a result. However, with the appropriate data and evaluation methods, the degree to which a scheme minimises deadweight loss and generates "new" growth (i.e. addresses a market failure), can be loosely estimated.

Following DBEI's 2015 Review of MFI, the requirement that a loan applicant must provide evidence that they were rejected by a bank for a loan before they were deemed eligible for an MFI loan was removed. This decision could be revised. Even though a previous rejection by a bank does not guarantee a firm would not have attained credit on the private market eventually, it does go some of the way to demonstrating that a recipient had experienced challenges accessing credit through typical channels, and that crowding out is being minimised. The efficacy of the scheme could be calculated on a less conservative ratio than currently employed in CBAs of Irish State-supported lending schemes. For example a recent CBA of the FGLS by DBEI used a deadweight loss in assumption of 70% for financial additionality. Strong evidence of high previous rejection rates in the pool of FGLS loan applicants, would support the use of a lower value parameter for deadweight loss in future CBAs of the FGLS.

In the UK, evaluations of the Enterprise Finance Guarantee (EFG) have used surveys of firms to ascertain the level of deadweight loss associated with lending under the scheme. While based on the subjective perceptions of respondents, such surveys can provide a useful estimate of the potential financial additionality of State-supported loan schemes and could be applied in an Irish context. The carrying out of surveys to identify borrower perceptions of the financial additionality of State-supported lending is recommended.

To determine the economic additionality of schemes, ongoing annual data on the economic performance of firms in receipt of State-supported lending should be collected. The performance of firms across certain indicators (e.g. new employment, increased value added) could be observed if ongoing data is collected from the population of State-supported loan recipients. The ideal would be to compare these values to the value of equivalent variables in a random sample of characteristically similar firms which had received no finance. Attaining this latter form of data could have challenges, and engagement between the relevant government departments and providers of national administrative data (e.g. CSO) should be established to allow for the routine usage of such data for ongoing analyses. Examples of datasets that may be suitable for this function are the CSO's business demography survey and the annual service inquiry.

7. Conclusion

This paper provided a detailed treatment of the operational mechanics of the 5 State-Supported Loan Schemes in operation in Ireland since 2012, and the political, economic and market context that brought about their expansion over the period. Data from the Strategic Banking Corporation of Ireland on State-Supported Loan Schemes up until April 2020 was analysed to describe loan approvals by region, sector, firm size and loan term conditions. The paper addressed the evolution of Exchequer-exposure from State-guaranteed lending as the schemes have expanded, and touched on issues of financial and economic additionality, distortion of behavioural/market incentives and effective measurement of scheme performance. The following sets out the key points that arose from the research:

Origin and Evolution of the Schemes

There are 5 State-supported loan schemes in operation in Ireland. While initially constituting a smaller share of enterprise supports, their expansion has arisen in the context of the economic recovery following the 2008 recession, Brexit, instability in agricultural markets and the emergence of the COVID-19 crisis.

All State-supported loan schemes apart from Microfinance Ireland (MFI) are in partnership with private lending institutions and operate on the principal of a state-guarantee mechanism, whereby the Exchequer agrees to take on a given percentage of losses incurred by private lenders. MFI is a government established not-for-profit responsible for lending directly, sans private lending institutions, to eligible microenterprises using funding from the Microenterprise Ireland Fund.

Exchequer exposure

- Over the period 2012-2020 (April), the total value of State-Supported Loan Approvals (minus lending through Micro Finance Ireland), ran to approx. €527.4 million. The level of Exchequer-exposure associated with loans approved under the schemes was approx. €125.6 million in total.
- State-guaranteed financing available to firms at the outset of 2020 came to approx. €475.6 million. The level of exchequer-exposure associated with available financing, if all of the schemes were to have been fully subscribed in that period, would have been approx. €127.2 million.
- 2020 has seen an increase in financing available through State-Supported Loan Schemes. The combined value of loans approved to date plus financing currently available (minus lending through Micro Finance Ireland), amounts to €3.4 billion. The level of cost the state ultimately

incurs as a result of this exposure will be a function of the degree of uptake of State-Supported financing by firms and the level of repayment default that arises.

- The main drivers of the increase in State-exposure from State-Supported Lending are the increase in financing made available through the Credit Guarantee Scheme (+ €2 billion) and the removal of the 13% portfolio cap that had previously been in place under the scheme.

Scheme Uptake and Distribution

As of April 2020, the combined number of loans approved under all schemes (excluding MFI) was 6,189.

Since inception of the various State-Supported Loan Schemes (up until April 2020), the following proportions of available financing under each scheme have been translated into loan approvals:

- Credit Guarantee Scheme (2012): 9% (€108.3 million) of available financing (€1.2 billion) converted into approved loans.
- Brexit Loan Scheme (2018): 18% (€52.5 million) of available financing (€300 million) converted into approved loans.
- Future Growth Loan Scheme (2019): 74% (€221.9 million) of available financing (€300 million) converted into approved loans.
- Agriculture Cash-Flow Supports Loan Scheme (2017): 96% (€144.7 million) available financing (€150 million) converted into approved loans.

Region

State-supported lending can be unevenly distributed across regions. 45% of loan approvals under the CGS were to enterprises in Dublin. In contrast, the Agriculture Cash-Flow Supports Loan Scheme (ACSLS) saw only 0.2% of approved loans arising in Dublin, with the concentration in the South-west (23%), South-east (18%) and the Mid-west (15%). The Future Growth Loan Scheme (FGLS) shows a more even distribution across regions.

Evolution and Evaluation of State-Supported Loan Schemes

State-Supported Lending should be rooted in sound principals of additionality (both financial and economic) and prudence with respect to lender-incentives and to the financial exposure of the State. Recent work by the Evaluation Unit at the Department of Business, Enterprise and Innovation has evaluated the Future Growth Loan Scheme for the potential financial and economic additionality of increases in financing through the Scheme this year. The unit is also examining the Covid-19 Working Capital Scheme and Brexit Loan Scheme in the same manner and is currently exploring sources of administrative and survey data on Irish SMEs for use in future evaluations of Schemes' additionality.

Under the European Commission's "Temporary Framework for State aid measures to support the economy in the current COVID-19 outbreak", schemes can now be used to support the needs of enterprises responding to the economic shock caused by the COVID-19 health crisis. The temporary measures allow for the relaxation of certain State aid rules for a limited time to enable EU Member States to support enterprises in their country. These provisions allow for vital supports to businesses during an unprecedented crisis, but may have implications for lender incentives and levels of additionality. Continued monitoring and evaluation of State-Supported Lending will ensure that the principals of additionality and due prudence are adhered to in the long term.

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