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Assessing growth and high growth potential within Welsh SMEs: A pilot study of data availability and quality

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Welsh Government, Internal Research Programme

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Views expressed in this report are those of the researcher and not necessarily those of the Welsh Government

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Glossary of Acronyms

AGP	Accelerated Growth Programme
CIS	Community Innovation Survey
BIS	(Department for) Business Innovation and Skills
EC	European Commission
ERC	European Research Council
ESNR	(Department for) Economy Science and Natural Resources
EST	(Department for) Economy Science and Transport (now ESNR)
EU	European Union
FAME	Financial Analysis Made Easy
FD	Financial Director
GDP	Gross Domestic Product
GEM	General Enterprise Monitor
HEIs	Higher Education Institutions
IDE	Innovation-Driven Enterprise
IRP	Internal Research Programme
MD	Managing Director
MIT REAP	Massachusetts Institute of Technology Regional Entrepreneurship Accelerator Programme
NESTA	National Endowment for Science Technology and the Arts
OECD	Organisations for Economic Co-operation and Development
ONS	Office for National Statistics
R&D	Research and Development
SIC	Standard Industrial Classification
SME(s)	Small and Medium-sized Enterprise(s)
TEA	Total Entrepreneurial Activity
UKTI	UK Trade and Investment
VAT	Value Added Tax
WG	Welsh Government

Executive Summary

The Internal Research Programme (Knowledge and Analytical Services, Welsh Government) was commissioned in January 2016 by the Entrepreneurship and Delivery team to undertake research with founders and leaders of Welsh-based exporting Small to Medium Enterprises (SMEs), which are or have the potential to be high growth businesses, to understand their pathways and barriers to growth. The Organisation for Economic Co-operation and Development (OECD) defines high growth businesses as all enterprises with average annualised growth greater than 20 per cent per annum, over a three year period, with ten or more employees. The purpose of this exploratory research was to develop and assess the utility of an approach to identify high growth firms in Wales and provide some indicative qualitative data on their pathways, enablers and barriers to growth. This analysis would be used by the Welsh Government in identifying, tailoring and targeting its interventions to ensure further growth for those enterprises that already demonstrate growth and those that have the potential to realise high growth.

The Welsh Government recognises that it plays a key role in creating an environment to foster entrepreneurship and supporting entrepreneurs and business owners to start, develop and grow successful businesses. In 2015, Wales was one of eight European nations selected to participate in the Massachusetts Institute of Technology Regional Entrepreneurship Accelerator Programme (MIT REAP), a global two year programme aimed at accelerating economic growth and job creation through innovation-driven entrepreneurship. Furthermore, Welsh Government provides a series of Entrepreneur and SME support services to enable Welsh businesses to realise their potential; among these services is the Accelerated Growth Programme (AGP) which offers individual support to start-ups and SMEs that have high growth aspirations and potential.

The Welsh Government was keen to better understand entrepreneurs and business leaders' perspectives on the relationship between innovation, export and high growth, what part these factors may have played in their pathway to growth, with the view to developing a framework with which to identify and support businesses with high growth potential in future. In order to inform the development of these assessment metrics, the IRP conducted a pilot study comprising secondary data analysis of existing datasets followed by a small set of qualitative interviews with growth and high growth firms exporting from within Wales. An assessment of the strengths and weaknesses of the relevant data sources accompanies this research.

The aims of the research were to:

- Identify a set of indicators which can be used to assess whether an enterprise is high-growth and compile relevant data sources which hold this information;
- Identify Welsh-owned businesses that are currently exporting and that are either already high-growth, or are growing and have the potential to achieve, high-growth;
- Explore pathways to, and relationships between growth, innovation and export of identified businesses to understand drivers, barriers and ways Welsh Government could support high growth or those enterprises with the potential for high growth;
- Provide colleagues in the Entrepreneurship Policy team with information on sources of information available on growth and high growth firms. This will highlight important data gaps and identify relevant sources of information when monitoring

business progress and designing interventions based on the most up-to-date information;

- Advise on how best to conduct analyses of this nature in future and what data would need to be collected to make a robust analysis possible.

The analysis utilised two principal datasets drawn from the FAME database and supplemented with an ONS microdata release which gave information on all Wales-based SMEs. It must be noted that FAME contains entries for 80,000 of the approximate 140,000 enterprises based in Wales, a shortfall attributed to the due to the voluntary basis upon which enterprises share their company information. We therefore acknowledge that the analysis here does not draw from a comprehensive database and this should be borne in mind when reading the findings.

Managing Directors or owners of high growth, and those demonstrating the potential to become high growth were selected for interview from a sample of growth and high growth firms drawn from the combined dataset. Analysis of nine completed interviews, comprising two high growth firms and seven firms approaching high growth, provided a more in-depth understanding of the contributory factors to business growth and also helped to identify what support, in the view of the business, would be most beneficial in terms of their future objectives.

Key Findings

Applying the OECD definition of high growth to SMEs in Wales has shown that most firms experiencing growth fall short of the 20 per cent average annualised growth over three years measure. Given the relevance of this measure and the distribution of growth and high-growth firms, it is suggested that support strategies for these businesses be tailored on the basis of their current status.

Phases of growth and high-growth are often cyclical and sporadic and can happen in business of any age. Growth and high growth businesses articulated the importance of external support, including that from Welsh Government and Local Authorities, at various phases in their development. Respondents did however call for grant funding to be more flexible to align with the life-cycle and priorities of the firm. Other businesses highlighted the need for grant funding to have a wider remit, allowing funding for more types of business improvement or support to address problems of sustainability that could affect growth.

Data were not available to determine any causal relationship between innovation, exporting and growth. However, it was clear for most managing directors of interviewed firms that the two activities were highly complementary in terms of stimulating and maintaining growth. Most striking was the importance of building knowledge through collaboration in all aspects of business life, whether that was working with Higher Education Institutions (HEIs) in development of innovative products, or in terms of building good relationships with those who provided grant support.

This research has helped identification of a range of relevant data sources and the information they hold. The strengths of the FAME and ONS datasets were used to provide an enhanced analysis when compared with using either dataset on its own. This meant that an improved analysis could be carried out using a wider variety of indicators. However, there were some inconsistencies and duplicate entries in the data supplied, making it difficult to ascertain correct turnover figures for firms. A full analysis of relevant data sources and an assessment of its strengths and weaknesses was provided to the policy team in a document separate to this report.

Improved data on start-ups is required to understand their pathways to growth - and further research could focus on understanding what is already captured, and in which datasets, and whether further data collection is needed to fill the gaps on understanding the growth of start-ups.

Recommendations

1. **These findings should inform future data/information gathering in relation to Welsh SMEs.** The approach taken here highlights that data are available to determine the growth status of firms in Wales and that this can provide valuable insight into the activities of SMEs. This forms the basis for further analysis of the types of businesses not covered here, such as the wider set of SMEs who trade only domestically, in order to broaden our understanding of business growth. This will provide a full gap analysis of data sources and quality which will allow us to move forward in understanding how to address these gaps.
2. **Design a data collection instrument to capture evidence on business growth more systematically.** Once further analysis of other types of businesses has been completed, researchers and policymakers may be better informed about the strengths and weaknesses of datasets currently available. We advise the design of a dataset to synthesise existing data and collecting missing data to produce a tool that is fit for purpose for long term monitoring of business performance.
3. **Policy teams may also want to consider incorporating qualitative evidence into future monitoring.** Interview data have been particularly informative in understanding the detail with regard to innovation, export and growth and the complex relationships between these activities. These issues change over time and are invaluable in understanding how tailored support might impact on a business. It is clear that data alone do not provide sufficient insight. It is recommended, therefore, that any future monitoring include periodic qualitative data collection to ensure that policy teams remain informed as to the situations facing individual businesses.
4. **Consider tailored business support which focuses on maintaining success for high growth firms, but also assists firms not quite reaching the 20 per cent threshold to become high growth.** This research has highlighted that, in Wales, a small proportion of exporting firms can be considered high growth, but that there are a far larger group who are growing, but not quite above the 20 per cent threshold. Policy teams should consider both quantitative and qualitative research in order to inform the design of tailored support to individual businesses. For high growth firms, it will comprise maintaining growth, or steering them through difficult periods whilst attempting to maintain growth. For growth firms, it may be devising appropriate support or strategies to enable them to become high growth.
5. **Take account of issues raised through qualitative analysis when developing tailored business support.** Qualitative data highlighted some of the issues around receipt of intervention, such as the cyclical nature of growth and the opportunistic nature of entry into export markets should be considered. A consideration of the specific context in which businesses are placed and their short and long term goals should guide the selection of interventions to best facilitate growth.

1. Introduction

In any nation, such as Wales, it is important to create the conditions in which entrepreneurs and businesses can establish themselves, grow and be successful. This comes through firstly creating a favourable environment, or 'entrepreneurial ecosystem' – the right combination of economic infrastructure, resources and attitudes which develop within the local, national or even supranational context in which the business operates (Jenkins, 2014). Secondly, government has long seen itself as having a key role in assisting business owners along their 'entrepreneurial journey', and to support established small to medium enterprises (SMEs) to grow and to recognise in what circumstances enterprises have the potential to grow at a higher rate. These businesses have been identified as requiring specific interventions to maximise their growth potential and ensure that they contribute to a thriving business community and consequently to the economic prosperity of Wales.

There have been numerous academic and policy initiatives conducted in recent years to identify and support high-growth enterprises in Wales. The Wales Fast Growth 50 Project, a key barometer of entrepreneurship activity in Wales has, since 1999, published a list of the fastest growing businesses nationwide. The Fast Growth 50 project recognises Welsh-based privately-held companies (of all sizes) and their contribution to creating wealth and employment based on company sales. However, prior to gaining this recognition, it is important to understand how these companies achieved such high growth, and whether advice and support was used to maximise their potential for growth.

Within the Welsh Government, there are a number of business support schemes available for entrepreneurs and small business owners seeking to improve upon their success. Business Wales, WG's business advice and support service, operates using European funding to support and encourage entrepreneurial activity within the general population of Wales, but also provides follow-on support to SMEs, providing a combination of generalised and tailored advice on various aspects of business planning, finance, marketing, innovation and more. As part of Business Wales, the Accelerated Growth Programme (AGP) also provides a suite of support services for businesses with 250 employees or less, and who have the potential to grow by at least 20% year on year, generate well-paid and sustainable jobs and venture into international markets (AGP website, 2016). New Business Start-up Support was also run by the then WG Department for Economy, Science and Transport (EST) as part of the 2007-13 round of European funding, with an orientation towards supporting SMEs with growth potential.

In 2015, Wales was also selected as one of the regions to take part in the Massachusetts Institute of Technology Regional Entrepreneurship Acceleration Programme (MIT REAP), a two year programme through which selected nations/regions work collaboratively to devise strategies or action plans to accelerate economic growth and job creation through innovation-driven entrepreneurship (IDE) (MIT REAP, 2016). Following Scotland's participation in 2014, which resulted in an action plan to improve the entrepreneurial ecosystem and called to action relevant stakeholders in order to put these actions into practice (MIT REAP, 2014), Wales is hoping to develop a customised strategy of its own. This signals a commitment from the Welsh Government to understand enablers and barriers to innovation in entrepreneurship and to use knowledge gained from the programme to identify areas of importance and improve growth in an ecosystem made up predominantly of SMEs.

Although a variety of funding and support is available to SMEs, there are insufficient data available with regard to the number of SMEs who are high growth, or have potential to be high growth in the near future. The Fast Growth 50, although recognising success, relies on businesses self-selecting for consideration in the top 50 fastest growing enterprises,

and therefore may be missing key businesses in Wales who are exemplars for growth but who do not put themselves forward. The Fast Growth 50 focuses on larger businesses as well as SMEs. Whilst this is an inclusive strategy for the entire business community in Wales, the vast majority of Welsh businesses are SMEs, and therefore a focus on identifying high-growth (in line with other forms of support) is required.

It is recognised that the data available to systematically identify high-growth or potential for it within SMEs in Wales is limited, as is understanding of the enablers and barriers to growth, and whether these enterprises require some form of specific support to enable them to become market leaders. In November 2015, the Entrepreneurship Policy Team, part of the Department for Economy, Science and Natural Resources (ESNR) within the Welsh Government, commissioned the Internal Research Programme (IRP) to undertake an analysis of the current data available on Welsh companies that were already, or had the potential to become, high-growth enterprises. The aim was to establish, through a pilot study, whether the data available were of a high enough quality to identify relevant businesses. It was decided that a discrete subset of data would be examined instead of attempting to analyse the entire dataset of SMEs operating in Wales, which number approximately 236,595 (Stats Wales, 2015). Using the resources of the IRP, it was decided that the search for relevant data would focus upon SMEs operating in Wales, but specifically those that also exported goods or services. This would provide a manageable sample whilst allowing the IRP to establish the quality of data that already existed.

Aims of the Research

The aims of the research were therefore to:

- Identify a set of indicators which can be used to assess whether an enterprise is high-growth and compile relevant data sources which hold this information;
- Identify Welsh-owned businesses that are currently exporting and that are either already high-growth, or are growing and have the potential to achieve, high-growth;
- Explore pathways to, and relationships between growth, innovation and export of identified businesses to understand drivers, barriers and ways Welsh Government could support high growth or those enterprises with the potential for high growth;
- Provide colleagues in the Entrepreneurship Policy team with information on sources of information available on growth and high growth firms. This will highlight important data gaps and identify relevant sources of information when monitoring business progress and designing interventions based on the most up-to-date information;
- Advise on how best to conduct analyses of this nature in future and what data would need to be collected to make a robust analysis possible.

The findings of the research have been used to identify what we already know about the growth of exporting SMEs in Wales, but also to identify gaps in the data required to identify high-growth and potential high-growth enterprises. The dearth of knowledge around growth firms and sectors was identified in the Welsh Government Internal Review of Entrepreneurial Evidence (2014), identifying further understanding of high growth businesses as a priority through investment in further research.

This research does not represent an analysis of the entire SME business base in Wales. The pilot study aims to establish whether future analyses of this nature are feasible for the SME population more generally and to advise on how this could be undertaken successfully. In addition to the secondary data analysis, nine qualitative telephone interviews were carried out with the owner/directors of high-growth enterprises and also businesses which were demonstrating growth, but not enough to be considered high-growth. These data would allow a more detailed understanding of the historical context of the SME, their individual pathways to growth, the enablers and barriers and the particular

dimensions brought to this picture through the businesses' role in innovation and export activity. The export characteristic is an important one, as the SME's decision to export goods and services often sets it apart from those who choose to trade exclusively in the domestic market. The relationship between exporting companies and their engagement with research and development (R&D) is also of interest with regard to the decision to enter the international market and the mutual effects of innovation and export on one another. This project allows close attention to be paid to these particular issues, whilst providing advice on future, similar analyses for enterprises with different characteristics and requirements.

The combination of secondary analysis and qualitative findings will also provide insight into perceptions of advice, support and financial interventions, and if or what is considered useful by businesses in the way of Welsh Government or alternative support for the future. This will help shape effective and tailored government interventions to foster high-growth for SMEs into the future.

The following section explores some of the key literature around SMEs and high growth, participation of SMEs in export markets, the role of innovation, and the relationship between innovation and export activity. Section three outlines the methodology adopted for this research, section four gives the results of the secondary analysis using the FAME database and the ONS microdata; and section five gives an analysis of the findings of the telephone interviews with owner/directors of high growth SMEs. Finally, section 6 provides some conclusions about what the data tells us about high growth firms, but also what information is absent or incomplete, preventing informed judgements being made. This section also provides some recommendations as to how this analysis could be modified and expanded to be used to understand growth within SMEs who trade exclusively within the UK, and segmented by firm characteristics to identify specific issues and tailor support.

2. Literature Review

This section provides a short literature review of relevant academic articles and government reports of relevance to this research. It is by no means a systematic review of the literature, but provides a summary of the key issues around high growth, innovation and export for SMEs. Some of the data specifically relates to the UK, and other research was conducted in countries around the world. There are no academic studies which address issues for Welsh-owned SMEs, but other reports, such as the General Entrepreneurship Monitor (GEM) Report 2014, provide an understanding of the entrepreneurial environment in Wales.

The first section covers the definition of high growth and the enablers and barriers to growth, followed by a discussion of the various forms of innovation undertaken by SMEs and the relationship between innovation and growth. This is followed by an exploration of the export patterns of SMEs, taking into account the enablers and barriers of exporting for small firms in various sectors, whilst concluding with a discussion of the interaction between innovation, export and growth. The review also includes a discussion of the data available for Wales with regard to entrepreneurship and growth, and identifies the gaps in research and knowledge about high-growth firms in Wales. It concludes that, following on from the research into the entrepreneurial environment within Wales (2014), more research is required to understand how entrepreneurs develop and grow their businesses. An understanding of what makes a SME high-growth, and bridging the gap in knowledge around the start-up process to the building of a growing and successful firm, and understanding the enablers and barriers which are inherent within this process is yet to be fully outlined in terms of the Welsh context. In attempting to do so, we not only aim to understand what data are missing, but whether the data exist in order to understand this more fully, and if further data is required in order to build up a more accurate picture.

Growth and High Growth SMEs

The definition of a high growth firm used in this research is the OECD definition as stated in the *OECD-Eurostat Manual on Business Demography Statistics* (2007), which defines a 'high growth enterprise' as;

'All enterprises with average annualized growth greater than twenty percent per annum, over a three year period and with ten or more employees at the beginning of the observation period. Growth is thus measured by the number of employees and by turnover.'

As part of this research, we acknowledge that although many firms grow within a few years of their formation, that pathways and patterns relating to business growth are not uniform (Levie, 2006). Firms can grow at any point in their existence, not just in the early years following their founding (Brown et al, 2014). Therefore we are considering firms of all ages, making a distinction from a focus on gazelle firms, which are defined as;

'All enterprises **up to five years old** with average annualised growth greater than twenty percent per annum over a three year period, and with ten or more employees at the beginning of the observation period.'

Taking from Levie's (2008) work into reviewing theories of business growth across different types of firms throughout the latter half of the 20th century, this work acknowledges that although businesses are in the main motivated to grow and become more successful, pathways to growth are not uniform. He notes that even though intentions to grow are common, that not all young, small firms grow, and that pathways to growth do not follow an established, tried and tested pathway to growth (Birch, 1987, in Levie, 2008). Recent evidence (Brown et al, 2014) has also challenged the assumption

that the youngest growth firms are always those that experience rapid or high growth, advocating the expansion of public sector support to established firms as well as start-ups with high potential.

To allow for this heterogeneity in patterns of business growth, Levie advocates the Dynamic States Model, in which an open systems framework operates, allowing for complexity in the development of a business. The business model adopted to achieve this allows the firm to incorporate activities, resources, collaborations and strategic positions in order to survive in their business environment, and to adapt quickly if external factors change. This is referred to as a dynamic state. Dynamic states aim to reflect an optimal relationship between the firm's business model and its environment. There can be any number of dynamic states within a firm's existence, and these states can occur in any order. Levie proposes a move away from thinking about firms' growth in terms of the organism metaphor, and to orientate thinking towards assessing how effective a given dynamic state is in relation to the environment in which the firm is situated.

The intention therefore is to acknowledge that growth may not follow a linear pattern defined by clear 'stages', but that a focus on SMEs in relation to their business models and their environment, as opposed to their age, is useful in this instance. This research therefore seeks to understand the growth status of Welsh-owned SMEs. What proportion of Welsh SMEs are high-growth, and what is the nature of their growth? Understanding whether growth is indeed cyclical and which are the main factors affecting Welsh SMEs will be a key concern of the qualitative interviews.

Enablers and Barriers to Growth

Growth is primarily driven by a healthy and growing economy, indicated through rising GDP. UK Trade and Investment (UKTI), in its research into how SMEs are breaking into high-growth markets (2013), have found that companies of all ages and sizes are finding success in these markets, not just large enterprises. Pathways to growth for SMEs are largely dependent on the characteristics of the entrepreneur and the entrepreneurial environment. The ERC White Paper on Growth and Growth Intentions (2013) demonstrates that both endogenous and exogenous motivations and influencers affect the pathway and extent of growth. In terms of endogenous factors, or those internal to the business, both the characteristics of the head entrepreneur and the business itself are of interest. Those firms headed by younger, male entrepreneurs with experience in business are more likely to possess growth intentions. There is also a positive relationship between willingness to take risks and business performance, with data from many countries suggesting that this is particularly true for smaller businesses, although the direction of causality is unclear. The report also finds that innovativeness and growth ambition are linked, but the relationship appears two-way, with growth providing the resources to innovate, but also that entrepreneurs may see innovation as the key to securing further growth. In terms of the business characteristics, high growth can occur across all sectors, not just high-tech businesses (ERC, 2013, Brown et al, 2014), and within businesses of any age. There was also a positive correlation between growth intention and export intensity, with varying effects for different groups, small effects for nascent entrepreneurs, medium effects for new business owners and small effects for established business owners.

In terms of exogenous effects, it was found high regulatory burden can have a negative effect on the prevalence of growth-orientated entrepreneurs, and this has a particularly detrimental effect on prevalence when high regulatory burden interacts with the rule of law. In terms of comparing prevalence of growth-orientated entrepreneurs within the UK and other nations, there is a higher prevalence of such individuals in the US when compared to the UK. This may be due to the relative size of the growth market in the US. There also

appears to be an overall lower prevalence of wealth motives among growth-oriented entrepreneurs in the UK.

These trends highlight some of the entrepreneurial characteristics that are indicative of business growth, as well as taking into consideration the configuration of the business and the wider macroeconomic environment as influencers of whether a business has growth potential. As mentioned in the ERC report, both innovation and export participation and intensity are important activities which may accelerate the growth of an SME. What is lacking here is a clear understanding of the effect of internal and external factors on export, innovation and growth within Welsh SMEs. The research will seek to understand the particular business environment for growth and high-growth firms in Wales and the impact of macroeconomic conditions on pathways to growth. This will inform design of policy interventions to facilitate growth, being mindful of how factors both from within and external to the business will have an impact on the effectiveness of those schemes.

Innovation, Export and Growth in SMEs

Innovation has long been identified as being crucial to the growth of the firm, and having an interactive relationship to other markers of growth, such as export. In this section, the benefits of innovation and export are outlined, and the complex enabling relationship between the two activities is discussed.

Innovation undertaken by a business can take a number of forms; product, process, marketing and open innovation. Product innovation is the development and/or improvement of a product that the business will or have brought to market, whereas process innovation is the improvement of business or production processes that make the running of the business or the manufacturing of a product leaner, more efficient, and therefore cheaper. Marketing innovation is the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing (OECD, 2005). In terms of improving the quality of their innovative activity, businesses can adopt an open innovation approach, whereby they take advantage of inflows and outflows of knowledge to improve internal innovation and also to use the networks they have created to expand their market for external exploitation of innovation. The Department for Business, Innovation and Skills UK Innovation Survey (BIS, 2013) found that SMEs were more likely to undertake 'broader' forms of innovation than larger companies, which would include internal R&D, training or acquisition of external knowledge. Open innovation therefore appears to be more useful for SMEs seeking to grow. Love and Roper (2015) have found that SMEs often benefit more from engaging in open innovation than larger firms, as the innovation ecosystem is strong and potential knowledge transfer partners are accessible. It is important therefore, to have an understanding of the different forms of innovation a business undertakes, and the ways in which SMEs seek to take advantage of knowledge flows within their particular business community to improve the way in which they innovate and become a growing business.

Love and Roper (2015) also find that those firms that innovate will be more productive, efficient and profitable than non-innovators. Their review of existing evidence on SME innovation, export and growth demonstrates that there is a positive relationship between those who undertake product and process innovation, and productivity, and also between productivity and growth. Demirel and Mazzucato (2012), in their study of whether research and development (R&D) leads to firm growth within large and small pharmaceutical firms, found that the positive impact of R&D on growth (when measured as annual percentage increase in sales) is greatly dependent on the characteristics of the firm, namely, its size and the nature of innovative activity. Although R&D has a significant positive effect on growth of firms at an aggregate level whether they patent their innovations or not, it was smaller firms only (less than 500 employees) that persistently patented who benefitted from growth at the firm level. Innovation is acknowledged to have a positive overall impact

on growth, but these and other studies highlight the need to take into account the particular combinations of firm characteristics and the nature of the business environment for SMEs when determining what really works in terms of securing and sustaining growth.

Simultaneously, the decision of a firm to engage in export activity is viewed as a positive development in its pathway to growth. The UKTI Discovering High Growth Report (2013) notes that for those doing business overseas, 98 per cent were selling directly or through an agent, although there is also evidence to suggest high growth firms internationalise using a wide variety of entry modes, such as joint ventures, overseas foreign direct investment, overseas acquisitions and partnering) (Brown et al, 2014). Undoubtedly, export is crucial in achieving and maintaining sustained growth. Much of the literature highlights a positive relationship between export, innovation and growth, the UK Innovation Survey finding that the majority of exporters also engaged in some form of innovation behaviour (2013). However, the nature of this interaction is complex. Golovko and Valentini (2011) found that innovation and export were complementary activities, with participation in export encouraging the firm to interact and benefit from the knowledge within their international market. At the same time, through innovative activity, firms can enter new markets with improved products and improve the success of both their domestic and international business. Size of the firm and advertising intensity positively affects the decision to export, where capital intensity has a positive impact on the decision to innovate, but a negative impact on decisions to begin exporting. However, this complementarity is dependent on the firm being able to absorb the knowledge available in export markets and that this knowledge needs to be used effectively in innovation activity and be of value in both home and international markets.

The appreciation of the complexity of this interaction, dependent on internal and external enablers, is recognised by Love and Roper (2015). The internal enablers of a successful relationship between innovation and export include the existence of good skills in terms of management and technical ability, the ability to collaborate or partner with other businesses or HEIs to overcome internal skills constraints, strong R&D capability, the availability of capital investment and the ability to access government support to cover the sunk costs of entering international markets. Investment in design has a positive effect on innovation and export results are stronger where firms orient their product design to the needs of their customers. Obtaining patents is not significant for sustaining growth, but good leadership and management does contribute to success, even though exporting is often opportunistic as opposed to being a strategic priority. External enablers include operating in a strong innovation ecosystem, where access to partners and knowledge is plentiful. The availability of government assistance (financial or non-financial) will also have a positive effect, and SMEs are more likely to innovate due to the barriers that this support can help overcome.

Love and Roper, like Golovko and Valentini (2011) also make it clear that highly productive firms self-select for export activity, precisely because they were more productive in the first place and are able to cover the sunk costs. They are not more efficient because they export, but are generally more efficient than non-exporting firms to begin with. Although the evidence is mixed, it has been shown that firms can however become more productive through exporting, as stronger competition leads to improved and more competitive products, and a so-called 'learning by exporting' effect occurs. There can be both a learning effect and a scale effect, whereby products can be improved and sold at a higher rate as a result of exporting. The 'learning by exporting' effect was also shown by Love and Ganotakis (2013), where exposure of exporting high-technology firms to the international market enhances performance through access to knowledge of their trading partners. The effect, however, was complex. The 'learning by exporting' effect is achieved only if firms consistently export, and those that do export have a higher probability of innovating in the medium term than those who do not. In terms of innovation, whilst there

was evidence that both internal and external R&D have a positive impact on innovation outcomes, the effect is more nuanced in that internal R&D activity has a positive impact on likelihood of innovation, whilst the presence of internal and external R&D are important determinants of innovation intensity. The 'learning by exporting' effect aids firms in overcoming barriers to innovation, but does not have any impact on innovation intensity.

Esteve-Perez and Rodriguez (2013) also explore the dynamic inter-relationship between R&D and export within small and medium Spanish manufacturing firms. Taking into account the interdependence and cross-persistence of these activities, it confirms strong interdependence in that engaging in export will increase the likelihood of engaging in R&D. Persistence is also important in this relationship, as earlier participation in export means that a business is 67 per cent more likely to be involved in export at the present time compared with those who did not export. Those engaged in R&D at an earlier point in time were 37 per cent more likely to be doing so at present than those who had not engaged in R&D previously. There are weaker relationships with regard to cross-persistence, with those undertaking earlier innovation being 22.5 per cent more likely to participate in export at present, and those taking part in earlier export being 12.9 per cent more likely to innovate. This demonstrates the complexity of the inter-dependence between the two activities beyond the simplistic conception that they are mutually beneficial.

This review has demonstrated the financial barriers that present themselves to small businesses in undertaking either export or innovation; the sunk costs associated with entering export markets and the capital required to undertake innovation activity. For small firms, this issue is acute and often those who are already highly productive will self-select for export and/or innovation because they are able to overcome these costs. Although innovation and export can lead to growth in and of themselves, they are more effective when employed together, with 'learning by exporting' leading to increased inflows of knowledge and innovative activity leading to improved products and consequently, growth. The inter-relationship is complex, and outcomes are dependent on firm characteristics and business environment, with evidence demonstrating difficulty identifying the relationship between export and innovation intensity, for example.

For firms experiencing growth in Wales, there is relatively little understanding of the complex interaction between innovation, export activity and growth. What is of interest here is the extent to which research undertaken in other nations, or at a UK level, aligns with the business activity of firms operating in a small-nation context, such as Wales. This research will seek to understand to what extent open innovation exists and what form it takes; what are the benefits of innovation and export for Welsh SMEs; what is the relationship between export and innovation, and how does this relationship contribute to growth? Of additional interest will be if and how the 'learning by exporting' effect is applicable to Welsh SMEs, and the extent to which this contributes to growth within the firm.

Policy approaches to supporting high growth firms

As Brown et al (2014) point out in a NESTA working paper; high growth firms are seen as the main form of employment growth and are therefore the recipients of a wide range of support and intervention to ensure they continue to contribute positively to the growth of the economy overall. This has been particularly important in the UK following the 2008 financial crisis. At both UK and Wales level, those considered high growth have been able to access finance and other forms of advice and support in order to maintain their growth. However, Brown et al propose that some government interventions are not targeted effectively enough to provide appropriate support, and that more research is required on how high growth firms achieve growth before effective policy interventions can be designed.

The FutureFifty programme and the Fast Growth 50 programme both aim to highlight the success stories of the most rapidly growing forms in UK and Wales respectively. However, the OECD definition used to define high-growth is challenging to achieve for SMEs, particularly in Wales, and omits firms which may be growing quickly but fall just outside this category (Anyadike-Danes et al, 2013). It is for this reason that, in seeking to know in more detail which forms are high growth, it is also important to consider those who are growing and have the potential to grow further in the future. The highly cyclical nature of growth means that those who are growing may become high-growth in the next year or two. Identifying these firms and why and how they grow, something about which relatively little is known, will enable understanding of what forms of support are most appropriate and at what time.

Brown et al's paper debunks myths associated with high growth firms, namely that they are always new and young 'gazelles'. Evidence has shown that the majority of high growth firms are older and larger than previously believed. In the UK, a NESTA study showed that 70 per cent of high growth firms are at least five years old (2009). This challenges the assumption made by policymakers that only new SMEs should be targeted for growth support and raises the question about how older SMEs should be assisted. Another myth Brown et al identify is that high growth firms undertake steady, linear growth. Garnsey et al (2006) have found, to the contrary, that growth is often erratic, unpredictable and of limited duration. Policymakers are advised to tailor business support to align with periods of growth, as often they are out of sync, leading to a lack of effectiveness for firms when they most need it. Brown et al highlight the need for further research to identify how firms grow, the resources they need to maintain growth, and maintaining that growth so that SMEs become mid-range firms. There is also a dearth of information about the quality and sustainability of the employment opportunities provided by high-growth firms.

In terms of export and innovation, given the inter-dependence evident between these activities, policymakers should take this into consideration when forming policy to support businesses, ideally designing an intervention that supports both in conjunction, rather than separate initiatives which may conflict in their aims and outcomes (Esteve-Perez and Rodriguez, 2013). It has been suggested that subsidies for SMEs that export should be rolled out if a 'learning by exporting' effect is taking place (Love and Ganotakis, 2015). However, this proved challenging when taking into account opportunities for exporting and growth; as many SMEs undertake these activities on an opportunistic basis, meaning that any learning is sporadic.

In terms of some of the myths of high growth firms highlighted by the NESTA report, this research will be interested in understanding whether any of these hold for Welsh-owned SMEs. If so, the research can inform policymakers in tailoring their interventions to growth and high growth firms, using the most up-to-date Wales specific data.

The Welsh context and addressing research gaps

Whilst there is much academic literature available to provide information on the interrelationships between innovation and export, there is less in relation to the Wales context and Welsh-owned businesses. Much of the current data available relates to characteristics of nascent entrepreneurs and total entrepreneurial activity, such as that published by the Global Entrepreneurship Monitor (GEM). At a Wales level, total entrepreneurial activity (TEA) is 7.1 per cent, not significantly different from the average of 6 per cent and the UK estimate of 8.6 per cent (GEM, 2014). The GEM report for Wales also notes that amongst young adults ages 18-29, TEA rose from 4.9 per cent in 2013 to 8.4 per cent in 2014, and has risen amongst other age groups. Those who anticipated starting a business in the next three years rose from 3.9 per cent in 2013 to 7.8 per cent in 2014. However, TEA is still significantly lower than the UK average of 9.3 per cent in 2014, whilst Wales also struggles to increase its TEA, with some of the main reasons for

reluctance to start a business, despite seeing opportunities to do so, were fear of failure and reluctance amongst women to become entrepreneurs. Although the level of TEA is improving, there remain perceived barriers to particular demographics and fear of failure is also a significant issue preventing individuals fulfilling their potential.

In terms of the entrepreneurial ecosystem, a recent review of the entrepreneurship evidence shed some light on the international research on the effect of local economic infrastructure and on the evidence in relation to the ecosystem in Wales (Welsh Government, 2014). The review found that much of the evidence involved small samples, and the data was often patchy and lacking in depth, which prevented firm conclusions from being drawn. More precise data, and in particular qualitative data, is needed to understand entrepreneurial attitudes, barriers, and motivations as well as how individual level issues relate to the wider entrepreneurial ecosystem.

In the same way that data for entrepreneurial attitudes and ecosystems is patchy in places, so too is there is a dearth of information regarding the context for high growth and potential high growth of Welsh SMEs. Although programmes such as the Fast Growth 50 can identify growing firms, more analysis is required to not only identify those companies with potential to grow, but also to identify the context for growth, enablers and barriers to growth, the role of innovation and export in growth and the forms of support that may be helpful for firms to achieve or sustain growth. The entrepreneurship evidence review identifies the need for more qualitative evidence in terms of entrepreneurship, and it is argued that this is also required in terms of identifying and supporting high growth firms.

The following section outlines the methodology for the identification of high growth and potential high growth firms through the secondary analysis, followed by the rationale for undertaking qualitative research with those identified firms.

3. Methodology

A pilot study comprising secondary analysis of existing datasets and a small set of qualitative follow-up interviews was devised to identify Welsh SMEs that were (i) exporting at any time over the period between 2011 and 2014, and (ii) defined as ‘high-growth’. The European Commission’s definition of an SME is used, which takes into account number of employees and turnover as indicators. The following table illustrates how a given SME is sub-categorised i.e. as micro, small or medium using staff headcount and turnover or balance.

Table 1: European Commission definition of an SME

Company category	Staff headcount	Turnover	or	Balance sheet total
Medium-sized	< 250	≤ € 50 m		≤ € 43 m
Small	< 50	≤ € 10 m		≤ € 10 m
Micro	< 10	≤ € 2 m		≤ € 2 m

Source: EC website (April 2016)

Whilst varying data exist around SMEs basic information, employment figures, turnover and other measures of business health and growth, this has not previously been analysed in an attempt to identify those enterprises in Wales which (i) are already high-growth or (ii) are very close to achieving high-growth status.

The pilot was selected to cover only those SMEs operating within Wales that participated in export. This approach was taken firstly to understand the value of this analysis on a smaller subset of SMEs that would be more manageable within the timeframe, and to assess whether there would be merit in replicating this approach in the future with a larger dataset. Secondly, focusing on those companies that already export provided us with a sample which is likely to have a higher number of high-growth enterprises within it, given that there is much evidence to suggest SMEs that engage in export activities are more likely to be high-growth enterprises (Golovko and Valentini, 2011). The analysis also offered the opportunity to identify eligible enterprises and contact a small number to obtain further qualitative data, thus adding a further dimension to our understanding of the relationship between high-growth, export activity and innovation within specific businesses.

Initial work involved a search of relevant databases to understand what information was collated currently and in what form. The following sources were identified;

- ONS Business Structure Database
- ONS UK Innovation Survey
- Community Innovation Survey (CIS)
- Companies House Business Data
- HMRC data around export and internationalisation
- Financial Analysis Made Easy (FAME) database
- MINT UK
- Creditsafe UK

A summary was compiled which detailed, for each source, the metrics/indicators that were collected, as well as other useful information, such as frequency of data collection, what level the data was collected at (e.g. international, UK, or Wales level data), how company information was broken down and the strengths and weaknesses of each dataset. A copy of this analysis is available separately to this report.

Following the analysis, it was decided that data would be drawn from a combination of information from FAME, which would enable the identification of Welsh-owned SMEs that were engaged in export activity, and which also included key measures of size of enterprise (defined by number of employees), turnover, overseas turnover and export as a percentage of turnover. These data were to be supplemented with an ONS microdata release which gave information on all Wales based SMEs (Wales and foreign-owned) over the three most recent financial years available (2011/12, 2012/13 and 2013/14). Combined, these data would allow for identification of SMEs who engaged in export by sector, enterprise size (micro, small or medium) and geographical location. Further, enterprises who are defined as high growth, and those who fall just below the threshold could be identified using the ONS microdata release. These enterprises would form the basis of the sample for the qualitative interviews.

It must be noted that FAME contains entries for 80,000 of the approximately 140,000 enterprises based in Wales due to the voluntary basis upon which enterprises share their company information. We therefore acknowledge that the analysis here does not draw from a comprehensive database and this should be borne in mind when reading the findings. The database was cleaned, with duplicated entries removed. Additional information was added to the database to establish whether enterprises were Welsh or foreign owned (completed via an internet search of enterprise headquarters) and SIC codes were converted into broader sections (labelled A to T) for easier analysis. Where data were missing in the FAME dataset, the ONS microdata were used to fill in the gaps where possible, particularly on number of employees and turnover.

Once the high growth enterprises or those approaching the high-growth threshold were identified, ten enterprises were selected and contact details for the director or owner of each enterprise were contacted for interview. Five enterprises who were already demonstrating high-growth were approached and interviewed. Initial analysis of these interviews then informed the interview schedule for those companies who were approaching the high growth threshold, in order to identify any points of difference or any specific needs of these enterprises to improve their growth. Each interview schedule is available at annex A. In total, nine interviews were conducted; two with high growth firms and seven with growth firms. The semi-structured telephone interview with high growth companies covered the following issues;

- The 'entrepreneurial journey' – the history of the company and its growth trajectory to date;
- How the enterprise moved into international markets and the impact on the business;
- Whether the enterprise undertakes any form of innovative activity (product, process or business model) and the relationship between innovative activity, export and business growth;
- Information on whether the enterprise has received any form of external intervention/support, the impact of any intervention, the key challenges facing the enterprise at present and how any future support from government or elsewhere could benefit them.

This provided more in-depth data on the contributory factors to business growth and also helped to identify what assistance, in the view of the business, would be most beneficial in terms of their future objectives. The interviews were recorded and notes were then taken from the recordings to identify key themes. Both the identities of the business and those data from which the secondary quantitative analysis is derived are anonymous and no enterprise can be identified from the information presented in this report.

The purpose of this research is predominantly to assess the utility of the approach to identifying high-growth enterprises in Wales, to provide some indicative qualitative data on the enablers and barriers to growth, to explore how best the Welsh Government may target its resources to ensure further growth for those enterprises who already demonstrate growth, and those who have the potential to do so. It makes no claims to representativeness of all Welsh-owned SMEs, but instead makes recommendations on how to improve our knowledge of the SME business base in order to better target government intervention.

4. Growth and High-Growth SMEs in Wales: Secondary Analysis

Introduction

The results of the secondary analysis are presented here. The data are drawn from two sources; firstly, the FAME database, which identifies those SMEs (both Welsh and foreign-owned) who are currently exporting. The FAME data also includes profile data on the companies, including company name, address, SIC code, number of employees and information about national turnover, overseas turnover and overall turnover for the last three available financial years, which in this case are 2011/12, 2012/13 and 2013/14¹. Additionally, export as a percentage of turnover for each enterprise is also calculated.

The ONS microdata release supplements the FAME data and is drawn from the entire SME base in Wales, both Welsh and foreign-owned, and includes both exporting and non-exporting companies. The ONS data provides additional information on the date of birth of the enterprise, the number of employees for the first financial year (2011/12) and the last financial year (2013/14). In addition to providing information on turnover (as FAME also does), the ONS data also calculates the growth of the enterprise, using the European Commission definition².

Whilst this report will not identify individual companies and their financial data, instead aggregating and presenting the information in an anonymised way, inconsistencies were noted between the two datasets in terms of their individual level data. This was found across the dataset and highlights the problems associated with using different datasets to analyse business data of this nature. Additionally, where analysis was possible, there were often gaps in individual data entries for enterprises, and this has lowered the proportion of businesses that could be included in any given analysis. The analysis will clearly state which dataset was used to draw particular data, the numbers of firms where data were available to include, and will provide some comments in the conclusions about the issues in relation to obtaining consistent data.

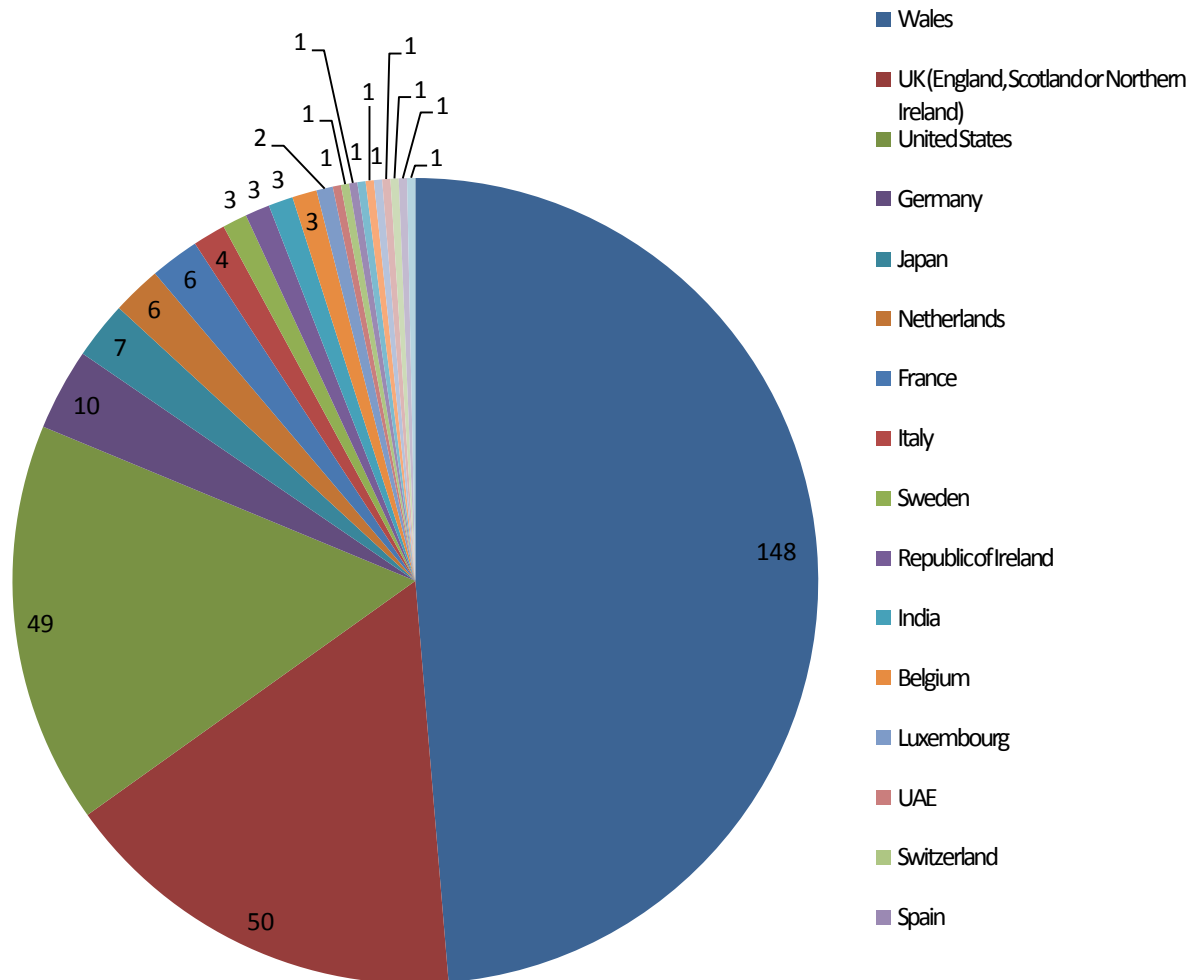
Profile Characteristics of Exporting Enterprises

The FAME database contained a total of 417 exporting Welsh and foreign-owned enterprises that were currently based in Wales. Subsequent cleaning of the data removed 22 duplicated entries and 69 enterprises which reported more than 250 employees, and so are not classed as an SME. A further 22 were removed due to an absence of information on employee numbers, a key measure of whether an enterprise is counted as an SME. This left a total of 304 enterprises. The following pie chart shows the breakdown of ownership by country of the dataset.

¹ At the time of requesting the data, the most recent information for financial year 2014/15 was not available.

² All enterprises with average annualized growth greater than twenty percent per annum, over a three year period and with ten or more employees at the beginning of the observation period. Growth is thus measured by the number of employees and by turnover. (European Commission, 2007)

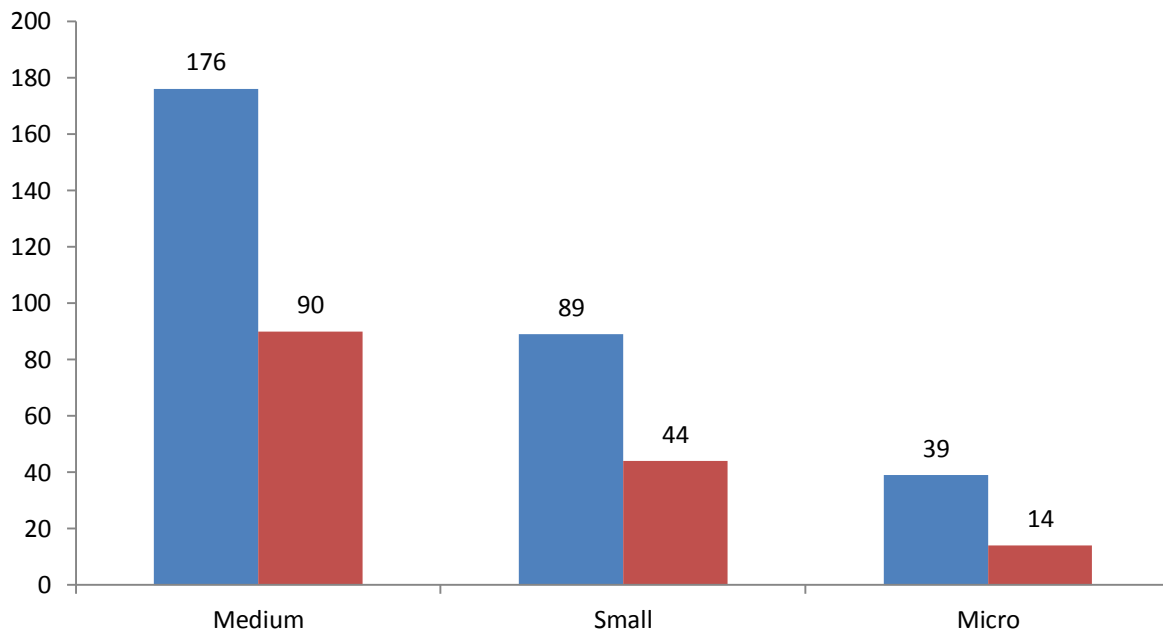
Figure 1: Breakdown of enterprise ownership by country



For this analysis, the country of origin was defined as the country in which the enterprise's headquarters or head office was based. This information was not available via FAME and so was found and added to the FAME database through internet searching. The data show that for exporting SMEs, Welsh owned enterprises make up just under half of the 304 enterprises used in the analysis, with companies headquartered in the United States and the rest of the UK (England, Scotland and Northern Ireland) making up 16 per cent of the sample apiece. There was also notable representation from Germany, Japan, France and the Netherlands. This pie chart demonstrates the relatively high number of Welsh-owned exporting businesses compared with foreign-owned businesses with operations in Wales.

In terms of SME size (defined by number of employees, the FAME data provides the following information for the overall sample of exporting enterprises and Welsh-owned enterprises.

Figure 2: Breakdown of (i) all exporting enterprises operating in Wales and (ii) Welsh owned exporting enterprises by type of SME

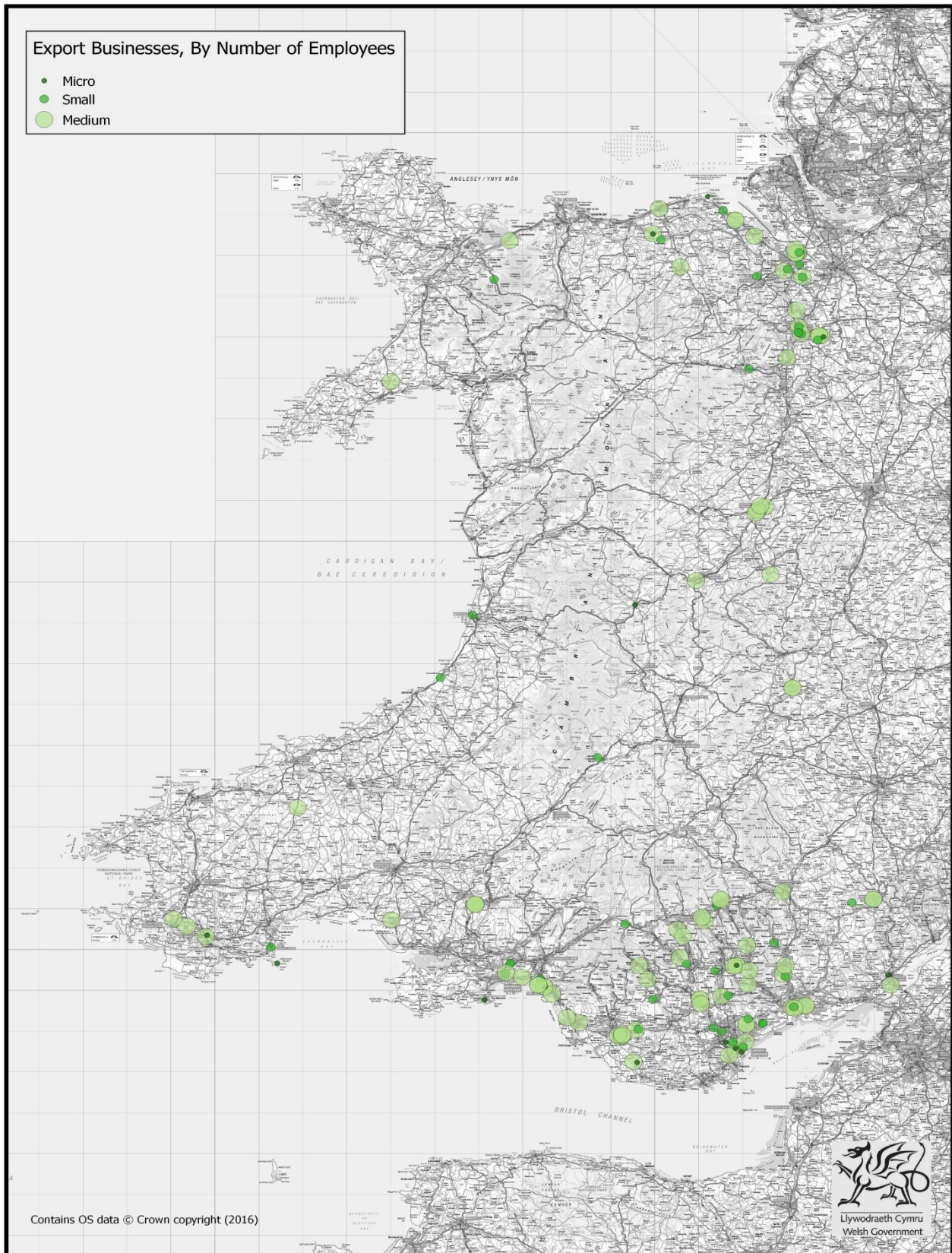


Source: FAME

Of all exporting enterprises, medium sized enterprises (between 51 and 250 employees) make up the majority of the sample, at 58 per cent (n=176), with small enterprises (11-50 employees) making up 29 per cent (n=89) and micro enterprises (0-10 employees) making up the remaining 13 per cent. The Wales-owned enterprises are formed of slightly less micro enterprises (9 per cent, n=14) and a slightly higher number of small (30 per cent, n=44) and medium enterprises (61 per cent, n=90).

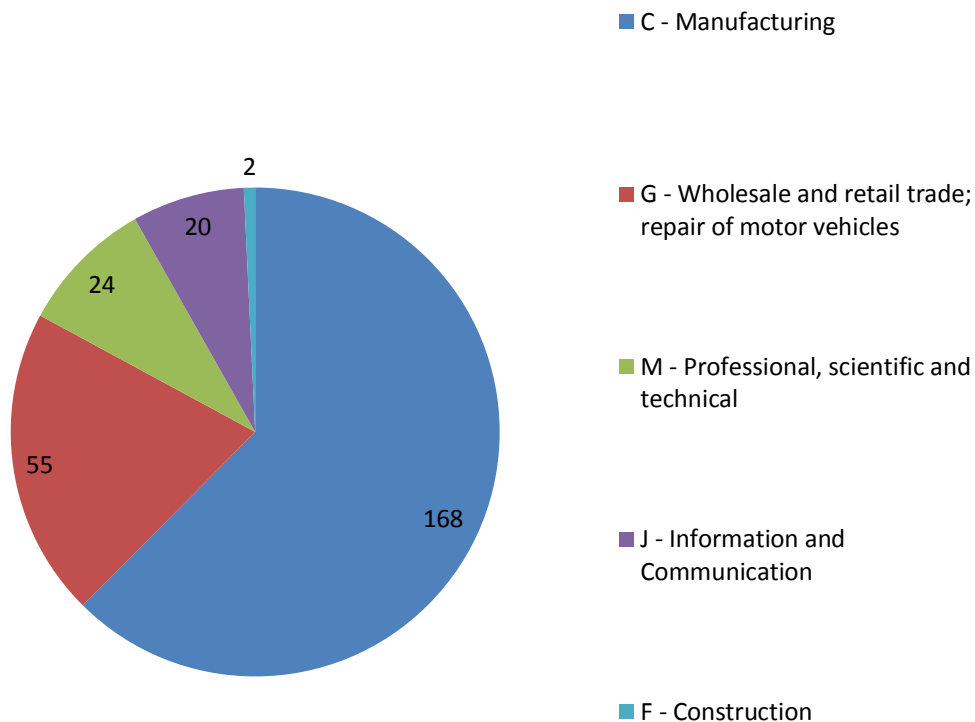
In terms of geographic location of SMEs of each size, figure 4.3 shows the distribution of Welsh-owned micro, small and medium SMEs across the country. As expected, it shows a stronger concentration of businesses in or near to urban areas, particularly around Cardiff, Newport and Swansea in the south, and Wrexham in the north, reflecting links to other businesses and services and proximity to major roads. As already stated, medium sized businesses predominate, and this is particularly true for the Cardiff and south Wales Valleys area. The locations of the businesses were not found to have any association with identified Enterprise Zones. Maps depicting the south east and north east regions in closer detail are available in the appendices to this report.

Figure 3: Whole Wales map depicting location and size of Welsh-owned SMEs



The following pie charts provide a comparison of the overall dataset of exporting enterprises and the Welsh-owned enterprises by sector, using the broader SIC (2007) code classifications. The pie charts show only the sectors that are most commonly operating in Wales, a full breakdown of all sectors is available in appendix B.

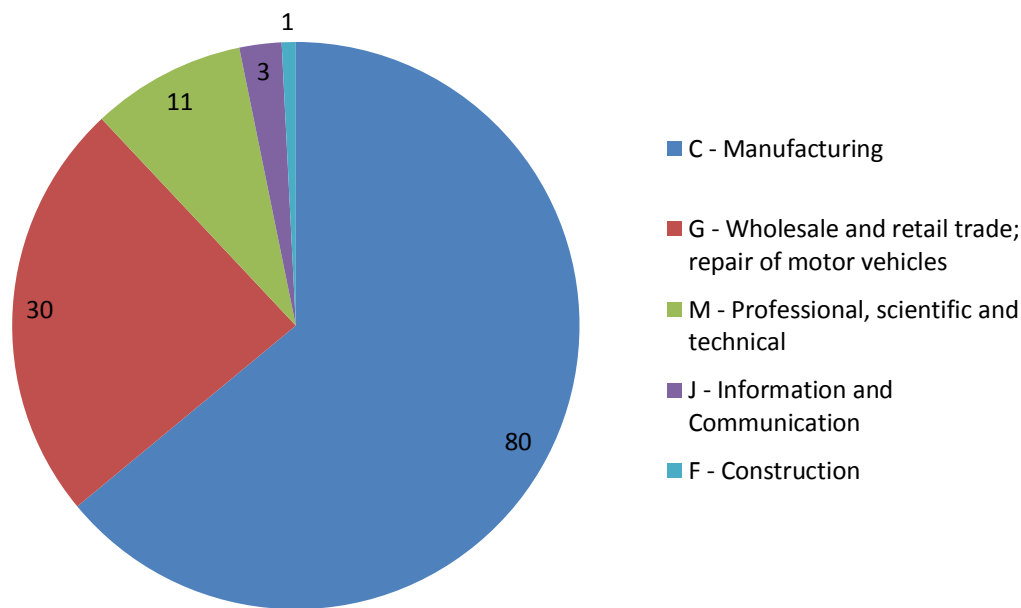
Figure 4: Breakdown of foreign and Welsh-owned exporting enterprises operating in Wales by sector (sectors C, G, M, J and F only)



Source: FAME

Of all exporting enterprises, Manufacturing is notably the most dominant sector, comprising 168 out of 304 businesses, or 55 per cent of the sample. Wholesale and retail trade (G) is also sizeable at 55 enterprises (18 per cent), with Professional, Technical and Scientific (M) and Information and Communication (J) also relatively prominent, with 24 and 20 enterprises respectively (8 per cent and 7 per cent). This is broadly in line with knowledge of the sectoral breakdown in Wales as a whole, in which the manufacturing, retail and scientific and technical fields are dominant. The following pie chart shows sectoral breakdown within the Welsh owned businesses.

Figure 5: Breakdown of Welsh-owned exporting enterprises by sector (sectors C, G, M, J and F only)

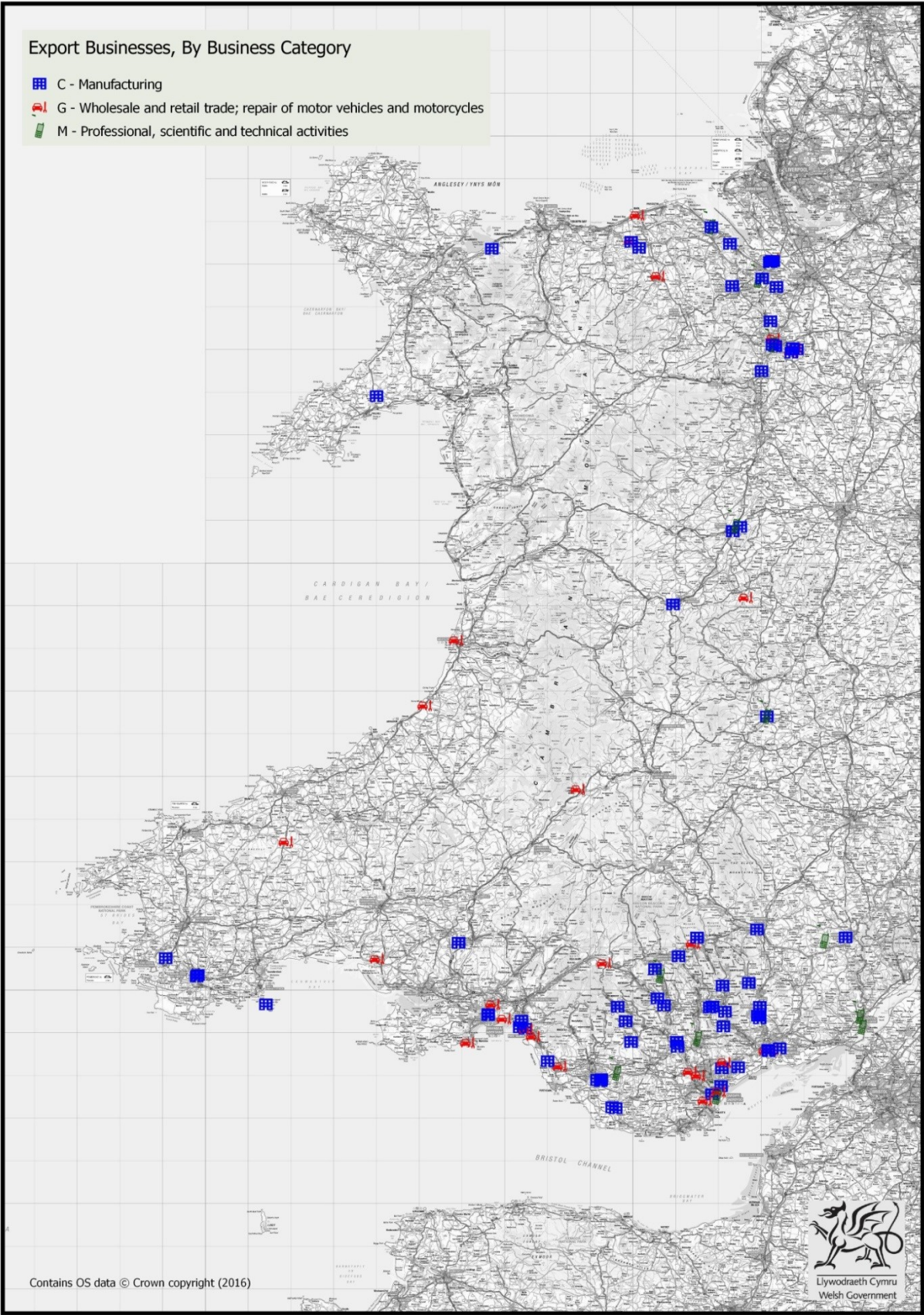


Source: FAME

This shows that the distribution of enterprises by sector is generally in line with all exporting enterprises operating in Wales, with Manufacturing (C) making up 54 per cent of the 148 enterprises (n=80) and Wholesale and Retail Trade (G) making up 20 percent (n=30). The proportion of Information and Communication (J) firms is lower within the Welsh-owned sample when compared with all exporting enterprises, at 3 enterprises (2 per cent).

The following maps tell us more about the geographic location of businesses by sector, focusing the three most common sectors only; C (manufacturing), G (wholesale and retail trade) and M (professional, technical and scientific). Manufacturing businesses dominate, and are largely located near urban areas, with wholesale and retail trade businesses (G) being more likely to be dispersed more widely. There was no evidence of particular clusters of sectoral activity in particular regions, and interview data indicated that the location of businesses was largely due to historical factors as opposed to strategic positioning in relation to other businesses. Figures 4.7 and 4.8 show the north east and south east regions in more detail;

Figure 6: Welsh-owned exporting businesses by location (sectors C, G and M only)



**Figure 7: Welsh-owned exporting businesses by location (sectors C, G and M only):
South East Wales region**

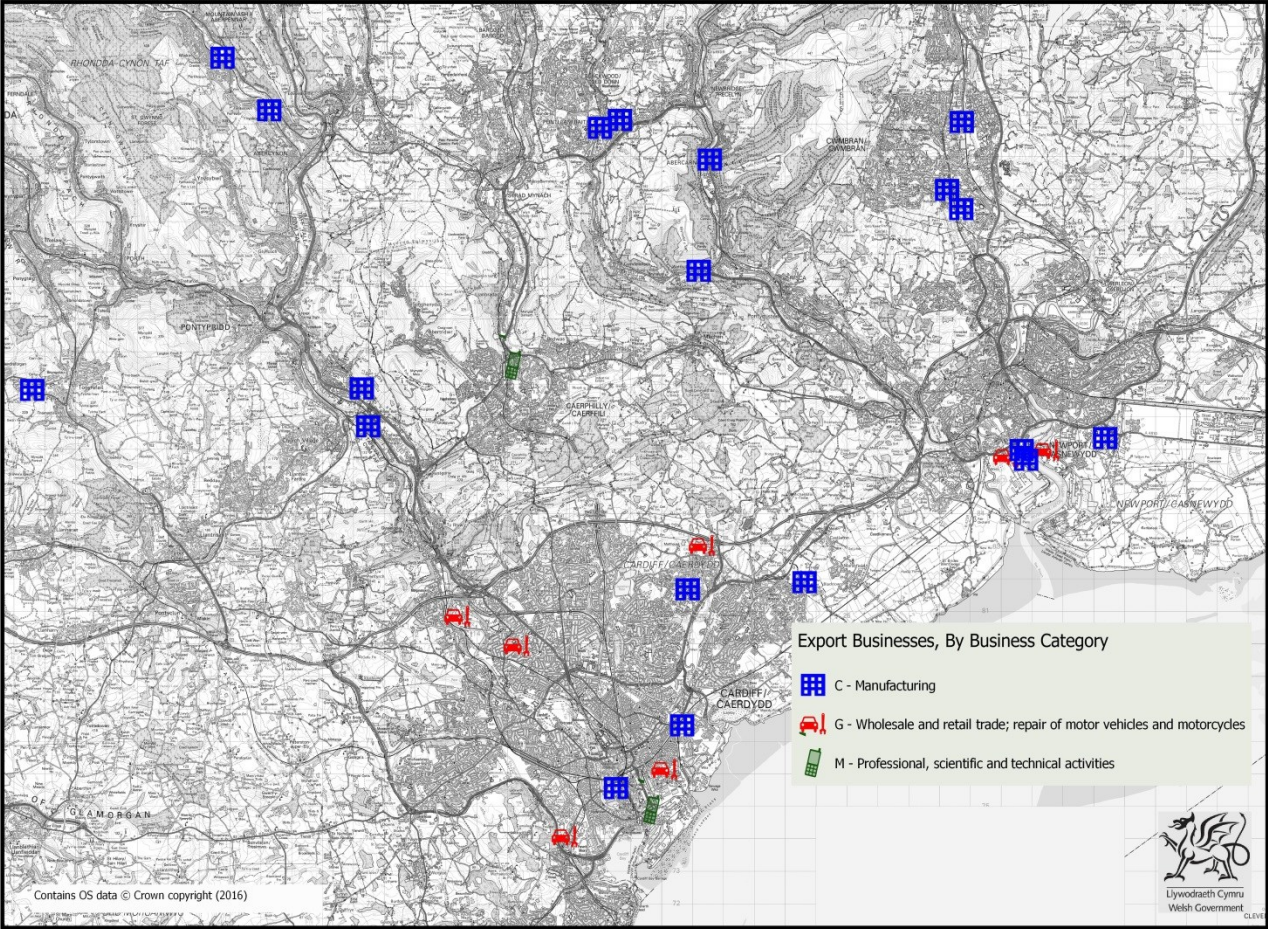
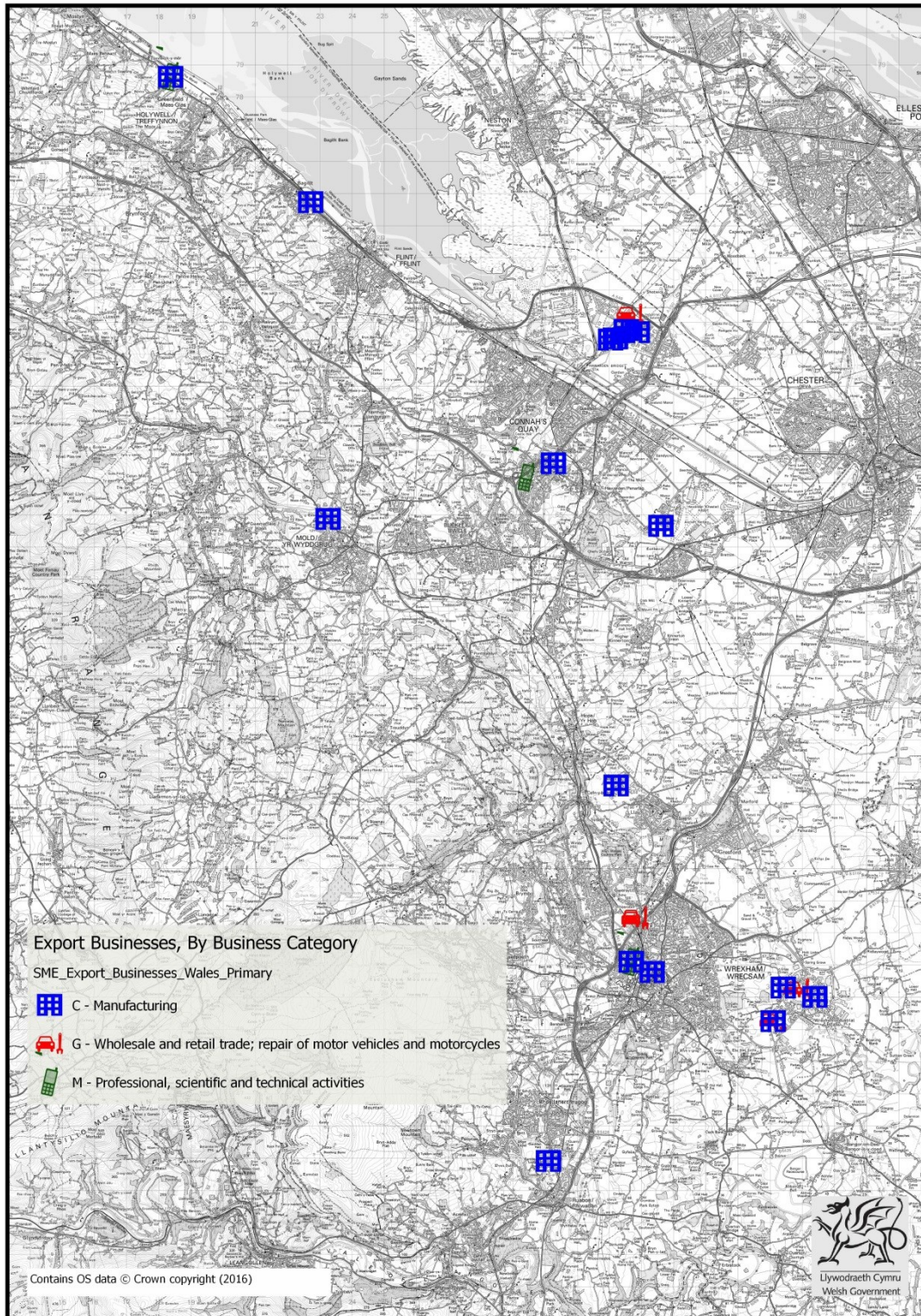


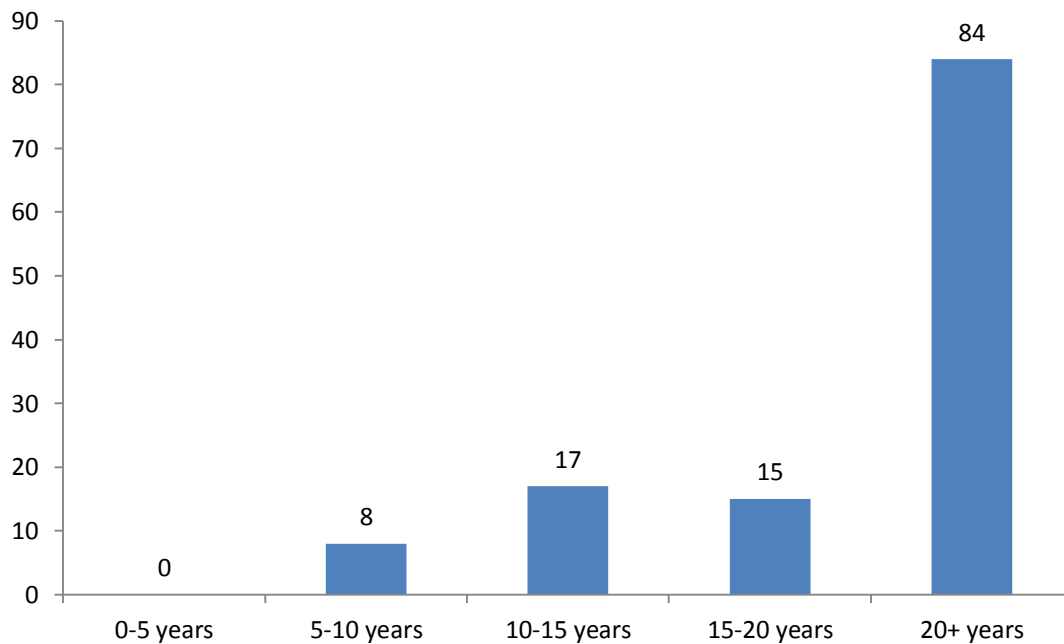
Figure 8: Welsh-owned exporting businesses by location (sectors C, G and M only): North East Wales region



In terms of the age of the business, this was measured using ONS data (which contained 124 of the 148 firms identified from FAME) using the birthdate of the business. The following shows that the majority of businesses ($n=84$) were 20 years or older, with none being less than five years old. This is a consequence of focusing on those companies that export, based on the assumption that those that export are more likely to be older due to the trend for firms to engage in export activity later in their lifecycle, once their domestic business is established. However, the evidence has also shown that growth does not necessarily occur for gazelles, and that it can be cyclical and somewhat unpredictable. The likelihood of older firms experiencing growth of equal significance to new businesses

should be explored in a wider sample of SMEs to establish a fuller picture of the relationship between growth and business age.

Figure 9: Age profile of Welsh-owned SMEs

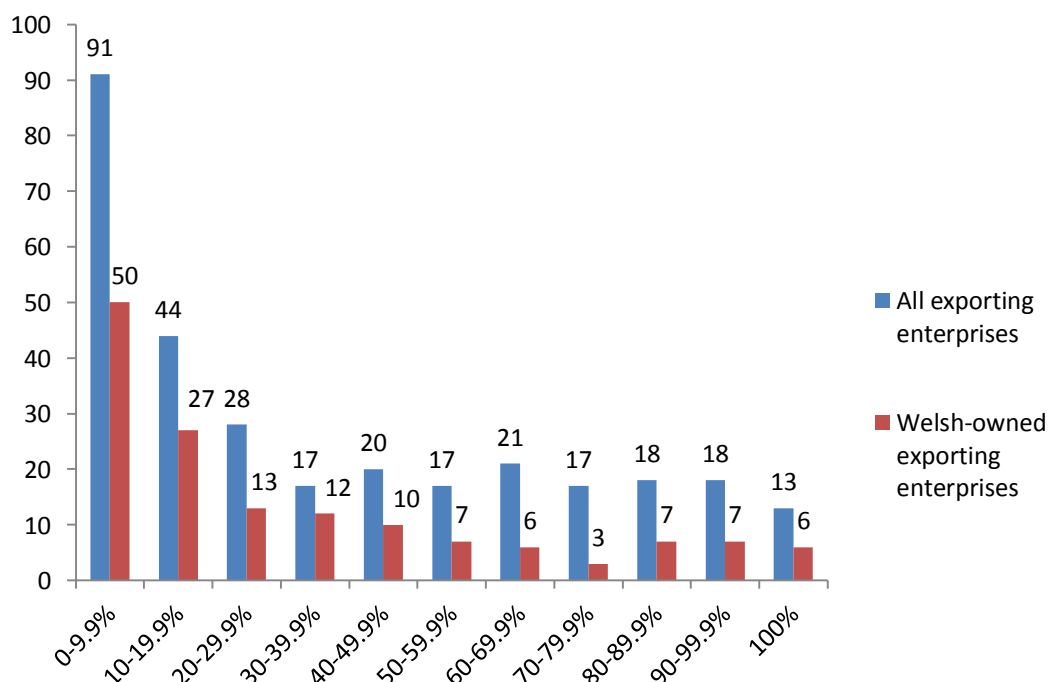


Source: ONS Microdata
Base: n=124

Exporting Behaviour

From the data available, we are able to provide some indicative information on the export behaviour of the sample. This section will discuss the proportion of turnover that results from export activity.

Figure 10: Export as a percentage of turnover for (i) all exporting enterprises and (ii) Welsh owned exporting enterprises

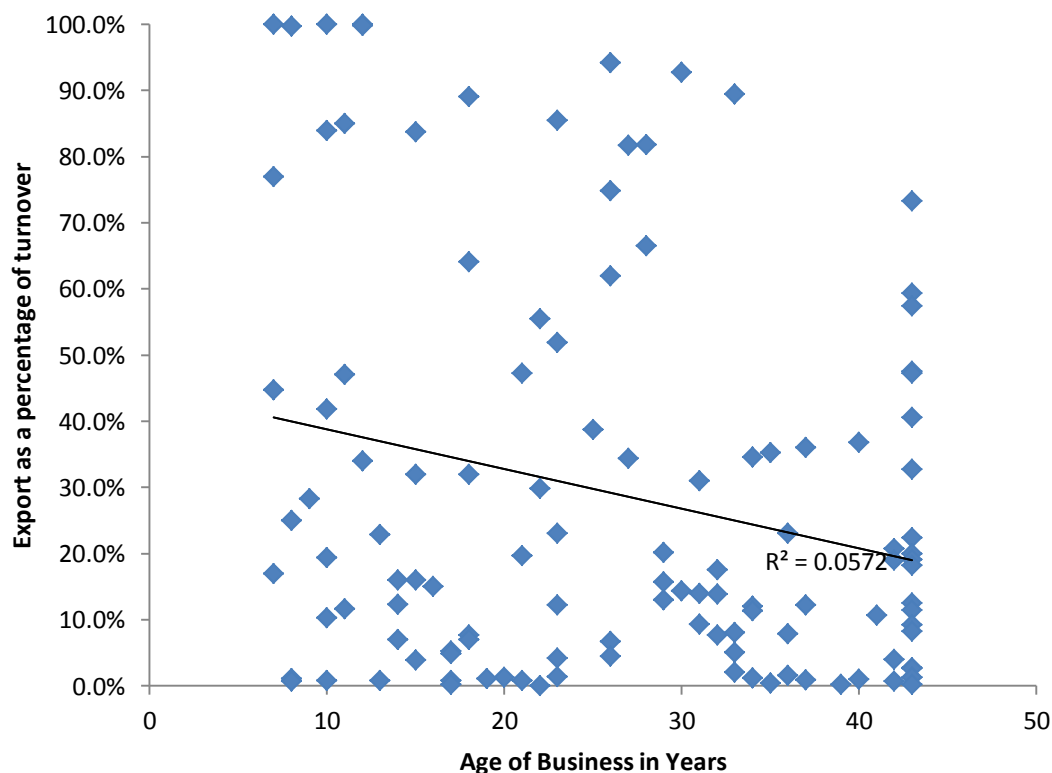


Source: FAME

The bar chart shows the number of enterprises who reported the percentage of their total turnover as coming from export activity, and the results are banded in groups of 10 to show trends in the data. Using export as a percentage of turnover as a proxy for the proportion of business activity which takes place in the international market, the results show that export is predominantly an activity that forms a small proportion of total business activity. For all exporting enterprises, 30 per cent report that under 10 per cent of their total turnover comes from exporting, with 14 per cent reporting that export turnover forms 10-19.9 per cent of total turnover. This declines rapidly as the percentage bands increase, indicating that overall, a very small number of SMEs are export intensive. This is also true of the Welsh-owned enterprises, but to a slightly greater extent, with 33 per cent of enterprises reporting that export forms under 10 per cent of total business activity, and 18 per cent of enterprises reporting that 10-19.9 per cent of turnover can be attributed to export activity. It seems for most SMEs, export forms a small proportion of business activity and those who work to a higher degree in international markets are in the minority.

Focusing on Welsh owned exporting firms, the graph below plots the age of the business in years against the percentage of turnover derived from export activity, a proxy for measuring export intensity. This analysis was undertaken to determine whether the age of the business has any bearing on export intensity. The data do not show any significant relationship in the data available between age of business and export intensity.

Figure 11: Comparing age of business and export as a percentage of turnover for Welsh-owned exporting businesses



Source: FAME and ONS
N=118

Measures of Growth

Using the ONS microdata, we are able to provide some indicative analysis on measures of growth within Welsh-owned SMEs. This will enable understanding of whether high growth within this small sample exists and provides a sub-sample of companies that can be contacted to take part in a qualitative telephone interview to explore the pathways and

drivers of high growth in further detail. The following table gives an indication of business growth within the Welsh-owned enterprises. This is measured by averaging annual growth of each enterprise over three years between financial years 2011-12 and 2013-14.

Table 2: Percentage growth status of Welsh-owned exporting SMEs

Average Annualised Percentage Growth 2011/12 – 2013/14	Number of SMEs
≥20%	19
15% to 19.9%	5
10% to 14.9%	9
5% to 9.9%	24
0.1% to 4.9%	19
0%	9
-0.1% to -19.9%	24
-20% to -40%	4
Data not available	24
Total	146

Source: ONS

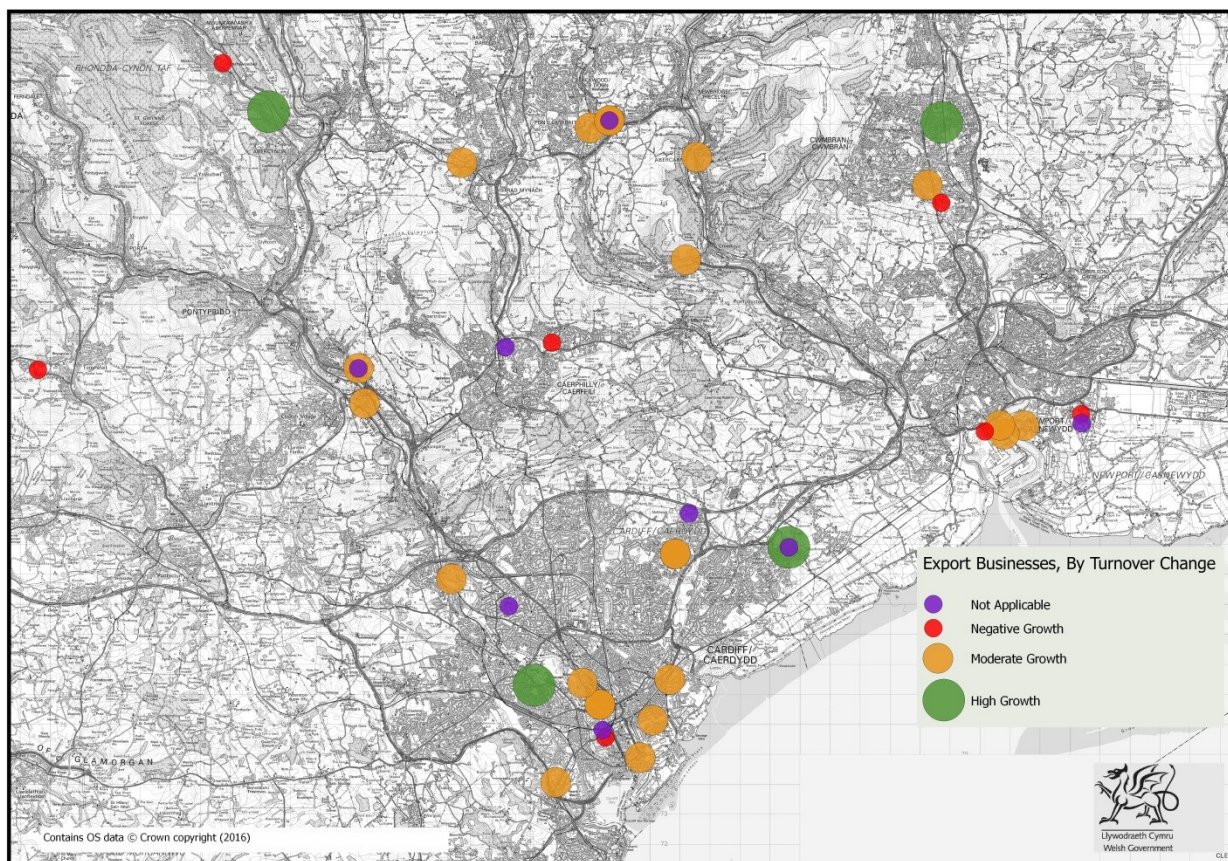
These figures show that only a small number of Welsh SMEs could be classed as high growth over the past three years, with the majority of the eligible enterprises reporting growth of 0.1 per cent-19.9 per cent. A sizeable minority reported negative growth, mostly falling between 0 and -19.9 per cent. Of those who do experience growth, the largest number experience around 0.1 per cent to 9.9 per cent of growth, suggesting that growing SMEs are predominantly at the lower end of the growth spectrum. This may have implications for how support to grow is targeted at these businesses as opposed to those who are experiencing higher rates of growth. Due to the incomplete nature of the data available on growth, we cannot say with confidence that this is representative of Welsh-owned SMEs that export, but it does provide an indication of the nature and distribution of growth within the data we have. The sample of enterprises that have reported growth is sizeable enough for us to approach company directors / owners for further qualitative research.

In terms of location, the following figures depict Welsh-owned businesses in the north east and south east Wales regions by their SME and growth status;

Figure 12: Growth and SME status Welsh-owned businesses in North East Wales



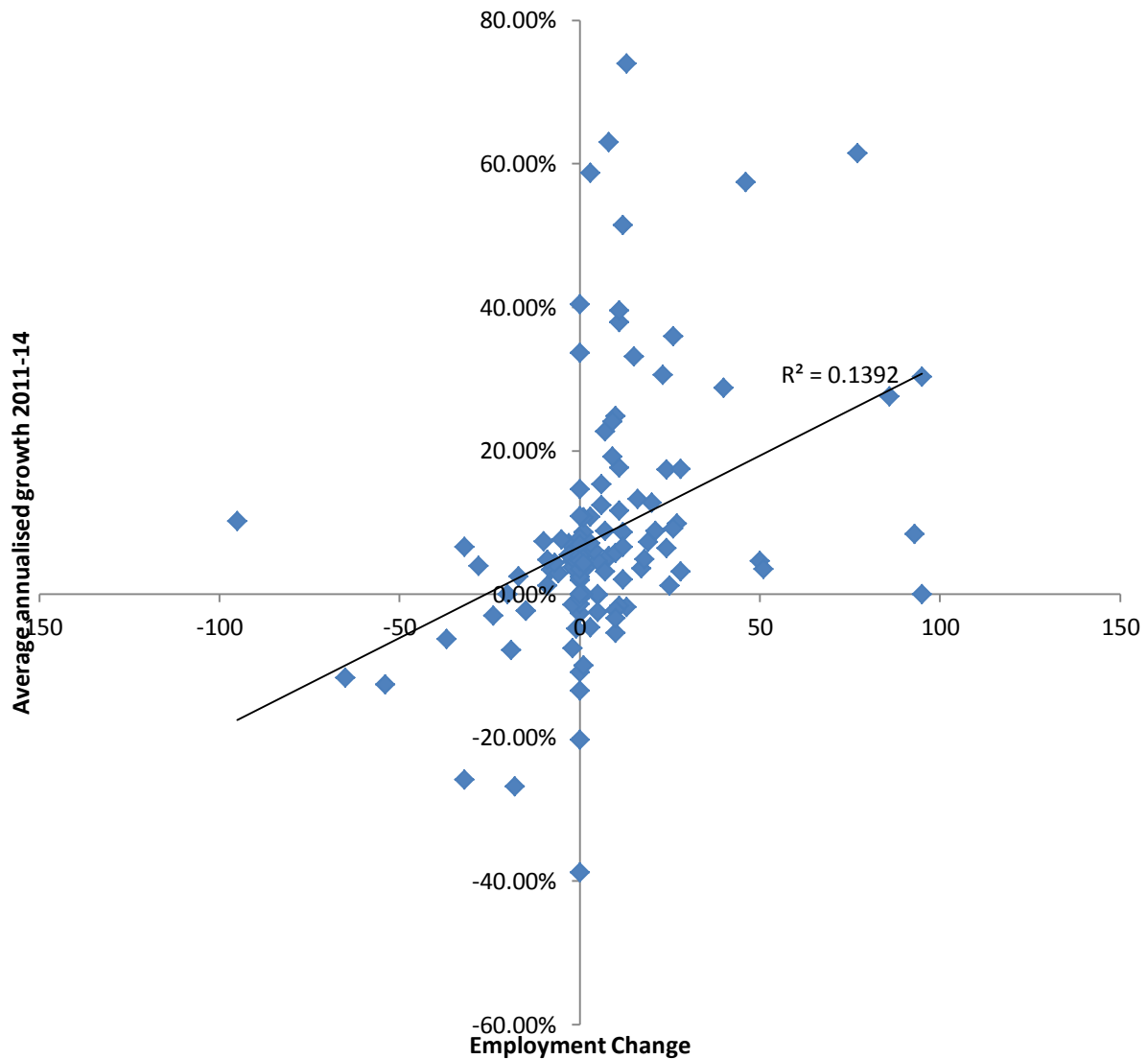
Figure 13: Growth and SME status Welsh-owned businesses in South East Wales



These maps show the distribution of growth and high growth firms in the areas where these types of businesses are most concentrated. They reflect the predominance (in orange) of moderate growth (0-19.9 per cent average annualised increase in turnover) as reflected in the sample, with six high growth businesses located in the North East, and four located in the Cardiff and South Wales Valleys area. Purple dots indicate that data on average turnover change over the three financial years was not available.

Examining the relationship between the two measures of growth being used in this analysis, average annualised growth over three years, and employment change over the same period, the graph below shows a reasonably positive relationship between these two measures. Overall, it shows a general trend of low growth and consequent low levels of positive employment change, with a few instances of more significant positive employment change alongside higher percentages of growth. This general pattern is to be expected given the documented interrelationship between growth in turnover and the ability to increase employment headcount; however in SMEs in Wales the majority of growth businesses report less than 20 per cent average annualised growth. There exists a trend towards growth, but that predominantly falls below the threshold for high growth. This suggests that, just as important as identifying high growth businesses, is also to ensure that support is available for those firms that are growing but require support to become high growth, and the possibilities for achieving this given the situation of the business.

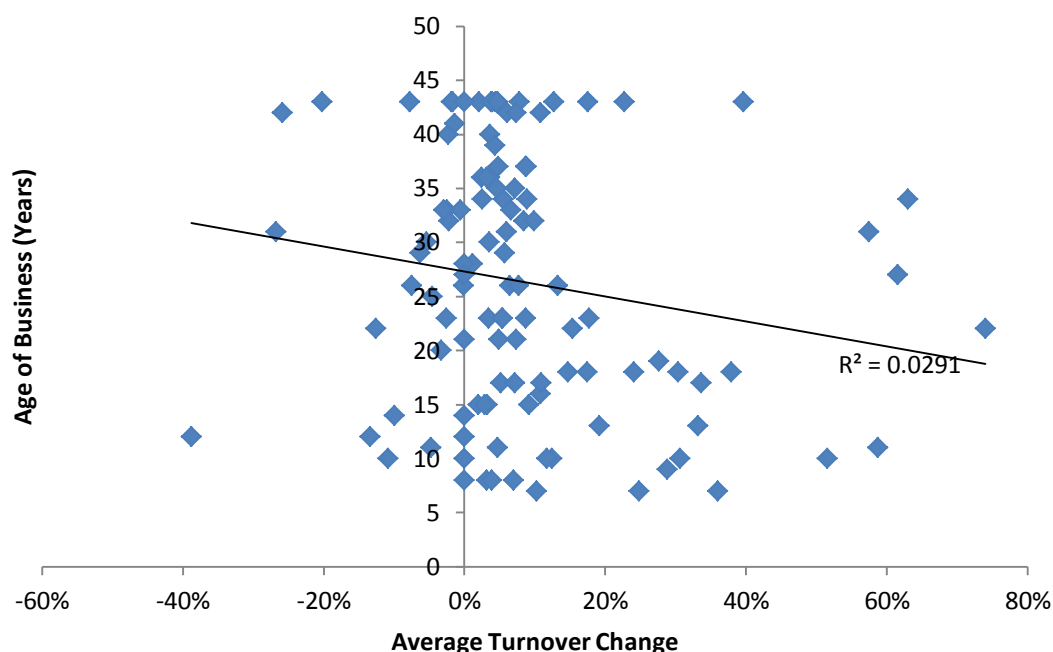
Figure 14: Relationship between average annualised growth and employment change between financial years 2011-12 and 2013-14



Source: ONS

Whilst understanding that there is a weak positive relationship between the two established indicators of growth, there is also value in understanding if any other factors have any bearing on growth. The following examines average turnover change against the age of the business in year.

Figure 15: Comparing average turnover change with age of the business in years



In terms of whether age is of any importance when it comes to business growth, the following data can indicate whether there is a relationship and how intervention may be targeted at certain businesses. As expected, the majority of the sample falls within the 0 per cent - 20 per cent growth range, and there were no businesses in the sample younger than 5 years. The ages of the businesses are evenly spread, with a slightly higher number of younger businesses (20 years or younger) falling within the high growth bracket. There is no discernable relationship between business age and turnover change, indicating that growth does not occur at a prescribed point in a firm's history. There exists the possibility that growth is cyclical, and that it is worth targeting support on a case-by-case basis to businesses, based on their growth potential at a particular time.

Summary

The FAME and ONS data combined have provided us with an indicative picture of the export environment in Wales for both Welsh and foreign owned enterprises. It constitutes a pilot of this form of analysis, demonstrating what it can and cannot tell us, whilst providing some information which can be taken into consideration when designing business support programmes. There are some caveats to the findings laid out here based on the quality of the data, which will be discussed further in the concluding sections.

The FAME data has shown that, although Wales attracts businesses from all over the world to operate here, just under half are headquartered in Wales, indicating a healthy home-grown market. When looking at all export businesses for which there are data available, including those that are foreign owned, and Welsh-owned businesses, it is clear that medium-sized enterprises (employing between 51 and 250 people) are the most common form of SME within the sample. As reflected in the wider business characteristics, the manufacturing sector dominates, closely followed by retail, information and communication and the professional, technical and scientific sectors. This is broadly true of all exporters and those which are Welsh owned. In terms of location, growth and high growth businesses are in the main clustered around urban centres such as Cardiff, Swansea, Newport and Wrexham and are less inclined to be located in Powys or further to the west. There are, however, a number of wholesale and retail businesses which are located on the West Wales coast. Mapping of the businesses by location revealed no

relationship of their location to the designated enterprise zones, or any particular sectoral clustering in a particular location.

In terms of age, the data indicate that over two thirds (67 per cent) of firms are more than 20 years old. When bearing in mind some of the issues around the cyclical, as opposed to linear, nature of growth that came up in many of the interviews (discussed in the following section), this suggests a strong need for appropriate support for older businesses as well as start-ups or gazelles. FAME data indicate that for those who do export, it constitutes in the main, a small proportion of total business activity for most enterprises. This indicates that most export enterprises operating from Wales, whether Welsh or foreign-owned, are not operating predominantly in the international market. It does suggest that they are either in the early stages of exporting, or that exporting forms a smaller component of an enterprise in which domestic business is the priority. Indicative analysis of the relationship between age of the business and export as a percentage of turnover indicated no correlation. This suggests that export does not become an increasing feature of business as the firm gets older, but that foreign trade can fluctuate with changes both internal and external to the business.

When it comes to assessing high growth, only a small number of the total Welsh-owned export businesses were found to be classed as high growth by the European Commission definition, with the majority of those who were reporting growth coming in at under 20 per cent average annualised growth over three years. This suggests that, although high-growth business should be recognised and nurtured, there is a far bigger group of growing businesses that could potentially require assistance to become high-growth. As expected, and supported by interview data, there is a positive relationship between export as a percentage of turnover and employment change. However, it is not possible to determine the direction of causality. There was no relationship found between average turnover change (a proxy measure for growth) and business age, indicating that significant growth is not necessarily found in particularly young or older businesses, and providing support for the cyclical nature of growth, as discussed by business owners in the qualitative interviews.

What this analysis gives us is some basic information about the growth of exporting enterprises, but it does not tell us enough about the pathways to growth for each of these enterprises. Further analysis is needed to understand the path to high-growth, the enablers and challenges and the specific aspects of geographical location, the sector in which the enterprise operates and the decisions that were made that contributed towards high-growth. For those enterprises that reported less than 20 per cent average growth, it is also important to understand the enablers to that growth, but also how they perceive the opportunities and challenges ahead, and what support from Welsh Government or other sources, is required to secure continued or higher growth in future.

The following section attempts to address some of these issues through analysis of semi-structured telephone interviews with SMEs which have already achieved high-growth, and also those who may achieve, or aspire to achieve this in the future. Through more detailed understanding of the mechanisms through which growth may be attained, and the perceptions of business owners of the future of the enterprise, we can begin to understand how Welsh Government and others may best support these efforts through targeted intervention.

5. Interviews with Growth and High-Growth Businesses: Analysis

Following the secondary analysis, businesses identified as high-growth or growth were approached via telephone to take part in a 20 minute telephone interview. The aim of these interviews was to expand upon the information obtained from the FAME and ONS datasets and provide some qualitative information from managing directors or finance directors of these firms.

Interviews were undertaken with nine firms; two of which were classed as high growth and seven classed as growth firms. This section of the report highlights some of the key issues arising from these interviews to provide some indicative in-depth information. Responses have been anonymised, and firms will only be identified by the sector they are operating in, and the position of the individual in the firm who took part in the interview. Where the content of some of the responses may identify the company, the information has been edited.

Pathways to SME growth

This section asked questions about the history of the company to date, the issues around the business's geographical location in Wales, its pathway(s) to growth and how the growth has impacted on the business.

Location of the business in Wales

Whilst each of the businesses was in a different position in terms of their respective histories, they often cited that the reason for their location in Wales was due to a long history of being based in their current location. As such, they felt both from a business and personal perspective, that this remained the best place for them to be. Some businesses were family run and continued to be, providing an incentive to remain in the same area;

'Well, the original business started in 1968 by my grandfather, so I'm third generation taking over the original business.'

(MD, manufacturing, growth)

The latter quote illustrates an adaptation of the business over time in terms of the products sold, which aligns with the changing economic landscape of South Wales. In doing so, this company highlighted the importance of remaining in the area as a base for their business, viewing the region in both personal terms, as their home. Family businesses considered both these factors in making their decision to stay as opposed to moving elsewhere, for example, to other areas of the UK where trading conditions may be more favourable.

'In Wales we've got some very talented local people who work for us. We have in the past, considered moving to another more central location within the UK but it's where we've always been and we'd rather stay at home and produce in Wales at the end of the day..'

(Financial Director, Wholesale and retail, growth)

For all businesses interviewed, the historic basis in their current location offered an established base from which growth could occur. The key concerns of being able to attract and train suitable skilled labour, and the importance of location in achieving this, was highlighted by some firms;

‘With regard to our being in the city centre, we found it helps with regard to the profile of the staff we have working here. We have quite a number of people between the ages of 20-35 who are quite attracted to working in what is a relatively vibrant city centre location.’

(MD, Administrative and support services, growth)

‘Also, by the time I had taken the business over, this has been going for forty odd years, all our core competencies that we had developed internally, that we had trained internally and put a training programme together and brought on youngsters and continued to do that...’

(MD, Manufacturing growth)

As well as providing a sound base for recruitment and training, possessing a good location was frequently cited as a strong positive practical factor in deciding that their business should remain in their current location, and something they felt they currently had;

‘Well we’ve got a good location on the industrial estate, on the A470 and the M4 corridor, so we’ve got a really good location I feel for distribution...The infrastructure of Cardiff is pretty good, there’s accessibility to Cardiff Airport, Bristol, it quite easy along the M4 corridor to get to.’

(MD, Administrative and support services, growth)

‘There’s very good transport links, we’re just off junction [X] and very good transport links, there’s not bad access for skilled labour from near both Swansea way and Cardiff way so it’s not too remote and fairly easy to get to.’

(MD, Manufacturing, growth)

For others, the concentration of suppliers and associated businesses offered another advantage. For this manufacturing and engineering business, proximity to an incubation unit for start-ups provided opportunities to absorb knowledge from HEIs and build networks which are of benefit to the business;

‘Yeah the other ermm key benefit to us being here is the [specialist centre] – I don’t know if you’re familiar with the [specialist centre]...It’s a technology and an incubation centre that was set up specifically to ... and they have incubation units for start-up businesses so whilst we weren’t strictly a start-up business by the time we moved our manufacturing facility in the [specialist centre], it was very convenient for us.’

(MD, Manufacturing, high growth)

Drivers and enablers of growth

Interviewees were then asked about the reasons they felt they experienced healthy growth, whether the full potential of that growth has been affected by other factors, and what that growth had enabled.

Crucial for some firms was the boost to their respective sectors from external factors. This occurred either through the improvement in macroeconomic conditions, and therefore more investment in particular sectors following the 2008 recession, or the increase in popularity of a particular type of tourism that the business catered to. The increase in spend both at home and abroad had created more favourable market conditions and therefore more trade;

‘The main catalyst for growth has been, as I mentioned earlier, sort of increase in [X] spend both UK and overseas.’

(MD, Manufacturing, High Growth)

In terms of other markets, the resurgence in demand for goods and services in particular markets had led to businesses taking the opportunity to develop their business to meet the demand and subsequently grow;

‘The factors were I think the actual rebirth of [X] throughout the country. It wasn’t just the gang of four of X who had the idea, throughout the country other people had the idea and they we’re saying ‘there used to be a [X] here, it used to come through, let’s have a look to develop’....,

(MD, Transportation and storage, growth)

One prominent driver of growth for small businesses was to use acquisitions as a key method to ensure growth as well as to expand their customer base. There was found to be a mix of organic and acquisition-based growth among the businesses interviewed. This provides indicative support for Brown et al’s (2014) assertion that many high growth firms do not grow via organic means alone, but that a high proportion of these businesses are engaged in acquisitions as a means to growth and increase employment;

‘It was in 2010/2011 that we purchased the company and since then we’ve been rationalising the current range, making some acquisitions and also doing some product development and launching some new products, which has led to growth in the business.’

(MD, Manufacturing, growth)

Other factors were reported to a lesser extent. One important emerging theme was to take opportunities to grow through collaborating with their existing customer base. One company had used their existing business partners’ international subsidiaries as a springboard, offering products to international partners;

‘We deliberately decided to target export in 2000 and so we had a lot of growth essentially by technical expertise where we’ve taken products that have technical ... and taken them to initially British companies and piggy backed them onto their foreign subsidiaries, or their foreign sister companies and spread them round the world like that.’

(MD, Manufacturing, high growth)

A couple of firms also discussed how, in different ways, the increased specialisation of their business offer has allowed them to carve out a market niche and build a reputation upon having that specialism and doing it well. This has enabled them to secure a good relationship with their customers and respond quickly to their needs.

‘We do have a very sound engineering design team so internally, our ability to be able to respond very quickly and very proactively to customer requirements has been a significant differentiator for us.’

(MD, Manufacturing, high growth)

Factors affecting growth – benefits and challenges

There were a number of issues which posed a challenge or barriers to growth for the SMEs interviewed. Responses often pointed to the cyclical pattern of growth that took place within the firm. From the perspective of managing directors, growth often took place over a limited period of time, and was dependent on external macro economic factors. Periods of high growth were, on the whole, not considered sustainable in the long-term

and periods of low or even negative growth often followed in a cyclical pattern. This is also consistent with Brown et al's argument that high growth firms do not undertake steady linear growth, but that growth is unpredictable, sporadic and of limited duration (2014:13). In recent times, this cycle has been heavily associated with the 2008 recession. This cycle was considered inherent to the nature of business, as these extracts demonstrate;

'Growth has been cyclical in parts, we have suffered as part of the economic slowdown, around 2008-2010, when the economy is good then we tend to prosper. Growth was not steady [prior to 2008 recession]. We had a cyclical downturn in terms of the business we had. We haven't grown steadily in our 16 year history, it's been periods of growth and contraction.'

(MD, Administrative and support services, growth)

'Growth has fluctuated year by year, some years we have growth 15 per cent, and then 15 per cent and then 15 per cent and then you have a few years where it's fairly stable and there's no specific plan that we're going to grow by x per cent a year... Some years you'll pick up three or four contracts in a year, just those contracts, there aren't the renewals coming up, they don't pick up those contracts. There's very little rhyme or reason to it, it's just we don't have very much control over what happens.'

(MD, Manufacturing, growth)

Inevitably, unfavourable economic conditions do impact negatively on growth, but interviewees also highlighted that even in good economic conditions, issues such as contract renewals can be unpredictable and external factors can have negative consequences on the success of the business. Strategic approaches can be considered, but external factors can disrupt any formulated strategies, which have consequences for turnover and, therefore, growth. This is true with regard to internationalisation, as is explained later in the section.

The global downturn has had other effects, including cutbacks on discretionary spend, losing domestic trade to cheaper foreign imports, and the loss of government funding following the recession, as these extracts illustrate;

'I think it's difficult to look past general economic factors but in the UK and abroad we supply [X] contractors, so when companies cut back on discretionary spend, then it hits us quite hard.'

(MD, Administration and support services, growth)

'.. and what we've found is that although the garden centre side of the business has grown, the other side of the business... Tesco, for example will source their [X] by going through somebody else... in the Far East.'

(FD, Manufacturing, growth)

'Figure originally intimated by the WG that we could get would be 2.5 million towards our extension. Because it was delayed, getting the transport and works order, the country went into a bit of a decline, there wasn't sufficient funding left for all of the projects that they had promised money to.'

(MD, Transportation and Storage, growth)

Despite there being numerous challenges to growth, there were also several benefits, with several interviewees citing the immediate positive impacts on growth being an increase in turnover and the related possibilities this brought in terms of increasing recruitment and/or ensuring current employment remained stable;

‘All of the above [increase in turnover, increase in employment].’

(MD, Administrative and support services, growth)

‘We’re planning to recruit another 4-5 people this financial year and we’ll be looking to recruit the same again next financial year. So, we’ll be looking at least 60 employees in the next two years.’

(FD, Manufacturing, high growth)

‘Well I think since – when I started in the company, we probably had around 50 to 55 employees of which probably 25 were in the factory and the others were – a few in the office, a few in the warehouse. We now employ between 100-110 employees... one of the things we have achieved is that we’ve given our staff relatively stable employment and pretty decent wages for the area.’

(MD, Wholesale and retail trade, growth)

Investment in the business as a result of growth, as mentioned in the extract above, alongside providing stable employment has enabled businesses to maintain stability and expand their market abroad, and to attract more customers to their business;

‘Without that export growth, we would not be here. It has enabled us to re-equip quite a lot of the factory...but the fact we are still here and still solvent is entirely due to the fact that we adopted that exporting strategy, because what it has enabled us to do is until very recently keep the same number of people employed as in 2000/1,’

(MD, Manufacturing, growth)

‘But it enabled us to carry more passengers into [X], so again looking at the bigger picture, people came down because they could get to [X], [X] benefitted by getting more visitors to the actual town and obviously the more people we carry the more people know about us.’

(MD, Transportation and Storage, growth)

‘I think we’ve been willing to take a few risks, so we’ve opened up offices in new markets such as [X] and [X], which we’re quite familiar with in terms of dealing with them nationally, so that’s certainly a factor in growing our export sales.’

(MD, Manufacturing, growth)

Finally, alongside providing more stable employment, expanding their international reach, and investing in equipment, some businesses also highlighted their ability to better serve their customers, in this case as a result of acquisitions to ensure diversification of a product offer;

‘First of all it’s given everybody stability, a much more stable basis to build the company forward on, because our customers are much more locked into us now, their packaging is bought from one place, their [X], their [Y], the whole lot so that enables us then to concentrate on fewer customers and give a much better service and add much greater value...’

(MD, Manufacturing, growth)

Overall, the results of growth e.g. increased turnover, allow more stability and confidence in securing jobs and expanding employment within a business. Favourable external forces were, however, the key factor in creating conditions that businesses felt were stable enough to do this. Other issues, such as the availability of finance, linked to the improving financial situation post-recession, also enabled investments in which firms were certain would lead to increased growth.

Export and Internationalisation

Interviewees emphasised the importance of export activity to their business over the years and decades they had engaged with it, citing the ethos of internationalisation as close to the intentions of the company and that it had been an established process for many years. In terms of how their entry into the export market was initiated and became successful, most cited that this came about through seizing an opportunity, rather than there being a particular export strategy within the firm;

'[entry into the [X] market] ironically was something of an accident. They found us on the internet and we pursued it, but it wasn't the main focus at all.'

(MD, Manufacturing, high growth)

'I think it's purely opportunity. It's very difficult to turn an opportunity for a business down.'

(MD, Administrative and support services. growth)

'It started by [X], the [X] museum contacted us and we invited them to one of our events so they could have a look at it and it then snowballed from there.'

(MD, Transportation and Storage, growth)

Responses indicate that often entry into global markets comes about through fortuitous circumstances as opposed to executing a pre-conceived strategy. As the last respondent points out, the 'snowball' effect can be positive, as an initial opportunity can develop into other opportunities and further business. This is often a key pathway to growth; as positive relationships are built with one overseas firm, these can often lead to enhanced reputation and additional business. Often, targeting markets was thought to be ineffective, and opportunities often arose from approaches from customers as opposed to seeking out business.

In terms of the balance of home versus domestic business, this varied widely across different growth firms. Export trade as a percentage of total turnover varied from as little as less than 10 per cent, to as high as 60 per cent across all nine businesses interviewed. Responses generally emphasised that the company initially developed and grew on domestic business before entering export markets. Nevertheless, export was an inherent part of the business and would continue to be so over the short to medium term. The amount of export undertaken (as a percentage of turnover) was highly dependent on the opportunities offered by international trade however, with some firms stating that a new contract with a foreign business had led to an increase in export contributing a higher proportion to overall turnover, but that this changed over time and business came and went. Other European nations featured prominently in the international trade discussed, with equal importance given to China and other countries in the Far East, the US and the Middle East.

Benefits of internationalisation

The main benefits highlighted through engaging in exporting were firstly the ability to engage with businesses offering a similar or complementary service in other parts of the world, and the opportunity for networking and knowledge sharing that provided;

‘The benefits really are closer ties with similar attractions on the continent...but this opened other doors and through communication with them now, there are things...we have probably gained because they want...they’ve sent parties across to [X]...And again, it goes back there, they’ve been here and the knock-on effect is anybody coming from the continent over to Wales will more than likely come and visit us [here]...but we still offer the quality service anyway, but if they see us at our best, they go back and it’s fresh in their minds. It just develops really...’

(MD, Transportation and Storage, growth)

This business highlights the constructive relationship built through visits from and to partners abroad. The importance of quality of service, for this business, works in tandem with this engagement to provide constructive relationships and an improved reputation for what they do worldwide. This can lead to increased contacts and subsequent business growth. This was also true of one of the high growth businesses interviewed;

‘The positives are that it has allowed the business to grow very quickly and it opens up new markets as well. It raises the profile of the brand and the organisation.’

(FD, Manufacturing, high growth)

In this way, export was viewed as one of the principal avenues to growth. Although, for most businesses interviewed domestic trade was responsible for the majority of turnover, export was considered a significant factor in their ability to obtain new business and establish wider business relationships when opportunities arose.

Barriers and Challenges to Export

There were a number of challenges to exporting goods and services that recurred over the interview transcripts. The most notable was that detailing the legal and regulatory issues that needed to be addressed in order to set up effective trade relationships with foreign businesses;

‘The barriers to entry to foreign markets are typically legal and regulatory. So, the particular bits of legislation that apply to staffing companies in those countries. The number of countries that require particular licenses and there might also be constraints on how labour can be supplied.’

(MD, Administrative and support services, growth)

‘The...working out the VAT and taxation side of things has been interesting in inverted commas...but that’s not insoluble and it just takes a bit of work to do and understanding really.’

(MD, Wholesale and Retail trade, growth)

Legislation in relation to employment, VAT and other forms of tax and regulation were all cited as potential stumbling blocks to successful trading relationships. These issues could often delay the set up of trading partners whilst the business grappled with the paperwork required to ensure compliance with legislation. As the second quote above illustrates, this just requires some research and diligence to overcome. But for the most part these barriers were not insurmountable and did not prevent success once the issues had been understood and solutions provided, as one MD points out;

‘that there’s quite a steep learning curve for all the ins and outs of what they want doing, but once it’s been done and once we’ve established what the processes are, then it becomes easy.’

(MD, Wholesale and retail trade, growth)

Other issues were of a socio-cultural nature, where language barriers and cultural differences between the UK and international partners were noted, particularly in Asian countries, where established conventions for doing business are slightly different;

‘Well, first of all the barriers we have, the language barrier and also they understand how people work in that country, every region is different. The UK, a lot of people forget in the UK when they try to do business, especially in the Far East that there are certain ethics you have to follow, they will only do business with you if you do certain things, and its all about respect and a lot of people forget that so the best way of knowing that is by employing local people.’

(MD, Wholesale and retail trade, growth)

This quote highlights not only the adaptation that businesses have to undertake in the way they communicate, and to be accommodating of different cultural conventions in order to trade successfully in Asia, but also that a good strategy for achieving this is to employ local people, who can speak the language and understand the business environment. An intermediary with local knowledge means that issues can be addressed and solved more quickly, leading to improved business relationships and efficient working arrangements.

Future internationalisation strategy

This section looked to the future and asked interviewees to outline their export strategy going forward. What was clear from all responses was that businesses saw themselves as part of a global market and that export activity was inherent to their business model and would continue to be so. This became evident as they described their forthcoming plans;

‘What I do see is I think there’s been a continuing trend that our customers are getting more worldwide, as I said on the weekend we had an enquiry from Vietnam...these are all things that would have seemed impossibly exotic even 5 years ago.’

(MD, Manufacturing, high growth)

‘I think once we’ve established the base over in [X], we’re now being approached by other customers saying...they’re opening a factory in say Slovakia and they say ‘Now you’re in [X], you can supply our Slovakian HQ.’

(MD, Wholesale and retail trade, growth)

For this business, their export strategy had led them to set up an office on the continent, which had made them more attractive to European businesses due to them being more accessible in mainland Europe. The benefits of this move had meant the possibility of increased export business in the future and the potential of different business relationships with their customers. Above all, regular and face-to-face engagement with international customers remained very important to a number of firms, despite the ease of email and the internet. Firms felt this enabled positive relations to be maintained and for them to ensure they were providing the best service.

‘So it’s good old fashioned face to face meetings, even in these...even in the age of the internet.’

(MD, Manufacturing, high growth)

Through all interviews, the focus was looking to improve on gains made in international markets through various means, seeking to innovate in terms of branching out to new markets, improving customer service to existing markets and capitalising on increased opportunities that the international market presents. Innovation, in all its forms, was a key part of building upon this success, as will be discussed in the next section.

Innovation

With regard to innovation, interviewees were asked what types of innovation took place within the business, and the relationship between innovation, export and growth.

The interviews revealed the full range of innovative activity taking place across firms, with development of new products, refining processes to make them more lean, efficient and therefore, better value for money. Also discussed were some marketing and customer offer innovation for one tourism business that had seen a rise in its numbers as a result of offering added extras to its service.

What was clear was that in whatever form it took, innovation was a key driver of improvement to the business offer and its processes. At the heart of the innovation ethos was the idea that customer needs should drive innovative practice.

'What drives the R&D activity? – Mainly customer or technology driven.'
(MD, Manufacturing, growth)

'[Product innovation is] customer driven, we have a laboratory with various test equipment in and we have three people who would be R&D and another three are quality, which sort of link into that and the sort of research we're doing it's cutting edge in the sense that we are inventing new rubber formulas.'
(MD, Manufacturing, high growth)

'We're very proactive in the design process so the vehicle manufacturer will obviously have initial designs around what they want their X systems to be able to do and their X, where they want them to be mounted on the vehicle umm and then we take over, very much the design of that. As I say, we're very proactive and we work very closely with our customers' technical teams by making improvements, enhancements and design modifications.'
(FD, Manufacturing, high growth)

The most effective efforts in terms of innovation were those that were requested by customers, or innovation that was undertaken in collaboration with customers to produce a bespoke product. For some, in addition to the impetus for innovation being due to customer needs, the importance of collaboration with customers was considered;

'As I say, we're very proactive and we work very closely with our customers' technical teams by making improvements, enhancements and design modifications. So, all of our equipment is pretty much bespoke, depending on what vehicle it goes into, you know. It's not that we have a sort of standard product range that we can just ship round the world.'
(FD, Manufacturing, high growth)

For some, innovation was employed in the context of improving or tweaking products or processes;

'Depends what you call innovation, within our market, there's relative...there's some opportunity for innovation but most of the time it's developing products that are already in place, or you're starting something that's already in place and tinkering with it, so I wouldn't be so bold as to say we're actually innovating very much.'
(MD, Wholesale and retail, growth)

‘We try as best we can to do process innovation, that is more tricky...It just shows the difficulty of radically changing the process. But we do constantly try and tweak the process to be less wasteful, to use less energy.’

(MD, Manufacturing, high growth)

For those firms where the nature of the business is less conducive to innovation in its fullest sense, tweaking and continuous improvement offers the most benefit, to offer a better or more efficient service.

Innovation and its relationship to export and growth

For all, the interdependence between innovation and export was plain;

‘[Innovation] is happening in parallel [with working overseas]. We’re looking at business processes and client focus pretty much at the same time. They are interdependent to a degree.’

(MD, Administrative and Support services, growth)

‘I think its obviously, if you’re new to the international markets you’ve got to have, you’ve got to be able to respond quickly to increased competition, you’ve got to have a unique selling point with your product or service.’

(MD, Manufacturing, growth)

Engaging in innovation and international markets was of mutual benefit to each activity, with the implication being that new products and processes opened up new markets overseas. As a consequence, once new customers engaged with the product offer and were on board with the firm, more innovation could then take place to suit customer needs. This virtuous circle was established with many firms in order to increase competitiveness and ensure that the products and services provided were unique. This subsequently facilitates increased growth, as this managing director of a high growth firm explains;

‘[Innovation, export and growth] are intimately interrelated because as I say the entire drive into export, which was successful on the back of having products which were materially better than the competition and that was driven by R&D. So without the R&D, we wouldn’t have the exports and we wouldn’t be here.’

(MD, Manufacturing, high growth)

External Support and Intervention

The final section of the interview turned towards discussion of how the managing director envisaged the business developing over the short to medium term, touching on the key challenges the firm faced in the forthcoming period. This then moved onto a discussion about previous external support the firm had received (whether from Welsh Government or other sources) and to what extent that had been useful to the business. Finally, the interviewees were asked whether they anticipated receiving further support, and what form of support would be most helpful to them.

When discussing the immediate plans for their respective businesses, much of the discussion focused on building on current strengths and achieving increased growth through various methods including forming a strategy to expand into other international markets, strengthening links and trade with existing business partners both home and abroad, investing in up-skilling staff, completing existing investment programmes to grow the business through seeking additional external funding, and making further acquisitions to secure more growth. With respect to some of the key challenges identified, macro economic conditions were felt to be an important factor, as the continued growth in the economy would have knock-on positive benefits for the business. For a couple of businesses, securing short-term investment to improve facilities and ensure continued

growth was the major challenge, with some avenues of funding that were available to them in the past not being available currently;

‘Yeah, that’s the biggest challenge, is finance. Because we’re building a new [X] there, the [X] don’t want to know.’

(MD, Transportation and Storage, growth)

‘The main challenges are in being able to continue with supporting the investment programme that I went on two years...five years ago, to continue supporting it, to continue to get to where we need to get to, to get the good growth and to get the employment...That involves basically a full refit of the facility, an upgrade into a full manufacturing facility, basically with all new kit.’

(MD, Manufacturing, growth)

For some, making improvements led to a renewed cycle of growth, allowing the firm to take on more staff to undertake more improvements, and to perpetuate the process further. This sometimes required external support to kick-start this process, and lack of such support could inhibit progress. For others, the challenge was being able to create and maintain growth without compromising existing processes and customer relations;

‘Managing growth – absolutely. Making sure our processes and procedures will allow us to deliver the increases in product without alienating customers, without being late on deliveries, without incurring penalties. So, that’s probably the single biggest concern at the moment.’

(FD, Manufacturing, high growth)

In terms of previous intervention received, financial or non-financial, there were a range of different schemes mentioned, including European Objective 1 funding received for new equipment, capital investment from a firm’s local authority, receipt of innovation vouchers and advice on innovation from the European funded Business Innovation Support programme (2007-13) and other loans from the Welsh Government. Some businesses were also working with HEIs on specialist innovation projects. Businesses’ assessment of the support provided by Welsh Government in their various forms highlighted that a good relationship with Welsh Government is valued and advice and financial support are, in the main, very welcome;

‘We had a few grants. The latest one was three years ago, which has just ended and forgive me I don’t know the scheme. I think it was a European scheme, 30 per cent matched funding for new equipment and that was about £110,000 from memory...It enabled us to make one or two investments in bits of equipment that we probably wouldn’t have done. So that has undoubtedly been a help.’

(MD, Manufacturing, high growth)

‘We’ve recently had...an interest-free loan from the Welsh Government. ...basically the roof was in very very poor repair and in order to fix that roof, would cost in the region of £0.5m, which is a huge sum to a business like us. We’ve had support from the Welsh Government of £150,000 repayable loan, so we’ve had some support there...That’s enabled us to stay where we are... stay in South Wales. Not having to do, what is very serious, having to close the site, basically. It’s maintained the jobs etc. where we are.’

(FD, Manufacturing, growth)

Funding received in the main had been used to improve infrastructure and buy equipment. These have been useful in providing a way to overcome obstacles in the short term and enabling growth. Maintaining good relations with government was considered to be very useful in the long term, as new streams of funding may emerge, or valuable partnerships

can be strengthened between business and government. However, whilst some of the funding cited was useful, it was not considered ground-breaking and a more substantial sum of money to deliver bigger improvements were not always available due to the economic uncertainty post-recession.

‘We’ve had several grants from the Welsh Government. We’ve had capital grants, we’ve had work placement schemes, I think Go Wales. We’ve er... been working closely with Welsh Government regarding our previous or current occupancy of the [X], prior to that being taken over by the university and the building that we’re in now and moving our manufacturing facility to the building that we rent from Welsh Government.’

(FD, Manufacturing, high growth)

Good partnerships with Welsh Government and others were considered important, as it was recognised that the organisation had the best interests of business at heart. Although maintaining good relationships with Welsh Government and, in some cases the local authority, was important, there was also criticism of the inflexibility of some financial support, some of which came from the Welsh Government. Often, it was thought that although the support was needed, that it often came with overly bureaucratic processes and procedures which were frustrating, and which negated some of the benefit of receiving the report due to time lost complying with the conditions of the grants;

‘It’s just various things in terms of your flexibility, flexibility there is for businesses, the amount of legislation sometimes and red tape around doing various things, sometimes it slows businesses down and doesn’t make it as easy. They don’t have any other markets as we have, so I think there need to be some better reviews of those things.’

(MD, Manufacturing, growth)

‘I think we’ve had this situation before, where we wanted to spend money, we basically had most of the money to spend, and we were looking to top up assistance but we can’t actually spend any of the money until the process has been agreed, so I think we’ve seen a bit of a lack of flexibility in that way, and because of the relatively bureaucratic processes you have to go through, sometimes we’ve said, well actually we won’t bother, and we’ll just find the money ourselves.’

(MD, Wholesale and retail trade, growth)

Highlighted here, and in other accounts drawing attention to the negative effects of bureaucracy on grant funding processes, was the idea that a lack of flexibility was at the heart of the problem with funding received. Firms often discussed how things move fast in the business world, and circumstances changed. The challenge for funding bodies was reacting quickly to these changes and being able to support firms when it was most needed. The business cycle and the grant funding cycle were not often in alignment, and this leads to frustration for businesses.

In other cases, the rules around what can be funded were often too rigid for what some businesses wanted to achieve, meaning that funding was denied them on the basis that they didn’t meet the criteria, which was frustrating for one tourism business which needed capital investment to be able to complete an improvement which could lead to substantial growth;

‘But [obtaining grant funding] is a long winded drawn out process when you consider that tourism is a major industry at the moment, heritage particularly...We’ll start [re]generating the town that died in the 60s and the [X] closed. We’ll generate jobs, we’ll generate growth, we’ll do this, we’ll do the other and we’re struggling for someone to say, I’ll give you the money.’

(MD, Transportation and storage, growth)

Others sometimes felt that the funding was also misdirected and that grant funding could be used to address other areas of concern for businesses. Of particular concern for one firm was the effect of having to keep the final salary pension scheme sustainable, whilst also being focused on growing the business long term;

‘What we could with now is an independent trustee who’s fully clued up on pension legislation. It’s becoming an ever bigger and more thorny problem for us. It’s the number one problem without any shadow of doubt whatsoever.’

(MD, Manufacturing, high growth)

In terms of what grants could be used for, there were strong feelings from some of the firms that the eligibility criteria for grant funding could be expanded to include other issues which are of primary concern in ensuring that their business can sustain itself over the long term and maintain its financial commitments. There is call for non-financial support to address these long-term issues which are so central to the sustainability of the business, and will have direct consequences for forecasted growth. In terms of support needed, it was sometimes difficult for firms to say definitively exactly what they would need, but that they would seek to nurture good relationships with Welsh Government and others in order that when support was required, they would be able to rely on that working relationship to make the case for particular support. Again, flexibility is important; the ability of the supporting organisation, Welsh Government or others, in adapting to changing situations occurring within the business is paramount in ensuring that the support delivered is of the right type and comes at the right time.

‘We would look for support in export control, in training again potentially with additional funding. I think... er... sort of as a general comment it’s a case of Welsh Government being supportive and continuing to be supportive and smoothing the way for Welsh businesses.’

(FD, Manufacturing, high growth)

‘In that way it’s very difficult to answer because we tend to only look for assistance where we’ve got specific issues coming up, and so to say...we don’t have a generalised ‘oh, we need marketing support, oh we need finance support’, it does tend to be a bit more as and when but we have a specific issue that we’ve focused on and what...usually when that arises, it usually needs quite a fast turnaround as well, rather than...well we now need to go through this process which then takes 6 months and we can’t actually do anything until we’ve spoken to you.’

Reflections on business growth

In terms of what businesses felt had put them in a strong growth position over recent years, many businesses drew attention to having a good understanding of their business and the national and international context in which it operates in order to make sound decisions; having a strategy for the immediate future in order to have a clear idea of the direction the business will take; and to have a USP to draw in and retain customer loyalty. What also came out strongly here was the importance of collaboration with government and others to foster and maintain those good relationships should assistance be needed;

'I would say work closely with Local Government and with politicians and if possible, you need to be able to have a firm base from which to grow. Don't be too speculative... You need to work from a firm base. And you need to make sure as the turnover of the business grows, that its support structure and processes grow as well... seek advice, seek advice and use the facilities that are available. Use HMRC, use Local Government, use erm ... and do your research. Make sure you understand the rules and regulations around exporting.'

(FD, Manufacturing, high growth)

Consistent with other views expressed within the interviews, this highlights the importance of good relationships with local and central government as key to ensuring a firm has all the information needed at its disposal and that it can call upon these partnerships when needed. Despite the frustrations inherent within some funding processes, these relationships are considered key to maintain and have been significant in attaining successful growth.

Summary

These interviews added a narrative to the secondary data analysis, and offered the perspectives of some of the businesses on their pathways to growth, and the barriers and challenges to maintaining or becoming high growth. Many of the firms were strongly based in Wales, in both practical ways and in terms of the historical roots of the business in their respective locations. The history of some businesses and the rootedness of family or other key personnel in Wales was just as much as a deciding factor in their location than other practical concerns. So too was the importance of maintaining key business relationships and an established workforce in Wales as more valuable than moving to where there may be more trade. Growth was driven primarily by the prevailing economic conditions and other factors, such as the resurgence in popularity of certain goods or services, were similarly to a large extent, out of the control of businesses. However, businesses also emphasised the importance of identifying and capitalising on opportunities efficiently as important in ensuring a business could grow as much as possible in difficult economic circumstances. Businesses were able to control certain factors, such as the selection of acquisitions which would aid growth. The clear mix of organic and acquisition-based growth goes against myths which purport that growth is primarily achieved through organic growth. In terms of key barriers to growth, this research also suggests that, contrary to the idea that growth is continuous and linear, it in fact is cyclical and unpredictable in nature and duration. Firms acknowledge this as part and parcel of the business environment, and do not take it for granted that once growth is achieved, that it will always be so.

Export was considered a key part of business activity and formed part of being a growth business. Although the domestic market was dominant for all firms interviewed, export was important in opening up new markets and forming new and productive business relationships. Most businesses described entry in the international market as a result of an opportunity taken as opposed to being as a result of a clear strategy. There were clear benefits to this, including increased networking and being able to provide better customer service. However, barriers needed to be overcome, in some cases these were legal or regulatory, and in others they were cultural. Export was in all cases to be pursued into the future in tandem with various forms of innovation discussed by each business. The combination of export and innovative activity, whether it is product, process or marketing innovation, formed a mutually beneficial interaction which businesses felt was conducive to growth. Innovation was thought to be most effective when consumer-led, and was an important factor in business improvement and effective customer service.

External support had been taken up in various forms; from EU funding from Welsh Government programmes and others, through to one-off grants from the local authority for small-scale improvements. However, the financial downturn had meant that there were less opportunities for funding available, and less money overall. This has meant that some capital investment had been curtailed, leaving the possibilities for business growth diminished in some cases. Although the majority of firms interviewed were receiving, or had received support in the past and reported that it had been of benefit, there was frustration with the bureaucratic process of getting the funding, and a lack of flexibility of these regulations to be able to address business needs at the right time. Additionally, some businesses also considered the funding to be too small for their needs, and this was another barrier to potential growth for them.

What persisted throughout all interviews and in most contexts was the importance of networking with different stakeholders, whether that was international business partners, funding partners or higher education institutions, in order to improve relationships and services. This was the cornerstone for growth and was reflected in relationships with regard to innovation and export.

6. Conclusions and Recommendations

The secondary analysis, together with the qualitative interview data, provide a richer picture of the current status of Welsh-owned exporting SMEs, their pathway(s) to growth, the relationship between their export and innovation activity and ways in which Welsh Government and others may be able to effectively support them in the future. This section will discuss the overall findings alongside the original aims of the research, before discussing the scope for further research to follow and ending with a set of recommendations for the Entrepreneurship policy team.

1. Identify a set of indicators which can be used to assess whether an enterprise is high-growth and compile relevant data sources which hold this information;

This research has identified clear indicators for growth; namely average annualised growth over three financial years (the official OECD definition), and has examined other related characteristics to ascertain the nature of growth, including age of the business, the percentage of turnover that comes from export, and employment change as it relates to growth.

Applying the OECD definition of high growth to SMEs in Wales has shown that most firms experiencing growth fall short of the 20 per cent average annualised growth over three years measure. Although this measure is useful for comparison with other nations, in terms of being a business support measure in Wales, it appears quite arbitrary. Furthermore, focusing support exclusively on those defined as high growth may be missing a significant section of the business community that contributes positively to the economy of Wales. Given the distribution of growth and high-growth firms, it is suggested that support strategies for these businesses be tailored on the basis of their current status. This could be achieved by a number of means; either as ways to recognise and maintain high growth firms, or as ways to develop support to enable them growing firms to become high growth firms. Alternatively, support could be tailored to enable businesses to plan their next move, if they've plateaued in their growth or if they've been unable to gain financial support from elsewhere and need support to find alternatives.

2. Identify Welsh-owned businesses that are either currently exporting and already high-growth, or are growing and have the potential to achieve high-growth;

Combining the ONS and FAME data provided a reasonably detailed picture of the growth status of exporting firms. Those who were high growth or growth could be identified, although there were some issues with the quality and completeness of the data. However, what was particularly valuable about using secondary analysis and qualitative interviewing together was the detail that emerged behind firms' pathways to growth, helping us to better understand what enables and poses a barrier to growth in particular contexts. Secondary data analysis revealed that many growth and high-growth firms vary greatly in terms of business age. This finding, in tandem with the indicative qualitative data which reports growth to be cyclical and sporadic, as opposed to linear and predictable, suggests that businesses of all ages, not just start ups or 'gazelles', are in need of support. Many responses highlighted the importance of macroeconomic conditions in dictating the possibility, duration and extent of growth, and it is important to consider how effective any intervention may be in a given economic context. Nevertheless, some businesses were able to identify potential growth opportunities despite unfavourable economic conditions, and were able to capitalise on them and grow as a result. What may be most useful for firms is for supporters and partners to acknowledge the non-linear pathways to growth, and to facilitate the potential for growth in favourable conditions, and furthermore, to support firms in other ways when the rate of growth reduces or firms enter a negative growth phase.

3. *Explore pathways to, and relationships between growth, innovation and export of identified businesses to understand drivers, barriers and ways WG could support high growth or those enterprises with the potential for high growth;*

This aim could not be addressed through secondary analysis alone. The intricacies of these relationships were primarily understood through the qualitative interviews. In terms of exporting, interview data indicated that most exporting activity was opportunistic in nature and that establishing and carrying out a strategy for export was not normal practice, with many firms seizing an export opportunity and building their export trade from that point. In terms of the relationship between export and innovation, this research has not been able to obtain quantitative data which may provide insight into the causal relationship between these activities. However, it was clear for most managing directors of interviewed firms that the two activities were highly complementary in terms of stimulating and maintaining growth. The forms of innovation were wide ranging, was undertaken with the customer's needs as paramount, and informed by the customer base of both the domestic and foreign market. Targeting innovative efforts in this way meant that the potential for growth was maximised. However, the data were not available to determine whether this activity contributed to an increase in productivity. There was some anecdotal evidence of a 'learning by exporting' effect, but what was most striking within the qualitative data was the importance of building knowledge through collaboration in all aspects of business life, whether that was working with HEIs in the development of innovative products, or in terms of building good relationships with those who provided grant support.

Focusing on the receipt of both financial and non-financial external support, firms discussed the wide variety of support they had received in the past from various sources, including Welsh Government and Local Authority grants. Although such support was gratefully received, respondents highlighted problems in the process of obtaining such support, which often did not align with the timescales of the firm. Many businesses called for grant funding to be more flexible to allow money to be provided when most needed, rather than having to enter protracted periods of bureaucracy before money could be put to use. Other businesses highlighted the need for grant funding to have a wider remit, allowing funding for more types of business improvement or support to address problems of sustainability that could affect growth, such as sustaining the pension scheme, as suggested by one firm.

4. *Provide colleagues in the Entrepreneurship Policy team with information on sources of information available on growth and high growth firms. This will highlight important data gaps and provide information on which sources of information will be most useful when monitoring business progress and designing interventions based on the most up-to-date information;*

This research has helped identification of a range of relevant data sources and the information they hold. As part of the scoping work for this research, relevant databases were identified and examined to determine which would be most useful for the secondary analysis and in terms of their usefulness for the Entrepreneurship policy team. A full analysis of the information held, gaps in the data held, and the strengths and weaknesses of the data will be passed onto the policy team as a separate document to this report, which will allow them to become familiar with a wider range of data sources, and determine which sources are most useful to them in terms of their monitoring the growth SMEs in Wales.

The final aim; *'Advise on how best to conduct analyses of this nature in future and what data would need to be collected to make a robust analysis possible'* is addressed in the following sections and the recommendations.

Scope for further research

The aim of this pilot was primarily to identify ways in which high growth could be measured for SMEs in Wales, and then to understand whether the data exist to be able to identify those firms. This research has focused on a specific section of the business community – exporting businesses based in Wales – to test out the assumptions on what data are available and the extent to which it can be used to measure growth status.

There were some notable data issues that were encountered. Firstly, the number of exporting firms was taken from the FAME database. Companies can submit their data to FAME on a voluntary basis and as a result, only 80,000 of the approximate 140,000 businesses in Wales are registered on FAME. Although a sizeable portion of the entire business population, it does not include a comprehensive sample of businesses fitting the desired criteria. Despite this, we can be reasonably confident that the findings are salient to SMEs more generally within Wales. Further research should attempt to complete the sample of exporting SMEs in Wales to provide more robust data.

Secondly, although the data contain micro enterprises (those with less than 10 employees), a representative picture of start-up firms are less likely to be captured by FAME and other datasets owing to the fact that these firms may not have the resources to provide such information, or are not required to provide such information in the early stages of start-up. Improved data on start-ups is required to understand their pathways to growth, and further research could focus on understanding what is already captured, and in which datasets, and whether further data collection is needed to fill the gaps on understanding the growth of start-ups.

The strengths of the FAME and ONS datasets were used to provide an enhanced analysis when compared with using either dataset on its own. This meant that an improved analysis could be carried out using a wider variety of indicators. However, there were also some inconsistencies in the data supplied when compared across the FAME and ONS datasets, particularly with regard to turnover figures. This makes it difficult to ascertain which the correct figure is. There were also issues around duplicate entries for one business having different information with regard to the sector, and also for turnover figures. Again, further research should attempt to pull together complete data from various sources and verify the figures to provide a robust and reliable data source.

In terms of the sample of businesses, we must acknowledge the characteristics of the businesses selected will create inherent bias. Literature has shown that those who engage in export often self-select for this activity because they are more productive businesses to start with, and are therefore able to absorb the sunk costs associated with initiating export activity. The implications for this research are that more productive businesses who participate in export are more likely to be experiencing success before exporting, and so the extent to which export is contributing to their growth may be over-stated. If this pilot were to be extended to look at sections of the business community that only trade domestically, we may see very different patterns of growth. The extent to which exporting SMEs can be viewed as representative of all SMEs is limited; however further analysis on businesses that do not export is needed to confirm this.

Finally, although SMEs are widely regarded as a homogenous group of enterprises, this is not strictly the case. For example, start-ups will need different kinds of support in their efforts to grow in comparison to medium sized enterprises, who have more employees and who are more likely to be older. Qualitative analysis has indicated that these businesses experience cyclical growth and require support of a different nature, namely short-term, targeted support to capitalise on an opportunity or address a particular obstacle to growth. There is relatively little known about these sorts of firms in terms of what constitutes effective support for them. It is proposed that further research focus on the effect of current

policy and practical challenges to medium sized firms, which would be beneficial in devising strategies to support these firms.

Recommendations

As a result of this research, a number of recommendations are identified for policy teams to consider, both in terms of designing policies and support to assist growth and high growth firms, and also in terms of collecting the right data to ensure any subsequent secondary analysis of Welsh-owned SMEs is as robust as possible. They are as follows;

1. **These findings should inform future data/information gathering in relation to Welsh SMEs.** The approach taken here highlights that data are available to determine the growth status of firms in Wales and that this can provide valuable insight into the activities of SMEs. This forms the basis for further analysis of the types of businesses not covered here, such as the wider set of SMEs who trade only domestically, in order to broaden our understanding of business growth. This will provide a full gap analysis of data sources and quality which will allow us to move forward in understanding how to address these gaps.
2. **Design a data collection instrument to capture evidence on business growth more systematically.** Once further analysis of other types of businesses has been completed, researchers and policymakers may be better informed about the strengths and weaknesses of datasets currently available. We advise the design of a dataset to synthesise existing data and collecting missing data to produce a tool that is fit for purpose for long term monitoring of business performance.
3. **Policy teams may also want to consider incorporating qualitative evidence into future monitoring.** Interview data have been particularly informative in understanding the detail with regard to innovation, export and growth and the complex relationships between these activities. These issues change over time and are invaluable in understanding how tailored support might impact on a business. It is clear that data alone do not provide sufficient insight. It is recommended, therefore, that any future monitoring include periodic qualitative data collection to ensure that policy teams remain informed as to the situations facing individual businesses.
4. **Consider tailored business support which focuses on maintaining success for high growth firms, but also assists firms not quite reaching the 20 per cent threshold to become high growth.** This research has highlighted that, in Wales, a small proportion of exporting firms can be considered high growth, but that there are a far larger group who are growing, but not quite above the 20 per cent threshold. Policy teams should consider both quantitative and qualitative research to tailor support to individual businesses. For high growth firms, it will comprise support for maintaining growth, or for steering them through difficult periods whilst attempting to maintain growth. For growth firms, it may be devising appropriate support or strategies to enable them to become high growth.
5. **Take account of issues raised through qualitative analysis when developing tailored business support.** Qualitative data highlighted some of the issues around receipt of an intervention, such as the cyclical nature of growth and the opportunistic nature of entry into export markets should be considered. A consideration of the specific context in which businesses are placed and their short and long terms goals should guide the selection of interventions to best facilitate growth.

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Appendix A

Qualitative interview schedule with businesses

1. 'The Entrepreneurial Journey' - Company history and growth to date

- Can you tell me a bit about your reasons for setting up the company and how that came about?

Prompts:

- *Motivating factors (internal, external, both)*
- *Enablers (access to finance, support, advice and guidance)*

- From where do you operate and what was the reason for choosing to set up in Wales and in your particular location?

Prompts:

- *What, if any, impact did setting up in Wales have on your success to date?*
- *What, if any, impact does continuing to operate from Wales have on your future aspirations?*

- How has the company grown in the years since you established it?
 - What was/were the catalyst/s for growth in the business and how did these come about?
 - What did this growth enable you achieve? E.g. employing more staff, more business, entry into more/international markets, increase in turnover?

2. Move into exporting

- When in the development of the company did you enter international markets?
- What were the reasons for deciding to export at this particular time?
- Which markets did you enter and for what reasons?
- What barriers /challenges did you encounter and what were the factors that helped you to overcome these barriers?
- What was the impact on your business, both positive and negative?
- What is the balance between home and international business?

Prompts:

- *Input (time, resource, money, skills/experience)*
- *Output (financial return, other opportunities)*

- How do you see participation in international markets featuring in business development in the future?

3. Innovation

- Do you undertake innovative activity within the business and what type of innovation do you currently undertake e.g. product, process, business model etc?
 - At what stage in the development of the business did innovation become a feature i.e. pre or post entry into international markets?
- What is your experience of the relationship between innovation and growth of the business?

4. External Intervention and Support

- How do you see your business developing over the short to medium term?
- What key challenges do you face as a business currently?
- What external support have you received (financial or non-financial) and from whom? E.g. any WG intervention or support from other sources?

Prompts:

- *What impact, if any, has this support had on your ability to grow the business?*
- Could external support benefit you and in what ways?
- If you were to give advice to other SMEs with aspirations to grow their business, what would it be?

Prompts:

- *Any specific advice in relation to export activity?*
- *Any specific advice in relation to innovation activity?*

Appendix B

Data Tables

1. Breakdown of foreign and Welsh-owned exporting enterprises operating in Wales by sector (full list)

Sector	No. of Businesses
C – Manufacturing	168
G – Wholesale and retail trade	55
M – Professional, Scientific and Technical	24
J – Information and Communication	20
N – Administration and Support	12
H – Transportation and Storage	5
K – Financial and Insurance	4
E – Water supply, sewerage, waste management and remediation	3
R – Arts, entertainment and recreation	3
Not available	3
F – Construction	2
P – Education	2
A – Agriculture, Forestry and Fishing	1
I – Accommodation and food service	1
O – Public Administration and Defence	1
Q – Human Health and Social Work	1
S – Other service activities	1
T – Activities of Households as Employers	1

2. Breakdown of Welsh-owned exporting enterprises by sector (full list)

Sector	No. of Businesses
C – Manufacturing	80
G – Wholesale and retail trade	30
M – Professional, Scientific and Technical	11
J – Information and Communication	6
N – Administration and Support	4
H – Transportation and Storage	3
K – Financial and Insurance	3
E – Water supply, sewerage, waste management and remediation	2
R – Arts, entertainment and recreation	1
Not available	1
F – Construction	1
P – Education	1
A – Agriculture, Forestry and Fishing	1
I – Accommodation and food service	1
O – Public Administration and Defence	1
Q – Human Health and Social Work	1
S – Other service activities	1
T – Activities of Households as Employers	0