



Centre for Business Prosperity

Evaluation of the Scottish Government's Export Promotion Support

November 2023

Methodology Note

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1. Introduction

- 1.1. Enterprise Research Centre (ERC) and Centre for Business Prosperity (CBP) at Aston University were commissioned by the Scottish Government to undertake the evaluation of Scotland's export promotion support over the period of 2018/19 2020/21 (three financial years). This covers 3,053 businesses and consisted of a beneficiary business survey and indepth qualitative interviews.
- 1.2. ERC was additionally commissioned to conduct a business survey with non-beneficiary firms in order to construct a counterfactual group for supported firms, as well as to examine feasibility of a counterfactual evaluation.
- 1.3. This report is a technical Methodology Note of the export promotion evaluation: beneficiary business survey and non-beneficiary counterfactual evaluation. It provides an outline of the methodological approach to the beneficiary and non-beneficiary evaluation and field work, the final survey and interview questionnaires, the assessment of beneficiary survey representativeness.

2. Questionnaires

- 2.1. The beneficiary survey questionnaire was designed through a collaborative and iterative process with the Scottish Government, its delivery partners¹ and ERC/CBP. At the late stages of survey design, ERC/CBP approached a number of supported businesses suggested by SE to pilot the questionnaire. Three exporting companies took part in the pilot. ERC/CBP administered the questionnaire to them by a video conference call. The questionnaire was then updated based on pilot feedback. The final version of the questionnaire can be found in Appendix 1.
- 2.2. The interview guide for the beneficiary evaluation, like the survey questionnaire, was agreed with the stakeholders. It was designed to contextualise survey findings. Its latest version was piloted with three interviewees and modified based on feedback. The final interview guide can be found in Appendix 2.
- 2.3. The non-beneficiary survey questionnaire was designed on the same principle: for maximum comparability it was based on the beneficiary survey by removing support-related sections that did not apply to non-beneficiaries and modifying wording to reflect that these firms did not receive the support. The final version of the non-beneficiary questionnaire can be found in Appendix 3.

3. Fieldwork

3.1. This section describes details of the fieldwork for beneficiary and non-beneficiary surveys.

Beneficiary survey

3.2. The beneficiary survey covered 3,053 businesses that received export promotion support in the financial years of 2018/19 – 2020/21. This included companies that that received export support and started exporting and those that did not start exporting, as well as those that

¹ Scottish Enterprise and its international division Scottish Development International (SE/SDI), Highlands and Islands Enterprise (HIE), South of Scotland Enterprise (SoSE) and Scottish Chamber of Commerce (SCC)

- received wider business development support and anticipated achieving export sales. Businesses could seek support from multiple delivery partners and support activities.
- 3.3. The support was evaluated using a mixed-method approach of surveying (by email and/or by telephone) and in-depth qualitative interviewing. Of the 3,053 supported companies, 2,329 opted in and/or were included in the evaluation survey (76%). In addition to opting out, some firms were excluded from the evaluation by SDI operational decision, for example, when a company was subject to legal sanctions.
- 3.4. Participation in the survey was voluntary. The survey fieldwork took place in September November 2022. In order to maximise the response rate and be inclusive, the questionnaire was administered in a mixed mode: firstly, the online survey, and then by computer assisted telephone interview (CATI) to those firms that did not respond, could not be reached by email, or those that responded partially, in order to obtain a complete survey response.
- 3.5. In the post-survey adjustment, 211 firms were removed: 134 because business was no longer trading or because the contact no longer worked for the company and 77 because they could not be reached by any means (email/phone). These counted towards non-coverage and thus the final sample of supported firms was 2,118. Four hundred sixty-three firms responded to the survey (22% response rate) (see Table 1 for more detail). This represents the margin of error (MOE) of four per cent, which means survey findings are representative of firms that opted into the evaluation.

Table 1. Beneficiary businesses by evaluation stage.

	SE/SDI	HIE	SCC	Multiple	Total
All supported	2,311*	-	-	-	3,053**
Opted in	1,833	290	95***	111	2,329
Post-survey	1,637	285	90	106	2,118
adjustment					
Respondents	366	45	18	34	463

^{*} Possible overlap with other delivery partners; ** Scottish Government's collation of delivery partners' management information data. Population of all supported firms was not available from HIE and SCC; *** SCC supported firms included all firms registering for a trade mission, time period unspecified.

- 3.6. Business contact details, information on assistance provided and businesses data necessary for the evaluation of firms were provided by delivery partners. These were checked and deduplicated by ERC/CBP any issues or questions about the contact list were clarified with delivery partners. Business contact information provided by the delivery partners contained both an email and a phone number for 73% of firms and email only for 27% of firms. Emails only were provided for businesses supported exclusively by SCC and HIE.
- 3.7. The online survey consisted of the invitation and three reminders to non-responding and partially responding firms. During the CATI stage, multiple contacts attempts were made to obtain a response (up to 10). Businesses had the option of scheduling their CATI for a later date. The online survey remained open during the CATI stage.

3.8. During the fieldwork, 125 firms could not be reached by email² and 673 firms could not be reached by phone (501 because only email was provided and 172 because associated phone numbers were unobtainable or incorrect, e.g., did not connect, reached a different business). Using a mixed-mode survey, on the other hand, resulted in a complete no contact of only 3% of all firms (see Table 2).

Table 2. Count and share of firms that could not be reached by a specific mode (N=2,329)

No contact	Count	%
By email	125	5%
By phone	673	29%
By phone and email (no contact)	77	3%

- 3.9. Respondents were provided with the opportunity to opt out of the evaluation through a "warm-up" email sent out by delivery partners, through the survey, by contacting ERC/CBP or when called during the CATI stage. If the firm opted out, it was not contacted again (i.e., if they opted out during the online stage, they were excluded from the CATI stage). In total, 5% of firms (115) opted out during the survey fieldwork. Fieldwork concluded with 463 responses. Of them, 74% were online survey responses, 24% were CATI and 2% were both (i.e., incomplete online responses finished in CATI).
- 3.10. Each survey question was optional. Hence, 81% of respondents completed the whole survey and 19% responded partially. The latter were all online survey respondents. Note that this excludes partial responses with only a few completed questions: such responses were counted as non-response. Furthermore, the beneficiary survey was designed to apply to different groups of the respondents. Namely, questions about exporting characteristics and outcomes only applied to current exporters (N=273). Note that 105 firms reported not receiving any export or wider business development support and were routed out of the rest of the survey which focused on impact of the support.
- 3.11. Businesses in the survey were asked for permission to be approached for an in-depth qualitative interview. Fifty-one per cent of respondents agreed. These companies were followed up by ERC/CBP, resulting in interviews with 23 companies.

Non-beneficiary survey

- 3.12. For the control group evaluation, a CATI survey was conducted with exporting Scottish firms that have not received export or wider business development support since 2015, i.e., non-beneficiaries. It was agreed that only exporting non-beneficiaries could be included because surveying the whole population of (unsupported) businesses would have been cost prohibitive. The counterfactual evaluation thus compares beneficiary exporters with exporting firms that did not receive the support from the delivery partners. It focuses on the impact of the support on the intensive margin (i.e., increase in export sales) as opposed to extensive margin (i.e., becoming an exporter).
- 3.13. The sample for Scottish non-beneficiary firms was drawn from the most current list of HMRC exporters of goods, Inter-Departmental Business Register (IDBR) extracts of exporting firms

² As specified by a number of bounced emails. This only includes bounces for every of the four contact attempts and does not mean that each inbox was monitored or that respondents saw the survey invites.

- (goods or services) provide by the Scottish Government and the commercial business database Fame which holds UK and Ireland company data. The survey was conducted with senior company staff, primarily managing directors, owners and CEOs. Their contact details were obtained from data matching to the commercial Fame database. In total, the survey contacted 2,231 non-beneficiary firms.
- 3.14. As with the beneficiary survey, participation in the non-beneficiary survey was voluntary. The survey fieldwork took place in December 2022 March 2023. This survey achieved a response rate of 135 firms (6% response rate, which is slightly higher than an expected 5% rate for a "cold" sample, that is the one without any ties to the research). All of them were complete responses.

4. Beneficiary survey representativeness

- 4.1. This section provides an assessment of representativeness between all 3,053 supported businesses, 2,329 firms that opted into the evaluation and 463 survey respondents.
- 4.2. Analysis of differences between all supported firms (the population) and the responders' sample was available for the SE/SDI data, which supported the largest share of all companies (76%). The share of firms by support type (international/non-international) was very similar: 85% and 81% (Figure 1). SE/SDI also collected data on firms that aimed to contribute to international sales measures: likewise, the proportion in the whole population and the sample was very similar (Figure 2). There was a slightly higher share of SMEs responding to the survey than in the population (Figure 3), however, this data was not available for over one-fifth of firms, which might explain the discrepancy.

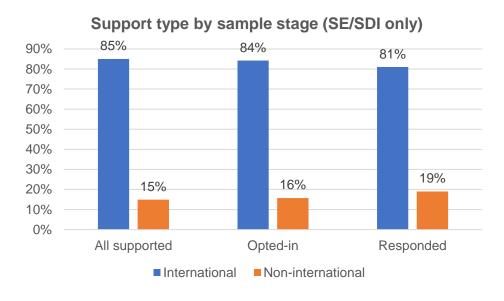
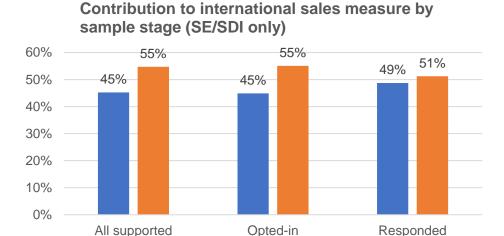


Figure 1. Percentage of SE/SDI beneficiaries incl. firms also supported by other delivery partners.



■No ■Yes

Figure 2. Percentage of SE/SDI beneficiaries incl. firms also supported by other delivery partners.

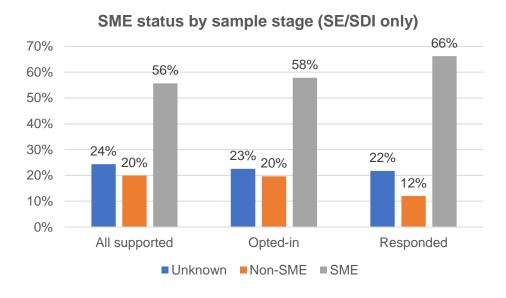


Figure 3. Percentage of SE/SDI beneficiaries incl. firms also supported by other delivery partners.

- 4.3. From 2019/20, SE/SDI also collected data on the status of the firm in terms of it being Export Growth Promotion (EGP) Top Exporter. The share across different stages was also very similar: 23% in the population, 24% in the evaluation in survey and 20% in respondents.
- 4.4. The sectoral breakdown between different evaluation stages was very familiar, varying by just a few percentage points, if at all. Only the Oil & Gas and Tourism sectors were slightly less likely to respond sector.

Table 3. Percentage breakdown by sample stage of the business sector of beneficiaries, SE/SDI only which includes firms supported by multiple delivery partners.

	All supported	Opted-in	Responded
Unknown	3%	3%	4%
Aerospace, Defence and Marine	1%	1%	2%
Chemical Sciences	2%	1%	2%

	All supported	Opted-in	Responded
Construction	1%	1%	2%
Creative Industries	7%	8%	9%
Energy - Low Carbon/Renewables	4%	5%	5%
Energy - Oil & Gas/Thermal	14%	14%	10%
Generation & CCS			
Financial & Business Services	2%	2%	2%
Food and Drink	16%	16%	16%
Forest Industries	0%	0%	1%
Further and Higher Education	2%	2%	1%
Life Sciences	6%	6%	8%
Non-Sector	10%	10%	13%
Technology & Engineering	18%	18%	17%
Textiles	5%	5%	5%
Tourism	8%	7%	5%

4.5. Information on which delivery partner supported which firms was available for the evaluation survey sample. As can be seen from Figure 4, there were no notable discrepancies: firms supported by SE/SDI exclusively made up the majority of beneficiaries in both stages (79%), followed by exclusively HIE supported firms (12% and 10%), SCC trade missions (4%), and firms supported by multiple delivery partners (5% vs 7%).

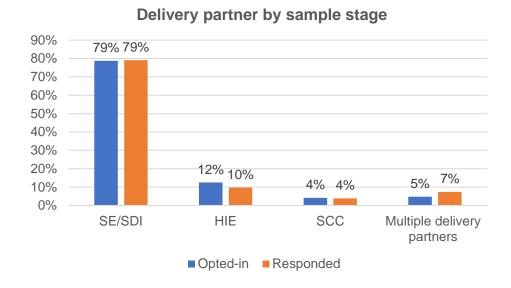


Figure 4. Percentage of all firms.

4.6. Excluding SCC for which data on exact year of support was not available, the samples were also very similar in terms of the financial year of support delivered with just a small difference in those firms that received support in 2018/19, which can be expected (Figure 5).

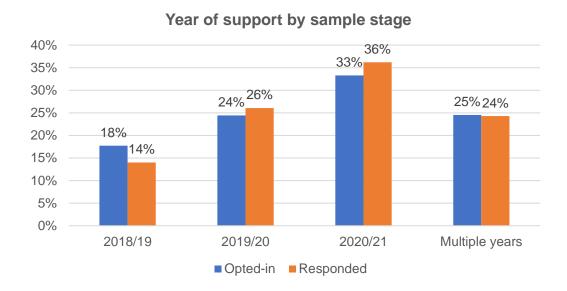


Figure 5. Percentage of all firms.

- 4.7. For SE/SDI beneficiaries,³ there was no material difference in terms of the number of interventions accessed: all supported beneficiaries accessed on average 3.8 SE/SDI interventions, while those who opted into the survey and responded on average accessed 3.9.⁴ Accounting for interventions from SCC and HIE,⁵ showed that the number of interventions across all delivery partners was also very similar between those firms that opted-in and those that responded (3.5 vs 3.6).
- 4.8. It could be concluded that, based on available data, there were no material difference between beneficiary samples that could constitute non-coverage or non-response; thus, the beneficiary survey did not require weighting. However, data on other business characteristics, such as size, age, exporting status or export performance, was not collected, so the full extent of differences between the sample groups could not be assessed. We did not evaluate reasons for firms opting out of the evaluation (nor were they collected by the monitoring system), so it is not clear whether the impact of support was overestimated or underestimated by the survey, if at all.

5. Analyses

- 5.1. Beneficiary survey data was analysed quantitatively using descriptive and inferential statistics where relevant (e.g., outcome assessment). Survey comments from open-ended questions and in-depth interviews with beneficiaries were analysed thematically. The beneficiary evaluation was supplemented by quantitative analysis of data on respondents from the Management Information where relevant, e.g., assistance provided.
- 5.2. The survey data was analysed descriptively and inferentially using significance testing and thematically for open ended comments. Qualitative data was analysed thematically to contextualise quantitative data. Additionally, data on all supported businesses stored in the

³ Incl. those firms also supported by other delivery partners.

⁴ This information is a slight underestimate of the total number of interventions firms might have received as it does not include interventions from other delivery partners for which data was not available at the population stage.

⁵ For which data was available from the evaluation stage.

delivery partners' management information system was analysed to obtain sampling information.

Beneficiary outcome assessment

- 5.3. This section provides details on the export sales outcome assessment methodology. The outcome assessment extrapolates (infers) the survey self-reported data to the supported business population. For this, it also uses information about the business population from the delivery partner Management Information.
- 5.4. Survey data is extrapolated to the firms that opted into the evaluation (2,329). In the post-survey adjustments this was corrected to 2,118 due to further non-coverage considerations (section 3.5). From here on, we refer to these 2,118 firms as the business population.
- 5.5. The survey is the source for actual export data, incl. exporting status and the value of exports. In the survey this data is provided by current exporters (firms that exported in the last 12 months). For those firms that provided their numeric responses in the form of bands ("don't know" responses), the bands were converted into numeric values as the average, the highest and the lowest points.
- 5.6. We extrapolated the share of current exporters in the survey to the business population on the basis of the survey's margin of error. This provides a number of exporters in the population (c. 1,249), incl. its lowest and highest estimates. We then extrapolate the share of exporters who report that the support contributed to achieving export sales to the number of exporters (c. 482 firms), as well as the percentage of export sales they attributed to the support (c. 41%). The timing dimension of impact achieving the same export sales but sooner was not considered because it did not contribute to the volume of export sales.
- 5.7. To derive total export sales attributed to the support, we first estimate total export sales by impacted firms in the business population. Export sales reported by impacted firms, cumulative across four years of the evaluation period (2018 2021), were used. We explored alternative options to capture export sales and agreed with the steering group on the period of 2018 2021 as it captured the records of the support timing the best.
- 5.8. Mean export sales were extrapolated to the (estimated) number of impacted firms. This corresponds to about £4b in total export sales (£3.2b to £4.9b). We then apply estimated percentages of attributed export sales to this value, which corresponds to c. £1.6b of export sales achieved as a result of the delivery partner support (range of £1.1b £2.2b).
- 5.9. The outcome assessment of anticipated export sales as a result of the support was conducted the same way with one key difference: both exporters and non-exporters were asked to anticipate export sales. We consider exporters' responses only as they provided export sales values.

Econometric analysis

5.10. This section provides methodological details of the econometric analysis using the beneficiary (exporters only) and non-beneficiary survey data. Advanced econometric analysis is used in order to assess impact of the export promotion support when compared to nonbeneficiary firms, that is, the counterfactual scenario of what would have happened if firms had not accessed the export support.

Beneficiary survey and assistance

- 5.11. Examining the beneficiary survey data shows the composition of exporting beneficiary firms. It is apparent that there are multiple ways to define assisted firms, or the "treatment" group. We briefly describe the ways in which assisted firms are observed and measured in the management information system to arrive at a definition we deployed for analysis purposes.
- 5.12. Assistance usually took place across years and could happen in more than one financial year for the same firm (i.e., in non-adjacent years). This means that using this definition, firms would be double- or multiple-counted in observations. Instead, we could count firms in assistance by exact dates when assistance was provided. In this case, firms can be in assistance in multiple years including non-adjacent years. If we count firms in assistance only as the first time they were assisted by the exact dates recorded in the management information system (i.e., regardless of further assistance in later years), there are fewer counts of assisted firms in the data.⁶
- 5.13. In the programme evaluation analysis, we differentiate firms that have been treated from those that have never been treated according to their status regarding assistance. We build on the exact year of assistance (as opposed to a financial year or intervention period) and give the value 1 for all periods since the start of assistance (i.e., once a firm has first been assisted). Using this variable (treat), we can split the sample of assisted firms into beforeand after-treatment periods. Our empirical analysis focuses on evaluating the effect of assistance on after-treatment firm-year observations.

Econometrical approach of business support programme evaluation

- 5.14. Within the toolkit of econometrics of business support programme evaluation, various approaches are available to tackle the complex challenges posed by factors such as missing observations, observable and unobservable selection, endogeneity, and data availability, as extensively reviewed by Cerulli (2015). These approaches include Control Function regression, Matching, Instrumental Variable methods, and Selection models. They differ in terms of their identification assumptions, model specifications, and underlying data structures. In our case, as explained in more detail below, the conventional two-way fixed effect (TWFE) model may not be the most suitable method due to heterogeneous treatment effects and varying treatment timings across units. Our preferred approach is the staggered difference-in-differences (DiD) method, following Callaway and Sant'Anna (2021).8
- 5.15. In the following sections, we will present the primary methodology employed for the evaluation and compare it to other popular approaches.

Difference-in-Differences with Multiple Time Periods

5.16. A powerful technique to address endogenous selection without the need for instrumental variables or additional distributional assumptions is the difference-in-differences (DiD) method. DiD is particularly suited for evaluation scenarios where observational data is

⁶ Note that in the management information system, exact dates indicate project or activity finish dates, so the first instance of assistance indicated the first completed project or activity.

⁷ Cerulli, G. and Cerulli, G., 2015. An Introduction to the Econometrics of Programme Evaluation. Econometric Evaluation of Socio-Economic Programs: Theory and Applications, pp.1-47.

⁸ Callaway, B. and Sant'Anna, P.H., 2021. Difference-in-differences with multiple time periods. Journal of Econometrics, 225(2), pp.200-230.

- available for both treated and untreated units before and after treatment. It has been demonstrated that, under this data structure, DiD consistently identifies and estimates causality.
- 5.17. Broadly, there are two types of DiD estimators in the literature, adapted for longitudinal datasets and repeated cross-section data, each with various techniques under different assumptions. However, the generalised DiD, also known as the two-way fixed effect (TWFE) model, may not be the appropriate choice when treatment effects are heterogeneous and treatment timing varies across units, as is the case with the export promotion programme we are examining. Firms received assistance at different times between 2016 and 2021.
- 5.18. Additionally, understanding the effect of an intervention on the outcome becomes challenging when the intervention is dynamic, and the timing of interventions varies across firms within groups. This scenario is reminiscent of policy evaluations, such as the impact of minimum wage changes on employment, as studied by Meer and West (2016).9
- 5.19. To address these complexities, we adopt a state-of-the-art methodology for policy evaluation of interventions occurring at various times over an extended period. Our approach follows the framework of Callaway and Sant'Anna (2021),10 known as the Staggered DiD approach. This method enables the estimation of disaggregated causal parameters, referred to as grouptime average treatment effects. These parameters represent the average treatment effect for a specific group at a given time, where a "group" is defined by the time period when units were first treated. An attractive feature of these parameters is that they do not impose strict restrictions on heterogeneity concerning observed covariates, the initial treatment period, or the evolution of treatment effects over time. As a result, these easily interpretable causal parameters can be used directly to explore treatment effect heterogeneity or construct more aggregated causal parameters. 11 Moreover, this method provides sufficient conditions regarding treatment anticipation behaviour and conditional parallel trends, which ensure that these group-time average treatment effects are nonparametrically point identified.
- 5.20. To illustrate, we focus on the time period from 2016 to 2021, during which some firms received assistance from the export promotion programme at various points, while others did not. We specifically concentrate on a group of 302 firms that did not receive assistance at the outset in 2015, combining data from beneficiary and non-beneficiary surveys. By considering the first year of assistance as the year of intervention, we distinguish between the treated group (175 firms that received assistance at some point between 2016-2021) and the untreated or control group (135 firms that did not receive assistance during this period). In the initial stage of our analysis, we treat all types of assistance equally.
- 5.21. A fundamental assumption underlying the DiD method is the parallel trends assumption, which posits that the untreated units provide a suitable counterfactual for the trend that treated units would have followed if they had not been treated. In essence, this implies that the two groups would have experienced parallel trends.
- 5.22. In such scenarios, it is common practice to conduct pre-trend tests, examining whether the policy change appears to have had an effect on the outcome before it was implemented. The

⁹ Meer, J. and West, J., 2016. Effects of the minimum wage on employment dynamics. Journal of Human Resources, 51(2), pp.500-522.

¹⁰ Callaway, B. and Sant'Anna, P.H., 2021. Difference-in-differences with multiple time periods. Journal of Econometrics, 225(2), pp.200-230.

presence of pre-event trends or "pre-trends" is viewed as evidence against the strict exogeneity of the policy change.

Methodology

- 5.23. This section sets up the potential outcome framework. Here the method combines the dynamic potential outcomes framework of Robins (1986, 1987) with the multi-stage treatment adoption setup discussed by Heckman et al. (2016). Let $Y_{i,t}(0)$ denote unit i's untreated potential outcome at time t if they remain untreated through time period t. For t if they were to first become treated in time period t. Note that our potential outcomes notation accounts for potential dynamic treatment selection, though it also accommodates (pre-specified) treatment regimes (Murphy et al., 2001; Murphy, 2003).
- 5.24. The observed and potential outcomes for each unit *i* are related through

$$Y_{i,t} = Y_{i,t}(0) + \sum_{g=2}^{T} (Y_{i,t}(g) - Y_{i,t}(0)) \cdot G_{i,g}$$

- 5.25. Thus, we only observe one potential outcome path for each unit. For those that do not participate in the treatment in any time period, observed outcomes are untreated potential outcomes in all periods. For units that do participate in the treatment, observed outcomes are the unit-specific potential outcomes corresponding to the particular time period when that unit adopts the treatment.
- 5.26. Two underlying assumptions are made about the treatment process. The first is "Irreversibility of Treatment", which means that no one will be treated at time t=1, and once a unit is treated, it will remain retreated for the rest of the period. This is also known as staggered treatment adoption. Second, "Random Sampling" imposes that unit I is randomly drawn from a large population of interest.
- 5.27. Given that different potential outcomes cannot be observed for the same unit at the same time, researchers often focus on identifying and estimating some average causal effects, or group-time average treatment effect:

$$ATT(g,t) = \ \mathbb{E}\big[Y_t(g) - Y_t(0)|G_g = 1\big]$$

- 5.28. The advantage of this modelling approach is its generality and flexibility that allow us to focus on the family of ATT(g,t)'s to analyse how average treatment effects vary across different dimensions in a unified manner (Callaway and Sant'Anna, 2021). In this case, by fixing a group g and varying t, say firms that entering EP in 2017, we can highlight how average treatment effects evolve over time for the cohort. We can also compare the differences in the outcomes between groups/cohorts, say firms entering EP in 2018 with those in 2017.
- 5.29. There are also three identifying assumptions for the treatment effects, requiring "Limited Treatment Anticipation" for all "eventually treated" groups, or no prior knowledge of firms being chosen for the treatment; "Conditional Parallel Trends Based on a "Never-Treated" Group" assumption; and "Conditional Parallel Trends Based on a "Never-Yet-Treated" Group" assumption. The latter two conditional parallel trends assumptions are generalised two-period parallel tends assumptions for multiple-period case and multiple-treatment

- groups. They essentially impose that these units are similar enough to the "eventually treated" units. Both assumptions need to be held after controlling for covariates X.
- 5.30. In addition, an "Overlap Condition" assumption is also needed. It states that a positive fraction of the population starts treatment in period *g*, and that, for all *g* and *t*, the generalized propensity score is uniformly bounded away from one.

Appendix 1

Beneficiary Survey Questionnaire v10

A Exporting behaviour

- 1. Has your company exported goods and/or services outside of UK in the last 12 months?
 - 1.1. Yes
 - 1.2. No [move to Q7]
- 2. In what year did you export for the first time?
- 3. [if Q2 < 2022] Have you been exporting in every year since {insert Q2 response}?
 - 3.1. Yes
 - 3.2. No
 - 3.3. Don't know
- 4. [if Q3 = No] How many years in total have you exported for?
- 5. [if Q3 = No AND Q2 <2018] Did you restart exporting in the period of 2018 2021?
 - 5.1. Yes
 - 5.2. No
- 6. [if Q5 = Yes] In what year exactly did you restart exporting?
 - 6.1.2018
 - 6.2.2019
 - 6.3.2020
 - 6.4.2021
- 7. [if Q1 = No] Have you ever exported?
 - 7.1. Yes
 - 7.2. No [move to Section 0]
- 8. [if Q7 = Yes] In what year did you last export?
- 9. [if Q7 = Yes] How many years in total before {insert Q8 response} did you export for? [move to Section 0]
- 10. Which industrial market(s) do you export to? Tick all that apply
 - 10.1. Construction
 - 10.2. Food and drink
 - 10.3. Engineering and Advanced Manufacturing
 - 10.4. Life Sciences
 - 10.5. Chemical Sciences
 - 10.6. Energy low carbon and renewables

- 10.7. Energy oil and gas
- 10.8. Technology, Digital & Media
- 10.9. Financial and Business Services
- 10.10. Education
- 10.11. Tourism
- 10.12. Other (please specify):

11. Do you export goods, services or both?

- 11.1. Goods
- 11.2. Services
- 11.3. Both

12. [if Q11 = Goods or Both] What type of goods do you export: is it...

	Yes	No
12.1. Finished products (e.g., whisky, laptops)?		
12.2. Intermediate goods (used as parts to produce other goods,		
e.g., car parts, and raw materials, e.g., oil, grain)?		
12.3. Capital goods (used in the production, e.g., machinery,		
tools, equipment)?		

13. [if Q11= Services or Both] What type of services do you export: is it...

- 13.1. Communication services
- 13.2. Construction and engineering services
- 13.3. Digital services
- 13.4. Distribution services
- 13.5. Education and training services
- 13.6. Environmental services
- 13.7. Financial and business services
- 13.8. Health and social services
- 13.9. Maintenance and repair
- 13.10. Tourism and travel-related services
- 13.11. Recreational, cultural, and sporting services
- 13.12. Transport services
- 13.13. Other (please specify):

14. Which of the following countries have you exported to in the last 12 months?

- 14.1. { List of top 15 exporting countries as per ATN }
- 14.2. Other (please specify):

15. And which country was your largest market by export value in 2017?

- 15.1. { List of selected from the above}
- 15.2. Other (please specify):
- 15.3. Not applicable did not export in 2017

16. And which country was your largest market by export value in 2021?

- 16.1. { List of selected from the above}
- 16.2. Other (please specify):

17. What was the approximate total value of your export sales in the following years? Specify 0 if you did not export in a particular year

{ Tailored by Q2 = First year started; "don't know" band estimates included}

2015	2016	2017	2018	2019	2020	2021
Don't	Don't	Don't know	Don't	Don't	Don't	Don't
know	know		know	know	know	know

B Support and its activities

1. In the period of 2018 – 2021, did you receive any export support from any of the – following delivery partners?

- Scottish Development International (SDI)
- Scottish Enterprise (SE)
- Highlands and Islands Enterprise (HIE)
- South of Scotland Enterprise (SOSE)
- Scottish Chambers of Commerce (SCC) delivered trade missions
- 1.1. Yes
- 1.2. No [go to Q3]

2. [if Q1= Yes] Did you receive the following type of support from delivery partners as part of export support?

		Yes	No
2.1. Cros	ss-sector trade mission		
2.2. Trac	de missions by SCC		
2.3. Exp	ert marketing advice		
2.4. Exp	ert technical advice		
2.5. One	e-to-one exporting advice		
2.6. Glob	palscot		
2.7. Trav	vel / accommodation support to access		
inte	rnational markets		
2.8. Fun	ding for international business		
deve	elopment		
2.9. Inte	rnational scale-up grant / International		
Rec	overy Programme (IRP) grant as a		
resp	oonse to Covid-19		
2.10.	Grant to develop the corporate strategy		
2.11.	E-commerce workshop		
2.12.	International market event		

2.13.	Market research support		
2.14.	Preparing to Export training		
2.15.	International strategy planning workshop		
2.16.	International trade training		
2.17.	Other advisory support (please specify):		
2.18.	Other type of support via grant		
contribution (please specify):			

3. In the period of 2018 – 2021, did you receive any other wider business development support from any of the following delivery partners?

- Scottish Development International (SDI)
- Scottish Enterprise (SE)
- Highlands and Islands Enterprise (HIE)
- South of Scotland Enterprise (SOSE)
- Scottish Chambers of Commerce (SCC) delivered trade missions

3.1. Yes

3.2. No

[if Q3 and Q1 = No -> End of survey]

4. [if Q3 = Yes] Did you receive the following type of support from delivery partners as part of the wider business development support?

		Yes	No
4.1. Cap	4.1. Capital grant		
4.2. R&I	O grant		
4.3. Inno	ovation grant		
4.4. EU-	exit support grant		
4.5. Inno	ovation workshop		
4.6. Lea	dership development		
4.7. Inve	estment and/or financial readiness support		
4.8. Bus	iness strategy planning workshop		
4.9. Inno	ovation advisory support		
4.10.	Marketing advisory support		
4.11.	Sector-specific expert advice		
4.12.	Workplace development/innovation		
4.13.	Efficiency/productivity improvement		
4.14.	ICT and/or digital technology advice		
4.15.	Intellectual property advice		
4.16.	Financial support for business improvement		
4.17.	ScotGrad		
4.18.	Other (please specify):		

C Outcomes

We are now going to ask some questions about the impact of the delivery partner support. Please consider only the support you received in 2018-2021 through the delivery partners (SDI, SE, SCC delivered trade missions, SOSE or HIE) for export support, business development support or both. We would ask you to consider any immediate impacts of this support as well as impacts of subsequent actions that your business took as a result of this support.

C1 New / Re-entry exporters only (i.e., those who started/re-started exporting in 2018 – 2021)

- 1. If you had not received the delivery partner support in 2018-21, would you have started exporting in the period of 2018 2021?
 - 1.1. Yes definitely
 - 1.2. Yes, but progress would have been slower
 - 1.3. Probably not
 - 1.4. Definitely not
 - 1.5. Don't know
- 2. [if Q1 = No / slower progress] When do you think you would you have started exporting if you had not received this support?
 - 2.1. Up to 1 year later
 - 2.2.1 up to 2 years later
 - 2.3.2 up to 3 years later
 - 2.4.3 up to 4 years later
 - 2.5.4 up to 5 years later
 - 2.6.5 years and more later
 - 2.7. Never
 - 2.8. Don't know

C2 All current exporters

- 3. Which of the following best describes your view on the contribution the delivery partner support has made to your firm in terms of export sales achieved after receiving this support?
 - 3.1. We would have achieved these export sales anyway
 - 3.2. We would have achieved the same amount of export sales but later
 - 3.3. We would have achieved some of these export sales but not all of them
 - 3.4. We probably would have not achieved these export sales
 - 3.5. We definitely would not have achieved these export sales
 - 3.6. Don't know
- 4. [if Q2 < 2022] [if Q3 = Not achieved similar results (3.3 3.5)] Without the delivery partner support, approximately what percentage of the total value of your exports sales would you have achieved?
 - 4.1. %:
 - 4.2. Don't know -> Bands
- 5. [if Q3 = Not achieved similar results (3.3 3.5)] Approximately what percentage of your competitors are based in Scotland?

- 5.1.%:
- 5.2. Don't know -> Bands

6. [if Q3 = Not by 2021 (3.2)] When do you think you would have achieved these export sales without the delivery partner support in 2018-21?

- 6.1. Up to 1 year later
- 6.2.1 up to 2 years later
- 6.3.2 up to 3 years later
- 6.4.3 up to 4 years later
- 6.5.4 up to 5 years later
- 6.6.5 years and more later
- 6.7. Don't know

7. As a result of the delivery partner support in 2018-21, have you started to export to any new countries?

- 7.1. Yes
- 7.2. No
- 7.3. N/A was not interested in exporting to new countries
- 7.4. Don't know
- 8. [if Q7 = Yes] Which ones?
 - 8.1. {List of top 15 exporting countries as per ATN
 - 8.2. Other (please specify):

9. As a result of the delivery partner support in 2018-21, have you started to export any new product categories (goods and/or services)? (Tick all that apply)

- 9.1. Yes, new related goods (e.g., long-life milk and long-life soy milk)
- 9.2. Yes, new unrelated goods (e.g., long-life milk and long-life soup)
- 9.3. Yes, new services
- 9.4. No
- 9.5. N/A was not interested in exporting a new product category
- 9.6. Don't know

10. As a result of the delivery partner support in 2018-21, does your business now export on a permanent basis?

- 10.1. Yes
- 10.2. No still not exporting every year
- 10.3. No –already exporting on a permanent basis
- 10.4. N/A was not interested in exporting on a permanent basis
- 10.5. Don't know

11. As a result of the delivery partner support in 2018-21, have you received any external finance for exporting activities?

- 11.1. Yes
- 11.2. No

- 11.3. N/A was not interested in raising external finance for exporting activities
- 11.4. Don't know

12. [if Q11= Yes] What was the source of this external finance? (Tick all that apply)

- 12.1. Clearing bank
- 12.2. Business Angel
- 12.3. Venture capitalist
- 12.4. Public sector (please specify source):
- 12.5. Other source of funding (please specify):
- 12.6. Prefer not to say
- 12.7. Don't know

13. [if Q11= Yes] What type of funding did you receive? (tick all that apply)

- 13.1. Equity
- 13.2. Debt
- 13.3. Grant
- 13.4. Other (please specify):
- 13.5. Don't know
- 13.6. Prefer not to say

14. [if Q11 = Yes] And where from did you receive this external finance?

	Scottish	Institution based	Institution based
	based	elsewhere in the UK	overseas
	institution		
[if Q13= equity] Equity finance			
(incl. venture capital)			
[if Q13 = Debt] Debt finance			

15. Have your exporting activities increased your firm's R&D investment in the period 2018-21?

- 15.1. Yes
- 15.2. No
- 15.3. N/A was not interested in increasing R&D investment
- 15.4. Don't know

16. [if Q15 = Yes] By what percent in the period 2018-21?

- 16.1. [open]
- 16.2. Don't know -> % bands

17. Have your exporting activities increased your firm's capital spending in the period 2018-21?

- 17.1. Yes
- 17.2. No
- 17.3. N/A was not interested in increasing capital investment at that time
- 17.4. Don't know

- 18. [if Q17 = Yes] By what percent in the period 2018-21?
 - 18.1. [open]
 - 18.2. Don't know -> % bands
- 19. Have your exporting activities resulted in your firm receiving any external finance in the period of 2018-21?
 - 19.1. Yes
 - 19.2. No
 - 19.3. N/A was not interested in raising external finance
 - 19.4. Don't know

20. Have the supported export activities in 2018-2021 had any positive impact on the following measures of your firm's productivity?

	Yes	No	Don't know
Gross-value-added per employee [Gross Value Added is the			
value of goods and services produced by your firm. It is the			
total value of output produced, without including the			
intermediary costs that went into producing them.]			
Revenue per employee			

C3 All supported

- 21. Do you anticipate your export sales increasing as a result of the delivery partner support over the next three years?
 - 21.1. Yes
 - 21.2. No.
 - 21.3. Don't know
- 22. [if Q21 = Yes] By what percent at the end of 3 years?
 - 22.1. [open]
 - 22.2. Don't know -> % bands
- 23. As a result of the delivery partner support in 2018-21, have you introduced any new products (goods and/or services) or made improvements to your existing products?
 - 23.1. Introduced new products (goods and/or services)
 - 23.2. Improved existing products (goods and/or services)
 - 23.3. Both
 - 23.4. None of these
 - 23.5. N/A was not interested in product development
 - 23.6. Don't know
- 24. [if Q23 = New products] And are these new products (goods and/or services)....
 - 24.1. New to your company?
 - 24.2. New to the market?

- 24.3. Both?
- 24.4. Neither?
- 24.5. Don't know

25. [if Q23 = New products] **Do you sell these new and/or improved products to the following** markets?

		Yes	No
25.1.	Scotland		
25.2.	Rest of UK		
25.3.	EU		
25.4.	Rest of the world		

- 26. As a result of the delivery partner support in 2018-21, have you introduced any new business processes or made improvements to your existing processes (i.e., production or delivery methods)?
 - 26.1. Introduced new processes
 - 26.2. Improved existing processes
 - 26.3. Both
 - 26.4. None of these
 - 26.5. N/A was not interested in process development
 - 26.6. Don't know
- 27. [if Q 26 = Process innovation] And are any of these new and/or improved processes automated?
 - 27.1. Yes
 - 27.2. No
 - 27.3. Don't know

28. [if Q26 = Process innovation] **Do these new or improved processes contribute to making products sold in the following markets?**

		Yes	No
28.1.	Scotland		
28.2.	Rest of UK		
28.3.	EU		
28.4.	Rest of the world		

- 29. [if RECEIVED Export support only] Have you increased the number of people employed by your company, or safeguarded any existing jobs, if at all, as a result of the support received to develop your exporting activities?
 - 29.1. Yes increased number of people employed
 - 29.2. Yes safeguarded existing jobs
 - 29.3. Yes both
 - 29.4. No
 - 29.5. N/A was not interested in increasing/safeguarding jobs at that time

- 29.6. Don't know
- 30. [if Q29 = jobs increase] Overall, how many new people have you employed as a result of the support received to develop your exporting activities?
- 31. [if Q29 = jobs safeguarded] Overall, how many existing jobs have you safeguarded as a result of the support received to develop your exporting activities?
- 32. What other benefits, if any, has the delivery partner support provided?

D Outcomes x Support activities

1. Were the following support activities useful in helping you to achieve export sales?

{ Display choices from section B incl.		No
business support, excl. N/A}		
1.1. Cross-sector mission		
1.2. Expert marketing advice		
1.3		

- 2. [if Q1 = multiple Useful] And which one was the most useful in helping you to achieve export sales?
 - 2.1. { List of Useful selections }
 - 2.2. Don't know
- 3. Were any of the following support activities useful in helping you to introduce new products or make improvements to your existing products that you export and/or wish to export?

{ Display choices from section B incl.	Yes	No
business support, applies only to YES		
outcomes}		
1.1. Cross-sector mission		
1.2. Expert marketing advice		
1.3. Expert technical advice		
1.4		

- 4. [if Q3 = multiple Useful] And which one was the most useful in helping you to introduce new products or make improvements to your existing products that you export and/or wish to export?
 - 4.1. { List of Useful selections }
 - 4.2. Don't know
- 5. Were any of the following support activities useful in helping you to introduce new business processes or make improvements to your existing processes of relevance to exporting?

{ Display choices from section B incl.	Yes	No
business support, applies only to YES		
outcomes }		
1.1. Cross-sector mission		
1.2. Expert marketing advice		
1.3. Expert technical advice		
1.4		

- 6. [if Q5 = multiple Useful] And which one was the most useful in helping you to introduce new business processes or make improvements to your existing processes of relevance to exporting?
 - 6.1. { List of Useful selections }
 - 6.2. Don't know
- 7. Were any of the following support activities useful in helping you to export to new countries?

{ Display choices from section B incl.		No
business support applies only to YES		
outcomes }		
1.1. Cross-sector mission		
1.2. Expert marketing advice		
1.3. Expert technical advice		
1.4		

- 8. [if Q7 = multiple Useful] And which one was the most useful in helping you to export to new countries?
 - 8.1. { List of Useful selections }
 - 8.2. Don't know
- 9. Were any of the following support activities useful in helping you to export new categories of goods and/or services?

{ Display choices from section B incl.	Yes	No
business support applies only to YES		
outcomes}		
1.1. Cross-sector mission		
1.2. Expert marketing advice		
1.3. Expert technical advice		
1.4		

- 10. [if Q9 = multiple Useful] And which one was the most useful in helping you to export new categories of goods and/or services?
 - 10.1. { List of Useful selections }
 - 10.2. Don't know

11. Were any of the following support activities useful in helping you to export on a permanent basis?

{ Display choices from section B incl.	Yes	No
business support applies only to YES		
outcomes }		
1.1. Cross-sector mission		
1.2. Expert marketing advice		
1.3. Expert technical advice		
1.4		

- 12. [if 11 = multiple Useful] And which one was the most useful in helping you to export on a permanent basis?
 - 12.1. { List of Useful selections }
 - 12.2. Don't know
- 13. You selected the following support activities as the most useful in helping you achieve exporting outcomes: {selected choices in Q2, Q4, Q6, Q8,Q10, Q12 }. Why were these the most useful?

E External Factors (Exporters only (& started before 2022) and/or Stopped exporting after 2017)

1. Did you experience any of the following challenges with exporting goods or services in 2018-2021? { Randomised response options }

111 2	2010-2021? { Randonnised response options }	1	Т
		Yes	No
1.1.	Additional paperwork		
1.2.	Basing some staff in an EU member state to be allowed to work		
1.3.	Change in transportation costs		
1.4.	Closure of infrastructure used to export goods or services		
1.5.	Customs duties or levies		
1.6.	Destination countries changing their border restrictions		
1.7.	Disruption at UK borders		
1.8.	Finding information on how to export		
1.9.	Lack of hauliers to transport goods or lack of logistics equipment		
1.10.	Our existing products are no longer competitive in the		
int	ernational market place		
1.11.	Time taken for checks at the border		
1.12.	Work permit or visa restrictions, or lack of mutual recognition of		
pro	ofessional qualifications		
1.13.	Discriminatory measures against suppliers at export destination		
(e.	g., through tax or subsidies)		
1.14.	Regulatory compliance procedures		
1.15.	Restrictions of foreign entry to export destination		
1.16.	Other (please specify):		
			-

- 2. [if Q1 = Challenges] What was the main cause of these exporting challenges in 2018-2021?
 - 2.1. The coronavirus (COVID-19) pandemic
 - 2.2. End of the EU exit transition period (31 Dec 2020)
 - 2.3. The coronavirus (COVID-19) pandemic and the end of the EU exit transition period
 - 2.4. Other (please specify):
 - 2.5. Don't know
- 3. [if Q1 = Challenges] Could you provide an estimate of how much your export sales have decreased due to these challenges since receiving the delivery partner support?
 - 3.1.%
 - 3.2. Don't know -> Bands
- 4. [if Q1 = Challenges] How useful, if at all, was the delivery partner support in helping you to overcome these challenges?
 - 4.1. Very useful
 - 4.2. Fairly useful
 - 4.3. Somewhat useful
 - 4.4. A little useful
 - 4.5. Not at all useful

F Process & Future

- 1. How do you rate your satisfaction with the way the delivery partner support was delivered on a scale from 0 (extremely dissatisfied) to 10 (extremely satisfied)?
 - 1.1. Scale 0 10
- 2. [if < 8] What could have been improved? Open box
- 3. Which top three barriers to exporting goods or services do you expect to affect you in the next three years? { placement of options to be randomised}
 - 3.1. Additional paperwork
 - 3.2. Customs duties or levies
 - 3.3. Rule of origin proof
 - 3.4. Trade finance
 - 3.5. Skills and human capital
 - 3.6. Physical production capacity and/or technical constrains
 - 3.7. Organisational constraints (e.g., management capacity)
 - 3.8. Quality of the delivery partner support
 - 3.9. Sufficiency of the delivery partner support
 - 3.10. Our existing products are no longer competitive in the international market place
 - 3.11. Time taken for checks at the border
 - 3.12. Work permit or visa restrictions, or lack of mutual recognition of professional qualifications

- 3.13. Discriminatory measures against suppliers at export destination (e.g., through tax or subsidies)
- 3.14. Regulatory compliance procedures
- 3.15. Restrictions of foreign entry to export destination
- 3.16. Other (please specify):
- 3.17. Do not expect any barriers with exporting
- 4. [if Q3=barriers] Thinking about the type, content and delivery of support that you received from the delivery partners, how effective, if at all, do you think it would be in addressing these barriers in the next three years?
 - 4.1. Very effective
 - 4.2. Fairly effective
 - 4.3. Somewhat effective
 - 4.4. A little effective
 - 4.5. Not at all effective
- 5. [if Q3= barriers] Which of the following are critical gaps in helping you address your export barriers in the future ?{ placement of options to be randomised}Tick all that apply
 - 5.1. Customs and tariffs
 - 5.2. Export licences
 - 5.3. Financial advisory support
 - 5.4. Finding new markets
 - 5.5. Finding new overseas contacts or customers
 - 5.6. Information on exporting
 - 5.7. Legal support
 - 5.8. Transport and distribution
 - 5.9. Understanding markets and demand issues
 - 5.10. Regulatory Compliance
 - 5.11. Other (please specify):
- 6. Do you plan to export to any new market sector in the next three years?
 - 6.1. Yes
 - 6.2. No
 - 6.3. Don't know
- 7. Which new market sectors do you plan to export to? Tick all that apply {doesn't display current export sectors as per A10}
 - 7.1. Construction
 - 7.2. Food and drink
 - 7.3. Engineering and Advanced Manufacturing
 - 7.4. Life Sciences
 - 7.5. Chemical Sciences
 - 7.6. Energy low carbon and renewables
 - 7.7. Energy oil and gas
 - 7.8. Technology, Digital & Media

- 7.9. Financial and Business Services
- 7.10. Education
- 7.11. Tourism
- 7.12. Other (please specify):
- 8. Do you plan to export to any new countries in the next three years?
 - 8.1. Yes
 - 8.2. No
 - 8.3. Don't know
- 9. [if Q8 = Yes] Which one(s)? [open]
- 10. Is there any other type of support you wish you had received that would have been useful in helping you to achieve export sales? Why?
- 11. [if Section B Q1 = Yes] If you had not received export support from the delivery partners, would you have sought export support from some other organisation(s) in the period of 2018 2021?
 - 11.1. Yes
 - 11.2. No
 - 11.3. Don't know
- 12. [if Q11 = YES] From which organisation(s)?
- G Firms not exporting only
- 1. What are the three most important reasons which explain why you are not currently exporting? {Order of items on the list displayed randomly}
 - 1.1. Additional paperwork
 - 1.2. Customs duties or levies
 - 1.3. Rule of origin proof
 - 1.4. Trade finance
 - 1.5. Skills and human capital constrains
 - 1.6. Physical production capacity and/or technical constrains
 - 1.7. Organisational constraints (e.g., management capacity)
 - 1.8. Quality of the delivery partner support
 - 1.9. Sufficiency of the delivery partner support
 - 1.10. Our existing products are no longer competitive in the international market place
 - 1.11. Time taken for checks at the border
 - 1.12. Work permit or visa restrictions, or lack of mutual recognition of professional qualifications
 - 1.13. Discriminatory measures against suppliers at export destination (e.g., through tax or subsidies)
 - 1.14. Regulatory compliance procedures
 - 1.15. Restrictions of foreign entry to export destination
 - 1.16. Other (please specify):

H Business characteristics

1. Is your business head-quartered in Scotland?

- 1.1. Yes
- 1.2. No
- 1.3. Don't know

2. What is the main activity of your business (i.e., business sector)?

- 2.1. Agriculture, forestry or hunting
- 2.2. Fishing
- 2.3. Mining & quarrying
- 2.4. Manufacturing
- 2.5. Electricity, gas & water supply
- 2.6. Construction
- 2.7. Wholesale, retail & certain repair
- 2.8. Hotels & restaurants
- 2.9. Transport, storage or communication
- 2.10. Finance
- 2.11. Real estate, renting or business activities
- 2.12. Public administration & defence
- 2.13. Education
- 2.14. Health & social work
- 2.15. Community, social & personal services
- 2.16. Other (please specify):

3. In what year was your business established?

4. How many people are currently employed by your business within Scotland?

- 4.1. Number
- 4.2. Don't know -> bands
- 4.3. Prefer not to say

5. Comparing the number of employees your company had in Scotland before receiving the delivery partner support to the current number of employees, how did it change?

- 5.1. It increased
- 5.2. It decreased
- 5.3. It stayed the same
- 5.4. Don't know

6. What was the approximate turnover of your business in 2021 across all your Scottish sites?

- 6.1. Number
- 6.2. Don't know -> bands:
 - 6.2.1. Less than £85,000
 - 6.2.2. £85,000 £249,999

- 6.2.3. £250,000 £499,999
- 6.2.4. £500,000 £999,999
- 6.2.5. £1m £1.99m
- 6.2.6. £2m £4.99m
- 6.2.7. £5m £9.99m
- 6.2.8. £10m £14.99m
- 6.2.9. £15m £24.99m
- 6.2.10. £25m £49.9m
- 6.2.11. £50m or more
- 6.2.12. Don't know
- 6.2.13. Prefer not to say
- 7. Comparing your business's turnover across all your Scottish sites before receiving the delivery partner support to the turnover in 2021, how did it change?
 - 7.1. It increased
 - 7.2. It decreased
 - 7.3. It stayed the same
 - 7.4. Don't know
- 8. What is the role of your business in the global value chain (i.e., when different stages of the production process are located across different countries)? Are you a:
 - 8.1. Lead firm in the global value chains (GVC)
 - 8.2. GVC partner (not lead firm) B2B (business to business)
 - 8.3. GVC partner (not lead firm) B2C (business to consumer)
 - 8.4. GVC partner (not lead firm) B2G (business to government)
 - 8.5. None all business' activities are domestic (UK)
 - 8.6. Other (please specify):
 - 8.7. Don't know
 - 8.8. Prefer not to say
- 9. Do you import goods and/or services?
 - 9.1. Yes
 - 9.2. No
- 10. Would you be willing to take part in potential future Scottish Government/delivery partner research on this topic (e.g., short interview, follow-up survey)?
 - 10.1. Yes
 - 10.2. No
- 11. Would you be happy for us to link the data you provided with other government surveys or datasets to enable further confidential statistical analysis?
 - 11.1. Yes
 - 11.2. No

Appendix 2

Beneficiary Qualitative Interview Guide v4

1. Can we start with you telling me what your company does? 2. [Based on database info & survey responses, validate support received] Why did you seek to access the delivery partner support? For what specific purpose, if any, did you need this support for? 3. How relevant the support was to your exporting / business objectives [as applies]? If not, why not? 4. What do you think of the quality of support provided? Why? 5. [if multiple support activities] How did different support activities work together, if at all (clarify if needed: did they complement or hinder each other, or did not interact at all)? Why? 6. What did you take away from the delivery partner support received, if anything? [if nothing] Why not? [if something] How did you apply this to your firm's [exporting - if applicable] activities? Was this for the purposes that you had originally sought support for or for some other purpose? [if other purpose] How did you come to apply what you received for this/these other purpose(s)? 7. [if exporting] A. In the survey you said that the delivery partner support [helped / didn't help] you to achieve export sales - could you tell me how and why the support help / did not help? 8. A. [N/A if not SE-supported] Comparing the export sales you planned to achieve with the ones you reported achieving, the number is [higher / lower] - what are the **reasons for this difference?** [N/A if the comparison is the same] B. [survey response] How will the support help you to achieve sales in the future? / Why do you anticipate that you won't be able to achieve export sales in the future? 9. Aside from the delivery partners, did you receive support from other public sources for exporting? [IF YES] From where? What impact, if any, did this support have on your export sales and/or activities?

- 10. [N/A if never exported] If you had not received the delivery partner support, what do you think would have happened to your firm's exporting activities and/or sales? Why?
- 11. You mentioned that [survey response] would have been useful in helping you to achieve export sales not having this support, how did it affect your exporting activities/sales?
- 12. Broadly speaking, what are your future exporting plans? How do you think SG and/or delivery partners could support you with them?
- 13. This is the end of the interview, is there anything else you'd like to add about the delivery partner support or anything to ask me?

Appendix 3

Non-beneficiary Survey Questionnaire v5

A Support and exporting behaviour

- 1. Has your company exported goods and/or services outside of UK in the last 12 months?
 - 1.1. Yes
 - 1.2. No [INELIGIBLE]
- 2. Since 2015 has your company received any export or business development support from the following Scottish Government delivery partners:
 - Scottish Development International (SDI)
 - Scottish Enterprise (SE)
 - Highlands and Islands Enterprise (HIE)
 - South of Scotland Enterprise (SOSE)
 - Scottish Chambers of Commerce (SCC) delivered trade missions?
 - 2.1. Yes [INELIGIBLE]
 - 2.2. No
- 3. Since 2015 has your company received any other public sector support for exporting?
 - 3.1. Yes
 - 3.2. No
- 4. [if Q3 YES] From which organisation(s)? (Tick all that apply)
 - 4.1. UKTI (UK Trade & Investment)
 - 4.2. DIT (UK Department of International Trade)
 - 4.3. Scotland's Innovation Centre
 - 4.4. Innovate UK
 - 4.5. Business Gateway
 - 4.6. Local council
 - 4.7. UK Export Finance
 - 4.8. Other (please specify):
- 5. Since 2015 has your company received any public sector support for wider business development?
 - 5.1. Yes
 - 5.2. No
- 6. [if Q5= YES] From which organisation(s)? [open box]
- 7. In what year did you export for the first time?
- 8. [if Q2 < 2022] Have you been exporting in every year since {insert Q2 response}? 8.1. Yes

- 8.2. No
- 8.3. Don't know

9. [if Q3 = No] How many years in total have you exported for?

10. [if Q3 = No] Did you restart exporting in the period of 2018 - 2021?

- 10.1. Yes
- 10.2. No

11.[if Q5 = Yes] In what year exactly did you restart exporting?

- 11.1. 2018
- 11.2. 2019
- 11.3. 2020
- 11.4. 2021

12. Which industrial market(s) do you export to? Tick all that apply

- 12.1. Construction
- 12.2. Food and drink
- 12.3. Engineering and Advanced Manufacturing
- 12.4. Life Sciences
- 12.5. Chemical Sciences
- 12.6. Energy low carbon and renewables
- 12.7. Energy oil and gas
- 12.8. Technology, Digital & Media
- 12.9. Financial and Business Services
- 12.10. Education
- 12.11. Tourism
- 12.12. Other (please specify):

13. Do you export goods, services or both?

- 13.1. Goods
- 13.2. Services
- 13.3. Both

14. [if Q11 = Goods or Both] What type of goods do you export: is it...

	Yes	No
Finished products (e.g., whisky, laptops)?		
Intermediate goods (used as parts to produce other goods, e.g., car		
parts, and raw materials, e.g., oil, grain)?		
Capital goods (used in the production, e.g., machinery, tools,		
equipment)?		

15. [if Q11= Services or Both] What type of services do you export: is it...

15.1. Communication services

- 15.2. Construction and engineering services
- 15.3. Digital services
- 15.4. Distribution services
- 15.5. Education and training services
- 15.6. Environmental services
- 15.7. Financial and business services
- 15.8. Health and social services
- 15.9. Maintenance and repair
- 15.10. Tourism and travel-related services
- 15.11. Recreational, cultural, and sporting services
- 15.12. Transport services
- 15.13. Other (please specify):

16. Which of the following countries have you exported to in the last 12 months?

- 16.1. { List of top 15 exporting countries as per ATN }
- 16.2. Other (please specify):

17. And which country was your largest market by export value in 2017?

- 17.1. { List of selected from the above}
- 17.2. Other (please specify):
- 17.3. Not applicable did not export in 2017

18. And which country was your largest market by export value in 2021?

- 18.1. { List of selected from the above}
- 18.2. Other (please specify):

19. What was the approximate total value of your export sales in the following years? Specify 0 if you did not export in a particular year

2015	2016	2017	2018	2019	2020	2021
Don't	Don't	Don't know	Don't	Don't	Don't	Don't
know	know		know	know	know	know

[If don't know] If you had to estimate, would you say it was...?

- Less than £85,000
- £85,000 £249,999
- £250,000 **-** £499,999
- £500,000 £999,999
- £1m £1.99m
- £2m £4.99m
- £5m £9.99m
- £10m £14.99m
- £15m £24.99m

- £25m £49.9m
- £50m or more
- Don't know

B Outcomes

1. In the last 12 months have you started to export to any new countries?

- 1.1. Yes
- 1.2. No
- 1.3. N/A was not interested in exporting to new countries
- 1.4. Don't know

2. [if Q7 = Yes] Which ones?

- 2.1. List of top 15 exporting countries as per ATN
- 2.2. Other (please specify):

3. In the last 12 months have you started to export any new product categories (goods and/or services)? (Tick all that apply)

- 3.1. Yes, new related goods (e.g., long-life milk and long-life soy milk)
- 3.2. Yes, new unrelated goods (e.g., long-life milk and long-life soup)
- 3.3. Yes, new services
- 3.4. No
- 3.5. N/A was not interested in exporting a new product category
- 3.6. Don't know

4. In the last 12 months have you received any external finance for exporting activities?

- 4.1. Yes
- 4.2. No
- 4.3. N/A was not interested in raising external finance for exporting activities
- 4.4. Don't know

5. Compared to 12 months ago, does your business now export on a permanent basis?

- 5.1. Yes
- 5.2. No still not exporting every year
- 5.3. No –already exporting on a permanent basis
- 5.4. N/A was not interested in exporting on a permanent basis
- 5.5. Don't know

6. In the last 12 months have you introduced any new products (goods and/or services) or made improvements to your existing products?

- 6.1. Introduced new products (goods and/or services)
- 6.2. Improved existing products (goods and/or services)
- 6.3. Both
- 6.4. None of these
- 6.5. N/A was not interested in product development

6.6. Don't know

- 7. [if Q23 = New products] And are these new products (goods and/or services)....
 - 7.1. New to your company?
 - 7.2. New to the market?
 - 7.3. Both?
 - 7.4. Neither?
 - 7.5. Don't know

8. [if Q23 = New products] **Do you sell these new and/or improved products to the following markets?**

	Yes	No
8.1. Scotland		
8.2. Rest of UK		
8.3. EU		
8.4. Rest of the world		

- 9. In the last 12 months have you introduced any new business processes or made improvements to your existing processes (i.e., production or delivery methods)?
 - 9.1. Introduced new processes
 - 9.2. Improved existing processes
 - 9.3. Both
 - 9.4. None of these
 - 9.5. N/A was not interested in process development
 - 9.6. Don't know
- 10. [if Q 26 = Process innovation] And are any of these new and/or improved processes automated?
 - 10.1. Yes
 - 10.2. No
 - 10.3. Don't know

11. [if Q26 = Process innovation] **Do these new or improved processes contribute to making products sold in the following markets?**

		Yes	No
11.1.	Scotland		
11.2.	Rest of UK		
11.3.	EU		
11.4.	Rest of the world		

- 12. In the last 12 months have you increased the number of people employed by your company, or retained any existing jobs, if at all?
 - 12.1. Yes increased number of people employed
 - 12.2. Yes retained existing jobs

Evnort Promotion	Evaluation	Methodology Note
	Lvaluation	Methodology Note

- 12.3. Yes both
- 12.4. No
- 12.5. N/A was not interested in increasing/retaining jobs
- 12.6. Don't know
- 13.[if Q29 = jobs increase] Overall, how many new people have you employed in the last 12 months? + Don't know -> bands
- 14. [if Q29 = jobs safeguarded] Overall, how many existing jobs have you retained in the last 12 months? + Don't know -> bands
- 15. Did your exporting activities increase your firm's R&D investment in the period 2018-21?
 - 15.1. Yes
 - 15.2. No
 - 15.3. N/A was not interested in increasing R&D investment
 - 15.4. Don't know
- 16. [if Q15 = Yes] **By what percent in the period 2018-21?**
 - 16.1. [open]
 - 16.2. Don't know -> % bands
- 17. Did your exporting activities increase your firm's capital spending in the period 2018-21?
 - 17.1. Yes
 - 17.2. No
 - 17.3. N/A was not interested in increasing capital investment
 - 17.4. Don't know
- 18. [if Q17 = Yes] By what percent in the period 2018-21?
 - 18.1. [open]
 - 18.2. Don't know -> % bands
- 19. Did your exporting activities result in your firm receiving any external finance in the period of 2018-21?
 - 19.1. Yes
 - 19.2. No
 - 19.3. N/A was not interested in raising external finance
 - 19.4. Don't know
- 20. Have your export activities in 2018-2021 had any positive impact on the following measures of your firm's productivity?

	Yes	No	Don't know
Gross-value-added per employee [Gross Value			
Added is the value of goods and services produced			

by your firm. It is the total value of output produced,		
without including the intermediary costs that went		
into producing them.]		
Revenue per employee		

C External Factors (if started before 2022)

1. Did you experience any of the following challenges with exporting goods or services in 2018-2021? { Randomised response options }

	Yes	No
1.17. Additional paperwork		
1.18. Basing some staff in an EU member state to		
be allowed to work		
1.19. Change in transportation costs		
1.20. Closure of infrastructure used to export		
goods or services		
1.21. Customs duties or levies		
1.22. Destination countries changing their border		
restrictions		
1.23. Disruption at UK borders		
1.24. Finding information on how to export		
1.25. Lack of hauliers to transport goods or lack of		
logistics equipment		
1.26. Our existing products are no longer		
competitive in the international market place		
1.27. Time taken for checks at the border		
1.28. Work permit or visa restrictions, or lack of		
mutual recognition of professional qualifications		
1.29. Discriminatory measures against suppliers at		
export destination (e.g., through tax or		
subsidies)		
1.30. Regulatory compliance procedures		
1.31. Restrictions of foreign entry to export		
destination		
1.32. Other (please specify):		

2. [if Q1 = Challenges] What was the main cause of these exporting challenges in 2018-2021?

- 2.1. The coronavirus (COVID-19) pandemic
- 2.2. End of the EU exit transition period (31 Dec 2020)
- 2.3. The coronavirus (COVID-19) pandemic and the end of the EU exit transition period
- 2.4. Other (please specify):
- 2.5. Don't know

- 3. [if Q1 = Challenges] Could you provide an estimate of how much your export sales have decreased due to these challenges in the last 12 months?
 - 3.1.%
 - 3.2. Don't know -> Bands

D Future

- 1. Which top three barriers to exporting goods or services do you expect to affect you in the next three years? { placement of options to be randomised}
 - 1.1. Additional paperwork
 - 1.2. Customs duties or levies
 - 1.3. Rule of origin proof
 - 1.4. Trade finance
 - 1.5. Skills and human capital
 - 1.6. Physical production capacity and/or technical constrains
 - 1.7. Organisational constraints (e.g., management capacity)
 - 1.8. Our existing products are no longer competitive in the international market place
 - 1.9. Time taken for checks at the border
 - 1.10. Work permit or visa restrictions, or lack of mutual recognition of professional qualifications
 - 1.11. Discriminatory measures against suppliers at export destination (e.g., through tax or subsidies)
 - 1.12. Regulatory compliance procedures
 - 1.13. Restrictions of foreign entry to export destination
 - 1.14. Other (please specify):
 - 1.15. Do not expect any barriers with exporting
- 2. [if Q3= barriers] Which of the following are critical gaps in helping you address your export barriers in the future ?{ placement of options to be randomised}Tick all that apply
 - 2.1. Customs and tariffs
 - 2.2. Export licences
 - 2.3. Financial advisory support
 - 2.4. Finding new markets
 - 2.5. Finding new overseas contacts or customers
 - 2.6. Information on exporting
 - 2.7. Legal support
 - 2.8. Transport and distribution
 - 2.9. Understanding markets and demand issues
 - 2.10. Regulatory Compliance
 - 2.11. Other (please specify):
- 3. Do you plan to grow your export sales in the next three years?
 - 3.1. Yes

- 3.2. No
- 3.3. Don't know

4. [if Q3 = Yes] By what percent at the end of three years?

- 4.1. [open]
- 4.2. Don't know -> % bands

5. Do you plan to export to any new market sector in the next three years?

- 5.1. Yes
- 5.2. No
- 5.3. Don't know

6. Which new market sectors do you plan to export to? Tick all that apply {doesn't display current export sectors as per A10}

- 6.1. Construction
- 6.2. Food and drink
- 6.3. Engineering and Advanced Manufacturing
- 6.4. Life Sciences
- 6.5. Chemical Sciences
- 6.6. Energy low carbon and renewables
- 6.7. Energy oil and gas
- 6.8. Technology, Digital & Media
- 6.9. Financial and Business Services
- 6.10. Education
- 6.11. Tourism
- 6.12. Other (please specify):

7. Do you plan to export to any new countries in the next three years?

- 7.1. Yes
- 7.2. No
- 7.3. Don't know

8. [if Q8 = Yes] Which one(s)? [open]

E Business characteristics

1. Is your business head-quartered in Scotland?

- 1.1. Yes
- 1.2. No
- 1.3. Don't know

2. In what year was your business established?

3. What is the main activity of your business (i.e., business sector)?

3.1. Agriculture, forestry or hunting

- 3.2. Fishing
- 3.3. Mining & quarrying
- 3.4. Manufacturing
- 3.5. Electricity, gas & water supply
- 3.6. Construction
- 3.7. Wholesale, retail & certain repair
- 3.8. Hotels & restaurants
- 3.9. Transport, storage or communication
- 3.10. Finance
- 3.11. Real estate, renting or business activities
- 3.12. Public administration & defence
- 3.13. Education
- 3.14. Health & social work
- 3.15. Community, social & personal services
- 3.16. Other (please specify):

4. [if Q2 =< 2017] Was the main activity of your business (i.e., business sector) the same in 2017?

- 4.1. Yes
- 4.2. No
- 4.3. Don't know
- 5. [if Q4=No] What was the main activity of your business (i.e., business sector) in 2017? 5.1.Q3 non-selected options
- 6. How many people are currently employed by your business within Scotland?
 - 6.1. Number
 - 6.2. Don't know -> bands
 - 6.3. Prefer not to say
- 7. [if Q2 =<2017] How many employees were employed by your business within Scotland in 2017?
 - 7.1. No employees
 - 7.2.1 9
 - 7.3.10 49
 - 7.4.50 249
 - 7.5.250 or more
 - 7.6. Prefer not to say
 - 7.7. Don't know
- 8. What was the approximate turnover of your business in 2021 across all your Scottish sites?
 - 8.1. Number
 - 8.2. Don't know -> bands:
 - 8.2.1. Less than £85,000

- 8.2.2. £85,000 £249,999
- 8.2.3. £250,000 £499,999
- 8.2.4. £500,000 £999,999
- 8.2.5. £1m £1.99m
- 8.2.6. £2m £4.99m
- 8.2.7. £5m £9.99m
- 8.2.8. £10m £14.99m
- 8.2.9. £15m £24.99m
- 8.2.10. £25m £49.9m
- 8.2.11. £50m or more
- 8.2.12. Don't know
- 8.2.13. Prefer not to say

9. [if Q2 =<2017] What was the approximate turnover of your business in 2017 across all your Scottish sites?

- 9.1.1. Less than £85,000
- 9.1.2. £85,000 £249,999
- 9.1.3. £250,000 £499,999
- 9.1.4. £500,000 £999,999
- 9.1.5. £1m £1.99m
- 9.1.6. £2m £4.99m
- 9.1.7. £5m £9.99m
- 9.1.8. £10m £14.99m
- 9.1.9. £15m £24.99m
- 9.1.10. £25m £49.9m
- 9.1.11. £50m or more
- 9.1.12. Don't know
- 9.1.13. Prefer not to say

10. What is the role of your business in the global value chain (i.e., when different stages of the production process are located across different countries)? Are you a:

- 10.1. Lead firm in the global value chains (GVC)
- 10.2. GVC partner (not lead firm) B2B (business to business)
- 10.3. GVC partner (not lead firm) B2C (business to consumer)
- 10.4. GVC partner (not lead firm) B2G (business to government)
- 10.5. Other (please specify):
- 10.6. Don't know
- 10.7. Prefer not to say

11. Do you import goods and/or services?

- 11.1. Yes
- 11.2. No

Outro

- 1. If you don't mind telling us, why have you not accessed export or business development support from the Scottish Government delivery partners?
- 2. Would you be happy for us to link the data you provided with other government surveys or datasets to enable further confidential and aggregate statistical analysis? This would involve Aston University using the company name, which you have already agreed can be provided with your responses, to link the data you have provided to other government surveys or datasets they may have access to.
 - 2.1. Yes
 - 2.2. No