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Feasibility Study – Exploring the Long-Term Impact of Business Support Services

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This report is a feasibility study examining whether it is possible to observe a longer term impact of business improvement schemes and is not intended to be a detailed evaluation of the former Business Link intervention. The report, therefore, covers the methodological issues of assessing the economic impact of business interventions over an extended time period.

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Executive Summary

- Governments across the globe have a range of policies to assist small businesses to start up and grow, in order to promote the desirable outcomes of growth and job creation. Whilst there is often a desire for the effectiveness of a new scheme to be assessed, there is concern that often a too short period of time is allowed before an evaluation takes place, which limits the chance of the impact of any intervention to have been fully realised.

- This research first undertakes a literature review to identify to what extent evidence exists on the long-term effects of non-financial government interventions in the small business policy area. The review particularly looked for international examples of evaluations assessing impact over more than 3 years.

- The research then considers whether it is feasible to assess the long-term impact of UK based business support schemes using Business Link (BL) as an example. As such, this report is a feasibility study examining whether it is possible to observe a longer term impact of business improvement schemes in general and is not a detailed evaluation of Business Link. The report, therefore, covers the methodological issues of assessing the economic impact of business support interventions over an extended time period, although the findings will be of interest to policy makers.

- The research is conducted with a sub-sample of the original 3,448 respondents to the Business Link Operator (BLO) Economic Impact Survey in 2005 (BLO survey) which surveyed firms who were recipients of either an 'Intensive Assist' (IA) or 'Other Assist' (OA) in the first 6 months of 2003 (the categories defined by Business Link[1]). Firms in our sub-sample were linked to the ONS Business Structure Database (BSD) to obtain subsequent annual employment and turnover data to analyse the survival and growth of recipient businesses in the post-assistance period to see how long potential impacts may last over time.

Literature Review Findings

- There were very few robust studies of the long-term impact of non-financial support (as well as financial ones) programmes to small firms among government sources and organisations such as the OECD and European Commission.

- Long-term impact studies for financial support schemes seem more popular with researchers because they would appear easier to measure. Despite this there are still very few in the public domain which is perhaps surprising when considering the proportion of government expenditure dedicated to them.

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[1] Intensive assistance would usually have stretched over several months and a number of interactions between SME and Business Link advisors, probably featuring an action plan and the use of external consultants. In comparison, non-intensive assistance is more likely to be a "one-off" interaction by phone.

- One of the key concerns with evaluations, particularly those few long-term ones, is the use of a methodology based on a self-reported impact derived from survey. This self-assessment of, for example, a firm's satisfaction, perceived difference and additionality of a programme or intervention is likely to be highly subjective and may lead to both over- and underestimations of impact. In some evaluations the inclusion of control groups in the survey seeks to control for this and the application of econometric techniques further addresses the issues of selection and assistance bias. Whilst this approach does conform to best practice evaluation guidelines, there is a need to consider the long-term effects of the intervention as such surveys are typically undertaken shortly after the firm received the assistance.

Feasibility Study Findings

- The increasing availability of administrative firm-level micro-data offers one potential solution to understanding the long-term impact of interventions. These datasets can either be official government data (e.g., the ONS Business Structure Database based on the Inter-Departmental Business Register - IDBR) or commercial datasets (e.g., FAME). Linking the beneficiaries of assistance to administrative data provides an opportunity for monitoring annual performance (i.e., employment and turnover) in the pre- and post-assistance periods as well as benchmarking against a suitable control group. Linking to other ONS business survey datasets introduces the possibility of more sophisticated econometric analysis as other variables on the characteristic of beneficiaries and non-beneficiaries become available (e.g., R&D expenditure and export sales)

- Another option is to take the original survey dataset of beneficiaries and non-beneficiaries and link it to an administrative micro-dataset to obtain annual performance data for many years after the original assistance and indeed after the original evaluation was undertaken. It is this option which is explored in this feasibility study using the original BLO evaluation survey in 2005 and extending the analysis to 2010 using annual data on employment and turnover from the ONS Business Structure Database (BSD) held within the Virtual Micro-Data Laboratory (VML).

- Using the Business Link (BL) intervention in 2003 as an example, this study found the benefits of that particular intervention is associated with strong business growth in subsequent years.

- Analysis of the surviving firms[2] assisted by BL in the 2004 to 2010 period points to markedly different growth behaviour by the IAs compared to OAs and non-assisted businesses. One key observation is that within the first three years from the date of intervention in 2003 to 2006 IAs and non-assisted businesses (NAs) show reasonably similar growth figures overall, whilst OAs experience a marked dip in terms of employment growth. However, over the longer period from 2004 to 2010, IAs experienced an average annual growth rate of 7.8%, OAs of 1.8% and the non-assisted control group recorded a growth rate of 4.1%.

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[2] We are, of course, dealing with a smaller number of firms than in the original evaluation study as the sample of 3,448 firms in the survey was reduced for three reasons: firms who did not give their permission to link their details to government datasets; firms had ceased trading; firms could not be linked to the ONS BSD as there was erroneous or missing data in the original data file. We ended up with a subset of 693 linked firms of which 345 survived the period 2004 to 2010.

- **However, some level of caution is required.** As might be expected from the attrition process over time the sub-sample of 'linked' assisted Business Link businesses portray some significant differences from the original samples. For instance, differences exist in business size, use of a business plan, business owner's age, sectoral composition and likelihood to export. It is clear that the 'linked' sub-sample does not fairly represent the full sample from the original survey, and that selection error is introduced on top of any selection bias that the original survey sample may already have been subject to. There are also risks of other schemes having had an impact on firm performance in the post-assistance period in addition to any impact from the original BL intervention. Disentangling these impacts is extremely difficult and has not been addressed in the analysis presented in this report. We simply run the original econometric models with additional years of performance data.

- Running these original econometric models, which will control for the sample differences within the new smaller sub-sample of IAs and non-assisted businesses, intensive assistance was found to have a positive significant on employment growth for each period assessed[3], except for the initial 2004 to 2005 period, where the coefficient takes a negative sign and is insignificant.[4] The 2003 intervention yields its highest measured impact for the time periods to 2009 and 2010 when intensive assistance increased the employment rate by about 24.5 percentage points. **These results suggest that there may indeed be a time lag before the full impact of assistance received becomes observable**.

- The impact of Business Link 'other assistance' (OA) on employment growth was not found to be significant for any of the time periods examined, however, the OA coefficient gradually gets stronger suggesting again that the realisation of the beneficial impact of assistance received seems to be a longer and more gradual process than most evaluations are able to allow for.

- The results of Business Link IA and OA on turnover growth also confirm this assessment. The impact of IA is rather weak for the 2004 to 2006 period and even negative[5] for the estimation of the initial one year period 2004 to 2005. Only in the fourth post-intervention year (for the 2004 to 2007 period) does the coefficient markedly strengthen, and eventually becomes significant for the 2004 to 2008 period, with a 32.6 percentage point impact on turnover growth. It then declines in the post-2008 periods as the economic downturn begins to take hold on business performance, but still with a relatively strong coefficient compared to the first three post-intervention years.

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[3] That is, we run the models for a range of ever-lengthening periods starting from 2004-05 (the original study period) – 2004-06; 2004-07; 2004-08; 2004-09 and 2004-10.
[4] In the original impact study, only the latter period was assessed but returned a significant positive result.
[5] But it is statistically insignificant.

Recommendations

- **This feasibility study would indicate that the time horizon for most evaluations of business improvement services is far too short**. The original Business Link evaluation could only consider the 2004-05 period to determine if there were any economic impacts. Whilst we also found positive and significant employment effects for the same period (using ONS employment data and not self-reported data from survey) our analysis shows a clear lag before larger and significant impacts on staffing and sales.

- We recommend, therefore, that consideration be given to introducing a twin-track approach to evaluation. There will always be the need to undertake an evaluation study based on survey evidence shortly after the introduction of a new policy intervention. That should continue due to the demands of policymakers and ministers but the value of linking beneficiaries to official administrative datasets for tracking performance data leading to robust economic impact assessments is clear and should be instigated for all major business support products and services. These datasets can then be combined and analysed to ensure that the long-term effects of assistance can be captured.

- We further recommend, that these datasets be linked to other official business survey datasets to provide additional variables over time (e.g., R&D expenditure; export sales) to avoid the over-reliance on the original beneficiary/non-beneficiary surveys. Indeed, this has the potential to create a range of control groups which may facilitate such economic impact techniques as Propensity Score Matching (PSM). For major programmes this is an investment which is both cost-effective and invaluable to obtain the most robust estimates of economic impact. The recent development of RCT protocols in connection the BIS Growth Voucher scheme (main programme and Small Business Charter programme) is another example of how data-linking methodologies are being used to track 0performance after the intervention.

- For the assessment of the long-term effects of business support products and services the sample size of the original beneficiary/non-beneficiary survey is a critical factor. In this feasibility study we have shown that, 7 years after an intervention, the attrition effects are considerable even after allowing for the fact that many firms will not give their permission for their data to be linked to other official government datasets. In this case we started off with a sample size of 3,448 and by the end we were running econometric models on a sample of just over 300 firms who had survived the full 7 years after the original evaluation. This illustrates the value of investing in a large enough sample in the first place. We recommend that when evaluations are commissioned the need for a long-term impact evaluation should be a compulsory part of the design feature and that appropriate samples are sought. This is important because the initial evaluation survey can provide a range of important variables not normally captured in the ONS administrative datasets (e.g., growth aspiration; strategic orientation and senior management profile).