**BLS0002**

# Written evidence submitted by Prof. Marc Cowling (Derby) and Prof. Paul Nightingale (Sussex)

1. This submission is from Prof. Marc Cowling (College of Business, Law and Social Sciences, University of Derby) and Prof. Paul Nightingale (SPRU, University of Sussex Business School). This evidence is written in a personal capacity.

2. The evidence draws on many decades of work on SME financing, and data and analysis from a large study that we undertook for BEIS. We are grateful to BEIS and ESRC for their support for this work. Part of Prof. Nightingale's time for this research was supported by the ESRC.

3. Our main areas of research relevant to this submission are SME finance, loan guarantee schemes, and risk management. Prof. Cowling is one of the world's most published academics working on Loan Guarantees and works extensively with the UK policy community. Prof. Nightingale was Director of Strategy at the ESRC (Economic and Social Research Council, within UKRI) where he worked the UKRI Covid-19 response. He is now a Professor at the University of Sussex Business School.

4. This work was partly funded by BEIS, and Prof. Nightingale was working for UKRI (which sits under BEIS) when some of this work was undertaken. We receive no funding from financial institutions involved in these loans. We have no further conflicts of interest to declare.

5. The evidence in this submission is new, and has not been previously published, but will form part of submissions to future academic papers.

## Summary

6. Predicting the extent of fraud within the loan portfolio is non-trivial and is subject to high levels of uncertainty. There are various definitions and kinds of fraud, some of which have fuzzy boundaries, and are only clear in hindsight. This creates inherent uncertainty in any analysis.

7. The analysis in this submission is based on an empirical investigation of a comprehensive data set, capturing suspected fraudulent loans within the Bounce Back Loans (BBL) scheme during the Covid-19 crisis. Our key indicator of fraud is whether a loan has been tagged in the data set as 'suspected of being fraudulent'. This can be an *ex post*

indicator, that is tagged to a loan at the point that the loan is not repaid. This indicator is likely to miss some loans that are fraudulent and also incorrectly tag loans that are legitimate (for example, if a lending institution has made a bad decision and is seeking to cover its own failings).

8. Our analysis suggests the incidence of suspected fraud is relatively low given the size of the scheme with only 0.71% of total loans issued tagged as being of concern. This equates to 6,904 loans with a total cash value of £301 million. The accuracy of this estimate depends on how closely the indicator matches 'actually fraudulent' cases.

9. While this is low in the context of the one million BBL scheme loans, with a contingent liability of £46.5bn, the suspected fraudulent lending cash value equates to the total lending issued under guarantee in a typical year of the Enterprise Finance Guarantee (the predecessor of the Covid-19 loan guarantee schemes).

10. A small number of alternative finance providers have a much higher probability of issuing loans that are flagged as being suspected of fraud. The scale of this difference in probability suggests systemic failure rather than coincidence. This may reflect their lack of formal interaction or personal relationship with firms, or their relative inexperience in handling the sheer volume of loans issued, and/or a failure in their lending processes and systems.

11. Other key findings include:

- Larger BBL loans had a higher suspected fraud incidence, and particularly loans where the ratio of loan value to annual sales was above 20%.

- Loans with shorter maturity had a higher suspected fraud incidence.

- Firms with smaller annual sales were more likely to be flagged as potentially fraudulent.

- Sole traders had a higher probability of suspected fraud.

- Firms located in London and to a lesser extent, the West Midlands had a higher probability of suspected fraud.

- Firms in the construction, household services sector, as well as those in other services, administrative services, and mining were all associated with a higher probability of suspected fraud.

**Fraud in the BBL Portfolio**

12. Prior to the pandemic very significant numbers of firms in the UK had very limited financial resources and were at severe risk of failing (Cowling et al, 2020). In response, the UK government introduced three new large-scale Covid-19 loan guarantee schemes alongside its income protection scheme. The most significant of these loan guarantee schemes in terms of number of loans issued and the total cash volume of guaranteed loans was the Bounce Back Loan (BBL) scheme.

13. The BBL Scheme was explicitly targeted at the smallest businesses with a lending ceiling of £50,000 and a fixed interest rate of 2.5% with a 12 month repayment holiday. In total more than 1 million loans with a total value of £70bn, and a contingent liability of £46.5bn, were issued under guarantee under BBL.

14. As the Covid-19 crisis unfolded there was political and economic urgency in getting BBL loans out to smaller business as quickly as possible. As a result, the normal third party loan application processes and procedures were relaxed, and the formal legal requirements of the consumer credit act were temporarily suspended for BBL lending. Whilst this speed up cash transfers to small businesses it also raised the potential for fraudulent loan applications to be made and approved with little *ex ante* scrutiny.

15. To understand the extent of this potential fraud we have analysed 971,000 BBL guaranteed loans issued during the Covid-19 crisis in the UK using a unique ex post fraud identifier.

16. The BBL scheme was introduced in May 2020 with a maximum loan ceiling of £50,000 to support lending to cash-constrained small businesses. There was no portfolio cap associated with BBL lending because of the pressing need to get large numbers of loans to struggling businesses. The scheme was closed on March 31st 2021.

17. The need to get funds to SMEs quickly meant the administrative process was streamlined and speeded up, with a relaxation of the need to comply with the Consumer Credit Act. As a result, the loan decision-making role was taken away from banks who became a simple conduit to channel urgently needed loan funds to firms.

18. Previous academic research has shown that loan quality worsens when loan officers are time constrained (in this case they would have been swamped with 1 million BBL loan requests), (Campbell, Loumioti, and Wittenberg-Moerman, 2019).

19. Pre-determining the loan contract parameters, sped up and streamlined the process, but reduced the role of specialist, expert loan officers. This is potentially problematic during crisis periods, as previous research (Wang, et al 2021) suggests the average quality of information used in loan decisions is lower, which can lead to an increase in fraudulent borrowing.

20. To understand the extent and nature of potential fraudulent lending, we have analysed the full population of UK government guaranteed loans issued under the auspices of three Covid-19 special loan guarantee schemes, the Bounce Back Loan Scheme (BBL), the Coronavirus Business Interruption Scheme (CBILS), and the Coronavirus Large Business Interruption Scheme (CLBILS).

21. This involves loan level data for 1,048,575 loans across the three schemes, split between the BBL scheme (971,302 loans totalling £32.7bn), the CBILS scheme (76,704 loans totalling £26.5bn), and the CLBILS scheme (569 loans totalling £7.1bn). The respective average loan sizes across the three schemes are £32,754, £264,496 and £7.1m over the period March 2020 until July 2021.

22. The key variable we are concerned with is an ex ante "suspected fraud" indicator. This is categorised into four 'types' of suspected fraud: Application first party fraud; Organised crime fraud; Other fraud; Third party fraud. Table 1 below reports the incidence and distribution of suspected fraud across the four types.

Table 1: fraud across types of suspected fraud Type of Suspected Fraud

| | % of total BBL Loans Issued | % of Suspected Fraudulent Loans |
|---|---|---|
| None | 99.3 | |
| Suspected fraud | 0.7 | |
| Application first party fraud | | 87.7 |
| Organised crime fraud | | 3.7 |
| Other fraud | | 3.3 |
| Third party fraud | | 5.3 |
| Total | 100 | 100 |

23. The incidence of suspected fraud is low at 0.71% of the total number of loans issued. Of those BBL loans that are flagged as suspected fraudulent loans, the most common type is "application first party fraud", which occurs when the applicant firm is suspected of making a fraudulent loan application.

24. First party fraud occurs when someone or a group of people, give false information to gain financially, for example, by misrepresenting their identity or their financial or business circumstances. Third party fraud occurs when someone, or a group of people, use someone else's identify without their knowledge to gain financially. The other types of suspected fraud are relatively minor.

**How suspected fraudulent lending differs by type of financial institution.**

25. Our data allows us to explore differences across types of financial institution. While our indicator is imperfect, it does provide a basis for comparison, and these differences are likely to reflect 'real' differences.

Table 2: Suspected Fraudulent Loans across different types of financial institutions

| **Type of Financial Institution** | **% of Suspected Fraudulent Loans** |
|---|---|
| Asset financier | 0.71 |
| Big Bank | 0.71 |
| Invoice financier | 0.36 |
| Other institution | 7.6 |
| Responsible finance provider | 2.8 |
| Small Bank | 0.61 |
| Total | 0.71 |

26. Table 2 reports this data and shows that 'other' non-core types of financial institution have a suspected fraud incidence more than 10 times the average. This is an obvious concern. This 'other' group includes European Social Fund supported lenders, regional investment funds, and an eclectic mix of fintech and other financial intermediaries including many with an on-line only presence.

27. There appears to be one lending institutions that has exceptionally high suspected fraud incidence (>26%) given the number of loans they advanced and a further two who have relatively high rates.

28. We also see that "responsible finance providers" (local or regional not-for-profit lenders) have a higher incidence of lending with suspected fraud.

**Differences in loan and firm size characteristics**

29. Our evidence suggests that there are differences between No Fraud and Suspected Fraud in terms of the Loan Size which are £32,676 and £43,542 respectively.

30. Average fraudulent loans were also slightly larger in respect of the amount borrowed as a share of turnover at 20.9% compared to 19.1% but did not breach the 25% scheme rule. The average sales turnover for firms with suspected fraudulent loans was lower at £262k compared to £295k for No Fraud firms.

31. Our evidence suggests that there are tiny differences between No Fraud and Suspected Fraud in terms of the Loan Term (measured in months) which are 72.2 months and 72.0 months respectively.

**Differences across industries**

32. Table 4 shows that four sectors stand out as having a disproportionately high share of suspected fraud. All other sectors had a lower incidence of fraud compared to their share of the total distribution of BBL loans.

33. Nearly one-quarter of loans that are suspected of being fraudulent are in the construction industry.

34. The relative incidence of suspected fraudulent loans is also very high in other services, and to a lesser degree transport & storage and administrative & support services. It is not immediately clear why these particular sectors have a high incidence of potential fraud compared to other service sector industries.

Table 4: Suspected fraud and industry distribution (High incidence industry sectors)

| Industry Sector | No Fraud<br>% of loans | Suspected Fraud<br>% of loans |
|---|---|---|
| Construction | 16.3 | 23.4 |
| Transport & Storage | 5.2 | 7.9 |
| Administrative & Support Services | 7.3 | 11.2 |
| Other Services | 5.4 | 10.0 |

**The Regional Distribution of Suspected Fraud**

35. Our data also allows us to explore the regional distribution of suspected fraud as a percentage of total loans, which is set out in table 5.

Table 5: Suspected fraud and regional distribution

| Region | No Fraud<br>% of loans | Suspected Fraud<br>% of loans |
|---|---|---|
| East Midlands | 6.2 | 6.4 |
| East of England | 9.5 | 8.4 |
| London | 21.8 | 40.5 |
| North East | 2.8 | 2.0 |
| North West | 10.2 | 9.1 |
| Northern Ireland | 2.8 | 0.83 |
| Scotland | 6.3 | 2.5 |
| South East | 14.0 | 9.1 |
| South West | 7.4 | 3.5 |
| Wales | 4.2 | 1.5 |
| West Midlands | 8.0 | 10.1 |

| | | |
|---|---|---|
| Yorkshire & Humberside | 6.7 | 6.0 |
| Total | 100 | 100 |

36. From Table 5, it would appear that suspected fraudulent lending on BBL is solely concentrated in London and the West Midlands. Aside from a slightly higher relative incidence in the East Midlands, no other geographic region of the UK has a greater share of suspected fraud than their relative share of non-fraudulent BBL loans. This evidence suggests that these two regions merit more detailed investigation.

**The importance of legal form**

37. The legal form of a SME has a major impact on its behaviour. Table 6 shows that legal form is important for understanding the incidence of suspected fraud. It shows a disproportionately high share of loans flagged as suspected fraudulent loans from sole traders where they make up 56.3% of the loans of concern and only 17.3% of the no fraud loans. Whilst the actual share of private limited companies with loans flagged as being suspected fraudulent ones is large (~42.6%) it is very low relative to their share of non-suspected fraudulent loans (~77.5%).

Table 6: Suspected fraud and legal form

| Legal Form | No Fraud % of loans | Suspected Fraud % of loans |
|---|---|---|
| Limited Liability Partnership | 0.6 | 0.25 |
| Other legal form | 0.4 | 0.6 |
| Partnership | 4.2 | 0.25 |
| Private Limited Company | 77.5 | 42.6 |
| Public Limited Company | 0.04 | 0.01 |
| Sole Trader | 17.3 | 56.3 |

| | | |
|---|---|---|
| Total | 100 | 100 |

**Summary of analysis**

38. Loans that have been flagged as being suspected of being fraudulent have the following characteristics:

☐ Largely suspected as being fraudulent due to a misrepresentation by the business itself,

☐ Have a total accumulated value of £301m,

☐ Are most likely to have originated in an alternative finance provider,

☐ Have an average loan value of £43,542 which is £10,885 larger on average than lending that is not suspected of fraud,

☐ Are made to businesses that, on average, have £32,627 lower sales turnover than businesses that are not suspected of fraud,

☐ Are disproportionately concentrated in the construction industry and three other sectors,

☐ Are disproportionately concentrated in London and the West Midlands,

☐ Are disproportionately concentrated amongst businesses with sole trader legal status .

**Econometric analysis**

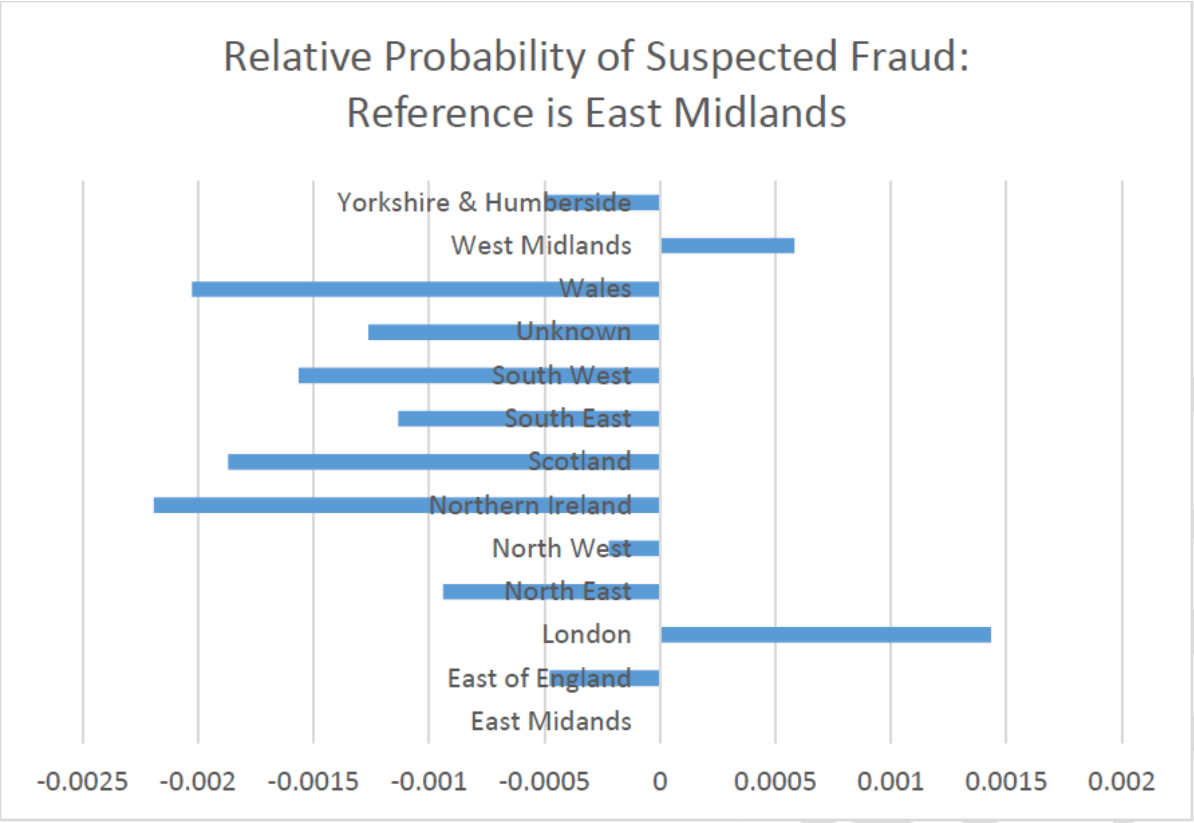
39. We also ran econometric models that take into account and control for differences across settings. For example, the reason some regions have higher suspected fraud may be because they have more firms that are risky, compared to other areas. This analysis allows us to control for these differences and isolate the individual effects.

40. We estimate a marginal effects probit model that takes into account the binary nature of the variable we are interested in – whether or not a loan is suspected of fraud.

41. This modelling exercise confirms the size and direction of the effects we report above, but also allows us to identify and isolate key characteristics that are associated with being flagged as a suspected fraudulent loan whilst holding other factors constant.

42. Figure 1 illustrates the relative probability of suspected fraud by region, compared to the East Midlands region, which is our reference case. This analysis takes into account differences in things like the size and nature of firms across regions and shows that even controlling for these differences London is associated with a significantly larger probability of suspected fraud

Figure 1: Relative probability of suspected fraud by region




43. Figure 2 reports significant variation across sectors in the probability that a loan is classified as being suspected of fraud. The magnitude of these differences are much larger than that was observed for regions. The household sector, for example, has the highest suspected fraud probability which is +4.3% higher than agriculture which is our reference industry. Other services, administrative services and mining all have an increased probability in excess of +2.0%, and transport industries and construction both have an increased probability in excess of +1.0%. This analysis suggests the influence of being in the construction sector is less than was seen in

the raw data, and reflects other features of the firms in the sector that are more prominent in the construction sector.

Figure 2: Relative probability of suspected fraud by industry


**Conclusion**

44. The analysis suggests the incidence of suspected fraud is relatively low as a percentage, with only 0.71% of the loans have been tagged as being of concern. However, given the size of the scheme this equates to 6,904 loans with a total cash value of £301 million. The cash value of this suspected fraudulent lending is about the same as the total lending issued under guarantee each year by the previous Enterprise Finance Guarantee.

45. We have found that a small number of alternative finance providers have a much higher probability of issuing loans that are flagged as being suspected of fraud. The scale of this difference in probability is concerning and suggests systemic failure.

46. We have also found that larger loans, and loans with shorter maturity, and loans from firms with smaller annual sales had a higher suspected fraud incidence.

47. We also found that sole traders had a higher probability of suspected fraud.

48. In relation to regions, we find that firms located in London and to a lesser extent, the West Midlands, had a higher probability of suspected fraud.

49. Lastly, we find that firms in the construction, household services sector, as well as those in other services, administrative services, and mining were all associated with a higher probability of suspected fraud.

50. These findings are not necessarily that surprising given the nature of the scheme, and the importance of supporting very large numbers of firms very quickly. The risks of fraud needed to be traded off against the significant economic damage that would have occurred had the guaranteed loans not been forthcoming. Our previous research (Cowling et al, 2020), found that very large numbers of UK firms were not in a position to support themselves and would be at extreme risk of failing had they not been supported. The extent of this systemic risk is a major policy concern.

51. Our findings differ substantively from the fraud estimates documented in the National Audit Office report, "The Bounce Back Loan Scheme: an update" December 2021 which were significantly higher than our estimates for a variety of reasons. The British Business Bank identified a total of 36 fraud risks of which 10 were deemed to be the top fraud risks. A small sample of 1,067 loans were investigated by PWC to identify potential fraud and their initial estimates were that 11% of these loans were potentially fraudulent (including 6.65% probable fraud and 4.50% possible fraud). Aggregating to the whole BBL scheme they arrived at a ceiling of cash fraud estimate of £4.9bn. Further investigations downgraded this to 80 potentially fraudulent loans out of the 1,067 initially investigated. This represents 7.5% of

their investigation sample. The scale of total potential fraud had a floor of £1.8bn and a ceiling of £5.0bn according to NAO.

52. Why do we differ with our estimate of £301m and 0.7% of total loans issued? Firstly, we use the full data set for BBL loans issued until June 2021 rather than a 1% sample of which a total of 80 were classed as probable or possible fraud after second investigation.

53. Second, we use the pre-determined suspected fraud flag in the data set. Using reported sales turnover, we find that only 0.88% of loans are issued where the loan to sales ratio breaches the 25% scheme rule. In this sense it is likely that even with a widespread over-and mis-reporting of sales turnover to access larger loans it would take a heroic assumption to upgrade our fraud estimates to anything near those estimated in the NAO report.

54. Third, it is also the case that suspected and actual fraud does not necessarily translate into subsequent loan default. For example, many firms mis-reporting their income and accessing larger loans are likely to repay. Data from the SME Finance Monitor Covid Waves shows that 1/3$^{rd}$ of the highest credit risk Covid guarantee loan recipients had either not spent any of their loan funds at all or very little. The correlation between suspected fraud and known default is 0.62. Actual default by early July 2021 is 1.67% of total loans issued. Where we believe a future problem may occur is for defaulting loans subject to recovery processes. Evidence from the Enterprise Finance Guarantee shows that around 10% of defaulting loans had very lengthy asset recovery process times which is indicative of drawn out legal actions and/or difficulty in identifying relevant assets.

55. This last point is important as it suggests caution in moving from a prediction of what percentage of loans are fraudulent to subsequent losses. Technically a firm that misrepresents itself to access a loan that it intends to repay and actual repays may have committed fraud. For example, a London builder may misrepresent themselves to borrow at a lower interest rate in order to buy a new car, and then repay the loan when it becomes due. However, since that loan is repaid, it does not translate into a subsequent loss.

56. In conclusion, we feel that the NAO estimate is likely to be an over estimate, of both the extent of fraud and the subsequent costs. However, we caveat this by highlighting that the prediction of fraud is highly uncertain. Different datasets, indicators, and methods are likely to come up with different results. Early indicators of actual default

levels, of 1.67%, can be used as an approximate upper limit on actual fraud where the borrower misrepresented themselves with the intention of not paying the loan back, if we make a very strong assumption that all firms that defaulted did so because of fraud. Our analysis suggests that a more realistic assumption would be that roughly a half of the loans that default will be due to fraud. The costs of these fraudulent loans will be large in absolute terms, but that cost needs to be understood in relation to both the size of the scheme and the costs of any alternatives that reduced fraud but slowed down the flow of finance to large numbers of firms with very fragile balance sheets.

**References**

Campbell, D., Loumioti, M., & Wittenberg-Moerman, R. (2019). Making sense of soft information: Interpretation bias and loan quality. *Journal of Accounting and Economics*, 68(2-3), 101240.

Cowling, M., Brown, R., & Rocha, A. (2020). Did you save some cash for a rainy COVID-19 day? The crisis and SMEs. *International Small Business Journal*, 38(7), 593-604.

Wang, J., Wang, Y., Wu, C., Yang, X., & Zhao, L. (2021). Social Proximity, Information, and Incentives in Local Bank Lending. *The Review of Corporate Finance Studies*.

# January 2022