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# ERDF Support for Business Evaluation

## Final report

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**Glossary**

Glossary text

| Abbreviation | Definition |
|---|---|
| AGP | Accelerated Growth Programme |
| ASTUTE | Advanced Sustainable Manufacturing Technologies |
| BERD | Business Expenditure on Research and Development |
| BSD | Business Structures Database |
| CATI | Computer-Assisted Telephone Interviewing |
| CCT | Cross-Cutting Theme |
| CIE | Counterfactual Impact Evaluation |
| CJRS | Coronavirus Job Retention Scheme |
| CPIH | Consumer Price Index including owner occupier's Housing costs |
| CRM | Customer Relationship Management |
| CRN | Companies House Registration Number |
| DID | Difference in Differences |
| ERDF | European Regional Development Fund |
| ESF | European Social Fund |
| EW | East Wales |
| FE | Further Education |
| FTE | Full-Time Equivalent |
| GDHI | Gross Disposable Household Income |
| GDP | Gross Domestic Product |
| GVA | Gross Value Added |
| HEI | Higher Education Institution |

| Abbreviation | Definition |
|---|---|
| HMRC | HM Revenue and Customs |
| ICT | Information and Communications Technologies |
| IP | Intellectual Property |
| ITL | International Territorial Level |
| IUK | Innovate UK |
| NGA | Next-Generation Access |
| NGB | Next-Generation Broadband |
| ONS | Office for National Statistics |
| PA | Priority Axis |
| PAYE | Pay As You Earn |
| PSM | Propensity Score Matching |
| RD&I | Research Development and Innovation |
| RET | Regional Engagement Team |
| SFBE | Superfast Broadband Business Exploitation |
| SIC | Standard Industrial Classification |
| SME | Small to Medium-Sized Enterprise |
| SO | Specific Objective |
| SPC | Supplementary Protection Certificate |
| SPF | Shared Prosperity Fund |
| TCA | Trade and Cooperation Agreement |
| VAT | Value-Added Tax |
| WBFG | Well-being of Future Generations |
| WEFO | Welsh European Funding Office |
| WWV | West Wales and the Valleys |

# 1. Introduction/background

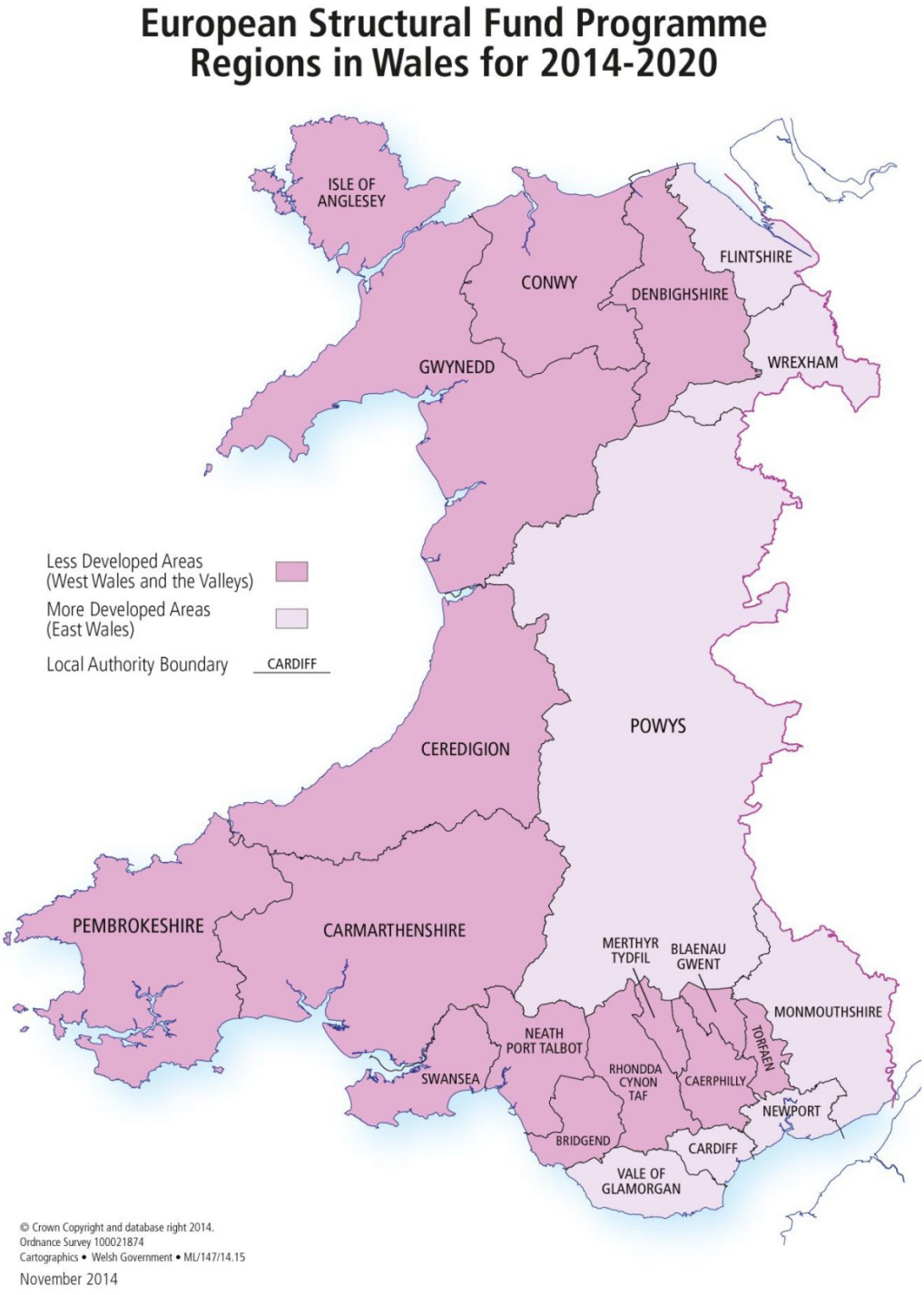
1.1 In November 2021 the Welsh European Funding Office (WEFO) of the Welsh Government commissioned Wavehill alongside Winning Moves and Belmana to undertake an evaluation of non-financial support for businesses funded through the European Regional Development Fund (ERDF) and delivered through the 2014–2020 European Structural Funds Programmes.

1.2 The 2014–2020 ERDF and European Social Fund (ESF) programmes are known as the European Structural Funds Programmes. The WEFO is part of the Welsh Government and manages the delivery of the European Structural Funds Programmes in Wales.

1.3 The 2014–2020 ERDF is split into two Operational Programmes in Wales based on two geographical regions, namely West Wales and the Valleys (WWV) and East Wales (EW). The local authorities associated with each geographical region are shown in Figure 1.1 overleaf.

1.4 The ERDF Operational Programmes are designed to contribute to smart, sustainable and inclusive growth and to economic, social and territorial cohesion. They aim to address longstanding weaknesses in the Welsh economy whilst building on its strengths. Furthermore, the programmes aim to tackle inequalities, promote environmental issues and mitigate adverse impacts, and tackle poverty and social exclusion.

**Figure 1.1: EU Structural Funds Programme regions in Wales (2014–2020)**




Source: Welsh Government

1.5 The programmes are structured using Priority Axes (PA), Specific Objectives (SO), and operations, which provide the focus for investment. The evaluation seeks to assess the effectiveness of ERDF support for businesses with a particular focus on

two PAs within the Operational Programmes[1], namely PA1: Research and Innovation and PA2: Small and Medium-Sized Enterprise (SME) Competitiveness.

**Table 1.1: Priority Axes included in the study**

| Priority Axis | Changes sought |
|---|---|
| 1 – Research and Innovation | • Increase research funding (private and competitive) attracted to Wales' research institutions.<br>• Increase the commercialisation of research development & innovation (RD&I) by Welsh businesses within the programme area. |
| 2 – SME Competitiveness | • Address market failures in the provision of loan and equity finance to SMEs, including risk capital.<br>• Increase the number and survival of SMEs, particularly high-growth SMEs (including social enterprises).<br>• Increase employment growth in SMEs with growth potential by addressing barriers at key stages of growth.<br>• Increase the uptake and exploitation of superfast and ultrafast broadband by SMEs in Wales. |

1.6 A series of SOs are found under each PA. The SO identifies the socioeconomic need and the specific changes to be achieved through Structural Funds investment. The focus of the evaluation has been on operations that have been delivered through SOs focused on assisting businesses. The list of SOs and their descriptions is presented in Table 1.2 below.

**Table 1.2: Specific Objectives included in the study**

| Specific Objective | Description |
|---|---|
| **SO1.2** | To increase successful translation of research and innovation processes into new and improved commercial products, processes and services, particularly through improved technology transfer from higher education institutions (HEI) |
| **SO2.2** | To increase the number of SME start-ups through the provision of information, advice, guidance and support for entrepreneurship |
| **SO2.3** | To increase the uptake and exploitation of next-generation access (NGA) and information and communications technologies (ICT) infrastructure by SMEs |

[1] There are five Priority Axes (PA) across the ERDF programmes: PA1: Research and Innovation, PA2: SME Competitiveness, PA3: Renewable Energy and Energy Efficiency, PA4: Connectivity and Sustainable Urban Development (West Wales and the Valleys)/Connectivity (East Wales), and PA5: Technical Assistance.

| Specific Objective | Description |
|---|---|
| **SO2.4** | To increase the growth of those SMEs with growth potential, particularly through accessing new markets (both domestic and international) |

Cross-Cutting Themes

1.7 Operations supported by the Structural Funds are required to contribute to the attainment of Cross-Cutting Theme (CCT) indicators and targets. The CCT indicators for the ERDF programmes are as follows:

**Priority 1: Research and Innovation:**

- Percentage of enterprises adopting or improving their equality strategies and monitoring systems
- Percentage of enterprises adopting or improving their sustainable development strategies and monitoring systems

**Priority 2: SME Competitiveness:**

- Percentage of enterprises adopting or improving their equality strategies and monitoring systems
- Percentage of enterprises adopting or improving their sustainable development strategies and monitoring systems

1.8 Operations supported under SO1.2 are referred to a Business Future-Proofing Toolkit for support in this area. The toolkit is available online and used to advise companies on the benefits of adopting the measures described above, and its usage enables them to develop an action plan for further assistance. Developmental support provided by Business Wales as part of Priority Axis 2 leads to the claiming of these target indicators.

Evaluation aims

1.9 The main aims of the evaluation are to assess:

- the effectiveness of ERDF support for businesses, with a particular focus on the enterprise, RD&I, and ICT infrastructure areas of programme activity
- the outcomes achieved to date, e.g. business creation, innovation, survival and growth, including employment, turnover, R&D investment, ICT exploitation, exports, and profit amongst those businesses created and assisted by ERDF operations

- whether supported businesses have received advice, guidance or support in relation to CCTs, and their perceptions on the quality and satisfaction of this
- whether the programme provided opportunities to promote the Welsh language and how the programme contributed to the goals of the Well-being of Future Generations Act
- whether impacts are influenced by different types or categories of operations (and support) or different business situations (size, industrial sector or geographical location).

**Methodological approach**

1.10 The evaluation has involved **desk-based research** reviewing various documentation associated with the ERDF Operational Programmes, targeted case study operations, and performance-related data associated with the SOs.

1.11 A **survey of 1,014 SMEs** was conducted with a questionnaire that built on the survey design used in a similar evaluation in 2016[2]. Refinements were made to the survey to ensure that it reflected contemporary contextual socioeconomic factors during the Operational Programmes.

1.12 The survey included questions on awareness and motivations regarding obtaining ERDF support, the nature of support received, satisfaction levels with that support, and the effects of that support on business activity as well as its impact on employment and business performance. The business survey can be found in Annexe A.

1.13 The sample provided for the business survey comprised those businesses that had received support under SO1.2, 2.2, 2.3 and 2.4 (see Table 1.2 above). A quota sampling approach by SO was adopted which mimicked a simple random sample. This enabled the capture of a profile of survey respondents that reflected the characteristics of the larger population.

1.14 Following discussions between the evaluation consortium and the Welsh Government, the decision was made to limit the sample frame to businesses that had received support within the last few years (from March 2019 onwards). This approach was

[2] SQW Ltd, Aston Business School and BMG Research (2016) *ERDF 'Support for Business' Evaluation*, WEFO, Welsh Government.

adopted with the understanding that it would strengthen the recall of support from businesses and provide more accurate responses to questions, while also giving exposure to and enabling a comparison between the perceptions of support pre- and post-COVID-19.

1.15 Limiting the eligible population to those in receipt of support resulted in almost 7,500 eligible records. However, further analysis identified 520 duplicate records, which meant that there were 6,974 unique records within the eligible population.

1.16 The survey was piloted with a sample of 300 businesses, with 200 receiving an online survey and 100 being contacted via telephone. The objective of this pilot was to identify a preferred methodology for administering and managing the survey, and to compare the quality and usability of data collated via the online and telephone methods. Following the pilot, minor amendments were made to the structure and wording of questions.

1.17 Based on the findings from the pilot survey, a multi-modal survey method, which combined online and CATI (computer-assisted telephone interviewing) completions, was undertaken. In total, there were 1,014 survey completions, 870 from CATI and 144 from online submissions, equating to a response rate of 13.5 per cent.

**Table 1.3: Survey sample**

| Specific Objective (SO) | Participants (2016–2022) | Proportion of all participants | No. of available participants engaging (March 2019) | No. of survey responses achieved | Proportion of all survey respondents |
|---|---|---|---|---|---|
| SO1.2 | 1,122 | 5.7% | 390 | 59 | 5.8% |
| SO2.2 | 4,841 | 24.7% | 2,139 | 262 | 25.8% |
| SO2.3 | 5,306 | 27.1% | 1,806 | 272 | 26.8% |
| SO2.4 | 8,145 | 41.6% | 3,159 | 421 | 41.5% |
| **Totals** | **19,580** | **100.0%** | **7,494**[3] | **1,014** | **100.0%** |

Additional sampling requirements

1.18 In addition to the aforementioned sampling characteristics, there was a need to ensure that the final ~1,000 completed responses included:

[3] This was the number of available business contacts prior to the removal of duplicate records.

- a minimum of 600 responses from businesses supported through Business Wales (SO2.2 and 2.4) and Superfast Broadband Business Exploitation (SO2.3)
- a suitable geographical split reflective of the population of supported businesses in the two Operational Programmes: West Wales and the Valleys and East Wales.

**Counterfactual impact evaluation**

1.19 A counterfactual impact evaluation (CIE) was conducted as part of the evaluation to explore firm-level employment and turnover impacts amongst participant businesses registered with Companies House and for value-added tax (VAT) or pay as you earn (PAYE). Moreover, the CIE explored the fundraising of businesses (which provides an indication of business growth orientation, as well as being a proxy for innovation) and the average wages of participant businesses (as an indicator of the quality of employment).

1.20 In the CIE, as well as understanding the performance of supported businesses, evidence on what would have happened in the absence of the support is compiled by examining comparable but unsupported businesses as a benchmark (the counterfactual or comparison group). The analysis used the Office for National Statistics (ONS) Business Structures Database (BSD) and other firm-level data. The BSD draws a snapshot each year from the ONS Business Register. The register includes all businesses registered for VAT and/or PAYE income tax and, therefore, includes all significant businesses operating in the UK. The BSD is updated on an annual basis and, thus, provides a wide range of economic variables captured consistently for businesses over time. The variables captured include business age, turnover, employment, sector and survival (continued operation). This means that comparable data can be found for businesses in Wales supported by the ERDF as well as other UK businesses that can act as a counterfactual.

1.21 A statistical technique called propensity score matching (PSM) was used to identify a counterfactual. This can then form the basis for difference-in-differences (DID) analysis to understand whether the growth observed between supported businesses and the control group (the first difference) differs significantly before and after the support (the

second difference). Any significant difference is an estimate of the additional effects of the support.

1.22 **Qualitative research** with **key stakeholders** was carried out via telephone and through videoconferencing (Microsoft Teams). Consultations were undertaken with a range of ERDF stakeholders to reflect on the performance of the operations within the targeted SOs. Consultations were conducted during August and September 2022 with 16 stakeholders engaged.

1.23 A series of **case studies** have been compiled to provide more detail on the experience of delivering specific operations within each SO. Furthermore, they have provided the opportunity to contextualise the findings of the survey and to explore in greater depth the support offered and the experiences of businesses in receipt of that support. Interviews with Project Development Officers sought to identify operations that might be suitable as case studies. The evaluators used this insight alongside discussions with the Welsh Government to collaboratively identify a selection of case studies that represented all SOs and a wide range of business support.

1.24 For each case study, the lead beneficiary (the organisation managing the operation) and a random sample of participant businesses were interviewed via telephone. Across the six case studies these equated to 41 in-depth interviews with participant businesses.

**Methodological limitations**

1.25 The emphasis of this research is on evaluating activity at a broad SO level. Whilst the ultimate goals for provision delivered under each SO are consistent, the nature of that support (particularly its intensity, its duration, and whether it is delivered on a one-to-one or one-to-many basis) varies considerably (although all businesses would have received a minimum of six hours of support). Furthermore, business support within some operations is tailored to the growth orientation of those participants, with the most intensive support being targeted at those with the strongest growth prospects. Again, this leads to considerable variation in the support received. Detail on the intensity of support offered by operations was not available to the evaluators. Thus, it is not possible to account for variations in intensity when exploring levels of satisfaction as well as business effects and impacts.

1.26 The management information made available in order to conduct the survey consisted of contact details, the industrial sector of that business, the specific operation with which the business had engaged, and the date of that engagement. Some operations requested that their participants be excluded from the survey population because (for example) there was a risk of consultation fatigue, as they were in the midst of operation-specific evaluations (which necessitated fieldwork with those businesses). The evidence base for the population alongside influences on the eligible sample has limited the extent to which the representativeness of survey responses can be assessed.

1.27 As outlined previously in this section, respondents to the survey are dominated by participants of the Business Wales operations. The intensity of support offered through Business Wales varies considerably, depending on the growth potential of the business. One element within the Business Wales operation, namely the Accelerated Growth Programme, provides the most intensive support to growth-oriented businesses over a longer timeframe. Data made available subsequent to the survey have identified that the majority of enrolments (ca. 85 per cent) on the Accelerated Growth Programme took place prior to March 2019. This cohort of businesses have therefore largely been inadvertently excluded from the sample frame. (Fourteen respondents from that service were engaged in the survey. If survey responses were representative of their population, there would have been ca. 70 survey respondents.) This may have led to a dilution in the true level of self-reported impacts associated with employment and business growth.

1.28 In the design of the business survey, concerns were raised as to its length and the complexity of some question sets. This was set against the background of decreasing response rates to surveys, partly attributed to consultation fatigue associated with extensive primary research of businesses during the COVID-19 pandemic and the increased prevalence of remote working. This led to a rationalisation (the removal of some questions) of the survey to ensure focus on the key areas of interest of the evaluation.

1.29 The question set associated with attribution was one of the areas to be rationalised. With a reduced level of survey information on the self-attribution of impact, there is a

restricted ability to undertake a self-reported impact evaluation of the suite of SOs. This has limited some of the analyses that can be conducted. However, whilst self-reported impacts represented an element of the 2016 study, self-reported impacts are not considered to be robust methods of attribution and assessment. The approach does not register on the Maryland Scientific Methods Scale (which ranks policy evaluations from 1 (least robust) to 5 (most robust)), whilst the CIE approach described previously within this section is rated at Level 3[4].

1.30 The remainder of the report is structured as follows.

- Section 2 provides an overview of the socioeconomic context within which the programme has operated.
- Section 3 provides an overview of the support offered through the various SOs and summarises the progress of each SO against target indicators and spend data.
- Section 4 summarises stakeholder perspectives on programme delivery.
- Section 5 provides an analysis of 1,014 survey respondents in receipt of support via the SOs.
- Section 6 draws on findings from in-depth interviews with participant businesses and project managers from selected case study operations to summarise the key learning points from that provision.
- Section 7 provides a summary of the CIE.
- Section 8 draws the findings together to inform the conclusions and recommendations of the study.

[4] See details on the various levels of the Maryland Scale.

# 2. ERDF Operational Programme context and rationale

## Introduction

2.1 Before assessing the performance of business support operations through the two ERDF programmes, it is important to first consider the socioeconomic context in which they have been operating. This section reflects on the socioeconomic situation upon commencement of this round of Structural Funds (Structural Funds are allocated to Member States on a seven-year basis) in 2014 and presents an overview of the performance of the Welsh economy since then. The socioeconomic analysis focuses on those areas that the ERDF sought to influence, including gross value added (GVA), productivity, the business base, start-up rates, employment, innovation, exports, and earnings. Moreover, there is consideration given to the main changes in public policy within which the programmes have had to work.

2.2 The Welsh Chapter of the United Kingdom Partnership Agreement[5] identifies a series of socioeconomic indicators that provide the rationale behind an emphasis (amongst others) on the four SOs within the scope of this evaluation.

## Research Development and Innovation

2.3 A particular gap in Business Expenditure on Research and Development (BERD) between Wales and the rest of the UK was evident in data analysed within the Partnership Agreement. A strong advantage in innovation is generally observed in the UK; however, this is not equally distributed, with Wales being identified as an "innovation follower"[6] on the Regional Innovation Scoreboard[7] and lagging behind some regions in the rest of the UK.

2.4 The Partnership Agreement describes how the peripherality of Wales impacted negatively on the commercialisation of research, which, in turn, led to less investment in research and innovation. That being said, the Agreement identified distinct

[5] United Kingdom Partnership Agreement (accessed 4th January 2023).

[6] The Innovation Scoreboard identifies a hierarchy of four innovation groups for regions: Innovation Leader, Innovation Follower, Innovation Moderate, and Innovation Modest. Wales therefore sat within the second group of four, albeit at the low end of the category alongside the North East, West Midlands, and Yorkshire and Humber but below most of the UK regions.

[7] See Regional Innovation Scoreboard 2012 for further details.

advantages for Wales in encouraging inward investment in research and innovation through, for example, a lower cost of living and a better quality of life, advanced manufacturing capabilities, and existing and emerging areas of smart specialisation that could be exploited through the Structural Funds Programme[8].

**SME Competitiveness**

2.5 From an SME competitiveness perspective, the Partnership Agreement identified that average SME productivity in Wales in 2011 was 69 per cent of the UK average, or 83 per cent when London and the South East of England were excluded. This productivity gap was seen to be a contributory factor towards the disparity in GVA with the rest of the UK and was viewed as affecting the competitiveness of Welsh SMEs[9].

2.6 Investment in research and innovation is widely recognised as a key driver with which to increase productivity growth, but several other barriers were identified in the Partnership Agreement to the creation and growth of SMEs in Wales, including:

- a reluctance amongst potential entrepreneurs to start new businesses
- SMEs not fully exploiting new markets, particularly in other countries
- SMEs not meeting productivity potential in particular sectors, e.g. manufacturing
- SMEs in rural areas facing barriers to growth due to remoteness from their proximity to skilled staff, inadequate infrastructure, and, for the land-based sector, an ageing workforce[10].

2.7 These challenges were exacerbated by the underlying disparities in socioeconomic performance encountered in Wales at that time (further detail on these disparities is presented later within this section).

**ICT Exploitation**

2.8 ICT exploitation plays a key role in improving SME Competitiveness but requires relevant infrastructure to be in place. In 2012, Wales had the lowest availability of cable broadband services and the second-lowest availability of fibre broadband (2013)

[8] Key areas of smart specialisation were generally drawn from Welsh Government (2012) *Science for Wales, a strategic agenda for science and innovation in Wales*, Welsh Government.
[9] United Kingdom Partnership Agreement, HM Government (revised 31st January 2020).
[10] HM Government (2014) *United Kingdom Partnership Agreement*,

among the UK nations[11]. In 2013, access to next-generation broadband (NGB) and the availability of superfast broadband (actual downstream speed of 30Mbit/s or above) was lowest in Wales of all UK regions (48 per cent in comparison to the UK average of 73 per cent, although this was up from 37 per cent one year earlier)[12]. The paper recognised that the challenges of introducing ICT infrastructure to the geographically peripheral and more challenging areas (typically those that are sparsely populated with challenging terrain) would not be met by the market, thereby warranting significant ERDF investment. Thus, the Superfast Cymru Programme of 2007–2013, which sought to ensure NGB, was delivered to 96 per cent of the 1.4m premises in Wales by summer 2016[13].

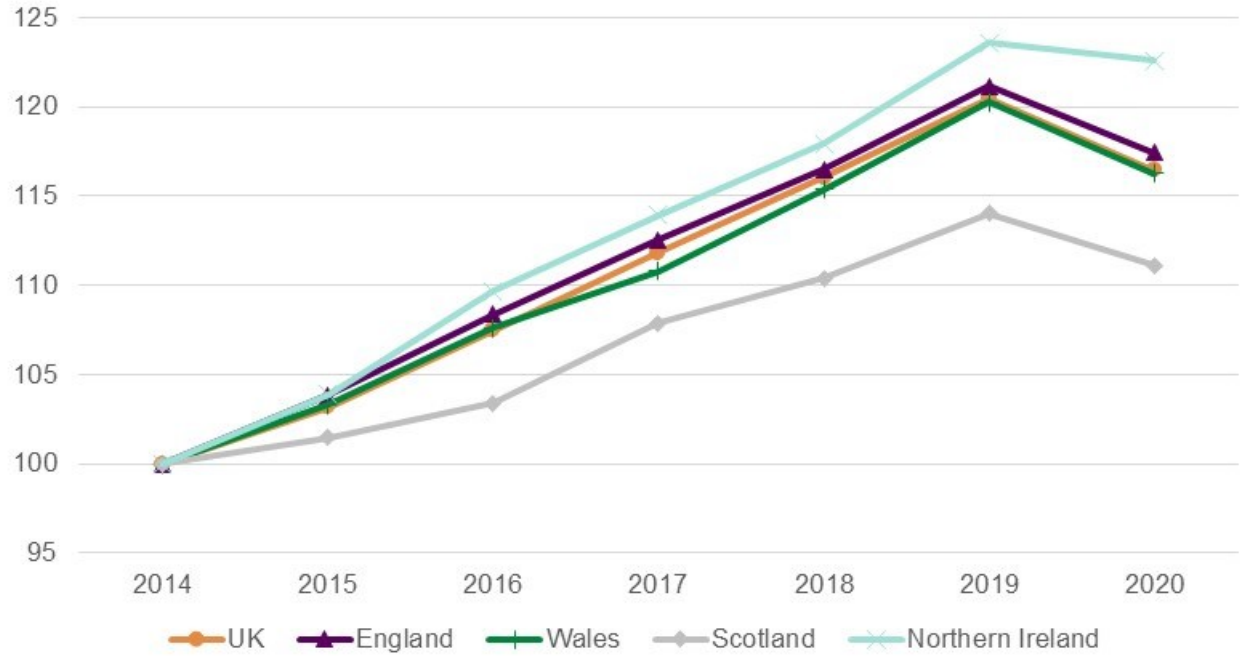
**Headline economic performance since 2014**

Productivity

2.9 In 2014, total GVA in Wales was £57.3bn[14]. By 2019, GVA had increased to £68.9bn; however, the outbreak of COVID-19 in 2020 led to a contraction in GVA to £66.6bn[15]. Figure 2.1 below illustrates that GVA trends have broadly mirrored those of England and the UK. GVA has increased at a faster pace in Wales than it has in Scotland, whilst growth in GVA in Northern Ireland has surpassed that of all other regions, which some economists have attributed to their access to EU markets (specifically Ireland)[16].

[11] Ofcom (2013) *Communications Market Report: Wales*, Ofcom, p.67
[12] Ofcom (2013) *Infrastructure Report*
[13] HM Government (2014) *United Kingdom Partnership Agreement*
[14] Regional gross value added (balanced) by industry.
[15] Ibid.
[16] Ibid.

**Figure 2.1: Index of GVA, 2014=100**

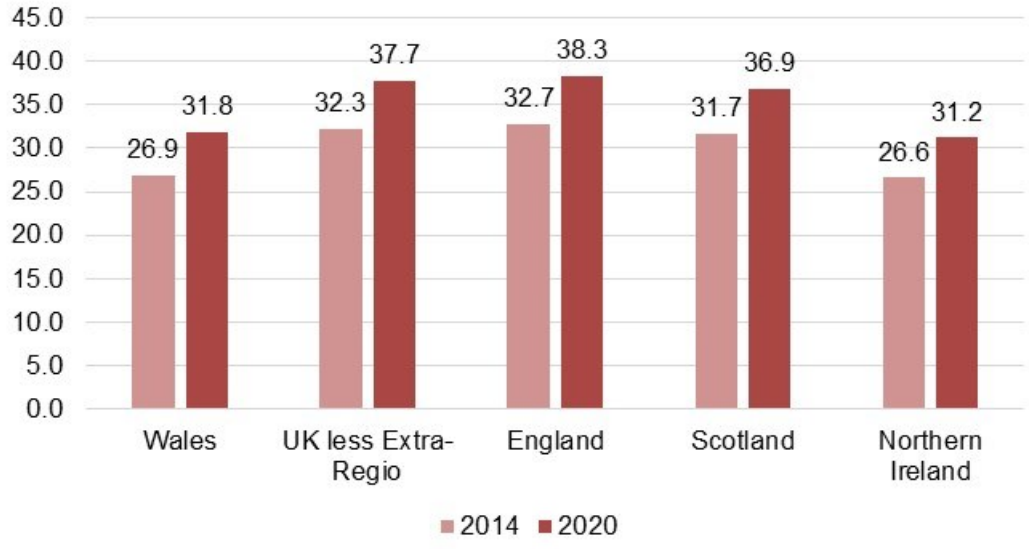



Source: ONS, 2020, Regional gross value added (balanced) by industry

2.10 Productivity is typically measured in terms of GVA per hour worked. In Wales this was £26.90 in 2014 and by 2020 this figure had increased by 18 per cent to £31.80 (see Figure 2.2 below). The rate of increase in productivity was higher than the average achieved across the UK (17 per cent) and higher than each of the other home nations. Such performance has marginally narrowed the proportional gap between Welsh and UK productivity (with Welsh productivity at 84.4 per cent of the UK average in 2020 in comparison to 83.3 per cent in 2013). The closure in the productivity gap has been driven by productivity growth in West Wales and the Valleys, which over the programme period has outperformed East Wales and the UK (with 19.4 per cent growth). Despite this recent increase, however, productivity in West Wales and the Valleys remains at only 81 per cent of the UK average[17].

[17] Subregional productivity: labour productivity indices by UK ITL2 and ITL3 subregions

**Figure 2.2: GVA per hour worked**



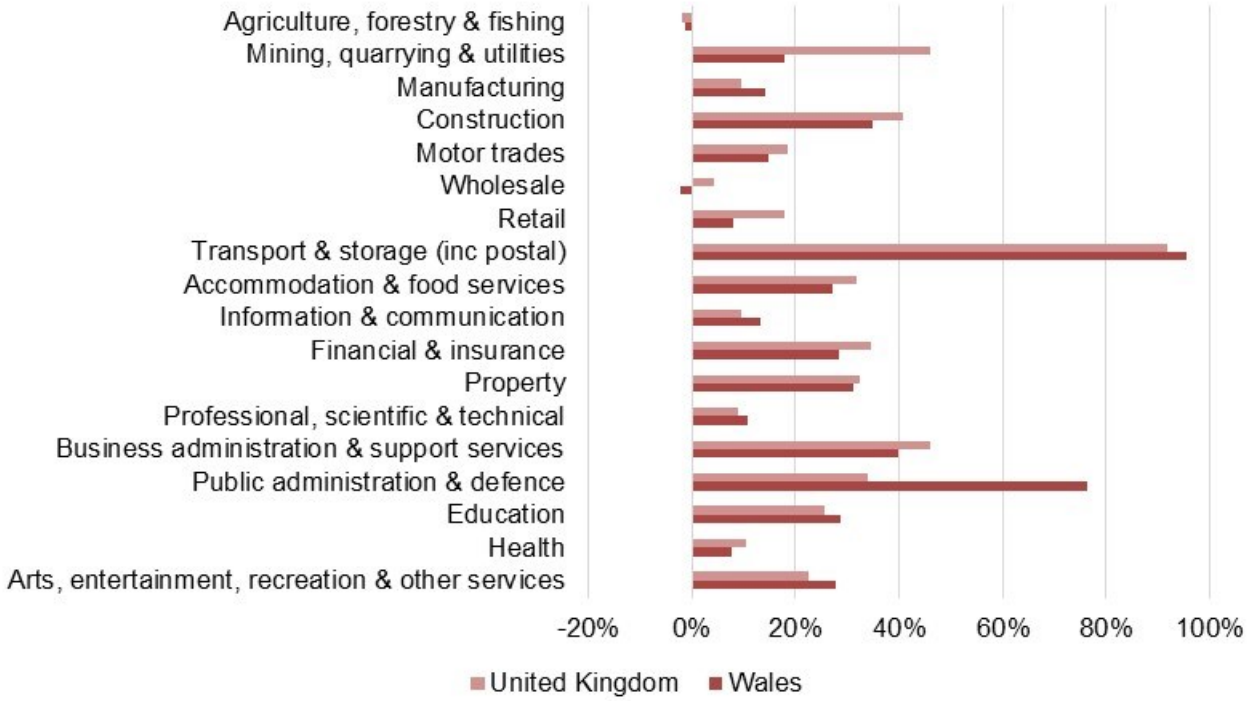

Source: ONS, 2020, Subregional productivity: labour productivity indices by UK ITL2 and ITL3 subregions

## Business stock

2.11 There were 92,445 registered businesses in Wales in 2014. By 2021, the business stock had increased by more than 13,000 or 14 per cent to 105,815 registered businesses. Similar rates of growth in the business stock were found in both programme regions. On average, growth in the business stock throughout the UK surpassed that in Wales (15 per cent), primarily driven by growth in England (16 per cent)[18]. Figure 2.3 compares the change in business stock by broad industrial sector and illustrates how the number of enterprises in Wales expanded in all industrial sectors in Wales apart from the agriculture and wholesale sectors. The largest proportional growth was found in transport and storage as well as public administration and defence, with sectoral trends broadly mirroring those encountered across the UK[19].

[18] Business Demography, Office for National Statistics, Active business enterprises by area and year
[19] UK business counts – enterprises by industry and employment size band, Office for National Statistics.

**Figure 2.3: Percentage change in business stock by broad industrial sector in Wales and UK (2014–2022)**

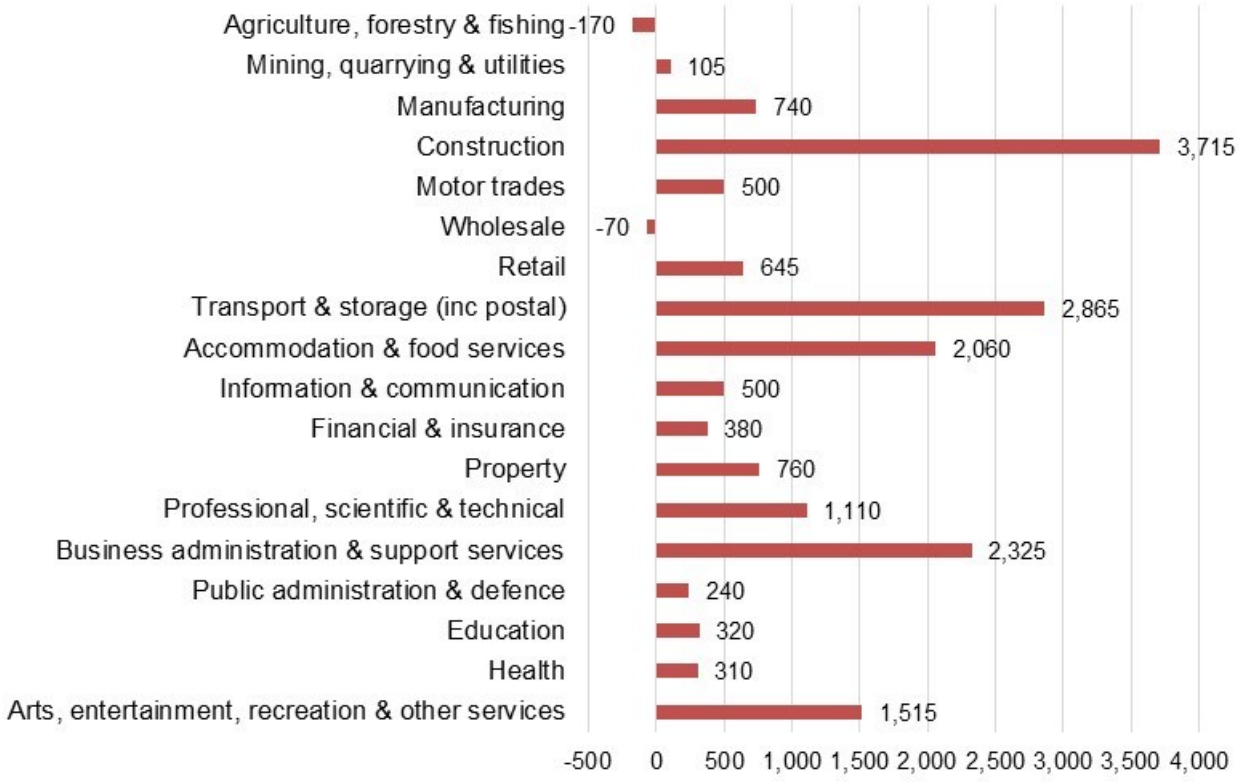



Source: ONS, 2022, UK business counts

2.12 How the proportional change translates to a change in the number of enterprises by industrial sector in Wales is presented in Figure 2.4 below. It illustrates that the growth in stock has been driven by an expansion in the number of enterprises in the construction, transport & storage, and business administration & support services sectors. Whilst the public administration and defence sectors witnessed substantial proportional change, the small stock of businesses in this sector in 2014 meant that this proportional growth translated to an increase of 240 enterprises in the sector[20].

[20] UK business counts – enterprises by industry and employment size band, Office for National Statistics.

**Figure 2.4: Change in the number of enterprises by broad industrial sector in Wales (2014–2022)**




Source: ONS, 2022, UK business counts

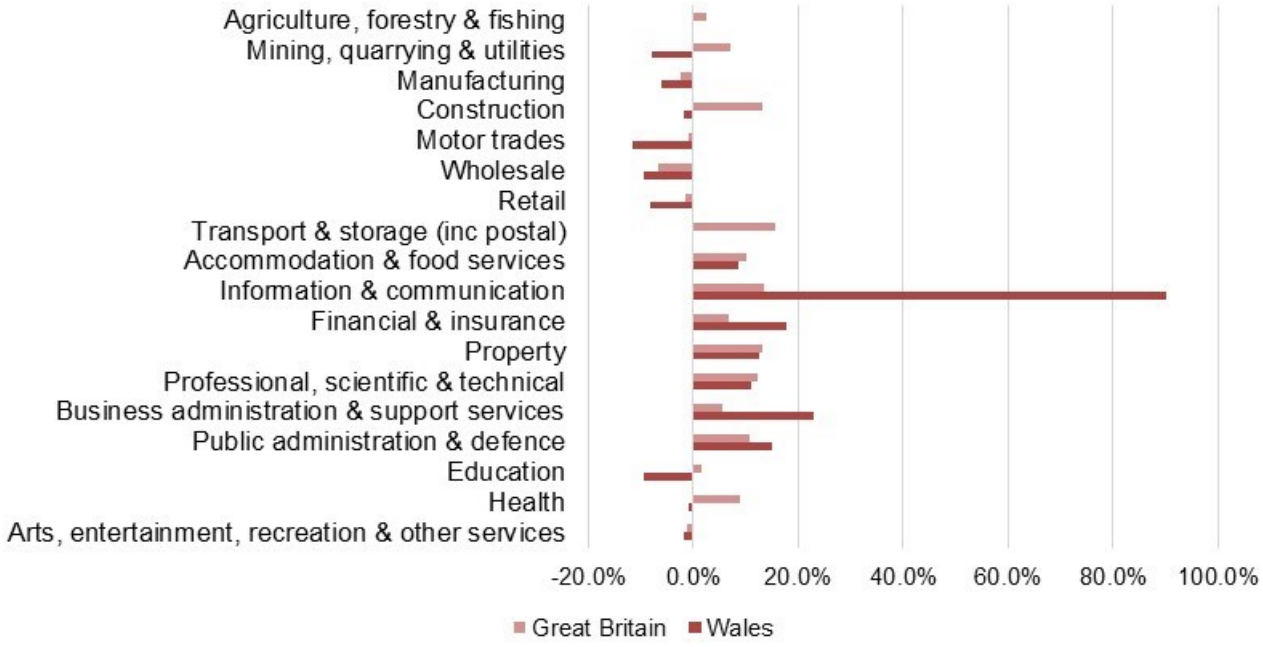
2.13 The number of businesses per capita (measured per 10,000 of the working-age population) increased by almost 10 per cent from 2014–2020 to 527. Over that period, rates of growth in businesses per capita were slightly higher in WWV than in EW; however, businesses per capita in WWV constituted only 72 per cent of the UK average. Rates of growth in businesses per capita were higher across the UK (driven by England and Northern Ireland). The number of businesses per capita is sometimes referred to as the density of businesses. Such growth elsewhere in the UK increased the gap in the density of businesses between Wales and the other regions. Wales now has 76 per cent of the UK average density of businesses (down from 77 per cent in 2014)[21].

[21] Active business enterprises per 10,000 population by area and year, Business Demography, ONS.

2.14 The **total number of jobs** in Wales increased from 1.394m in 2014 to 1.444m in 2019[22]. The growth in jobs in Wales was, however, driven by East Wales (where the number of jobs increased by 8.2 per cent over that timeframe in comparison to 0.2 per cent in West Wales and the Valleys). Whilst the growth in employment in East Wales surpassed the UK average, overall growth in Wales stood at 3.5 per cent in comparison to a UK average of 6.5 per cent[23]. The relatively high rate of growth in the business stock combined with an absence of any material growth in the number of jobs in WWV suggest a shift in the business stock to businesses of a smaller scale.

2.15 Whilst the analysis is over a slightly different timeframe from the analysis of a change in the business stock, Figure 2.5 below provides further insight into which sectors have contributed to job creation. The chart maps out proportional change by sector and indicates a rapid proportional expansion of employment in the information and communications sector[24].

**Figure 2.5: Percentage change in employees by broad industrial sector in Wales and Great Britain (2015–2021)**




Source: ONS, 2021, Business Register and Employment Survey

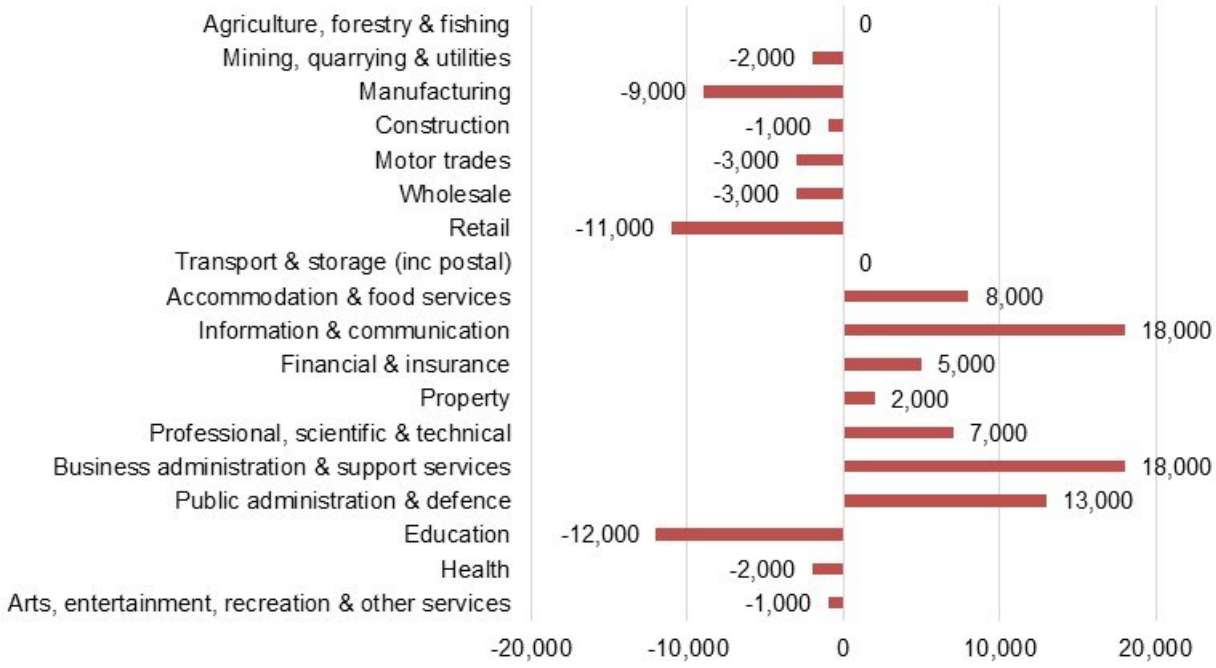
[22] StatsWales – workplace employment by industry and area. 2019 is the latest data available for this dataset.
[23] Ibid.
[24] Business Register and Employment Survey, ONS.

2.16 Figure 2.6 considers the proportional expansions by sector in Wales in terms of the numbers of employees and shows that the key drivers of growth in the number of jobs (to the nearest thousand) are from the information & communications, business administration & support services, and public administration & defence sectors. Conversely, the education, retail and manufacturing sectors all experienced a considerable contraction in the number of employees over that same timeframe. Interestingly, all three sectors which experienced a contraction in the number of employees experienced an increase in the stock of enterprises. This suggests a shift in the profile of enterprises in those sectors towards microbusinesses and small businesses and away from those that are larger in scale[25].

2.17 An analysis of the business stock in 2014 shows that microbusinesses (0–9 employees) constituted 76.4 per cent and 76.6 per cent of all businesses in the manufacturing sector and education sector, respectively. By 2021, microbusinesses accounted for 79.7 per cent and 81.5 per cent of all businesses within these sectors. By way of comparison, across all sectors the proportion of microbusinesses and self-employed businesses increased marginally from 88.3 per cent to 89.5 per cent of all businesses[26].

[25] Business Register and Employment Survey, ONS.
[26] Detailed size analysis of business, Wales and UK Stats Wales.

**Figure 2.6: Change in the number of employees by broad industrial sector – 2015–2021 (to nearest thousand)**




Source: ONS, 2021, Business Register and Employment Survey

2.18 The gap in employment rates between Wales and the UK has converged slightly over time. In 2014 the employment rate in Wales stood at 69.5 per cent, but by 2022 it had increased to 73.7 per cent. This remains slightly below the UK average, however, which stood at 75.4 per cent in 2022. The employment rate increased more markedly in WWV than in EW over that period, with the employment rate in WWV standing at 73 per cent in comparison to 74.9 per cent in EW in 2022[27].

2.19 The table below seeks to summarise, in a similar manner to that of the 2016 report, the performance of the Welsh economy since 2014 against that of the UK. The metrics include other key indicators on start-up rates, innovation, exports, and qualifications. Whilst most of the metrics show positive change to the Welsh economy, performance over that time, relative to the UK average, is mixed and it continues to lag behind that of the UK.

[27] Employment rate by Welsh local area and year, Annual Population Survey/Local Labour Force Survey: Summary of economic activity, ONS

## Table 2.1: Summary of economic indicators

| Indicator | Summary | Change since 2014 | Relative to UK change since 2014 | Latest vs. UK average |
|---|---|---|---|---|
| **GVA** | GVA in Wales was £57.2bn in 2014, increasing to £66.6bn by 2020. This represents an uplift of 16.3 per cent over the seven-year period. However, the rate of growth has remained marginally lower than in the rest of the UK except for Scotland[28]. |  |  |  |
| **GVA per head** | The Welsh GVA per head was £18,532 in 2014, increasing by 13.4 per cent to £21,020 in 2020. This rate of increase is higher than that of the UK (12.1 per cent) and all other regions aside from Northern Ireland. The Welsh GVA per head is now 72.2 per cent of the UK average, up from 71.4 per cent in 2014[29]. |  |  |  |
| **GVA per hour worked** | The GVA per hour worked increased from £26.9 in 2014 to £31.8 in 2020, representing a 14.8 per cent increase. This is marginally higher than the increase at the UK level. Welsh productivity remains 15.7 per cent lower than UK productivity (£37.7)[30]. |  |  |  |
| **Business stock** | In 2021, Wales had 105,815 registered businesses, an increase of more than 13,000 (14 per cent) since 2014. During the same period, the UK witnessed an increase of 15 per cent in the business stock. The number of businesses per capita increased by 9.6 per cent in Wales from 2014–2021, compared to an 11.3 per cent increase across the UK[31]. |  |  |  |

[28] Regional gross value added (balanced) by industry, ONS
[29] Regional gross value added (balanced) per head and income components.
[30] Subregional productivity: labour productivity indices by UK ITL2 and ITL3 subregions
[31] Active business enterprises by area and year, Business Demography, Office for National Statistics

| Indicator | Summary | Change since 2014 | Relative to UK change since 2014 | Latest vs. UK average |
|---|---|---|---|---|
| **Employment** | The Welsh employment rate increased by 4.2 percentage points between 2014 and 2022. The UK-wide increase for this period was 3.7 percentage points. However, Wales' employment rate remains lower than the UK's[32]. |  |  |  |
| **Start-up rates** | The number of business births in Wales increased from 11,345 in 2014 to (provisionally) 13,945 in 2021 (a higher rate of increase than in the UK). The business birth rate (births per 10,000 population) data are only available until 2020; however, they show an increase of 3.4 per cent in Wales, whilst across the UK the birth rate remains flat. That being said, Wales' birth rate remains considerably lower than the UK's[33]. |  |  |  |
| **Business death rates** | The number of Welsh business deaths increased from 8,530 in 2014 to 10,200 in 2020. During this period the Welsh business death rate increased by 20.5 per cent, whilst the UK rate increased by 26.7 per cent. The Welsh death rate is below the UK average[34]. |  |  |  |
| **Innovation** | Welsh Business Expenditure on Research and Development (BERD) increased from £386m in 2014 to £494m in 2020, an increase of 28.8 per cent. This is lower than the growth in spend across the UK of 34.8 per cent. The level of spend per 10,000 of the working-age population remained below the level for the UK[35]. |  |  |  |

[32] Employment rate by Welsh local area and year, Annual Population Survey, Office for National Statistics
[33] Business births by area and year, Births Business Demography, Office for National Statistics
[34] Business births by area and year, Deaths Business Demography, Office for National Statistics
[35] Breakdown of R&D performed in UK businesses by country or region: Expenditure and employment, 2009 to 2020 current prices, ONS.

| Indicator | Summary | Change since 2014 | Relative to UK change since 2014 | Latest vs. UK average |
|---|---|---|---|---|
| **Exports** | The value of Welsh exports increased from £14.1bn in 2014 to £15.2bn in 2021, an increase of 7.6 per cent. In comparison, total UK exports increased from £283bn to £309.7bn, an increase of 9.4 per cent[36]. |  |  |  |
| **Skills** | The proportion of Wales' working-age population qualified at NVQ Level 4 or above increased from 33.2 per cent in 2014 to 38.6 per cent in 2021, representing a 15.8 per cent uplift. The UK average remains higher at 43.5 per cent and has increased since 2014 by a greater rate (23.7 per cent)[37].<br>The proportion of Wales' working-age population with no qualifications decreased from 10.0 per cent to 8.3 per cent between 2014 and 2021. Wales, nevertheless, still has higher levels of people with no qualifications than the UK average of 6.8 per cent[38]. |  |  |  |
| **Earnings** | Average gross weekly earnings in Wales increased from £470.5 in 2014 to £562.8 in 2021, an increase of 18.8 per cent. The UK average during the same period increased slightly less (by 17.8 per cent). However, average weekly earnings in Wales remained lower than the UK average which stood at £609.8 in 2021[39]. |  |  |  |

[36] UK Regional Trade in Goods Statistics Value of Exports by Region, HMRC.
[37] Annual Population Survey, ONS.
[38] Annual Population Survey, ONS.
[39] Average (median) gross weekly earnings by UK country, Annual Survey of Hours and Earnings, ONS

| Indicator | Summary | Change since 2014 | Relative to UK change since 2014 | Latest vs. UK average |
|---|---|---|---|---|
| **Gross disposable household income** | GDHI per head increased in Wales from £15,374 to £17,592 between 2014 and 2020. This represents a 14.4 per cent uplift. Across the UK, GDHI per head increased by 15.9 per cent and the average GDHI in Wales remains lower than the UK average[40]. |  |  |  |

[40] Gross disposable household income in Wales by measure and year, National Accounts

**Additional contextual changes affecting the Welsh and UK economies**

UK exit from the EU

2.20 In June 2016 the majority of voters in a UK referendum voted to leave the EU. Following a period of political and economic uncertainty whilst the agreement and terms of departure were being negotiated, the UK officially left the EU in January 2020. The UK then entered a transitional period until December 2020, when the UK left the single market and customs union.

2.21 In December 2020 the UK and the EU agreed to a new Trade and Cooperation Agreement (TCA) to govern future trading relationships between the UK and the EU. The Agreement outlined a different basis for market access. A number of new processes and costs were introduced that businesses must now take into account when trading between the UK and the EU. In some cases, this has required exporting and importing businesses to recalibrate their operations, involving additional paperwork and costs[41].

COVID-19 outbreak

2.22 On 23rd March 2020, the British public were instructed by the Prime Minister to stay at home other than for a limited set of specific purposes. Over the subsequent 15-month period, lockdowns and social distancing requirements were implemented, although the regulations differed in different periods. This period witnessed substantial disruption to daily life and economic activity. The direct implications of this, across a large period of 2020 and 2021, included:

- the reconfiguration of operations for most businesses to enable home working or social distancing of employees and customers
- the temporary closure of businesses in some sectors, including the retail, hospitality and leisure sectors, during periods in which social distancing measures were at their most stringent
- the reluctance of consumers to return to stores and leisure facilities when these did reopen, with footfall in many areas failing to return to pre-pandemic levels

[41] Office of Budget Responsibility (2022) *The latest evidence on the impact of Brexit on UK trade – March 2022*

- the inability to access many workplace venues, disrupting activities, such as research and development, for which access to specialist equipment or facilities was integral to the work
- disruptions to supply chains, nationally and internationally, as the pandemic disrupted economic activity worldwide.

2.23 In response to the impacts of COVID-19 on the UK economy, the UK Government and the Welsh Government implemented a series of policies to support businesses and employees, including:

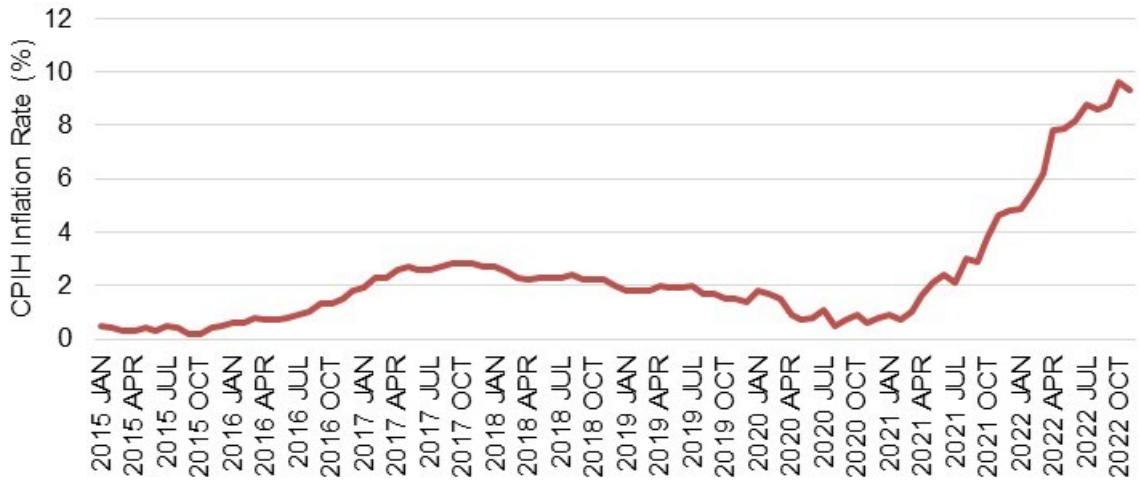
- the Coronavirus Job Retention Scheme, which saw HMRC pay 80 per cent of furloughed workers' wages up to a cap of £2,500 per month, running (in various forms) from March 2020 to September 2021
- a number of business loan schemes, including the Coronavirus Business Interruption Loan Scheme and Bounce Back Loans
- business rate relief for all businesses in the retail, hospitality and leisure sectors in Wales for the financial year of 2020–2021
- the distribution of an Economic Resilience Fund by the Welsh Government, providing loans at favourable rates as well as grant funding as an emergency pot to eligible applicant businesses.

Inflationary pressures and the cost-of-living crisis

2.24 The reopening of economies around the world following the COVID-19 pandemic led to increased energy prices[42] and the early emergence of inflationary pressures. The Russian invasion of Ukraine in February 2022 accelerated the increase in global energy prices and caused considerable disruption to supply chains, which led to a rise in inflation in the UK and global economies during 2022 (see **Error! Reference source not found.** 2.7). The effects of this are expected to last through to the end of the ERDF programme period.

**Figure 2.7: Monthly CPIH inflation rate (January 2015–November 2022)**

[42] See, for instance, five-year price trends for natural gas, where prices increased steadily from spring 2021 and oil prices increased sharply from December 2021: BBC news.



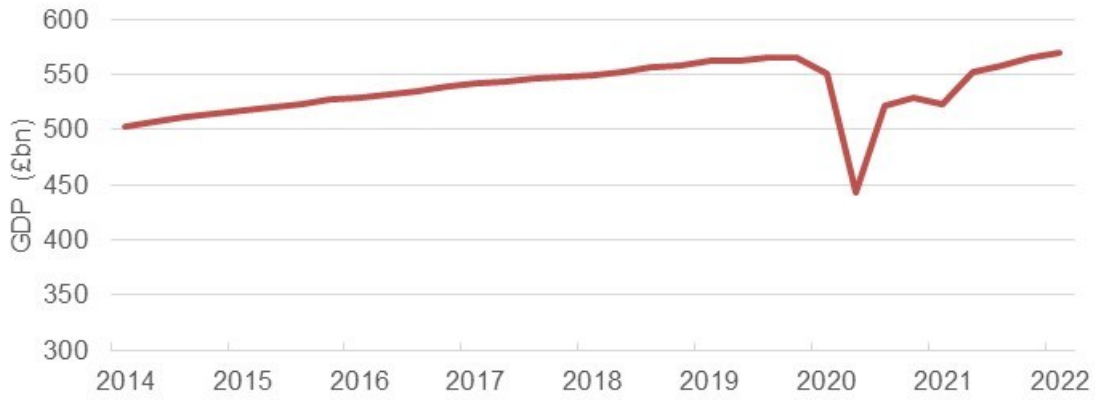

Source: ONS, 2022, CPIH annual rate: all items

### Effects of contextual changes on economic indicators

2.25 Figure 2.8 below illustrates how GDP was gradually increasing up to the beginning of 2020, before decreasing substantially following the outbreak of COVID-19. It is yet to fully recover to pre-COVID-19 levels. The UK economy narrowly avoided recession in the latest economic figures; however, there is still an expectation that the UK is falling (or indeed has fallen) into recession (although of a shallower scale than first feared) and will likely remain in recession throughout 2023[43], meaning challenging economic conditions for the remainder of the ERDF programme delivery period.

[43] Bank of England

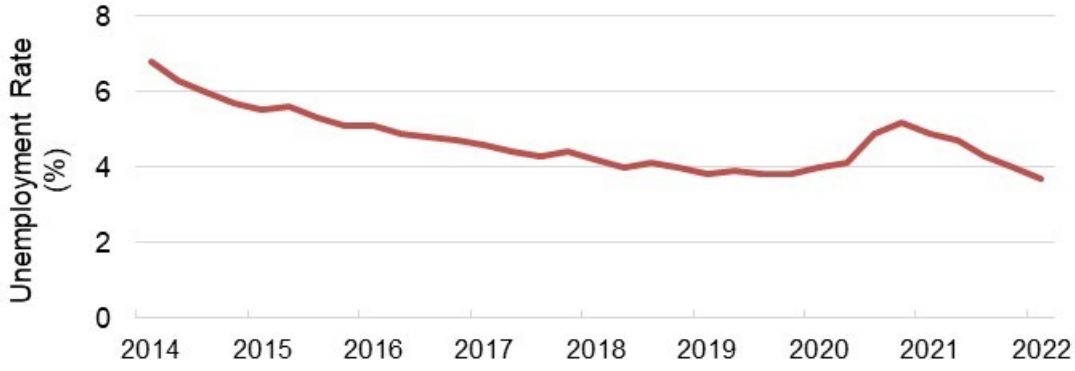
**Figure** Error! No text of specified style in document.**.8: UK actual quarterly GDP – 2014(Q1) to 2022(Q1)**




Source: ONS, 2022, Gross domestic product: chained volume measures: seasonally adjusted £m

2.26 Typically with a high degree of economic turbulence over recent years, a similar level of fluctuation in the various metrics would be evident within the labour market. Figure 2.9 below illustrates COVID-19-related effects on the rate of unemployment, for example; however, the rate of increase was marginal and the recovery from that increase was relatively rapid. The limited rise in unemployment in 2020, despite the challenges for businesses as a result of COVID-19, was considered to be largely due to the Coronavirus Job Retention Scheme helping businesses to retain employees.

**Figure** Error! No text of specified style in document.**.9: UK unemployment rate (%) for people aged 16 and above, seasonally adjusted**[44]




Source: ONS, August 2022, Employment in the UK

[44] Seasonally adjusted data are data that are adjusted to take into account seasonal patterns and trends. Unemployment, for example, may temporarily decrease in the lead-up to Christmas as retailers respond to the heightened demand; it may also temporarily decrease in the summer months as the tourist and leisure sector responds to the increased demand.

**Policy context**

2.27 The Operational Programmes for the ERDF were designed in 2013–2014, with Innovation Wales, the Smart Specialisation Strategy, setting out the rationale behind much of the Research and Innovation PA, whilst the Wales Chapter of the UK Partnership Agreement provides further evidence of the justification for the need for both the Research and Innovation and the SME Competitiveness PAs.

2.28 In 2015, shortly after the commencement of this round of Structural Funds, the Well-being of Future Generations Act came into Law. The Act gives a legally binding common purpose for public bodies to deliver services that contribute to the achievement of those goals. Of particular relevance to the business support services are:

- **A Prosperous Wales** — an innovative, productive and low-carbon society, a skilled and well-educated population in an economy which generates wealth and provides employment opportunities, allowing people to take advantage of the wealth generated through securing decent work
- **A Resilient Wales** — a nation that supports social, economic and ecological resilience and the capacity to adapt to change
- **A More Equal Wales** — a society that enables people to fulfil their potential (regardless of their background or circumstances).

2.29 Published in 2016, Taking Wales Forward set out four key themes and associated activities that would make a difference to the people of Wales. The four themes were:

- Prosperous and secure
- Healthy and active
- Ambitious and learning
- United and connected.

2.30 The approach provided further evidence of a shift (alongside the Well-being of Future Generations Act) in Welsh Government policy towards a greater focus on entrepreneurship and business support that spreads opportunity and promotes well-being based on a vision of inclusive growth.

2.31 Prosperity for All: the National Strategy sets out 12 objectives of the government (the government's well-being objectives, building on the goals of the WBFG Act) and the proposed steps to meet them. Prosperity for All: the Economic Action Plan set out a programme of investment in people and businesses with the aim of driving prosperity and reducing inequality across Wales. It articulated how businesses were recognised as key delivery partners, with the Action Plan introducing the Economic Contract to frame the reciprocal relationship between government and business and drive public investment with a social purpose.

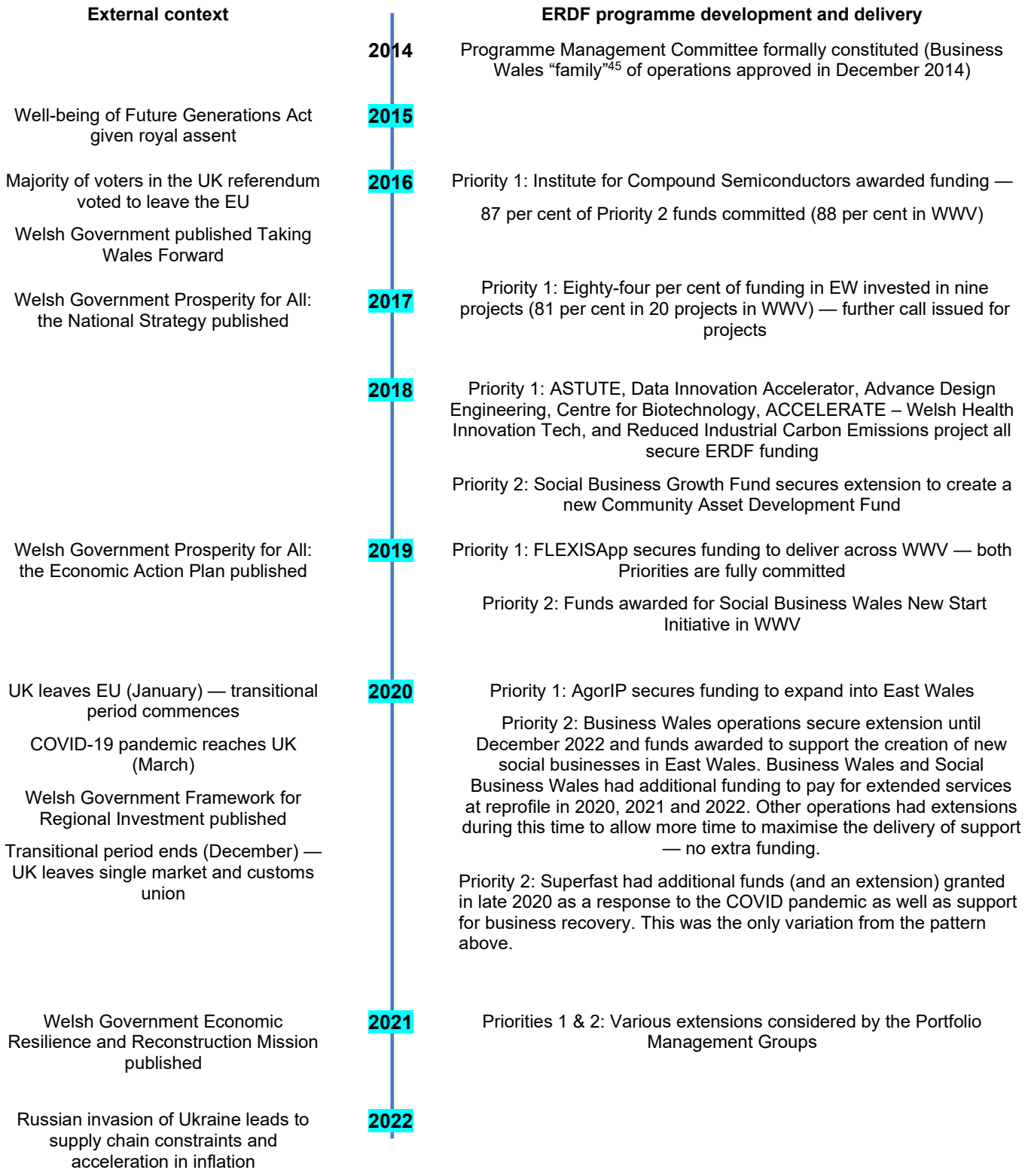
2.32 The profound impact of the COVID-19 pandemic triggered a wide-ranging and extensive policy response from both the Welsh and UK Governments. The Welsh Government set out their approach in COVID-19 Reconstruction: Challenges and Priorities, which is taken forward in Our Economic Resilience & Reconstruction Mission (which sets out plans in the pursuit of three outcomes that underpin the vision of a well-being economy which drives prosperity, is environmentally sound, and helps everyone to realise their potential):

- a **prosperous economy** through a focus on resilience, strengthening the foundational economy and a diverse yet interrelated economic base of outward-looking firms with positive innovation performance, good productivity levels, and a highly skilled workforce
- a **greener economy** with high levels of circularity and resource efficiency that adds economic value and avoids waste, creating jobs in new industries from renewables to repair
- a **more equal economy** that invests in the productive potential of all people in communities, ensuring that nobody is left behind.

2.33 The mission is designed to align closely with the Welsh Government's Framework for Regional Investment, which (through lessons acquired over 20 years of EU cohesion policy) sets out pathways for optimum use of replacement funding from the UK Government in a regional manner.

2.34 Figure 2.10 overleaf summarises the policy developments coinciding with socioeconomic changes of significance over the programme period.

## Figure 2.10: Programme development and delivery




[45] Entrepreneurship Support, SME Support, and Social Business Wales, along with Broadband Exploitation.

## Summary

- In the lead-up to the Operational Programme, Wales suffered from low rates of R&D investment, entrepreneurial activity, and a lower prevalence of growth-oriented SMEs than in other UK regions.
- The Welsh economy has grown steadily during the programme period, with East Wales driving growth in jobs, whilst West Wales and the Valleys has driven growth in the number (stock) of businesses.
- The Welsh economy has witnessed a positive change against most socioeconomic indicators over the programme period, closing the gap with the UK in relation to productivity, entrepreneurial activity, and average earnings. Against indicators including exports, spend on R&D, and upskilling, however, the gap between Wales and the UK has widened.
- The COVID-19 pandemic, Brexit, and the war in Ukraine (and the associated cost-of-living crisis) have all affected the performance of the Welsh (and the UK) economy.

# 3. ERDF business support activities

### Introduction

3.1 This section provides an overview of the broad types of activities delivered under each SO and the associated collective progress of activities by SO against profiled target indicators and spend.

### Description of activities

SO1.2: Commercialisation of Research and Innovation Activities

3.2 The aim for Specific Objective 1.2 was: “To increase the successful translation of research and innovation processes into new and improved commercial products, processes, and services, in particular through improved technology transfer from HEIs.”

3.3 Example activities for this objective included operations that supported businesses to overcome barriers to innovation, undertake innovation, and improve innovation supply chains between businesses and academic institutions. Moreover, they included the piloting of operations that tested innovative products, processes or services in areas with commercial potential.

3.4 Furthermore, the SO included the delivery of commercialisation activities, supporting the development of prototypes and low-cost hubs or clusters for innovative businesses and sectors, as well as support in the commercialisation, protection or exploitation of research. The list of operations delivered through SO1.2 is set out in Table 3.1 below (please note that where the operation is delivered in both programmes, it is two operations, namely one in EW and one in WWV).

**Table 3.1: List of operations delivered under SO1.2**

| Operation title | Lead beneficiary | Programme |
|---|---|---|
| SMARTInnovation | Welsh Government | EW & WWV |
| ASTUTE 2020 | Swansea University | WWV |
| SMARTCymru | Welsh Government | EW & WWV |
| M-Sparc | Bangor University | WWV |
| SMART Expertise | Welsh Government | EW & WWV |
| CEMET (Centre of Excellence in Mobile and Emerging Technologies) | University of South Wales | EW & WWV |

| Operation title | Lead beneficiary | Programme |
|---|---|---|
| BEACON Plus | Aberystwyth University | EW & WWV |
| SEACAMS2 | Bangor University | WWV |
| SPECIFIC 2 | Swansea University | WWV |
| Institute for Compound Semiconductors | Cardiff University | EW |
| AgorIP | Swansea University | EW & WWV |
| Shellfish Centre RDandI | Bangor University | WWV |
| SMARTAQUA | Swansea University | WWV |
| Geographical Data and Earth Observation for Monitoring (GEOM) | Aberystwyth University | WWV |
| Smart Energy Storage Solutions Hub (SESS) | University of South Wales | WWV |
| Marine Energy Engineering Centre of Excellence (MEECE) | Offshore Renewable Energy Catapult | WWV |
| Avenues of Commercialisation for Nano and Micro Technologies | Swansea University | EW |
| ASTUTE East | Swansea University | EW |
| Centre for Photonics Expertise (CPE) | Glyndwr University | WWV |
| Future Foods | Aberystwyth University | WWV |
| Reduced Industrial Carbon Emissions (RICE) | Swansea University | WWV |
| Data Innovation Accelerator (DIA) | Cardiff University | EW |
| Advanced Design Engineering | University of Wales Trinity Saint David | EW & WWV |
| ACCELERATE – Welsh Health Innovation Tech Accelerator | Life Sciences Hub Wales Ltd | EW & WWV |
| Circular Revolution | Riversimple Movement Ltd | WWV |
| FLEXISApp | Cardiff University | WWV |

SO2.2: Start-Ups

3.5 The aim for Specific Objective 2.2 as set out in the ERDF Operational Programmes was: “To increase the number of SME start-ups through the provision of information, advice and guidance and support for entrepreneurship.”

3.6 Example activities for this SO included the following:

- advice and mentoring for start-ups, with a focus on high-growth-potential start-ups
- pre-start entrepreneurship activity (e.g. ability to test business ideas or support for high-potential starts)

- customised delivery of support for social enterprise creation (including the promotion of innovative business models) where there are evidenced gaps in mainstream provision.

3.7 The list of operations delivered through SO2.2 is set out in Table 3.2 below.

**Table 3.2: List of operations delivered under SO2.2**

| Operation title | Lead beneficiary | Programme |
|---|---|---|
| Entrepreneurship Support – Business Wales | Welsh Government | EW & WWV |
| Social Business Wales New Start | Cwmpas (formerly known as Wales Co-operative Centre) | EW & WWV |

SO2.3: ICT Take-Up and Exploitation

3.8 The aim for Specific Objective 2.3 was: "To increase the take-up and exploitation of NGA networks and ICT infrastructure by SMEs."

3.9 Example activities for this SO included the delivery of workshops, clinics, and one-to-one business diagnostics focused on the uptake and exploitation of NGA broadband[46], not only emphasising the benefits to SMEs but also addressing any barriers to effective uptake and exploitation. Under SO2.3 there are two ERDF operations being delivered by the Welsh Government, namely Superfast Broadband Business Exploitation (EW) and Superfast Broadband Business Exploitation (WWV)

SO2.4: Employment Growth in SMEs

3.10 The aim for Specific Objective 2.4 was: "To increase the growth of those SMEs with growth potential, in particular through accessing new markets (both domestic and international)."

3.11 Example activities for this SO included the following wide-ranging activities:

- information and advice for businesses, such as universally available support to all SMEs, e.g. through websites and helplines

[46] This refers to broadband that supports enhanced speed and quality of service in comparison to older systems. It often involves upgrades to existing copper or coaxial networks. More details can be reviewed at the Broadband Glossary

- tailored support for economically important and growth businesses, including social enterprises, to address barriers to improving productivity, e.g. sales, marketing, product development, pricing, and risk management
- tailored advice and business support to address barriers to growth, e.g. HR issues, strategy, marketing, business models, systems, risk management, resource efficiency, operational improvement, product development, supply chains, and distribution
- customised delivery of support for social enterprise development and growth (including the promotion of innovative business models) where there are evidenced gaps in existing mainstream provision
- capacity building, advice, guidance, and support to address barriers for Welsh businesses to access procurement opportunities (including international markets)
- support for the internationalisation of businesses and increasing exports, such as brokerage and partner events, trade fairs, training, counselling/advice/mentoring, mission-related costs or other financial support, market research, and other information services
- support for resource efficiency and energy efficiency measures within SMEs, including addressing barriers to related investment, support for behavioural change, supporting the diffusion of technology and innovation, and encouraging SMEs to undertake energy audits[47].

**Table 3.3: List of operations delivered under SO2.4**

| Operation title | Lead beneficiary | Programme |
|---|---|---|
| SME Support – Business Wales | Welsh Government | EW & WWV |
| Social Business Wales | Cwmpas (formerly known as Wales Co-operative Centre) | EW & WWV |
| Social Business Growth Fund | Wales Council for Voluntary Action | EW & WWV |

[47] For further details see Wavehill (2023) *European Structural Funds Indicators Study – European Regional Development Fund Report*, Welsh Government

### Spend to date

3.12 Table 3.4 below presents the latest programme monitoring data on expenditure. The table shows that across both Operational Programmes the 47 operations were allocated just under £0.5bn of funding, of which £300m related to EU grants. The final columns present an analysis of progress in spend against funding commitments and illustrate that most SOs are likely to spend close to their target allocation. The one exception to that is SO1.2, for which a considerable shortfall in expenditure is likely, particularly in East Wales.

3.13 It is understood that a number of projects within that SO have decommitted funding and reduced targets accordingly as a result of COVID-19 (in March 2020, business support outputs were all at least 75 per cent committed in both regions, with most over 90 per cent committed)[48].

**Table 3.4: Expenditure by SO (January 2023)[49]**

| SO | Operations | Total allocation (£m) | EU grant allocation (£m) | Total committed (£m) | EU grant committed (£m) | Total spend (% of committed) | EU grant spend (% of committed) |
|---|---|---|---|---|---|---|---|
| **West Wales and the Valleys** | | | | | | | |
| 1.2 | 23 | 245.9 | 163.8 | 259.7 | 160.4 | 66% | 67% |
| 2.2 | 2 | 34.3 | 21.4 | 42.2 | 29.0 | 88% | 85% |
| 2.3 | 1 | 8.5 | 5.3 | 10.9 | 7.1 | 87% | 82% |
| 2.4 | 3 | 60.7 | 37.9 | 67.7 | 46.6 | 88% | 88% |
| **East Wales** | | | | | | | |
| 1.2 | 12 | 110.3 | 55.1 | 104.2 | 50.0 | 51% | 55% |
| 2.2 | 2 | 14.9 | 7.5 | 9.8 | 4.9 | 93% | 88% |
| 2.3 | 1 | 3.4 | 1.7 | 4.1 | 1.6 | 95% | 88% |
| 2.4 | 3 | 16.7 | 8.4 | 21.7 | 11.9 | 88% | 87% |
| **All SOs** | **47** | **494.7** | **301.1** | **520.3** | **311.5** | | |

[48] Ibid.
[49] Progress of programmes: EU Structural Funds 2014 to 2020

**Performance against target indicators**

SO1.2

3.14 Tables 3.5 and 3.6 below detail the performance of the SO against key output and result indicators for each Operational Programme up to 31st October 2022. They illustrate that whilst performance against the profile for new-to-firm and new-to-market products appears to be strong as a proportion of the profiled target, neither Operational Programme will meet its targets for the entire programme. This echoes points raised by stakeholders (explored in the following section) regarding the ability to commercialise products. Similarly, within both tables the output indicator for the number of patents registered for products is at 10 per cent of the total target for East Wales and 21 per cent of the total target for WWV. Again, this illustrates the challenges raised with regard to the relevance of this indicator, given the concerns surrounding the sharing of intellectual property, the time that it takes to register a patent, and the resource demands amongst participating businesses to do so. Collectively these suggest that this may not have been the most suitable indicator for operations of this nature.

3.15 It was agreed that participant businesses would be referred to Business Wales (SO2.2 and 2.4) for the equality & diversity and sustainable development indicators. One operation had commenced the delivery of these indicators prior to the agreement to refer to Business Wales; thus, the figures recorded for WWV relate to one operation, with nothing being recorded against these indicators for East Wales.

3.16 The number of enterprises receiving non-financial support and the outcome target associated with this indicator, i.e. the level of employment created, are also short of the programme target. Employment created is naturally a lagging indicator. Therefore, it is likely to increase considerably in the final few months of the programme; however, it is unlikely to do so to the extent required to meet the programme target, particularly given the lower rate of enterprises supported than profiled.

3.17 The operations within SO1.2 have, however, performed strongly in relation to the number of collaborations, the scale of private sector investment, and the number of new enterprises supported.

## Table 3.5: SO1.2 – Performance against profile (to 31st October 2022) – West Wales and the Valleys

| Target indicators | West Wales and the Valleys | | | | | |
|---|---|---|---|---|---|---|
| | Target[50] | Project forecast[51] | Profiled to date[52] | Achieved to date[53] | Performance against target | Performance against profile |
| Number of enterprises supported to introduce new-to-market products | 490 | 453 | 238 | 238 | 49% | 100% |
| Number of enterprises supported to introduce new-to-firm products | 725 | 922 | 521 | 427 | 59% | 82% |
| Number of partners cooperating in research projects | 1,500 | 2,533 | 1,892 | 1,905 | 127% | 101% |
| Number of enterprises receiving grants | 350 | 110 | 68 | - | 0% | |
| Number of enterprises receiving non-financial support | 2,000 | 1,377 | 1,076 | 861 | 43% | 80% |
| Number of new enterprises supported | 30 | 61 | 37 | 33 | 110% | 89% |
| Private investment matching public support in innovation or R&D projects | €42.8m | €76.8m | €45.5m | €43.1m | 101% | 95% |
| Employment increase in supported enterprises | 1,125 | 753 | 324 | 288 | 26% | 89% |
| Number of patents registered for products | 519 | 267 | 103 | 108 | 21% | 104% |
| Number of pilot projects completed | n/a | 86 | 50 | 52 | | 104% |
| Enterprises adopting or improving: | | | | | | |
| – equality and diversity strategies and monitoring systems | 470 | 8 | 8 | 8 | 2% | 100% |
| – sustainable development strategies and monitoring systems | 470 | 8 | 8 | 8 | 2% | 100% |

[50] Target: the agreed level of delivery for output indicators as set out in the Operational Programmes.
[51] Project forecast: the target set against output indicators for approved Operations to be achieved by the completion of those Operations.
[52] Profiled to date: the value forecast by approved Operations to be achieved against output indicators by a certain point in time in the Operations' lifecycle. This point in time varies for each Operation and relates to the time period of the most recent authorised claim.
[53] Achieved to date: the value reported against output indicators by approved Operations by a certain point in time in the Operations' lifecycle. This point in time varies for each Operation and relates to the time period of the most recent authorised claim.

## Table 3.6: SO1.2 – Performance against profile (to 31st October 2022) – East Wales

| Target indicators | East Wales | | | | | |
|---|---|---|---|---|---|---|
| | Target[54] | Project forecast[55] | Profiled to date[56] | Achieved to date[57] | Performance against target | Performance against profile |
| Number of enterprises supported to introduce new-to-market products | 300 | 166 | 82 | 82 | 27% | 100% |
| Number of enterprises supported to introduce new-to-firm products | 250 | 274 | 149 | 116 | 46% | 78% |
| Number of partners cooperating in research projects | 450 | 708 | 443 | 444 | 99% | 100% |
| Number of enterprises receiving grants | 320 | 100 | 43 | - | 0% | 0% |
| Number of enterprises receiving non-financial support | 650 | 586 | 525 | 421 | 65% | 80% |
| Number of new enterprises supported | 20 | 20 | 11 | 7 | 35% | 65% |
| Private investment matching public support in innovation or R&D projects | €26.2m | €30.1m | €13.7m | €12.9m | 49% | 94% |
| Employment increase in supported enterprises | 670 | 286 | 110 | 104 | 16% | 95% |
| Number of patents registered for products | 315 | 117 | 44 | 32 | 10% | 73% |
| Number of pilot projects completed | n/a | - | - | - | 27% | 100% |
| Enterprises adopting or improving: | | | | | | |
| – equality and diversity strategies and monitoring systems | 200 | - | - | - | 0% | n/a |
| – sustainable development strategies and monitoring systems | 200 | - | - | - | 0% | n/a |

[54] Target: the agreed level of delivery for output indicators as set out in the Operational Programmes.
[55] Project forecast: the target set against output indicators for approved Operations to be achieved by the completion of those Operations.
[56] Profiled to date: the value forecast by approved Operations to be achieved against output indicators by a certain point in time in the Operations' lifecycle. This point in time varies for each Operation and relates to the time period of the most recent authorised claim.
[57] Achieved to date: the value reported against output indicators by approved Operations by a certain point in time in the Operations' lifecycle. This point in time varies for each Operation and relates to the time period of the most recent authorised claim.

SO2.2

3.18 For operations under SO2.2 the table (3.7) below shows strong performance in the delivery of non-financial support to enterprises (typically those that have recently started in business), delivering at least three times the original target for the SO. Across other indicators, including new enterprises supported and the outcome indicator of an employment increase in supported enterprises, the SO is just above the profile and appears to be likely to meet, or fall just short of, the total target.

3.19 Performance against the indicators relating to the adoption or improvement of equality & diversity and sustainable development strategies is short of the target. This is primarily a result of lower-than-anticipated performance against these targets in the early stages of those operations under this SO, particularly those that commenced towards the beginning of this round of the Structural Funds Programme. As outlined in subsequent sections of the report, there has been a considerable uplift in this activity as the operations have progressed, albeit not to the extent that the shortfall evident will be overcome.

**Table 3.7: SO2.2 – Performance against profile (to 31st October 2022)**

| Target indicators | West Wales and the Valleys | | | | | |
|---|---|---|---|---|---|---|
| | Target[58] | Project forecast[59] | Profiled to date[60] | Achieved to date[61] | Performance against target | Performance against profile |
| Number of new enterprises supported | 5,150 | 4,138 | 3,783 | 4,069 | 79% | 108% |
| Number of enterprises receiving non-financial support | 275 | 1,056 | 849 | 925 | 336% | 109% |
| Employment increase in supported enterprises | 8,800 | 7,851 | 7,510 | 8,156 | 93% | 109% |
| Enterprises adopting or improving: | | | | | | |
| – sustainable development strategies and monitoring systems | 2,710 | 1,310 | 1,094 | 1,193 | 44% | 109% |
| – equality and diversity strategies and monitoring systems | 2,710 | 1,160 | 950 | 1,044 | 39% | 110% |

[58] Target: the agreed level of delivery for output indicators as set out in the Operational Programmes.
[59] Project forecast: the target set against output indicators for approved Operations to be achieved by the completion of those Operations.
[60] Profiled to date: the value forecast by approved Operations to be achieved against output indicators by a certain point in time in the Operations' lifecycle. This point in time varies for each Operation and relates to the time period of the most recent authorised claim.
[61] Achieved to date: the value reported against output indicators by approved Operations by a certain point in time in the Operations' lifecycle. This point in time varies for each Operation and relates to the time period of the most recent authorised claim.

| Target indicators | East Wales | | | | | |
|---|---|---|---|---|---|---|
| | Target | Project forecast | Profiled to date | Achieved to date | Performance against target | Performance against profile |
| Number of new enterprises supported | 2,200 | 1,885 | 1,765 | 1,974 | 90% | 112% |
| Number of enterprises receiving non-financial support | 120 | 556 | 580 | 584 | 487% | 101% |
| Employment increase in supported enterprises | 3,800 | 3,187 | 3,124 | 3,653 | 96% | 117% |
| Enterprises adopting or improving: | | | | | | |
| – sustainable development strategies and monitoring systems | 1,170 | 698 | 577 | 640 | 55% | 111% |
| – equality and diversity strategies and monitoring systems | 1,170 | 606 | 481 | 532 | 45% | 111% |

SO2.3

3.20 The SO has performed strongly against the profile, having already surpassed project targets, and some by a considerable margin. Following the outbreak of COVID-19, after a brief lull in the uptake of this provision, there has been particularly strong engagement amidst an acceleration in the transition to the digitalisation of business-related activities. The combination of social distancing and remote working likely strengthened the demand for this support, which the operation was largely able to service, leading to the overperformance evident in Table 3.8 below.

**Table 3.8: SO2.3 – Performance against profile (to 31st October 2022)**

| Target indicators | West Wales and the Valleys | | | | | |
|---|---|---|---|---|---|---|
| | Target | Project forecast | Profiled to date | Achieved to date | Performance against target | Performance against profile |
| Number of enterprises supported to introduce new-to-firm products | 1,480 | 1,709 | 1,591 | 1,806 | 122% | 114% |
| Number of enterprises receiving non-financial support | 3,450 | 4,384 | 4,077 | 4,048 | 117% | 99% |
| **Target indicators** | **East Wales** | | | | | |
| | **Target** | **Project forecast** | **Profiled to date** | **Achieved to date** | **Performance against target** | **Performance against profile** |
| Number of enterprises supported to introduce new-to-firm products | 400 | 474 | 445 | 433 | 108% | 97% |
| Number of enterprises receiving non-financial support | 900 | 1,296 | 1,223 | 2,038 | 226% | 167% |

SO2.4

3.21 The tables (3.9 and 3.10) below show that the number of enterprises receiving non-financial support is currently below the profile across both Operational Programmes. However, the outcome indicators — employment increase and level of exports — both surpass targets. This suggests that whilst the numbers of enterprises supported are lower than expected, they are likely to have received more intensive support and be more growth-oriented than anticipated, leading to the overachievement of outcome indicators.

3.22 It is also notable that there are no indicators recorded for private sector investment. It is understood that there was little demand amongst applicants for ERDF funding to incorporate this indicator into their operations. Feedback from related research[62] suggests that there was little incentive for contractors to secure private sector income, as any private funding secured would replace ERDF investment in projects.

3.23 The targets for the two CCT indicators (5,910) are the targets set out within the Operational Programme, as agreed with the European Commission. However, the project forecasts are lower because, for example, operations such as Business Wales SME Support are targeted to deliver CCT indicators for 40 per cent of businesses supported.

**Table 3.9: SO2.4 – Performance against profile (to 31st October 2022) – West Wales and the Valleys**

| Target indicators | West Wales and the Valleys | | | | | |
|---|---|---|---|---|---|---|
| | Target[63] | Project forecast[64] | Profiled to date[65] | Achieved to date[66] | Performance against target | Performance against profile |
| Employment increase in supported enterprises | 6,450 | 10,527 | 9,852 | 10,760 | 167% | 109% |
| Number of enterprises receiving grants | 40 | 59 | 55 | 29 | 73% | 53% |
| Number of enterprises receiving non-financial support | 8,000 | 6,353 | 5,904 | 6,013 | 75% | 102% |

[62] Ibid.
[63] Target: the agreed level of delivery for output indicators as set out in the Operational Programmes.
[64] Project forecast: the target set against output indicators for approved Operations to be achieved by the completion of those Operations.
[65] Profiled to date: the value forecast by approved Operations to be achieved against output indicators by a certain point in time in the Operations' lifecycle. This point in time varies for each Operation and relates to the time period of the most recent authorised claim.
[66] Achieved to date: the value reported against output indicators by approved Operations by a certain point in time in the Operations' lifecycle. This point in time varies for each Operation and relates to the time period of the most recent authorised claim.

| Target indicators | West Wales and the Valleys | | | | | |
|---|---|---|---|---|---|---|
| | Target[63] | Project forecast[64] | Profiled to date[65] | Achieved to date[66] | Performance against target | Performance against profile |
| Private investment matching public support to SMEs – grants | €4.3m | €0.8m | €0.6m | €0.0m | | |
| Increase in level of export | £167.1m | £312.7m | £287.0m | £317.0m | 190% | 110% |
| Enterprises adopting or improving: – sustainable development strategies and monitoring systems | 5,910 | 1,819 | 1,566 | 1,603 | 27% | 102% |
| – equality and diversity strategies and monitoring systems | 5,910 | 1,969 | 1,680 | 1,732 | 29% | 103% |

## Table 3.10: SO2.4 – Performance against profile (to 31st October 2022) – East Wales

| Target indicators | East Wales | | | | | |
|---|---|---|---|---|---|---|
| | Target[67] | Project forecast[68] | Profiled to date[69] | Achieved to date[70] | Performance against target | Performance against profile |
| Employment increase in supported enterprises | 2,550 | 6,405 | 5,949 | 6,145 | 241% | 103% |
| Number of enterprises receiving grants | 10 | 24 | 22 | 15 | 150% | 68% |
| Number of enterprises receiving non-financial support | 5,400 | 3,156 | 3,046 | 3,190 | 59% | 105% |
| Private investment matching public support to SMEs – grants | €2.2m | €0.8m | €0.7m | €0.0m | 0% | 0% |
| Increase in level of export | £65.9m | £84.8m | £83.2m | £99.0m | 150% | 119% |
| Enterprises adopting or improving: – sustainable development strategies and monitoring systems | 3,200 | 760 | 700 | 818 | 26% | 117% |
| – equality and diversity strategies and monitoring systems | 3,200 | 852 | 766 | 870 | 27% | 114% |

[67] Target: the agreed level of delivery for output indicators as set out in the Operational Programmes.
[68] Project forecast: the target set against output indicators for approved Operations to be achieved by the completion of those Operations.
[69] Profiled to date: the value forecast by approved Operations to be achieved against output indicators by a certain point in time in the Operations' lifecycle. This point in time varies for each Operation and relates to the time period of the most recent authorised claim.
[70] Achieved to date: the value reported against output indicators by approved Operations by a certain point in time in the Operations' lifecycle. This point in time varies for each Operation and relates to the time period of the most recent authorised claim.

### Performance against result indicators

3.24 For the current ERDF programme there was a change in how result indicators are measured, such that they now relate to the entire population of the country (rather than merely those who have been supported[71]) and normally can be found in existing published statistics.

3.25 In analysing performance against result indicators, Table 3.11 below presents multiple baselines. This relates to the fact that due to a lag in the availability of indicator data, the baselines drew on evidence from several years prior to the commencement of the Operational Programmes.

3.26 Targets for the Operational Programme are based on proportional increases against the baseline; therefore, adjustments in the baseline influence the target indicator.

3.27 The target for the result indicator associated with SO1.2 is described as an increase of 23–27 per cent (depending on the Operational Programme). This equates to a target of an average share of turnover of between 28.1 per cent and 32.3 per cent (depending on the baseline used and the range applied). Regardless of the baseline indicator used, the actual figure for the result indicator for 2020 surpasses this target (although data are unavailable at the Operational Programme level).

**Table 3.11: SO1.2 – Performance against result indicator**

| SO | Result indicator | Baseline | Target in WWV (2023) | Target in EW (2023) | Actual |
|---|---|---|---|---|---|
| 1.2 | Average share of total turnover from product innovation as well as novel innovation: new to market, new to business, and significantly improved | 22.4%[72] (2010)<br>Baseline in 2012 = 25.5%[73] | +24–27% | +23–24% | 34.8%[74] (all Wales) (2020) |

[71] For example, one result indicator in the previous round of Structural Funds was "jobs created in assisted SMEs".
[72] Department of Business Innovation and Skills (BIS) (2010) UK Innovation Survey Presented in WEFO (2015) Guidance on Indicator Definitions, Data and Evidence Requirements – ERDF Priority Axis 1: Research and Innovation
[73] BIS (2012) UK Innovation Survey.
[74] Department for Business Energy & Industrial Strategy (BEIS) (2020) UK Innovation Survey.

3.28 The targets for SO2.2, 2.3 and 2.4 are presented in Table 3.12 below. A similar approach to that of SO1.2 has been adopted and in all instances the programme has achieved the result indicator target. The extent to which this is attributed to the support received is explored in section 5 (findings from the business survey) and section 7 (the CIE).

**Table 3.12: SO2.2, 2.3, 2.4 – Performance against result indicators**

| SO | Result indicator | Baseline | Target in WWV (2023) | Target in EW (2023) | Actual (latest performance) |
|---|---|---|---|---|---|
| 2.2 | Count of birth of new enterprises | 4,675 (WWV)[75] (2012), 2,595 (EW)[76] (2012)<br><br>Baseline in 2014 = 6,410 (WWV)[77], 4,935 (EW)[78] | +8% (assumed on 2012 figures) | +5% (assumed on 2012 figures) | 7,920 (WWV)[79] 6,025 (EW)[80] (2021 figures) |
| 2.3 | SME use of fibre and cable broadband | 22%[81] | 27%[82] | 27%[83] | 100% adoption<br>61% superfast (>30mbps download)<br>39% standard broadband <30mbps (2020 figures)[84,85] |
| 2.4 | Employment within small (10–49 employees) and medium-sized (50–249) enterprises | 169,100 (WWV), 117,100 (EW)[86] | +10% WWV | +6% EW | 188,400 (WWV), 132,500 (EW)[87] (2021 figures) |

[75] ONS Business Demography (2012) Presented in WEFO (2015) Guidance on Indicator Definitions, Data and Evidence Requirements – ERDF: Priority Axis 2: SME Competitiveness:
[76] Ibid.
[77] Business Demography (2014).
[78] Ibid.
[79] Number of business births in West Wales and the Valleys in 2021, ONS Business Demography (2021).
[80] Number of business births in East Wales in 2021, ONS Business Demography (2021).
[81] Ofcom Communications Market Report Wales in WEFO (2015) Guidance on Indicator Definitions, Data and Evidence Requirements – ERDF: Priority Axis 2: SME Competitiveness
[82] Ibid.
[83] Ibid.
[84] Digital maturity survey
[85] Note that superfast broadband adoption has increased by 23 percentage points since 2017.
[86] Welsh Government (2013) *Size Analysis of Welsh Businesses.*
[87] Welsh Government (2022) *Size Analysis of Active Businesses in Wales, 2021*

## Summary

- Most SOs are close to fully spending the committed EU grant funding; however, SO1.2 appears to be likely to fall short of this due to the decommitment of funds from several operations.
- For SO2.4 there has been an overcommitment of EU funding.
- SO1.2 is ahead of its target regarding partners cooperating in research projects; however, against new-to-market and new-to-firm products, the number of patents registered, and an employment increase in supported enterprises, the SO is unlikely to reach its target for the programme.
- SO2.2 has far exceeded targets regarding the number of enterprises supported and is close to its target with regard to most other indicators. However, the SO is likely to fall short of its target in relation to the adoption of sustainable development or equality and diversity strategies and monitoring systems.
- SO2.3 has already surpassed all targets for the programme and has more than doubled the target number of enterprises receiving non-financial support in East Wales.
- Within SO2.4, the number of enterprises receiving non-financial support is currently below the profile; however, the outcome indicators associated with increased employment and exports are ahead of targets, suggesting more intensive support that has secured stronger growth performance than anticipated.
- All Operational Programme result indicators for the SOs have been met, with some being surpassed by a considerable margin.

# 4. Stakeholder perspectives on programme delivery

4.1 This section provides a summary of strategic perspectives on the delivery of the ERDF programme and, specifically, the provision in relation to the SOs of focus for this study.

**Rationale behind intervention**

4.2 When asked about the thinking behind the design of operations in relation to activities under SO2, stakeholders spoke of the need to increase entrepreneurial activity, rates of productivity, and the number of growth enterprises in Wales. Moreover, it was hoped that increasing the number of growth enterprises in Wales would lead to increased levels of secured venture capital. Amongst those SMEs with growth potential, stakeholders felt that projects would seek to enable SMEs to fulfil such potential through (amongst other aspects) accessing new markets (both domestic and international) and creating high-value jobs for the Welsh economy.

4.3 For SO2.3 there was recognition of considerable investment in broadband infrastructure through the previous programme; at the time of the design of the operation within this SO, however, infrastructure funded through the 2007–2013 programme was still being rolled out. The operation for the 2014–2020 programme was designed on the basis that broadband availability would be universal. At the programme design stage, where broadband infrastructure had been completed, there was recognition that many businesses were unaware of its availability or were unfamiliar with its potential benefit to their organisation.

4.4 With regard to SO1.2, stakeholders spoke of the need to increase levels of innovation through additional investment in research and development and for such investment to lead to the successful translation of research and innovation processes into new and improved products, processes and services (through SO1.2). Those investments in SO1.2 should demonstrate “smart specialisation” — identifying those niche areas in which Welsh businesses and research organisations have already established internationally significant expertise or hold some form of comparative advantage.

4.5 Stakeholders also spoke of the need to strengthen the links between Welsh businesses, academia and Innovate UK, highlighting the challenge of leveraging in innovation funding from the UK Government to supplement ERDF investment in RD&I activities in Wales.

**Range and nature of activities funded through the programme**

4.6 In defining the nature of activities funded through the ERDF programme, several stakeholders made reference to the Guilford Review[88], which recommended the development of an "initial group of strategic backbone projects which demonstrate clear potential for early delivery of key objectives of the Economic Prioritisation Framework"[89]. Stakeholders felt that this enabled a shift towards a more strategic level of activity and away from more numerous, smaller-scale operations.

4.7 The Business Wales one-stop-shop service was also considered to be a strategic backbone project, with the design of the programme enabling a relatively smooth transition from the provision offered in the previous round of Structural Funds. It was felt that the Business Wales operation had reflected on what worked as well as lessons learnt from the previous programme and adjusted the service offer accordingly. One stakeholder noted that the only new addition (since the previous programme) to the Business Wales family of activity funded through these SOs was that related to superfast broadband exploitation. That also, however, reflected a natural graduation from activities undertaken in the previous programme, evolving from the implementation of broadband and fibre infrastructure into supporting effective exploitation of such infrastructure.

4.8 For other activities, stakeholders spoke of the value of the negotiation period (where applications were reviewed collectively by the programme team), which provided the opportunity to coalesce bids. This led to situations and solutions in which multiple applicants were separately seeking to deliver a similar activity, being instructed to combine the scheme into one. However, one of the limitations of this approach was a lack of deadlines associated with the coalescing of project ideas, which it was felt left applications too open-ended and led to slippage in the awarding and implementation of projects.

4.9 Another stakeholder reflected on whether research institutions from outside of Wales were given sufficient exposure to bring forward project ideas in collaboration with Welsh HEIs that may have been addressed through Structural Fund activities. It was felt that their relative lack of engagement in the design process meant that the profile

[88] Guilford, G. (2013) *An Independent Review of Arrangements for Implementation of European Structural Funds Programmes 2014-2020*, WEFO, Cardiff.
[89] The Economic Prioritisation Framework is designed to enable the identification of areas in which Structural Funds can contribute most effectively to overall Welsh Government economic development policy.

of funded activities (primarily through SO1.2) was driven by Wales-based HEIs and other research institutions and typically where they felt their research expertise to be strongest. That is not to say that project ideas led by Wales-based research institutions were considered to be any weaker; indeed, stakeholders spoke of the strength of these proposals but that the ability to innovate and bring forth new ideas and activities may have been constrained somewhat.

**Administration and delivery**

4.10 Stakeholders spoke of initial challenges with the monitoring systems for the programme as well as the constrained ability of the WEFO online system in accommodating partner reporting. However, there was also felt to be a considerable and effective effort that led to improvements in the usability of the system, which aided programme delivery.

4.11 Prior to the pandemic, the programme required the capture of "wet signatures" and paper copies of various participation and enrolment forms. The pandemic led to a rapid transition in this process and a shift towards electronic signatures. Whilst this generated considerable efficiencies for operations, particularly when social restrictions were in place, capturing necessary evidence from participants to record various outcome indicators through remote email requests was described as being particularly challenging.

4.12 The programme also saw the introduction of Regional Engagement Teams (RET) that provided support to those applying for Structural Funds[90]. Stakeholders felt RETs to be particularly useful for applicants new to EU funding or for smaller organisations. What is more, they were felt to be useful for other organisations (including HEIs, FE colleges, and local authorities) that may have suffered from staffing cuts or turnover which had led to a loss of expertise in EU Structural Funds.

4.13 The monitoring and administration processes associated with the programme were described by several stakeholders as a journey with processes refined throughout the programme. The processes are now considered to be exemplary in the UK and the EU. Reportedly, the OECD[91] has also commended the approaches adopted, recommending their continuation after the end of the EU programme.

[90] Further detail on the role of the RETs can be found here: Regional Engagement Teams Evaluation
[91] The Organisation for Economic Co-operation and Development.

4.14 A further issue flagged by stakeholders and lead beneficiaries (project managers of operations) related to the eligibility criteria for some of the ERDF indicators. The terminology for some indicators had changed slightly from the previous programme and there was also a degree of confusion surrounding requirements. The number of new enterprises supported and the number of enterprises receiving non-financial support were two indicators flagged by stakeholders for which there was initial confusion surrounding the eligibility criteria. In some instances, this led to considerable reductions in the numbers being reported and to some operations having their targets reduced.

4.15 Operational leads widely spoke of a stronger partnership ethos in their engagement with the WEFO, with a greater emphasis on collaboration and providing advisory support than some had experienced in previous rounds of EU Structural Funds.

Cross-Cutting Themes

4.16 The partnership approach with the WEFO was particularly evident in relation to CCTs. The lead beneficiaries and the WEFO have worked to create a system for CCTs that has shifted the approach from being something rather peripheral to operations to being effectively integrated (from engagement through to the adoption of a pragmatic approach in their delivery). Advisors have been appointed with the necessary expertise to effectively integrate this provision or supported in talking about equality and environmental sustainability in the context of business needs. In addition, the integration of these activities has been enhanced by the fact that issues for businesses associated with climate change, the cost-of-living crisis, and rapid increases in energy bills have increased.

4.17 Those involved in delivering activity under the Business Wales brand (new start, SME growth, and superfast broadband exploitation) have been involved in a series of Priority 2 ERDF workshops which are understood to have been useful in strengthening the partnership approach in delivering the CCTs. The workshops have explored performance, activities being delivered which may support CCTs, and where improvements might be made. These have been supplemented by the establishment of quarterly CCT workshops which seek to identify solutions to any issues encountered. Attendees have included those delivering business support provision, representatives from the third sector, and HEIs.

4.18 CCT case-level indicators were also introduced to help operations to identify actions that they were undertaking which support the CCTs when they did not have responsibility for the CCT Operational Programme indicators. They acted as a guide and a way of demonstrating through case studies the contribution that they were making. This approach has widened the range of activity that can be reported as contributing to the CCT agenda. The additional flexibility in the approach is reported to have led to a greater level of commitment from lead beneficiaries as well as enthusiasm towards the fulfilment of case-level indicators through service provision. A greater level of understanding and commitment has seen significant improvement in delivery.

**Perceptions of key successes**

COVID-19 response

4.19 When reflecting on key successes there was a universal acknowledgement of the programme's response to the COVID-19 pandemic. A rapid transition to virtual provision took place across all operations, with many describing how they were able to adjust within a matter of days, rather than weeks, whilst the programme adjusted its service offer away from growth and towards resilience and survival. Some stakeholders reported how the demand for support with exploiting ICT and broadband and operating remotely increased considerably, which is reflected in the performance of activities in SO2.3.

4.20 Targets associated with employment growth and increasing exports were eased back and flexibilities were introduced (initially by the European Commission) to enable an adjustment in the delivery approach. Some participant businesses were supported to adjust their operations to help respond to the pandemic, e.g. developing hand sanitiser, personal protective equipment, or providing research to help in the understanding of the virus.

4.21 The shift towards virtual provision witnessed in response to the pandemic has largely been retained. Not only does virtual provision offer efficiencies for service delivery, it can also help to avoid inadvertent exclusion of some participants for in-person provision if they are perhaps reticent about attending a workshop session due to the ongoing risk of infection.

Research institutions and business collaborations

4.22 A further key area of success was in relation to the increased rate of successful collaborations between HEIs and industry. Facilitating access to academics is perceived to have broken down many pre-existing barriers between research institutions and the commercial sector. Collaborations of this nature helped to surpass targets in relation to partner cooperation (as outlined in section 3).

**Areas of improvement**

4.23 Whilst there has been a considerable increase in the prevalence of partner collaboration and cooperation, the ability of these collaborations to bring forward new products and services to the market has been constrained by issues surrounding intellectual property and, reportedly, limited linkages with commercial support providers. Several stakeholders felt that the transition from innovation-related support to business support to aid effective commercialisation of products and services needed strengthening and may have influenced the lower-than-anticipated rates of recorded commercialisation of products and services.

4.24 Furthermore, it was felt that one of the key target indicators, i.e. the number of patents registered, was possibly inappropriate for some businesses. Stakeholders associated with Priority 1 reported that there were concerns amongst businesses with regard to sharing ideas and intellectual property and that there were other ways of securing intellectual property (rather than following a patent route).

4.25 There were also concerns that some microbusinesses and single traders did not have the financial resources with which to help commercialise their products and services and that some of the non-financial support through the programme was viewed by prospective businesses as being less valuable than financial interventions, affecting levels of engagement and interest.

4.26 There was a sense that business and service provision would benefit from stronger alignment with UK Research and Innovation and, specifically, Innovate UK to draw on the available resources at the appropriate time to facilitate product commercialisation. However, it was felt that there was a lack of specific liaison with these organisations within project activities, which led to low visibility within the UK Government of investment opportunities emerging through SO1.2.

4.27 There were associated concerns surrounding how the UK's exit from the EU may influence access to funding of this nature in the future. Stakeholders spoke of how

synergies with Horizon Europe early on within the programme had worked well. However, a gap in specific funding opportunities existed, raising the importance of drawing on the UK-based innovation provision and raising the profile of suitable operations to benefit from such investment.

Staff retention

4.28 Staff retention has also proven to be challenging for operations, particularly within the latter stages of the programme, affecting the continuity of provision and the capacity to manage and deliver services. Some stakeholders associated this with the socioeconomic turbulence since the outbreak of the COVID-19 pandemic as well as an associated desire amongst the labour force for permanent (rather than temporary) roles. This alongside a lack of clarity as to the funding source, scale and focus following the closure of the EU Structural Funds heightened a sense of uncertainty surrounding career pathways for those considering taking up one of these positions.

Output indicators

4.29 Stakeholders spoke of some initial frustrations regarding the key performance indicators, how the indicators were defined, and the necessary requirements to record against an indicator. Two indicators were flagged as being particularly problematic:

- the definition associated with a new-to-firm/new-to-market product (which is understood to have changed over time, with the refinements providing clarity as to what is required to fulfil that target)
- the unclear distinction between six hours of business diagnostic support and 12 hours of active consultancy support. Delivering either one of these leads to the achievement of an enterprise receiving non-financial support. However, some operations incorrectly recorded the indicator being achieved, having delivered what was considered to be six hours of advisory support (rather than diagnostic support), whereby leading to adjustments (reductions) in the number of this indicator that they had achieved.

4.30 Other concerns surrounding the output indicators relate to the extent to which these influence the design of service provision and delivery. Some operations had intentionally geared their service offer around six hours and/or 12 hours of provision. Stakeholders questioned the extent to which that shifted the service away from being needs-led towards being led by target indicators. Associated with these concerns was

a sense that there may have been situations in which participant businesses were supported up until the six hours or 12 hours of intervention and no further. The extent to which this takes into account the specific journey of that participant business was questioned.

**Outcomes, impacts, and strategic added value**

4.31 A range of outcomes and impacts were identified by stakeholders, which included survival rates amongst start-up businesses supported by Business Wales which were typically more than double the survival rates of newly established businesses across Wales[92].

4.32 Reference was also made to the GVA generated by support schemes, particularly through additional generation of employment amongst supported businesses. Estimates suggest that each £1 of spending on Business Wales could be connected to an estimated £10 uplift in Welsh GVA per annum were that employment to be maintained[93].

4.33 Elsewhere, stakeholders spoke of the enhanced strategic emphasis of the programme, driven by the establishment of "backbone" projects that have sought to build on pre-existing success and refine and embed provision established through prior rounds of the Structural Funds.

4.34 Strategic linkages were also reportedly established during the life of the programme, with international partnerships being established with MIT in Boston on the Industrial Liaison Programme and the Vanguard Initiative (which seeks to build regional innovation ecosystems across Europe).

4.35 There were also examples in which HEIs had been invited by businesses into Horizon Europe projects, demonstrating the outcomes arising from the networks and partnerships that have been enabled by the ERDF programme.

4.36 Whilst strengthening the cohesion between industry, government, and academic partners was identified by several stakeholders, the extent to which successful partnerships were being disseminated and shared as good practice was queried. Two

[92] Munday, M. and Roche, N. (2021) *Quantifying the economic impact of Business Wales*, Cardiff University.
[93] Ibid.

stakeholders felt that more could be done to share and disseminate successful collaborations and cement this practice.

**Recommendations for future provision**

4.37 Reflecting on the experience of the ERDF programme and the changing socioeconomic context, stakeholders were asked for their recommendations regarding future support provision.

4.38 Stakeholders spoke of the importance of complementarity in support provision, providing a consistent, visible and connected service offer that avoids confusion in the marketplace. A desire for multi-year agreements on funding was expressed by several stakeholders, particularly for strategic backbone services.

4.39 Simplification in the process of awarding and delivery was also recommended, with the ability of shorter timeframes for innovative initiatives that complement that strategic offer.

4.40 Several spoke of the need to mainstream the digital support offer along with a greater focus on net zero, climate change, and equality, diversity and inclusion.

4.41 In anticipation of a reduction in the scale of resources available for support services, stakeholders spoke of the need to consider charging for certain services but also ensuring that support services are closely aligned with governmental policy, generating well-paid jobs and fair work (for example).

4.42 The decoupling of service provision from ERDF targets was also viewed as presenting an opportunity to revisit approaches to service delivery, establishing performance indicators that are needs-led and opportunity-driven. Associated with this is a perceived need and opportunity for greater objectivity in the delivery of initial diagnostics as part of the engagement process, reducing that perceived influence of reaching a threshold in the hours of support.

4.43 Stakeholders also spoke of the need to build on the progress in improving links between research institutions and industry. The encouragement of microbusinesses in particular to engage in research collaborations and provide the resources with which to overcome some of the barriers associated with their engagement was also cited.

4.44 Stakeholders also spoke of the opportunities to more effectively engage in local economies and with local authorities, research institutions, and other stakeholder

organisations to ensure that provision is reflective of the unique local strengths and challenges that exist and are embedded within those local communities.

4.45 There are concerns that the robust programme and project management approaches synonymous with the delivery of EU-funded provision in Wales may be lost, and there is a desire for the best elements of these to be retained in future activity. Similarly, there are concerns that the considerable progress made in delivery against the CCTs may be lost without the Structural Fund requirements.

4.46 CCTs have led schemes to think about how services are delivered differently. Building in CCTs from the start of future programmes will likely help to address shortfalls in resourcing experienced in the past. The use of case-level indicators has provided useful guidance to initiatives to reflect on the contribution that they are making to the CCTs. There is now greater awareness and recognition of the added value that this brings to business support.

4.47 A variety of the recommendations from stakeholders also reflected on the changing delivery structures for funding provision brought about by the UK Shared Prosperity Fund (SPF). There are concerns that with local-authority-led investment plans for the SPF there is a risk of the proliferation of small-scale initiatives that confuse the marketplace or lead to duplication or overlap where businesses are operating across authority areas.

4.48 Stakeholders felt that the Welsh Government should play a key role in working with local authorities to ensure that SPF schemes complement backbone provision planned for mainstreaming beyond the ERDF programme.

## Summary

- The Guilford Review was widely cited by stakeholders as informing the prioritisation of activities through the Operational Programme and the development of an initial group of strategic backbone projects.
- The design of the backbone projects was widely commended for building on what had worked within the previous programme, evolving, refining and embedding the support offer in Wales.
- Whilst initial challenges were encountered with the monitoring systems, output definitions and eligibility requirements have improved over time. Moreover, there has been a marked shift in the role and relationship of the WEFO with lead beneficiaries, with a strong

partnership ethos being established and an emphasis on collaboration as well as flexibility in response to external shocks.

- The partnership approach has also aided enhanced integration of CCTs within the activity of operations within SO2.2 and SO2.4 (where targets were assigned).
- Stakeholders were particularly positive with regard to the reaction to the COVID-19 pandemic. The adjustments of online or remote service provision were rapid and the revisions to the programme priorities, away from growth and towards resilience and survival, were welcomed.
- Stakeholders also described how collaborations between research institutions and commercial organisations had been a particular success. However, challenges encountered with product commercialisation were identified, with some associating these with a need for closer collaboration and integration between initiatives associated with innovation, product development, and business support.
- For future provision, stakeholders recommended multi-year agreements for backbone projects to be complemented by short-term, innovative activities. Furthermore, they spoke of the need to mainstream digital support provision and to more effectively engage with local economies to ensure that provision is reflective of local challenges and opportunities.
- It was also felt that the removal of EU funding presented an opportunity to decouple provision from output/outcome indicators to ensure that it is needs/opportunity-led, rather than output-driven.

***Recommendations***

- A review of performance indicators and the associated qualification criteria for achieving an indicator is necessary in the lead-up to the funding of future support provision.
- Indicators should avoid influencing behaviour if it draws service provision away from the needs and opportunities of participant businesses.
- The approaches adopted in effective integration of CCTs in service provision should be retained in future business support, particularly given their close alignment with the Well-being of Future Generations Act and other Welsh Government policy.
- Support services need to ensure close alignment with and good access to Innovate UK and other innovation-oriented resources to ensure that Welsh businesses gain their fair share of opportunities to secure this investment.

- Digital support provision should form part of the mainstream offer for business support, given its central role in driving economic competitiveness.
- There remains a critical role for the Welsh Government to play in the coordination, alignment and promotion of local-authority-led business support activity, working alongside regional teams so as to reduce the risk of heightened confusion and complexity regarding the offer arising in the marketplace.

# 5. Reflections on support received – business survey

### Introduction

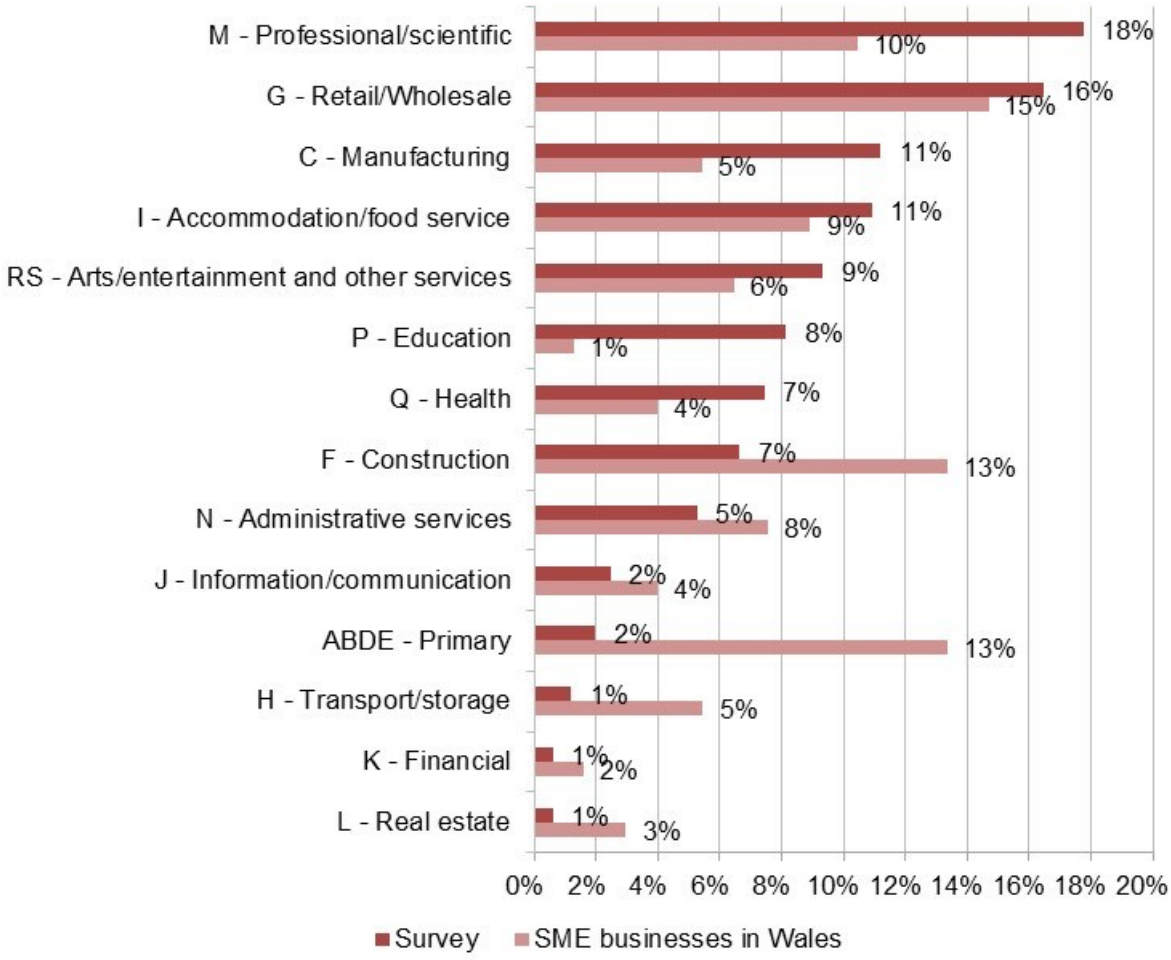
5.1 This section provides an overview of the findings from the survey of 1,014 participants in ERDF-funded support under SO1.2, 2.2, 2.3 or 2.4. A copy of the survey can be found in Annexe A of this report.

5.2 Throughout this section of the report, cross-tabulations have been created to identify and test the statistical significance of potential relationships between two variables (namely the response of all respondents to the survey as one variable and the response of respondents from an SO as the other variable) by means of Pearson's chi-square test of independence. In interpreting the analysis presented in this section (specifically that presented in tables), statistically significant differences between what is observed in comparison with the rest of the sample, at the 95 per cent confidence level (0.05 level of significance), have been shown. Blue figures and an upward arrow have been used to indicate positive differences, and red figures with a downward arrow for negative differences. As such, figures without arrows show no significant relation, in comparison to the rest of the sample, and are therefore deemed not to be a statistically significant determinant.

### Beneficiary profile

5.3 Figure 5.1 shows the sectoral distribution of respondent businesses to the survey and compares this to the distribution of SMEs across Wales. The professional and scientific sector and the manufacturing sector are much more prevalent amongst supported businesses than is typically the case throughout Wales. The sectors were most prevalent amongst recipients of support under SO1.2, with one third of participant businesses operating within the professional/scientific sector and one quarter within the manufacturing sector.

**Figure 5.1: Survey sample by primary sector of beneficiary against SMEs in Wales**




Source: ERDF Support for Business Survey (Base = 1,014), and business counts from the Business Register and Employment Survey (2022)

5.4 The majority of respondents were microbusinesses (employing fewer than 10 people), accounting for 86 per cent of survey respondents, whilst 92 per cent of respondent businesses operated from a single premises.

5.5 More than four in five businesses (83 per cent) have customers throughout Wales, whilst half (51 per cent) serve customers throughout the rest of the UK.

### Awareness and motivations

5.6 Two thirds (67 per cent) of all respondents confirmed that they were aware that the support was funded through the ERDF (slightly lower than the rate of awareness in

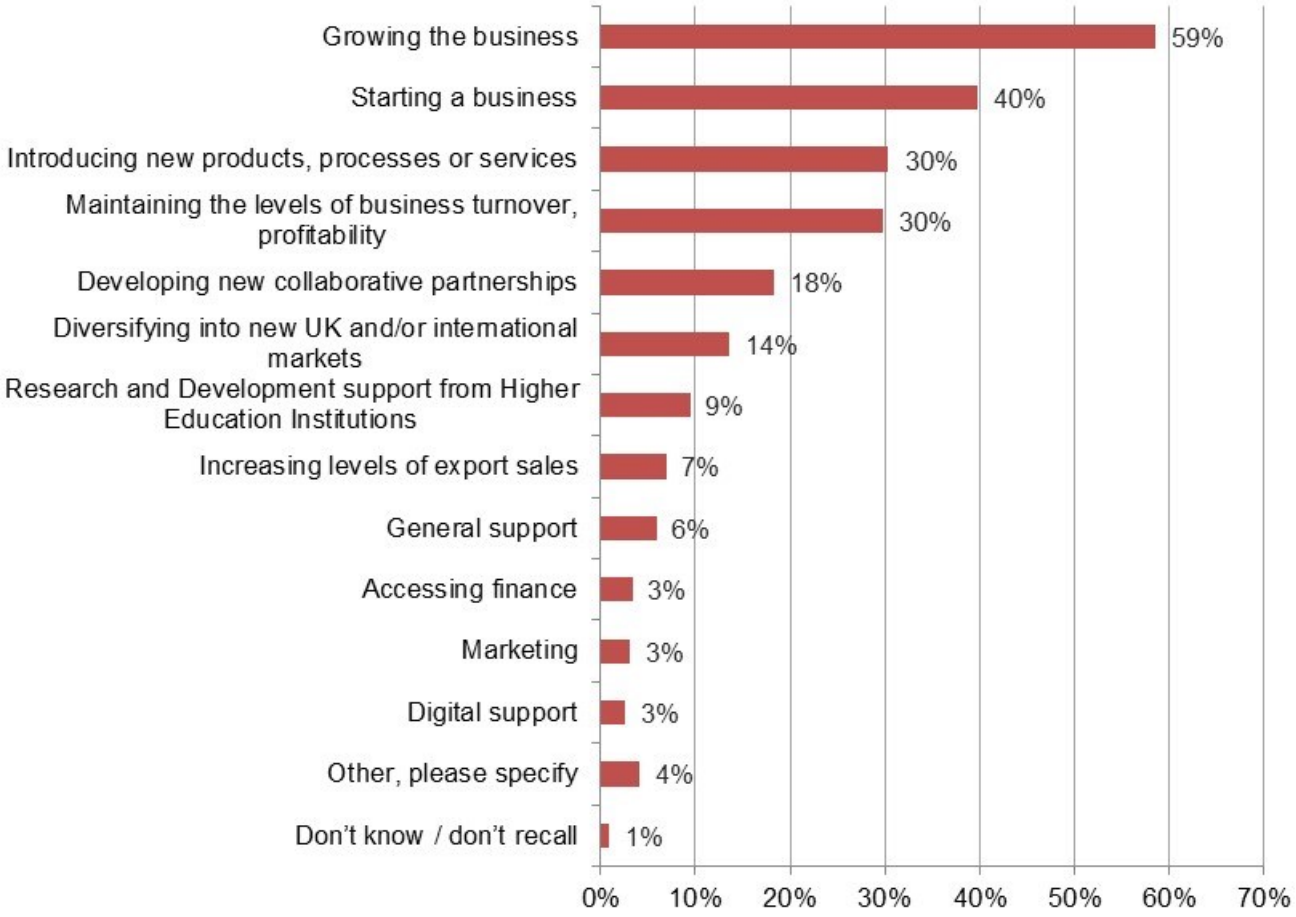
2016 (75 per cent))[94]; however, almost all (97 per cent) of those who engaged with support through SO1.2 were aware of the funding source.

5.7 One quarter of survey respondents found out about the support through an online search (compared to only six per cent in the 2016 survey), which increased to 29 per cent of businesses that engaged with support after the commencement of the COVID-19 pandemic, illustrating a possible influence of the transition to virtual provision.

5.8 Survey respondents were asked to state their reasons for becoming involved in the provision. Figure 5.2 shows that 59 per cent identified business growth as a reason (down from 71 per cent in 2016), while 40 per cent were interested in starting a business. Other notable reasons included introducing new products, processes or services (30 per cent in comparison with 54 per cent in 2016) and maintaining levels of turnover and profitability (30 per cent).

[94] SQW, Aston Business School and BMG Research (2016) *ERDF Support for Business Evaluation*, Welsh Government

**Figure 5.2: Reasons for seeking support**




Source: ERDF Support for Business Survey (Base = 1,014)

5.9 When analysed by SO it is evident that aspirations to grow their business were most prevalent amongst those who received support through SO2.3 (exploitation of ICT and fibre broadband), with 70 per cent expressing that desire. Elsewhere, patterns of motivation typically reflected the aims of each SO (with the desire to introduce new products, processes or services being particularly prevalent amongst participants of SO1.2 and the desire to start a business being particularly prevalent amongst participants of SO2.2).

5.10 Survey respondents were asked why they had accessed ERDF support over other business support provision. Just over half spoke of how it was more accessible than other provision, increasing to two thirds of those seeking support to diversify into new markets or develop collaborative partnerships (typically SO1.2-related). In addition, 50 per cent referred to the fact that services were free to access (which increased to 59 per cent amongst those in receipt of support under SO2.3). Over one third (37 per cent) felt that the support was more suited to their needs than was other available

provision, whilst 22 per cent felt it to be of better quality than other provision (increasing to 27 per cent amongst those in receipt of support under SO2.2).

5.11 If ERDF support had not been available, 40 per cent of surveyed respondents stated that it would have been unlikely or very unlikely that they would have accessed support elsewhere. This proportion increased to almost half of the respondents who accessed support under SO2.3. For those seeking to start a business, 22 per cent described it as “unlikely” and 16 per cent “very unlikely” that in the absence of the support, they would have sought it elsewhere. For those seeking to grow their business, the proportion of business respondents unlikely to seek support elsewhere was 30 per cent whilst 13 per cent were “very unlikely” to seek support elsewhere.

**Project support**

5.12 Table 5.1 overleaf presents the nature of ERDF-funded support provided to survey respondents. The table shows patterns that are reflective of the emphasis of each SO. It is notable that in 2016, 26 per cent of respondents reported support with e-commerce or ICT, illustrating almost a doubling of the proportion of survey respondents receiving support of this nature from the previous Operational Programme to this one.

**Table 5.1: Type of support provided – overall and by SO[95]**

| | SO1.2 | SO2.2 | SO2.3 | SO2.4 | Total |
|---|---|---|---|---|---|
| Advice or support on running and growing a business | 12% ↓ | 75% ↑ | 18% ↓ | 25% ↓ | **59%** |
| Support with digital marketing and e-commerce | 29% ↓ | 67% ↑ | 58% | 58% | **50%** |
| Accessing finance | 14% | 16% ↑ | 3% ↓ | 10% | **36%** |
| Advice or support on starting a business | 36% | 52% ↑ | 14% ↓ | 42% ↑ | **35%** |
| Developing a collaboration, partnership, or networking support | 12% ↓ | 48% | 84% ↑ | 34% ↓ | **27%** |
| Innovation advice or support | 66% ↑ | 29% | 24% | 21% ↓ | **26%** |
| ICT advice or support | 42% ↑ | 36% ↑ | 18% ↓ | 25% | **26%** |
| Drafting company-wide strategies and/or processes — including environmental and equality & diversity strategies | 22% | 23% | 48% ↑ | 15% ↓ | **25%** |
| Support for business premises or office space, including laboratory space | 10% | 8% | 4% | 6% | **10%** |
| Export advice or support | 24% | 33% ↑ | 14% ↓ | 27% | **6%** |
| Other (please specify) | 3% | 2% | 3% | 6% ↑ | **5%** |
| None of these | 2% | 2% | 2% | 4% | **4%** |
| Don't recall/don't know | 5% | 4% | 4% | 6% | **3%** |

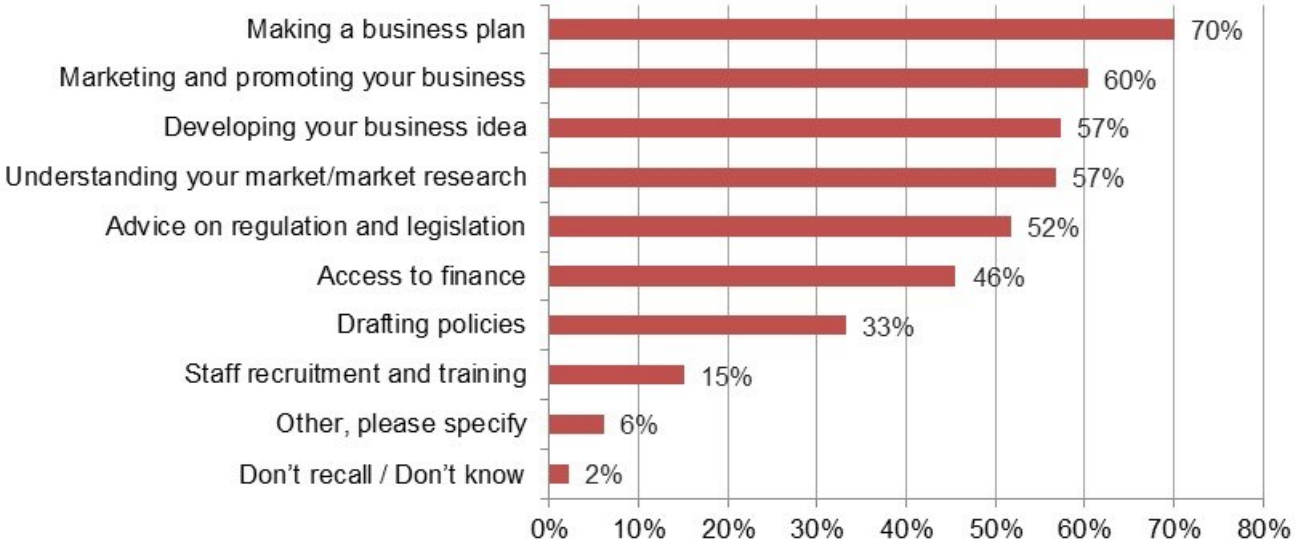
Source: ERDF Support for Business Survey analysis (Base = 1,014). Please note that survey respondents could select multiple options for this question; thus, the percentages do not add up to 100 per cent.

[95] The arrows represent a statistically significant difference (0.05 level of significance) between what is observed from respondents supported by an SO in comparison to the rest of the sample. The upward blue arrow (↑) indicates a positive difference, and the downward red arrow (↓) a negative difference.

### Start-up support

5.13 Among those businesses that accessed start-up support, primarily through SO2.2, support focused on business planning (70 per cent) and the exploration/development of a business idea (57 per cent), or was associated with marketing and promotion (60 per cent) and/or understanding your market (57 per cent). Other important areas of start-up advice were regulation and legislation, accessed by 52 per cent of respondent businesses, and access to financial support (46 per cent)[96].

**Figure 5.3: Type of start-up support provided**



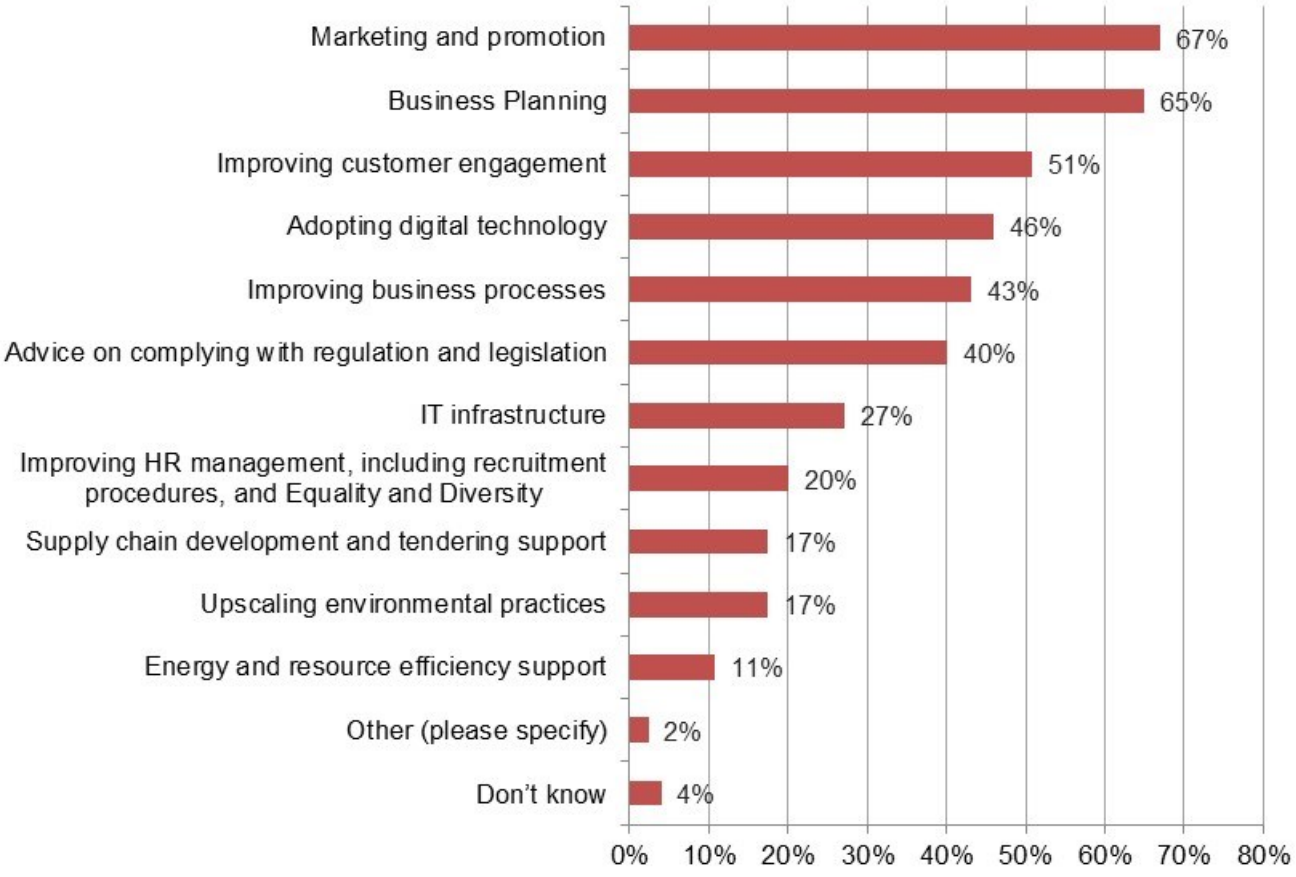

Source: ERDF Support for Business Survey (Base = 358)

### Support for established businesses

5.14 In a similar trend to that of start-up support, marketing and promotion (67 per cent) and support with business planning (65 per cent) were the most common types of support received. Among more established businesses, however, there was a greater emphasis on support aimed at customer engagement and improving infrastructure and internal processes. Half of the businesses sought ways in which to improve customer engagement, while 46 per cent received support with digital adoption (27 per cent also received help with IT infrastructure) and 43 per cent with improving business processes.

[96] Please note that this question allowed businesses to select multiple responses.

**Figure 5.4: Support in running and growing a business**




Source: ERDF Support for Business Survey (Base = 597)

Innovation support

5.15 Among survey respondents, 26 per cent reported that they received innovation support. Of these businesses, 46 per cent received support for R&D, product development, and innovation, whilst 42 per cent received commercialisation and knowledge transfer support.

5.16 Where businesses received innovation support, more than one third (37 per cent) reported developing collaborative relationships with HEIs, other academics, and other businesses. The proportion of respondents reporting the development of collaborative relationships increased to 42 per cent when solely focused on those based in East Wales in receipt of innovation support. As perhaps expected, a higher proportion of businesses (58 per cent) that received support under SO1.2 confirmed that they had

developed collaborative relationships through innovation support than those in receipt of support under the other SOs.

5.17 An analysis by sector identifies a higher proportion of beneficiaries in the business services sector receiving support with R&D, product development, and innovation (69 per cent), whilst an analysis at the SO level highlights that one in five businesses receiving support under SO2.3 specifically had help with website development and social media presence, again reflecting the SO's focus on the uptake and exploitation of ICT infrastructure by SMEs.

Cross-Cutting Themes

5.18 Survey respondents were asked about their use of Business Wales' Future-Proofing Toolkit[97]. Of the 1,014 respondents, only three per cent (29 respondents) recalled using the toolkit (although a further 21 per cent were unsure as to whether they had done so).

5.19 A potential lack of awareness of what the Future-Proofing Toolkit related to may have influenced this rate of response. When asked about the types of advice and support that they had received, one quarter of respondent businesses referred to receiving support with "drafting company-wide strategies and/or processes — including environmental and equality & diversity". This is the type of activity that would typically have been identified through the toolkit. Reference to receipt of this type of support was particularly prevalent amongst businesses supported through SO2.2 (33 per cent) and SO2.4 (27 per cent). It is within these SOs that operations were targeted to deliver CCT programme indicators.

5.20 When the nature of support was explored in more depth, the elements set out in Table 5.2 below are all likely to have been influenced through the use of the toolkit (although it is not possible to determine to what extent). The table shows that this activity was again most prevalent amongst recipients of support through SO2.4 and SO2.2.

[97] The Business Future-Proofing Toolkit aims to help businesses to contribute to the Well-being of Future Generations Act by embedding sustainable development, equality & diversity principles, and support with the Welsh language into their future aspirations

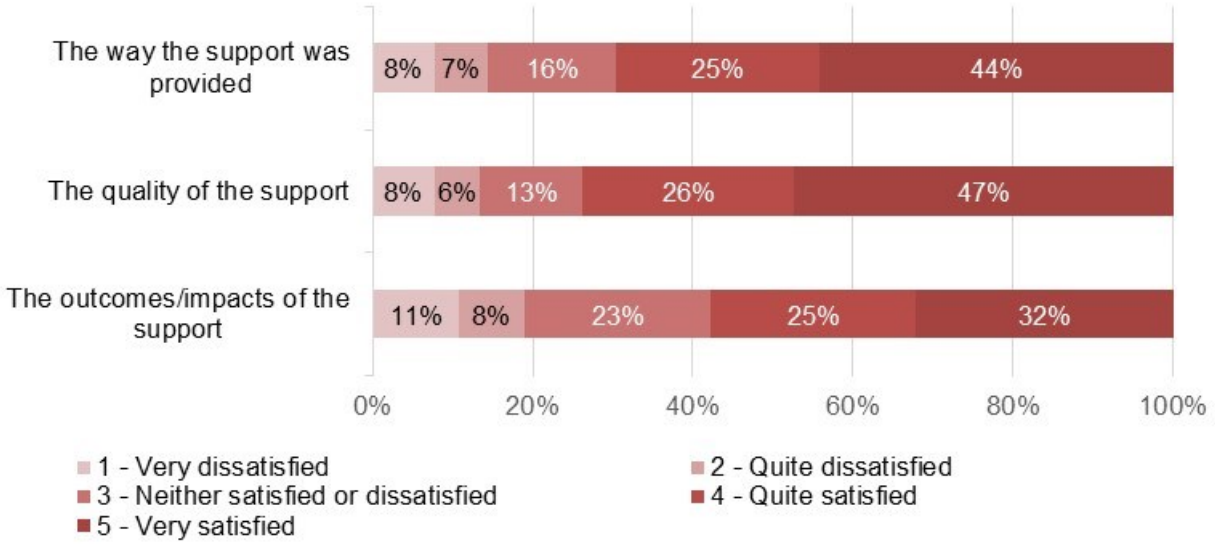
**Table 5.2: Support in topic areas potentially identified through the Future-Proofing Toolkit[98]**

| Column % | SO1.2 | SO2.2 | SO2.3 | SO2.4 | Total |
|---|---|---|---|---|---|
| Improving HR management, including recruitment procedures and equality & diversity | 0% | 23% | 8%↓ | 27%↑ | **20%** |
| Energy and resource efficiency support | 6% | 15%↑ | 5%↓ | 11% | **11%** |
| Upscaling environmental practices | 12 | 22% | 9%↓ | 20% | **17%** |
| **Column n** | 17 | 176 | 159 | 245 | 597 |

Perceptions of support

5.21 Figure 5.5 below details respondent satisfaction in three areas, namely how the support was delivered, the quality of that support, and the outcomes/impacts of the support. It shows high levels of satisfaction across all three areas. Almost three quarters (73 per cent) were "very" or "quite satisfied" with the quality of support received, and 69 per cent were "very" or "quite satisfied" with the way in which the support was provided.

**Figure 5.5: Satisfaction with support**




Source: ERDF Support for Business Survey (Base = 1,014)

5.22 Among those "very satisfied" with the way in which the support was delivered, the responsiveness and accessibility of the advisor were very important. In addition,

[98] The arrows represent a statistically significant difference (0.05 level of significance) between what is observed from respondents supported by an SO in comparison to the rest of the sample. The upward blue arrow (↑) indicates a positive difference, and the downward red arrow (↓) a negative difference.

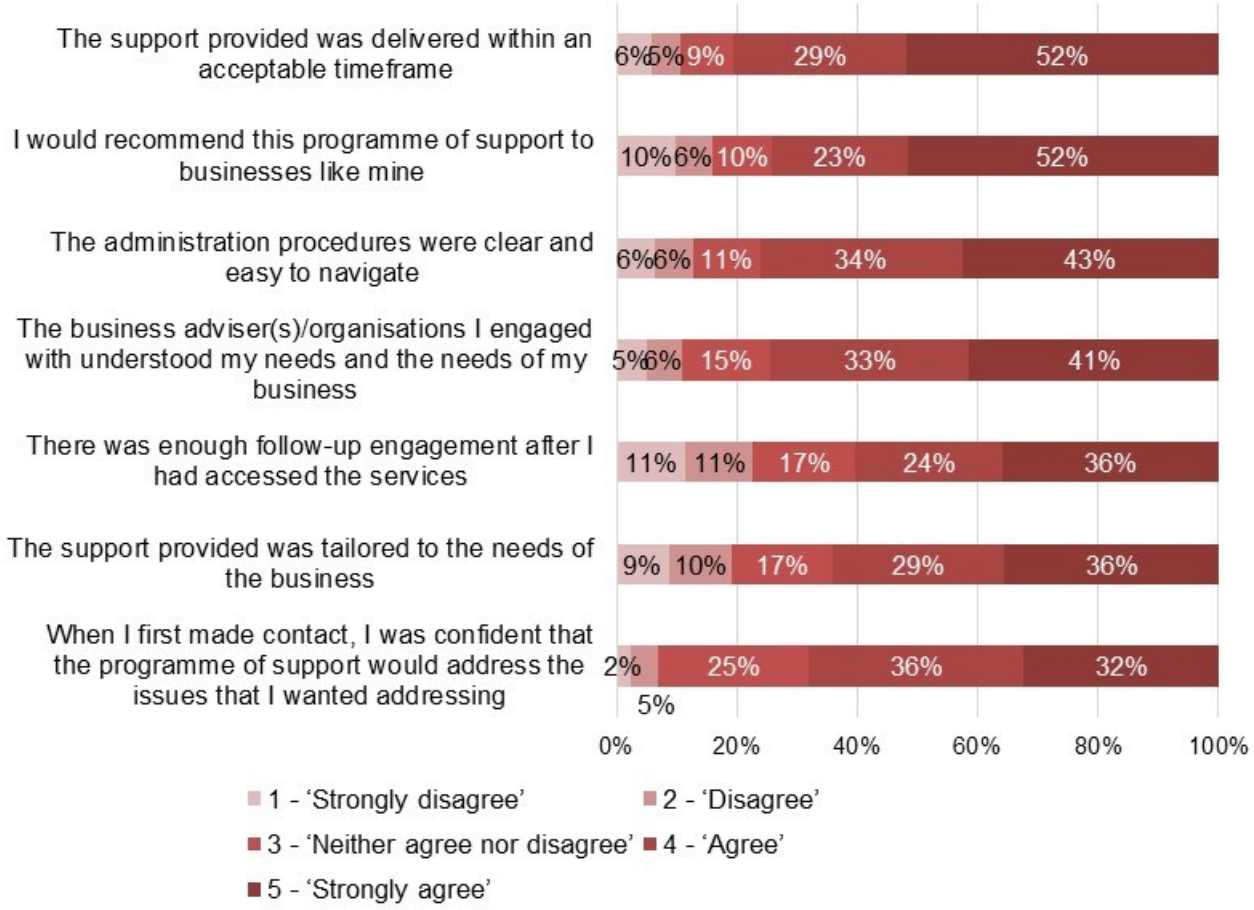
satisfied businesses often highlighted the deliverables, such as diagnostic reports and action plans, as a particular strength.

5.23 For dissatisfied respondents, references were made to a lack of engagement from their advisor as well as infrequent communication or a lack of responsiveness. The other main reason for dissatisfaction appears to be associated with COVID-19, with several businesses highlighting the problems with online engagement and a lack of face-to-face contact. An analysis of survey respondents by their timing of engagement with support identifies an increase in those dissatisfied with the way in which support was provided (from 12 per cent of respondents who enrolled prior to the pandemic to 17 per cent of respondents who enrolled following the commencement of the pandemic). However, this rate of increase is not statistically significant.

5.24 An analysis by SO identified that a higher (statistically significant) proportion of businesses were “very dissatisfied” with the support received under SO2.4 (11 per cent in comparison with eight per cent for all respondents). When open responses are analysed with regard to drivers of dissatisfaction, it is evident that this figure is partly linked to a lack of responsiveness from the support provider.

5.25 Survey respondents were then asked to state their level of agreement with several statements covering specific aspects of the support received. Over 80 per cent of respondents noted that the provision was delivered over an acceptable timeframe, with three quarters of respondents agreeing that the support was relevant to their (and similar businesses’) needs. However, one fifth of respondents felt that there was insufficient follow-up engagement or tailoring of provision.

**Figure 5.6: Satisfaction with specific aspects of support**




Source: ERDF Support for Business Survey (Base = 1,014)

Meeting expectations

5.26 Over 80 per cent of respondents felt that their expectations were (at least) met, whilst almost two thirds (60 per cent) of survey respondents stated that the support had surpassed their expectations (increasing to 69 per cent of respondents in receipt of support under SO2.2). Around one in six respondents (17 per cent) felt that the support had failed to meet their expectations, with 12 per cent of respondents under SO2.4 stating that support was much less than they had expected. Among those respondents whose expectations had been met, there were three clear reasons as to why this was the case: speed of response, knowledge and experience of the advisor, and follow-up engagement.

5.27 For those who felt that their expectations had not been met, the quality and the frequency of communication were identified as a reason for dissatisfaction. Several businesses stated that there was limited contact from their advisor after the initial meeting and that they would regularly have to chase their contact to check on progress and receive updates. Other reasons for dissatisfaction related to a lack of tailored support, with the advice and information received considered to be too generic.

Impact of COVID-19 and the exit from the EU on support

5.28 Of the survey respondents, 41 per cent enrolled in the support after March 2020, when the government imposed social restrictions to prevent the spread of COVID-19. These businesses were asked several questions exploring the impact of the COVID-19 pandemic on the support received as well as its impacts.

5.29 Among this cohort of respondent businesses, 38 per cent stated that the restrictions imposed had impacted on when and/or how the support had been delivered. As shown in Table 5.3 below, amongst those who cited an impact of COVID-19 restrictions, almost two thirds of businesses across all SOs within the survey had seen their support delivered remotely. This proportion increases to almost four in five businesses under SO2.3 receiving their support remotely. Furthermore, one quarter of all respondents stated that they needed more support as a result of the pandemic. The responses illustrate how effectively operations responded to the restrictions imposed, as only a minority of survey respondents (11 per cent) stated that their support had been delayed or was unavailable. However, this issue was much more prevalent amongst participant businesses in receipt of support under SO1.2. As outlined in previous sections, many businesses participating in operations under this SO were restricted by the inability to access laboratories and associated technical equipment to facilitate R&D and innovation activities in the midst of the pandemic.

**Table 5.3: Impact of COVID-19 on how support was delivered[99]**

| Impact of COVID-19 | SO1.2 | SO2.2 | SO2.3 | SO2.4 | Total |
|---|---|---|---|---|---|
| It was delivered remotely | 38% | 85% ↑ | 79% ↑ | 49% ↓ | 63% |
| More support was needed | 15% | 15% | 19% | 31% | 24% |
| Support was delayed or unavailable | 46% ↑ | 0% | 2% | 14% | 11% |
| Other | 0% | 0% | 0% | 5% | 3% |
| Total | 100% | 100% | 100% | 100% | 100% |

Source: ERDF Support for Business Survey (Base = 160)

5.30 Respondents were then asked to reflect on how COVID-19 and government-imposed restrictions had affected the implementation of any recommendations or actions. Almost half (46 per cent) of businesses that answered the question had been forced to shut down or were unable to work, while nearly one quarter (23 per cent) highlighted difficulties in communicating with customers due to a lack of face-to-face engagement and a loss of trade.

5.31 One in five respondents stated that Brexit had an impact on their ability to implement actions (a figure that increased to 32 per cent of businesses that generated up to 49.9 per cent of their sales from European markets and which stated that they had customers in Europe). Where businesses did identify impacts of Brexit on their operations and/or performance, the costs of exporting and importing as well as supply chain issues were the most common.

### Outcomes and impacts from support

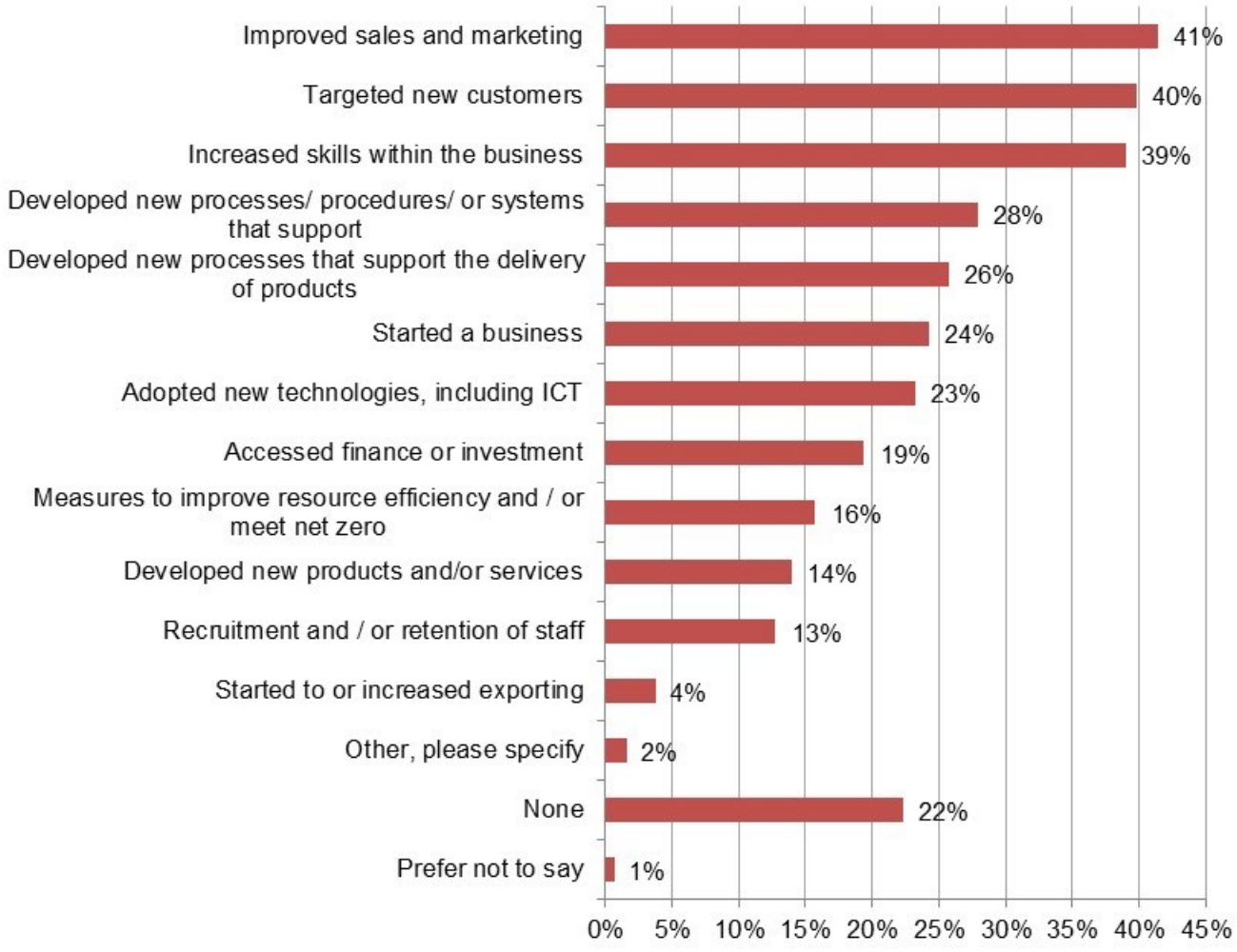
5.32 The business survey included a series of questions with which to understand the actions that respondents had undertaken as a result of receiving the support, as well as the impact that undertaking such actions had on their business performance. Of the 1,014 business beneficiaries who responded to the survey, more than three quarters (77 per cent) had implemented at least one action as a result of receiving support.

5.33 Most commonly, actions were undertaken to improve sales and marketing (particularly so amongst SO2.3 participants, where 57 per cent of respondents undertook these actions), target new customers, and increase skills in the business, with approximately

[99] The arrows represent a statistically significant difference (0.05 level of significance) between what is observed from respondents supported by an SO in comparison to the rest of the sample. The upward blue arrow (↑) indicates a positive difference, and the downward red arrow (↓) a negative difference.

two in five businesses implementing actions in at least one of these three areas. More than one quarter of businesses stated that they had developed new processes that either supported the day-to-day running of their business (28 per cent) or supported the delivery of products and/or services to customers (26 per cent). Almost one in five businesses (19 per cent) benefitted from access to finance or investment (increasing to almost one third of businesses (29 per cent) in receipt of SO2.2 support). Moreover, it is notable that access to finance was more prevalent (23 per cent) amongst those businesses that had enrolled on the programme following the outbreak of COVID-19.

**Figure 5.7: What actions, if any, have you taken as a result of receiving support through the programme?**




Source: ERDF Support for Business Survey analysis (Base = 1,014)

Starting a business

5.34 Almost one quarter of survey respondents set up a business following the support that they received through the programme. Respondents were then asked how likely they would have been to set up a business anyway in the absence of the advice. Almost one fifth of respondents (19 per cent) felt that it was “unlikely” (12 per cent) or “very unlikely” (seven per cent) that they would have set up their business in the absence of support. Over 60 per cent of all respondents who set up a business following the support were those who participated in SO2.2. Amongst that group, the same level of attribution (19 per cent feeling that it was “unlikely” or “very unlikely” that they would have set up their business in the absence of support) was evident.

5.35 The latest monitoring data showed that within SO2.2, just over 6,000 (6,043) new enterprises had been supported[100]. According to the survey, 56 per cent of those who participated in SO2.2 started a business as a result of receiving support. If the start-up rate in the survey is reflected amongst the entire population supported through SO2.2, this equates to 3,384 new business starts. If the same proportion of those surveyed who felt that in the absence of the support they would not have started up a business were reflected across the entire population of SO2.2 who started a business, this would equate to an aggregate of **643 businesses started as a result of the support received through SO2.2**.

Business exploitation of ICT

5.36 Almost one quarter (23 per cent) of respondent businesses had implemented changes to their ICT infrastructure as a result of their support. Almost three quarters of these (73 per cent) referenced the development of an online presence via social media marketing and promotional activity, increasing to 83 per cent amongst those in receipt of SO2.3 support (as one of the intended outcomes of this support, this level of popularity is expected). Furthermore, two thirds of respondents introduced or improved their company website (increasing to 77 per cent of those in receipt of SO2.3 support). Just over 40 per cent of businesses had started using online communications platforms such as Microsoft Teams and Zoom, applications that have taken on greater

[100] Based on quarterly returns until October 2022.

significance in the day-to-day management and operation of businesses since COVID-19.

5.37 Survey respondents were asked whether they had started using or increased their usage of fibre or cable broadband services within the last five years. Slightly more than one third (34 per cent) had either introduced fibre/cable broadband (17 per cent) or increased their use of it (17 per cent). Of these respondents, 11 per cent (and 20 per cent of SO2.3 respondents) stated that the support received had impacted on this.

**Table 5.4: Implementation of changes to ICT infrastructure as a direct result of support**

| Changes to ICT infrastructure | % |
|---|---|
| Marketing and promotional activity via social media | 73% |
| Website development | 66% |
| Online communications platforms (Microsoft Teams, Zoom, etc.) | 41% |
| Internal communications and remote working (e.g. intranet) | 24% |
| Data sharing and/or storage systems | 23% |
| Management software (e.g. project management, holidays, digital accounting software, etc.) | 21% |
| CRM system to integrate/link other IT systems | 13% |
| None of the above (if other, please specify) | 8% |
| Don't know | 4% |

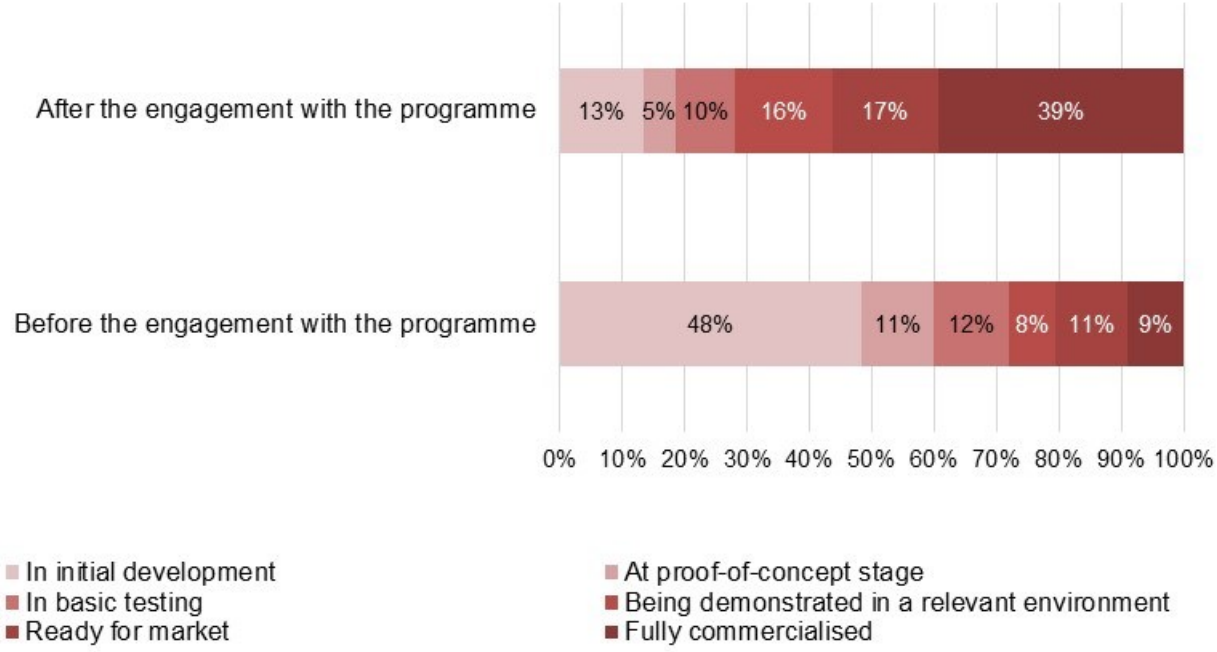
Source: ERDF Support for Business Survey (Base = 231). Multiple responses were possible. Please note that survey respondents could select multiple options for this question; thus, the percentages do not add up to 100 per cent.

New products and processes

5.38 Approximately 45 per cent of respondent businesses had developed new products or processes as a direct result of receiving support through the ERDF programme. Of the 446 unique businesses that had developed new products, processes or services, 32 per cent had developed new products or services, while 38 per cent had introduced new processes, procedures or systems to support the management of their business, and 30 per cent had introduced processes to support the delivery of products and services to customers. Almost three quarters (72 per cent) of survey respondents considered the support to be "very important" or "mostly important" in the development of these.

5.39 Where businesses had developed new products, they were routed to several additional questions. Figure 5.8 below illustrates progress made in the commercialisation of products[101] as a direct result of the support. Before engagement with the programme, only 20 per cent of respondents felt that their products were ready for market, with more than half (59 per cent) being at the initial development or proof-of-concept stage. Following the support, 56 per cent of respondents considered their products to be ready for market, with 39 per cent of products being fully commercialised (being sold or offered to customers), whilst 18 per cent were at the initial development or proof-of-concept stage.

**Figure 5.8: Progress in commercialisation of products**




Source: ERDF Support for Business Survey (Base = 132 before engagement, 135 after engagement — "prefer not to say" excluded)

[101] Commercialisation is **the process of bringing new products or services to market**. The broader act of commercialisation entails production, distribution, marketing, sales, customer support, and other key functions critical to achieving the commercial success of the new product or service

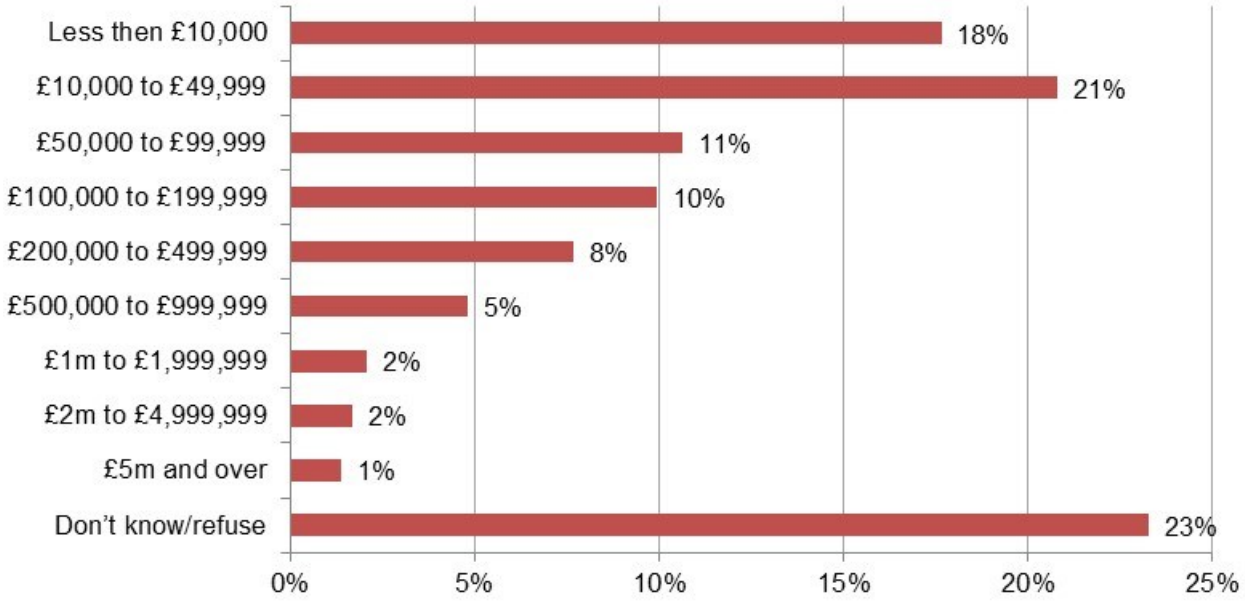
5.40 When asked to consider the impact of their new products on sales, two thirds (65 per cent, 92/141) stated that they had witnessed an increase in sales (increasing to 89 per cent (42/47) of those who had fully commercialised their product/service), with one third of those citing an impact on sales (33 per cent, 30/92) estimating that their sales had increased by more than 31 per cent.

Turnover, profit and loss

5.41 In terms of annual turnover, in the last financial year, half of the respondent businesses had a turnover below £100,000, 18 per cent between £100,000 and £499,999, and five per cent between £500,000 and £1m (see Figure 5.9 below).

5.42 When those who were unable to provide a turnover figure are removed from the analysis, it is evident that over three quarters (76 per cent) of participant businesses in receipt of SO2.2 support operated with a turnover of less than £50,000, whilst three quarters of those with SO1.2 support and half of those in SO2.4 had a turnover of over £100,000. The distribution of turnover amongst those in receipt of SO2.3 support is very similar to that presented in the chart below.

**Figure 5.9: Turnover in last financial year prior to receiving support**




ERDF Support for Business Survey (Base = 1,014)

5.43 When asked to provide estimates of profit or loss in the last complete financial year, 56 per cent of respondents stated that they had made a profit, a figure that increases to 64 per cent amongst those businesses established more than 10 years ago. Almost one quarter of respondent businesses reported a loss in the last financial year, whilst the remaining 20 per cent of respondents were unsure or preferred not to say.

5.44 Of those reporting a profit, 41 per cent estimated it to be less than £10,000, 29 per cent estimated their profit to be between £10,000 and £49,999, whilst 12 per cent stated a profit of between £50,000 and £199,999. When analysed by SO, the highest rates of profit were evident amongst participant businesses in SO1.2 support (48 per cent with profits in excess of £100,000).

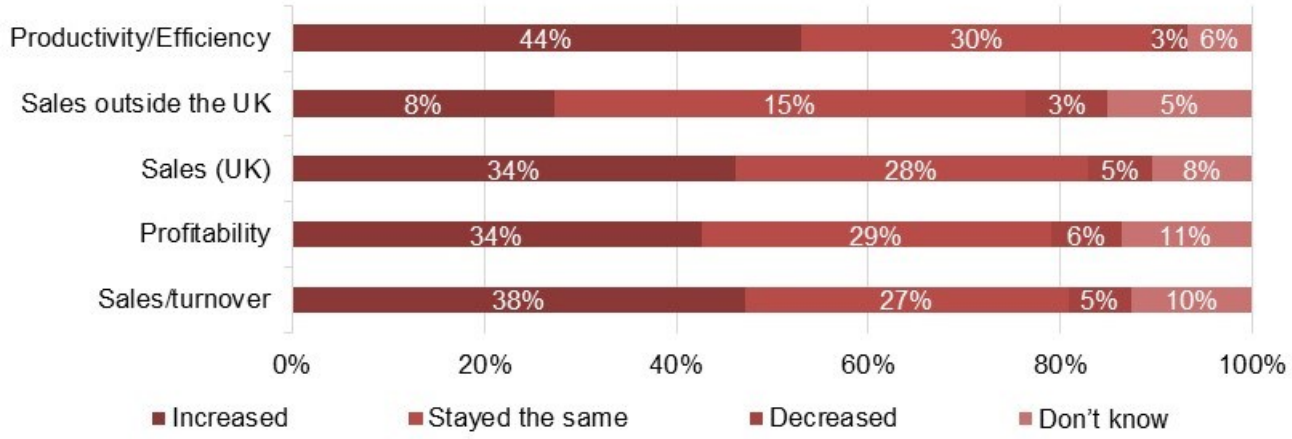
5.45 Of the 24 per cent stating a loss in the last financial year, they were fairly evenly distributed across all sizes and ages of businesses (albeit with loss making being less likely amongst those businesses established for over 10 years). The proportion describing a more considerable loss was typically higher amongst businesses within SO1.2 than in other support streams and reflects the likelihood that these organisations were in the research and product development phase, prior to taking their product/service to market and generating income. The data therefore shows the diversity in performance of participant businesses accessing SO1.2 support with respondent businesses reporting the highest profit margins whilst also, where losses were incurred, reporting the highest losses all respondent businesses.

5.46 To provide an estimate of attributable impact, business beneficiaries were asked whether the changes in turnover, profitability and sales were a direct result of the actions undertaken following support. As shown in Figure 5.10 below, approximately one third of businesses stated an increase in turnover (38 per cent), profitability (34 per cent) and sales in the UK (34 per cent), while 45 per cent stated an increase in productivity/efficiency, as a direct result of the support. For a further one in four businesses, these same measures had remained the same, with between three per cent and six per cent (of the 795 who answered the question) stating that the support had resulted in a decrease.

5.47 Where responses are analysed by SO, there is very little variation in the proportion of businesses attributing positive changes to business performance to programme support. Nor is there any variation when analysed by the timing of their engagement with the support[102].

5.48 When analysed by industrial sector, those within the information and communications sector (50 per cent, 10/20) and those within the accommodation and food services sector (47 per cent, 42/89) were the most likely to describe sales/turnover growth as well as growth in profitability. For the accommodation and food services sector this may have been associated with the sector's recovery following the easing of restrictions associated with the COVID-19 pandemic.

**Figure 5.10: Changes in business performance resulting from programme support**




Source: ERDF Support for Business Survey analysis (Base = 795)

5.49 As perhaps to be expected, when asked about the impact of COVID-19 on turnover, profit and loss, 50 per cent of respondents stated that it had impacted "to a great extent", while a further 20 per cent stated "to some extent".

Employment

5.50 The last area of impact that the survey explored was employment. The survey findings suggest that there has been a limited impact of the support on jobs created and jobs safeguarded, with 10 per cent of respondents stating that they had created jobs and/or safeguarded jobs as a direct result of the support provided and the subsequent actions

[102] An analysis of the timing of engagement with support was collated under three categories, namely those who enrolled before October 2019 (pre-COVID-19), those between October 2019 and March 2020 (engaged pre-COVID-19 and possibly still receiving support during COVID-19), and those from March 2020 onwards (engaged post-COVID-19).

that they had undertaken. An analysis by SO identified a higher proportion of businesses who received support under SO2.4, creating (16 per cent) and safeguarding (also 16 per cent) jobs as a direct result of that support, while two per cent of businesses that received support under SO2.3 stated that they had created jobs, a figure that increased to three per cent for jobs safeguarded.

5.51 Among the 105 businesses that created jobs, whilst two thirds of respondents created one or two posts, 14 per cent of respondents created 10 or more. Of the 97 that safeguarded jobs, almost half of the respondents (48 per cent) safeguarded one or two posts, whilst more than one fifth (21 per cent) safeguarded 10 or more.

5.52 Table 5.5 below provides an analysis based on the assumption that the patterns of job creation as a direct result of the support encountered within the survey for each SO are reflected across all participants in receipt of support under that SO. This assumes that survey respondents are reflective of all participants and that the fact that the survey only engaged those who had enrolled since March 2019 had no bearing on the number of jobs that each business had created.

5.53 The table shows that under SO2.2 an estimated 3,500 full-time equivalent (FTE) jobs were created, whilst under SO2.4 an estimated 4,500 FTE jobs were created. Collectively the data suggest almost 10,000 gross (FTE) jobs created.

**Table 5.5: Estimated gross jobs (FTE) created and jobs (FTE) safeguarded by SO**

| SO | Programme | No. of enterprises supported (Oct 2022) | Jobs created (FTE) | Jobs safeguarded (FTE) |
|---|---|---|---|---|
| SO1.2 | WWV | 861 | 541 | 677 |
| | EW | 421 | 781 | 833 |
| SO2.2 | WWV | 4,069 | 1,874 | 816 |
| | EW | 1,974 | 1,707 | 1,719 |
| SO2.3 | WWV | 4,048 | 334 | 474 |
| | EW | 2,038 | 85 | 146 |
| SO2.4 | WWV | 6,013 | 3,553 | 4,943 |
| | EW | 3,190 | 978 | 2,839 |
| | | **Total** | **9,852** | **12,446** |

5.54 Respondent businesses were then asked to reflect on the level of importance that they associated the support playing in the creation or safeguarding of jobs. Over 80 per cent (97/120) described the support as being at least moderately important and 41 per cent of respondents (49/120) described the support as playing a very important role in the creation or safeguarding of jobs.

5.55 Over the next five years, approximately one in three of all businesses surveyed (34 per cent) anticipated that further jobs would be created as a direct result of the actions undertaken following the support. This figure increases to almost half (49 per cent) of businesses in receipt of support through SO1.2.

**Looking to the future**

5.56 Just under one quarter (23 per cent) had accessed other business support since receiving support through the programme, increasing to 39 per cent of those in receipt of support through SO1.2.

5.57 Almost two thirds (61 per cent) of those surveyed would welcome further support with marketing and promotion as well as access to finance (increasing to 65 per cent and 67 per cent, respectively, when analysed against those who expected to generate further jobs as a result of the support that they had received). Around half would like help with finding and retaining customers, reducing overheads, and adopting technology to help sell to customers.

**Table 5.6: Future support services needed**

| Type of support | % |
|---|---|
| Marketing and promotion | 61% |
| Access to finance | 61% |
| Finding and retaining customers | 51% |
| Reducing overheads | 47% |
| Using technology to sell to customers | 47% |
| Financial management | 43% |
| COVID-19 recovery | 39% |
| Using technology to maximise work–life balance | 38% |
| Offering flexible and remote working | 21% |
| Managing office space and desk sharing | 13% |
| Staff recruitment and training | 8% |
| Other | 7% |
| None | 5% |
| Business support | 4% |
| Energy efficiency | 2% |
| NET | 100% |

Source: ERDF Support for Business Survey (Base = 1,014). Please note that survey respondents could select multiple options for this question; thus, the percentages do not add up to 100 per cent.

5.58 Almost two in five (39 per cent) respondent businesses would like to see further support with COVID-19 recovery, with one third of respondents still referencing concerns surrounding the long-term impacts of COVID-19. Whether businesses received their support pre- or post-COVID-19 made little difference to the types of support that they wanted in the future.

## Summary

- Two thirds of all respondents were aware that the support was funded through the ERDF, whilst almost all (97 per cent) of those who engaged with support through SO1.2 were aware.
- One quarter of respondents found the support through an online search (compared to six per cent in 2016), which increased to 29 per cent of those who enrolled in provision following the COVID-19 outbreak.

- The accessibility of provision, its suitability, and the fact that it was free were primary drivers of engaging with ERDF support. For 40 per cent of respondents it was “unlikely” or “very unlikely” that they would have accessed other provision in the absence of ERDF support.
- Almost three quarters (73 per cent) of respondents were “very satisfied” or “quite satisfied” with the quality of the support that they had received.
- Dissatisfaction typically emanated from a perceived lack of responsiveness or communication from an advisor or from challenges with online (instead of face-to-face) engagement (particularly following the pandemic). Rates of dissatisfaction were higher amongst SO2.4 participants, primarily due to a perceived lack of responsiveness.
- Over 80 per cent of respondents felt that their expectations were met, and 60 per cent felt that their expectations had been exceeded. Respondents spoke of the speed of response, the knowledge and experience of the advisor, and follow-up-engagement as key factors influencing this response.
- Amongst survey respondents who had received support during the pandemic, 38 per cent felt that governmental restrictions impacted on when/how support had been delivered, whilst only 11 per cent described support as being delayed or unavailable. However, this issue was more prevalent amongst SO1.2 participants (46 per cent).
- More than three quarters (77 per cent) of business respondents had implemented at least one action as a result of receiving support. Most commonly, these related to improved sales and marketing, the targeting of new customers, or increasing skills within the business.
- Almost one quarter set up a business, of which one fifth felt that it would have been “unlikely” or “very unlikely” that they would have done so in the absence of the support. This equates to an aggregate of 643 additional businesses started as a result of the support received through SO2.2.
- Just over one third had introduced fibre/cable broadband or increased their use of it, with 20 per cent of those supported through SO2.3 feeling that the support had impacted this.
- Almost three quarters (72 per cent) of survey respondents who had developed new products or processes as a result of receiving ERDF support considered the support to be “very important” or “mostly important” in the development of these.
- Prior to support, 20 per cent of those developing new products or services felt ready for market; following the support this increased to 56 per cent of those respondents.

- Around one third of respondents felt that the support had led to an increase in turnover and profitability, whilst 45 per cent stated an increase in productivity/efficiency as a direct result of the support.
- Amongst respondents, 10 per cent stated that they had created or safeguarded jobs as a result of the support. Modelling the number of jobs created against the number of estimated unique participants for each SO suggests that almost 10,000 self-reported unique FTE jobs were created as a direct result of the support.

# 6. Learning from project case studies

## Introduction

6.1 Six case studies are presented in Annexe B and have been compiled from in-depth interviews with participant businesses (41 interviews across the six operations) and representatives from each of the operations. Operations of various scales were selected to provide a representation of the range of provision offered through each of the targeted SOs. This section summarises the key learnings from those case studies in addition to any patterns and trends that emerged following an analysis of the interview responses.

6.2 Table 6.1 provides an overview of the six operations, whilst Table 6.2 illustrates the distribution of target indicators against each operation.

**Table 6.1: Overview of selected operations for the case studies**

| Operation title | SO | Operation summary |
|---|---|---|
| Accelerate – Welsh Health Innovation Tech Accelerator (EW & WWV) | 1.2 | The Accelerate programme aims to support SMEs and enterprises in Wales by allowing them to make use of academic expertise and the latest facilities in HEIs to enable the exploitation of innovative ideas in the life sciences sector. |
| CEMET – Centre of Excellence in Mobile and Emerging Technologies (EW & WWV) | 1.2 | Operating through the Faculty of Computing, Engineering, and Science at the University of South Wales, CEMET aims to provide SMEs in Wales with access to funded research and development work to bring products to market in high-growth sectors like artificial intelligence, digital manufacturing, and cybersecurity. The R&D work is designed to help businesses seeking to create new products, solutions or services revolving around cutting-edge and emerging technologies such as machine learning, virtual and augmented reality, data visualisation, and artificial intelligence. |
| Future Foods (WWV) | 1.2 | Future Foods aims to deliver world-class expertise in food science, technology, nutrition, research, and development to ambitious Welsh-based food businesses seeking to develop healthy, market-creating products targeted at UK and international markets. In delivering this support the operation sought to enable food and drink companies in Wales to improve their competitiveness, underpinning future growth and sustainability. |
| Business Wales Entrepreneurship Support and SME | 2.2 and 2.4 | The Core and Growth service aims to provide a one-stop shop for entrepreneurs and SMEs which will support them to grow and create jobs. The level of support delivered by the programme is dependent on the beneficiary's growth potential and scale, from level 1 for microbusinesses |

| Operation title | SO | Operation summary |
|---|---|---|
| Support (EW & WWV) | | and those who are self-employed that are lifestyle-oriented to level 4 for larger organisations with greater growth potential.<br>The Accelerated Growth Programme (AGP) is available for businesses and start-ups that exhibit a higher growth potential than those at levels 1 to 4, demonstrating the potential for a 20 per cent increase in turnover annually for five years. |
| Social Business Wales New Start and Social Business Wales (EW & WWV) | 2.2 and 2.4 | The aim of the Social Business Wales programme (across both operations) is to provide support and technical information to those seeking to set up, operate or grow a social business. As well as providing support regarding how to set up and grow these types of businesses, Social Business Wales also aims to provide specialised advice to enterprises seeking additional capital investment or legal advice to those seeking to become an employee-owned trust. |
| Superfast Broadband Business Exploitation (EW & WWV) | 2.3 | SFBE aimed to support businesses to take advantage of the superfast broadband rolled out across Wales. The operation aims to achieve this through supporting businesses to understand the commercial opportunities and efficiencies that could be made available through the adoption of superfast broadband.<br>The SFBE programme had two ERDF targets, namely providing non-financial support to enterprises and the introduction of new-to-firm products. |

## Table 6.2: Target indicators by operation

| | Accelerate | CEMET | Future Foods | Business Wales | Social Business Wales | Superfast Broadband |
|---|---|---|---|---|---|---|
| Partners cooperating in a research project | ✓ | ✓ | ✓ | | | |
| Employment increased in supported enterprises | ✓ | | ✓ | ✓ | ✓ | |
| Enterprises receiving non-financial support | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Enterprises supported to introduce new-to-market products (processes/services) | ✓ | ✓ | ✓ | | | |
| Enterprises supported to introduce new-to-firm products (processes/services) | ✓ | ✓ | ✓ | | | ✓ |
| Private investment matching public support innovation or R&D | ✓ | ✓ | ✓ | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Patents registered for products | ✓ | | ✓ | | | |
| Enterprises adopting or improving equality and diversity strategies and monitoring systems | | | | ✓ | ✓ | |
| Enterprises adopting or improving sustainable development strategies and monitoring systems | | | | ✓ | ✓ | |
| Increase in level of exports | | | | ✓ | | |
| Number of individuals receiving support | | | | ✓ | | |
| Enterprises cooperating with supported research institutions | ✓ | ✓ | | | | |

**Determining eligibility and diagnosing needs**

6.3 Across most operations, eligibility for provision is determined by the nature of support needs amongst business owners and entrepreneurs. Several operations, particularly Business Wales and Superfast Broadband, are designed for all SMEs to be eligible, whilst eligibility for operations associated with SO1.2 is primarily influenced by the sectoral alignment and ambition of the business.

6.4 Across all operations, initial engagement is closely integrated with some form of diagnostics. Several of the operations undertake initial diagnostics virtually or via telephone. This has increasingly been the case since the outbreak of COVID-19, particularly with those associated with SO2.2 and SO2.4 because of the structure of these operations and the emphasis on a streamlined gateway and enrolment process.

6.5 For those operations under SO1.2, greater emphasis was placed on in-person engagement to determine the needs and prospects for the product/service idea. This more intensive approach was adopted in recognition of the specialist and niche support required and the emphasis on the collaborative approach to the relationship throughout an organisation's participation in that operation.

Support provision

6.6 Support provision delivered through SO2.2, 2.3 and 2.4 typically focused initially on securing six hours of diagnostic support or 12 hours of advisory support to fulfil the eligibility requirements for recording an "enterprise receiving non-financial support". This initial provision was often delivered in the form of one-to-many, off-the-shelf services. Beyond this initial six- or 12-hour threshold, supplementary support, more intensive and bespoke in nature (typically one-to-one), would be targeted at those enterprises deemed to be most likely to generate growth that would contribute to the

employment indicator[103]. For those in receipt of support under SO1.2 the nature of support was more bespoke to the specific requirements of the organisation and their associated product/service idea. Relationships and ongoing engagement with participant businesses in this SO were typically sustained over multiple months to reflect the needs of the business and the nature of the support.

6.7 Operations offered a mixture of services delivered by contracted providers, partner agencies, procured specialists via a framework, or in-house expertise to support participant businesses.

6.8 Amongst the participant organisations engaged through the case study interviews, most participants spoke of having predominantly received support remotely. This included one-to-one meetings via telephone or video conference, webinars, and ad hoc email support. Consistent with other elements of the fieldwork conducted as part of this study, organisations attributed this to the timing of the provision, as the pandemic restricted in-person delivery. Furthermore, a minority of organisations reported a preference for remote delivery, as this was easier for them to access and offered flexibility of which they were particularly appreciative. Only one respondent amongst the 41 interviewed reported that they would have preferred face-to-face provision.

COVID-19 influence

6.9 The COVID-19 pandemic impacted the way in which support was delivered; however, businesses were able to adapt to these circumstances and in most cases the level of support was not compromised. Indeed, in these in-depth interviews, most organisations (22/41) reported that the pandemic had no impact on the support that they received through the programme. Of those who reported some impact, this primarily related to how it was delivered, with the vast majority (16/19) reporting that the support had been delivered remotely through online meetings, instead of face-to-face. Most organisations reported that the use of a remote delivery method had not been an issue, as it was merely a different mode of communication, although a small number of participants reported that they would have hoped for site visits had this been possible.

[103] The ERDF target indicator “employment increase in supported enterprises” — the number of gross new working positions in supported enterprises.

6.10 Only a small number of participant organisations (4/41) reported that the support that they had received was affected by COVID-19. These organisations were those that were involved in SO1.2, including laboratory-based projects in which additional safety procedures had been implemented as a result of the pandemic or they were restricted or unable to access the specialist equipment available in laboratories for various periods during lockdown.

6.11 The socioeconomic situation created by the pandemic (and subsequently by the Ukrainian war and the associated cost-of-living crisis) has made recruitment to some operations more challenging. The teams running those operations spoke of the relative lack of security associated with the temporary contracts that were typically offered, which were felt to be less attractive due to the uncertain socioeconomic climate and the lack of clarity as to future opportunities following the completion of the programme.

Performance

6.12 All operations had performed well against the majority of their targets, with the majority being above profile and expecting to surpass targets at the point of operation completion. Amongst SO1.2 operations there were consistent challenges identified in relation to the registering of patents (see sections 3 and 4 for more information), an issue reflected by stakeholders who noted the challenges of bringing new products and services to market from this SO. Conversely, operations spoke of considerable progress and success in collaboration between business and research institutions (and between partner research institutions). Several spoke of the potential legacy of these relationships and the high likelihood of them lasting (and developing further) beyond the lifetime of the operations.

Cross-Cutting Themes

6.13 Amongst case study operations, specific targets for CCTs were assigned to Business Wales and superfast broadband provision. Business Wales has been targeted with 40 per cent of participants adopting or improving equality and diversity or sustainable development strategies and monitoring systems. In the early stages of the operation this proved to be challenging to deliver, but considerable progress has been made. The project team felt that progress had been influenced by a changing mindset amongst participants, with equality and diversity and, in particular, environmental

sustainability (and how that may influence a reduction in energy costs) being a greater priority for businesses. As a result, the operation is now close to meeting the 40 per cent threshold.

6.14 Businesses' recollection of their engagement with the Business Future-Proofing Toolkit appeared to be relatively low, reflecting the nature of responses to the wider business survey. Just over one quarter (11/41) of organisations were able to recall whether their business had accessed the toolkit, and of these, 9/11 reported that they had not used the toolkit because either it was not relevant or they felt that it was repeating information that they already knew. That being said, as outlined in the analysis of the wider business survey (section 5), there appeared to be a weak association by businesses of the toolkit with the delivery of support to meet CCT targets.

6.15 The other operations were tasked with delivering CCT case-level indicators. These were established as findings from the 2007–2013 programme which identified that the formal indicators were seen to be too blunt and often not relevant to the activity delivered. In response, additional project-level indicators were identified and chosen by operations in collaboration with the WEFO to better reflect CCT-related activity.

Lessons learnt

6.16 Operations spoke of the importance of clarity surrounding information and requirements in programme guidance for capturing evidence that would contribute towards target indicators from the outset of the initiative. This related to some initial confusion surrounding what was necessary (in terms of evidence) in order to achieve a target. Moreover, they spoke of the importance of a high-quality project team that remains consistent throughout the operation.

6.17 In reflecting on lessons, a consistent brand along with a clear and simple message of the support available were highlighted as key factors for success, alongside strong, embedded networks for promoting service provision and securing referrals. Looking forward, there are concerns surrounding the combined effects of a potential reduction in the scale of funding available and the potential proliferation of small-scale, local initiatives arising from UK Shared Prosperity Funding that risk creating confusion in the marketplace for prospective and existing businesses in Wales.

6.18 Several operations spoke of the importance of mainstreaming digital support provision under the umbrella of Business Wales or similar. In the current programme it was considered to be niche or specialist, but interviewees spoke of how the pandemic had accelerated the rate of transition to digital engagement and delivery and that this should be embraced in future support activity.

6.19 Businesses were also asked to consider what they perceived to be the main business development issues that may affect them in the future. Commonly (13/41), businesses discussed concerns surrounding securing funding and investment. These included difficulties in obtaining funding for project development, research or testing (as had been accessible through other SOs of the ERDF programme). These funds were felt to be crucial in enabling businesses to undertake developmental work that may otherwise be cost-prohibitive.

6.20 Some businesses (10/41) were concerned about cost-of-living pressures, the possibility of recession, and the impact that this may have on their sector. Businesses reported that rising energy costs, salaries, and operational costs were placing considerable pressures on their organisations. As a result, several businesses were concerned about their ability to absorb these costs and the associated impact that these may have on the resilience of their business. Businesses spoke of a risk of redundancies and potential closures due to these pressures:

> ‘Small businesses are facing increased energy and fuel costs plus rising wages, and unless we get support, we will not be able to continue trading.’ (Business interviewee)

6.21 Several businesses also reported that the uncertainty surrounding wider socioeconomic conditions was a barrier to growth and their investment plans, leading to a reluctance to invest in equipment or take on new premises.

6.22 Businesses also reported concerns surrounding staff recruitment and retention (discussed in 10/41 responses). In particular, businesses noted that there was a shortage of suitably skilled staff. As articulated in the quote below, this was felt to be more challenging in the context of increased remote/hybrid working since the COVID-

19 pandemic, as this meant that Welsh companies were now competing against an even greater pool of employers for qualified applicants:

> ‘Recruiting tech talent [is a challenge]; since COVID-19, lots of Wales-based [staff] started working remotely, which has allowed them to change jobs and start working for London-based or American companies who will pay a starting salary north of 60k — it’s hard to match that as a start-up.’ (Business interviewee)

6.23 Businesses reported a need for more skills provision to increase the availability of skilled staff where the shortages are most acute in order to improve the supply of qualified applicants in these fields.

6.24 Several businesses also reported support needs in relation to helping businesses to prepare for regulatory and legal changes, including supporting businesses to prepare for net zero. Furthermore, several businesses felt that it would be beneficial to have access to funding to support businesses to improve their energy efficiency.

## Summary

- Across all operations, initial engagement was closely integrated with some form of diagnostics. For those under SO2.2, 2.3 and 2.4, initial engagement tended to be virtual, whilst for SO1.2 there was more of an emphasis on in-person engagement.
- The initial focus of provision on SO2.2, 2.3 and 2.4 operations was one-to-many in nature, beyond which more intensive and bespoke supplementary support (typically one-to-one) was delivered. SO1.2 support was more bespoke to the specific needs of the participant business and sustained over multiple months.
- Operations offered a mixture of contracted service providers, partner agencies, and procured specialists via a framework or in-house expertise to deliver services to participant businesses.
- COVID-19 affected only a minority of businesses and specifically those involved in SO1.2 operations in which they needed access to laboratories or specialist equipment.
- The uncertain socioeconomic climate affected the staffing of operations, with lead beneficiaries reporting challenges in attracting staff to temporary roles.

- Those operations within SO1.2 spoke of the success in research institution and organisation collaborations and the likelihood that these would form a key legacy of their activity. Echoing perspectives from stakeholders, commercialising services and registering patents were widely viewed as being challenging.
- For SO2.2, 2.3 and 2.4, operational targets are largely being met. A shortfall against CCTs was noted by lead beneficiaries, although this was primarily associated with slow progress initially in delivering these. Improvements were associated with close working with the WEFO and the introduction of the Future-Proofing Toolkit. However, there was little association with or recognition of the use of that toolkit among businesses.
- In considering lessons learnt, lead beneficiaries spoke of the importance of clarity surrounding information and requirements for capturing evidence from the outset of an operation, as well as the importance of a high-quality project team that remain consistent throughout an operation.
- Consistency and simplicity of the brand were also flagged amidst concerns surrounding the risk of confusion in the marketplace.
- Amongst businesses there were concerns surrounding the socioeconomic situation, which was impacting their appetite to invest. What is more, there were challenges associated with sourcing suitably skilled staff amidst a concern that remote working meant that Welsh businesses were competing against a wider pool of employers for qualified applicants.

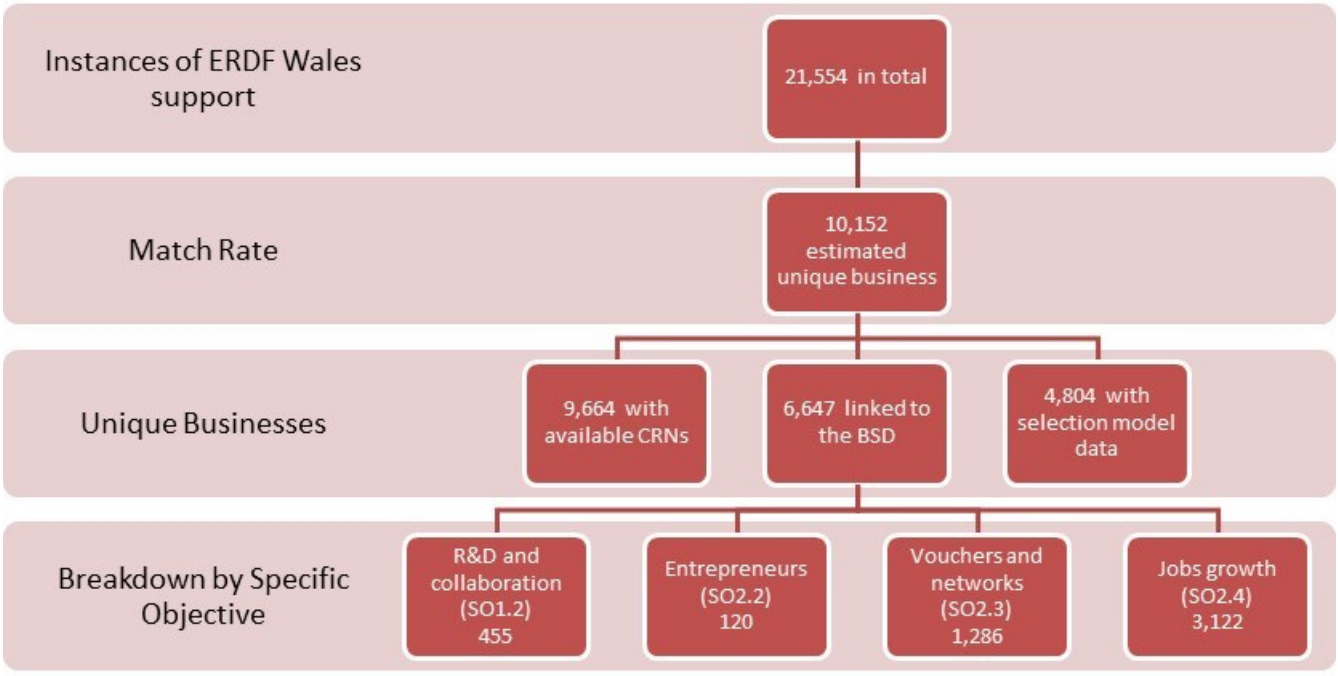
# 7. Counterfactual impact evaluation

## Introduction

7.1 A counterfactual impact evaluation (CIE) was conducted as part of the evaluation to explore firm-level employment and turnover impacts amongst participant businesses registered with Companies House and for VAT or PAYE. An initial stage in the analysis links the supported businesses to their Companies House Registration Numbers (CRN). However, an analysis of the monitoring data revealed that CRNs were not available for all businesses. Consequently, additional research, through the use of the Companies House registry as well as the name of the company and other details, was required to source the CRN.

7.2 Once a CRN had been identified, the second stage was to link the businesses to ONS data, primarily through the Business Structures Database (BSD). Figure 7.1 indicates the matching process from instances of support through to the number of matched organisations at the SO level.

**Figure 7.1: Data linking match rate and link to ONS data**



7.3 From the original dataset, 21,554 instances of support were identified. However, it should be noted that businesses could secure multiple instances of support across more than one SO. Following de-duplication of the data, there were 10,152 unique businesses. A CRN could be linked with 9,664 (95 per cent) of these businesses. Of the 9,664 businesses with CRNs, 6,647 were linked to the ONS register, from which 4,804 companies were used in the analysis. Attrition at this stage reflects ca. 2,000 new or small businesses not being recorded in the ONS business register, or those very recently supported in 2021 (ca. 1,000 businesses) with outcomes not yet realised or measurable in the available data.

7.4 Table 7.1 summarises the number of businesses that were available for analysis under each SO. The table illustrates a considerable rate of attrition for those supported through SO2.2, as entrepreneurs and start-ups were less likely to have registered for VAT and PAYE. Where they had registered, most were not visible in the ONS business register or had very recently been supported or established and, therefore, could not be used in the CIE modelling (as they were not present in the business register for the two-year period prior to support).

**Table 7.1: CRNs by SO**

| | | Number of unique CRNs amongst participant businesses | | Companies used in CIE modelling | | |
|---|---|---|---|---|---|---|
| Specific Objective | Total participants | No. | Percentage of participants | No. | Percentage of companies with CRNs | Percentage of total participants used |
| SO1.2 | 1,122 | 941 | 83.9 | 445 | 47.3 | 39.7 |
| SO2.2 | 4,841 | 2,218 | 45.9 | 120 | 5.4 | 2.5 |
| SO2.3 | 5,306 | 2,425 | 45.7 | 1,286 | 53.0 | 24.2 |
| SO2.4 | 8,145 | 4,080 | 50.1 | 3,112 | 76.3 | 38.2 |

### Matching businesses

7.5 Simply comparing all supported businesses to all unsupported businesses is problematic because these two groups are likely to be very different. Whilst certain operations providing business support through the ERDF programmes in Wales are open to all SMEs, some provision is targeted at certain groups. It is therefore

necessary to construct a comparison group of unsupported businesses that resemble the recipients. For example, in a scenario in which supported businesses tend to be small, the matching process will identify unsupported businesses of a similar size.

7.6 The match pool is the population of businesses from which comparator businesses are selected. The businesses are selected from the wider population of UK businesses. Drawing from this pool uses a selection model which is derived by identifying and estimating factors that correlate with a business receiving support[104]. More than a dozen models were estimated. By adjusting the variables used in each of these models, this resulted in different sets of unsupported counterfactual businesses. From the various models of estimation, three control groups were identified.

- **Preferred Control Group 1:** This matches comparable businesses in terms of real turnover split into categories to understand how selection is driven by size, and whether the business was an Innovate UK (IUK) project beneficiary or tracked by Beauhurst. Being an IUK beneficiary or tracked by Beauhurst indicates a business that is innovative and growth-oriented[105]. The model also uses variables for start-ups, whether the businesses were recipients of furlough, where they operated in high-tech sectors, and a variable with which to capture low pay.
- **Alternative Control Group 2:** Comparable businesses were identified for this group using real turnover and employment split into categories of size, as well as a wider range of growth proxies, namely whether the business is in the high-knowledge service industry or high-tech manufacturing and whether the business is a scale-up (20 per cent growth). What is more, this model includes innovation indicators by capturing whether a business is tracked by Beauhurst and a beneficiary of IUK. The model also includes variables for low pay, start-ups, and local live units[106] and introduces the one-year lagged level of turnover growth of the industry and businesses' previous year of employment growth.

[104] This is modelled using a probit model, where the fact that an individual firm receives support (taking the value of 1, or 0 otherwise) is regressed on the pre-support characteristics of businesses to determine what drives businesses towards taking up support.
[105] Beauhurst is a data provider that tracks a group of more than 50,000 high-growth companies. Whilst being tracked by Beauhurst can be a proxy for high growth potential, one of the key reasons for a business being followed by Beauhurst is that the business secured fundraising (to facilitate such growth).
[106] Number of local offices.

- **Median of Models Control Group:** The median results for each of the outcome variables and characteristics for the models produced.

7.7 Establishing a preferred model from the three control groups first involved examining whether the comparator groups selected by the matching were similar to the supported businesses and then considering which potential counterfactual was most alike. The statistical matching generally aligns the comparators in terms of key characteristics, such as the average size of the supported businesses being similar to those selected for the counterfactual.

7.8 A second test, to assess the quality of the modelled control groups, involved comparing the pre-support trends of the outcome variables (for this study, employment and turnover growth) in supported businesses against the three control groups. This found that both the preferred model (Group 1) and the two alternative models (Group 2 and Median of Models) had provided comparator businesses that appeared to be on a similar growth trajectory to that of the supported businesses. For the latter two groups, this is unsurprising, as past employment and turnover data had been included in the modelling, which is not the case for the preferred model. However, including the outcome variable (employment and turnover) of focus of the CIE as an input in the control group modelling can bias CIE result findings. As such, Preferred Control Group 1 is more of a focus in the following sections (though alternative models are also presented for comparison).

**Profiling the supported enterprises**

7.9 For the firm-level CIE, there are 4,936 businesses linked to the ONS data. These businesses are very likely to be “selected” both by those running the operations and by the businesses themselves in putting themselves/their business forward for the support (self-selection). To understand the circumstances of this selection, analysis focuses on a business prior to receiving support, imagining the drivers towards the support. Therefore, to model that journey towards support and the selection processes associated with that journey requires data for at least the year (and preferably two years) before support had commenced to be able to position the modelling at a point in time when the business sought support. A sample of 4,804 businesses meets this requirement.

7.10 To avoid further attrition in requiring two years of pre-support data, steps[107] were taken for “start-up” businesses that were not present in business registers for the two-year period before support so that these businesses could be retained and, therefore, analysis is not overly focused on older businesses.

7.11 The BSD provides a yearly snapshot of the business population in the UK and it tracks employment and turnover over time. It provides the industry classification (SIC code) and year of birth, alongside other variables that characterise the business. This allows analysis to track the supported businesses across several years, as well as comparing their performance with that of other comparable businesses.

7.12 The BSD was linked to IUK-funded project lists including the CRN of the company supported by the funding. In addition, firm-level data on the fundraising that businesses achieved (as fast-growing, innovative businesses typically facilitate their growth for fundraising), which is tracked by Beauhurst, were linked. Other public datasets that can be linked to a CRN were patents and the businesses benefitting from the Coronavirus Job Retention Scheme data (see Annexe C for further information).

7.13 Table 7.2 characterises the supported businesses, the wider business population, and the preferred control group. Supported businesses are more likely to be in manufacturing than are the wider business population, and, on various indicators, appear to be more inclined towards innovation, being likely to hold a patent or have secured funding from Innovate UK.

7.14 The “preferred comparison” matches on size, employment categories, previous growth, any previous Innovate UK funding and Beauhurst tracking. Other models were considered. The “alternative comparison” is based on a similar model which also includes whether a business claimed the Coronavirus Job Retention Scheme (see Annexe C for further information). Additionally, a median model is introduced that uses the median results for all 22 models that were run.

[107] This involved setting the pre-start-up data to 0 and then including a variable equal to 1 where the business was a start-up, thus avoiding the modelling dropping the business due to it having missing pre-start-up data.

## Table 7.2: Summary statistics for beneficiaries and comparison groups in the base year

| Variable | ERDF Wales<br>Mean<br>(n=4,804) | Preferred comparison<br>Mean<br>(n=4,804) | Median model comparison<br>Mean<br>(n=4,804) | Wider BSD[108]<br>Mean<br>(n=3,570,536) |
|---|---|---|---|---|
| | | Business size | | |
| Employment | 23 | 41** | 25 | 10** |
| Real turnover (£'000) | 2,954 | 3,361 | 3,049 | 1,768 |
| Real productivity | 109 | 114 | 149 | 147 |
| | | Industry classifications | | |
| Low pay | 28% | 28% | 28% | 28% |
| High-tech | 17% | 17% | 15% | 13%** |
| Manufacturing | 16% | 17% | 15% | 4% |
| High-tech manufacturing | 1% | 1% | 1% | 0%* |
| High-KI services | 7% | 9%* | 7% | 8% |
| High-medium-tech manufacturing | 4% | 3%** | 3% | 2% |
| | | Innovation proxies | | |
| IUK project before | 3% | 3% | 3% | 0%** |
| Patent holder | 4% | 3% | 3% | 1%** |
| Beauhurst-tracked | 8% | 8% | 8% | 1%** |
| | | Coronavirus impact | | |
| Coronavirus Job Retention Scheme (furlough) | 54% | 54% | 33%** | 18%** |
| | | Business demographics | | |
| Local units | 1.7 | 2.0** | 1.8 | 1.1** |
| Years of activity | 12.8 | 13.4 | 13.4 | 11.5 |

Note: Summary statistics were calculated for the base year using BSD data and other public datasets. Wider BSD statistics were calculated for the financial year of 2019/20. Real turnover was calculated using sector-specific deflators and expressed in thousands of pounds using 2021 as the base year. Knowledge-intensive (KI) sectors were identified by Eurostat using indicators of a skills mix. Coronavirus Job Retention Scheme data from HMRC indicate whether a company received support for employees on furlough. Real productivity is a function of real turnover per employee. Whether the mean of the comparator differed from the treated is tested, and significance levels are 1% (**) and 5% (*).

[108] The wider BSD does not include very large businesses, which are defined as having more than 5,000 employees or over £1bn in turnover.

**Employment change in the supported businesses**

7.15 Table 7.3 below presents the change in employment for supported businesses in the years after receiving support. This change is a "gross" measure, as it is affected both by the support and by other factors unrelated to the support. An analysis indicated that there were some very large businesses in the supported group. This could occur due to an error in the matching of business names to CRNs. Furthermore, it is possible for an SME to be part of a larger enterprise but separately registered or for it to have been bought by a larger entity after receiving support. A simple cut-off was used to remove the distortion that this introduces to the analysis, restricting it to businesses with fewer than 5,000 employees or below £1bn in turnover.

7.16 The table indicates that prior to receiving support, the businesses collectively (across all SOs) employed 108,347 staff. The table then tracks how the number of jobs changed in the years after ERDF support occurred. Overall, employment in the supported businesses increases by 10,585 jobs.

7.17 Some of the employment estimates will be in a year affected by COVID-19. While both the 2015/16 and 2016/17 employment estimates will cover a period ending before 2020/21, in each of the cohorts after this the final employment estimate will be that of employment in 2020/21. This was a year during which businesses would have been affected by lockdowns and other pandemic-related disruptions. During this period, employment may also have been supported by the Coronavirus Job Retention Scheme[109].

[109] On 20th March 2020 the government announced the Coronavirus Job Retention Scheme. The purpose of the scheme was to provide grants to employers to ensure that they could retain and continue to pay staff, despite the effects of the COVID-19 pandemic.

**Table 7.3: Gross employment change for beneficiaries by year of support**

| Employment | 2015/2016 Cohort (n=309) | 2016/2017 Cohort (n=928) | 2017/2018 cohort (n=1,115) | 2018/2019 cohort (n=1,059) | 2019/2020 cohort (n=700) | 2020/2021 cohort (n=584) | Total |
|---|---|---|---|---|---|---|---|
| Base year | 6,460 | 23,386 | 23,937 | 26,676 | 16,564 | 11,324 | 108,347 |
| Yr. of supt. | 6,737 | 24,863 | 25,748 | 27,487 | 17,073 | 11,385 | |
| 2 yrs. after | 7,081 | 26,310 | 26,474 | 27,876 | 16,950 | | |
| 3 yrs. after | 7,340 | 27,451 | 29,602 | 27,901 | | | |
| 4 yrs. after | 7,537 | 27,741 | 27,418 | | | | |
| Gross change | 1,077 | 4,355 | 3,481 | 1,225 | 386 | 61 | **10,585** |

Note: Employment figures indicate the sum across all beneficiaries in each given cohort. Gross change is calculated from the base year. This analysis removes outliers, defined as very large companies in terms of employment and/or real turnover.

7.18 This gross change in employment will include employment growth that would have happened anyway. The objective of the CIE is to estimate what would have happened in the absence of the support in order to estimate the net change attributable to ERDF support.

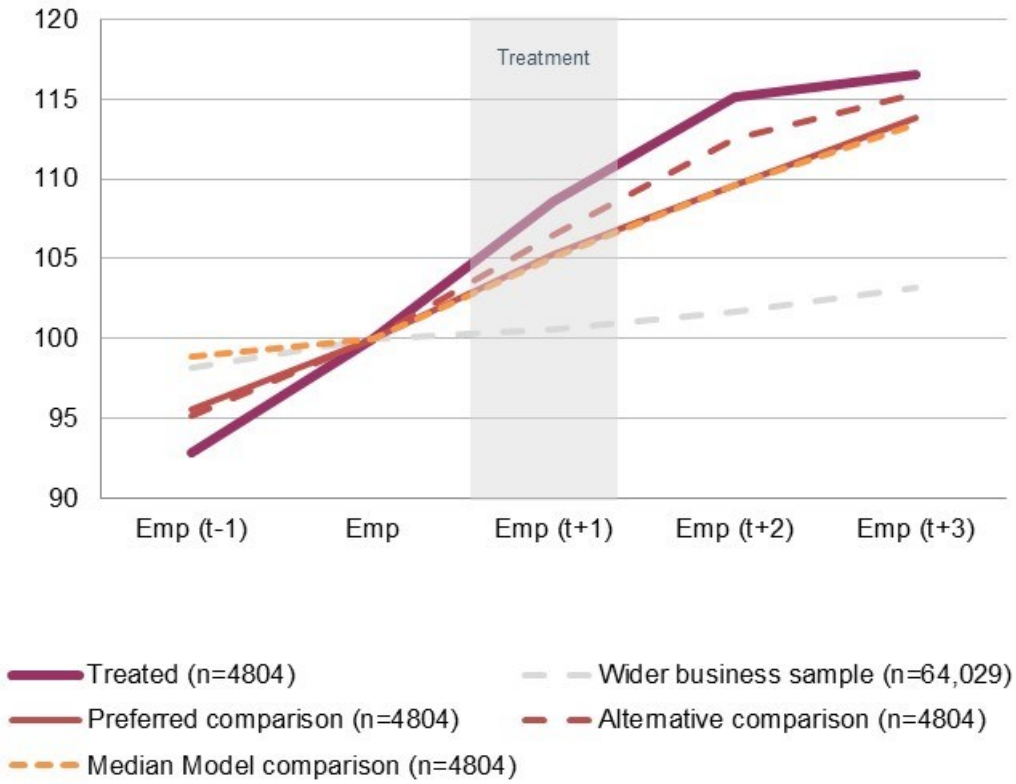
### Impact of support on employment growth

7.19 Figure 7.2 indicates that the employment growth for supported businesses is higher relative to comparison groups and the wider business population. This and later figures use logged variables so that any outliers in growth did not unduly influence the estimation and that the focus was on the growth in firm performance. In each figure, the performance is indexed so that in the base year the value is set to 100 to allow easier presentation of any divergence in performance paths after support between the treatment group (those in receipt of support) and the comparison group. The figures also indicate the period of support, with businesses receiving this during the year after the base year.

7.20 The line “treated” is the index of employment for supported businesses. For those that were supported through the ERDF, log employment growth is 8.6 per cent in the year of support, 15.1 per cent two years after the base year, and 16.6 per cent three years after the base year. The figure indicates how this is much higher employment growth than in businesses in the wider business population. As noted previously, however,

supported businesses differ in nature from the wider business population, and after matching, a set of businesses more comparable than the treated are used with the different matched groups presented. Whilst the matched groups also show consistently higher rates of growth than in the wider business population, the rates of growth of the supported businesses remain higher still.

**Figure 7.2: Employment growth in supported businesses versus comparators**




7.21 The degree to which the growth rates differ can be tested using difference in differences (DID), estimating how changes in employment in the treated and counterfactual (the first difference) then differ before and after the support (the second difference).

7.22 The DID results (Table 7.4 below) show that the businesses supported by the ERDF programmes experience higher employment growth than do the comparison groups (the preferred model and the median model). The higher employment growth is statistically significant in the year of support as well as for two years after the support when the effect of the support is most pronounced. However, the results are not statistically significant for the third year after support in the preferred model. This

means that the impact of the support was felt primarily in the first two years following the support and that the effect diminished over time.

**Table 7.4: Employment additionality**

| Employment growth | Growth in supported | Preferred model | Median model | Difference in differences | Additionality estimates |
|---|---|---|---|---|---|
| **Year of support** | 8.6% | 5.3% | 5.0% | 3.3% (3.29**) | 38% |
| **2 years after support** | 15.1% | 9.6% | 9.6% | 5.5% (3.51**) | 36% |
| **3 years after support** | 16.6% | 13.9% | 13.5% | 2.7% (1.31) | 16% |

Note: Significance levels are 1% (**) and 5% (*); T statistics are presented in parentheses using robust standard errors. Difference in differences is treated as a minus control.

7.23 Table 7.4 estimates the share of growth observed in supported businesses that is not observed in the counterfactual, which represents the share that is additional. The additional growth can be combined with the estimates of employment change observed in the businesses, as presented in Table 7.3. The table shows how supported businesses created new jobs in the three years after support, representing 10,585 years of employment[110]. The additional growth can be used to estimate the employment over and above that observed in comparable businesses. Table 7.4 suggests that in the year of support, 0.38 years (38 per cent) is additional, which diminishes in subsequent years (36 per cent and 16 per cent, respectively), but there is still additional employment. Collectively this equates to **4,023 years of employment estimated as being due to the support**.

7.24 The rates of additionality have been used to "gross up" additional employment years to reflect the number of unique participant businesses in SO1.2, SO2.3 and SO2.4 and to address the lost observations through the CIE exercise, as set out in Table 7.5 below.

[110] The measure of employment used is "years of employment" so that the effects of different cohorts of support can be aggregated satisfactorily. A new job in a business that is maintained for two years provides two years of employment, and a firm that has employment increasing by four in the year after support, increasing to six a year after, has secured 10 years of employment in total.

This provides a broad estimate of aggregated additional employment years for those supported through the three SOs. The approach is set out below.

**Table 7.5: Modelling estimated additional employment years**

| | |
|---|---|
| Gross additional employment years for SO1.2, 2.3 and 2.4 | 10,585 |
| Difference in additional employment years between treatment and control groups | 4,023 |
| Additionality rate | 38.0% |
| Total number of companies used in CIE modelling for 2.2, 2.3 and 2.4 | 4,843 |
| Total unique participants | 14,573 |
| Scaling-up ratio | 3.01 |
| **Estimated additional employment years for SO1.2, 2.3 and 2.4** | **12,105** |

7.25 When analysed by SO, employment growth in SO2.4 (SME growth) witnessed statistically significant growth (at a 0.01 significance level) across all three years when compared to the preferred comparison group. This equates to 47 per cent additionality across the three years after receiving support.

### Impact of support on real turnover

7.26 The sales or real turnover of the supported businesses can also be tracked in a similar manner to that of the analysis of changes in employment. Table 7.6 presents the estimates for this.

7.27 Broadly, sales increase across the cohorts of supported businesses. In the base year, the businesses across the cohorts (years) of support have a combined turnover of £14.2bn, which translates to £2.9m per business and £131k per employee. By the last year of data available, i.e. 2020/21, turnover has increased to £15bn, representing a five per cent improvement.

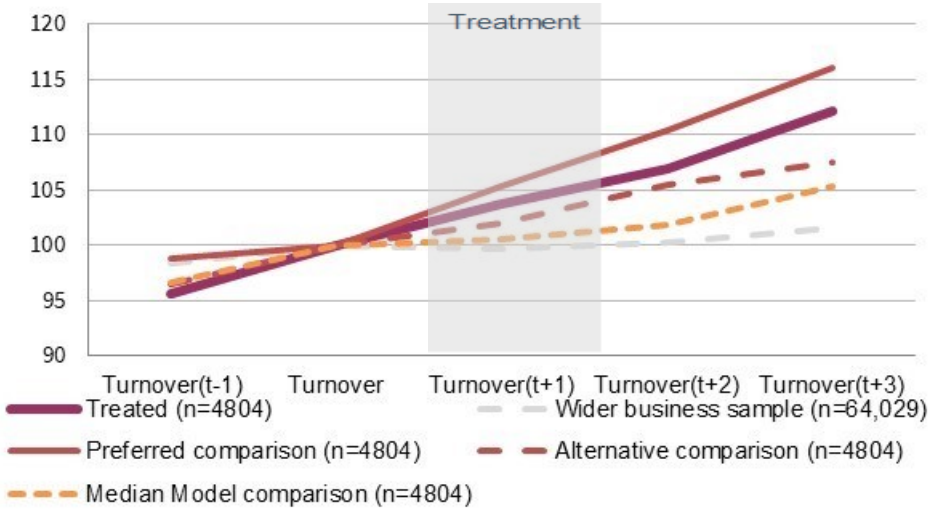
**Table 7.6: Real turnover change for beneficiaries by year of support**

| Real turnover (£mil) | 2015/2016 cohort (n=309) | 2016/2017 cohort (n=928) | 2017/2018 cohort (n=1,115) | 2018/2019 cohort (n=1,059) | 2019/2020 cohort (n=700) | 2020/2021 cohort (n=584) | Total |
|---|---|---|---|---|---|---|---|
| Base year | 757.9 | 2919.7 | 3440.4 | 3489.2 | 2255.2 | 1335.2 | **14,197** |
| Yr. of supt. | 819.9 | 2818.4 | 3448.8 | 3660.2 | 2247.8 | 1390.5 | |
| 2 yrs. after | 803.9 | 3061.1 | 3567.1 | 3669.2 | 2209.1 | 0.0 | |
| 3 yrs. after | 824.0 | 3376.8 | 3497.1 | 4050.4 | 0.0 | 0.0 | |
| 4 yrs. after | 836.5 | 3402.9 | 3671.8 | 0.0 | 0.0 | 0.0 | |
| Gross change | 78.6 | 483.2 | 231.4 | 1.2 | -46.0 | 55.3 | **803.6** |

Note: Employment figures used in calculations are the sum across all beneficiaries in each given cohort. Gross change is calculated from the base year. This analysis removes outliers, defined as very large companies in terms of employment and/or real turnover.

7.28 Figure 7.3 indicates the real turnover growth for the supported businesses relative to comparison groups and the wider business population. Estimates are presented for the logged real turnover, again indexed to 100 in the year before support so that the figure focuses on growth and allows a comparison of the period after support. Real turnover growth was lower in comparison to the counterfactual group; however, the difference was not statistically significant.

**Figure 7.3: Turnover growth in supported business versus comparators**

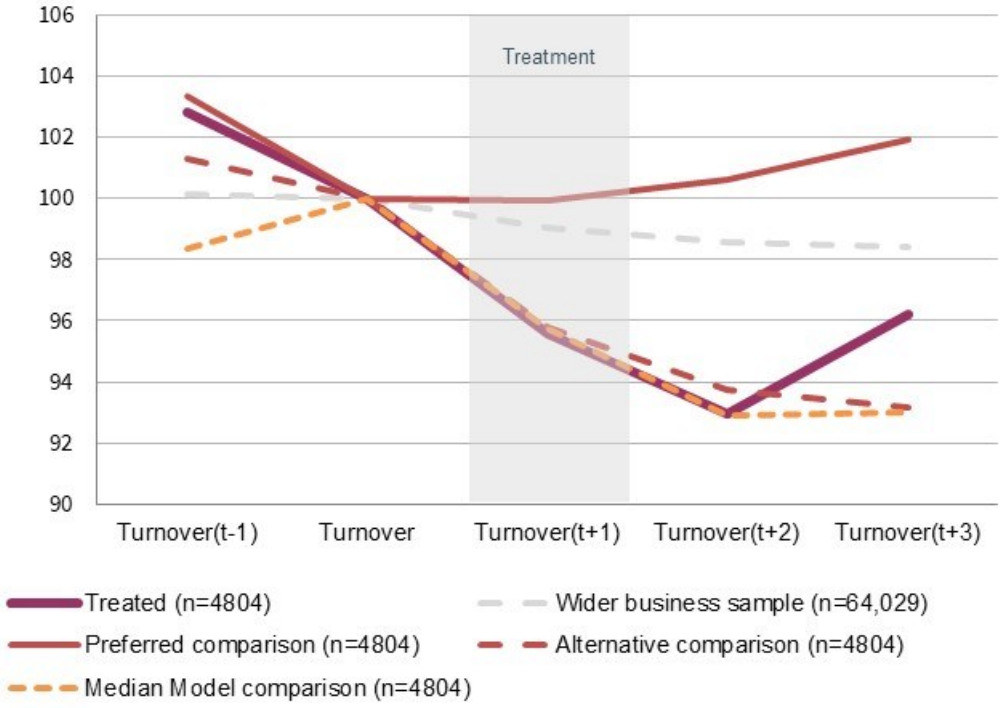


7.29 When analysed by SO, businesses supported by SO2.4 (SME growth) grew statistically significantly (at a 0.01 level of significance for the first two years and 0.05 level of significance for the third year) more quickly than did the preferred control group. Additionality of the support in comparison to the preferred comparison group equated to 78 per cent of turnover growth over those three years. For businesses supported through SO1.2 (research and innovation), the real turnover effects were modest, reflecting that the outcomes of these participant businesses primarily related to investments in innovation and the development of new products, rather than the generation of additional sales (which would likely arise in subsequent years).

**Impact of support on real turnover per employee (real productivity)**

7.30 Figure 7.4 indicates the changes in real turnover per employee for the supported businesses, comparison groups, and the wider business population. In each figure, the logged performance is indexed so that in the base year the value is set to 100. This measure is a proxy for productivity in that real turnover divided by employment is often viewed as correlating with the value added per labour input.

**Figure 7.4: Real productivity**



7.31 Figure 7.4 indicates that the control group grew in real productivity, while the treatment group fell in real productivity. Real productivity does witness significant growth three years after support in the treatment group, indicating a catch-up effect. Noticeably, real productivity is falling for the treated and wider BSD and then slowly recovers, which could be explained by the impact of COVID-19 on the economy. As real productivity is a function of turnover and employment (turnover per employee), and as employment increased while turnover did not for the overall support, this fall is expected.

**Limitations of analysis using a counterfactual**

7.32 This section has explored whether and to what extent the effects observed in supported businesses are not observed in a comparable set of businesses. It presents a range of effects and can quantify these to determine the additional effects of support. However, especially because the approach relies on administrative data, it has some limitations.

7.33 The additional effects depend on the quality of the matching to comparable businesses. Counterfactuals have been identified and these appear to be comparable to the supported businesses. However, this focuses on comparisons using measurable characteristics and will not capture some drivers towards support that are important and could correlate with better performance. In applying for support, for example, a business is likely to be more growth-oriented and have a management team that are more able and willing to take on support. These features are not measured and, therefore, cannot be guaranteed to occur in the control group. What is more, there are risks that those in receipt of support may have accessed other forms of support from different sources. The support may have influenced performance and it is not possible to isolate the instances.

7.34 The effects that can be measured may not reflect all of the expected additional benefits of support. Administrative data constitute an excellent source for employment, sales, and understanding the survival status of a business. However, these may not be the aspects of the business that are likely to change due to support. Thus, support may encourage investment in R&D or upskilling within the business, which the analysis may miss.

7.35 Related to this, the effects of the support may not have materialised yet. The study benefits from a relatively long period for many of the supported businesses, but some forms of business effect, such as innovation, may take a longer period of time to mature into measured effects on (for example) productivity.

7.36 Attribution of the different performance observed in ERDF-supported businesses in comparison to counterfactuals is also complicated by the post-support period being affected by significant shocks. COVID-19 effects would occur one year after support; meanwhile, changes as the UK left the European Union would affect more of the years.

7.37 Attribution does depend on the extent to which, having modelled selection, this can integrate the shocks equally into the treated and the control so that any difference in performance can then be attributed to the ERDF policy.

7.38 For the COVID-19 effects, the support provided by the government through furlough does complicate attribution because of the Coronavirus Job Retention Scheme (CJRS) support measure. The analysis, by integrating other support such as Innovate UK funding, can check the support from the CJRS in this wider context. Checks on the sensitivity of employment effects to different modelling suggested that the difference-in-differences estimates, and their significance, are not overly affected (estimates of one-year employment change are 0.03 in the preferred models, and those without furlough range from 0.019 to 0.035, all of which are significant at five per cent).

7.39 The logic behind the furlough means some expected effects on outcomes. For example, the COVID-19 shock with the furlough would result in sustained employment, albeit declining turnover as employees are furloughed. Testing robustness was then more difficult while examining productivity measures, as the variance of turnover per employee is high; therefore, the ability to get underneath what is observed in this measure is limited.

## Summary

- CIE analysis shows that employment growth in businesses in receipt of non-financial support by the ERDF that were included in this study is higher than in comparison groups of similar businesses, as well as being higher than employment growth in the wider business population.
- The results of the analysis indicate that 38 per cent of the employment growth amongst supported businesses is growth not reflected in the comparable businesses (and is therefore a differential impact). This equates to an additional 4,023 total years of employment[111]. The scale of difference in the estimates for employment growth amongst supported businesses compared to the comparison group is statistically significant. When scaled up to account for all unique participants in SO1.2, SO2.3 and SO2.4, it equates to an estimated 12,000 years of employment as a result of ERDF support.
- CIE analysis showed the strongest rates of employment growth and additionality amongst businesses supported under SO2.4. Furthermore, real turnover also grew more quickly amongst supported businesses in SO2.4 than in the preferred control group. The difference in turnover growth is statistically significant.
- Amongst businesses supported through SO1.2 and SO2.3[112], CIE analysis shows that real turnover growth was lower in comparison to the counterfactual group. The difference in real turnover growth was not statistically significant.
- The analysis identifies that supported businesses typically experience a decrease in real productivity, i.e. turnover per employee, in the years following support. This decrease occurs in the first two years after the support and then begins to move towards its original level of productivity. Real productivity in this analysis is a function of turnover and employment (turnover per employee), and as employment increased while turnover did not for the overall support, this fall is expected.
- Aside from businesses supported through SO2.4, there is little evidence of turnover (sales) growth amongst supported businesses. Generating sales growth was not a target for operations; however, the analysis shows that a lack of turnover growth alongside employment growth means that real productivity (turnover per employee) has remained

[111] Years of employment are used to reflect that the analysis is conducted on an annual basis. One year of employment is where an additional job has been created for one year in the intervention group.
[112] SO2.2 was excluded from the analysis due to a low count of businesses included in the various datasets.

static or has fallen. Falling or static rates of productivity amongst supported businesses will not address the persistent productivity gap that exists between Wales and the UK average.

***Recommendations***

- To improve statistical matching to a control, it could be useful to have businesses that were interested in support but either were declined or did not pursue an application. Lists of unsupported applicants or those that expressed an interest without applying would be valuable in providing a pool from which a counterfactual is selected. This often provides a robust comparator in that these businesses often share the unmeasured behavioural and attitudinal characteristics of those who have been supported.
- The matching of beneficiaries to administrative data is always dependent on the quality of the identification data provided as support is administered. The quality of identifiers can be improved by administrative processes including CRN checks. Moreover, any information with which to filter out businesses that are unregistered, such as asking this as part of an application for support, can lessen the effort and reduce the mismatches associated with linking businesses that are not in administrative data.
- That sales generation be considered a performance indicator (alongside employment) in future business support provision to help address the productivity gap between Wales and the other regions of the UK.

# 8. Conclusions and recommendations

8.1 This section presents the conclusions and recommendations from the study.

**Rationale and socioeconomic context**

8.2 The rationale behind the specific design of the evaluated SOs drew on evidence of continued underperformance of the Welsh economy relative to the UK average. Entrepreneurial activity, productivity, and investment in research and development and innovation were all lagging indicators when compared to the majority of other regions in the UK. The issues that the Welsh economy faced were enhanced by indicators of a lack of entrepreneurial ambition and a lack of ambition to exploit new markets, whilst the peripheral and rural situation in much of Wales hampered connectivity and growth.

8.3 The latter stages of 2014–2020 Operational Programmes have witnessed considerable turbulence for the Welsh and indeed the wider UK economy, particularly since the outbreak of COVID-19 in March 2020.

8.4 Over the programme period and despite the turbulence encountered, a wealth of positive macroeconomic trends for the Welsh economy are evident. Of particular note is the rate of improvement in productivity, which is in excess of the UK average (leading to marginal closure in the gap to the rate of productivity across the rest of the UK). In addition, considerable improvements in entrepreneurial activity, business survival rates, and wages have all led to a narrowing of the gap to the UK average.

8.5 Additional socioeconomic indicators have typically shown positive movements; however, these have often been outshone by the average rate of improvement across the UK, widening the inherent performance gap across indicators associated with skills, levels of innovation, and export activity.

8.6 Other contextual factors that have influenced the performance of the Welsh economy, in addition to the COVID-19 pandemic, include the UK's exit from the EU and the Russian invasion of Ukraine, which has had considerable inflationary effects on energy prices and the cost of living.

**Design and implementation**

8.7 Activities associated with SO2.2, 2.3 and 2.4 are underpinned by strategic "backbone" projects that drew on learning from the previous round of Structural Funds. These projects sought to adopt a refined service offer that emphasised clarity and simplicity in the nature of the service offer. Furthermore, the backbone projects evolved from previous activity, aiding a relatively smooth transition of services to the current programme.

8.8 In the early stages of implementation, some indicators lacked clarity or represented a slight shift from terminology in the previous programme, which led to some confusion. The definitions regarding eligibility were also, at times, unclear, which led to issues surrounding evidence gathering and the recording of indicators.

8.9 Several stakeholders noted an adjustment in the role of the WEFO in managing the programme. They have acted in more of a partner role than in previous programmes, supporting operations through challenging times, particularly during the midst of the pandemic.

8.10 The partnership approach of the WEFO was also evident in the enhanced integration of CCTs within the activity of operations within SO2.2 and SO2.4 (where targets were assigned). Whilst these SOs were short of their targets for CCTs, there has been a considerable uptick in performance, and CCT provision has become better integrated into service provision.

***Recommendation***

The approaches adopted in effective integration of CCTs in service provision should be retained in future business support, particularly given their close alignment with the Well-being of Future Generations Act and other Welsh Government policy.

8.11 The rapid adjustments to operational activity and target emphasis at the time of the pandemic (away from growth and towards revival and resilience) illustrated that ERDF funding can be both flexible and responsive to changing needs. From an operational perspective, the transition to remote service provision was particularly effective, with there being minimal negative impact on those businesses participating in support, particularly within Priority 2.

8.12 For those operating in SO1.2 there was often a need to access specialist equipment in laboratories, which led to a pause in activities at the height of social restrictions. Indeed, 46 per cent of survey respondents in receipt of support from that SO described support being delayed or becoming unavailable as a result of the pandemic. More widely, the pandemic brought with it a degree of caution that had a mixed effect on participant businesses, with some embracing the opportunity and diversifying accordingly as part of the response effort to the crisis, whilst others have held back from investment and growth plans due to the additional uncertainty.

**Activities**

8.13 Amongst participants there was a high level of awareness that the support that they had received was ERDF-funded, particularly amongst participants of SO1.2. Almost one third of participants sourced the support through an online search (up from six per cent in the previous programme), illustrating the growing importance of the Internet and social media in promotional and engagement activities. That being said, a further fifth of respondents became aware of support via word of mouth, illustrating that more traditional forms of promotion and awareness raising also remain important.

8.14 Starting or growing a business remains a prominent driver of engaging with the programme, with other influences being reflective of the goals of each SO. Amongst those who enrolled in provision following the outbreak of COVID-19, there was a (statistically significant) marked shift upwards for those seeking support to access finance, and, conversely, a (statistically significant) fall in the proportion of respondents seeking advice on office space.

8.15 Marketing & promotion and business planning were the most prominent types of support received; amongst more established businesses, however, there was a greater emphasis on customer engagement. Amongst those in receipt of innovation support, nearly half (46 per cent) received support for R&D, product development, and innovation, whilst 42 per cent received commercialisation and knowledge transfer support.

8.16 Across all survey respondents, almost three quarters (73 per cent) were “very satisfied” or “quite satisfied” with the quality of support received, and 69 per cent with

the way in which the support was provided. The most common reason that drove satisfaction and dissatisfaction related to regular (or a lack of) communication.

8.17 Over 80 per cent of survey respondents felt that their expectations were (at least) met, whilst almost two thirds (60 per cent) of survey respondents stated that the support had surpassed their expectations. Key influencers on levels of satisfaction and expectations were themes in relation to the knowledge and experience of the advisor, the relevance of advice, the speed of response, and follow-up engagement. Rates of dissatisfaction were highest amongst respondents who had received support through SO2.4. The primary driver of dissatisfaction related to a perceived lack of responsiveness, with over one fifth of respondents feeling that there was insufficient follow-up engagement or tailoring of provision. This level of dissatisfaction regarding follow-up engagement alongside the high rates of participant expectations being exceeded may indicate the need to consider how the services on offer are pitched to participant businesses.

**Performance against target indicators**

8.18 It is evident from stakeholder consultations, feedback from lead beneficiaries, and participant businesses that operations within SO1.2 were most impacted by the COVID-19 pandemic. This led to a decommitment of funding and a shortfall against several project indicators (including new-to-market and new-to-firm products, patents registered, and employment generated). The SO has performed particularly strongly in relation to partner cooperation, which was reflected in the business survey, where of those receiving innovation support, more than one third (37 per cent) reported developing collaborative relationships with HEIs, other academics, and other businesses.

8.19 The collaborations with research institutions appear to have typically gained limited success in the commercialisation of products. This is partly associated with the target indicator for the number of registered patents being considered, which in hindsight is inappropriate for the programme, but also a sense that the barriers to commercialising products have not been overcome with the support on offer, particularly for microbusinesses. That being said, the business survey provided indications of progress in the development of products and processes, with the proportion of

respondents who reported that their new products or services were considered to be ready for market increasing from 20 per cent prior to receiving support to 56 per cent after receiving support.

8.20 A lack of financial support was typically identified by stakeholders and businesses as being one of the key barriers to the commercialisation of products and services. Several stakeholders felt that stronger alignment of support provision with Innovate UK will be important in addressing this gap, given the relative lack of other funding options (Horizon Europe) currently available.

***Recommendation***

Support services need to ensure close alignment with and good access to Innovate UK and other innovation-orientated resources to ensure that Welsh businesses gain their fair share of opportunities to secure this investment.

8.21 For SO2.2, the operation overachieved regarding support to established businesses; furthermore, related research[113] indicates that the support has a strong impact on survival rates for start-ups. However, despite national economic indicators for the economy suggesting increased entrepreneurial activity, operations under SO2.2 are short of their target with regard to the number of **new** enterprises supported. This is likely to be linked to the pandemic and the cost-of-living crisis, leading to a greater degree of caution associated with starting a business.

8.22 The operation regarding superfast broadband exploitation has met all targets associated with SO2.3 and reflects the acceleration in demand for support with ICT adoption and exploitation brought about by the pandemic and its legacy.

***Recommendation***

Digital support provision should form part of the mainstream offer for business support, given its central role in driving economic competitiveness.

8.23 For support delivered through SO2.4, whilst the target indicator for non-financial support to enterprises appears to be likely to fall short of the target under SO2.4, outcome indicators for employment and export growth are performing strongly. This

[113] Munday, M. and Roche, N. (2021) *Quantifying the economic impact of Business Wales*, Cardiff University.

suggests a more effective use of resources than anticipated and a larger proportion of growth-oriented businesses than expected.

**Outcomes and impacts**

8.24 More than three quarters (77 per cent) of surveyed businesses have implemented at least one action as a result of receiving the support, which were typically aimed at improving sales and marketing, targeting new customers, and increasing skills in the business.

Innovation

8.25 Of the 446 unique businesses (45 per cent of business respondents) that had developed new products or processes, almost three quarters (72 per cent) considered the support to be important in the development of these.

8.26 Before engagement with the programme, only 20 per cent of products were ready for market, with more than half (59 per cent) being at the initial development or proof-of-concept stage. Whilst stakeholders and performance indicators illustrated challenges with the commercialisation of products and services, prior to engaging with SO1.2 provision, only 20 per cent of respondent businesses perceived their products or services to be ready for market. Following the support, 56 per cent of respondents felt that their products were fully commercialised (being sold or offered to customers). When asked to consider the impact of their new products on sales, two thirds (65 per cent, 92/141) stated that they had witnessed an increase in sales, with one third of those (33 per cent, 30/92) estimating that their sales had increased by more than 31 per cent.

New enterprises

8.27 Almost one quarter of survey respondents set up a business as a result of the support that they received through the programme. The latest monitoring data show that within SO2.2, just over 6,000 (6,043) new enterprises have been supported. Almost one fifth of respondents (19 per cent) felt that it was “unlikely” (12 per cent) or “very unlikely” (seven per cent) that they would have set up their business in the absence of the support. **Amongst SO2.2 participants this equates to 643 aggregated additional businesses started as a result of the support received.**

ICT exploitation

8.28 Almost one quarter (23 per cent) of respondent businesses had implemented changes to their ICT infrastructure in the time since receiving their support. When these businesses were asked to state changes that they had made, almost three quarters (73 per cent) referenced the development of an online presence via social media marketing and promotional activity. Furthermore, two thirds of respondents introduced or improved their company website.

8.29 Slightly more than one third (34 per cent) had either introduced fibre/cable broadband (17 per cent) or increased their use of it (17 per cent) over the last five years. Of these respondents, however, 11 per cent (and 20 per cent of SO2.3 respondents) attributed this change to the support that they received having impacted on this.

Employment growth

8.30 Amongst survey respondents, 10 per cent stated that they had created or safeguarded jobs as a result of the support. Modelling the reported numbers of jobs created against the number of estimated unique participants for each SO suggests that almost 10,000 self-reported FTE jobs were created as a direct result of the support.

8.31 The CIE identified statistically significant employment growth amongst supported businesses (higher than both the matched counterfactuals and the wider BSD). The impact of the support was felt primarily in the first two years after receiving the support, and the effect diminished over time.

8.32 Through the CIE, the data indicate that supported businesses created new jobs in the three years after support, representing 10,585 years of employment. The employment over and above that observed in comparable businesses is 4,023 years of employment. This additional employment is estimated to be a result of the ERDF-funded support. When the rate of additionality is applied to all businesses in the SOs included within the CIE (SO1.2, 2.3 and 2.4), this equates to just over 12,000 aggregated additional years of employment as a result of ERDF-funded support. This excludes employment generated for those in SO2.2, due to there being insufficient numbers with relevant information to be included in the CIE.

8.33 The fact that the survey is reporting lower figures than those contained within the CIE (despite including those from SO2.2) is at least partly linked to one analysis analysing the number of additional posts, whilst the CIE has analysed the number of employment years. **Collectively, therefore, it is estimated that the support across the SOs led to aggregated additional employment (that would not have taken place in the absence of support) of at least 10,000 jobs.**

Turnover and productivity

8.34 Amongst survey respondents, around one third felt that the actions undertaken following the receipt of support had led to increased turnover and profitability, whilst 45 per cent felt that they had led to an increase in productivity, with little variation by SO.

8.35 Within the CIE modelling, however, turnover growth, when measured across all SOs, was not statistically significant in comparison to the counterfactual. When analysed at a more granular SO level, however, turnover amongst businesses supported by SO2.4 (SME growth) grew more quickly than in the preferred control group. The extent of the difference in growth rates between those in receipt of support through SO2.4 and the comparator groups was statistically significant in each of the three years after receiving the support. **Additionality of the support compared to the preferred comparison group equated to 78 per cent additional turnover growth over those three years for SO2.4 participants.**

8.36 Expectedly, when analysing support across the four SOs, given the growth in employment but a lack of commensurate growth in turnover, supported businesses experienced a decrease in real productivity, as it is a function of turnover and employment — turnover per employee. This is concerning, given the persistent productivity gap that is evident in the Welsh economy when compared to the UK average. Across all SOs and particularly within SO2.4, however, there is a substantial uptick in productivity three years on from the base year, indicating a catch-up effect. That being said, none of the changes are considered to be statistically significant.

***Recommendation***

That sales generation be considered a performance indicator (alongside employment) in future business support provision to help address the productivity gap between Wales and the other regions of the UK.

Performance against result indicators

8.37 When exploring performance against the national-level result indicators for each SO, it is evident that all result indicators have been met, with some being surpassed by a considerable margin. There is evidence of R&D investment, enterprise creation, and growth amongst SMEs as well as broadband and fibre adoption that is attributed to the support. The evidence illustrates that, to varying degrees, ERDF funding has contributed to the achievement of the result indicators.

**Future provision**

8.38 Stakeholders and participant businesses provided various perspectives on what nature of support would be useful in future programmes. Businesses voiced concerns surrounding the socioeconomic situation and the impact that it was having on their appetite to invest. What is more, there were challenges associated with sourcing suitably skilled staff amidst a concern that remote working meant that Welsh businesses were competing against a wider pool of employers for qualified applicants. Primarily, given the socioeconomic uncertainty, businesses desired financial support. Moreover, there continued to be a desire for marketing and promotional support. Almost half of respondents spoke of a need for support to reduce overheads, providing further evidence of support associated with environmental sustainability, whilst the adoption of technology to sell to customers and to maximise their work–life balance was also a key area of interest. These latter elements were reflected by several stakeholders who felt that it was important that digital and technological adoption be more mainstreamed within the support offer.

8.39 As outlined previously in the report, the importance of closer alignment of innovation support with other business support provision was seen to be an important area of focus. Furthermore, support will continue to need refinement to reflect the contemporary socioeconomic situation, given its continued turbulence.

8.40 In reflecting on future provision, stakeholders were mindful of the shift in governance structure for the Shared Prosperity Fund, which sees local authorities determining the nature of investment in activity locally.

8.41 For some stakeholders this was felt to be an opportunity to develop local, targeted provision and to pilot innovative initiatives; however, several spoke of the important role that the Welsh Government should play in the retention of strategic “backbone” provision that the localised offer should complement. The economic prioritisation framework and the implementation of backbone initiatives in the design and implementation of the 2014–2020 Operational Programmes were widely welcomed, enabling the embedding of provision that was consistently branded. This was complemented by the negotiation period on project applications to ensure a coalescence of projects and help reduce confusion and the potential for overlap or duplication in the marketplace. Looking forward, there are concerns that local-authority-led service provision will lead to the proliferation of a variety of initiatives that may heighten confusion surrounding the support available and lead to something of a “postcode lottery” in the nature of provision available to businesses.

***Recommendation***

There remains a critical role for the Welsh Government to play in the coordination, alignment and promotion of local-authority-led business support activity, working alongside regional teams so as to reduce the risk of heightened confusion and complexity regarding the offer arising in the marketplace.

**Reference section**

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## Annexe A: Business survey

### Phone Intro

Would it be possible to record the call? The recording will not be shared outside of Winning Moves but may be used for monitoring and training purposes.

1. Yes
2. No

### Online Intro if

Would you like to proceed in English or Welsh?

1. English
2. Welsh

### Online Intro

Winning Moves is part of a consortium of independent research consultants (also including Wavehill and Belmana) carrying out an evaluation of non-financial support provided to Welsh businesses through 2014–20 European Regional Development Fund (ERDF) programmes.

As part of this evaluation, we are asking individuals and businesses who have received this support to complete an online survey to obtain feedback on the support provided and any benefits of the support for their business. The questionnaire will take between 20 and 25 minutes to complete and will cover:

- type of support accessed, including where it was accessed from
- reasons for accessing the support received
- satisfaction with the quality and outcome of support provided
- areas where support can improve
- actions that businesses have taken since receiving the support and the impacts of this
- impacts of the support
- effects of COVID-19 and any resultant business support needs.

You will be able to save and return to your responses at any point BEFORE you submit your questionnaire.

**Intro 3**

According to our records, you were involved in {Operation_Name} from {Delivery_Organisation} ({opdescription2_en} != '')?' and {opdescription2_en}':'' . Can you confirm this?

1. Confirm
2. No (please specify below)

**Intro3_bis if(Intro3 == 3)**

Please specify the programme that you were involved in.
Open-ended text:

**Q1** F if(module() == CATI)

[DO NOT ASK, code as appropriate if mentioned that they are going to close] Has the business reported that they will be closing shortly/are planning to close?

1. Yes – please can I ask a few quick questions about your business?
2. No – continue

**Q2:** Can you confirm that you are a senior person in the day-to-day control of the business?

1. Yes
2. No

**Q2_bis F if(Q2 == 2)**

(module() == CAWI)?'Could this be completed by someone in a management position?':'Could I speak to a senior person with day-to-day control of the business?'

1. Yes
2. No **(Route to close)**

**Q3:** We have the name of the organisation receiving support as {busname}. Is that correct?

1. Yes
2. No (please write in correct name or organisation)

**Q4 F if(module() == CAWI)**

Is (Q3 == 1)?'{busname}':'[Q4]' still in existence?

1. Yes
2. No **(Route to close)**

**Q5:** In what year was your business established?

Open-ended text:

**Q6:** Could you briefly describe what your business does? Include information on your main product and/or service and types of customers.

Open-ended text:

**Q7 F if(Q1 == 1) Then route to close**

Please could you provide a few details on why you will be closing your business?

Open-ended text:

**Q8:** Is this workplace…?

1. The only establishment in the organisation
2. The head office of an organisation with a number of sites
3. A branch of an organisation with a number of sites
4. Don’t know

**Q9 F if(Q8 == 2 || Q8 == 3)**

How many sites does your business have?

Open-ended text:

**Q10 F if(Q8 == 2 || Q8 == 3)**

How many of these sites have benefitted from the business support offered?

Open-ended text:

**Q11:** How many staff are employed at your site? (include full-time and part-time staff)

1. Number of employees:
2. Don’t know

**Q11_bis**

(Q11 == 2)?'If you don\'t know the exact figure, can you at least provide an approximate range of employees at your site?':'Please indicate the approximate range of employees at your site, based on your previous answer'

1. 0–4
2. 5–9
3. 10–24
4. 25–49
5. 50–99
6. 100–199
7. 200–249
8. 250+

**Q12 F if([Q9.1] > 1)**

How many staff does your business employ in Wales? (include full-time and part-time staff)

1. Number of employees:
2. Don’t know

**Q12_bis**

(Q12 == 2)?'If you don\'t know the exact figure, can you at least provide an approximate range of staff that your business employs in Wales?':'Please indicate the approximate range of staff that your business employs in Wales, based on your previous answer'

1. 0–4
2. 5–9
3. 10–24

4. 25–49

5. 50–99

6. 100–199

7. 200–249

8. 250+

**Q13 F if([Q9.2] >= 1)**

How many staff does your business employ in other sites in the UK? (include full-time and part-time staff)

1. Number of employees:

2. Don’t know

**Q13_bis**

(Q13 == 2)?'If you don\'t know the exact figure, can you at least provide an approximate range of staff that your business employs in the UK?':'Please indicate the approximate range of staff that your business employs in the UK, based on your previous answer'

1. 0–4

2. 5–9

3. 10–24

4. 25–49

5. 50–99

6. 100–199

7. 200–249

8. 250+

**Q15:** At the time of receiving the support, were you aware that the advice or support that you received was funded by the European Regional Development Fund (ERDF), provided via the European Union?

1. Yes

2. No

3. Don’t know

**Q16:** How did you originally find out about the programme?

1. Previous contact with the delivery organisation

2. Referral from a business support organisation

3. Saw programme marketing

4. Online search

5. Recommendation (from another business, family, friend, etc.)

6. Other (please specify)

7. Don’t recall

**Q17:** Which of the following best describes your reasons for becoming involved in the programme?

1. Starting a business

2. Growing the business

3. Maintaining the levels of business turnover, profitability

4. Introducing new products, processes or services

5. Increasing levels of export sales

6. Diversifying into new UK and/or international markets

7. Developing new collaborative partnerships

8. Research and development support from higher education institutions (HEI)

9. Other (please specify)

10. Don’t know/don’t recall

**Q18:** In the absence of the programme, how likely would you have been to seek out support from other sources?

1. Very likely

2. Likely

3. Unlikely

4. Very unlikely

5. Don’t know

**Q19:** Why did you access the support through the project, rather than from another source?

1. Free or cheaper than other available support

2. Better quality

3. More suited to the business’ needs

4. More accessible support and advice

5. We were approached by the programme

6. Other (please state)

7. Don’t know

**Q20:** Thinking back to when you accessed the support, what were your expectations of the support when you originally made contact? For example, how were you expecting the support to be delivered, what outputs did you hope to receive, and what advice were you hoping to receive?

Please type your answer in the box below.

1. Open-ended text:

2. Don’t know/don’t recall

**Q21:** On a scale of 1–5 (with 1 being “Much less than expected” and 5 being “Much more than expected”), to what extent do you think that your expectations were met?

1. Much less than expected

2. Less than expected

3. As expected

4. More than expected

5. Much more than expected

6. Don’t know

**Q22 F if(Q21 == 1 || Q21 == 5)**

Can you provide reasons for this rating?

Open-ended text:

**Q23:** Which of the following types of advice or support did your business receive through the programme?

| | **Yes** | **No** |
|---|---|---|
| 1. Advice or support on starting a business | | |
| 2. Advice or support on running and growing a business | | |
| 3. Support for business premises or office space, including laboratory space | | |
| 4. Accessing finance | | |
| 5. Support with digital marketing and e-commerce | | |
| 6. Innovation advice or support | | |
| 7. Developing a collaboration, partnership, or networking support | | |
| 8. ICT advice or support | | |
| 9. Export advice or support | | |
| 10. Drafting company-wide strategies and/or processes — including environmental and equality & diversity strategies | | |
| 11. None of these | | |
| 12. Other (please specify below) | | |
| 13. Don’t recall/don’t know | | |

**Q23_bis F if(Q23.12 == 1)**

Please specify any additional types of advice/support not already mentioned above.

Open-text answer:

**Q24 F if(Q23.1 == 1)**

What start-up support did you access through the programme?

1. Developing your business idea
2. Making a business plan
3. Advice on regulation and legislation
4. Drafting policies
5. Understanding your market/market research
6. Marketing and promoting your business
7. Staff recruitment and training
8. Access to finance
9. Other (please specify)
10. Don’t recall/don’t know

**Q25 F if(Q23.6 == 1)**

Was the support for innovation that you received:

1. Support for R&D, product development, and innovation
2. Commercialisation and knowledge transfer support
3. Other (please specify)
4. Don’t recall/don’t know

**Q26 F if(Q23.6 == 1)**

Did you establish any collaborative relationships in relation to this innovation support?

1. Yes
2. No
3. Don’t know
4. Prefer not to say

**Q27 F if(Q26 == 1)**

If Yes, what organisation(s) did you collaborate with? Please state the organisation(s) type and name.

Open-text answer:

**Q28 F if(Q23.2 == 1)**

Was the advice or support that you received about any of the following topics?

| | **Yes** | **No** |
|---|---|---|
| 1. Marketing and promotion | | |
| 2. Business planning | | |
| 3. Improving HR management, including recruitment procedures, and equality and diversity | | |
| 4. Improving business processes | | |
| 5. Adopting digital technology | | |
| 6. Supply chain development and tendering support | | |
| 7. Energy and resource efficiency support | | |
| 8. Upscaling environmental practices | | |
| 9. Advice on complying with regulation and legislation | | |
| 10. IT infrastructure | | |
| 11. Improving customer engagement | | |
| 12. Other (please specify below) | | |
| 13. Don’t know | | |

**Q28_bis F if(Q28.12 == 1)**

Please specify the other topic(s) about which you received advice/support.

Open text verbatim:

**Q29:** On a scale of 1–5, where 1 is “Very dissatisfied” and 5 is “Very satisfied”, how satisfied were you with the way in which the support was provided through the programme?

1. Very dissatisfied
2. Quite dissatisfied

3. Neither satisfied nor dissatisfied

4. Quite satisfied

5. Very satisfied

**Q30:** Can you please explain the reasons for your rating?

Open text verbatim:

**Q31:** On a scale of 1–5, where 1 is “Very dissatisfied” and 5 is “Very satisfied”, how satisfied were you with the quality of the support provided?

1. Very dissatisfied

2. Quite dissatisfied

3. Neither satisfied nor dissatisfied

4. Quite satisfied

5. Very satisfied

**Q32:** Can you please explain the reasons for your rating?

Open text verbatim:

**Q33:** On a scale of 1–5, where 1 is “Very dissatisfied” and 5 is “Very satisfied”, how satisfied were you with the outcomes/impacts of the support for your business?

1. Very dissatisfied

2. Quite dissatisfied

3. Neither satisfied nor dissatisfied

4. Quite satisfied

5. Very satisfied

**Q34:** Can you please explain the reasons for your rating?

Open text verbatim:

**Q35:** On a scale of 1–5, where 1 is “Strongly disagree” and 5 is “Strongly agree”, to what extent do you agree with the following statements about the support received?

**Q36:** Since receiving support from the programme, has your business accessed support from any other source (other than ERDF)?

1. Yes
2. No
3. Don't know
4. Prefer not to say

**Q37 F if(Q36 == 1)**

Which organisation(s) provided this support?

1. Competitors or other businesses in your industry
2. Private consultants or agencies
3. Universities or other higher education institutions
4. Professional/trade/technical publications
5. UK Government Departments (e.g. UKTI, HMRC)
6. Welsh Government
7. Local government
8. Enterprise agencies or other business support organisations
9. Other (please specify)
10. Don't know
11. Prefer not to say

**Q38:** Has the support received from the programme, and from other sources, added value to your business?

1. Yes
2. No
3. Don't know
4. Prefer not to say

**Q39:** Do you recall if your business used the Business Future-Proofing Toolkit?

1. Yes

2. No

3. Don’t know

**Q40 F if(Q39 == 1)**

The Business Future-Proofing Toolkit created a bespoke report based on questions that you filled out about your business. On a scale of 1–5, where 1 is “Strongly disagree” and 5 is “Strongly agree”, to what extent do you agree with the following statements about the report generated for your business by the Welsh Government Business Future-Proofing Toolkit?

**Q41 F if(Q39 == 1)**

Are there any comments that you have about the statements above or anything further to add about the Welsh Government Business Future-Proofing Toolkit?

**Q42:** What actions, if any, have you taken as a result of receiving support through the programme?

1. Started a business

2. Targeted new customers

3. Accessed finance or investment

4. Developed new products and/or services

5. Developed new processes that support the delivery of products and services to customers

6. Developed new processes/procedures/systems that support the day-to-day management of your business

7. Started to or increased exporting

8. Improved sales and marketing

9. Recruitment and/or retention of staff

10. Increased skills within the business

11. Adopted new technologies, including ICT

12. Measures to improve resource efficiency and/or meet net zero ambitions

13. Other (please specify)

14. None

15. Prefer not to say

**Q43** F if(CompareDate({year},01/03/2020) >= 0 && CompareDate({year},31/12/2021) <= 0)

Did COVID-19 have any impact on when or how the support that you received was delivered?

1. Yes

2. No

3. Don’t know

**Q44 F if(Q43 == 1)**

If Yes, how?
Open text verbatim:

**Q45 F if(CompareDate({year},01/03/2020) >= 0)**

Did COVID-19 have any impact on your ability to implement actions following the support?

1. Yes. What was this impact? (open text verbatim)

2. No

3. Don’t know

**Q46:** Did Brexit have any impact on your ability to implement actions following the support?

1. Yes. What was this impact? (open text verbatim)

2. No

3. Don’t know

**Q47 F if(Q42 == 1)**

If you had not received the advice and support through the programme, how likely is it that the business would have been set up anyway?

1. Very likely

2. Likely

3. Unlikely

4. Very unlikely

5. Don’t know

**Q48 F if(Q42 == 4 || Q42 == 5 || Q42 == 16)**

Have you developed any new products and/or processes as a direct result of the programme support? Please note that processes refer to areas including staff training, recruitment, business structure, performance management, and any other management processes.

1. Yes – new products and/or services **F if(Q42 == 4)**
2. Yes – new processes that support the delivery of products and services to customers **F if(Q42 == 5)**
3. Yes – new process/procedures/systems that support the day-to-day management of the business **F if(Q42 == 16)**
4. No
5. Don’t know
6. Prefer not to say

**Q49 F if(Q48 == 1)**

Could you briefly describe the products developed as a direct result of the support?

Open verbatim here:

**Q50 F if(Q48 == 1)**

Were these products:

1. New to market
2. New to your business
3. A significant improvement on something that the business was already producing

**Q51 F if(Q48 == 1)**

Before your engagement with the programme, where in the commercialisation process was your technology/product?

1. In initial development
2. At proof-of-concept stage
3. In basic testing

4. Being demonstrated in a relevant environment

5. Ready for market

6. Fully commercialised

7. Prefer not to say

**Q52 F if(Q48 == 1)**

After your engagement with the programme, where in the commercialisation process was your technology/product?

1. In initial development

2. At proof-of-concept stage

3. In basic testing

4. Being demonstrated in a relevant environment

5. Ready for market

6. Fully commercialised

7. Prefer not to say

**Q53 F if(Q48 == 1)**

On a scale of 1–5, how important was the programme support in the development of these products?

1. Not important

2. Somewhat important

3. Moderately important

4. Mostly important

5. Very important

**Q54 F if(Q48 == 1)**

Can you please explain the reasons for your rating?

**Q55 F if(Q48 == 2)**

If Yes, could you briefly describe these new processes that support the delivery of new products to customers developed as a direct result of the support?

Open text verbatim:

**Q56 F if(Q48 == 2)**

On a scale of 1–5, how important was the programme support in the development of these processes?

1. Not important
2. Somewhat important
3. Moderately important
4. Mostly important
5. Very important

**Q57 F if(Q48 == 2)**

Were these processes:

1. New to market
2. New to your business
3. A significant improvement on something that the business was already producing

**Q57a F if(Q48 == 2)**

What would have happened to these processes if you had not received the support?

1. We would have still developed them, but progress would have been slower
2. We would have still developed them, but the scope/scale of the process changes would have been smaller
3. We would not have developed any new processes
4. There would have been no real difference

**Q55proc F if(Q48 == 6)**

If Yes, could you briefly describe these new processes/procedures/systems developed as a direct result of the support?

Open text verbatim:

**Q56PROC.1 F if(Q48 == 6)**

On a scale of 1–5, how important was the programme support in the development of these processes?

1. Not important
2. Somewhat important
3. Moderately important
4. Mostly important
5. Very important

**Q58 F if(Q48 == 1)**

Did you establish any collaborative relationships with HEIs or other organisations as a direct result of the programme?

1. Yes
2. No
3. Don’t know
4. Prefer not to say

**Q59 F if(Q48 == 1)**

What would have happened to these products and services if you had not received the support?

1. We would have still developed them, but progress would have been slower
2. We would have still developed them, but the scope/scale of product changes would have been smaller
3. We would not have developed any new products/services

4. There would have been no real difference

**Q60 F if(Q48 == 1)**

Has the new product or service led to an increase in your annual sales?

1. Yes
2. No
3. Don’t know

**Q61bis F if(Q60 == 1)**

What is the increase?

1. Less than 1%
2. 1–2%
3. 3–5%
4. 6–10%
5. 11–20%
6. 21–30%
7. 31%+
8. Don’t know
9. Don’t want to disclose

**Q62 F if(Q42 == 8)**

You said that you had recruited and/or retained staff since receiving support through the programme. How many jobs have you created?

| | |
|---|---|
| 1. Full-time | |
| 2. Part-time | |
| 3. Don’t know | |
| 4. Don’t want to disclose | |

**Q63 F if(Q42 == 8)**

Since receiving support from the programme, how many jobs were safeguarded during the COVID-19 period? For the purpose of this question, the COVID-19 period is being defined as 23rd March 2020 to 28th March 2022.

| | |
|---|---|
| 1. Full-time | |
| 2. Part-time | |
| 3. Don't know | |
| 4. Don't want to disclose | |

**Q63bis F if(Q42 == 8 && !Q62.3 == 1 && !Q62.4 == 1 && [Q62.1]+[Q62.2] == 0 && !Q63.3 == 1 && !Q63.4 == 1 && [Q63.1]+[Q63.2] == 0)**

Attention: You previously mentioned that you had created/retained staff since receiving support, yet you indicated a total of 0 jobs created and safeguarded since then.

Please check your answers.

1. Correct jobs created **Skip GoTO (Q62)**
2. Correct jobs safeguarded **Skip GoTO (Q63)**

**Q64 F if(Q42 == 8 && ([Q62.1]+[Q62.2] > 0 || [Q63.1]+[Q63.2] > 0))**

What is the average salary of the...?

| | **Average salary (in £)** | **Don't know** | **Don't want to disclose** |
|---|---|---|---|
| 1. Jobs created | | | |
| 2. Jobs safeguarded | | | |

**Q64bis (Q64.1 == 6)**

Please indicate the approximate range of the average salary of the jobs created, based on your previous answer.

1. Less than £15,000
2. £15,000–£24,999
3. £25,000–£39,999
4. £40,000–£64,999
5. £65,000+

**Q64ter (Q64.2 == 6)**

Please indicate the approximate range of the average salary of the jobs safeguarded, based on your previous answer

1. Less than £15,000
2. £15,000–£24,999
3. £25,000–£39,999
4. £40,000–£64,999
5. £65,000+

**Q65 F if (Q42 == 8)**

On a scale of 1–5, how important was the programme support in the development or safeguarding of these jobs?

1. Not important
2. Somewhat important
3. Moderately important
4. Mostly important
5. Very important

**Q66:** Over the next five years, do you anticipate that further jobs will be created in the business as a direct result of actions taken following the programme support?

1. Yes
2. No
3. Don't know
4. Prefer not to say

**Q67 F if (Q42 == 11)**

Over the last five years, have you implemented any of the following changes to your ICT infrastructure as a direct result of the programme?

1. Website development
2. Marketing and promotional activity via social media
3. Online communications platforms (Microsoft Teams, Zoom, etc.)
4. Internal communications and remote working (e.g. intranet)
5. Management software (e.g. project management, holidays, digital accounting software, etc.)
6. Data sharing and/or storage systems
7. CRM system to integrate/link other IT systems
8. None of the above (if other, please specify)
9. Don't know

**Q68 F if(any selection at Q67)**

How likely or unlikely would you have been to introduce ICT of the same scope or quality and over the same timescale had you not had the support?

| | **Very likely** | **Likely** | **Unlikely** | **Very unlikely** | **Don't know** |
|---|---|---|---|---|---|
| Same scope and scale | □ | □ | □ | □ | □ |
| Same timescale | □ | □ | □ | □ | □ |

| | | | | | |
|---|---|---|---|---|---|
| Same quality | □ | □ | □ | □ | □ |

**Q69:** In the last five years, have you started using or increased your use of fibre or cable broadband network services for any of your operations?

1. Yes – introduced fibre/cable broadband
2. Yes – increased your use of fibre/cable broadband
3. No
4. Don't know

**Q70 F if(Q69 == 1 || Q69 == 2)**

Did the support received from the programme have any impact on the introduction of these broadband services?

1. Yes
2. No
3. Don't know
4. Prefer not to say

**Q71 F if(Q70 == 1)**

If Yes, please describe.

Open text verbatim:

**Q72:** Can you confirm when your financial year starts and ends?

1. April to March
2. January to December
3. Other (please state)

**Q73:** What was the approximate turnover of your business in the last financial year?

1. Turnover (in £):
2. Don't know
3. Prefer not to say

**Q73_bis F if(Q73 != 3) (Q73 == 2)**

Please indicate the approximate range of the turnover of your business in the last financial year, based on your previous answer.

1. Less than £10,000
2. £10,000 to £49,999
3. £50,000 to £99,999
4. £100,000 to £199,999
5. £200,000 to £499,999
6. £500,000 to £999,999
7. £1m to £1,999,999
8. £2m to £4,999,999
9. £5m to £9,999,999
10. £10m to £19,999,999
11. £20m+
12. Don’t know

**Q74:** Did you make a profit or a loss in the last financial year?

1. Profit
2. Loss
3. Don’t know
4. Prefer not to say

**Q75 F if(Q74 == 1)**

If a profit, approximately how much profit did you make?

1. Less than £10,000
2. £10,000 to £49,999
3. £50,000 to £99,999

4. £100,000 to £199,999
5. £200,000 to £499,999
6. £500,000 to £999,999
7. £1m to £1,999,999
8. £2m to £4,999,999
9. £5m to £9,999,999
10. £10m to £19,999,999
11. £20m+
12. Don’t know
13. Prefer not to say

**Q76 F if(Q74 == 2)**

If a loss, approximately what loss did you make?

1. Less than £10,000
2. £10,000 to £49,999
3. £50,000 to £99,999
4. £100,000 to £199,999
5. £200,000 to £499,999
6. £500,000 to £999,999
7. £1m to £1,999,999
8. £2m to £4,999,999
9. £5m to £9,999,999
10. £10m to £19,999,999
11. £20m+
12. Don’t know
13. Prefer not to say

**Q77:** To what extent do you think that COVID-19 affected your profit or loss in the last financial year?

1. Not at all
2. Very little
3. Somewhat
4. To a great extent
5. Don’t know

**Q78:** What proportion of your sales is generated in the following markets?

| | **Enter %** | **Don’t know** |
|---|---|---|
| 1. Wales | | |
| 2. UK (outside of Wales) | | |
| 3. Other Europe | | |
| 4. North America | | |
| 5. Central/South America | | |
| 6. Middle East | | |
| 7. Africa | | |
| 8. Russia | | |
| 9. Asia | | |
| 10. Australia and New Zealand | | |
| **TOTAL** | | |

**Q79 F if(Q42 >= 1 && Q42 != 14 && Q42 != 15)**

Have you seen any changes to the following as a direct result of actions taken following the support that you received?

| | Increased | Decreased | Stayed the same | Don't know |
|---|---|---|---|---|
| 1. Sales/turnover | | | | |
| 2. Profitability | | | | |
| 3. Sales (UK) | | | | |
| 4. Sales outside of the UK | | | | |
| 5. Productivity/efficiency | | | | |

**Q80 F if(Q42 >= 1 && Q42 != 14 && Q42 != 15)**

What contribution has the support received from the programme made to your business performance in general?

1. Vital contribution
2. Some contribution
3. No contribution
4. Don't know
5. Prefer not to say

**Q81:** Reflecting on your experience, what aspects of the support...?

| | Open verbatim: |
|---|---|
| 1. Worked well | |
| 2. Didn't work as well | |

**Q82:** What improvements do you think could be made to the support that you received?

Open verbatim:

**Q83:** As far as you are aware, has your business benefitted from support under the European Social Fund (ESF) for training your workforce in the last three years?

1. Yes
2. No
3. Don’t know

**Q84:** What future support services do you think that your business, and businesses like yours, will need in the next 12–18 months?

1. Access to finance
2. Financial management
3. Marketing and promotion
4. Finding and retaining customers
5. Using technology to sell to customers
6. Offering flexible and remote working
7. Managing office space and desk sharing
8. Using technology to maximise work–life balance
9. Reducing overheads
10. COVID-19 recovery
11. Other (please state)

**Q85:** Do you have any ongoing concerns regarding the longer-term impacts of COVID-19?

1. Yes. What are they?
2. No
3. Don’t know
4. Not applicable

## Annexe B: Case studies

### Accelerate – Welsh Health Innovation Tech Accelerator (EW & WWV) case study

Aims and objectives

The Accelerate programme aimed to support SMEs in Wales by allowing them to make use of academic expertise and the latest facilities in higher education institutes (HEI) to enable the exploitation of innovative ideas in the life sciences sector.

Accelerate operated under Specific Objective 1.2 by responding to economic development opportunities across Wales in the health and life sciences sectors, which, in turn, would contribute towards the enhanced health and improved quality of health provision in Wales.

Operation targets included:

- registering patents for products in the health and life sciences sector
- providing non-financial support to enterprises, as well as supporting new enterprises
- increasing employment levels in the supported enterprises
- encouraging private investment to match public support in innovation or RD&I projects
- supporting enterprises to introduce new-to-market and new-to-firm products, services or processes
- the number of partners cooperating in research projects.

Context and rationale

The Accelerate operation was developed in response to several challenges that project partners had recognised in the life sciences and health sectors in Wales:

- barriers in developing new, innovative products and services based on meeting the needs of clinicians and health practitioners — innovations which could improve efficiency in the NHS
- the need to improve the integration of academic expertise into developing practical and innovative solutions to tackle health challenges
- the need to increase private sector involvement in the health and life sciences sectors in Wales.

The Welsh Government identified a synergy between funding applications submitted by three HEIs in response to a call for innovative projects to deliver in this space. Therefore, the decision was made for Cardiff University, Swansea University, and the University of Wales Trinity Saint David to work collaboratively, providing technical assistance on a project led by Life Sciences Hub Wales (LSHW), an arm's-length body of the Welsh Government that works closely with the health and social care sector to identify challenges and pressures that can be addressed by industry.

Activities delivered

According to a survey conducted for the operation's final evaluation, over 60 per cent of the supported enterprises that responded to the survey came across Accelerate through direct contact from an academic partner or through Life Sciences Hub Wales. Other routes of initial engagement included hearing about the programme through a business group or network contact and through online research. Once in contact with Accelerate, enterprises were directed to the most suitable partner organisations to work collaboratively with them to produce a plan aimed at addressing any barriers to bringing the concept to launch. The support was tailored to each enterprise; academic support could be used to address a range of issues such as product development, research design, analysis, and market expertise. Access to university facilities at Assistive Technologies Innovation Centre (AtiC), the Clinical Innovation Accelerator (CIA) and the Health Technology Centre (HTC) provided opportunities for businesses to use specialist technologies and to develop and test prototypes.

Excluding issues specifically related to COVID-19, a number of delivery challenges were identified. They included the fact that enterprises were not asked to financially commit to a project before receiving support from Accelerate, which led to cases in which projects could not continue once Accelerate support had concluded.

Furthermore, COVID-19 presented a significant challenge for staff recruitment to deliver the Accelerate programme. A pessimistic economic outlook in the wake of the COVID-19 pandemic led to a reduced interest in temporary contract jobs like the ones advertised for Accelerate, which exacerbated the challenge of quickly training up new starters in roles which required specific knowledge and skills (such as finance managers), as well as the knowledge loss when postholders moved on.

Another challenge arose in managing enterprise expectations, with some firms misunderstanding the offer of the programme, thinking that they could access financial support or get onto NHS preferred supplier lists. Partners addressed this by continuously emphasising what could be offered by Accelerate.

Performance

The Accelerate programme has been successful in meeting or exceeding almost all of its target indicators across both Operational Programmes. The biggest challenge for the partners related to the target indicators for the number of patents registered for products and the number of enterprises receiving non-financial support. Both challenges were compounded by the COVID-19 pandemic.

Beyond the target indicators, Accelerate has been successful in developing new systems of collaboration between industry, HEIs and the NHS in Wales. The project's final evaluation notes that the closer model of collaboration had not been exhibited in Wales previously, that health boards and businesses had expressed a desire to continue collaborating, and that discussions on further co-working projects had occurred. When beneficiaries were asked whether they would continue to work with academic partners beyond Accelerate, nearly 60 per cent believed that collaboration would persist beyond the support.

Additionality

In addition to economic impacts, added value has been generated through networking opportunities between businesses as well as improved collaboration between the health and life sciences industries and academia.

CCTs

The Accelerate programme has contributed to a variety of CCT case-level indicators, helping to drive the participation of underrepresented groups, with special consideration being given to maximising the engagement of women in STEM through specific workshops and (for example) by inviting six inspirational women from the tech and health & care sectors to talk about their experiences with participants as part of International Women's Day. Sustainable development was at the heart of the project, as its work inevitably aimed to make more effective use of NHS resources by introducing new innovations in the health and life sciences sectors. The HTC opted to participate in the LEAF (Laboratory Efficiency Assessment Framework), a programme

designed to facilitate and drive improvements in laboratory efficiency. The tools allow the HTC to reduce utility costs as well as their environmental footprint, increase research efficiency, and ensure compliance with health and safety standards. They have recently been audited and awarded the Bronze Award.

Accelerate has also contributed to tackling poverty and addressing social inclusion through raising the aspirations for careers in under-engaged areas among young people. This has mainly been achieved through the workshops conducted with Technocamps and Reaching Wider (which specifically target individuals classed as NEET).

Reflections and recommendations

The general sentiment among delivery partners and beneficiaries is that the project was a success in supporting SMEs to develop their innovative ideas into practical solutions.

A series of recommendations were set out in the final evaluation and included streamlining the work for project staff by using a CRM, as well as hiring business development officers to improve client outreach. Additionally, future projects should have clearer selection criteria and simpler onboarding and due diligence to ensure that collaborations have been appropriate. Given the slow, costly and hard-to-navigate nature of patent acquisition, a softer and more appropriate indicator than patents was also recommended to monitor future projects, such as the number of design approvals secured. Finally, even closer collaboration between academia and industry was recommended in order to better identify potential gaps in the market as well as to ease knowledge transfer.

**CEMET – Centre of Excellence in Mobile and Emerging Technologies (EW & WWV) case study**

Aims and objectives

Operating through the Faculty of Computing, Engineering, and Science at the University of South Wales, CEMET aimed to provide SMEs in Wales with access to funded research and development work to bring products to market in high-growth sectors like artificial intelligence, digital manufacturing, and cybersecurity. The R&D work was designed to help businesses seeking to create new products, solutions or services revolving around cutting-edge and emerging technologies such as machine learning, virtual and augmented reality, data visualisation, and artificial intelligence.

CEMET was delivered through SO1.2 with the following target indicators:

- the number of enterprises receiving non-financial support
- the number of partners cooperating in research projects
- the number of enterprises supported to introduce new-to-firm products
- the number of enterprises supported to introduce new-to-market products
- private investment matching public support in R&D projects.

Context and rationale

The Centre of Excellence in Mobile and Emerging Technologies (CEMET) was a follow-on project from the Centre of Excellence in Mobile Applications and Services (CEMAS) that ran under the previous ERDF funding period, aiming to provide research, development and innovation assistance to Welsh-based SMEs that demonstrate strong growth potential. The midterm evaluation describes the rationale behind CEMET as being underpinned by a need to address R&D barriers faced by SMEs in relation to technological development due to a lack of expertise, skills and capacity as well as high upfront costs that are high-risk because they do not guarantee a return for the business.

Activities delivered

Businesses initially engaged with CEMET by undergoing a business diagnostic involving a discussion of their initial idea and the formulation of a viable R&D proposal to be reviewed by CEMET’s in-house team of emerging tech experts. Businesses then moved on to the

collaborative R&D stage, where the scope and objectives are formalised to ensure time and resource efficiency. The collaborative stage saw CEMET confirm the feasibility of the businesses' design and support them through the product development stage with frequent consultation and engagement. The final stage of support saw the businesses work with the CEMET team to plan a viable route to market for the new product. The entire process of support typically lasted for 3–4 months.

Support was available through the operation to businesses at a wide range of product or service readiness, supporting businesses from the proof-of-concept stage to businesses with a tested prototype. Businesses have received R&D support to develop technologies, with there being tangible positive impacts for users in sectors such as finance and health & social care.

Performance

The midterm evaluation showed that CEMET was well on track to meet or exceed its WEFO-contracted targets, although in the West Wales programme these have been more challenging to achieve because whilst the team have engaged with clients based in West Wales, sometimes they have their businesses registered in Cardiff, therefore counting towards the East Wales operation.

In-depth interviews with beneficiaries conducted as part of the evaluation praised the expertise of the staff who worked collaboratively with them on their projects, noting that they had a strong understanding of the innovation process and provided actionable feedback on how to move forward with the development of their products.

The COVID-19 pandemic had, on balance, a positive effect on the operation. It was already operating virtually and, thus, minimal change was necessary in order to adhere to social restrictions; however, it did allow an increase in virtual support, which heightened the efficiencies of service delivery (with the removal of journey times to meet clients, for example). The project manager described how for highly innovative businesses the pandemic typically increased their motivation to pursue their idea. The project manager described how participant businesses were deemed to be more proactive following the outbreak of COVID-19 and how demand for the support increased.

Additionality

When asked if they had considered other forms of support in the beneficiary survey, all respondents noted that they were not aware of a similar form of support available. The project team concurred with this view and were unaware of any other provision of this nature available in the market. Furthermore, a number of businesses noted that after researching other forms of support, nothing else suited their needs in a similar way to that of CEMET, demonstrating strong additionality for businesses seeking to develop cutting-edge products and services.

The project team speculated that whilst some of the projects with businesses may have progressed in the absence of the support, they would likely have been slower in coming to market and possibly of a lower quality. According to the operation's midterm evaluation, in the absence of CEMET, beneficiaries felt that some of the ideas would simply not have been brought forward at all.

CCTs

CEMET has been effective in encouraging sustainable development through supporting businesses to develop technologies that improve business efficiency. For example, virtual reality medical training apps have improved the accessibility of training, whereby reducing travel burdens. Furthermore, motion-sensing technology for people in care should improve the responsiveness of care suppliers to people with urgent support needs. What is more, many CEMET projects contributed towards supporting social inclusion and tackling poverty, namely through developing applications and training products which reduce barriers to accessing careers in certain fields. One collaboration, for example, between Gas Assessment and Training Centre Ltd and CEMET has created a virtual reality application which enhances the training of prospective gas engineers.

Internally, CEMET has adopted University of South Wales policies in relation to equal opportunities and gender mainstreaming, as well as sustainability policies through the university's environmental strategy.

Reflections and recommendations

Businesses were widely positive about the support that they received, and desired more networking opportunities between businesses that were receiving CEMET support. Although the technical expertise on offer was highly praised by every beneficiary in the in-depth

business support survey, some businesses would have appreciated more commercial and legal expertise as they moved their product or service towards commercial use.

The project team reflected on the added value of having a small, consistent team, and felt this to be a key to their success because they were able to collectively develop and share learning with one another. Looking forward, the team flagged that, given its central role in the Welsh economy, integrating digital support provision in the core business support offer should be a key area of focus in future provision.

**Future Foods (WWV) case study**

Aims and objectives

The Future Foods operation aimed to deliver world-class expertise in food science, technology, nutrition, research, and development to ambitious Welsh-based food businesses seeking to develop healthy, market-creating products targeted at UK and international markets. In delivering this support the operation sought to enable food and drink companies in West Wales and the Valleys to improve their competitiveness, underpinning future growth and sustainability. Future Foods specifically contributed towards SO1.2.

Context and rationale

Future Foods brought together the expertise of two organisations, namely Aberystwyth University (particularly AberInnovation and its Future Food Centre) and BIC Innovation Ltd. The operational structure consists of an innovative SME–HEI collaborative approach to delivering an ERDF operation in Wales.

Analysis conducted by UK Research and Innovation (UKRI)[114] showed low levels of spend on research and development (R&D) in the food and drink industry in Wales. Through data captured by Nutri-Wales, there was also evidence that by embracing R&D, businesses could develop new products and increase resilience in the sector as a whole. This led to BIC Innovation collaborating with Aberystwyth University (and specifically with the internationally recognised expertise within the Institute for Biological, Environmental and Rural Science — IBERS) to provide scientific expertise that businesses do not typically access, delivered alongside the commercial knowledge and food sector expertise of BIC Innovation.

Activities delivered

Referrals to the operation were wide-ranging, with the programme team estimating 12–15 different routes into the programme, including referrals from Aberystwyth University, Cywain, and via word of mouth. Promotion of the operation took place through an extensive social media and communications programme and through BIC Innovation and the university's pre-existing links with organisations in the food and drink sector.

[114] UKRI (2022), Geographical distribution of spend data financial year (accessed: 16 January 2023).

In terms of engagement, following initial discussions with the Future Foods team, businesses were forwarded to academic partners to start their R&D journey. Evidence from the in-depth business interviews undertaken with participant businesses shows that many businesses needed to use the state-of-the-art testing facilities made available through the Future Food Centre at AberInnovation to assess the nutritional value of their products when making alterations to recipes. The programme closely interlinked with the AberInnovation campus, which was a key referral route for subsequent support on exiting the Future Foods operation.

The support from Future Foods has primarily provided firms with scientific evidence with which to develop new products and back up nutritional claims about their food products. In other cases, firms have been able to develop and improve existing products following extensive R&D work, improving the prospects of their business in the long run.

Alongside the provision of comprehensive scientific expertise and facilities to design, deliver and host projects within the laboratories available at AberInnovation, BIC Innovation fulfilled a business development and engagement role combined with ongoing technical and commercial R&D and client management.

Performance

The programme ended in December 2022 and achieved or exceeded six of its seven key performance indicators:

- partners cooperating in a research project
- employment increased in supported enterprises
- enterprises receiving non-financial support
- enterprises introducing new-to-market products
- enterprises introducing new-to-firm products
- the number of patents registered for products.

The only indicator not achieved was the indicator for private investment matching public support, which had a small shortfall at the project end.

The COVID-19 pandemic had a mixed impact on the project. From a positive perspective, it led to a transition to online management and business beneficiary meetings, which reduced travel costs and made more effective use of time previously lost through travelling. Participant businesses, however, felt that the restrictions reduced their ability to access laboratory facilities

at AberInnovation, which stalled or slowed their progress, whilst some would have preferred in-person (rather than virtual) engagement.

Additionality

The additionality of the programme primarily came from the technical depth and detail of research that had been offered to enterprises. Small enterprises would not have the resources or time with which to obtain and distil the information provided through the project, nor would they have been able to access the high-quality facilities and equipment made available.

The project team spoke of how the operation had changed mindsets regarding research and development and then provided the expertise with which to identify marketing opportunities, much of which, it is felt, would not have been possible in the project's absence.

CCTs

Both BIC Innovation and Aberystwyth University nominated CCT Champions for the project who carried out equality impact assessments. Gender diversity has been at the forefront of consideration for all project teams and the external advisory board throughout the project.

The programme also supported a host of activities with businesses in relation to functional foods and with an emphasis on enhancing the level of local production, thereby reducing food miles and increasing levels of food security and resilience, whereby contributing to sustainable development.

Reflections and recommendations

Reflecting on the success of the project, the management team felt that the work involved in the design of the project had been key to its success. Furthermore, from a governance perspective, the partnership between BIC Innovation and Aberystwyth University was described as being one that has grown in strength over time with a clearer understanding of each partner's strengths and capabilities as the operation has evolved. The collaboration between academic and commercial expertise in delivering a project of this nature provides the ability to draw on the key strengths of each partner, bringing together knowledge and expertise that provide a more rounded package of support.

Participant businesses commonly spoke of the knowledge and expertise of the professional and scientific experts as well as the quality of facilities to which they gained access.

Conversely, businesses could identify no weakness with the offer, illustrating the perceived value of the support.

Recommendations for future provision from businesses were in relation to a desire for increased accessibility to experts. Multiple businesses expressed that they would have liked to stay in contact with academic experts over a longer period for future stages of product development, reflecting the value of that element of the support provided. Other businesses noted that they could not gain access to experts for certain aspects of work, such as developing a production line, marketing the product, and expanding the business. An expansion in the integrated offer to businesses to extend the support, or further integration with other provision that may offer support in commercial implementation of products developed, could be considered in a future scheme.

**Business Wales Entrepreneurship Support and SME Support (EW & WWV) case study**

Aims and objectives

The Core and Growth service aimed to provide a one-stop shop for entrepreneurs through SO2.2 and SMEs through SO2.4, which will support them to grow and create jobs. The level of support delivered by the programme was dependent on the beneficiary's growth potential and scale, from level 1 for microbusinesses and those who are self-employed that are lifestyle-oriented to level 4 for larger organisations with greater growth potential. Lower levels of support for those starting up included training courses, workshops, advisory support, and signposting, whereas businesses that were already trading could access a wider array of support in relation to aspects like HR, tendering, international trade, skills, mentoring, marketing, ICT, and resource efficiency.

The Accelerated Growth Programme (AGP) was available for businesses and start-ups that exhibited higher growth potential than those at levels 1 to 4, demonstrating the potential for a 20 per cent increase in turnover annually for three years. These services addressed SO2.2 and 2.4: "to increase the number of SME start-ups through the provision of information, advice and guidance and support for entrepreneurship" and "to increase the growth of those SMEs with growth potential, in particular through accessing new markets".

The operations are collectively targeting the following indicators.

| Indicator | Entrepreneurship | SME growth |
|---|---|---|
| Number of new enterprises supported | ✓ | |
| Number of enterprises receiving non-financial support | ✓ | ✓ |
| Employment increase in supported enterprises | ✓ | ✓ |
| Increase in level of exports | | ✓ |
| Enterprises adopting or improving: | | |
| – sustainable development strategies and monitoring systems | ✓ | ✓ |
| – equality and diversity strategies and monitoring systems | ✓ | ✓ |

Context and rationale

Indicators associated with entrepreneurial activity and productivity in Wales were consistently below the UK average. To address this the Welsh Government used funding from the 2007–2013 ERDF programme to support two business support programmes: Customer Engagement and New Business Start-Up Support. The evaluations of these programmes recommended a continuation of ERDF-funded business across Wales. For the 2014–2020 ERDF programme, Business Wales was established in response as a single brand across both programme areas, broken down into distinct operations: Business Wales Core and Growth Service, Accelerated Growth Programme and Youth Entrepreneurship and the Regional Entrepreneurship Acceleration Programme[115].

The rationale behind revisions to the design was that it would allow individuals and enterprises to easily access the right support at the right time under one consistent brand. The model is sometimes described as an escalator of support, providing the opportunity to progress through provision as a business grows. The design and branding of the operation under Business Wales provided the opportunity to streamline and simplify the delivery model and bring clarity to the customer.

Activities delivered

The programme engaged businesses through a dedicated online portal and helpline which can forward businesses to factsheets, courses, workshops, business diagnostics, and one-to-one advice. Businesses often began their journey by filling out an online questionnaire which enabled businesses to outline the challenges that they were facing and their business aspirations, which formed part of the early diagnostic of needs and requirements and informed the formulation of an action plan.

Businesses were then signposted to the relevant support, which could range from general tax or marketing advice (delivered initially through workshops and subsequently through webinars) to a more refined and more catered approach delivered on a one-to one basis by a business advisor.

[115] During the 2014–2020 ERDF programme, funding under the Business Wales brand also supported Enterprise Hubs — five “physical” communal spaces located throughout Wales for new start and early stage businesses.

Provision for those at levels 1–4 was offered on a “dip in, dip out” basis, being available as and when businesses required. For those businesses with a stronger growth orientation, there was more of a longer-term relationship management approach adopted and, typically, this cohort received more support of greater intensity over a longer period.

When asked about the kind of support that enterprises received from Business Wales, the businesses referred to a wide variety of provision, which is reflective of the one-stop-shop approach offered through the operation.

The COVID-19 pandemic interrupted the face-to-face delivery of certain workshops and one-to-one advice sessions; however, many businesses noted in the in-depth business support interviews and in the wider telephone survey that the support that they received was not impacted by the pandemic, often because many of Business Wales’ services were already delivered remotely, with the pandemic typically hastening the transition to virtual provision of webinars and business consultations. As social restrictions eased, face-to-face provision was reintroduced in the delivery model, with the offer becoming a hybrid of virtual and face-to-face provision.

Performance

When participant businesses were asked about the strengths of the operation, many cited the experience of those delivering the support, with their ability to provide catered and in-depth support being of particular value. Businesses were also appreciative of the fact that the support was free for them to access, with a few businesses noting that paying consultancy fees would have been too large a barrier for them to access similar kinds of support.

One of the initial challenges encountered by delivery staff related to their understanding of the eligibility requirements for certain project outputs. This initially led to underperformance in the early stages of the project. Over time a more collaborative working approach with the WEFO improved the team’s clarity as to output claims, allowing them to improve their support as the project moved ahead. Interviews with the project leads revealed that the transition to online delivery also proved to be a challenge in collecting evidence of the impacts of the support beyond the six hours of support required to claim an output. This led to a shift in the focus of evidence collection to assess some of the wider impact achieved by Business Wales.

More widely, the project is viewed as being particularly successful in the production of a simplified model of support in Wales, with the programme team dealing with the complexities of four separate projects behind the scenes whilst maintaining a consistent offer and brand for the customer.

Additionality

Surveys conducted for the midterm evaluation noted that many beneficiary businesses felt that Business Wales fills a large gap in the kind of support that is available for enterprises in Wales. The interim evaluation notes that many businesses in the Core and Growth and AGP programmes felt that they would have been less successful had they not received support from Business Wales, which is echoed in findings from the survey in section 5 of the main report.

CCTs

Data relevant to CCTs were collected as part of the midterm evaluation, which illustrated that 46 per cent of Business Wales participants (of 8,671 participants in the Core and Growth programme) were women, and five per cent of beneficiary businesses (a total of 584) had owners who were Black, Asian or minority ethnic people. The programme contributed to sustainable development through improving business efficiency, while many programme activities were also delivered virtually, ensuring that the benefits were spread as widely as possible with minimal environmental impact. The geographical distribution of the supported beneficiaries indicates that the project contributed to tackling poverty and addressing social exclusion by supporting potential business growth across the entirety of Wales.

The programme included target indicators regarding 40 per cent of supported enterprises adopting or improving equality and diversity strategies (including monitoring systems) and enterprises adopting or improving sustainable development strategies (including monitoring systems). Progress against this target in the early stages of the project was described as being poor, an issue reiterated in the midterm evaluation. However, the team spoke of working in close collaboration with the WEFO to identify innovative ways in which to deliver this support, with the introduction of a Future-Proofing Toolkit as a mechanism with which to underpin a refined system for CCTs in which the approach to their delivery shifts from being something rather peripheral to being effectively integrated, from engagement in support through to the adoption of a pragmatic approach in their delivery. With better integration of CCTs into the

mainstream offer, the uptake of this provision has increased markedly and the 40 per cent target is now considered to be achievable.

Reflections and recommendations

The programme team reflected on some of the challenges associated with eligibility and evidence requirements for key performance indicators in the early stages of delivery — they represented a slight shift from the previous programme, but it took some time, working closely with the WEFO to gain such clarity. The close collaborative working relationship with the WEFO was seen by the programme team to be a particular strength.

They also reflected positively on the marketing and communications activity undertaken across a range of media, which helped to build awareness and cement the Business Wales brand across the SME market.

Some beneficiaries noted that they would prefer more face-to-face interaction in future support, conceding that it was not possible at the time due to COVID-19 regulations. Moreover, some businesses expressed a desire to know more about what support was available through Business Wales through more promotion and advertising of the support. A small number of beneficiaries also would have appreciated more funding opportunities from Business Wales, either directly or being getting signposted to other opportunities.

Looking forward, there are concerns surrounding potential duplication of Business Wales emerging from localised programmes commencing as a result of UK Shared Prosperity Fund (UKSPF) funding, and the programme team reiterated the importance of retaining a consistent, streamlined offer for entrepreneurs and businesses across Wales.

**Social Business Wales New Start and Social Business Wales (EW & WWV) case study**

Aims and objectives

The aim of the Social Business Wales programme (across both operations) was to provide support and technical information to those seeking to set up (through provision delivered under SO2.2), operate or grow (through provision delivered under SO2.4) a social business. As well as providing support on how to set up and grow these types of businesses, Social Business Wales also aimed to provide specialist advice to enterprises seeking additional capital investment or legal advice to those seeking to become an employee-owned trust.

Collectively these operations sat under SO2.2 and SO2.4 and were tasked with delivering the following indicators:

- enterprises receiving non-financial support
- the number of new enterprises supported
- an employment increase in supported enterprises
- enterprises adopting or improving equality and gender mainstreaming strategies and monitoring systems
- enterprises adopting or improving sustainable development strategies and monitoring systems.

Context and rationale

In 2013, the Welsh Co-Operative and Mutuals Commission identified that the conventional approaches taken to economic growth were not sufficient alone to achieve the desired improvements in well-being for the people of Wales. They advocated the expansion of co-operatives and mutuals (all of which come under the umbrella of social businesses), as they offer significant social, economic and environmental benefits in comparison to ordinary businesses. Furthermore, given the different motivations, structures, and legal frameworks associated with social businesses, it was recognised that they warranted dedicated business support distinct from the core Business Wales offer.

In 2015, Cwmpas (formerly the Wales Co-Operative Centre) were restricted to responding to one strategic “backbone” project call within one SO (strategic backbone projects were those activities demonstrating clear potential for early delivery of key objectives of the Economic

Prioritisation Framework[116]. This approach enabled a shift towards a more strategic level of activity and away from more numerous, smaller-scale operations).

These requirements led to the decision to apply to the SO associated with SME and social business growth (SO2.4). Between 2015 and 2019, social business start-up provision was delivered as part of the core Business Wales offer; in 2019, however, the WEFO approved an application from Cwmpas to deliver dedicated social business start-up support (Social Business New Start) to complement the Social Business Growth operation.

Activities delivered

Enterprises were most commonly referred to Social Business Wales through other business support schemes and organisations which made them aware of what they could receive from the programme. The first point of contact typically took place via the Social Business Wales website, where they would complete an action form.

Initial contact (following completion of a form) involved virtual meetings with a member of the Social Business Wales team, where a telephone diagnostic would take place to establish the individual's or business' needs and what could be done to support them and the communities that they serve. Thereafter, businesses were offered a wide range of support, much of which was specialist in nature and warranted the establishment of a framework of consultants serving those specific needs. Examples included legal advice to help determine the nature of the social business that they wished to establish, support to become an employee-owned trust, financial planning, and sector-specific technical advice.

Participant businesses would typically be supported through the new start operation for their first 12–18 months of trading (when they would transition to Social Business Growth). If at that point they were still test-trading, they would remain with that operation; once ready, they would be transferred to Social Business Growth.

COVID-19

The support delivered by Social Business Wales rapidly shifted in response to the COVID-19 pandemic, with the emphasis away from growth and towards survivability and resilience and the sourcing of loans and social finance. This reflected an evident shift in beneficiary

[116] The Economic Prioritisation Framework is designed to enable the identification of areas in which Structural Funds can contribute most effectively to overall Welsh Government economic development policy.

expectations of provision to survivability and a short-term emphasis (prior to the announcement of furlough) on HR support, as the outlook for some organisations had seemed to be so bleak. The only change that beneficiaries noted was a shift to meeting Social Business Wales staff virtually, with webinars dominating (rather than face-to-face sessions in community facilities), which, reportedly, did not impact the quality of the support.

The pandemic led to many businesses pivoting their service offer in order to respond to the constraints and opportunities that the restrictions presented. For advisors the shift to virtual provision increased the level of direct service delivery that they could undertake. Cwmpas' analysis suggests that direct hours of support increased by around 87 per cent initially, which have subsequently settled at 58 per cent higher than the pre-COVID-19 level.

Performance

Businesses praised Cwmpas for its organisational efficiency: advisors responded to queries promptly, external support was arranged clearly, and businesses were given a pressure-free environment in which to reach their goals, knowing that the operation could offer support when needed.

Furthermore, the interim evaluation of Social Business Wales shows that the project has managed to surpass its targets for the number of businesses supported as well as increased employment for almost every quarter between 2017 and 2019, placing the project in a strong position to move forward.

More recent discussions with project managers indicate that the COVID-19 pandemic has had a negative impact on job growth targets. This has been mainly attributed to the effective mothballing of growth-oriented provision in the pandemic, as well as enterprises becoming more risk-averse during that period, preferring to employ freelance workers or bring in volunteers (as opposed to hiring new staff). That being said, the new start element is continuing to attract larger numbers to the project than anticipated, and, in doing so, is bringing forward and supporting social businesses of the future.

As for the new start operation, at the point of consultation the project was ahead of profile regarding every target apart from jobs created. As for the Social Business Growth operation, the scheme was again short with regard to jobs created, and whilst other indicators are

marginally short, the team felt confident that they would surpass these targets by the time that the operation had finished (at the end of June 2023).

Additionality

Businesses were unaware of a similar form of support available, and some noted that Social Business Wales was an obvious route for them (given the longstanding relationships that they had with either Business Wales or Cwmpas). The identification of needs and opportunities for social businesses sufficiently distinct from the private sector to warrant specific support is also a notable indication of additionality.

Social Business Wales has also had an impact on the policy landscape by bringing the matter of employee ownership closer to the forefront through research and support activity to raise the issue and the importance of employee ownership to the Welsh economy. Project managers noted that they had succeeded in including employee ownership as a priority in the Welsh Government's Programme for Government. This, in turn, has meant that other programmes such as Business Wales are also now pushing for more socially beneficial models of business.

CCTs

The programme included target indicators regarding 50 per cent of supported enterprises adopting or improving equality and diversity strategies (including monitoring systems) and enterprises adopting or improving sustainable development strategies (including monitoring systems). The interim evaluation showed that the project was ahead of its targets for developing these strategies with businesses. Moreover, it was noted how social business owners are becoming increasingly diverse in terms of age, gender, and other backgrounds.

Additionally, the transition to hybrid delivery following the COVID-19 pandemic has boosted productivity and reduced travelling time, whereby leading to environmental benefits from their operation.

Reflections and recommendations

The interim evaluation recommended the continuation of the project past its current timescale, especially in West Wales and the Valleys (where the delivery model was noted to have been particularly successful). What is more, the evaluation spoke of the need for further consideration of how the impacts of Social Business Wales could be adequately measured and

captured. Since the project's impacts expand beyond generic business support, additional monitoring tools should be used to recognise the wider outcomes achieved, such as safeguarding jobs as well as support for local employment, so that the full social value of the project can be demonstrated.

For Cwmpas, the plan is to merge the two teams upon completion of the project, which will aid the integration of provision and provide a more rounded assessment of performance for any future programme of support.

**Superfast Broadband Exploitation (EW & WWV) case study**

Aims and objectives

SFBE aimed to support businesses to take advantage of the superfast broadband rolled out across Wales. The operation aimed to achieve this through supporting businesses to understand the commercial opportunities and efficiencies that could be made available through the adoption of superfast broadband.

As well as the inherent benefits to businesses brought about through the programme, SFBE was also expected to support other Welsh Government programmes centred on superfast broadband, including:

- Access Broadband Cymru: a programme which provides grants to individuals, businesses, and third sector organisations to introduce alternatives to broadband when an upgrade to superfast would not provide a step change in the download speed
- Ultrafast Connectivity Voucher Scheme: a programme that provides grants to businesses to introduce business-grade broadband.

The SFBE programme operates under SO2.3 and had two ERDF targets, namely providing non-financial support to enterprises and the introduction of new-to-firm products.

Context and rationale

In 2012, Wales had the lowest level of fibre broadband among the UK nations[117] and the rurality and peripherality of many parts of Wales limited the ability of the private sector to address this issue, prompting the need for public sector intervention to expand the levels of

[117] Ofcom Communications Market Report Wales in WEFO (2015) Guidance on Indicator Definitions, Data and Evidence Requirements – ERDF: Priority Axis 2: SME Competitiveness

fibre installation across the country. Although installation during the 2006–2013 programme had been successful in addressing the identified shortfall, it was recognised that some enterprises needed support so that they could take full advantage of the new infrastructure.

Operating under the Business Wales brand, the Superfast Broadband Exploitation (SFBE) programme is designed to address the need to continue the delivery of business support in a new technological context, with the aim of enhancing the rollout of superfast broadband for enterprises across Wales.

Activities delivered

Over one quarter of 272 businesses surveyed by Winning Moves became aware of the support through a referral from a business support organisation. A further quarter found out about the support from an online search, reflecting an extensive social media and online campaign for the operation. Following initial engagement, the majority of beneficiary businesses reported participating in webinars which covered a wide array of topics, such as web design, trends in the online market, GDPR, and ways in which to upgrade IT infrastructure. The webinars (or workshops as they were prior to COVID-19) typically culminated in an action plan for businesses that set out the steps associated with better exploiting ICT infrastructure to enhance the competitiveness of their business. Many businesses then followed up with one-to-one discussions with a superfast advisor, either in person or via the telephone. The advisor would run a diagnostic of the business and support the business in improving aspects of their IT, examples of which include producing reports for businesses on how they could improve their websites, or a discussion with business IT staff on how to manage the transition to superfast broadband.

Evidence from the Winning Moves business survey indicates that their experience with the support was not significantly impacted by the COVID-19 pandemic. The main impact on the delivery of the support was the transition to virtual consultations with the superfast broadband advisors. Although the beneficiary experience was (largely) unaffected by COVID-19, the team felt that some elements that you only gain through human interaction, particularly within the workshops (including the informal networking opportunities that these presented), were no longer possible when delivered virtually.

Performance

The midterm evaluation forecasted that the SFBE programme was likely to achieve most of its targets. Some concern was expressed in the early stages with regard to the challenge of collecting data on the introduction of new-to-firm products. However, monitoring data for the final evaluation indicate that the SFBE programme will hit all of its contracted targets, which has been confirmed by the project team.

One of the strongest elements of SFBE was its ability to quickly transition towards providing delivery online. One project manager noted that it was a credit to the delivery teams that the operation was able to fully transition to online delivery in 10 days. As noted above, in-depth business support interviews conducted as part of this evaluation show that businesses felt that the quality of delivery did not decrease at all during the course of the COVID-19 pandemic. At times the operation had almost struggled to respond to the level of demand that existed, with levels of interest being enhanced by the social restrictions associated with the pandemic.

Additionality

As the only operation under SO2.3, the team were relatively confident that the scheme was largely unique in Wales. Many businesses noted in the in-depth business support survey that prior to engaging with SFBE their digital knowledge was quite low, indicating that in many cases the support provided through the SFBE programme was strongly correlated with any digital improvement that they experienced.

CCTs

As of the midterm evaluation, over half of the SFBE beneficiaries (56 per cent) were women and 4.9 per cent of beneficiary businesses had Black, Asian or minority ethnic owners. The programme contributes to sustainable development through improving business efficiency, primarily through encouraging businesses to source more efficient equipment and adopt energy efficiency strategies. Many programme activities were also delivered virtually, ensuring that the benefits were spread as widely as possible with minimal environmental impact. The geographical distribution of the supported beneficiaries indicates that the project is contributing somewhat to tackling poverty and addressing social exclusion by supporting potential business growth across the entirety of Wales.

Reflections and recommendations

When asked to identify the strengths of the programme, many businesses were appreciative of the expertise of the operation's advisors, praising their ability to identify areas of improvement for businesses and provide them with actionable solutions. Furthermore, businesses praised the webinars for providing businesses with much new information on how they could improve the digital aspects of their business, especially their website and social media presence.

Evidence from the Winning Moves business survey indicates that many businesses would have also appreciated networking opportunities so that they could collaborate and share knowledge with businesses in similar sectors. What is more, several businesses expressed a desire for the support to be available over a longer term, as they felt that they would have benefitted more from one-to-one consultations further down the line so that new goals could be set to help further their use of ICT and fibre infrastructure in their business operations.

Amongst the project team, the relationship between the Welsh Government and contracted service providers was viewed as being a particular strength, which then bolstered a strong relationship between the service providers and the local authorities. Moving forward, there is a desire for support in the use of digital technologies to be increasingly mainstreamed within the business support offer in recognition of how pervasive it has become within business operations.

## Annexe C: Counterfactual impact evaluation

### Compiling beneficiaries

This annexe summarises the compilation of businesses supported by ERDF funding under Specific Objectives (SO) 1.2, 2.2, 2.3 and 2.4. The objective is to match supported companies without Companies House Numbers (CRN). This is to prepare beneficiary lists so that the supported businesses can be linked to ONS Secure Research Service (SRS) data, enabling an analysis of the impact of the ERDF-funded non-financial support on supported businesses in Wales.

After linking to the Companies House registry, there were 9,664 businesses in the beneficiary list with CRNs and these received 12,567 incidences of support; this was achieved through a list of 16,941 individuals and entities that received 21,554 incidences of support. The initial datasets included some CRNs, and our matching exercise identified additional business CRNs and corrected CRNs in the dataset, adding 3,338 incidences of support linked to CRNs. A breakdown by SO and operation reference of the CRNs matched is also provided.

### Approach

The initial dataset was composed of 22,601 instances of support, for which 12,000 CRNs were provided. After cleaning and checking the data, there were 9,229 legitimate CRNs (being eight characters in length and comprising eight digits or two letters and six digits). The high number of missing CRNs is to be expected because there were numerous individuals which would not have a CRN in the dataset. This translated to 8,228 unique CRNs of 16,877 entries, after correcting for instances of the same company having different CRNs/slight spelling differences.

There were several stages to the approach taken in cleaning and checking the data and identifying unique CRNs. The initial stage involved checking the accuracy of the data, from which 3,896 company names, CRNs, and postal codes exactly matched the Companies House registry, of which 3,153 were unique. Checking on the company and company number, an additional 3,268 businesses were confirmed, of which 2,808 were unique.

When comparing the CRNs provided to the different CRNs matched via the name from the Companies House registry, it became apparent that there were errors in the entered CRNs (typically having number orders inverted — seven out of 20 from a sample of the unmatched). Thus, linking by company name and postal code (which corrected at 100 per cent from a

sample of 10) was used to replace the CRNs that had not been confirmed in the previous checks, which corrected CRNs for 593 entries. As a result, 3,669 remaining CRNs were added from the data provided, as well as the link to the Companies House, which translated to an additional 3,131 businesses. Following this, company names were linked to the Companies House registry but restricted to only those residing in Wales, which added an additional 615 matches.

Projects that targeted primarily entrepreneurs (80754 ("Entrepreneurship Support – Business West Wales") and 80755 ("Entrepreneurship Support – Business East Wales")) were missing CRNs for 70 per cent and 64 per cent of entries. These were tagged as targeting individuals. Thus, given that they were focused on entrepreneurs, they would not count as missing Companies House Numbers. After cleaning, checking and linking the data, there were 9,654 identified businesses in the beneficiary list and these received 11,448 incidences of support, adding 2,219 incidences of support for 1,426 unique companies.

**Table C1: Results for number of CRNs and unique CRNs at each stage**

| Stage: Data Linking | # of CRNs | Total # of Entries | Unique # CRNs | Total # Unique | Accuracy of Add | Comment |
|---|---|---|---|---|---|---|
| Initial Data | 12,000 | 22,601 | 8,994 | 17,757 | n/a | Several manual data entries noted |
| Data Clean | 9,229 | 19,786 | 8,228 | 16,877 | n/a | Decreased as data were cleaned and companies with multiple CRNs were corrected to one, and mistakes in CRNs were dropped (fewer than eight digits or two characters and six digits) |
| Data Check Level 1: Match Name, CRN, Postcode | 3,896 | 19,786 | 3,153 | 16,877 | 100% (20/20) | Confirmation of exact data given for 3,896 entries |

| Stage: Data Linking | # of CRNs | Total # of Entries | Unique # CRNs | Total # Unique | Accuracy of Add | Comment |
|---|---|---|---|---|---|---|
| Data Check Level 2: Match Name and CRN | 7,164 | 19,786 | 5,961 | 16,877 | 100% (20/20) | Confirmation of data given at a company name and CRN for 7,164 entries |
| Data Link Level 1: Match Name and Postcode | 10,833 | 19,786 | 9,092 | 16,877 | 100% (20/20) | Use of full data provided by client, correcting errors in CRNs provided for 593 entries through match on name and postcode, which are more accurate (15/20 for data not previously confirmed), and adding additional CRNs |
| Data Link 2: Match Name | 11,448 | 19,786 | 9,654 | 16,877 | 85% (17/20) | Link is only for companies in Wales |
| Data Link 3: Removing Non-companies | 11,448 | 17,223 | 9,654 | 14,538 | 90% (18/20) | Projects 80754 and 80755 (Entrepreneurship Support – Business Wales (West & East Wales)) tagged |
| New Datasets Added and Linked | 12,567 | 18,113 | 9,664 | 14,602 | n/a | 10 new unique CRNs provided, hours for roughly 9,000 instances of support added |
| Data Complete Check on Unmatched | 5,775 unmatched | | 4,884 unique unmatched | | 90% (18/20) | Correctly not included in analysis |

Additional data were provided in several Excel documents during the early stages of the study. These were compiled, cleaned and added to the pre-existing data. After cleaning and linking to the original dataset, 890 new incidents of support were provided in the dataset, from which 64 uniquely identified companies were added.

### CRNs by Specific Objective

Below shows the table of CRNs found by Specific Objective. Table C2 focuses on incidences of support, while Table C3 covers the unique businesses once data had taken account of businesses that received multiple incidences of support.

**Table C2: CRNs found by Specific Objective by instances of support**

| Specific Objective | CRNs | Total | Percentage |
|---|---|---|---|
| SO1.2 | 1,159 | 1,216 | 95% |
| SO2.2 | 2,355 | 2,355 | 100% |
| SO2.3 | 2,767 | 5,325 | 52% |
| SO2.4 | 6,286 | 9,217 | 68% |
| Total | 12,567 | 18,113 | 69% |

The tables highlight general higher match rates where SMEs are targeted, with low percentages in the Specific Objectives where a high number of individuals/non-companies are targeted by the operation reference.

**Table C3: Unique CRNs found by Specific Objective**

| Specific Objective | CRNs | Total | Percentage |
|---|---|---|---|
| SO1.2 | 941 | 994 | 95% |
| SO2.2 | 2,218 | 2,218 | 100% |
| SO2.3 | 2,425 | 4,982 | 49% |
| SO2.4 | 4,080 | 6,408 | 64% |
| Total | 9,664 | 14,602 | 66% |

### Propensity score matching and model selection

A total of 22 models were used in finding a suitable control group that would most accurately reflect the counterfactual.

There were challenges in finding an appropriate counterfactual group for the treated businesses. These were primarily observed in the differences in the levels of growth in real turnover, employment, and real productivity in the two groups prior to the year of treatment. Significantly different levels of growth (i.e. the treated growing at a rapid rate, while the

comparison group were declining in these variables) violate the assumption of common trends (an econometric assumption that the counterfactual group and the treatment groups are growing similarly prior to treatment). Thus, the models were introduced in a manner of improving the matching, while gradually adding outcome variables (pre-growth rates). The trade-off between adding outcome variables would be that the match rate would improve in terms of pre-treatment period trends; however, it would nullify the additional growth rates and could risk matching businesses that are less similar but just happen to be growing at similar rates to those of the treated businesses.

The models were as follows:

- **Model I** – matching companies based on turnover categories, high-knowledge service sector, high level of manufacturing, scale-ups, whether they are tracked by Beauhurst, their previous year of employment, and year in which companies operate
- **Model II** – matching companies based on employment categories, IUK project beneficiaries, low-pay jobs, their previous year of employment, and year in which companies operate
- **Models III to V** – matching on combinations of turnover and employment categories, as well as numerous other categories
- **Models VI to X** – matching on combinations of two-year pre-treatment industry growth rates (employment and turnover)
- **Models XI to XV** – matching on combinations of one-year pre-treatment industry growth rates (employment and turnover)
- **Models XVI to XXII** – matching on combinations of one-year pre-treatment firm-level growth rates (employment and turnover).

**Probit estimates**

The groups of comparable businesses are identified using propensity score matching (PSM). This technique uses a statistical model of the selection process into support in order to estimate the likelihood of participating in the ERDF programme, i.e. the propensity score, and then matches businesses which have the closest propensity scores.

The selection model seeks to approximate the recruitment, application and selection processes, albeit in a simplified, quantitative model. If the model is robust, it can then be used to identify unsupported businesses that appear to be — in terms of the modelled

characteristics — very similar to the ERDF beneficiaries. A probit model is used to estimate how likely it is that companies would be given support (given their characteristics). A total of 22 models were run that produced results which were fairly consistent, of which three selected models are presented below.

**Table C4: Probit model estimations**

| Variables | Mod. I (n=756,621) | Mod. II (n=756,621) | Mod. III (n=756,621) |
|---|---|---|---|
| **Employment Categories** | | | |
| 3–9 employees | | 0.4923*** | 0.5161*** |
| 10–19 employees | | 0.8646*** | 0.8819*** |
| 20–49 employees | | 0.5193*** | 0.5356*** |
| **Turnover Categories** | | | |
| <£101,000 | 0.7552*** | 0.1756*** | 0.1838*** |
| £101,000–£500,000 | 0.8868*** | 0.3346*** | 0.3371*** |
| £501,000–£1,000,000 | 0.9689*** | 0.4255*** | 0.4279*** |
| £1–5 million | 0.6112*** | 0.2714*** | 0.2791*** |
| £5–10 million | 0.2986*** | 0.1599*** | 0.165*** |
| £10–50 million | 0.0888 | 0.0179 | 0.023 |
| **Sectoral Variables** | | | |
| Scale-up | | 0.1392*** | 0.106*** |
| Start-up | 0.0488*** | -0.0968*** | -0.1106*** |
| High-tech manufacturing | | 0.2923*** | 0.2738*** |
| Low pay | -0.0847*** | -0.0334*** | -0.0366*** |
| Live local units | | 0.003 | 0.004 |
| **Annuals** | | | |
| 2015 | 0.7464*** | 0.7083*** | 0.7077*** |
| 2016 | 0.8059*** | 0.7692*** | 0.7691*** |
| 2017 | 0.7701*** | 0.7429*** | 0.7427*** |
| 2018 | 0.6089*** | 0.5882*** | 0.5884*** |
| 2019 | 0.5316*** | 0.5233*** | 0.5225*** |
| **Previous Years of Employment and Turnover** | | | |
| Industry Ave. Emp. (t-1) | -0.41** | 5.1592 | 4.7025 |
| Industry Ave. Emp. (t-2) | -0.30* | 5.2663 | 4.8301 |
| Industry Ave. Turn. (t-1) | -0.35** | 5.2199 | 4.7424 |
| Industry Ave. Turn. (t-2) | 0.02 | 0.0299 | 0.0279 |
| Log employment (t-1) (start-up) | 0.14 | | |
| Constant | -4.0759*** | -3.8708*** | -3.8845*** |

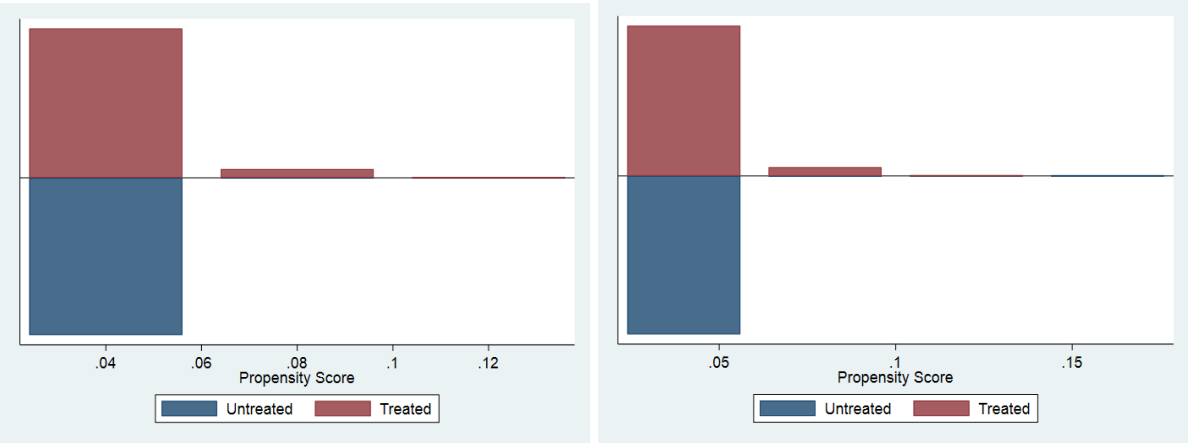
Table C4 indicates three estimated models. Positive estimates indicate that a variable increases the chance of participation. Selection tends to target smaller businesses. Past performance is also a strong correlation, with pre-support industry average employment growth

resulting in an increased chance of selection. Submitting a claim through the Coronavirus Job Retention Scheme also implies a positive weighting into selection.

### Matching outcomes

After identifying comparable businesses using PSM, the main robustness tests centre on the extent to which the treated and comparators are similar after matching and whether their pre-support growth paths were similar. In addition, various additional checks have been undertaken, such as considering whether propensity scores for supported and control broadly are matched so that the propensity to be treated is covered in the pool of unsupported businesses. Figure C1 presents two of the plots, namely one for Model I and the second for Model II, indicating how in these models all of the treated were matched.

**Figure C1: Propensity score plots for Models I and II**




### Data sources used for counterfactual

The modelling uses variables available on supported businesses prior to receiving support and the wider set of businesses. The variables are derived from the ONS Business Structure Database (BSD), which is linked to other datasets. The BSD provides annual firm-level employment and turnover for all significant UK businesses. Furthermore, it indicates their industry and location.

Work has been undertaken to define specific Standard Industrial Classification (SIC) codes as relating to highly knowledge-intensive industries and high-tech manufacturing. Using the BSD panel nature, pre-support employment or turnover trends can be estimated and geographical proxies, business age, employment, and turnover size categories are included. In addition, datasets linked to the ONS data are as follows.

Beauhurst is a data provider and tech start-up incorporated in 2010, providing software-as-a-service and information services, that tracks a selective group of 50k+ high-growth companies with tracking triggers based on performance. Belmana has the ability to extract Companies House-level data and fundraising data from Beauhurst through a series of code made by Belmana, which allows for rapid and comprehensive quantitative analysis. This allows us to conduct an impact analysis on companies at early stages of development, measure policies targeting innovation in SMEs, as well as the creation of new industries, and provide quantitative analysis where typically only quantitative understanding can be evaluated. As part of our analysis, we used fundraising and the status of whether a business is tracked by Beauhurst.

Innovate UK reports all incidences of Innovate UK support since 2004, providing business details, grant amounts, start dates, end dates, product information, and collaborators. This has been linked to the BSD. The fact that a business has received support in the past may reveal motivational characteristics, e.g. motivation to grow as well as actively seeking support to achieve this goal.

The Intellectual Property Office datasets are snapshots of patent/SPC applications received and subsequently published by the IPO. This dataset is then linked to businesses' enterprise reference numbers through matching on company names.

HMRC publishes a dataset covering all Coronavirus Job Retention Scheme claims submitted by employers from the start of the scheme until 31st August 2021. It includes statistics on the claims themselves and the jobs supported. Making a claim through this scheme can be used as a proxy of having been negatively affected by the COVID-19 shock.