



Welsh Economy
Research Unit
Yr Uned Ymchwil
i Economi Cymru

QUANTIFYING THE ECONOMIC IMPACT OF BUSINESS WALES: REPORT

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Summary

Cardiff Business School was commissioned in Summer 2021 to provide an assessment of the economic outcomes associated with Business Wales activity between 2015/16 to end June 2021.

The focus was to investigate how Business Wales programmes had worked to create new employment, new enterprises, investment and private sector leverage. The analysis is contextualised in terms of the economic conditions prevailing over the period.

Two main elements of the Business Wales services were examined. First, the new-start, core and growth support service and second the Accelerated Growth Programme (AGP). These elements of support have a common purpose in providing: “A clear, accessible route for all start-up and established SMEs in Wales to access the right support at the right time in order to support business growth in Wales.”

Critical context for operation of the Business Wales programme has been the economic contraction, and then recovery following the Covid-19 pandemic. Interventions put in place by UK and Welsh Government to assist small firms through the Covid-19 crisis are expected to have impacted the pattern of demand for Business Wales Services, as much as the underlying economic conditions. Outputs and outcomes were down for the AGP for 2020/21 as compared to 2019/20.

Accelerated Growth Programme

- The overall budget for the AGP was £26.9m with around 85% of funds committed at end June 2021. Programme monitoring data suggests around 9,900 jobs had been created against a target of 10,000 by the end of the programme.
- Business Accounting Systems (BAS) data reveals that since 2015-16 the AGP supported around £377m of investment in enterprise, some 9,755 jobs, £266m of exports. Around 30% of employment had been created in manufacturing sectors. Nearly 2,200 jobs have also been created in the financial and business services sector.
- In terms of the export increase of £266m, the majority of this has been supported in manufacturing (around 37%) and wholesale & retail (also 37%).
- This report estimates that the total gross 9,755 jobs created translates to around 5,332 net jobs i.e. around 45% of the employment outcomes might have occurred in the absence of the AGP intervention. These net jobs are estimated to be connected with around £410m of GVA.
- The cost per gross created job estimated using BAS data would be around £2,329. Once allowance is made for additionality it is estimated that the cost per net job created under the AGP is £4,261.
- The report analysis suggests that at October 2021 around 75% of the firms assisted under AGP were still active as opposed to dissolved, dormant or in liquidation.

Business Wales Core and Growth Programme

- Total programme spend from the start of January 2016 to end May 2021 was £37.1m. The programme monitoring data suggests a total of 8,396 enterprises received non-financial support, and with 4,610 new enterprises supported, and 12,280 individuals receiving support.
- Over the period to end September 2021 Business Wales, Core & Growth support was connected to a 15,447 employment increase in supported enterprises, 10,408 safeguarded jobs and £49.5m of exports supported.
- BAS data reveals that the programmes supported around £92.2m of investment in enterprise, some 14,471 jobs, and £45.4m of exports. There are some important differences in the sectoral distribution of employment created under the Core and Growth Support programmes in comparison with the AGP meaning that GVA supported per job created might be expected to be lower in the case of these programmes compared to the AGP where there is a higher representation of job creation of relatively high GVA sectors such as manufacturing.
- Under the Core and Growth programmes some 9,618 jobs were also safeguarded by interventions over the period since 2015.
- It is estimated that the total gross 14,471 jobs created translates to around an estimated 7,234 net jobs i.e. around 50% of the employment outcomes might have occurred in the absence of the Business Wales, Core & Growth intervention. These net jobs reported are estimated to be connected with around £380m of GVA. Total programme spending was estimated to be £37.1m as at end May 2021.
- The cost per gross created job estimated using BAS data would be around £2,564. Once allowance is made for additionality it is estimated that the cost per net job created under the Core and Growth programmes is £5,129.
- It was also estimated that 5,108 of the 10,408 safeguarded jobs under these programmes would not have been protected in the absence of the support, and with these jobs connected with an additional estimated £266m of Welsh Gross Value Added (GVA).
- In total then the activity under the Core and Growth programmes could be connected with as much as £646m of gross value added supported were job created and safeguarded to be maintained.
- Compared to firms starts in Wales as a whole over the period, firms assisted under these interventions are found to have better survival prospects.

1. Introduction

1.1. Analysis of Business Wales programmes

Cardiff Business School was commissioned in Summer 2021 to provide a high level assessment of the economic outcomes associated with Business Wales activity between 2015/16 to end June 2021.

The focus was to investigate how Business Wales programmes had worked to create new employment, new enterprises, investment, and private sector leverage. The analysis is contextualised in terms of the economic conditions prevailing over the period.

The analysis benefitted from data held on the Welsh Government BAS system (and associated monitoring information). This held data on small and medium sized enterprise (SME) and self-employment beneficiaries of Business Wales support across a range of programmes. The focus was to explore the role of Business Wales programmes in creating employment, new enterprises, supporting private investment and private sector leverage.

This report includes an estimate of net jobs supported by the Business Wales programmes.

1.2. Service elements considered in this report

Two main elements of the Business Wales services are separately examined in this report. First, the new-start, core and growth support service and secondly, the AGP. These elements of support have a common purpose in providing: “A clear, accessible route for all start-up and established SMEs in Wales to access the right support at the right time in order to support business growth in Wales.”

The outcomes generated by these elements of the Business Wales service are measured with indicators including:

- New businesses created (start-ups)
- New jobs created (including new jobs created above the Wales salary average for AGP)
- Value of export deals secured by supported businesses
- Investment leveraged into supported businesses

1.3. The main questions considered in the report

This report seeks to answer the following questions:

- What impact was generated by these Business Wales programmes in the period to Summer 2021?

- How should this economic impact be understood in terms of the regional, UK, and macro-economic conditions prevailing over the period, and latterly those prevailing through the immediate Covid-19 'period'?
- What is the relationship between the **gross** outcomes of Business Wales activity (for example, in terms of employment creation) and **net** outcomes allowing for issues such as deadweight, displacement, leakage, substitution and multiplier effects?
- What is the estimated cost per gross and net job created under Business Wales interventions in the period?
- How have firms assisted under Business Wales programmes performed in comparison to the wider population of Welsh SMEs, particularly in terms of survival and credit risk?

1.4. Structure of the report

The remainder of this report is structured as follows.

The second section of the report outlines the approach undertaken in the study, and the data used in the analysis. The third reviews the economic conditions prevailing during the period of the Business Wales programme of intervention, and with conclusions made in respect of how far economic conditions would have strengthened or weakened the outcomes from the intervention. The fourth section focuses on the AGP and examines the gross and net outcomes of this Business Wales activity in terms of key employment indicators, and then the comparative performance of firms assisted by this Business Wales programme in terms of survival rates and credit worthiness (the latter being a key indicator of business health). The fifth section repeats this analysis for the Business Wales Core and Growth programmes. The final section contains conclusions from the analysis and further recommendations.

2. Approach to the study

2.1. Introduction

This section explains how the analysis was undertaken and the main data sources used. It is important to recognise that this is a high level analysis, focusing on selected outcomes of Business Wales programmes.

2.2. Data sources: Welsh Government BAS

The main data source used in the analysis of gross (and then net in the case of employment) outcomes of Business Wales programmes was the BAS database. In the analysis the main fields used from this data included: company name; industry sector (2 digit Standard Industrial Classification, 2007); programme (i.e. whether AGP or other Programme – i.e. level of support); and date firm created and data on assistance provided.

Information was collected for each firm listed as benefitting from a Business Wales programme in terms of jobs created and safeguarded; value of investment in enterprise; projected turnover in assisted firm; and increase in value of export. For some firms there was no job creation or export growth associated with the SME treatment. The outcomes focused on in this report would not therefore identify all the beneficial effects from Business Wales assistance.

The BAS data was subdivided into activity linked to the AGP and data in respect of other Business Wales programmes. These other programmes are characterised as Business Wales Core and Growth Programmes falling under headings in BAS of:

- 4 Business Support - High Growth;
- 3 Business Support - Growth,
- 2 Micro-business Support – Standard;
- 1 Self-employment Support - Standard.

Note that there are many instances evident in the BAS data where firms and individuals have benefitted from assistance at different Programme levels over the period 2015/16- 2021. Then the number of reported interventions will therefore not tally with the actual numbers of firms and individuals supported by the Programmes (see later).

This firm level data was aggregated into two digit industry (SIC, 2007) groups. The rationale here was to gain estimates of job creation by industry, and then to allow an estimate of the Value GVA connected to each of the jobs created. The separation of jobs created into industry groups was also important for the estimation of the extent to which new jobs in these industries might be connected to the support of employment indirectly in other parts of the regional economy (i.e. multiplier effects vary by industry - see below).

Average GVA added/employee data was collected from the Office for National Statistics (ONS) using GVA current price estimates for 2019 and information from the Business Register and Employment Survey. There are some problems with this approach, as the GVA estimates are based on average GVA per employee estimates for one year during the period of the intervention, and it is assumed that the firms in which jobs are created share the characteristics of the industry average. This might be a more reasonable assumption for selected services as opposed to manufacturing sectors. As such the GVA figures connected to employment creation should be taken as indicative and used only as a guide to effects.

2.3. **Additionality: net and gross estimates**

The BAS data discussed in section 2.2 provides an indicator of the gross outcomes associated with the programmes of intervention. However, for evaluation purposes it is necessary to understand the net outcomes associated with the programmes. In moving from gross to net outcomes it is then necessary to derive some broad assumptions on deadweight, displacement, leakage, substitution, and multiplier effects associated with interventions.

Estimating the value of factors such as deadweight and displacement is always complex, and a wide variety of methods can be used. Research in Wales estimating the additionality of European Structural Fund interventions has tended to gain inference on issues such as deadweight and displacement from fieldwork with beneficiaries and project and programme managers. The short time-scale of this project precluded such primary work.

In consequence this study derived deadweight, displacement, substitution, and leakage factors from a review of prior evaluations in both Wales and the wider UK, and with this including previous meta-analysis of additionality from a wide range of programmes (see BIS, 2009, and DBERR, 2009). Examples of deadweight and other related factors in reviewed work are found in Figures 2.1 and 2.2. While this research is somewhat dated the results in terms of additionality are still a relevant reference source. This process is however not without problems. For example, the meta analyses results reviewed in Figure 2.1 and 2.2 include studies at different spatial scales (with this affecting leakage and multiplier effects).

Figure 2.1 Examples of mean deadweight factors from UK BIS Sponsored Research on Additionality (2009)

	All mean %	All median %	Business development	Phys. Regen	People & skills
Deadweight	43	43	45.5	33.9	39.4
Displacement	29.6	25	29.3	37.4	24.7
Leakage	11.3	5	11.5	10.4	14.2

	All mean %	All median %	Business development	Phys. Regen	People & skills
Substitution	3.4	0	3.4	2.2	4.4
Multiplier	1.45	1.43	1.51	1.4	1.36
Net additional	50.3	48.8	49.7	50.8	55.1

Source: BIS OCCASIONAL PAPER NO. 1, Research to improve the assessment of additionality October 2009 see:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/191512/Research_to_improve_the_assessment_of_additionality.pdf

Figure 2.2 Examples of relationships between gross and net outcomes from UK regional development agency evaluations (2009)

	Evaluations	Expenditure	Gross outputs	Net outputs	Additionality
Jobs created/safeguarded	177	5189.1	471,869	212,873	45
People asst to empl	23	231	59,119	30,375	51
Skills assists	46	2,553.8	716,389	403,535	56
Business created	63	3,359.1	17,924	8,519	48
Business assisted	30	563.9	90,564	35,017	35
Land remediation	28	1,360.5	810.4	572.2	71

Source: Department for Business,Enterprise & Regulatory Reform Impact of RDA spending –

National report – Volume 1 – Main Report

March 2009

<https://webarchive.nationalarchives.gov.uk/20090609050004/http://www.berr.gov.uk/files/file50735.pdf>

The material in Figures 2.1 and 2.2 includes limited evidence from Wales. A review of evaluations undertaken by Oldbell 3 Limited for the Welsh European Funding Office reveals net job outcomes as a proportion of gross of:

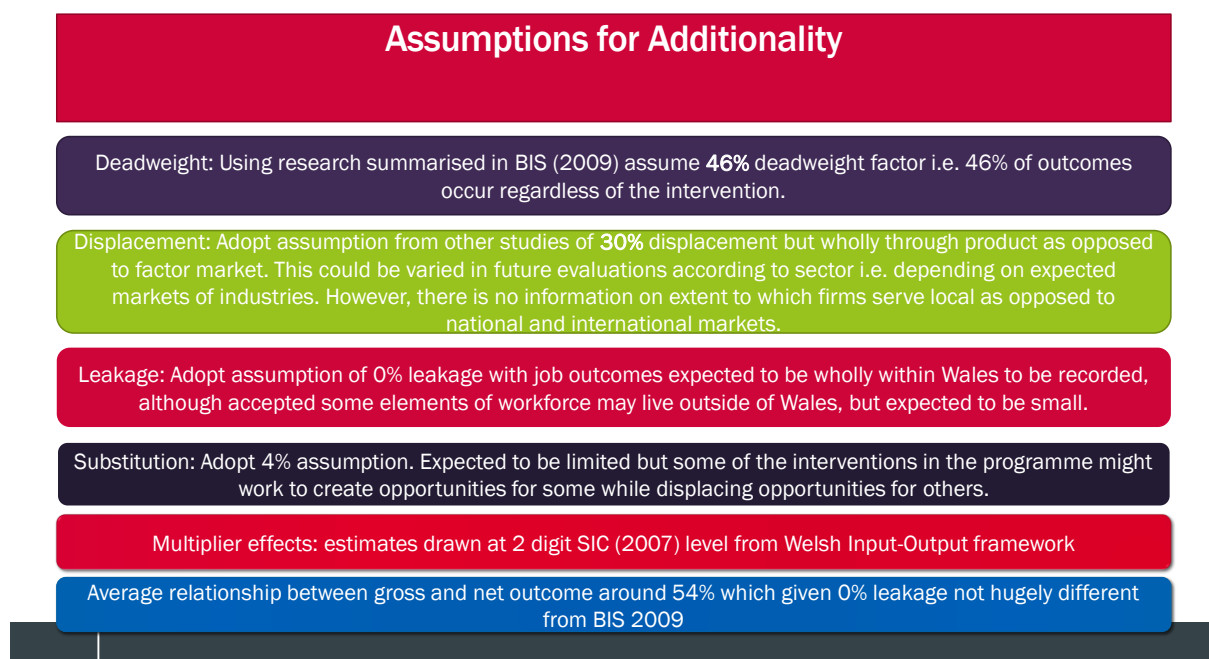
- 52-74% in programmes related to developing the competitiveness of SMEs
- 30-44% for programmes stimulating ICT use
- 33-50% for programmes involving financial support to SMEs
- 37-56% for job creation through innovation and R&D in SMEs.

The deadweight, displacement, leakage, and substitution assumptions used in this report derive from the review of this prior evidence and are summarised in Figure 2.3. Information with respect to multiplier effects are derived from employment multipliers within the Welsh Input-Output framework.¹

¹ See The Input-Output Tables for Wales (2007) for an explanation of employment multipliers.

https://www.cardiff.ac.uk/_data/assets/pdf_file/0010/698869/input-output-tables-2007-final-30-6.pdf

Figure 2.3 Summary of Additionality* Assumptions Used



*Note: Additionality. Gross impacts – (1-deadweight factor) – (1- displacement factor) – (1- leakage factor) – (1- substitution factor) + (multiplier effects) = net impact

The core assumptions in this report on additionality are not differentiated by types of programme i.e. by whether AGP or other support interventions.

In summary here then the BAS data on programme outcomes in terms of employment creation is aggregated into industry groups providing gross outcomes by industry. This becomes the basis for estimating GVA connected to the jobs created. We then apply various additionality factors (see Figure 2.3) at the industry level to gain net outcomes in terms of employment and GVA.

2.4. Programme-level information: costs per job created

The data from the analysis of BAS is complemented by Programme Monitoring data on spending and employment creation, export value, and investment value. There are some discrepancies between data held on BAS and that included in Programme Monitoring reports. In part this relates to time lags. (Note that at the time of writing this report Programme Monitoring data was available to the authors until the end of June 2021 (BW AGP and end of September (BW Core and Growth programme), whereas BAS data was available until end July 2021. Then the approach here is to apply the net of gross estimates from the activity records in BAS to the overall programme data to gain further estimates of costs per gross and net job created.

2.5. Assisted firm performance

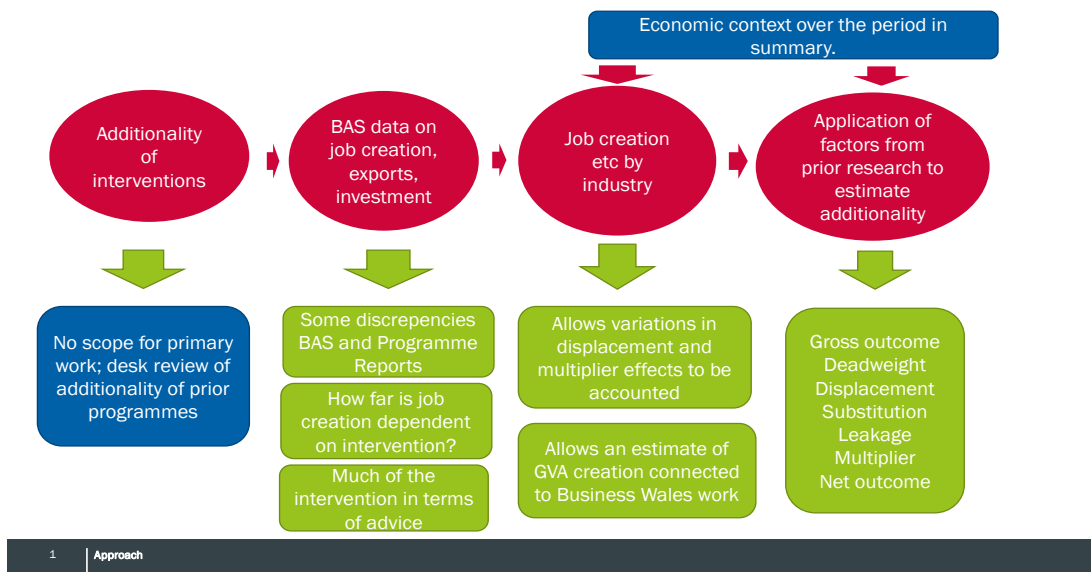
In addition to the above analysis it was also possible to explore some further elements of the performance of firms assisted by the Business Wales programme of support.

The adopted approach was to provide some analysis of the survival rates of firms assisted by Business Wales programmes. This links to the longevity of employment creation. For example, if government assistance is connected to new job creation, but then these jobs are short lived, then the economic value is more limited. It is difficult with so many firms assisted by the programme to accurately track how far new job creation translates into job years of employment. However, some insights can be gained from looking at survival trends in assisted firms, and how these compare to survival trends in the wider population of Welsh firms.

Companies House data derived from the Bureau van Dijk FAME database was used to examine survival trends in assisted firms compared to those in the wider population. In the case of Business Wales Core and Growth Programme assisted firms, the large numbers of intervention points involved meant that two samples of 1,000 SMEs assisted were taken from programmes listed under Level 3 Business Support – Growth and Level 4 Business Support - High Growth. It is accepted in our analysis here that a number of SMEs in the samples might also have been assisted under two or three separate levels of support.

The firms identified on FAME which had received assistance were then examined in respect of their status in October 2021 i.e. whether active, dissolved, in liquidation etc. It was then possible to make a basic comparison of the extent to which the firms founded, for example, in 2016 and which had received support were still trading in 2021; and then with this being compared to how many firms in Wales founded in 2016 were still trading in 2021. This was accompanied by an analysis of the credit scores of assisted firms and with this one indication of assisted firm health.

Figure 2.4 Summary of Overall Approach



3. Economic context of Business Wales interventions 2015-2021

3.1. Introduction

This section provides a brief overview of economic conditions prevailing over the period 2015-2021. We focus here on the more recent period 2019-2021, and with economic conditions prevailing over the period 2015-19 examined in a prior interim analysis of the Business Wales programmes completed in 2019.

In summary the period 2015-2019 revealed:

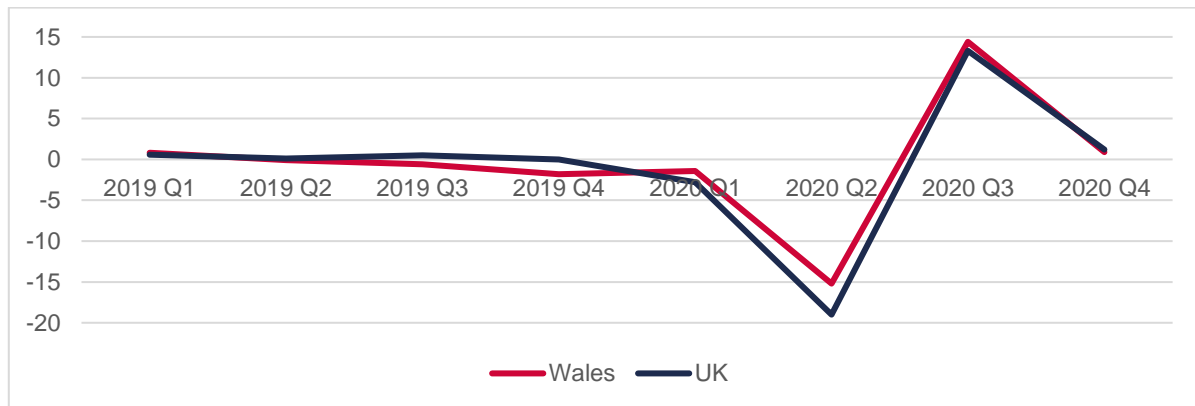
- The Business Wales interventions occurred over a period where UK GVA growth was slower than in the period preceding the Credit Crunch in 2008-09, and with GVA growth tailing off towards the end of the analysed intervention period in 2019.
- Welsh labour market conditions over the period of the intervention were strong. There were some caveats here in terms of the fact that this strength did not appear to work through to any improvements in closing the Wales/UK GVA per capita gap, GVA growth or regional productivity.
- The period 2015 - 2019 was marked by steady increases in Welsh output indices in respect of market services, and some increases in the Welsh index of production (2017-2018 excepted).
- The Business Wales intervention programmes occurred during a period where marked differences remained in terms of access to economic opportunity in the regional economy, and in the context of persistent socio-economic disadvantage in some parts of the Welsh economy.
- The intervention period coincided in large measure with a time of growth in activity in Welsh SMEs, albeit with growing concerns about the performance of the smallest firms in the regional economy.
- The programme period occurred over a time of growing concerns over Brexit transition.

3.2. Recent context for Business Wales interventions 2019-2021

Critical context for operation of the Business Wales programme post-2019 has been the economic contraction, and then recovery following the Covid-19 pandemic. The UK as a whole saw the largest annual economic contraction on record in 2020 (a 9.9% decline) but with some recovery in GDP during the second quarter of 2021 which equates approximately with the end of the period of Business Wales interventions considered in this report. However, for the UK as a whole GDP at the end of the second quarter of 2021 was still over 4% below the last pre-pandemic quarter (i.e. the fourth quarter of 2019).

On a more positive note GDP figures were somewhat better in Wales than in the UK as a whole after the start of the pandemic. Figure 3.1 reveals quarterly (experimental) GDP estimates for Wales. Prior to the pandemic the Welsh economy lagged slightly behind the UK in terms of GDP quarterly growth. However, between the first quarter of 2020 and the third quarter the quarterly growth of GDP in Wales was slightly above that of the UK, with growth rates converging in the final quarter of 2020.

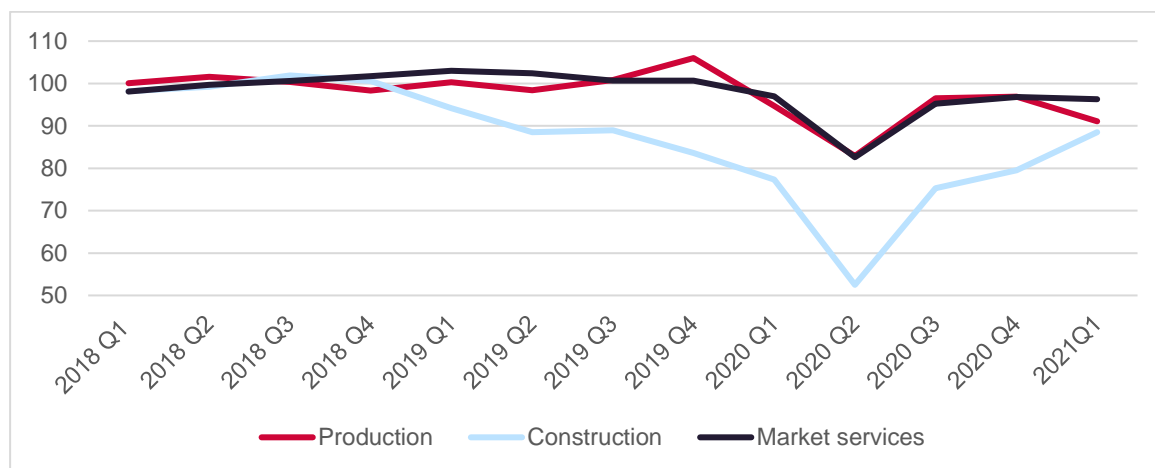
Figure 3.1. GDP quarterly percentage change



Source: [ONS, 2021](#)

More of the contextual story for expected demand for Business Wales interventions is found in Figure 3.2. This reveals trends in Welsh output leading up to, and then through the Covid-19 crisis. This shows the sharp decrease in output through the Covid-19 period. However, it also shows falling output in the period preceding the pandemic. These pre-Covid trends may have been linked to poorer business prospects for firms leading up to the UK's exit from the EU at the end of 2020.

Figure 3.2. Welsh output indices: trends 2018Q1 - 2021Q1 (2018 =100)



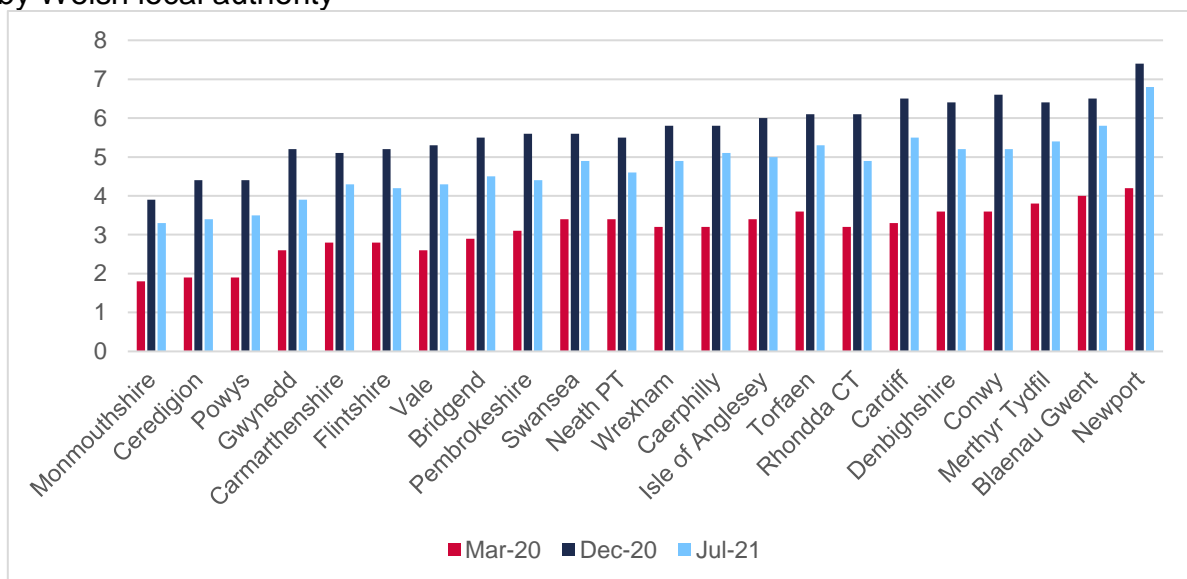
Source: Stats Wales, [Welsh Indices of Production and Construction \(2018=100\) by section and year](#) and [Index of Market Services \(2018=100\) by year and area](#)

Interventions put in place by UK and Welsh Government to assist small firms through the Covid-19 crisis (including regionally-led interventions such as those supported by the Economic Resilience Fund and Covid Wales Business Loan Scheme) are expected to have impacted the pattern of demand for Business Wales Services, as much as the underlying economic conditions. There is some expectation that the Business Wales outputs for 2020-21 would have been much reduced due to the poor economic conditions. This is actually confirmed in the following sections of this report which sees outputs and outcomes down for the AGPe for 2020/21 as compared to 2019/20 (Section 3). Following from the above disentangling the effects of Business Wales support from other Wales and UK-wide interventions in the period 2020-21 is extremely difficult.

3.3. Labour market indicators and business demography

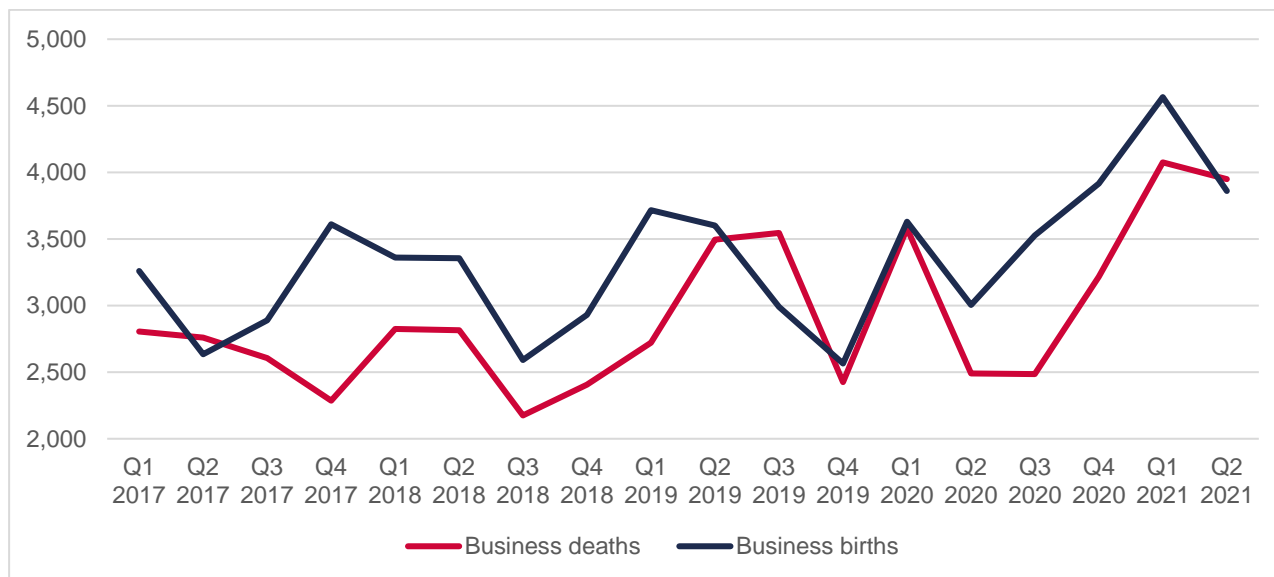
Further context for Business Wales activity in the latest period is provided by labour market indicators. These also evidence poorer economic conditions in the most recent period covered in this Business Wales analysis. Figure 3.3, for example, shows how unemployment increased in Wales through the 2020-21 period and with this occurring despite the operation of the UK Government furlough scheme over much of the period.

Figure 3.3. Proportion of working age people claiming unemployment-related benefits by Welsh local authority



Source: [ONS, 2021](#)

Figure 3.4. Quarterly business births and deaths in Wales 2017-2021Q2



Source: Business demography, quarterly experimental statistics, UK

Poorer labour market conditions ran parallel to small business confidence in the period after 2019. The Federation of Small Businesses reported that small business confidence dipped to extremely low levels in 2020-21. Indeed, in the last quarter of 2020 SME confidence was reported at a level of -48, and only returned positive (+34) in the first quarter of 2021.²

Business demography statistics provide a more mixed picture in the latest year (Figure 3.4). For example, Welsh business births actually increased by 28% in the year to 2021Q2, while business deaths increased by 59% over the same period.

3.4. Conclusion

To conclude the period 2015- 2021 has seen growing uncertainty over the implications of EU transition coupled in the latest period with the shock of Covid-19. There is a strong expectation that the outputs achieved by Business Wales intervention in the 2020/21 year would not have been as strong as in previous periods due to the prevailing conditions impacting demand and with many businesses placed on hold during the first Covid-19 lockdown period.

² FSB Voice of Small Business Index 2021Q2

4. Accelerated Growth Programme

4.1. Programme activity

Figure 4.1 summarises spending and outputs achieved by the Business Wales AGP. Note that the information in Table 4.1 reveals information on outputs (indicators such as individual supported) and outcomes (for example, indicators such as jobs created).

Figure 4.1: AGP: Spending, Outputs and Outcomes (estimated end June 2021)

	2015/1 6	2016/1 7	2017/1 8	2018/19	2019/2 0	2020/21 3	Total
Actual spending	£1.85m	£2.63m	£4.52m	£5.35m	£3.87m	£4.51m	£22.72m
Jobs created	392.0	860.7	2077.1	2170.5	2555.6	1839.7	9895.5
Export increase	£3.89m	£4.40m	£50.44m	£67.85m	£80.19m	£61.56m	£268.33m
Investment in enterprise	£5.62m	£15.82m	£82.67m	£107.19m	£99.97m	£68.39m	£379.64m
New enterprises supported	0	27	82	84	86	19	298
Individuals up to 6h non-fin support	36	55	96	84			271
Enterprises 6h non-fin support	161	95	134	154			544

Source: Data provided by Business Wales.

³ Including data to June 2021

The overall budget for the AGP was £26.9m meaning that around 85% of funds had been committed at end June 2021. Total spending on the programme was largely in line with profile (actual £22.72m against a profile £22.21m). The monitoring data suggests around 9,900 jobs had been created against a target of 10,000 by the end of the programme.

4.2. Analysis of BAS data for the Accelerated Growth Programme

The BAS data for the AGP revealed a total of 986 reported interventions. Section 2 revealed that information on these interventions was placed into industry sectors and then an estimate of GVA connected to job creation was derived.

Figure 4.2 summarises the outcomes from the Programme by broad industry group. The BAS data reveals that the AGP Programme supported around £377m of investment in enterprise, some 9,755 jobs, £266m of exports (each a little lower than the total reported in Figure 4.1 which is based on Programme Monitoring Data to end June 2021). The £377m of business investment was connected to a projected turnover of £5.99bn.

Around 30% of employment had been created in manufacturing sectors and with this being a sector that was strongly hit by uncertainty leading up to the exit of the UK from the EU. Nearly 2,200 jobs have also been created in the financial and business services sector. How far new activity supported in these sectors prior to 2019 by Business Wales interventions has (and will) survived the Covid-19 problems is an unknown. It is still too early to come to firm conclusions on this issue with the UK job furlough scheme only ending around the time this report was compiled. There is also an interesting question around how far Business Wales programme beneficiaries as a whole were successful in applications for assistance from the initial phases of the Welsh Government Economic Resilience Fund, and other locally led intervention measures. Later in this section we do undertake some general survivor analysis of SMEs assisted under the AGP.

In terms of the export increase of £266m, the majority of this has been supported in manufacturing (around 37%) and wholesale & retail (also 37%). This increase in exports if maintained from year to year should be viewed in the context of total exports from Wales averaging £15.9bn per annum between in 2015-2019⁴ (i.e. prior to the Covid-19 disruption). It is important to recognise that this export uplift is among firms that are largely in the smallest SME employment category (i.e. micro-firms). This is a response to a challenge to create new export opportunities across all Welsh firms, given that much of total Welsh exports are still supported in just a relatively small number of large firms. Diversifying the regional export base is critical in the in the period since the UK has exited the EU, and with the UK as a whole seeing a relatively sluggish export performance in both goods and services in the 2020-21 period.

⁴ Value of exports to destinations outside the UK at: <https://statswales.gov.wales/Catalogue/Business-Economy-and-Labour-Market/Businesses/Exports/welshexports-by-quarter-destination>

Figure 4.2 Summary Outcomes from the AGP to end July 2021

Sector	Value of Investment in Enterprise £	Gross Jobs Created FTE	Value of export £	Net Jobs FTE	GVA associated with net jobs £
Primary	£8.2m	293	£0.1m	166	£10.7m
Manufacturing	£68.2m	2,891	£97.7m	1,914	£214.1m
Utilities & waste management	£23.6m	127	£10.0m	60	£6.1m
Construction	£10.9m	710	£6.6m	378	£28.4m
Wholesale & retail	£16.0m	1,099	£99.1m	536	£17.7m
Transport	£1.4m	114	£2.3m	54	£9.3m
Accommodation & food serving	£9.5m	406	£0.6m	174	£3.9m
Communication & ICT	£49.5m	1,271	£15.9m	617	£38.6m
Financial & business services	£164.1m	2,179	£31.3m	1,064	£65.9m
Other services	£25.1m	664	£2.6m	369	£15.2m
Total (may not sum due to rounding)	£376.5m	9,755	£266.4m	5,332	£409.8m

The job creation number reported in Figure 4.2 is a gross number not allowing for deadweight, displacement, leakage, substitution, and multiplier effects. Applying the factors allowing for these effects (see Section 2 for discussion) this report estimates that the total gross 9,755 jobs created translates to around 5,332 net jobs i.e. around 45% of the employment outcomes might have occurred in the absence of the Business Wales AGP intervention.

The net jobs reported in Figure 4.2 are estimated to be connected with around £410m of GVA. Total programme spending was estimated to be £22.717m as at end June 2021. Then the following points can be made:

- The cost per gross created job estimated using BAS data would be around £2,329. Once allowance is made for additionality it is estimated that the cost per net job created under the AGP is £4,261.

- The net jobs created here if maintained would support an estimated £410m GVA uplift in Wales per annum.
- Each £1 of Business Wales AGP spending can be connected to a £18.0 uplift in Welsh GVA per annum were supported employment to be maintained.

These cost per job estimated are based on BAS data. Were the additionality factors to be applied to the Programme monitoring data (i.e. the slightly larger jobs total identified in Figure 4.1) the cost per gross job created would be an estimated £2,296, and the cost per net job £4,174.

It is critical here to remember that not all of the AGP interventions created employment which reinforces the conclusion that the numbers reported above are very much estimates. Recall also that there are important questions around how far employment created will be maintained in the long term given the problems caused by Covid-19. This noted much of the employment creation here is outside some of the industries known to have been worst impacted by Covid-19 including tourism-facing sectors and transport.

4.3. Accelerated Growth Programme – assisted firm performance

Section 2 outlined that from the BAS database made available by Welsh Government, we extracted details (company name) for businesses supported during the treatment period 2015 -2021 to enable an exploration of business survival. The company names associated with the 986 intervention cases were input to the Bureau van Dijk FAME database. The FAME Batch Search programme was used. The software seeks to match the names of the enterprises from the Welsh Government data with company names on FAME. The software identifies matches and shows whether the match is rated excellent to poor on an A to E scale. Only Excellent 'A' matches were used for further analysis. The records were further cleansed to remove obvious mismatches and with a number of businesses with almost identical names in other parts of the UK.

This process left 685 matched records. The FAME database contains only businesses that are registered at Companies House. As such, it needs to be borne in mind that the survival analysis was restricted to businesses that are, or were, incorporated over the period. Moreover, some recently assisted new starts would not have submitted financial reports to Companies House based on their first year of trading at the time of this report.

There are a series of issues that might be investigated using these enterprise records from FAME. While many of the identified enterprises produced only modified accounts (i.e. limited data on profit and sales performance) they were used to examine:

- Survival rates among enterprises that benefited from the AGP, and how these compared to survival rates in a wider population of Welsh SMEs.
- How assisted enterprises score in terms of their credit ratings, and how stable they are seen to be in this respect.

- Whether the employment created is expected to be sustainable or short-lived i.e. is employment supported in firms with good survival prospects?

There is some need for caution in the analysis. For example, some of the firms assisted under the Programme may have also benefited from prior Business Wales assistance, and a large majority of firms will have been beneficiaries of interventions during the Covid-19 period. There is also the prospect that some successful assisted firms were taken over in the period such that they are not easily identified in the FAME database.

4.4. Survival Rates and Credit Ratings

Figure 4.3 reveals the characteristics of the incorporated enterprises identified on the FAME database. Of the 685 enterprises 408 were incorporated prior to 2015 and the beginning of the Business Wales AGP. Figure 4.3 shows that at the time of the FAME search (October 2021) of the 685 enterprises identified, 516 (75 percent) were still active, and 169 (25 percent) were either dissolved, dormant or in liquidation.

Figure 4.3 Survival of Firms Assisted under AGP – Incorporation data and status at October 2021

Year Incorporated	Firms incorporated	Active	Dissolved	Liquidation	In dormant, in default etc	% Active	All Wales % Active
-2014	408	318	67	12	11	77.9	na
2015	59	34	16	1	8	57.6	32.1
2016	66	46	13	0	7	69.7	28.4
2017	53	41	7	2	3	77.4	32.7
2018	45	32	6	0	7	71.1	40.2
2019	39	33	1	0	5	84.6	49.1
2020	12	10	0	0	2	83.3	83.9
2021	3	2	0	0	1	66.7	na
Total	685	516	110	15	44	75.3	na

Source: Analysis derived from FAME database

The next stage was to investigate how these rates of failure/survival compare with the wider Welsh population of firms held within the FAME database. This analysis is only carried out for the years 2015-2020. For 2015 Figure 4.3 reveals that 57.6% of the AGP assisted firms were still active in 2021, compared to a figure of just 32.1% of all Welsh firms incorporated in that year. This pattern is repeated for years 2016-2019. This would be largely as expected given that the firms targeted for assistance under AGP tended to be established with strong growth aspirations. For enterprises incorporated in 2020 the percentages of AGP assisted firms, and all Welsh firms, still active were almost equal (83%). The four year survivability rate for AGP assisted businesses is 77% compared to 33% for a matched sample of non-assisted businesses (AGP).

The next analysis related to the credit scores of the enterprises. The credit score on FAME is a measure of the likelihood that a business will become bankrupt in the twelve months following the date of calculation. More specifically, it predicts the likelihood that a business will obtain legal relief from its creditors or cease operations over the following twelve month period.

The credit score is given as a number in the range 0 to 100, where 0 represents companies with the highest likelihood of failure. The broad ranges used are as follows:

- Stable 60-80: Normally large and successful public companies. Businesses scoring 60-80 are classified as 'stable' meaning that failure here would be a rare occurrence and would only happen as a result of a major company or market change.
- Normal 40-59: Contains many businesses that do not fail, but some that will fail.
- Unstable (Caution) 20-39: Significant risk of failure according to FAME and that businesses in this band are 'on average, four times more likely to fail than those in the Normal Band'.
- High risk 0-19 Businesses likely to have problems continuing trading unless 'significant remedial action is undertaken, there is support from a parent company, or special circumstances apply'.

Figure 4.4 shows the FAME credit scores for the 685 identified enterprises supported through AGP. Of the 685 firms assisted by the Programme just 480 had current credit scores (i.e. 205 had perhaps not submitted their first years accounts to Companies House or had failed in some way). Of the 480, just 3.8% were rated as High Risk, and 40% as Unstable. Then Figure 4.4 reveals that compared to all Welsh firms on the FAME database, the assisted firms have a slightly lower proportion in the High Risk category, and a lower proportion in the Caution category, but higher proportions in the Normal and Stable/secure categories.

Figure 4.4 Credit Scores of Firms Assisted under the AGP

Credit score	AG Programme firms	AGP Programme firms in risk category %	Wales firms in category	Wales firms in category %
0-19 High Risk	18	3.8	3,046	4.0
20-39 Caution	194	40.4	38,878	51.2
40-59 Normal	148	30.8	21,575	28.4
60+ Stable/secure	120	25.0	12,370	16.3
Total known	480	100.0	75,869	100.0
Not known	205		318,962	
Total	685		394,831	

5. Business Wales Core and Growth

5.1. Programme activity

Figure 5.1 shows achieved outcomes to 2021 for the Core and Growth Business Wales service (non-AGP) i.e. self-employment support, micro-business support, growth and high growth business support. Whereas activity on the AGP over a similar period resulted in 986 separate interventions with firms, the total interventions under Core and Growth programme activity were much larger at 18,207 and with some SMEs and individuals having experienced multiple interventions here.

Analysis of the BAS dataset (covering all Business Wales interventions suggests that an estimated 83% of SMEs will have experienced just one intervention (including some cases of multiple intervention under one strand of a specific Business Wales programme, for example, firms gaining support twice under programmes categorised under Micro-Business Support) in the period. Around 15% experienced two interventions under separate programmes, and around 2% three or more interventions under separate programmes. By far the most common 'multiples' are cases of firms/individuals receiving support under the Self Employment Support and Micro-Business Support; and Business Support Growth and Business Support High Growth (i.e. both these combinations making up around 25% of cases each where SMEs/individuals have experienced two or more interventions). Then a total of 19,193 interventions (across the AGP, and Business Wales Core and Growth Programmes) equates with an estimated 15,931 separate SME/individuals assisted.

Of the 18,207 interventions 6,762 (37.1%) were categorised under self-employment support, with 15.1% of interventions targeted on micro-business support, 28.7% under business growth and 19.1% under business high growth.

Total programme spend from the start of January 2016 to end May 2021 was £37.1m. The programme monitoring data suggests a total of 8,396 enterprises received non-financial support, and with 4,610 new enterprises supported, and 12,280 individuals receiving support.

Over the period to end September 2021 Business Wales support was connected to a 15,447 employment increase in supported enterprises, 10,408 safeguarded jobs and £49.5m of exports supported.

Figure 5.1: Outputs and Outcomes on Business Wales Core and Growth – Cumulative outcomes

	Jan 2016 to March 2017	April 2017 to March 2018	April 2018 to March 2019	April 2019 to March 2020	April 2020 to end of March 2021	To end of Sept 2021
EU Funding Indicators						
Enterprise Receiving Non-Financial Support	810	2,521	4,714	6,484	7,793	8,396
Individuals Receiving Support	551	3,080	6,065	9,417	11,251	12,280
Employment Increase in Supported Enterprise	1,319	4,845	8,898	12,511	14,249	15,447
Value of Exports £m	£3.1m	£8.2m	£16.2m	£29.8m	£39.5m	£49.5m
Number of new enterprise supported	133	784	1,771	3,274	4,019	4,610
Adopt or Improve Environmental Sustainability Strategies (Combined)	22	330	1,385	2,171	2,742	3,294
Enterprises Adopting or Improving Equality Strategies (Combined)	85	560	1,280	2,003	2,495	2,982
Welsh Government Indicators						
Investment in Enterprise £m	£5.1m	£15.1m	£34.0m			£101.8m

	Jan 2016 to March 2017	April 2017 to March 2018	April 2018 to March 2019	April 2019 to March 2020	April 2020 to end of March 2021	To end of Sept 2021
				£51.3 m	£89.9 m	
Jobs Safeguarded	51	840	1,852	3,215	8,486	10,408
Value of Deals £m						£538.8m
Mentoring Relationships Established (+ Add Value)						1,379
Number of New Growth Enterprises Supported	36	299	632	1,124	1,348	1,521
Number of Growth Enterprises Supported	463	1,535	2,795	3,786	4,767	5,178

5.2. Analysis of BAS data for Business Wales Core and Growth

As reported above, the BAS data in respect of the Business Wales Core and Growth Support programmes revealed a total of 18,207 reported interventions. Recall again from section 2 and 4 of this report that information on these interventions was placed into industry sectors and then an estimate of GVA connected to the job creation was derived.

Figure 5.2 summarises the outcomes from the Business Wales Core and Growth Support programmes by broad industry group. The BAS data reveals that the programmes supported around £92.2m of investment in enterprise, some 14,471 jobs, and £45.4m of exports. Again, there are some discrepancies with the monitoring data in Figure 5.1. with, for example, 15,447 new jobs in the monitoring data (covering the period to end September 2021) against 14,471 in the BAS data (covering up to end July 2021). The £92m of business investment was connected to projected turnover of £7.76bn.

There are some important differences in the sectoral distribution of employment created under the Business Wales Core and Growth Support programmes in comparison with the AGP. For example, Figure 5.2 reveals that just 13% of employment created was in manufacturing, with relatively higher levels of employment supported in sectors such as Accommodation and food serving (19.7% of new employment), financial and business services (18.1%) and Other services (23.6%). One conclusion, here deriving from the differences in sectoral contribution, is that GVA supported per job created might be expected to be lower in the case of Business Wales Core and Growth Support programmes compared to the AGP where there is a higher representation of job creation of relatively high GVA sectors such as manufacturing.

In terms of the export increase of £45.4m, the bulk of this was supported in manufacturing. Then for the Business Wales Core and Growth programmes manufacturing accounted for 13.1% of employment created under the programmes but 42.1% of exports.

It is also important to distinguish the Business Wales Core and Growth programmes from AGP in terms of jobs safeguarded. Under AGP, BAS records just 27 jobs safeguarded (possibly an under-estimate). However, under the Core and Growth programmes some 9,618 jobs were safeguarded by interventions over the period.

The 14,471 job creation number reported in Figure 5.2 is a gross number not allowing for deadweight, displacement, leakage, substitution, and multiplier effects. Applying the factors allowing for these effects (see Section 2) it was estimated that the total gross 14,471 jobs created translates to around an estimated 7,234 net jobs i.e. around 50% of the employment outcomes might have occurred in the absence of the Business Wales intervention.

The net jobs reported in Figure 5.2 are estimated to be connected with around £380m of GVA. Total programme spending was estimated to be £37.1m as at end May 2021. Then the following points can be made:

- The cost per gross created job estimated using BAS data would be around £2,564. Once allowance is made for additionality it is estimated that the cost per net job created under the Business Wales Core and Growth programmes is £5,129.
- The net jobs created here if maintained would support an estimated £380m GVA uplift in Wales per annum.
- Each £1 of Business Wales spending can be connected to an estimated £10 uplift in Welsh GVA per annum were employment to be maintained.

These cost per job estimates are based on BAS data. Were the additionality factors to be applied to the Programme monitoring data (i.e. 15,447 jobs in Figure 5.1) the cost per gross job created would be an estimated £2,402, and the cost per net job an estimated £4,805.

It is critical here to remember that not all of the Business Wales Core and Growth programme interventions created employment which reinforces the conclusion that the numbers reported above will not capture all the outcomes of the interventions. Furthermore, the above takes no account of jobs safeguarded under these programmes. Applying the above analysis stages to the jobs safeguarded numbers would imply that perhaps 5,108 of the 10,408 safeguarded jobs would not have been protected in the absence of the support, and with the 5,108 jobs connected with an additional estimated £266.35m of Welsh GVA. In total then the activity under the Business Wales Core and Growth programmes could be connected with as much as £646m of gross value added supported were job created and safeguarded to be maintained.

Figure 5.2 Summary of Outcomes Business Wales Core and Growth Programmes) to end of July 2021

Sector	Gross Jobs Created	Jobs safeguarded	Value of Investment in Enterprise £	Increase in Value of Export £	Net Jobs created	GVA associated with net jobs created £
Primary	157	5	£1.2m	-	76	£4.2m
Manufacturing	1,897	2,638	£18.7m	£19.1m	1,204	£109.0m
Utilities & waste management	258	175	£2.5m	£3.1m	122	£11.4m
Construction	921	541	£2.9m	£2.0m	490	£35.1m
Wholesale & retail	1,551	846	£10.8m	£3.8m	725	£24.2m
Transport	297	274	£1.0m	£4.8m	141	£11.3m
Accommodation & food serving	2,858	1,118	£21.2m	-	1,229	£24.4m
Communication & ICT	501	182	£4.9m	£2.9m	245	£16.0m
Financial and business services	2,613	1,400	£10.9m	£6.8m	1,202	£64.2m

Sector	Gross Jobs Created	Jobs safeguarded	Value of Investment in Enterprise £	Increase in Value of Export £	Net Jobs created	GVA associated with net jobs created £
Other services	3,418	2,439	£18.0m	£2.8m	1,800	£79.7m
Total (may not sum due to rounding)	14,471	9,618	£92.2m	£45.4m	7,234	£379.6m

5.3. Business Core and Growth Support – assisted firm performance

Section 4 outlined the process through which the BAS database made available by Welsh Government was used to enable an analysis of business survival. This same exercise was undertaken for two elements of the Business Wales Core and Growth Support programme; first interventions under Business Support High Growth, and then interventions under Business Support Growth. There were a large number of intervention records here (8,696 in total) so a sample of 1000 interventions was taken from the Growth and High Growth strands.

This process of seeking to match 1,000 records of the High Growth interventions led to 710 company records identified in FAME, and 634 in the case of Growth interventions.

In what follows elements of the analysis undertaken in Section 4 are repeated. That is examining:

- Survival rates among enterprises that have been identified in the FAME database, and how this compared to survival rates in a wider population of Welsh SMEs.
- How assisted enterprises score in terms of their credit ratings.
- Whether the employment created is expected to be sustainable or short-lived based on this analysis.

5.4. Survival Rates and Credit Ratings: High Growth Interventions⁵

Figure 5.3 reveals the characteristics of the incorporated enterprises identified on the FAME database. Of the 710 enterprises 474 were incorporated prior to 2015. Figure 5.3 shows that at the time of the FAME search (October 2021) of the 710 enterprises identified, 601 (85 percent) were still active, and 109 (15 percent) were either dissolved, dormant or in liquidation. Of the 474 SMEs that were supported, and incorporated prior to 2015, some 88% were still active in 2021.

Figure 5.3 Survival of Firms Assisted under Business Wales Core and Growth Programme – High Growth Category Interventions (BAS Level 4). Incorporation data and status at October 2021

Year Incorp	Firms incorporated in period	Active	Dissolved	Liquidation	In Active but dormant, in default etc	% Active	All Wales % Active
-2014	474	417	37	10	10	88.0	na
2015	33	28	2	1	2	84.8	32.1
2016	50	36	10	2	2	72.0	28.4
2017	48	32	9	2	5	66.7	32.7
2018	38	31	4	0	3	81.6	40.2
2019	30	23	3	0	4	76.7	49.1
2020	25	22	1	0	2	88.0	83.9
2021/not known	12	12	0	0	0	100.0	na
Total	710	601	66	15	28	84.6	na

⁵ Within the BAS dataset these are categorised as Level 4 interventions – High Growth

The next stage is an investigation of how these rates of failure compare with the wider Welsh population of firms held within the FAME database. This analysis is only carried out for the years 2015-2020. For 2015 starts, Figure 5.3 reveals a very positive finding that 84.8% of the assisted firms were still active in 2021, compared to a figure of just 32.1 of all Welsh firms incorporated in that year. This pattern is repeated for years 2016-2020. The four year survivability rate is 67% for Core & Growth assisted businesses, compared to 33% for a matched sample of non-assisted businesses.

The next stage is an analysis of the credit scores of the enterprises. The credit score on FAME is a measure of the likelihood that a business will become bankrupt in the twelve months following the date of calculation. More specifically, it predicts the likelihood that a business will obtain legal relief from its creditors or cease operations over the next twelve month period.

Figure 5.4 shows the FAME credit scores for the 710 identified enterprises. Of the 710 firms assisted by the High Growth programme just 551 had current credit scores. Of the 551, just 2.7% were rated as High Risk, and 25.4% as Unstable (Caution). Then Figure 5.4 reveals that compared to all Welsh firms on the FAME database, assisted firms have a much lower proportion in the Caution category, but higher proportions in the Normal and Stable/secure categories.

Figure 5.4 Credit Scores of Firms Assisted under Business Wales Core and Growth Programmes: High Growth Category Interventions (BAS Level 4) (October 2021)

Credit score	High Growth programme firms in category	High Growth share in each risk category	All Wales firms in each risk category	Wales % in risk category
0-19 High Risk	15	2.7	3,046	4.0
20-39 Caution	140	25.4	38,878	51.2
40-59 Normal	191	34.7	21,575	28.4
60+ Secure	205	37.2	12,370	16.3
Total known	551	100.0	75,869	100.0
Not known	159		318,962	
Total	710		394,831	

5.5. Survival rates and credit rating: Growth interventions

This section repeats the analysis above for interventions under the interventions classified as Business Wales Growth (i.e. Level 3 in the BAS database). Once again 1,000 interventions with firms were taken and were cross matched with 634 firms on the FAME database. The analysis in Figure 5.5 and 5.6 leads to broadly similar conclusions to firms supported under the High Growth support programmes namely relatively strong survival rates, and with this again largely expected given the nature of the support.

Figure 5.5 Survival of Firms Assisted under Business Wales Core and Growth Programme – Growth Intervention Category (BAS Level 3). Incorporation data and status at October 2021

Year Incorp	Firms assiste d incorp in period	Activ e	Dissolve d	Liquidatio n	Active but dormant , in default etc	% Activ e	All Wales %	Activ e
-2014	280	213	54	6	7	76.1	<i>na</i>	
2015	42	34	4	2	2	81.0	32.1	
2016	57	41	13	1	2	71.9	28.4	
2017	71	59	10	1	1	83.1	32.7	
2018	61	49	10	0	2	80.3	40.2	
2019	60	47	6	0	7	78.3	49.1	
2020	46	43	0	0	3	93.5	83.9	
2021/n k	17	16	1	0	0	94.1	<i>na</i>	
Total	634	502	98	10	24	79.2	<i>na</i>	

Figure 5.6 Credit Scores of Firms Assisted under the Business Wales Core and Growth Programme: Growth Category Interventions (BAS Level 3) (October 2021)

Credit score	Growth programme firms in category	Growth programme firms % in each risk category	All Wales firms in each risk category	Wales % in risk category
0-19 High Risk	15	3.6	3,046	4.0

Credit score	Growth programme firms in category	Growth programme firms % in each risk category	All Wales firms in each risk category	Wales % in risk category
20-39 Caution	200	48.3	38,878	51.2
40-59 Normal	129	31.2	21,575	28.4
60+ Secure	70	16.9	12,370	16.3
Total known	414	100.0	75,869	100.0
Not known	220		318,962	
Total	634		394,831	

6. Conclusions

6.1. Economic conditions

The interventions managed by Business Wales have occurred during a period of challenging economic conditions during the latter part of the intervention period, particularly during the Covid-19 period. The general context for the intervention period has been a growth slowdown, and in the Welsh case real pressure on the manufacturing sector. In understanding the impact of the programme, the poor economic conditions need to be factored in.

This noted there is some evidence of interventions occurring with firms that are identified with relatively high levels of GVA per employee. It is accepted that the assumptions underpinning connections between jobs created and GVA have some weaknesses. However, if jobs supported and created by the Business Wales programme are maintained (and the survivability analysis provides some support for this contention) then further growth of these firms could work to support improving productivity levels.

6.2. Further analysis

The analysis in this report focuses on selected elements of BAS and Programme Monitoring data. Therefore, in respect of further analysis it is recommended that:

- The scope for a finer grained analysis using the BAS data exploring the location of employment creation, and whether employment is being increased in more needy parts of the regional economy, and then in sectors characterised by higher levels of value added per employee.
- An ex-post evaluation might consider how far firms assisted under Business Wales programmes fared during the Covid-19 period, and moreover, how far the beneficiaries made demands for assistance under the Economic Resilience Programme and Covid Wales Business Loan System. Furthermore, how far were beneficiaries, under the AGP in particular, well placed to overcome the problems leveraged by the Covid-19 crisis.
- The type of data held within the BAS system would lend itself to more complex analysis of the counterfactual by matching with data on the Inter-Department Business Register (IDBR) and undertaking analysis using methods such as Propensity Score Matching. We have some concerns over the matching of records to FAME in this report, because this only provides limited information from which any inference can be drawn on the comparative performance of assisted firms with those in the larger population. There are also concerns over the coverage of the FAME database in establishing any comparative analyses.

- While this report focuses on jobs, trade, and investment, there are considerable challenges to consider indicators connected to sustainable development goals such as estimates of the carbon (emissions), ecological and waste footprints associated with the industries that have been assisted.
- The Programme Monitoring and BAS data evidences a strong focus on employment creation. A greater focus might be placed on how far interventions here are supporting activity with the potential to improve Wales productivity growth, and productivity growth in particular parts of Wales. There might also be a need to gain better estimates of the annual earnings associated with jobs created and safeguarded.
- The BAS data provides evidence of some firms benefitting from more than one type of assistance. In this respect there could be value in future evaluation of exploring a chain of effects model inasmuch as one type of assistance leads to another, and then what combinations of assistance drive the faster growing firms.
- Finally, the BAS data might be anonymised in such a way that it could be used for further detailed economic analysis by academics. The data source is rich in terms of interventions received and dates of assistance provided.

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