

**How is Welsh Government supporting Anchor Companies in Wales?**

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## **Abstract**

GVA per head in Wales during 2014 was 71.4 per cent of the UK average, the lowest amongst the devolved countries and English regions (source: ONS). This ranking for Wales has not changed since 1998 when it fell below Northern Ireland. In 1989 GVA was 85.4 per cent of the UK average which means that Wales is relatively worse off than it was 20 years ago (source: ONS).

Wales has seen much economic change over the last two decades and despite government intervention, she continues to lag behind the rest of the UK.

Whilst regional economic policy in Wales has historically been more interventionist than elsewhere in the UK, many key decisions were made in Whitehall. Since devolution in 1997, the executive arm of the National Assembly for Wales, the Welsh Government has gained powers in economic development. Cooke (2003) however, suggests that a weak devolution settlement has prevented Welsh Government from developing innovative economic policies and that a more powerful government is required.

Regional economic policy is important to Wales and the Welsh Government has invested considerable resource and money to it. This study explores government intervention within the Welsh economy, identifying activities in the attraction of foreign direct investment, embeddedness, business support and

the provision of grant and subsidies. It goes on to examine how is Welsh Government supporting Anchor Companies in Wales by asking four questions of them; namely, how satisfied are they, are the right business support structures in place, can the offer be improved and whether there are sectoral differences in the aforementioned.

The study draws on primary sources, which includes interviews with Anchor Companies and SMEs. This is the first study that outlines and analyses the specific Welsh Government Anchor Company policy. Academic study of regional economic theory and policy has also grown in scope but there is no literature on the specific Welsh Government Anchor Company policy.

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## **List of Abbreviations**

DBRW	Development Board for Rural Wales
DTI	Department of Trade and Investment
ELWa	Education and Learning Wales
FDI	Foreign Direct Investment
GDP	Gross Domestic product
GVA	Gross Value Added
IBW	International Business Wales
MAG	Ministerial Advisory Group
ONS	Office for National Statistics
RAE	Research Assessment Exercise
RDA	Regional Development Agency
RDG	Regional Development Grant
RSA	Regional Selective Assistance
SIF	Single Investment Fund
SME	Small to Medium Sized Enterprises
TUC	Trade Union Congress
UKTI	United Kingdom Trade and Industry
UNCTAD	United Nations Conference on Trade and Development
UNIDO	United Nations Industrial Development Organisation
WAG	Welsh Assembly Government
WDA	Welsh Development Agency
WINtech	Wales Investment and Technology
WINvest	Wales Investment Location
WTB	Wales Tourist Board

## Chapter 1: Introduction

*“Nothing is more important than the fundamental human right to work, and governments must intervene where necessary to ensure that, that right can be exercised in Wales itself....”.*

Morris (1974, p. 42)

### 1.1 Background to the Study

Geary and Stark (2011) developed historical GDP estimates dating back to 1901 which found that Welsh GDP, as a share of the overall UK figure had fallen as much over the period from 1991-2007 as it has done in the previous 60 years. This would suggest that the last twenty years is the worst period in Welsh economic history.

One explanation offered for the deterioration in Wales' performance, is the boom in financial services and other value added activity, which was concentrated in the London area. The reality is that London was only responsible for a small amount of the decline in Welsh GDP compared to the rest of the UK. Most of the decline in Wales' economic growth is in fact, its failure to keep up with the UK as a whole and not just London.

Wales has historically relied on the heavy industries of coal and steel but the decline in these industries during the 1970s and 1980s, led to high unemployment levels (National Audit Office, 1990). The Welsh Development Agency (WDA) was particularly successful in attracting foreign direct

investment (FDI), which was a method utilised by policymakers to replace the lost jobs within these industries (Brooksbank *et al.*, 2002).

The WDA was so successful at attracting FDI into Wales during the 1980s, the figure approached 20 per cent of the UK total, despite Wales only having 5 per cent of the UK population (Hill and Munday, 1992).

The reason Wales was so attractive to inward investors was proximity to the South East of England, an inexpensive semi skilled workforce and good road infrastructure (Munday and Roberts, 2001). The availability of the regional development grants (RDG) and regional selective assistance (RSA) grants was also attractive to foreign investors.

Hill and Munday (1992) found there is a relationship between inward investment success and the availability of financial incentives for inward investors. Inward investment was a way of creating jobs quickly and efficiently however, these jobs can as easily be tempted elsewhere. Brooksbank and Pickernell (2001) argue that Wales must wean herself off the continuing feed of valuable economic development budgets to large inward investment companies. If she doesn't, Wales will be reliant on inward investment, which is likely to require an increase rather than a decrease of resources given the economic growth of countries in Eastern Europe.

There is also a debate in Wales, over the allocation of regional policy between attracting FDI or investing in indigenous companies and the differing levels of

support they receive (Brooksbank and Pickernell, 2001). The jobs created in the 1970s, 80s and 90s via FDI were often below average salary, had lower supply chain links and required commuting (Brooksbank *et al.*, 2002). Although Wales was attracting FDI, the result was that it exacerbated the GVA situation within Wales.

Whilst Wales has received its fair share of inward investment, the current Welsh Government policy, Economic Renewal: A New Direction is concerned with embedding inward investors into Wales. Inward investment strategies will play a more modest part going forward however; financial support will always play a major part for companies in Wales. Although RSA was considered 'the most important national regional policy instrument in Britain' (Armstrong, 2001, p. 247), this policy was removed from Wales in 2010.

The Welsh Government is giving far more consideration to the way in which resources are allocated to target specific investors, with the potential to become embedded in the local economy (Brand *et al.*, 2000).

The specific Welsh Government Anchor Company policy aims to build strategic relationships between Welsh Government and the private sector and defines an Anchor Company as: -

- A company which is a global or international organisation
- Has Welsh headquarters or a significant corporate presence in Wales

## 1.2 Research Problem

Wales can no longer compete as a low wage nation, which means she needs to develop 'value added' businesses that produce good profits and high salaries. A new approach for Wales will recognise the realities of operating in a global market, which will sustain the future of the Welsh economy. This doesn't or shouldn't mean that Wales focuses solely on inward investment.

Historically Wales has relied on a 'stack-em-high-sell-em-fast' approach and whilst this may be acceptable for the short term, Wales has seen many large inward investors move out almost as quickly as they came in. The constant threat of relocating is a recurring theme.

Brooksbank *et al.* (2001) highlighted the need to resource entrepreneurship and skills development in Wales, but raised the difficulties in resourcing such policies given the continued requirement to supporting inward investors.

Audretsch and Keilbach (2007) highlighted the benefits of linking inward investment policy to indigenous policy, which can bring opportunities in terms of knowledge and technology spillovers being brought into the region. Whilst Ireland has been particularly successful in this area, Wales has not, simply because of its focus on attracting inward investment (Morgan, 2007).

Government intervention within the economy is not clearly defined but can be broadly categorised into two areas. The first area contains expenditure specifically aimed at the regional economy i.e. financial support for the creation or safeguarding of jobs. The second area contains expenditure, which contributes to economic development within the region. Most government expenditure fits into the second category.

This study focuses on the first category as it examines Welsh Government intervention; specifically the Anchor Company policy.

Regional development policies exist to reduce economic and social disparities within regions (Munday *et al.*, 2001; Pickernell, 1999) and to provide economic assistance to areas, which are heavily depressed or least well off (Taylor and Wren, 1997).

Whilst economic objectives are important within regional policy, there is a trend now for policies to have a far more holistic approach. Pike *et al.* (2007), found there is a move towards a broader perspective; an increasingly important distinction in the kind of quantitative extent and its qualitative character. The quantitative dimension concerns numeric measures such as GDP, productivity growth, number of jobs created/safeguarded whereby the qualitative dimension relates to the nature of local and regional development e.g. sustainability and forms of growth – the type and quality of jobs, the embeddedness and sustainability of investments.



The Green Book (1997:1) states that no policies should be developed without having answered these two questions: -

- Are there better ways to achieve this objective?
- Are there better uses for these resources?

This study will contribute to the debate about regional policy and examine how is Welsh Government supporting Anchor Companies in Wales. It will investigate how satisfied Anchor Companies are with the current Welsh Government offering and determine, whether the right business support structures are in place. The study will also analyse whether and in what ways the offer to Anchor Companies, can be improved and whether sectoral differences exist with regards to the offer.

### **1.3 Research Aims and Objectives**

The central research aim that this study explores is: -

**To investigate how is Welsh Government supporting Anchor Companies in Wales**

To achieve this aim, this study set out the following specific objectives, which address the gaps in literature: -

1. To evaluate how satisfied Anchor Companies are with the current offering
2. To determine whether the right business support structures are in place to support Anchor Companies
3. To analyse whether and in what ways the offer to Anchor Companies in Wales can be improved and
4. To identify whether there are sectoral differences with regards to the Welsh Government offering in terms of the above

#### **1.4 Methodology**

The research objectives set clear boundaries for the study and the findings from the research, were approached from a phenomenological stance and an inductive approach. The research design was an interpretive case study using qualitative collection methods.

Semi structured interviews were used as the primary tool to collect the data as the researcher, wanted the respondents to have the flexibility to elaborate on answers which could then, if needed, begin a different line of questions. This method of data collection allowed respondents to talk freely about their perceptions and experiences of being an Anchor Company in Wales.

Twenty-four companies across three sectors (Construction, Energy and the Advanced Materials and Manufacturing) were invited via email to take part in the interviews. At the time of writing this paper, 100 per cent of the Anchor

Companies were interviewed within Construction, 40 per cent within Advanced Materials and Manufacturing and 22 per cent within Energy.

The data collected from the Anchor Companies was recorded and transcribed. The researcher then gathered the data, analysed it in its entirety, took it apart and then pulled it back together again in a more meaningful way. This allowed the researcher to make comparisons and reflect on any patterns and themes, which emerged.

To ensure the research was 'trustworthy', the researcher followed Guba's (1981) four suggestions: credibility, transferability, dependability and conformability.

## **1.5 Study Contributions**

The study has made several contributions to knowledge and practice in the specific context of the Welsh Government Anchor Company policy: -

### **Contributions to Knowledge**

The main contribution to knowledge involves extending previous analysis of policy in Wales aimed at large indigenous or foreign firms in a range of sectors into a current sectorally based Anchor Company policy.

The first contribution to knowledge made by this study is that foreign owned Anchor Companies are very satisfied with the specific Welsh Government Anchor Company offering. The indigenous Anchor Companies were less satisfied with the offer, the difference being the levels of financial support they have been able to lever into their plants.

The second contribution to knowledge made by this study is that little evidence was found of integration between the multinationals and local supply chains. Whilst the purchasing power of the multinationals often sits outside of Wales, the Anchor Companies neither have the desire or power to engage with Welsh suppliers.

The third contribution to knowledge made by this study is linked with the first contribution and found that Anchor Companies with higher levels of satisfaction did not think the Welsh Government offering could be improved. The Anchor Companies with lower levels of satisfaction gave recommendations as to how the offer could be improved.

The final contribution to knowledge made by this study is that sectoral differences do exist, relating to the non-comparability of different sectoral needs. The sectors are very different in need and therefore require tailored support.

## **Contributions to Practice**

The contributions to practice identify how the current Anchor Company policy is perceived by the firms themselves and identifies alternative future approaches that may be necessary due to resource constraints.

The first contribution to practice that this study makes is, there is a requirement for Welsh Government policymakers to become more innovative in the way they deliver support. Whilst foreign owned Anchor Companies have the highest levels of satisfaction, policy should ensure that the focus includes delivery for indigenous Anchor Companies too.

Almost all of the Anchor Companies interviewed saw real tangible benefits of having Anchor status, especially when competing internally for projects within their Groups. The second contribution to practice that this study makes is that regardless of satisfaction levels, the results found that 'soft support' e.g. access to Ministers is equally as important as 'hard support' e.g. finance.

The third contribution to practice that this study makes is that a one size fits all policy, simply won't work. Anchor Companies have differing needs and require different types of support. There is a need for Account Mangers to spend time with their Anchor Company to fully understand not only the needs of the Anchor Company but also the sector in which they sit.

The final contribution to practice that this study makes is where indigenous Anchor Companies are fully integrated with the local supply chains, Welsh Government should tailor innovative solutions to their issues, to ensure they remain embedded in Wales.

## **1.6 Structure of the Study**

The structure of this study is organised into six chapters – namely Introduction, Literature Review, Methodology, Research, Discussion and Conclusion.

The remainder of this section details briefly the content of each chapter: -

**Chapter 2: Literature Review**, presents a review of literature dealing with economic theories. This study analyses aspects of economic theories and the empirical evidence, which is most relevant for designing regional economic policy. The review also identified that no empirical literature exists on the specific Welsh Government Anchor Company policy. The gaps in literature are used to develop the specific aims and objectives of this study.

**Chapter 3: Methodology**, discusses the research paradigms; explains the differences between the deductive and inductive approaches together with quantitative and qualitative research methods; clarifies the position on approach and discusses ethics and issues around confidentiality. The overall approach to the research is from a phenomenological stance and an inductive

nature. The research design was an interpretive case study using qualitative collection methods.

**Chapter 4: Research**, provides the results of the study, examines the findings and looks for patterns and themes; addresses their significance.

**Chapter 5: Discussion**, discusses the results of the study in line with the literature review, identifies contributions to knowledge and practice.

**Chapter 6: Conclusion**, sets out the conclusions arrived at by the study including the contributions to knowledge and practice; offers suggestions for future research and finally concludes with final comments as to the value of the study.

## **1.7 Summary**

The introduction has laid the foundations for the research by giving a background to the study, introducing the research problem, identifying the need for research together with a brief description of the methodology. The contributions to knowledge and practice are highlighted and the introduction, concludes by summarising each chapter.

The following chapter reviews economic theories and links them to regional economic policy and the justification for government intervention, in order to develop a specific research aim and objectives for the study.

## Chapter 2: Literature Review

*“One of the biggest myths is that in order to foster economic development, a community must accept growth. The truth is that growth must be distinguished from development: growth means to get bigger, development means to get better – an increase in quality and diversity”.*

Local Government Commission (2004, p. 1)

### 2.1 Introduction

This chapter lays out the groundwork for the central part of the study. The chapter is divided into four sections; the first section briefly reviews spaceless economic theories whilst the second section goes into more detail when space is introduced. The third section examines the development of regional economic policy and in particular the justification for government intervention. This also includes reference to the difficulties confronting policymakers (Hill and Williams, 2005). The final section concludes this chapter.

The central research aim that this study explores is: -

**To investigate how is Welsh Government supporting Anchor Companies in Wales**



## 2.2 Theory: Traditional, Spaceless Regional Economic Theories

Regional economic growth has been the focus of debate for many years and still; there remains no clear agreement as to its causes. This section provides an overview of economic growth theories, which can be broadly divided into two groups. The first group - spaceless regional economic theories place a greater emphasis on demand, implying that regions naturally move towards a greater regional inequality. The second group – spatial economic theories, stress the importance of supply, which assumes that growth within different regions tends to balance out due to perfect mobility of labour and capital (Hill and Morgan, 1998).

An examination of regional economic theory might begin by defining what is meant by the term 'region'. Richardson (1978, p.19) describes the classical spatial method of regions as: -

- Homogenous regions – characteristics are unified and internal differences are unimportant
- Nodal regions – little concerns for uniformity however contacts and interdependencies are polarised towards a dominant centre or node
- Planning regions – unity is driven from administrative control or the region is an ad hoc area where specific programmes apply

The concept of homogenous regions appeal to economists who prefer using non spatial models which require key economic parameters. The neoclassical

approach implies homogeneity and spacelessness, which creates, perfect competition.

Once space enters economic analysis however, a key number of orthodox assumptions break down. Imperfect competition becomes normal which therefore increases the tendency for phenomena such as clustering. The conflict between spaceless economics and geographic reality continues to be debated and remains a significant element of regional policy.

Keynes' (1923) assumption of a constant production capacity brought the time dimension successfully into economic theory but not space or distance. Time became such a dynamic consideration, that economists neglected the role of space for many decades. Problems relating to location and population can seem rather trivial in comparison to problems relating to growth and the stability of an economy. To summarise, Keynes proposed that aggregate demand is volatile and unstable and such demand should be mitigated by government policy responses that are either fiscal (e.g. taxes and spending) or monetary (e.g. interest rates). Such interventions can help to stabilise the economy during a period of recession and this approach continued until the 1970s.

Whilst it may be tempting to disregard spaceless economics, these theories form the basis of many regional policies (Bechtold, 2014). This is important because spaceless regional economic theories also exist and therefore need to be reviewed in order to provide a background context for the theories used

in this research. This section therefore briefly reflects on the understanding of how the broader global economy works and reviews theories developed by economists. These models focus on relationships rather than determining location decisions.

To review spaceless regional economic theories, it is essential to first examine regional growth theory. Siebert (1969) states that regional growth theory requires the explicit introduction of two fundamental dimensions – time and space.

The word 'spaceless' is also significant, however, within this context. Heilburn and McGuire (1987) state that traditional economic theory fails to acknowledge space and treats all economic activity as though it took place at a single point. They go on to say that economic theory at this time acknowledges consumers, producers, firms and industries but not distance or contiguity, separation or neighbourhood. Although population and economic activity are arranged in a spatial setting as a functional order – this is simply ignored.

Traditional neoclassical economic theories presume a spaceless framework in which households, businesses and governments choose only one location. Martin and Sunley (2001 p. 150) define orthodox neoclassical economics as “that part of economics that subscribes to methodological individualism, mathematical models, rational maximising behaviour and the notion of general equilibrium”.

General equilibrium (Walras, 1954) is a term used to describe a household or company's intent to maximise profits subject to budget constraints. This theory attempts to demonstrate how and why free markets tended towards equilibrium in the long run. These free markets did not necessarily reach equilibrium, only that they tended towards it. Walras believed he had proved that any market was necessarily in equilibrium if all other markets were also in equilibrium. This was known as Walras' Law.

It is almost a century since Lösch (1944) argued that economists should consider space and location within their theories. Martin and Sunley (2003) however, argue that the question of how the economy 'fits into space' has not been given serious attention.

Spaceless economic models can be grouped into three categories: -

- **Supply Based Models** – this theory explains growth as a result of factor endowment (which may be considered as an orthodox neoclassical approach). Supply based models can be traced back to David Ricardo (1772-1823), who stressed the role of factor endowment. Ricardo claimed that there was much benefit to be gained from trade even if one party was more productive than its counterpart (Backhouse and Backhouse, 2002).

From a policy point of view, as long as barriers to mobility can be removed then the market will achieve "equalisation of regional

factor rewards” (Balchin and Bull, 1987 p. 31). In reality however, the market is far from perfect. The mobility factors do have imperfections for example, information, removal and disturbance costs and locational inertia, which will increase with distance.

There is little to be gained from long distance labour mobility, as it would encourage a major regional shift in public sector infrastructure investment to areas of labour influx (Balchin and Bull, 1987).

- **Demand Based Models** – focuses on regional exports where regions trade with one another (Borts and Stein, 1964). Demand theory shapes the relationship between consumer demand for goods and services and their prices. The theory forms the basis for the demand curve, which accounts for consumer desire and the quantity of goods available. If a good or service is readily available then demand will drop which then has a direct impact on the equilibrium price.

A second explanation of regional growth is the export-based model, which is a development of the Heckscher-Ohlin theory (1991). Where supply based models discuss the importance of supply factors such as labour force growth, the growth of capital stock and technical progress, demand based models shape the relationships between consumer demand for goods and services together with

their prices. This theory forms the basis for the demand curve, which accounts for consumer desire and quantity of goods available.

- **Cumulative Causation** – a multi causal approach that incorporates both the supply and demand based models. Cumulative causation is a theory developed by Myrdal (1957) where core variables and their linkages are delineated in a multi causal approach i.e. the unfolding of events within a change of economy. Myrdal was the first to develop a comprehensive critique that regional development could be considered stable within an equilibrium framework. He goes on to say that market forces would promote inequalities between regions: -

*“Unhampered by any policy interferences, industrial production, commerce, banking, insurance and.... Almost all these economic activities which in a developing economy tend to be bigger than average return... would cluster in certain localities and regions”.*

Myrdal (1957, p. 26)

Authors who have developed this theory include McCrone (1969), Markusen (1983), Abraham and Van Rompuy (1992) and Venables (2003). The models developed by these authors bring together the demand and supply side factors, which face regional economics. An explicit approach was proposed by Kaldor (1970), which was then further developed by Dixon and Thirwall

(1975). This model integrated the neoclassical approach with the post Keynesian approaches to regional growth.

Markets depend on the interaction of both supply and demand and the emphasis on how one will play on the other. Armstrong and Taylor (2000) advise that although it can be tempting to place demand based export models as the best way to show medium growth and long term with the neoclassical models; they treat supply and demand as two separate methods. The cumulative causation model has combined these multi causal approaches just as the evolutionary approach has developed supply side analysis over time.

Regional economic growth is therefore, dependent on the extent that regions can exploit economies of scale. Sectors such as manufacturing are more likely to achieve greater productivity than those, which are land based. Cumulative causation can however be negative, whereby interaction between growth regions with other areas can cause stagnating regions to suffer (Osmond, 1976).

In terms of spaceless theories, Blakely (1994) maintains that there is no adequate set of theories, which explains the variations in regional growth disparities despite numerous noteworthy individuals' attempts at constructing regional growth models.

The absence of space makes it difficult for policymakers to address questions of income, wealth, population density etc. By introducing space into the rhetoric, policymakers are able to address these questions. A new interest

has, however, also been forged in external economies of scale, which is a result of clustering and possibly worthy of government intervention.

### **2.3 Theory: Spatial Economic Theories**

The previous section reviewed traditional, spaceless economic theory where the models assume a spaceless economy. These theoretical models clarify how businesses solve their production problems i.e. outputs produced and factors inputs which are used in line with their production function. The aim of these businesses is usually profit maximisation, regardless whether the conditions are perfect or imperfect (Samuelson and Nordhaus, 2001). Removing space allows businesses to concentrate on economic variables. In the real world however, space does matter.

Spatial economic theory has become increasingly significant in our understanding of economic phenomena, whether on a global or regional basis. Siebert (1969) states that all variables of the growth model have to be considered by an indicator of time as well as space. Isard (1956, p. 83-84) concurs by saying that if the concept of 'time preference is allowed, so then should the concept of space preference'. Weber (1911) argues that classical theory disregards transport costs and that further analysis must include space and distance.



*“To understand spatial patterns of economic activity it is necessary to understand how economic processes (and indeed social and political processes) operate but equally, in order to understand how economies operate, an appreciation of the effects of space is required”.*

(Healey and Ilbery, 1990, p. 4)

The models reviewed are the works of economists and geographers over several generations. They have attempted to explain the forces that influence location and the effect this has on the economy around them. These models are therefore; important for policymakers e.g. an evaluation of RSA (Regional Selective Assistance) grant in the United Kingdom between 1991-1995 found that large businesses are more likely to change their location if a grant is offered (DTI *et al.*, 2000, p. 6).

Spatial economic theories can be divided as follows: -

Table 2.1 – Summary of Spatial Economic Theories

Models	Examples
<b>Classical and Neoclassical Models</b>	Land use models: Von Thünen (1826) Location models: Laundhart (1885), Weber (1909), Moses (1958) Central Place Theory: Christaller (1933) Market Area models: Hotelling (1929); Palander (1935)
<b>Behavioural Models</b>	Simon (1957); Cyert and March (1963)
<b>Cluster and Agglomeration Models</b>	Industrial Districts (Marshall, 1920) Growth Poles (Perroux, 1950) Cluster models: Porter (1990)
<b>New Economic Geography Models</b>	Core-periphery Models (Krugman, 1991b) Dynamic Local Spillovers (Baldwin <i>et al.</i> , 2004)

It is important to place these theories within the context of the development of spatial theories in mainstream economics.

## **2.4 The Development of Spatial Theory**

Traditional mainstream neoclassical economics did not postulate about space until the seminal works of Marshall's 'Principles of Economics', 1890 where he introduced "agglomeration" into the rhetoric. To an extent, this is still the case today. Marshall concentrated on the development of industrial complexes, occurring from the existence of positive externalities that occurred due to three major forces: -

- Knowledge spill overs between firms
- Specialised inputs and services from supporting industries and
- Geographically pooled labour market for specialised skills

Marshall goes on to say: -

*"When an industry has thus chosen a locality for itself, it is likely to stay there long: so great are the advantages which people following the same skilled trade get from near neighbourhood to one another. The mysteries of the trade become no mysteries; but are as it were in the air, and children learn many of them unconsciously. Good work is rightly appreciated; inventions and improvements in machinery, in process and the general organization of the business have their merits promptly discussed: if one man starts a new idea, it is taken up by*

*others and combined with suggestions of their own; and thus it becomes the source of further ideas”.*

*(Marshall, 1890, IV, x, 3)*

Marshall explained why industries behaved as they did, which resulted in further research regarding external economies of scale. There were however some weaknesses in Marshall's work. Localisation economics assume that businesses belong in the same sector and that innovation is a seamless activity. This assumption assumes that within any given location, if one business is successful in terms of performance then other businesses should also be experiencing the same success. Geographers and economists pondered over the structure of Marshallian agglomeration and the research agenda was further driven by German academics, namely Walter Christaller.

Christaller (1933) was concerned not just with clustering in geographical terms but also in structural terms. He found that clusters are arranged precisely in terms of their importance to one another (Lloyd and Dicken, 1977). Christaller studies settlement patterns in southern Germany and found it was possible to model locations using geometric shapes.

There has been much research into spatial economics but Von Thünen (1826) was the first serious economist to develop spatial theory. In his work, 'The Isolated State', he compared relationships between production costs, market prices and transport costs. He went on to develop the theory of marginal productivity, which he summarised as follows: -

$$R = Y(p-c) - YFm$$

R is land rent

Y is yield per unit of land

C is production expenses per unit of commodity

P is market price per unit of commodity

F is freight rate and

m is distance to market

What we learn from Von Thünen's work is that the distribution of economic activity is governed by economic rent (Dunn, 1954).

Prior to the 1990s spatial issues were regarded as minor, which could be as a result of limited factor mobility, high tariff barriers and fixed exchange rates. The reason for renewed interest in spatial economics could be the increased economic integration, free trade, new information and communication techniques as well as the availability of new data (McCann and Sheppard, 2003).

There were also the linguistic barriers: -

*“Although most microeconomic analysis was written in English or quickly became available in English, virtually all early work on spatial analysis was in German. Therefore the use of spatial models to analyse urban economics had to await the availability of German literature to economists who were well versed in modern micro theory, but did not read German. The 1954 translation of Lösch's classic was*

*the key event in the education of English language scholars on spatial analysis”.*

(Mills and Nijkamp, 1987, p. 704)

Research into spatial patterns often concluded with assumptions i.e. physical factors such as soil and the climate influenced agricultural activities (Healey and Ilbery, 1990). Schaefer (1953) criticised this approach as it failed to explain the reasons for spatial development or provide the basis for developing general theories. He went on to say that geography needed rules and theories that applied to more than just the one region. This resulted in a change from ideographic to nomothetic studies with emphasis on why regional patterns occur (Healey and Ilbery, 1990).

Spatial development can be categorised as follows: -

- Mainstream economic theory – firms decide what they want to produce and how much labour and capital to employ (however, location is not an issue)
- Location theory – earlier studies are offered by authors such as Von Thünen (1826); Weber (1909; 1929); Isard (1956); Bunge (1966) and Harvey (1969), all used neoclassical theory to model patterns of land use – where profits are maximised and costs minimised (Healey and Ilbery, 1990, p. 20).

In recent times, policymakers and scholars have suggested a shift in paradigm regarding the form and nature of development strategies. Tomaney

(2010, p. 6) observes that it “aims to develop locally-owned strategies that can tap into unused economic potential in all regions and are the basis for strategies which tackle the questions of sustainable development and human well being”.

This approach is not without criticism; Pugalis and Bentley (2014) argue, that a place-based approach could limit its operational effectiveness and that the “development of new analytical approaches, methods and concepts” are required (Brenner and Schmid, 2014, p. 751-752). The appeal of a spatial thinking could therefore invalidate its primary feature i.e. that place matters.

Certainly there is currently a lack of actual policies in place that build on space-based approaches. Tomaney (2010) advises that spatial thinking has the potential to open up new approaches to the development of cities and regions regardless of their shapes, sizes and types. Pugalis and Bentley (2014) use England as an example whereby tailored spatial policies are yet to materialise. Marlow (2013) and Gallent *et al.*, (2013) both concur with Pugalis and Bentley stating that the opportunity to disperse powers to English cities has failed to win the public imagination. Business have however been given some control with the creation of the new Local Enterprise Partnerships which examines economic development under the coalition government (Pugalis and Bentley, 2014).

Even as policies evolve and spaces of governance are rescaled, Pugalis and Bentley (2013) question how this alters local and regional economic

development policies. How do spatial policies fit within this context or indeed what if any, are the alternatives? Have previous policies failed or can modifications be made. What lessons can be learnt? These questions can be problematic for policymakers where promoting economic growth is paramount.

Pugalis and Bentley (2013) therefore propose people centred models, active regional development and space blind policies “by way of explicating some of the potentialities and limitations of different characteristics of place-based approaches”.

The use of space as a mechanism for economic development has also been linked with regeneration initiatives, anti-poverty policy and as a response to urban unrest (Lang, 2016). Space therefore, has been seen as a mechanism for “spatially targeting government programmes and investment” (Lang, 2016, p. 5). In Wales, examples can include the removal of coal tips following the Aberfan disaster during the 1960s and the establishment of the Cardiff Bay Urban Development Corporation in 1987. Space is also inherent in Welsh Government’s anti-poverty programmes such as the Communities First Programme (2012) and the Future of Well Beings Generation (2015) Act.

Further research has also founded new theories namely cluster, new economic geography models, behavioural and evolutionary theories.

## 2.5 Classical and Neoclassical Location Theories

Neoclassical location theory focuses on a general normative model of finding an optimal location for one or more businesses. Von Thünen (1826), Launhardt (1882) (1826) (1909, 1929) and Palander (1935) are considered to be the founders in this field (McCann and Sheppard, 2003, p. 652): -

*“In situations where both locational coordinates and production technology exhibit stable and identifiable fixed-coefficients relationships, if transport costs are known or can be calculated, then the fixed-coefficients assumptions embedded in all these models allows the equilibrium factor conditions to be determined. Alternatively, for any given set of factor prices, where production technology is governed by stable and identifiable fixed-coefficients relationships, the conditions under which firms will be mobile can also be determined”.*

McCann and Sheppard (2003) go on to say that Von Thünen (1826) and Weber (1909) were not given a neoclassical ‘twist’ until the middle of the twentieth century. Alonso (1964), Muth (1969), Mills (1970) and Evans (1973) extended Von Thünen’s land use framework in order to provide an alternative between land and all non-land inputs. Likewise, Isard (1956) and Moses (1958) reached new conclusions when they introduced neoclassical factor substitution into Weber’s locational framework.

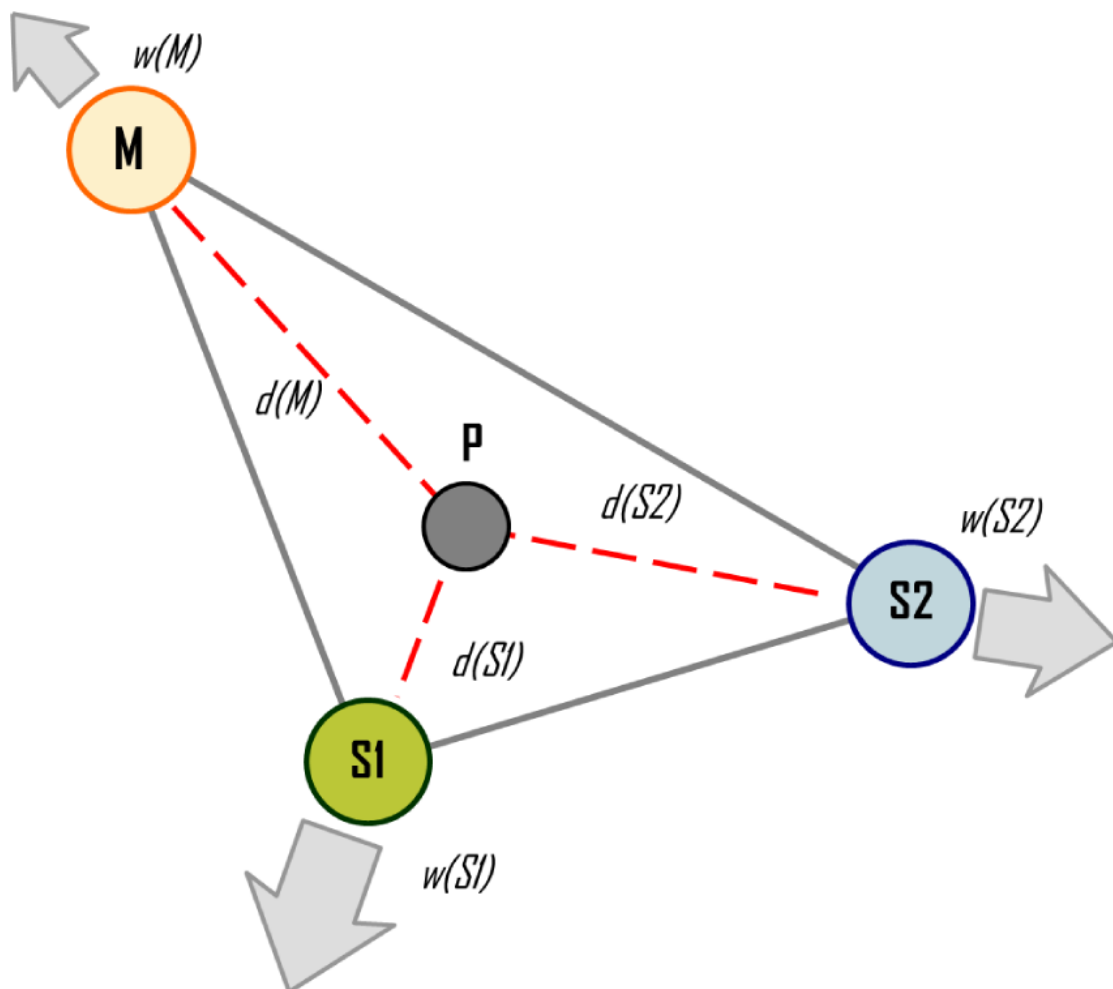
Weber’s (1909) theory is concerned with showing how the optimum location can be found and is based on a single, isolated country with homogenous



conditions. This is demonstrated via a locational triangle within which, the optimal is located. Figure 2.1, demonstrates the issue of minimising transport costs. If a product weighs  $w(M)$  tons and is to be sold at market M,  $w(S1)$  and  $w(S2)$  tons of material are required from S1 and S2. The issue is finding an optimal location P which is located at the respective distances of  $d(M)$ ,  $d(S1)$  and  $d(S2)$ .

Weber's Location Triangle is illustrated in Figure 2.1: -

Figure 2.1 - Weber's Location Triangle



Weber states that by relocating, a business will aim to reduce its costs, which he calls, least cost location. Smith (1981) however, criticises early location theory because of its abstraction from demand. Lösch (1954) offered a solution to this weakness by rejecting a least cost perspective and rather than seeking a low cost location, he strove to find a location where profits could be maximised. This theory however brought its own problems in that optimum location for the business was insoluble (Smith, 1981). The problem thereafter became too complex to formulate.

Isard (1956) drew upon the work of Von Thünen (1826), Lösch (1944), and Weber (1911) to develop principles for a general theory of location. Mathematical models are often used to explain the location of businesses (Smith, 1981).

Classical and neoclassical location theories originate from orthodox microeconomic analysis of price and output theory. McCann and Sheppard (2003) offer two elements of classical location theory, a classification echoed by Healey and Ilbery (1990): -

*“There are two main kinds of spatial pattern of economic activity. One is concerned with the location of various establishments including factories, warehouses, offices and shops; while the other is concerned with land uses such as agriculture and forestry ... the distinction is useful because it emphasizes two different analytical approaches. In the first case the economic activity is taken as given and the analysis is concerned with how its location pattern has evolved; in the second*

*case the location is taken as fixed and the analysis concerns the changing land uses and activities that occupy the location”.*

Healey and Ilbery (1990, p. 4)

### **2.5.1 Land Use Models**

Von Thünen (1826) developed the first element to differentiate land on the basis of its location rather than agricultural use i.e. industry, housing and commercial activity. This work was first realised by Ricardo (1821) who developed the element into a more urban locational concept however, Isard (1956) stated that economics suffered from the neglect of this method.

The ‘bid rent model’ was developed by a number of authors including Alonso (1964) long after Von Thünen stated he thought land to be an inelastic supply. On the contrary, ‘the bid rent model’ regarded land, labour and capital to be substitutable inputs. This model has received serious critiques over issues such as land ownership, polycentricity and whether the optimal size of a region can ever be predicted (McCann, 2001).

All land use models are based on the way areas have developed and grown. There are several ways to view urban land use models but the most common are concentric ring theory, sector theory and multiple nuclei theory. Each of these models differs in land use area.

## 2.5.2 Company Location Models

The second element is represented by earlier models of location by Laundhardt (1885) and Weber (1909; 1929) whose aim was to try and explain why businesses made the decisions they did. The relationships within these models are expressed via the quantity of outputs produced and the quantity of inputs required. McCann and Sheppard (2003) characterised this as a form of production function analysis. Weber (1909) argues that businesses will locate in an area where the overall costs are minimised, if conditions are perfect, the business would be a price taker so maximum profits will be made. This is considered as location dynamics.

Laundhardt (1885) formalises his model from the outset and contemplates location as an isolated state i.e. a closed market. The spatial area is then seen as an Euclidean plane where the market is the origin. This model has been summarised by Fujita *et al.* (1999) as follows: -

$$q_i(r) = \frac{1}{a^1}$$

Assuming that equal prices of land and capital can be achieved, McCann (2001, p. 58) argues that an interregional equilibrium wage gradient can be formed. He goes on to say: -

*“Geography confers different competitive advantage on different locations, which can only be compensated for by variations in local factor prices”.*

### **2.5.3 Central Place Theory**

Walter Christaller (1933) drove the research agenda further with his work on central place theory. Christaller (1933) focused on the location of towns and markets but concluded that businesses would not only cluster in geographical terms but also in structural terms. This means that clusters are arranged in terms of the comparative importance to one another (Lloyd and Dicken, 1977). Christaller (1933) made a number of assumptions with regards to this theory i.e. that all areas have: -

- An isotropic surface
- A population which is evenly distributed
- Resources which are evenly distributed
- Consumers who have similar purchasing powers
- Transportation costs which are equal in all directions
- Perfect competition

Christaller (1933) stated that the primary purpose of the central place theory is to provide the locality with goods and services. He also introduced the concept of a hierarchy, which was based on the levels of order amongst the constituent parts. This theory was based on an inductive observation rather

than a deductive extrapolation from the very first principle (Parr, 2002). Goods and services are placed in order – low to high and determined by their spatial range i.e. the acceptable distance from the point of consumption whilst allowing for transport costs.

Lloyd and Dicken (1977) present an example of spatial dispersion (Figure 2.2), which assumes that a specific space has ten goods and services, ranked 1-10. The rankings have a descending threshold i.e. the lowest value good has the highest demand: -

Figure 2.2 – Spatial Dispersion

Threshold Value		A centres	B centres	C centres
High	1	*		
	2	*		
	3	*	*	
	4	*	*	
	5	*	*	
	6	*	*	
	7	*	*	*
	8	*	*	*
	9	*	*	*
Low	10	*	*	*

Lloyd and Dicken (1977, p. 320)

Lloyd and Dicken's (1997) example shows that good number one, has the highest demand and should therefore have the priority in terms of production. Higher demanded goods tend to be produced in larger centres for larger markets with a minimum number of production points. Christaller (1933) proves that a hierarchy can exist with a variety of spatial market areas (McCann, 2001).

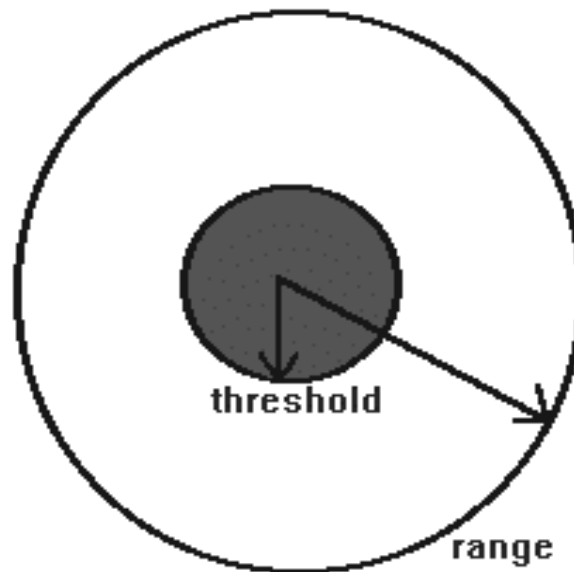
Heilbrun (1987) observed that a hierarchy is by definition a methodical arrangement of the classes of an object. It is difficult to see how Christaller's model will exist in the real world because: -

- isotropic surfaces rarely exist, therefore transportation costs will always vary
- Government policies / interventions can dictate where businesses locate
- Consumers will always vary their shopping trends and not always going to their nearest centre
- Perfect competition will never exist as some businesses will always make more money than others

Now that distance is included, Christaller (1933) endeavors to link the threshold values and spatial units together in one form. Figure 2.3 illustrates the two concepts working together: -



Figure 2.3 – Threshold Values and Spatial Units



This theory is based on two concepts; threshold is the minimum number of people needed to bring a provision of certain good or service to an area. Range is the average distance people will travel to purchase that good or service. This model therefore, highlights the upper and the lower limits of a good or service, which allows the reader to see how the central places are arranged.

The three elements of location theory discussed so far are based on unrealistic assumptions e.g. rational economic behavior, perfect knowledge and profit maximisation. In each of these areas, distance is the key variable.

## 2.5.4 Market Area Models

As previously discussed Lösch (1954) postulated about an isotropic surface where transport costs will always vary. Market area models analyse the way a market area of a business is established. At the point of production, demand will be high as no transport costs are included. Any movement away from the point of production will incur additional costs to cover transport. Transport costs are incurred both by movement to the consumer or by the consumer to the point of production. The market area will increase to the point whereby the product will become too expensive.

Erlenkotter (1989, p. 61) notes that: -

*“Market area models determine the optimal size of market for a facility. These models are grounded in classical location theory, and express the fundamental trade off between economies-of-scale from larger facilities and the higher costs of transport to more distant markets. The simpler market area models have been discovered and rediscovered, and applied and reapplied, in a number of different settings”.*

A simple version of the market area model is based on the following assumptions made by Erlenkotter (1989, p. 45-70): -

- Demand is distributed uniformly over an infinite plain, with density  $D > 0$  per unit area
- The cost for a facility producing the amount  $w$  is  $k + cw$ , where  $k > 0$  is the fixed cost for the facility and  $c > 0$  is the variable facility and production cost per unit
- Unit transport costs are proportional to the distance travelled, at the rate  $t > 0$  per item per unit distance
- The market area to be served is circular, with radius  $R$ , and the facility is to be located at the centre of the market
- Distances are measured according to the Euclidean norm
- Subject to assumptions (a)-(e), the average cost per unit of demand (or per unit area) is to be minimised

The microeconomic approach to location does not explain the nature of market location, market price nor why economic activities may be grouped in space. Market location is treated as a single spatial point. Agglomeration behaviour has generally been treated as exogenous to the micro location problem (Marshall, 1920 and Hoover, 1948). Markets however, do have spatial dimensions: -

- Population density, distribution of income and differences in consumer tastes vary in space within market areas
- Perfect competition may break down with spatial dimension (McCann, 2001)

Market area analysis (which deals with inter-firm oligopoly behaviour) provides an insight into the clustering processes. If customers are assumed to be distributed over space, then the models presented by Hotelling (1929) and Palander (1935) provide a theory, which helps to find a solution to the location problem.

Hotelling's (1929) profound observations of locational interdependence (now known as Hotelling's Law) can be illustrated with an example of two ice cream vendors on a long stretch of beach. Both vendors offer the same flavours and charge the same price which means sunbathers go to their closest vendor. The question for the vendors is where should they locate their stalls in order to maximise their share of customers.

These two ice cream sellers may shift their location but could end up at the same location. Hotelling's (1929) theory assumes the sellers will not change their behaviour in response to their own actions (known as Cournot conjectures). There is no incentive for the ice cream sellers to change their location because it could reduce their income. This is known as Nash equilibrium.

Given the assumptions of this model, McCann (2001) found that a change in location could cost more for the consumer. Attempts to increase profits for the sellers have in fact generated an agglomeration that is inefficient. Richardson (1978) suggests that public intervention could play a role in the location of private businesses: -

*“Market forces result in a location pattern that is socially wasteful because transport costs are at a maximum whereas the minimum transport cost location (a social optimum) would require the firms to locate in dispersed fashion”.*

Richardson (1978, p. 60)

If businesses continue to compete by price as well as location, the equilibrium position may become unstable. McCann (2001, p. 33) states “unless firms can agree to move away from each other, a price war becomes inevitable”.

Businesses tend to locate to each other when competition and price is ruled out and the clustering of businesses then becomes a natural and familiar process e.g. shopping centres. McCann and Sheppard (2003, p. 654) go on to say that the proximity and clustering of businesses is only possible when price competition for similar products “is not a major feature of the market of behaviour”.

## **2.6 Behavioural Theories of Location**

The spatial models discussed so far assume that the aim of all businesses is to maximise their profits with educated decisions. Healey and Ilbery (1990) found that assumptions about perfect competition led to behavioural approaches in the research of location and locational change.

Several studies have been completed on human variables within locational analysis (Pred, 1967; Baker, 1969; Golledge, 1969; Cox, 1969; Harvey, 1969

and Olson, 1969). It was Pred (1967) however, that went to great lengths to show how behavioural science can affect classical locational theory.

Pred (1967) developed a two dimensional model where one axis represented the information that was available and the other representing the capacity to use it. This matrix shows that even if all the information is available, it may not be used correctly and decisions may become irrational. If the matrix is used correctly then decisions therefore, become acceptable, which in turn becomes profitable. Uncertainty increases when a good has moved a fair distance from the market and smaller businesses have to rely on external factors. This says Richardson (1978), re-enforces the rationale to cluster within larger cities.

Human behaviour does not answer why businesses have chosen a particular location over another. Alchian (1950) found that businesses who found themselves with an uncertain market fell into one of the following categories: -

- Adoptive Environment – the business has no advantage in terms of information but the environment will adopt to suit its needs
- Adaptive Environment – some businesses use information to their advantage. Some smaller businesses may make decisions which mirror those who lead

Even when all the information is available, there is no guarantee that a given location will be profitable. Behavioural models suggest that if larger

businesses move to a particular location, smaller businesses will follow in order, which inevitably forms a cluster. This does however; raise the price of land / property which then impacts on profits and ultimately how attractive or not, an area may be.

## **2.7 Agglomeration, Clustering and Innovation**

Patterns within this section of the chapter, suggest that industries generally tend to occupy the same area of economic space. Traditional theories have evolved but the location of a firm is still dominated by transport costs and proximity to markets (Von Thünen, 1826; Lösch, 1944 and Weber, 1911). An important question to consider is whether transport costs really dominate the choice of location, especially in a modern world of global mobility. Crucial to current thinking about the role of space, however, are theories related to agglomeration, clustering and innovation.

The agglomeration of companies has been the focus of both economists and policymakers for some time. Economists have a particular interest as to why economic activities and people generally group together in a particular space.

Agglomeration and clustering are terms, which are often used synonymously but are in general “a geographical and sectoral concentration of enterprises and firms” (Athreya, 2000). Agglomeration therefore, specialises in a particular sector whilst clustering can be deemed by some economic

geographers as an unusual occurrence. They concede that the dispersion of economic activity over regions is the norm.

Agglomeration urban economics, describes the benefits businesses gain when located near to each other. Economies of scale and network effects are achieved when businesses in related industries cluster together (Karlsson, 2008).

Urban and regional economics generally adopt the Ohlin-Hoover classification (Ohlin, 1933; Hoover, 1937, 1948), which splits agglomeration into three groups: -

- Internal returns to scale – labour and capital will be concentrated in one particular area
- Localisation economies – agglomeration accrues in the same sector, at the same place
- Urbanisation economies – benefits accrue in a diverse range of sectors

Clustering is a geographical location of associated businesses, suppliers and various institutions in a particular field. Clustering increases competition for land, which in turn increases labour prices. Location specific economies of scale are known as agglomeration economies (Karlsson, 2008). Karlsson (2008) goes on to say that industrial clustering allows: -



- Informal contact and the sharing of knowledge between businesses.  
Advantage of clustering allows knowledge spill over
- Certain specialist inputs can be provided to the local group in a more efficient manner and the creation of a local labour pool

There are a number of reasons why businesses may choose to locate next to each other but may not pinpoint the exact influence. McCann (2001) suggests there are two distinct factors: -

- Most industrial activities are clustered together in close proximity
- An urban hierarchy exists, usually within a large city which is followed by smaller clusters which increase in numbers as their size falls

Karlsson (2008) notes there are five families of models, which look at the relationships between industrial clusters, agglomeration and innovation: -

- The Growth Pole Model (Perroux, 1950)
- The Incubator or Nursery-Cities Model (Chinitz, 1961 and 1964; Duranton and Puga, 2001)
- The Product Cycle Model (Vernon, 1966 and 1979; Markusen, 1985)
- The Cluster or Porter Model (Porter, 1990 and 1998)
- The New Industrial Area and Innovative Milieux Models (Scott, 1988; Saxenion, 1994; Aydalot and Keeble, 1998; Paniccia, 2002; Becattini, 2004)

The first three families emerged during the 1960s whereas, the last two families have materialised over the last two decades. It is clear that all models highlight the relationship between geography and innovation.

### **2.7.1 Growth Pole Model**

The growth pole model was developed by Perroux (1950, 1988) and was one of the first theorists who incorporated innovation into a regional development framework. Perroux (1950, 1988) found that larger businesses created a positive effect on smaller businesses that were based in the same geographical proximity. The economic growth of a locality is driven by the large expenditure on innovation by larger businesses. The buyer-supplier relationship drives the economic activity.

The growth pole model uncovers a polarisation effect, or a clustering of industries. Richardson (1978) argues that the model is outside regional economics: -

*“Blatantly borrowing from Schumpeter’s theory of innovations, Perroux argues that the pôle de croissance was confined to abstract space (i.e. economic space), rather than geographic space, which he regarded as ‘banal’”.*

Richardson (1978, p. 164)

One criticism of the model proposed by Perroux (1950) is the increase in factor prices. If a business specialises in a particular area, this tends to bring

an increase in production costs that ultimately increases the price of the good produced (McCann, 1997). Bell (1973) and Thomas (1975) also concur with this notion.

In his later work Perroux (1988) identified two phases in growth poles: -

- A cluster phase whereby firms benefit from the close distances they are from each other and
- Growth resulting from investment and information flows outside the growth poles

Myrdal (1957) however focussed on a different style of work where he proposed an endogenous view, which drew attention to the circular and cumulative effects in an economy.

### **2.7.2 Incubator Model (or Nursery City Model)**

Karlsson (2008) claims that the incubator model (or nursery-city model) presented by Chinitz (1961; 1964); Duranton and Puga (2001) and Hoover and Vernon (1962) show cities, which are highly diversified and contain a broad range of industries. These industries cluster together to provide superior 'incubators' for growth because geographical proximity is essential for innovation (McCann, 2001).

### 2.7.3 Product Cycle Model

The original argument for the product cycle model is based on a relationship between geography and innovation depended on the relationship between the location behaviour of firms and the structure of the urban system (Vernon, 1960). Depending on the stage of a product's life cycle, businesses will choose their locations to suit that particular stage. Markusen (1985) assumed that the *“innovation behaviour of a geographical area is directly related to the way location behaviour is related to the structure of the urban system”*, (Karlsson, 2008, p. 28).

Research and development is therefore likely to take place in innovative clusters such as city centres. This allows information spillovers and the constant supply of skilled employees. When the product matures, the production process can then be relocated to an area where costs and skills are lower.

*“The product-cycle argument therefore implies that more geographically peripheral areas, which tend to exhibit lower labour costs and lower labour skills, will also tend to have plants producing more mature, less novel, and more standardised products”.*

(McCann, 2001, p. 62)

## 2.7.4 The Cluster or Porter Cluster Model

One obvious example of where theory has been explicitly linked to policy has been through the work of Michael Porter.

Whilst Michael Porter may have coined the term 'cluster', it was Alfred Marshall who first considered the geographical proximity of firms. Marshall (1890) talked of agglomeration and why firms located to one another in order to obtain advantage.

Now that Porter (1990) had re-ignited interest in clustering, policymakers began considering how they could use a 'cluster' as an economic development tool. Clusters are considered as a strategic move by a firm in order to compete with one another. Porterian clusters drive a supply chain, which exists, in close proximity thus allowing the transfer of information and resources at reduced costs.

Porter (1990, p. 31) defines clusters as: -

*“....geographical concentrations of interconnected companies and institutions in a particular field. Clusters encompass an array of linked industries and other entities important to competition. They include for example, suppliers of specialized inputs such as components, machinery and services, and providers of specialized infrastructure. Clusters also often extend downstream to channels and customers and laterally to manufacturers of complementary products and to companies in industries related to skills, technologies or common inputs. Finally, many clusters include governmental and other*

*institutions- such as universities, standard setting agencies, think tanks, vocational training providers, and trade association that provide specialized training, education, information, research, and technical support”.*

This definition of clustering differs from what has been written before as Porter theorises about linking clusters with economic competition. Firms that cluster together compete more successfully than those on their own. Porter goes on to say that this theory is beneficial for both the region and the country in which it operates, thus allowing the country to compete internationally. Ultimately, “clusters should be central to regional economic policy”, (Woodward and Guimarães, 2009) driving high productivity and innovation.

It is no surprise that Porter’s idea of a cluster has been used by many government agencies e.g. DTI, WDA and the Welsh Government. The issue with this idea however, is that it ignores clustering as a phenomenon, which can naturally occur across economic space. Porter’s idea allows firms to make choices of how to produce their goods in relation to the market.

Porter argues that clusters can affect competition in three ways:

- Productivity is increased if businesses are based in a cluster
- Innovations is driven
- New businesses are stimulated in the sector

Porter used case studies from the US and Japan to explore the lack of competition between them. It was from this work that Porter developed the concept of the 'diamond of national advantage'. Porter found that by studying the issues, the foundations of competitiveness could be explored: -

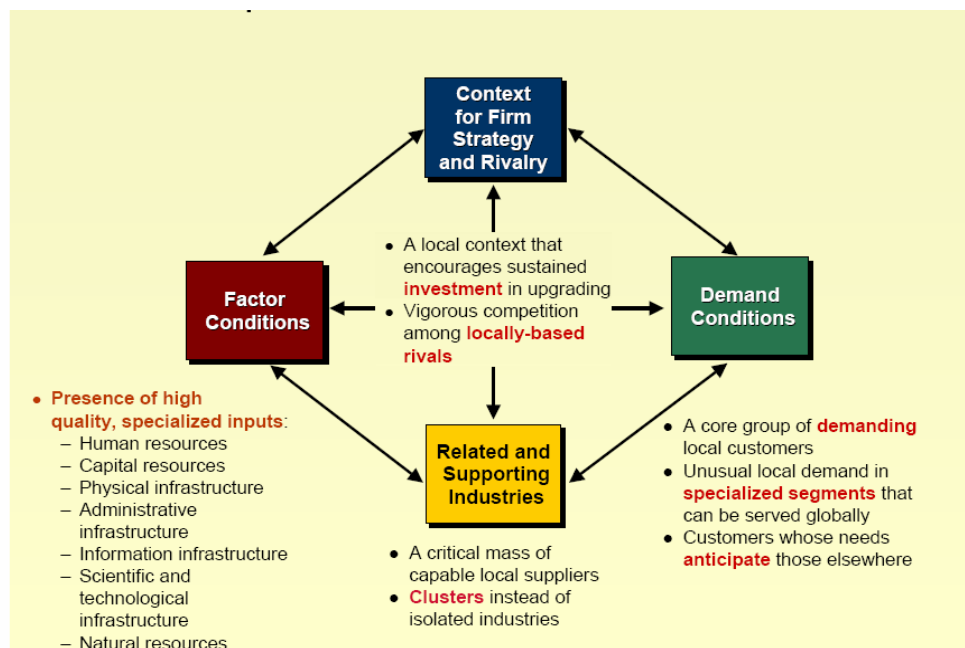
*“The answer lies in the four broad attributes of a nation, attributes that individually and as a system constitute the diamond of national advantage, the playing field that each nation establishes and operates for its industries”.*

Porter (1990, p. 77)

Porter's (1990) diamond model below shows how clusters proceed from one dimension to another: -

- Firm strategy and rivalry – competitive rivalry which drives productivity
- Demand conditions – strong, sophisticated demand
- Related and supporting industries – local base of supporting industries / sectors who are in close proximity of each other
- Factor input condition – favourable conditions

Figure 2.4 - Porter's Competitive Diamond of Local Industrial Clustering



Source: Michael Porter (1998), Institute for Strategy and Competitiveness, Harvard Business School

Each of the dimensions cannot be considered in isolation from each other (Ache, 2004) and it is the intensity between these dimensions, which make a business more competitive. Porter also found that the closer the businesses were located to each other, the higher the interaction. Martin and Sunley (2003) concur that the nation's most competitive businesses will be clustered together.

Martin and Sunley (2003) also found that this area of research had previously been examined by economic geographers but historically, little had been used by policymakers. This they say is perhaps the political agenda, which drove Porter to formulate this work i.e. rather than looking at what currently exists in



the global economy, Porter attempted to question what could be created artificially.

Porter's work is not without criticism and Martin and Sunley (2003, p. 175) question whether it is possible to theorise about clusters: -

*“Why is it that Porter’s notion of “clusters” has gate crashed the economic policy arena when the work of economic geographers on industrial localisation, spatial agglomeration of economic activity, and the growing salience of regions in the global economy has been largely ignored?”.*

Clustering allows businesses to transfer technology and allows information to spill over. This is especially important for the smaller business that may rely on external sources of knowledge. Porter (1998a, p. 80) states a cluster: -

*“Allows each member to benefit as if it had greater scale or as if it had joined with others formally – without requirements to sacrifice its flexibility”.*

All the benefits associated with clustering leads to economies of scale and scope, whilst productivity is increased due to competitive pressures and a demanding customer base.

Whilst Clustering receives much interest from academics and policymakers, it remains a complex area. The UK government invested a huge amount of money buying in the expertise of Michael Porter to establish whether clusters



	<ul style="list-style-type: none"> <li>• Long term contracts and co-operation</li> <li>• Labour market internal to district with worker loyalty to large firms, first then small, then district</li> <li>• Specialised services located within large firms, absence of trade associations</li> <li>• Strong local government</li> </ul>	
Marshallian	<ul style="list-style-type: none"> <li>• Cluster based on geographically generated external (to firm) EOS in labour, specialised services, information spillovers</li> <li>• Same / similar industry based</li> <li>• Geographically based external (to firm) Eos from co location of firms related by forward and backward linkages, to generate product flow, quality co-operation</li> <li>• Small local firms, low Economies of Scale (EOS)</li> <li>• Large intra-district trade between firms</li> <li>• Long term social contracts</li> <li>• Strong internal labour market, with labour loyal to district rather than individual firms</li> <li>• Specialised services available to firms in district</li> </ul>	Parr <i>et al.</i> (2002)  Markusen (1996)
Italianate	<ul style="list-style-type: none"> <li>• As above but also personnel exchanges between buyers and suppliers</li> <li>• Co-operation between competitors to share risk</li> <li>• High innovation</li> <li>• Strong trade associations to create shared infrastructure</li> <li>• Strong local government</li> </ul>	Markusen (1996)
Urban Hierarchy	<ul style="list-style-type: none"> <li>• Geographically based external (to firm and industry) Eos from sharing of common infrastructure, utilities, services, etc.</li> <li>• Different industry based</li> </ul>	Parr <i>et al.</i> (2002)
Relationship Based – Social Networks	<ul style="list-style-type: none"> <li>• Relationship and trust based clusters, based on informal (as opposed to formal transactions) ties to create joint ventures, reorganise relationships and act in a group for common benefit</li> <li>• Spatial benefits of networks based on 'weak tied'</li> </ul>	Gordon and McCann (2000) Granovetter (1992)
Relationship Based – Virtual Organisations	<ul style="list-style-type: none"> <li>• Relationship based on formal ties to create joint venture 'virtual large organisation; from groups of SMEs</li> <li>• Spatial benefits of networks based on string ties</li> </ul>	Styles and Goldsworthy (2002)
Satellite Industrial Platform	<ul style="list-style-type: none"> <li>• Structure dominated by large externally owned firms with high EOS</li> <li>• Low links to local suppliers and absence of long terms contracts and co-operation</li> <li>• Labour market external to district, with workers committed to large firm only</li> <li>• External sources for specialised services</li> <li>• Strong local government role (incentive based)</li> </ul>	Markusen (1996)

This framework can aid government policymakers to develop a cluster development policy. The tools within the framework can review and monitor sectors and also halt any problems, which may have been identified.

### **2.7.5 New Industrial Areas and Innovative Milieux Model**

Scott (1988) developed an alternative model to that of Porter, based in urban planning and regional economics, but also of potential use by policymakers. Scott (1988) found that the growth of regions dominated by large numbers of businesses was the result of being innovative. Saxenian (1994) concurred that it was smaller businesses that were the most innovative. The examples used were Silicon Valley, California which has a significant number of electronics clusters and the manufacturing region of Emilia Romagna, Italy. Saxenian (1994) goes on to say that smaller businesses tend to be more innovative because they are less risk averse than their larger counterparts. Also, their geographical location is a key factor as they share experiences with decision makers.

This model encourages trust between businesses, which falls into the social network theory analysis (Karlsson, 2008). The arguments presented are termed 'social capital' (Glaeser; Glaeser *et al.*, 2000, 2002) and suggest that the right environment will provide the right 'milieux' for innovation to take place (Aydalot and Keeble, 2008). Karlsson (2008) goes on to say that the key element of the interaction between human capital and interpersonal networking produces 'social capital'.

Aydalot (1984, p. 49) defines innovative milieux as: -

*“A strong collection of related companies located in a small geographical area, sometimes centred on a strong part of a country’s science base”.*

This model is of particular interest to policymakers as it can be replicated elsewhere (Castells and Hall, 1994). There has been some criticism of this model however, Arita and McCann (2000) argue that it is unclear whether the observations are truly new or simply a new name for an old model.

## **2.8 New Economic Geography (NEG) Models**

Historically, technological progress was considered to be exogenous but by introducing technology into the economic models as an endogenous variable, it brings us to endogenous growth theory (or new growth theory). This in turn gave birth to a range of new growth models (Martin and Sunley, 1998), which have been used by policymakers, either explicitly or implicitly. Endogenous growth theory aims to explain why some economies have succeeded and others failed. Endogenous growth theory also assumes that accumulated knowledge generates returns, which mean markets do not yield an optimal result. Businesses have an incentive to keep knowledge to themselves so they can charge monopoly rents.

New economic geography models or NEG models were developed in the 1970s and 1980s from new trade theories (Ethier, 1982, Krugman, 1979, 1980). The new trade theories focused on increasing returns to sale by

imperfect competition and network effects (Karlsson and Stough, 2002).

Armstrong and Taylor (2002, p. 135) state: -

*“New trade theories were initially developed to try and explain intra-industry trade and also the phenomenon of the predominance of trade flows between the larger, developed countries of the world, neither of which can be adequately accounted for in the Heckscher-Ohlin model”.*

Competitive advantage is enjoyed by regions that have the best access to markets or the biggest local markets (Armstrong and Taylor, 2000). These businesses exhibit economies of scale, which allows them to benefit from their home market. Competitive advantage can also be enjoyed as production is set up at the very best locations to serve their home market. This should then result in higher wages and higher exports (Venables, 1998). Within new economic geography models, regions which are given a head start, find their home markets are enhanced by cumulative causation (Armstrong and Taylor, 2000). They go on to explain economic development between countries as a competition between centripetal forces, which lead to industrial concentration, and centrifugal forces, which lead to industrial dispersal (Krugman, 1998).

Krugman (1998) identifies a number of significant forces, both centripetal and centrifugal, which affect industrial concentration: -

Table 2.3 - Main Categories of Forces Affecting Industrial Concentration or Dispersion

Centripetal forces	Centrifugal forces
Market-size effects	Immobile factors of production
'Thick' labour markets	Land rents
Pure external economies	Pure external diseconomies

Source: Krugman (1998)

Armstrong and Taylor (2000, p. 137) describe Krugman's table as follows: -

**Centripetal forces include: -**

- Market-size effects – the advantages an industry can attain through backward and forward linkages
- 'Thick' labour markets – the advantages that can arise when an industrial cluster leads to the development of a large and appropriately skilled local labour force into which all the firms can tap
- Pure external economies – the web of additional external economies arising from informational spillovers

**Centrifugal forces include: -**

- Immobile factors - factors which are wholly immobile and those where barriers to mobility are high

- Land rents - deter agglomeration because increased economic activity tends to lead to them being rapidly bid upwards
- Pure external diseconomies - spillovers from congestion and pollution which emerge in urban and industrial agglomerations

Krugman's (1998) concern with the spatial agglomeration of industries increases returns and knowledge spillovers, which in turn, sees a growth in national economic activity (Pike and Tomaney, 2009). Policies, which seek to redistribute economic activity, are therefore seen as threatening the benefits of agglomeration (Martin, 2008).

Those who advocate neoliberal place competition argue for greater support from government to create conditions for competitive success. Hildreth and Bailey (2013) have seen the growing influence of New Economic Geography policies on governments across the UK. London and the South East have seen the heaviest concentrations of public sector investment, which includes the £10bn Olympic Park, £4bn Terminal 5 at Heathrow, the £5bn Channel Tunnel Rail Link and the £15bn Crossrail project (Lang, 2016). Massey (2010) justifies these investments as 'trickle down geography' where the wealth will spread. London and the South East now claim 36 per cent of the UK's GVA (McInroy, 2016) whilst the Welsh economy falls further behind (Lang, 2016). In the period of 1989-2009, the Welsh GVA per head as a percentage of London's fell from 54% to 43% (ONS, 2017) and is now the poorest performing region of the UK (Lang, 2016). This suggests, therefore a need to examine whether there are gaps in the theoretical literature in the



Welsh context, and / or whether the continuing problems are policy formulation / implementation based.

## **2.9 Gaps in the Theoretical Literature in the Welsh Context.**

Spatial economics has become significant in our understanding of economics both globally and regionally. Geographical analysis is more relevant now than ever before with growth in international trade and the opening of new markets. Spatial analysis is highly topical for policymakers with historical as well as new theories emerging.

Whilst spatial economics has experienced criticism, Lang (2016, p. 9) argues that without “such an approach, creative local solutions to sustainable futures are often frustrated”. He goes on to say that critics of spatial economics “tend to over emphasise the power of national governments to solve problems, which in turn seek to exert too much influence upon the local stakeholder”. Nevertheless, spatial economics has failed to overcome the disadvantages experienced by poor communities, which means policymakers need to adopt a holistic approach to future policies.

The Welsh economic landscape poses significant challenges to the spatial approach. The historical emphasis of attracting FDI and agglomeration economics tends to take priority, over local economic development and large infrastructure projects ignore the importance of the broader social infrastructure (Lang, 2016).

Lang goes on to say that Neoliberalism objects to spatial economics as it interferes with the market and that places should be left to prosper, decline or recover. The city riots of the 1980s are significant as it undermines this tolerant perspective.

There have also been criticisms of place targeting associated with political problems. This says Lang (2016), “led to the abandonment of the original conceptions of the entirely competitive ‘opportunity’ nature Welsh Government’s flagship regeneration initiative Vibrant and Viable Places, as well as its flagship anti-poverty programme Communities First, which were originally designed to target resources at far fewer communities”.

Following the publication of the Haywood Report (Welsh Government, 2012), there was an emphasis on securing FDI by targeting the nine ‘key sectors’ together with series of Enterprise Zones in order to secure growth and raise the Welsh GVA. Many regions are now driving this agenda forward for example, the Cardiff City Deal, which will see connectivity improvements. Whilst there is an argument that improving transport links opens up regions in the context of spatial agglomeration, there is international evidence to suggest that large infrastructure projects do not leave a lasting legacy (Lang, 2016) which can be an issue for Welsh Government policymakers. The Industrial Communities Alliance (2015, p.12) question whether concentrating more power to cities harm growth outside their boundaries - “some big cities are actually eroding the economic base of the towns and surrounding areas”.

One area which has been targeted for support by Welsh Government is the specific Anchor Company policy, which encompasses both FDI and indigenous companies. Whilst the policy is still very much in its infancy, it can be explicitly placed within theories related to agglomeration and clustering.

It should be noted that since the work of Marshall (1890) through to the new modelling work of Krugman (1991), very little emphasis has been given to the interaction of firms - other than their trade relationships. Therefore there is a clear gap in theoretical literature with regards to the specific Welsh Government Anchor Company policy.

## **2.10 Regional Policy in the UK and Wales**

### **2.11 Introduction**

The previous section considered the importance of space and sought to understand why firms locate in a particular location. Classical and neoclassical location theories attempted to solve firms' locational and production problems however, these theories failed to explain why firms concentrated in particular locations.

Agglomeration and clustering models were developed to respond, building on the works of Marshall (1890). Whilst Porter's (1990) theory was popular amongst policymakers, these models were criticised, particularly by

geographers. The NEG models for example, failed to consider geography and history and therefore proved unattractive to policymakers.

Space and time is important, notwithstanding their ontological and epistemological differences and there is a need to 'spatially' rebalance the economy, which raises issues for our theories of regional development and policy. Imperfect competition and the restriction of free markets will always provide a convincing argument for government intervention.

This section outlines how Wales has evolved from its roots in coal, iron and steel to becoming a region with a status as one of the poorest areas of the European Union. It will also consider the ever-changing policies implemented by government. The objective is to review policies introduced by organisations such as the WDA and Welsh Government and provide a contextual background for this study. The study makes no attempt to duplicate the ample literature on policy (Taylor and Wren, 1997; MacKay, 2003; Fothergill, 2005) but aims to draw out themes relevant to Anchor Companies in Wales.

There is a lack of clarity with regards to the definition of government intervention within the economy. In the UK however, intervention can be categorised into two categories where firstly, expenditure is specifically aimed at supporting regional economies with the creation and safeguarding of jobs. The second category is where expenditure is aimed at economic

development. This study focuses on the first category as it examines how Welsh Government is supporting Anchor Companies in Wales.

During the post war period, government intervention was known as regional policy and focussed on a narrow range of support mechanisms to support businesses e.g. the construction of factories and attracting businesses to a particular area (McKenna and Thomas, 1988). These mechanisms consisted of grants, loans and tax allowances and were often complex in nature (Wren, 1996).

The term 'regional policy' was replaced with 'economic development' in the 1980s and regeneration became the focus of governmental activity.

## **2.12 The Historical Development of UK Regional Policy**

Governments commit vast amount of money to economic policy (Nightingale and Coad, 2014; Storey, 2006) and it is important to assess their effectiveness. Academic research therefore has a vital role to play both empirically and theoretically in contributing to a stronger evidence base. This will allow for properly designed policies, which are executed and evaluated (Blackburn and Smallbone, 2008; Cowie, 2012; Mason, 2009a). Given that we now live in age of austerity, some argue that it is more prescient than ever to examine interventions so that cost-effective policy paths can be developed (Williams, 2013, p. 3).

Much has been written about regional economics and policy and is a contentious subject amongst academics, researchers and politicians. Economists historically have been influenced by the climates in which they lived e.g. Karl Marx lived in a time when workers rights and conditions were very poor and John Maynard Keynes lived through the great depression (or slump as it was known in the UK) of the 1930s.

Definitions for regional policy are important and difficult to understand and there is no singular agreed homogenous understanding of development (Pike *et al.*, 2007). The complexity of regional policies also makes the evaluation of the different packages more difficult to understand and does not allow effective comparisons to be made between the schemes (Pickernell, 1999).

Regional policy is shaped by critique, debate, experience and evaluation. Pike *et al.*, (2007, p. 124) advise that “economic, social, political, ecological and cultural processes influence local and regional development across, between and through different scales”. All economic development policies should change with time and should vary both within and between countries.

Orthodox economics argue that a region’s economic activity and prosperity will converge over time. Most neoclassical economists believe the capitalist system to be self-correcting and self-regulating and these beliefs have implications on government policy (Cornwall, 1993). If there is no requirement for government intervention and the belief is that market forces themselves

will even out regional disparities, then it would be a pointless exercise spending resources on economic policy.

Regional development policies which are often referred to as 'place based', target a region to enhance their competitiveness. These policies can also target regions that may be lagging or displaying a 'problem' (Olfert *et al.*, 2014). Place based policies assume uneven economic activity, which may arise from the differences, which exist in natural advantages and factor endowments in neoclassical economics. Armstrong and Taylor (2000, p. 190) state, "the presence of regional disparities in economic welfare is not sufficient *per se* to justify the existence of regional policy". It is therefore essential to understand why regional policy is desirable and how a region can benefit from its delivery.

Regional policy in the UK starts during the inter war periods where persistent overcapacity and high unemployment in staple export industries led to 'black spots' (Armstrong and Taylor, 2000, p. 191). This period was coined by MacKay (2003, p. 304) as the 'The Golden Age', as unemployment was relatively low and standards of living were rising. The government responded by setting up the Industrial Transference Board whose aim was: -

*"Facilitating the transfer of workers, and in particular miners, for whom opportunities of employment in their own district or occupation are no longer available".*

Ministry of Labour (1928, p. 1)

Recovery from the Great Depression began in the mid 1930s and the British Government began addressing the regional imbalances. Action was taken to try and alleviate the huge suffering created by the job losses. Data retrieved from the Historical Abstract of Labour statistics (1933) show that the average UK unemployment rate was 23.4 per cent, which clearly demonstrates the huge problem facing the government. In order to prevent migration from areas of high unemployment, the government introduced the Special Areas (Development and Improvement) Acts 1934 – one of which was South Wales.

In April 1936, the Special Areas Reconstruction Association was established to provide support to businesses in the form of loans and the government at that time also introduced factory buildings into its regional policies. The Special Areas Amendment Act 1937 introduced special tax incentives and developed the use of trading estates for business. Unfortunately due to the low expenditure on aid to industry, few jobs were created (Armstrong and Taylor, 2000).

In 1944 the government committed to a policy of full employment under the White Paper Employment Policy. The government now not only had the power to create jobs but to be responsible for them as well. Areas of high unemployment were emphasised in the Barlow report: -

*“A beginning must be made in regarding the country as a social and economic unit as well as a political unit. We believe that if it be possible (and we consider that it is possible), by positive action through inducement, advice and direction, to achieve a better balanced*



*industrial development in the areas where excessive specialisation has brought disaster, unemployment will be reduced in these areas without increasing it elsewhere, whilst taking away the urge to locate new industries or to extend old ones in the admittedly congested area around London”.*

Royal Commission on the Distribution of the Industrial Population (Britain and Barlow, 1944, p. 208-9)

At the end of the post war period attacks were made on the economic ideology, Keynesianism, on the monetary and fiscal programmes which were designed to stimulate business activity (Phelps, 1967). Government was identified as the problem (MacKay, 2003), with welfare benefits being blamed for reducing the number of people who returned to work. The Counter Revolution’s answer to this should be for government to withdraw their economic policy and concentrate on ensuring a sound currency (Friedman, 1968). This approach was again echoed by the government in the 1980s, when they focused on providing a sound business environment rather than direct intervention (Wren, 2001).

The Distribution of Industry Act passed in 1945, played an important part in regional policy through to 1960. Special Areas were now called Development Areas and included not only the trading estates but also cities and major towns. A variety of business support tools were introduced, such as loans and grants to businesses, powers to build factories and industrial estates together with a basic provision for service (Armstrong and Taylor, 2000). Wrexham for example, was a major town, which was recognised as a

Development Area in 1948. Restrictions were placed on development in the South East of England so that the focus of the policy would be on reducing economic and social disparities within regions.

A large number of industrial buildings were developed in the 1950s and this very success led to a downplaying of regional policy. Towards the end of the 1950s however, problems affecting the coal, steel, textiles and shipbuilding industries reared once again (Armstrong and Taylor, 2000). An extension to the development of smaller areas was required and as such the government passed the Distribution of Industry Act 1958, which focused primarily on unemployment rather than development.

During the 1950s and 1960s the aim of regional policy was to create large businesses, which would compete on the basis of economies of scale with competitors in Japan and America. Small businesses at this time were considered as inefficient. The Bolton report (Bolton, 1971) argued that the smaller businesses had a vital role in the economy, which triggered further research into this area.

Birch (1979) found that 66 per cent of the increase in employment between 1969 and 1976 was in businesses that employed less than 20 workers. Storey and Johnson (1987) claimed that this was an overestimate but nevertheless, research continued in this area. The conservative government at this time shunned Keynesian management in favour of supply side economics. The broad aim then as well as today, is to reduce inflation and

create conditions in which businesses can grow. Policies since have focused on supporting the creation of new businesses and the findings of Birch (1979) and Doyle and Gallagher (1986) support this approach.

Employment creation continued to play an important part in the development of regional policy within the UK and a further act was passed; Local Employment Act 1960. The aim of this act was to give the Board greater powers in designating or descheduling areas and also allowed them to do this without the approval of parliament.

In 1966, regional policy in the UK moved away from reducing economic and social disparities within regions, to focussing and on the development of growth and expansion. The Industrial Development Act 1966 gave consideration to all circumstances, actual and expected, including the state of unemployment, population changes, migration and the objectives of regional policy. Grants for machinery, plant and the 'accelerated depreciation' were abolished and replaced with Automatic Investment Grants (Armstrong and Taylor, 2000). The Board of Trade continued to build factories for rent or sale on favourable terms. In 1967 the Regional Employment Premium was created to assist the manufacturing industry within Development Areas.

Special provisions were also made in 1967 for those regions, in the absence of special measures, to support areas where collieries were expected to close. These special measures gave financial assistance over and above what was available under the Development Areas. These areas in Scotland,

the North East of England and South Wales were known as Special Development Areas.

Regional policy strengthened during the early 1970s and The Industry Act 1972 saw the introduction of Regional Development Grants payable at a fixed percentage (22 per cent in Special Development Areas and 20 per cent in Development Areas) on capital expenditure. The mid 1970s proved to be somewhat harder in delivery, which was due to the balance of payments crisis. Investment fell particularly in manufacturing which means there was less money available to attract inward investors into the assisted areas (Armstrong and Taylor, 2000).

After the riots of the early 1980s, regional aid was cut from policy as the government began focussing on bringing the larger cities of the UK back to life (Armstrong and Taylor, 2000).

In December 1997, the Labour Deputy Prime Minister John Prescott released the White Paper "Building Partnerships for Prosperity", which set out the government's plans. The Regional Development Agencies Act 1998 was put into law and eight of the nine RDAs were formally launched in April 1999, with the London Development Agency following in July 2000. RDAs proved very successful in some areas of the UK and had annual budgets of £2bn, which helped to create and safeguard thousands of jobs and regenerate areas which were desperately needed. The White Paper was explicit in its creation of the RDAs in the context of devolution as the process took place as the

same time as power was being devolved to Scottish Parliament and the Welsh National Assembly.

By the late 1980s further cuts were to be made within government. The automatic investment grant scheme together with the regional development grant was terminated but regional policy was spared (Armstrong and Taylor, 2000). The government radically changed regional policy to encourage self help from within. This way forward was in complete contrast to previous policies (Martin, 1989a). The policy therefore helped the disadvantaged areas to improve their competitiveness and remove supply side rigidities which prevented businesses from generating growth.

The new policy was intended to replace inward investment with indigenous development and the White Paper DTI – The Department for Enterprise stated (1988, p. 29): -

*“In all our work we will take account of the differing circumstances in the regions... to enable those who live there to help themselves”.*

In order to achieve this objective, government expenditure went from automatic to selective investment grants, which had a focus on improving management skills, business strategies and business innovation.

A number of White Papers published during the 1990s, continued to focus on the need for policies, which were designed to enhance the nation's

competitiveness. The new Labour government echoed this objective and saw regional policy as: -

- The development of a strategic long term vision for promoting competitiveness in the region
- Ensuring national support for competitiveness is tailored to regional and local needs
- Providing support for the development of cluster, networks and other partnerships

Armstrong and Taylor (2000, p. 220)

The practical task for policymakers is designing a policy that demonstrates a need as well as a return on their investment. Olfert *et al.*, (2014) argue that place based policies targeted at lagging regions, tend to yield a low return and that policymakers should focus on a people based policy. Irrespective of approach, consideration has to be given to why and how a policy is designed.

### **2.12.1 Policy Design**

There is much literature on UK regional economic policy (Moore *et al.*, 1986; Taylor and Wren, 1997; Armstrong and Taylor, 2000; MacKay, 2003) and a considerable amount of time and money is devoted to designing and developing regional economic policies. It is therefore paramount that the objective of a policy is clear and can be measured.

Diamond and Spence (1983, p. 89) offer 9 regional policy objectives for economic prosperity: -

- Increased use of existing physical resources within the region
- More effective allocation of resources between uses within a region
- Optimum growth
- Efficient re-allocation of factors between regions to maximise national income / growth
- Equalise growth rates between regions
- Equalise per capita incomes between regions
- Reduce demand differences between regions
- Minimise location specific costs to maximise net social benefits
- Preserving regional and cultural identity

Today, economists are able to understand why decisions and actions were taken and the trick is to try to learn by mistakes and lead by example.

Government intervention therefore, can help an area work more effectively or which counteracts the market failure. Winnick (1966) advises that intervention can promote people prosperity or place prosperity. People prosperity policies he says, assist the unemployed, the poor or the under privileged whilst place prosperity supports poor regions and ghettos.

Taylor and Wren (1997, p. 836) state there are four arguments for supporting the case for a strong and effective regional policy: -

- Reducing unemployment in areas of high unemployment has direct economic and social benefits
- Reducing spatial unemployment disparities will reduce inflationary pressure in the economy as a whole
- Unbalanced regional growth leads to a persistence and intensification of regional problems through the process of cumulative causation
- Reducing unemployment in areas of high unemployment is politically necessary

Bannock *et al.* (1992, p. 274) define market failure as “a situation in which economic efficiency has not been achieved through imperfections in the market mechanism”. Market failure is therefore the inability of a market to produce goods and add value in such a way that consumers would be better off. Economic theory predicts that a market will usually fail if perfect competition has not been achieved. In this case, government intervention can be justified.

Equity considerations put pressure on governments in the developed world to provide a minimum living standard. These considerations have little to do with market failures but justify a rationale for redistributing income from richer areas to poorer areas. Teaching a poor area to ‘fish’ can help the population become productive and self-supporting. Governments have aimed policies at decentralising activities e.g. the Welsh Assembly Governments (2004) relocation strategy recognised the substantial benefits an area would receive from the presence of government office.



A number of theories lend weight, which can aid policymakers in taking a decision as to relocate a government office. The cumulative causation model discusses intervention at a particular stage, which can play a pivotal role on helping to grow a region. MacKay (2003) found that it is possible to have a negative cumulative cause. Workers who lose their jobs may lose interest or become disengaged with the labour market.

Taylor and Wren (1997, p. 84) discuss policies that could be implemented to increase the economic potential of less well off areas: -

- Encourage indigenous development, through the new firm formation and the growth of existing firms (by provision of business support, industrial sites and premises, financial support and loan guarantees);
- Encourage inward investment from other regions or from abroad (through provision of investment and other incentives);
- Improve physical infrastructure and environment to raise competitiveness and make areas more attractive to potential investors;
- Improve the skill level of the local workforce by investing in human capital programmes, including both education and training;
- Encourage unemployed people back into the workforce (by offering subsidies targeted at the individuals).

Rodrik (1996) says reform within an economy requires austere policies, which respect government constraints and should improve the well being of a large majority of a population.

In order to inform sound policy, it is essential that the evidence, which it supports, is sound. Nulley *et al.*, (2002, p. 8) note that 'researchers and analysts have long worked with and in government to provide evidence based policy advice' however, during the 1980s and early 1990s 'there was a distancing and even dismissal of research in many areas of policy'. This they say is purely down to politics. They also observe that the public sector lacks the knowledge base and is insufficient to inform many policy areas resulting in large gaps and ambiguities.

Recognition of these problems has led the UK government to develop R&D strategies. Nulley *et al.*, (2002, p. 4) argue that developing such strategies requires consideration on a number of issues: -

- What research designs are appropriate for specific research questions, and what are the methodological characteristics of robust research?
- What is an appropriate balance between new primary research and the exploitation of existing research through secondary analysis?
- How can the need for rigour be balanced with the need for timely findings of practical relevance?
- What approaches can be used to identify gaps in current knowledge provision, and how should such gaps be prioritised?
- How should research be commissioned (and subsequently managed) to fill identified gaps in knowledge?
- How can research capacity be developed to allow a rapid increase in the availability of research-based information?

- How are the tensions to be managed between the desirability of 'independent' researchers free from the more overt forms of political contamination, and the need for close co-operation (bordering on dependence) between research users and research providers?
- How should research findings be communicated and, more importantly, how can research users be engaged with the research production process to ensure more ready application of its findings?

Increasing the use of evidence for policy design can be challenging for governments especially during a time of austerity. The relationship between research, knowledge, policy and practice will fail if policymakers do not make use of research. Policy design is ultimately about delivering outcomes, which is also a measure of the effectiveness of politicians and governments.

### **2.12.2 Policy Delivery**

Both politicians and governments are judged by how they deliver results therefore successful policy delivery is as important as ever. Mulgan and Lee (2001) state that many policies have been successfully implemented however, policies which appear impressive on paper all too often are poorly delivered. Past delivery and implementation has since been given much attention.

The Blair government in the UK for example focused on delivery (Barber, 2007), as Ministers were frustrated with the inflexibility of public service professionals. New policies and initiatives were introduced in rapid succession, which resulted in policy overload and new regulatory mechanisms

i.e. targets, standards, audit requirements, inspections and new performance regimes (Barber, 2007).

Barber (2007, p. 238) congratulates the Blair government for the progress it made in improving public services. He does however add a caveat in that the progress was “*awful to adequate rather than good to great*”. Barber notes that it wasn’t inadequate expenditure on the part of the government but rather the failures of the organisation and their inability to align producer interests with those of the taxpayer. The approach developed to improve performance on key targets, involved regular performance reviews and the refusal to accept excuses on under performance with regards to managerial control.

Once a policy has been designed / written, there can be problems translating it into successful delivery. Gertler (1992) demonstrated how the successful policies of the industrial districts in Emilia-Romagna and Baden-Wurtemberg led many other regions to copy their policies. When these same regions came under severe pressure, they began to restructure their policies, which highlighted the limitations of the original strategy (Cooke and Morgan, 1994).

The traditional model of delivery has historically been a relatively simple process (Mulgan and Lee, 2001, p. 5): -

- Politicians identify a priority and the broad outlines of a solution (e.g. in the form of a manifesto commitment)
- Policymakers in Whitehall design a policy to put this into effect, assembling the right collection of tools: legislation, funding, incentives, new institutions and directives
- The job of implementation is then handed over to a different group of staff, an agency or local government
- .. the goal is (hopefully) achieved

Mulgan and Lee (2001, p. 5) go on to say that implementation and delivery are more likely to succeed if there is: -

- A tight process with few intermediaries
- Simple lines of accountability
- Clear prescription to minimise the scope for fudge
- Tough penalties and rewards on each link in the chain to perform their task

The traditional model of delivery and implementation proposed by Mulgan and Lee is a simple model and if all the conditions are met i.e. right people in the right job with no funding issues, then success is almost assured. In the real world however, this model may not always work, as it doesn't accurately describe the world in which governments work.

Mulgan and Lee (2001, p. 6) have identified seven reasons why policy delivery fails and why this can lead to frustrations: -

1. Delivery has to involve implementation of policy, achievement of targets and achievement of better outcomes and all three are closely related
2. Effective implementation of a flawed policy can worsen outcomes as can too great an emphasis on the wrong targets
3. Central government has only limited control over many of the people and institutions responsible for delivery
4. Few policies are implemented fully formed
5. The traditional model is at odds with lessons learned
6. Successful delivery depends on systems
7. Interdependence of policies – single policies however well implemented are unlikely to have much effect on the biggest challenge to government e.g. improving competitiveness

As Barber (2007) notes, the focus on delivery has dominated the thinking around policy making and delivery for over 40 years. As a result of the lessons learned, a more sophisticated approach to delivery has and still is taking place (author's own observation). Mulgan and Lee (2001, p. 3) found that effective policy delivery depended on the following: -

- How well the policy had been designed
- The motivations and skills of hundreds of thousands of front line staff
- The ethos or culture of those involved in the implementation
- Complex technologies
- Having the right rewards and penalties
- Securing real commitment from those involved

Success they say depends on all of the above and failure in one area can undermine the whole process. Some of the most high profile delivery failures show common features i.e. poor management, lack of IT, lack of reality checks, unrealistic timescales and poor communication and HR strategies. There are also common features with successful delivery i.e. a clearly and widely shared vision, policies that draw on experience of what works, strong support and training for those responsible for implementation and clear lines of accountability (Mulgan and Lee, 2000).

Mulgan and Lee (2000) found that from past experience, delivery is not a one off task and that it is best understood as a linear process. Rather than implementing policies on the ground level, the process should be more circular which involves continuous learning together with adaptation and improvement. Mulgan and Lee (2000) also argue that policies should have the ability to change in response to implementation. As with Barber (2007), there is a focus on improving performance with regular performance reviews.

There has been much work completed on the 'top down' approach to successful implementation. The structure within the approach is hierarchical with a chain of command to assemble and control resources with a system that communicates effectively (Gunn, 1978). Sabatier (1986) suggests that a 'bottom up' approach should be adopted where those, on the front line have discretion on how the rules are implemented. This street led activity he says, does not invalidate the top down approach rather it necessitates additional strategies in order to affect the preferences and behaviours of the street level bureaucrats.

There have been several attempts to synthesise the bottom up and top down approach however Sabatier (1986, p. 51), proposes an "*advocacy coalition framework for change*". He recognises the policy subsystem and the external events, which cause constraints on the sub systems and resources available. O'Toole (2000) suggests, that both approaches are obsolete and have since been superceded by the general strengths of each. He argues that there is a need to construct implementation models, which reflect the diversity and variety of context i.e. different approaches bring different advantages.

Barber (2007) proposes the creation of a new department, which combines the implementation of public sector reforms together with strategic vision and the ability to meet targets. Flexibility is key he says. The ability to be able to change a policy in line with the business needs is paramount; otherwise an ineffective policy can remain for years due to political interests.



### **2.12.3 What can Policy Writers Learn?**

Two diametrically opposed approaches for reducing regional disparities are the free market approach and the government interventionist approach (Armstrong and Taylor, 2001). It is widely recognised that long periods of regional economic disparity has a negative effect on the economy and as such disparities have harmful political and social consequences. For example, sub standard living conditions cause dissatisfaction and resentment. Persistent high levels of unemployment in disadvantaged regions have harmful economic consequences.

Regional development policies exist to provide economic help to the country's most depressed areas (Taylor and Wren, 1997). Typically, policies will aim to increase employment and encourage investment.

The same issues appear within regional economics as they did four hundred years ago. Therefore, what can policy writers learn from regional economic theory? Orthodox economists may argue the neoclassical school of thought for reliance on a free market to reduce disparities within regions, believing that various barriers prevent changes via trade and investment. If these barriers are removed, regions will move towards general equilibrium. This argument implies a meeting of regions, where the less deprived regions are able to catch up with their more prosperous counterparts. There is no requirement for any intervention by government to promote regional economic development.

Although the orthodox approach appears lucrative even before we begin drawing on empirical evidence, cracks do begin to appear in this school of thought. The neoclassical approach implies homogeneity and spacelessness, therefore once space is admitted, perfect competition breaks down. Space in this instance implies imperfect competition and businesses located in certain regions may benefit over businesses in other less prosperous regions. Achieving equilibrium does not mean equilibrium of prices or income over space.

Exporting will secure endogenous growth within regions and evidence of 'cumulative causation' provides a strong case for government intervention even within spaceless theory.

Perfect competition and spatial theories create a strong argument for government intervention. Although this is in breach of the neoclassical school of thought, new economic geography and clustering strengthen the argument for the development of this approach. New economic geography embraces imperfect competition imposed by spatial theories. Cluster theories and agglomeration arguments show models, which increase returns tenfold which are in contrast, to the orthodox theory. Clustering and new economic geography are consistent with cumulative causation and therefore create a strong argument for regional disequilibrium or regional economic policy.

Arguments in favour of public policy therefore hardly need the support of thoroughly heterodox theories. Evolutionary theories, however, provide

further ammunition, especially by stressing the possibility of path dependence and the likelihood of multiple equilibria and increasing returns. Finally, while hardly as yet respectable, heterodox theories that dispute the nature of overall equilibrium throw another spanner into the works by suggesting there is no inherently equilibrating process in the economy as a whole.

The conclusion therefore is that the science of regional economics leaves the door wide open for regional economic policy. Certainly there is no clear disproof of the need for policy. Some near orthodox theories, such as export based models, clustering and cumulative causation imply plausible roles for government intervention. This is very different; of course, from knowing that policy works.

### **2.13 The Historical Development of Welsh Regional Policy**

The Welsh economy was dominated by coal, iron and steel and in 1921, almost 50 per cent of insured employed workers were working within these sectors (Williams, 1995). The concentration of these sectors was also geographical with almost 70 per cent of the population living and working in South Wales (Williams, 1995).

Foreign competition combined with more efficient ways of burning coal and alternative fuel sources led to a sharp decline in the economy of Wales. This led to high unemployment levels reaching 42.8 per cent in August 1932 (Davies, 1993). Wales found herself unable to turn to alternative sources of

wealth generation, due to its dependency on coal, iron and steel. This problem was accelerated by the occupational structure of the industries, which employed manual rather than professional labour (Morgan, 1982). The most talented employees found work as clerks within trade unions, government or educational departments; the remainder neither had the skills nor the capital to start a new business.

Wales' decline during this inter war period saw the implementation of initiatives such as the Industrial Development Council for South Wales. The government was also instrumental in subsidising investment in the steel industry at Ebbw Vale (rather than Lincolnshire) and the introduction of a trading estate at Treforest (Marquand, 1932). The level of investment however, was minimal as compared with the losses occurring in the coal and steel industry. The two commissioners appointed under the legislation had limited powers and budget. The combined budget for the UK was £2 million (Parsons, 1988) and critics have argued that the Industrial Development Council suffered from a limited level of indigenous industrialist representation (Morgan, 1994b).

Lovering (1984) says that it was the Second World War that helped Wales to develop a presence within new manufacturing industries. This was due in part to the government placing pressure on manufacturers to relocate away from vulnerable areas such as London and the South East. An example of this is the large scale Royal Ordnance Factories being established at Bridgend and Hirwaun. Wales also had 50 foreign companies relocating from Central

Europe bringing with them skills, products and processes (Thomas, 1986). Although some of the newly acquired industries relocated back to their original locations, Wales without doubt, had a more diversified economy (Morgan, 1981).

The years following the Second World War saw a boom in employment and living standards in Wales (Morgan, 1981). The economic upsurge at this time was driven by government intervention and there was a political consensus that the unemployment levels suffered during the 1930s, was unacceptable and could have been prevented.

Government began influencing industrialists on where they should locate their factories and by 1948, an Industrial Development Certificate (IDC) was required if a manufacturer wanted to expand beyond a certain size (usually 5,000 square feet) or build a new factory (Moxon, 1972). IDC's were awarded by government and were used as an incentive to entice companies to less prosperous areas (now known as assisted areas). These were areas, which had been highlighted by government as underperforming and in need of job creation.

This policy was unique to the UK and also became controversial as it provided a means of influencing the pattern of industrial location. This allowed government to collect information about industrial developments taking place in their area and encourage mobility, from the most prosperous areas to the least prosperous areas.

Although regional policies in Wales helped to diversify the economy during the 1950s, it wasn't until the 1960s that these policies were redesigned in the form of investment grants, tax incentives and other types of financial assistance (McCrone, 1969). Despite new employment being created at this time, it did not fill the void with the losses being made within the coal and steel industries. It became increasingly clear that Wales had 'special needs' which would require specialist policies – a belief shared by Rees (1997).

As a result of this, the Welsh Office was created in 1965 and was established in order to execute government policy although some of the powers in this area were not devolved until after 1974. Wales took over responsibilities from other departments, which included economic planning, housing, local government, environmental health, town and country planning to name a few.

Also during this time the White Paper, *Wales: a Way Forward* was created and Morgan (1982) found that although this policy lacked support and was overly secretive, this was one of the first strategic frameworks that had been specifically formulated for Wales. These interventions have played an important part in helping Wales reduce its dependency on its roots in coal, iron and steel. Unfortunately, despite these interventions, the 'paradox' of the Welsh economy (Price *et al.*, 1994) is that it still lags behind other regions of the UK on a number of important indicators of economic well-being.

During the 1970s Wales TUC, the Welsh Labour Party and Plaid Cymru (Rees and Lambert, 1981) were vocal in their criticism of *Wales: the Way*

*Ahead*', much of which was directed at inward investment. The private sector as well as public service employees raised concerns that the areas, which needed employment i.e. the valleys, were being shunned for Wales' coastal belt. There were also concerns regarding the quality of the jobs created (Lovering, 1983) and Wales was fast becoming reliant on the 'stack-em-high-sell-em-fast-approach'.

One of the most tangible outcomes during this period was the creation of the RDAs, which included the WDA and the Rural Wales Development Corporation (which would later become DBRW). These agencies were created to provide financial support to companies creating or safeguarding jobs, to provide factories and to clear derelict land. This period was particularly turbulent with the rise of Prime Minister, Margaret Thatcher and the struggles over the nationalisation of the coal and steel industries.

Brooksbank and Pickernell (2001, p. 272) suggest that the history of regional policy in Wales has been dominated by inward investment, with grants being levered through the threat of the investment going elsewhere. This means that every inward investment project is likely to seek financial assistance and will continue to do so using the threats highlighted to obtain government resources. They go on to say, that "it illustrates the different way in which UK and non UK companies can take advantage of the regulations governing RSA, with potentially serious consequences for the regional policy resources available in the region".

## 2.14 Regional Policy in Wales from the WDA to Devolution

In 1976, The Welsh Development Agency was established under the Welsh Development Agency Act 1975. The Act also established a Welsh Industrial Development Advisory Board (WIDAB) to assist the Agency. Together with the Rural Wales Development Corporation, both these organisations were responsible for economic development in Wales (DBRW were responsible for mid Wales and the WDA was responsible for north and south Wales).

Although DBRW was created before the WDA, it was the WDA with its large budgets, which attracted most attention. Its objectives in 1976 were to: -

- Further the economic development of Wales
- Promote industrial efficiency and international competitiveness in Wales
- Provide, maintain or safeguard employment
- Improve the environment of Wales

At the time that the WDA was created, the Western Mail (1976) stated: -

*“High hopes are pinned on the newly formed Welsh Development Agency. This kind of agency has long been demanded in Wales from very many quarters for a very long time. People want it to be a forceful aggressive body playing an active and positive role in the Welsh economy, rather than some kind of passive safety net to be hoisted only when disaster has occurred”.*



The WDA's support programmes continued to evolve quite considerably over the decades. In the early years, the WDA's priorities were the provision of industrial sites and land reclamation. It was only during the 1980s that policymakers at the WDA began focusing on attracting foreign direct investment (Brooksbank *et al.*, 2002). This was delivered via a new investment arm called WINvest (Wales Investment Location) which was later rebranded as Welsh Development International (WDI) which included a shift in policy towards support for technological development via WINtech (Wales Investment and Technology, also known as the Technology Transfer Group).

WINtech was created to encourage collaboration between businesses and academia so that businesses could take advantage of new technology. Academic centres such as the telecommunication centre at Bangor University and Micro-Electronics Centre at UWIST, Cardiff were supported.

Unfortunately land reclamation and inward investment did not address Wales' economic problems at this time. The 1983/84 WDA Annual Report stated: "important though it is for Wales to have a continuing fusion of fresh industrial investment from outside, it is even more essential for new businesses to be established from within the Principality" (WDA, 1984, p. 3).

The WDA was well known for attracting inward investment and between 1979 and 1994 with names such as Bosch, Sony, Toyota, British Airways and LG coming to Wales (Phelps *et al.*; 1998). Airbus (Broughton), LG (Newport), Ford (Bridgend) and Sony are some of the Anchor Companies in Wales who

have benefited from large capital grants in the past (Brooksbank and Pickernell, 2001). LG (Newport) in particular is an example whereby a large company has maximised support from government in order to locate itself in Wales. The Korean electronics company was offered £69.5m in RSA support to create 6,000 jobs by 2001 (Munday *et al.*, 2000), which was an average of £11,500 per job. This was not however, the total public aid that was offered to entice LG into Wales (Brooksbank and Pickernell, 2001). Tewdwr-Jones and Phelps (1999) estimated that LG levered £247m from government at a cost of £40,000 per job. After the subsequent mothballing of the LG plant (and the 2,000 best paid jobs), the sustainability of such policies were called into question.

Munday and Roberts (2001) said the reasons for the WDA's success at attracting FDI included: -

- Grant assistance in areas close the south of England
- Plenty and cheap sources of semi skilled labour and
- Good Infrastructure

Hill and Munday (1992) concurred and found many overseas companies were seeking locations, which had a relatively low cost base, good communication links and grant assistance. Wales had these features and were well placed to attract FDI.

Wales was consistently out performing other parts of the UK in attracting FDI

and in July 1992, the unemployment figure fell below the UK average for the first time. During this time most economists were predicting a decade of superior growth with Wales narrowing the gap with the rest of the UK (Alden, 1996). The WDA however, was not without its critics during this time. Lovering (1999, p. 22) argued that the transformation of the Welsh economy “was overstated and over dependent on FDI”. There was pressure on the WDA to begin looking at its home-grown companies.

During the 1990s, business support within the WDA was restructured and focussed on small and medium sized enterprises (WDA, 1990). Based on clustering theories, networking programmes were created which were designed to promote the exchange of knowledge and information between businesses and business support providers.

The WDA continued to promote and develop programmes, which would strengthen the SME base and improve its interactions with inward investors. There was recognition that whilst Wales had been successful in attracting inward investors (Price *et al.*, 1994; Alden, 1996; Jones, 1996), local sourcing was still very much in its infancy. The Supplier Association Programme, which is based on clustering theories, for example, had drawn on the Japanese concept of *Kyoryoku Kai*, which grouped businesses together in a strategic alliance by their common customer (Hines, 1994). Morgan (1998) notes that the WDA pioneered trade associations such as these via its ‘Source Wales’ programme. He goes on to say that an important element of the programme was to enhance local sourcing by encouraging local suppliers

to meet the exacting quality standards of MNCs. It then linked the supply capacity of the local SME to the purchasing needs of the large FDIs located in the region.

The programme was viewed as a success and an evaluation concluded that the Supplier Association Programme had “not only facilitated relationships conducive to sharing knowledge and experience amongst its participants, but had an impact upon their view of inter-firm co-operation” (Izushi, 1999, p. 743).

Although Evans and Pickernell (2002) found that measures have been taken to assist small businesses in Wales, there are critics who argue that opportunities have been missed and the focus is still very much on FDI (Lovering, 1999).

Since 1998, Welsh policymakers have shifted their focus from attracting FDI towards indigenous growth. This occurred at the same time FDI numbers dropped, European Union Objective One funding and the new economic development strategy was introduced (Acs *et al.*, 2012). Policymakers began to look beyond FDI and looked at policies for innovation, entrepreneurship, product development, supply chain opportunities and training. These policies would seek to embed FDI companies whilst improving capacity within SMEs (Morgan and Cooke, 1998)

Surprisingly there has been no published account for the WDAs achievements

to date although the governance scandals of the 1990s was identified and analysed (Morgan and Henderson, 1997).

In 2006, the WDA, WTB and ELWa merged with Welsh Assembly Government in what could be arguably called the most radical shake up since devolution. The mergers were a key component of a broader approach to improving public services as set out in 'Making the Connections' strategy. A key element in developing the merged organisations was to ensure that a more efficient and effective service was provided to businesses, moving resources to the front line and increasing the capacity of Account Managers to be the main interface with companies. Academics feared there was a danger that the Welsh Assembly Government would become a more bureaucratic and risk averse organisation.

The Economic Renewal Programme was born (2010) and would be developed to lead Wales away from a grant-based culture. RSA ceased to exist overnight and Repayable Business Finance was introduced.

International Business Wales (IBW) was established by the WDA to bring new inward investment and re-investment into Wales and to facilitate trade by companies in Wales to overseas markets. In 2009, Glen Massey produced a report, commissioned by the WDA which found that the IBW brand was not strong or well recognised overseas. The report also raised concerns that Wales was the poorest performing region of the UK for foreign direct investment. He added: -

*“We have to recognise that we are no longer in that game. The problem Wales had was that the toolset it developed to attract that type of investment did not change to reflect the new world economy. The foreign direct investment that is coming into the UK now is not really looking for regional selective assistance; that is inappropriate. As a consequence of that, we should have developed a suite of other instruments – whether it be skills, a property proposition or R&D through universities, a whole raft of things – to make things attractive to inward investment companies. We have not done so. I think there is a recognition in Wales that something needs to be done, and I still think it is in the process of trying to figure out what it is. Sadly, that has been going on for a long time”.*

The Welsh Assembly Government (now known as Welsh Government) was established by the Government of Wales Act 1998, which created a devolved administration after the 1997 referendum. The Welsh Government consists of a First Minister, Cabinet Secretaries together with Ministers and Deputy Ministers and is responsible for tabling and delivering policies in devolved areas approved by the Assembly.

In 2007, Plaid Cymru entered government for the first time in a Welsh Assembly coalition with Labour. During this time the policy Economic Renewal: A New Direction was implemented by Plaid Cymru and is still being delivered by the Welsh Government. IBW was disbanded after the implementation of ‘Economic Renewal: A New Direction’ and the economic hunt for inward investors has slowed down.

Despite the best efforts of the WDA, Wales still lags behind the UK on a

number of economic indicators. Wales' poor economic activity rates, low household income per head and low levels of GVA per head all suggest a decline. According to ONS (2014) the UK per head figure was £24,958. With Extra-Region and the Statistical Discrepancy excluded, the UK per head figure was £24,616. Out of the four UK countries, only England had a higher GVA per head value at £25,367. Wales had the lowest GVA per head at £17,573.

Table 2.4 - Spatial Plan

	GVA per head (£) <sup>2</sup>
UK	24,616
England	25,367
Wales	17,573
Scotland	23,102
Northern Ireland	18,682

Source: Office for National Statistics

## 2.15 Foreign Direct Investment and Embeddedness

FDI is defined by the United Nations Conference on Trade and Development (UNCTAD, 2007, p. 245) as an “investment involving a long-term relationship and reflecting a lasting interest and control by foreign investor of its affiliate in another country”.

The 1995 White Paper on Regional Industrial Policy made it clear that regional financial incentives enabled the UK to compete for mobile projects. (Department for Trade and Industry, 1995, p. 2).

FDI can be grouped into two categories: -

- Greenfield investment – the creation of a new business
- Mergers and Acquisitions (M&As) – a complete or partial purchase of a business (also referred to as brownfield investment (Girma *et al.*, 2005; Meyer and Estrin, 2001)

The above can be further categorised into Horizontal and Vertical FDI. Horizontal refers to gaining strategic market access and vertical to the investment strategy when the parent company divides up production by allocating company units to lower cost countries (Evans *et al.*, 2008).

There is a large amount of research and empirical work on FDI and several models have been introduced from various schools of thoughts. Among them,



the Eclectic Paradigm of Dunning (1999) which provides a general framework of international production and location decision.

Dunning (2000, p. 33) went on to group investors into four categories: -

- Market seeking
- Efficiency seeking
- Asset seeking and
- Resource seeking

In later works, Dunning (2001) reviewed his approach and stated “no single theory of international trade can satisfactorily explain all forms of cross border transactions in goods and services”.

Evans *et al.* (2008, p. 19) advise that for FDI to occur, three conditions must be satisfied: -

- The FDI enterprise must possess net ownership advantages compared to rivalry firms of other nationalities in serving particular markets
- It must have benefits from internalising the use of resources in which it has an advantage rather than selling them on external markets
- The host country must offer special location advantages to be used in conjunction with those advantages deriving from ownership and internalisation

Knickerbocker (1973) observed that the first FDI investment is an aggressive investment strategy and the following of other subsidiaries to the same locations as defensive strategy. This pattern of FDI exhibits clustering and to avoid any risk of falling behind, other firms will follow with their own foreign investment (Evans *et al.*, 2008).

Wales has historically been successful in attracting foreign direct investment, particularly during the 1980s and 1990s (Hill and Munday, 1992; Evans *et al.*, 2008). It is also widely recognised that inward investment is important in creating jobs within assisted areas (Hill and Munday, 1994; Stone and Peck, 1996).

Wales has been attractive to foreign investors because of its position in the Single European Market, offering relatively lower wage costs and a skilled labour market (Taylor and Wren, 1997). During the 1990s, Welsh foreign manufacturing accounted for a greater proportion (25 per cent) of employment in Welsh manufacturing than both the North and North West of England (Driffield and Taylor, 2000).

This period was accompanied by a degree of knowledge and innovation transfer that impacted positively on demand for skills and higher wage rates (Driffield and Taylor, 2000). Although the focus of investment has switched from manufacturing to services, investment flows are still relatively successful. According to the DTI (2016), almost 7,000 jobs were created or safeguarded in Wales last year.

As discussed earlier, the policy Economic Renewal: A New Direction was intended to lead Wales away from a grant based culture and during this time Wales lost a large portions of its foreign manufacturing employment and output. Whilst the reason for location may have shifted towards the availability of skilled labour and key infrastructure, these factors can be considered key in retaining long term investments.

In a time of austerity, reduced public resources for inward investment and economic development signify the importance of linking Anchor Companies and SMEs. There is a push for Wales to improve innovation performance, which suggests that policies relating to Universities can attract high value investor's of high growth businesses. This can, however, lead to conflicting policies and debates about where precious resources should be spent.

Employment within manufacturing foreign direct investors is likely to have peaked and future overall growth is unlikely (Evans *et al.*, 2008). Where Wales is likely to see growth is within the lower value added sectors such as financial services and distribution. The Automotive and Aerospace sectors have also been much less affected due to their buoyant markets, which indicates possible priorities for Welsh Policy.

Cooke *et al.* (2003) illustrate that up to the millennium, FDI located in Wales was contributing disproportionately positively to an otherwise weak Welsh innovation performance.

According to Huggins (2001), the strongest contributory factor for FDI locating in Wales during the 1980s and 1990s was the availability of government grants and subsidies. This illustrates the important role played by the Welsh Development Agency in attracting these companies to Wales. Repeat investments are much more likely to take place if the first investment was a success. Hill and Munday (1991) advise that between April 1983 and July 1990, the total overseas capital investment in productive assets within Wales exceeded £2½ billion. Although this figure was skewed by the Ford investment, this is still a huge figure even by today's standards.

Hill and Munday (1991) found that the £720m investment into Ford in 1988, represented almost a third of capital inflow from overseas firms into Wales during that period. With such a huge investment going in to a single company, government will do anything to try and keep safeguard their investment. They will also be looking to secure repeat investment in the future also. This is supported by Evans *et al.* (2008) who say that once a company makes an investment abroad, further decisions have to be made e.g. whether to retain operations at the existing location or relocate. These decisions are influenced by location factors.

It is evident that Wales has been particularly successful in attracting foreign direct investment in the past (Hill and Munday, 1992; Evans *et al.*, 2008) and it is widely recognised that inward investment is important in creating jobs within assisted areas (Hill and Munday, 1994; Stone and Peck, 1996). Brooksbank and Pickernell (2001), however, query the tranches of grant aid

given to overseas companies located in Wales every few years and call into question these same policies which result in resources being tied up to large investment projects in order to keep them in a particular region. They say that the direct effects of FDI has created confusing picture in Wales, a view which is also echoed by Lovering (1999a) and Tewdwr-Jones and Phelps (1999).

Regional policy in Wales has therefore been dominated by inward investment, with grants being levered into a company to stop them locating elsewhere. Projects have become mobile which means every potential investment is likely to press for financial support using the threat of mobility. Unfortunately, these companies can continue to press governments for support on a regular basis (Brooksbank and Pickernell, 2001).

Ali and Guo (2005) argue: -

*“The past few years has seen a tremendous growth of foreign direct investment (FDI) that has exceeded both world output and world trade. China is by far the largest recipient, and in 2004 surpassed the USA as host destination”.*

Attracting FDI is becoming increasingly difficult with the expansion of the European Union into central and Eastern Europe and more recently, China. Acs *et al.*, (2012) argue that Wales requires focused FDI policies, which have a greater potential to lead to spillovers that local entrepreneurs can exploit. In countries characterised by weak indigenous knowledge, targeted FDI policies

can compensate by leading to knowledge spillovers. Munday (1995) however says where there is a lack of local embeddedness in concentrations of FDI; this can have a disastrous effect on SME development.

The disproportionate amount of FDI attracted into Wales (Acs *et al.*, 2012) and the data from Jones and Wren (2002), suggests that this rate fell from nearly 13 per cent in 1989 to just 6 per cent in 1999. During the 1990s, circa 40 per cent of the foreign investors that were supported with UK government aid were from the USA followed by Europe and Japan (Brooksbank and Pickernell, 2001; Phelps *et al.*, 2003). Morgan (1991) says that Wales was particularly affected by the 'branch plant' economy syndrome due to the lack of investment made by inward investors in R&D.

Towards the end of the 1990s and prior to the end of the FDI boom, Wales began to create a 'regional innovation system' (Cooke *et al.*, 2003). Multinational companies became more locally embedded with the emphasis on supply chain integration and innovation clusters (Acs *et al.*, 2012). This was not integrated with a specific policy and whilst FDI was relatively innovative its declining presence weakened regional innovation including SMEs in the supply chain (Cooke, 2003).

Jones-Evans (2002) criticised the lack of a clear science and technology policy for Wales and unlike Ireland, Wales did not pursue a simultaneous strategy of FDI and entrepreneurship (Acs *et al.*, 2012).

Morgan (1998, p. 13) argues: -

*“Foreign direct investment plays an important role in the growth process by combining increased resources with technology transfer. After all, FDI is typically undertaken by firms that possess competitive advantage in the production sectors in which they operate”.*

Opinions differ on the impact FDI has had on the Welsh economy. Some see positive impacts such as raising skills and providing opportunities for the local supply chain but noting that the ultimate decision makers sit outside of Wales. (Brand *et al.*, 2000). Cato (2004) however claims the investments provide low paid and low skilled jobs in an insecure environment and goes on to say that these investments could have been better utilised elsewhere.

Brand *et al.* (2000) found that whilst FDI companies in Wales purchased less locally than their domestic counter parts, their labour productivity was greater. There were further sensitivities with regards to FDI investments when Morris (1989) found Japanese plants were generally employing females as their production line workers, which meant that men who had lost their jobs in the coal and steel industries were not being re-employed. Sony's Bridgend plant responded opposing what it saw as “academic nit picking” (Jones, 1989).

Morgan and Cooke (1998) found innovation and entrepreneurship was emerging from FDI policies. Wales began to look beyond FDI to a more advanced approach, which focused on supply chain opportunities, training

and R&D. These activities would seek to embed FDI companies into the local economy whilst creating a spill over effect on the local community. As such, this can be seen in some ways to be a precursor to the Anchor Company policy which is the focus of this thesis, implicitly built around agglomeration and cluster based theories discussed earlier.

### **2.15.1 Embeddedness: An Application of Theory**

Regional economic growth has been the focus of much research and debate at a regional, national and international level however Hill and Morgan (1998) advise there is little discussion of its causes.

Lagging economic regions have witnessed different periods of economic policy and intervention over many decades. Within this, the role of FDI has been important. In terms of literature and practice, there is interest in how large overseas firms are embedded in the economy – through supply chain initiatives, skills programmes, access to other forms of support etc. Since devolution, there have been various business support initiatives that have focused on these areas – but the Welsh Government Anchor Company programme became an explicit approach after the Economic Renewal Programme of 2010, to provide a dedicated service to the largest firms (some indigenous, many here through FDI).

The impact of FDI on host countries has received much interest (Firm, 1975; Hood and Young, 1976; Phelps, 1993; Turok, 1993; Hill and Munday, 1994).



Whilst there are clear benefits of FDI in Wales, there have been negative concerns also pointing to low levels of integration with the host country (Phelps *et al.*, 2003). During the 1970s and 1980s, external control and functional 'truncation' became problematic when industrial regions became sites for routine parts of the production line (Firm, 1975; Watts, 1981; Hayter, 1982; Phelps *et al.*, 2003).

Markusen (1999) defines embeddedness as a 'fuzzy concept', but the term has attracted much attention (Lovering, 1999). Historically, economic geographers have sought to spatialise the embeddedness concept, which then generates further interest between the relationships that exists between companies and the areas in which they are located (Amin and Thrift, 1994; Dicken and Malmberg, 2001). Multinational embeddedness is also linked to growing knowledge and innovation in the development of a 'learning region'.

There is a need for regions to develop collective resources to facilitate co-operation and trust (Storper, 1997; Morgan and Cooke, 1998). According to Phelps *et al.* (2003) there are five factors of embeddedness: -

- Corporate Status and Function
- Research Development and Design Activity
- Local Supply Chains
- Skills and Training Demands
- Repeat Investment

### **2.15.2 Corporate Status and Function**

Hood and Young (1988) and Young *et al.* (1994) found that the importance of the parent - plant relationship is important in understanding the potential of a foreign owned plant. This relationship however can be complex and the notion of status is not easily defined. Phelps *et al.* (2003) found the presence of a manufacturing function sitting alongside non-manufacturing functions is important, together with the markets they serve. Their evidence showed the majority of FDI companies were not merely branch plant manufacturers, but were fully or partially integrated through the co existence of upstream and downstream functions.

### **2.15.3 Research Development and Design Activity**

A research and development facility that co-exists with the manufacturing function is considered to be embedded in the host region (Phelps *et al.*, 2003) however, the lack of such a function has been a long standing concern (Hood and Young, 1976; Thwaites, 1978; Cantwell, 1995; Allen and Thompson, 1997).

Charles and Howells (1992) found that collaboration between inward investors and universities was important to learning and knowledge transfer. Policymakers began developing policies whereby relationships were brokered between industry and higher education.

#### 2.15.4 Local Supply Chains

Local sourcing by foreign owned firms in the UK has been a long standing area of debate with several studies showing that sourcing opportunities are generally limited (Phelps, 1993; Turok, 1993; Crone and Roper, 1999; Crone and Watts, 2000).

The Source Wales programme was a highly regarded programme developed by the WDA and established in 1991 to stimulate the interactions between the host community and inward investors in order to achieve best practice (Segal Quince Wicksteed, 1996; Izushi, 1999). The purpose of the programme was recognising that Wales had successfully attracted FDI but local sourcing was limited in scope. This programme therefore developed support for businesses to identify sourcing opportunities. Phelps *et al.* (2003) found that the focus on innovation and learning tended to “over emphasise the scope for institutional initiatives to actually foster embeddedness in peripheral regions given the effect of inherited industrial structures”. Phelps *et al.*, went on to say that to say that their findings corresponded more closely to the characteristics of enclaves than locally embedded plants.

Kindleberger’s (1969) notion of the ‘enclave economy’ refers to a situation where FDI companies provide high levels of direct employment but local linkages remain limited (Lovering, 1999). This notion together with the concept of local embeddedness can be useful for regional development.

### **2.15.5 Skills and Training Demands**

Amin *et al.* (1994) argues that labour skills are more important than particular initiatives in relation to the aftercare of foreign owned companies. There is evidence to suggest that foreign owned investments generate a demand for a higher skilled workforce (Peck and Stone, 1993; Rees and Thomas, 1994; Potter, 1995) but Phelps *et al.* (1993) found that the impact of upgrading skills in the local labour market is limited given that foreign owned companies recruit from the existing skilled workforce. Phelps *et al.* (1993) goes on to say that their findings found little evidence to support claims of increased embeddedness and that the notion of an industrial enclave is not fully compatible where a large numbers of inward investors use the local vocational training system.

### **2.15.6 Repeat Investment**

The re-investment from a foreign owned company is important as it indicates to a longer-term commitment to sustain its operation in a particular area. It also demonstrates the ability of a foreign owned company to compete and win investment from the parent company or within Group (Young *et al.*, 1994). This allows policymakers to make decisions on whether to support foreign owned companies so that they can embed these companies into the local economies. Wren and Jones (2003) found no strong evidence to suggest re-investment was a source of plant embeddedness.

Historically, development agencies have sought to improve the level and scope of aftercare for inward investors, yet little is known about the process of driving reinvestment (Phelps and Fuller, 2000). Repeat investment is defined by Phelps *et al.* (2003, p. 29) as “any substantial programme of reinvestment in the plant since the initial start up” and their research found that local initiatives play an important part in reinvestment. They go on to say that there is scope for regional development agencies to support plant management via training and education facilities or knowledge transfer. This is referred to as ‘softer’ support. Although these areas of support have been perceived to support embeddedness (Amin and Thrift, 1994; Morgan, 1997a; Stroper, 1997; Cooke and Morgan, 1998), Phelps *et al.* (2003) found there was little evidence to suggest that successive rounds of reinvestment from foreign owned companies generated increased levels of embeddedness.

### **2.15.7 Failure to Embed FDI Companies**

Much has been written about the failure of foreign owned plants and the job losses that can have devastating effects on local communities (Tomaney *et al.*, 1999). FDI companies tend to be located in areas of high unemployment where they have been attracted to subsidies under UK regional policies (Wren, 2002).

A number of explanations have been offered as to why FDI companies fail but Fothergill and Guy (1990) say it stems from the ‘branch plant phenomenon’. Baden-Fuller (1989) says that branch plants tend to be more vulnerable to

economic conditions as their plants can be easily located in order to avoid fixed costs. Another explanation offered is that the distance from the parent plant makes them vulnerable, as the activities carried out tend to be low value added and can be done at a lower cost elsewhere (O'Farrell and Crouchley, 1987).

In order to halt closures of foreign owned plants the policymakers answer is to embed them into the local economy (Granovetter, 1985). Embeddedness is defined in terms of the quality of a relationship between a foreign owned company and a local firm or organisation and the economic development opportunities that can arise from that relationship (Phelps and MacKinnon, 2000). The issue policymakers have is that it is difficult to quantify these relationships and there is little evidence to suggest that they reduce closure rates of foreign owned companies (Phelps *et al.*, 2003). For Wales, this identifies a clear need to investigate the type and effectiveness of business support, particularly that related to Anchor Companies.

## **2.16 Business Support / Intervention post-Devolution**

Despite huge investment over several decades, Wales still has an economic problem. Changes in Government, strategies, institutional partnerships, support programmes together with a lack of investment in areas such as R&D have all impacted on the economy as we see it today.

By the mid 1990s attracting inward investment in Wales was still being

criticised (Evans *et al.*; 2008) and there was a clear shift towards driving a knowledge economy, clustering, networks and innovation.

Brooksbank and Pickernell (2001, p. 272) argue that the history of regional policy in Wales has been dominated by inward investment, with grants being levered through the threat of the investment going elsewhere. This means that every inward investment project is likely to seek financial assistance and will continue to do so using the threats highlighted to obtain government resources. They go on to say, "it illustrates the different way in which UK and non UK companies can take advantage of the regulations governing RSA, with potentially serious consequences for the regional policy resources available in the region".

There is also debate about whether Government should intervene in projects and whether they could proceed without financial support from the public purse. Hill and Williams (2005) use the term 'grant deadweight' which refers to companies or projects, which could have progressed without financial support. Studies differentiate between full grant deadweight and partial grant deadweight whereby the former makes no difference to job creation or their timing and the latter simply takes place sooner or on an increased scale (Armstrong and Taylor, 2000; Lenihan, 2002).

The difficulty for policymakers is measuring the effect of grant deadweight and trying to calculate whether a projects would have happened without grant

assistance (Murphy *et al.*, 2003), especially given the volume and complexity of policy initiatives (Munday and Williams, 2006).

Glaeser (2012) argues that government should withdraw from struggling cities, regions or industries which is a view shared by Overman (in Engelen *et al.*, 2016). Overman argues that the state should withdraw and the cities, regions and industries should compete.

Whilst place competition has influenced governments across the UK, the regional development problems of Wales have been associated not only with the economy, but also with a number of 'institutional deficiencies'. Both these areas have caused problems for Welsh business support. These problems include: -

- Poor relationships between partner organisations
- A plethora of new programmes causing confusion amongst businesses
- Evaluating business support programmes
- Bureaucracy

Poor relationships between partner organisations have been commonplace amongst Wales's business support providers. Garmise (1997) argues that this situation has been motivated by the incentives offered by the European Union regional policy so that partnerships can access structural funds.



'Team Wales' was one such partnership, which was established to attract inward investors. Phelps *et al.* (1998) however states that much of this activity achieved only short-term objectives. The 'spill-over' effect within other areas of economic development writing had a much smaller effect (Garmise, 1997).

The second problem relates to the plethora of business support programmes available to businesses, which results in a transparency within the system (Price *et al.*, 1994). CBI Wales together with Business in the Community Wales commissioned a survey, which found that that out of 113 businesses, a high percentage said there was confusion about business support in Wales (KPMG, 1994).

In order to counteract confusion, Business Connect was introduced as a one-stop shop where SMEs could access support in areas such as finance, marketing and exporting (Welsh Office, 1995). Anderton (1995) criticised this programme for actually adding more confusion to the pot. Roche (1997) also concurred and suggested that Business Connect had been unable to strengthen the relationships in certain areas of the sector.

Another problem with business support in Wales is the low take up of public sponsored programmes. Evidence suggests that only 10 per cent of businesses consider public support bodies as a first point of contact (Thomas, 1995). This adds weight to further arguments that public sector officials are rarely viewed as credible business support advisers (Sabel, 1994). Dankbaar

(1994, p. 82) goes on to say “companies learn most and most quickly from other companies”.

The frequent replacement and introduction of business support programmes takes its toll on the official who is tasked with the delivery. This further increases the problems with credibility (Henderson, 1995) and suggests that policies are written in a ‘supply-side’ manner. There has in recent years however, been a greater focus on consultation with potential users and stakeholders. *Economic Renewal: A New Direction* was written after much consultation with staff, business and partner organisations.

The final problem with business support in Wales is the issue of evaluating business support programmes. Morgan (1996) found that only a few business support providers did more than collect basic qualitative data and there was a general reluctance to undertake systematic evaluations. The situation did change when the WDA was obliged to engage in a rolling programme of departmental evaluations.

Whilst this is an opportunity for policymakers to collect information and make informed decisions going forward, there is a suspicion that evaluating policies and programmes remains an inconvenience. Evans (2000) looked at grant processes in Wales and found that small firms are hit disproportionately hard because of the administrative burden placed upon them when making an application for financial support. There is clearly a need, however, for greater evaluation of economic development policy, the specific Welsh Government

policy being an obvious and important example, particularly since it also overlaps with the sectoral focus approach adopted in Wales.

### **2.16.1 Sectoral Focus**

According to Lang (2016), economic policy in Wales is consistent with the broader UK context i.e. internationally competitive regions with an emphasis on FDI are accompanied by the targeting of nine 'key sectors'.

The term 'sector' implies selection from a set of sectors and the most appropriate accounting device would be the input-output model. Using this model creates advantages for ease of identification but it also fosters a myopic perspective (Hewings, 1982).

Sector identification can be traced back to the works of Rasmussen (1952, p. 112) where he suggests the use of two indices namely the "power of dispersion and the sensitivity of dispersion". The issue with the use of these indices is that Rasmussen ignores "the possibility of unequal variations within sectors". Hewings (1982) and Hazari (1970) propose the use of the coefficient of variation as an alternative.

In 2008, the Economy and Transport Ministerial Advisory Group (MAG) advised the Department for Economy and Transport to align its activities with key sectors of the Welsh economy. This new approach would achieve a greater focus and better co-ordination.

The MAG undertook a review of economic trends and identified core sectors, companies of significant importance to Wales (Tier 1) and enabling sectors, companies of strategic importance to Wales.

These are illustrated below: -

### **Core or Enabling**

- Energy
- Environmental management
- Telecommunication and ICT

### **Tier 1**

- Bioscience
- Health
- Financial Services
- Creative Industries
- Automotive
- Aerospace

### **Tier 2**

- Construction
- Food
- Defence
- Retail
- Leisure and Tourism

The MAG undertook a programme of work within the sector prioritisation and acknowledged the nature of the downturn. It was necessary for them to review their earlier recommendations. The analysis concluded the need to prioritise and achieve value for money. Sector strengths would increase Wales' international competitiveness and bring a more diverse economy.

The Department for Economy and Transport confirmed their commitment to a sector approach targeting key sectors and provide opportunities for the upturn.

Malerba (2004) says that innovation and technology are highly affected by the sector in which they take place and in 2009, Ministers agreed that funding support for R&D should concentrate on a series of priority areas. Funding would be sought from the Technology Strategy Board (TSB) and the European Commission.

The sector approach is not without its critics however; Partridge and Olfert (2011) argue that most sectoral policies aimed at improving regions are inappropriate and designed only to seek rent.

### **2.16.2 Economic Renewal: A New Direction**

Economic Renewal: A New Direction (2010) acknowledged there were too many sectors to work with. These were refined from the fourteen MAG sectors, to a more focused and manageable six: -

- ICT
- Energy and the Environment
- Advanced Materials and Manufacturing
- Creative Industries
- Life Sciences
- Financial and Professional Services

A sector-based approach to economic policy is an important tool in the government's industrial strategy (BIS, 2010). The document identifies several reasons why a sector approach is necessary: -

- Economic conditions vary across sectors and sector considerations give key insights into how to design and deliver policy
- As with private sector activity, Government interventions to support industry carry a significant risk they will not fully achieve their objectives
- The Government may need specific contributions from a particular sectors to achieve its economic policy goals
- Businesses often organise themselves in sectors, as evidenced by the range of sector specific trade bodies
- A strong Government dialogue with business sectors and sector leaders can also have a significant impact on global investment decisions and help drive confidence in the UK as a sustainable locations to access global markets
- A sector based approach cuts all Government departments to varying degrees and many government levers are either sector specific or have

a strong sector dimension

- A sector based approach plays into wider policy goals

Evans *et al.* (2008) found that different sectors have different impacts on the economy and went on to say that the manufacturing sector for example, represents significant shares of both employment and output. The main risk associated with a sector-based approach however, is a bias towards incumbent companies. Given all these contexts, the Welsh Government Anchor Company policy is therefore, in need of specific evaluation.

### **2.16.3 Welsh Government Anchor Company Policy**

Whilst there is no articulated single Welsh Government Anchor Company policy document, there are sufficient implicit and explicit activities related to an Anchor Company focus, as would be linked to relevant cluster theory discussed previously and articulated below, as to give it effective policy status.

The concept of an 'Anchor Company' emerged from the United States in the 2000s as a new paradigm for understanding the role that place based organisations could play in building local economies (Smallbone *et al.*, 2015). The key characteristics of an Anchor Company include spatial immobility, embeddedness in the local economy and a local supply chain. Smallbone *et al.*, advise that Anchor Companies must also have a social role, which allows them to develop a mutually beneficial relationship with the host community. It

should be noted however, that the Welsh Government Anchor Company policy includes both FDI and indigenous companies.

Markusen (1996) defines an Anchor Company as a company that holds a key position within the regional economy and is vertically integrated and surrounded by suppliers. The Welsh Government definition of an Anchor Company is: -

- A company which is a global or international organisation
- Have Welsh head quarters or significant corporate presence in Wales

A spatially based policy such as the specific Welsh Government Anchor Company policy is a conscious effort by government to enhance the performance of specific areas. In this instance, the Anchor Company policy aims to build strategic relationships between Welsh Government and the private sector.

Spatial policies commonly target underperforming areas but can also be designed by policymakers to improve areas of economic performance that are already doing well. This can be done by encouraging the development of a new cluster / network across a number of industries and / or sectors.

The Welsh Government Anchor Company policy is concerned with creating jobs, growth and wealth within the Welsh economy. The companies targeted



are major employers in Wales who invest in research, development and innovation, thus encouraging growth within the various sectors.

Regionally, Anchor Companies benefit the local economy by supporting smaller enterprises and strengthening the Welsh supply chain. Anchor Companies also have high levels of employment and invest in staff training whilst creating opportunities for apprenticeship programmes. Welsh Government values the relationships it has with Anchor Companies and will promote this to other FDI companies also.

Working with Anchor Companies is not new to Welsh Government and many of the relationships were well established prior to the implementation of the Anchor Company policy. The Anchor Company policy is a more formal acknowledgement of the relationship between the Anchor Company and Welsh Government.

Welsh Government and formerly the WDA have / had a long relationship with Key companies in Wales prior to the establishment of the Anchor Company policy. These key companies however, have tended to be FDI companies however this specific policy, includes indigenous companies also.

Porter and Gallardo (2007) emphasise a need for strengthening aftercare for foreign owned companies to ensure they continue to operate at a particular location. They advise that aftercare should involve a provision of services after the initial investment has been made. Whilst much effort and resource is

dedicated to attracting inward investment, aftercare is a much lower priority and in the long term, a lack of aftercare can lead to an erosion of location advantage and result in closure. A lack of care for indigenous companies can also be detrimental which suggests the need for this policy and its importance.

#### **2.16.4 The Anchor Company Policy and its relation to Theoretical Models**

Whilst the specific Welsh Government Anchor Company policy is still very much in its infancy, it can be seen to be linked to theoretical models in a number of ways.

Smallbone *et al.* (2016) define an Anchor Institution as either a higher education institute, notably a university (business schools), Local Enterprise Partnership or hospital. They understand the role that the place-based institutions could have in building and supporting local economies where relationships are developed with the host community. Only Wales has identified its key Companies as Anchors and developed a policy to create additional jobs growth and wealth.

Grouping the Anchor Companies together into a single policy lends itself to cluster theory. Clustering theory as discussed earlier is linked to theories of agglomeration, transactions within supply chains and relationships within networks (Pickernell *et al.*, 2007). Brown (2000) builds upon the work of

Markusen (1994), Bergman and Feser (1999) and Roelandt and den Hertog (1999) where grouping the clusters allows for further analysis. Brown studied the dynamics of clustering in Scotland, focussing on the phenomenon of their individual workings.

The following table was compiled by Brown (2000) and Bergman and Feser (1999) where they identified six types of clusters together with their characteristics. This table is interesting in particular, the term 'Business Network'.

Table 2.5 - Brown (2000) and Bergman and Feser (1999)

<b>Form of cluster</b>	<b>Characteristics</b>
Regional Industrial Cluster	A cluster whose elements share a common regional location, where region is defined as a metropolitan area, labour market, or other functional economic unity.
Potential Industrial Cluster	Related and supporting business and institutions, that with support could form inter-firm relationships, or critical linking sectors, would obtain some re-defined critical mass.
Value Chain Industrial Cluster	A cluster constructed around an extended input output chain. It includes final market producers, as well as intermediary suppliers that directly and indirectly engage in trade. Have multiple sectors or industries.

Business Network	<p>'A group of firms with restricted membership and specific, and often contractual, business objectives likely to result in mutual financial gains. The members of a network choose each other, for a variety of reasons, they agree explicitly to cooperate in some way and to depend on each other to some extent. Networks develop more rapidly within clusters, particularly where multiple business transactions have created familiarity and built trust (Rosenfeld, 1995a, p.13)'. Networks and typically more formal than in clusters</p>
Italian Industrial Cluster	<p>Geographically concentrated firms that work directly or indirectly for the same end market. They share values and knowledge resulting in the creation of a cultural environment. Linkages are a complex mix of competition and cooperation between firms, a result of a close intertwining of economic, social and community relations.</p>
Innovative Milieux	<p>Not a collection of firms or even a region, but a complex which creates a synergetic process, made up of firms which have interdependencies, economic as well as technological. These individual firms create a coherent whole in which a territorial production system and protagonists are linked.</p>

The relationship between firms is often described as a network yet Neck *et al.*, (2004) and Witt (2004) link the concept of a network with that of a cluster. This may be possible because of the overlaps in literature and the substantial

differences in the definition of a network, let alone that of a cluster (Pickernell *et al.*, 2007). The Anchor Company policy sits in this area of literature.

Porter (2003), found that US regions that had a high proportion of their workforce located in 'strong' clusters enjoyed higher levels of economic development, Porter's research (and the theories built around it) having a strong influence on regional policymakers across a range of countries, including Wales. The Welsh Government's Anchor Company policy is also a result of Welsh Government interacting directly with leading people in the business environment to understand their needs. Specifically, working together, Welsh Government acknowledges the importance of the Anchor Companies, commits to working with them, supporting them and ultimately, more strongly embedding them within the wider Welsh economy.

The ways in which clustering theory is directly relevant to the Anchor Company policy is via agglomeration (Karlsson, 2008), transactions within supply chains (Gordon and McCann, 2000) and relationships within networks (Pickernell *et al.*, 2007). The Anchor Company concept, the ways in which the Anchor Company can affect the economy and the reasons for government policies to be developed around this, are all interrelated with clustering theory. For Welsh Government policymakers, the economic benefits of the Anchor Company policy itself are derived in large part from encouraging thick labour markets (Markusen, 1996), specialised suppliers (Porter, 1990) and knowledge spillovers (Marshall, 1890), all of which is based around a concentration of businesses in related activities (in the case of the Anchor Company policy around a large economically important organisation).

These are all directly parts of clustering theory, unsurprising given the influence of Porterian concepts of clustering, leading to cluster initiatives organised by governments to increase growth and competitiveness within a region. Using clustering theory therefore helps inform the analysis of the creation / identification of specific sector based policy such as the Welsh Government Anchor Company policy. This allows policymakers to develop a more focussed strategy, which then sets political priorities and allocates funding (OECD, 2010). This demonstrates the link between clustering theory and Anchor Company policy. The application of clustering theory is therefore, of direct relevance to the discussion of outcomes of the research.

Welsh Government policymakers also have to make difficult choices, particularly when faced with budget constraints. Before public money can be invested into a sector-based policy, there is a need to understand the regional cluster landscape. Mapping clusters within a region allows information to be collected about the business environment, which can also aid policymakers in understanding international competitiveness (Brown, 2000; Markusen, 1994; Bergman and Feser, 1999 and Roelandt and den Hertog, 1999). This then allows policymakers to map regional and cluster strengths and weaknesses aiding prioritisation of budgets and resources. Undertaking this mapping process using clustering theory therefore helps to inform Welsh Government's policy and strategy. Porter's (2003) cluster concepts in particular, focus on 'competitiveness', which continues to be a major issue in economics and a key objective for Welsh Government policymakers.

Gordon and McCann (2000) took a deductive approach to their work by analysing networks as forms of clusters. They sought to identify the differences in the existence of linkages within different industries. They identified three models of clustering, of which two have their roots within the neoclassical origins of agglomeration. The third model focuses on the sociological perspective and builds on the work of Granvotter (1992) where networked societies are linked. The social perspective implies that trust is present and firms will deal with those they can work with, exchanging knowledge and taking bigger risks in their dealings. These relationships can develop into vast networks. Interestingly, distance but more importantly, spatial proximity is not as important within this model as it is with other models.

There are of course critiques within this debate. Cantwell (1991) highlights the differences between firms of differing origins where there can be little co-operation other than for the firms own self-interest. There can also a lack of loyalty and formality within structures, which would need long-term relationships to overcome.

## **2.17 Summary and Derived Research Framework**

Whether spatial policies work is a difficult question to answer as identifying comparable areas that have not been targeted for assistance would be a challenge. By the very nature of spatial policies, workers and companies can move as evidenced by FDI targeted policies.

A further concern with spatial policies is that if the policy benefits one area, it can also reduce economic activity in another. This raises the question of whether the policy increases overall economic activity.

Spatial policies do however; have benefits especially in agglomeration economics. Agglomeration postulates that jobs and people are more efficient and productive and that 'knowledge spillover', is much more likely to occur. The agglomeration benefits that can be seen encourage policymakers to promote industrial clusters.

The argument whether government should intervene will always be contentious and there are many arguments for and against. Regional policy will claim to reduce disparities within regions whilst raising social welfare but the reality is, regional policy has been operational for almost 80 years and despite the investment of tens of millions of pounds, the UK is still blighted by the same issues.

Allowing free markets to operate by themselves may not always deliver the desired economy, which suggests that government intervention is required. The levels of intervention in Wales post War has been remarkable. Davies (1993) estimates that in 1950, forty per cent of the labour force was working for state owned bodies, whilst many of the remainder were employed by industrialists and services controlled by government.

Despite a strong regional economic policy post War; there was still a



dependence on mining and agriculture. The losses in these sectors however, were largely being filled by inward investment. Despite the successes in attracting inward investment, evidence suggests that Wales is still seen as one of the poorest regions in the UK and has learnt many hard lessons, with regards to inward investment – notably LG (Phelps *et al.*, 1998).

Regional policy is, therefore a complicated area of study and policymakers are constantly faced with problems of location and the demands of spatial distribution of resources. Policymakers have historically offered solutions which involve opening and or widening regions and rectifying existing problems i.e. unemployment. An understanding of spatial economic systems is a pre-requisite for the policymaker.

Policymakers do not, however, explicitly refer to economic models when writing a policy and historically, policies are written from the top down with little external consultation. *Economic Renewal: A New Direction* (2010) was different, in that there was a real effort to consult with external stakeholders before the policy was introduced.

Wales' lack of investment within other areas limits developments within the economy. It wasn't until the birth of the 'de facto' regional policy shortly after the Second World War that manufacturing began to make an impact. Despite a boom in the early post war years, Wales continued to struggle and remained reliant on foreign direct investment.

MackKay (2003, p. 305) has identified two periods of strong regional policy (1945-51 and 1960-75) and two periods of weak regional policy (1952-59 and after 1975). He argues that this provides a “good guide as to the impacts of economic regional policy”. Annual plant movement evidences this, which was three times higher in the strong policy years (MackKay, 2003, p. 305).

There are many economists who advocate the need for regional policy in the UK, but equally as important is assessing the impact of the regional policies, which have been implemented. Credible evaluation has to tackle a wide range of variables and it is unlikely that any policy would make a real difference in any economy. What policymakers can hope to do however is learn from previous mistakes and re-implement successes. Some interventions will have been successful; other’s not so successful. Economic impacts have to be considered in all areas of regional policy as well as enquiring what the impact would be without intervention. There is another wider argument in that if all regional policies were abandoned, how much would it cost society in welfare benefits for those who were made redundant?

Policymakers have a difficult task of deciding where monies would be better spent. For example, monies could be allocated to the development of skills in schools, colleges, and universities or in training at work. This in itself could create a more sustainable economy where further investment is made in to research and development.

It seems that regional economic policy will for now remain an important policy in the UK. However, policies, programmes and projects should be carefully evaluated to ensure their impact on the economy as a whole.

Wales can no longer compete as a low wage nation, which means she needs to develop ‘value added’ businesses that produce good profits and high salaries. A new approach for Wales should recognise the opportunities of operating in a global market, which will sustain its future.

Table 2.6 therefore, highlights the theoretical models discussed previously and links them to past and present WDA and Welsh Government policies.

Table 2.6 – Summary of Theoretical Models with Past and Present WDA and Welsh Government Policies

<b>Welsh Policy</b>	<b>Link</b>	<b>Model Summary</b>	<b>Theory</b>	<b>Reference</b>
General Economic Policy	Wales Spatial Plan (2004); Wales: A Vibrant Economy (2005); One Wales (2009); Economic Renewal: A New Direction (2010)	Macro model, which attempts to explain the long-run economic growth rate of output per worker. This is done by looking at productivity, capital accumulation, population and technology exogenously	Neoclassical Growth Model	Solow-Swan Cobb-Douglas 1928
General Economic Policy	Wales Spatial Plan (2004); Wales: A Vibrant	Technology is acknowledged as an important factor on productivity growth	Modified Neoclassical Model	Solow 1956 & 1957

	Economy (2005); One Wales (2009); Economic Renewal: A New Direction (2010)			
General Economic Policy	Wales Spatial Plan (2004); Wales: A Vibrant Economy (2005); One Wales (2009); Economic Renewal: A New Direction (2010)	Growth is driven by technological process	Endogenous Growth Model	Romer 1986 & 1990
WEFO – European Funding	EU Cohesion Policy (2007-2013)	Poorer economies will grow faster than their richer counterparts. This results in an economy which converges in terms of per capita income	Catch-up model & Convergence	Barro and Sala-i-Martin 1991 & 1992; Sala-i-Martin 1996a & 1996b
DfES – Education and Skills	Our Skills that Work for Wales Strategy (2008); Labour Market Framework (2010); For our Future Strategy (2009)	Human Capital absorbs and uses new technology and the stock of human capital increases, the economy can benefit from developments	Human Capital & Embodied Knowledge	Lucas 1988; Mankiw <i>et al.</i> , 1990
International Business	A Review of the Economic	Regions specialise in the production and export of	Demand Based Models	Heckscher-Ohlin 1991

	Evidence on the Determinants and Effects of Foreign Direct Investment, Welsh Assembly Government	goods where they have a competitive advantage		
Industrial Parks	Property Strategy for Employment in Wales (2004-2013)	A multi causal approach where core variables and linkages are delineated i.e. a change in one business will lead to successive changes in others	Cumulative Causation Models	Myrdal 1957
Planning Policy	Property Strategy for Employment in Wales (2004-2013)	Land is differentiated on the basis of its location rather than agricultural use i.e. industry, housing and commercial activity	Land Use Models	Von Thunen 1826; Ricardo 1821; Isard 1956
Planning and Foreign Direct Investment	Property Strategy for Employment in Wales (2004-2013); A Review of the Economic Evidence on the Determinants and Effects of Foreign Direct Investment, Welsh Assembly Government	Model aims to answer why businesses choose one location over another. Model is expressed via quantities of outputs produced and quantity of inputs required.	Company Location Models	Launhardt <i>et al.</i> , 1885; Weber 1909 & 1929; McCann & Sheppard 2003
Planning	Property Strategy for	Businesses cluster in both	Central Place Theory	Christaller 1933

	Employment in Wales (2004-2013)	geographical and structural terms i.e. clusters are arranged in comparative advantage to one another		
Clustering and Export, Agri-food	Property Strategy for Employment in Wales (2004-2013)	Model analyses the way a market area of a business is established. At the point of production, demand is high as no transport costs are included. Any movement away will inevitably incur transport costs. Clustering only happens when price competition is not a major feature	Market Area Model	Lösch 1954
Technium	Property Strategy for Employment in Wales (2004-2013)	Industries cluster to provide superior incubators for growth	Incubator Model	Chinitz 1961& 1964; Duranton and Puga 200; Hoover and Vernon 1962
R&D investment Internal to Companies and FDI	Business Innovation Programme funded by ERDF	A relationship based on geography and innovation. A business will choose a location based on the their products life cycle	Product Life Cycle Model	Vernon 1960
General Economic Policy	Wales Spatial Plan (2004); Wales: A Vibrant Economy (2005); One Wales (2009); Economic Renewal: A	Theory focuses on increasing returns to sale by imperfect competition and network effects. Competitive advantage is enjoyed by those businesses who have best access	New Economic Growth Model	Ethier 1982; Krugman 1979 & 1980

	New Direction (2010)	to the biggest local markets		
Industrial Parks and Clustering	Property Strategy for Employment in Wales (2004-2013)	Economic growth is driven by expenditure on innovation by large businesses. Model uncovers a polarisation effect or clustering of industries	Growth Pole Model	Perroux 1950 & 1988; Schumpeter 1934; Porter 1990
Industrial Parks and Enterprise Zones	Property Strategy for Employment in Wales (2004-2013); Economic Renewal: A New Direction; Enterprise Zones (2014-present); Anchor Company policy	Model describes geographical clusters of interconnected companies and institutions in a particular field; Model assumes growth of regions is dominated by large number of businesses who innovate e.g. Silicon Valley	Cluster or Porter Model; New Industrial Area Model	Porter 1990; Scott 1988

The aim of this exercise is to identify whether there are concentrations in the policy, as well as gaps requiring analysis. The above table clearly illustrates a general focus on clustering and support for the larger firms able to support this, a defacto Anchor Company approach. Within this, however, there is also a lack of analysis of the effectiveness of such policies.

Porter and Gallardo (2007) found there is a need to strengthen the aftercare for foreign owned companies to ensure they continue to operate at a particular location. Whilst much effort and resource is dedicated to attracting the initial investment, Porter and Gallardo say aftercare is a much lower

priority. If after care is a low priority for foreign owned companies then indigenous companies could be perceived even lower. Lang (2016) suggests that of all the economic priorities that Wales has, there is a risk of overlooking or missing opportunities to support further development. Often missed he says, is the prioritisation of growing Wales' indigenous businesses.

This study seeks to find out how Welsh Government is supporting its largest companies in Wales. Having reviewed the literature, have emerged which this study will aim to fulfil: -

- There is a need to analyse the specific Welsh Government Anchor Company policy with emphasis on the interaction of firms within a network rather than a trade relationship
- There is a need to analyse the incentives (inputs) and relationships that literature suggest, may be of importance within the specific Anchor Company policy
- There is a need to evaluate whether the specific Anchor Company policy is fit for purpose given the post economic crisis
- There is a need to evaluate the policy given the Welsh Governments sectoral approach. This will allow the researcher to analyse if differences exist within the sectors

Therefore, the central research aim that this study explores is: -



## **To investigate how is Welsh Government supporting Anchor Companies in Wales**

Four research objectives emerged from the literature, which required empirical examination in order to form a sound discussion. No literature exists on the specific Welsh Government Anchor Company policy and no studies have been completed to find out whether Anchor Companies are satisfied with the specific policy. There are clear gaps in the literature, which this thesis will help to inform. Research is required into the specific Welsh Government Anchor Company policy, the offering, whether the offering can be improved and if sectoral differences exist.

The research objectives therefore are: -

1. To evaluate how satisfied Anchor Companies are with the current offering
2. To determine whether the right business support structures are in place to support Anchor Companies
3. To analyse whether and in what ways the offer to Anchor Companies in Wales can be improved
4. To identify whether there are sectoral differences with regards to the Welsh Government offering in terms of the above

The following chapter introduces the research methodology used for the study. It will briefly describe what is meant by research and what is involved in the research process

## Chapter 3: METHODOLOGY

*“Research is both a creative and destructive process; we make things up and out of our data, but we often inadvertently kill the thing we want to understand in the process. Similarly, we can preserve or kill the spirit of qualitative work; we can soften our notion of rigor to include the playfulness, soulfulness, imagination, and technique we associate with more artistic endeavours, or we can harden it by the uncritical application of rules. The choice is ours: rigor or rigor mortis”.*

Sandelowski (1993, p. 8)

### 3.1 Introduction

The previous chapter reviewed economic theories and linked them to regional economic policies, which justify government interventions.

This chapter introduces the research methodology used for this study. It will discuss how data has been collected, analysed and how policymakers can develop it for use. It will briefly describe what is meant by research and what is involved in the research process. It will show why this particular position is taken and why it is relevant and appropriate to the research.

The central research aim that study explores is: -

**To investigate how is Welsh Government Anchor Companies in Wales**

Four research objectives emerged from the literature, which required empirical examination in order to form a sound discussion. The research objectives are: -

1. To evaluate how satisfied Anchor Companies are with the current offering
2. To determine whether the right business support structures are in place to support Anchor Companies
3. To analyse whether and in what ways the offer to Anchor Companies in Wales can be improved
4. To identify whether there are sectoral differences with regards to the Welsh Government offering in terms of the above

According to Saunders *et al.* (2007) research has a number of characteristics, and these are namely: -

- Data is collected systematically;
- Data is interpreted systematically; and
- There is a clear purpose: to find things out

There are other definitions of research one being that offered by the RAE (Research Assessment Exercise, 1999b) as “original investigation undertaken in order to gain knowledge and understanding”. The inclusion of the word understanding is very important, as it is sometimes easy to increase

knowledge but understanding that knowledge could be fundamental in putting the knowledge into bettering future practices.

Following a study undertaken at Lancaster University, Day-Peters, (2000) offered two alternative definitions. One is that good research is rigorous, systematic, integrated, focused and objective. The second definition states that good research is accessible to all sorts of people and engages people.

This implies that a certain degree of imagination and creative thinking is applied, which would involve the researcher not being objective and conducting the research at arms length but actually being part of the research and central to the research question. In the doctoral context, this research should lead to a contribution to knowledge and practice.

### **3.2 Research Paradigms**

According to Blanche *et al.* (2006, p. 220), there are three major dimensions to the research process: -

- Ontology
- Epistemology and
- Methodology

All research studies consist of the dimensions above, which come together to form an all encompassing, inter related thinking and practice known as the

research paradigm (Blanche *et al.*, 2006). The term paradigm originates from the Greek word *paradeigma*, which means pattern. According to Gummesson (2000), this was first used by Thomas Kuhn (1962), an American Physicist who conceptualised the research paradigm as a set of beliefs, values and assumptions which was shared by a community of scientists with regards to nature and conduct of research (Kuhn, 1977). A paradigm therefore implies a pattern, structure and framework or systems of scientific and academic ideas, values and assumptions (Olsen *et al.*, 1992).

Ontology comes from two Greek words – *onto* which means 'being' and *logia* which means 'science, study or theory'. This branch of philosophy is "concerned with explaining the nature and structure of the world" (Wand and Webber, 1993, p. 220). Research philosophy is a term and / or belief in the way in which data about a phenomenon should be gathered, analysed and used. Epistemology is a term concerned with knowledge and understanding (what is known to be true) whereas doxology is concerned with the various philosophies of research (what is believed to be true) (Galliers, 1991). Methodology is how the researcher employs the methods to achieve what they believe or can be known. The strategic approach rather than techniques and data analysis are paramount (Wainwright, 1997)

Saunders *et al.* (2007) advise there are different approaches to research described by different researchers, many of them refer to two main approaches namely the deductive approach, in which a theory or a hypothesis is developed and a research strategy is developed to test these, or the

inductive approach, in which data is collected and a theory is developed as a result of the data analysis.

If these are to be related to the research philosophies then a deductive approach lends itself to a more positivist philosophy and the inductive approach lends itself to the phenomenological philosophies.

The table below indicates the ways in which research methods cross paradigm boundaries: -

Table 3.1 – Research Methods Crossing Paradigm Boundaries

<b>Paradigm</b>	<b>Methods (primarily)</b>	<b>Data Collection Tools (examples)</b>
Positivist/ Postpositivist	Quantitative, although qualitative methods can be used within this paradigm, quantitative methods tend to be predominant (Mertens, 2005, p. 12)	Experiments Quasi-experiments Tests Scales
Interpretivist/ Constructivist	Qualitative methods predominate although quantitative methods may also be utilised	Interviews Observations Document reviews Visual data analysis

### 3.2.1 Positivism

The positivism position of exploring social reality is based on the philosophical beliefs of August Comte (Henning *et al.*, 2004, p. 17). Comte believed that observation and reason are the best means of understanding human behaviour, which can be obtained through observation and experiment.

Henning *et al.*, go on to say that positivists adopt a scientific approach with the help of quantification methods. Positivism they say is “concerned with uncovering the truth and presenting it via empirical means”.

Saunders *et al.* (2007) state that if the research philosophy reflects the principles of positivism, then the research will probably adopt the philosophical stance of the natural scientist.

The researcher in this tradition assumes the role of an objective analyst, making detached interpretations about the data that has been collected in a value free manner (Saunders *et al.*, 2007). Research based in this philosophy places an emphasis on a highly structured methodology to facilitate replication (Gill and Johnson, 1997) and on quantifiable observations, that lend themselves to statistical analysis (Saunders *et al.*, 2007). The assumption is that ‘the researcher is independent of and neither affects or is affected by the subject of the research’ (Remenyi *et al.*, 1998, p. 33).

The main criticisms of positivism are summarised by Burrell and Morgan (1979, p. 255), who state that science is based on “taken for granted” assumptions, and thus, like any other social practice, must be understood within a specific context.

A ‘highly structured methodology’ that leads to ‘statistical analysis’ suggests quantity rather than quality. This approach in relation to how Welsh



Government is supporting Anchor Companies in Wales may not glean the information required due to the small sample.

### **3.2.2 Interpretivism**

Those researchers critical of positivism argue that rich insights into this complex world are lost if such complexity is reduced entirely to a series of law-like generalisations (Saunders *et al.*, 2007). This viewpoint, is that of interpretivism.

Remenyi *et al.* (1998, p. 35) found that it is necessary to discover the details of the situation to “understand the reality of perhaps a reality working behind them”. This is a persuasive argument for interpretivism. It follows from the interpretivist’s position that it is necessary to explore the subjective meanings motivating people’s actions, in order to be able to understand them (Saunders *et al.*, 2007). Saunders *et al.* (2007) go on to say that people may place many different interpretations on the situations in which they find themselves and in turn, these interpretations are likely to affect their actions. Therefore the role of the interpretivist, is seen as seeking to understand the subjective reality of those that they study, in order to be able to make sense of and understand their motives, actions and intentions.

The phenomenological approach “illuminates the specific, to identify phenomena through how they are perceived by actors in a given situation” (Lester, 2009). Phenomenology is concerned with experience taken from

individuals. The table below indicates where the phenomenological approach sits within the research paradigm: -

Table 3.2 - The Phenomenological Approach within the Research Paradigm

Positivist	Interpretivist
Experimental	Naturalistic
Quasi-experimental	Hermeneutic
Correlational	Interpretivist
Reductionism	Ethnographic
Theory verification	Multiple participant meanings
Causal comparative	Social and historical construction
Determination	Theory generation
Normative	Symbolic interaction

Adapted from Mertens (2005) and Creswell (2009)

This study sits within the Interpretivism paradigm because the research will be collected via a communication process, which will aid the researcher to examine the perceptions, intentions and beliefs of Anchor Companies. The researcher wants to delve into the relationship between Welsh Government and Anchor Companies to understand, the distinctive orientations of the Companies concerned. Henning *et al.* (2004) state that the researcher will participate, collaborate and engage with the respondents rather than standing above or outside the activities.

### 3.2.3 Deductive Approach

The deductive approach involves the development of a theory or hypothesis that is then subjected to a rigorous test, and as such it is the dominant research approach in the natural sciences, where laws provide the basis of explanation (Saunders *et al.*, 2007). In addition to this, the research should be independent of what is being researched and data should be collectable and measurable quantitatively. Therefore the majority of data collected within this approach would be quantitative data.

The main strengths of quantitative data is that it can provide a wide coverage of a range of situations and it can be fast and economical and particularly when statistics are aggregated from large samples, they can be of considerable relevance to policy decisions (Easterby-Smith and Lowe, 2002). However, on the negative side these methods tend to be rather inflexible and artificial, they are not very effective in understanding processes or the significance that people attach to actions. They are also, not very helpful in generating theories (Easterby-Smith and Lowe 2002).

In respect to analysing, quantitative data lends itself to being numerically coded. It is important to be aware of the coding necessary for data analysis during collection, as it would be very difficult and time consuming to have to go back and refine and readjust the data.

### 3.2.4 Inductive Approach

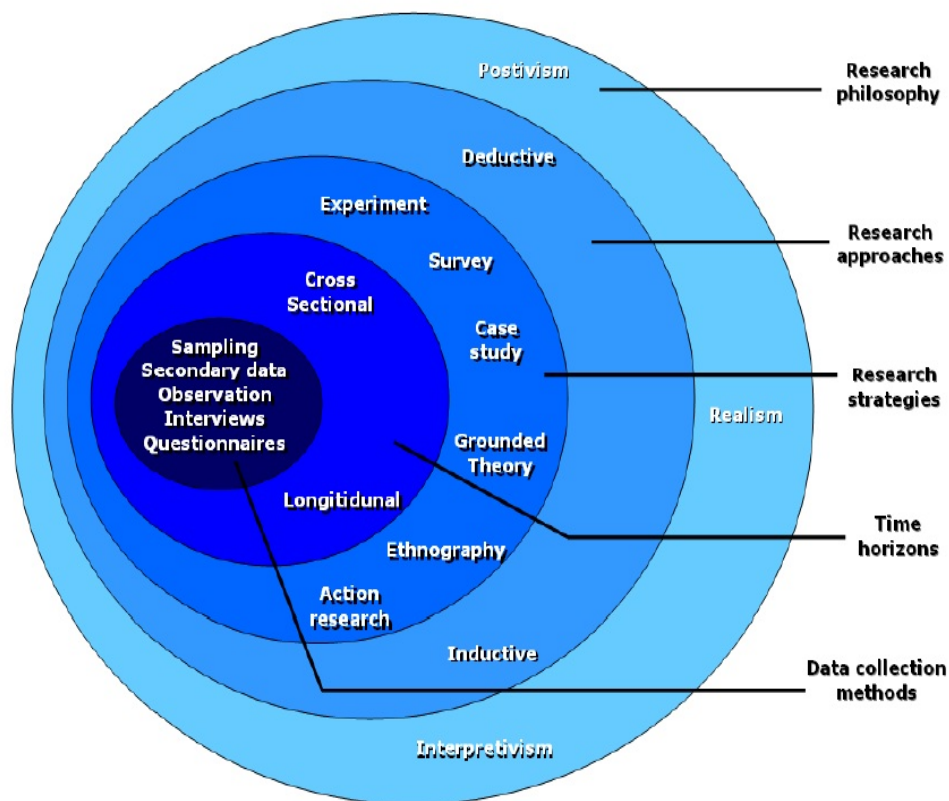
The alternative approach to the deductive approach is that of an inductive approach. This involves the formulation of a theory from data analysis. Therefore theory would follow data as opposed to data qualifying a theory, which is the deductive approach. Saunders *et al.* (2007) describes this approach as getting a feel for what is happening in the organisation so as to better understand the nature of the problem that you wish to tackle.

Gilmore and Carson (1996) claim that the adaptability and flexibility of qualitative research methods and techniques throughout the entire research process has many advantages. They go on to describe how qualitative methods allow the researcher to become familiar with the areas of interest, explore the field and consider the dimensions involved due to their open-ended, non-pre-ordained nature and this in turn aids understanding of the topic. Patton (1980) describes qualitative data as consisting of detailed descriptions of events, situations and interactions between people and things providing depth and detail. Another description of qualitative data offered by Hill and McGowan (1999) is living through the 'highs and lows' of the research, which allows the researcher to understand the phenomenon under investigation in a way that few other methodologies permit.

Saunders *et al.* (2007) describes the research process as a series of layers and that each layer needs to be peeled away depicting the path to the central

core of the research data. This process is also known as the “Research Onion” (Saunders et al., 2007, p. 102): -

Figure 3.1 – Saunder’s ‘Research Onion’: -



The first of these layers raises the question of the research philosophy you adopt; the second layer considers the subject of the research approach that flows from the research philosophy. The third layer is the research strategy, and the fourth layer refers to the time horizons applied to the research. The fifth layer is the final layer and identifies the data collection methods.

The adoption of an approach to thinking about research philosophy namely: epistemology, ontology and methodology will be dependent on the way in which the researcher thinks about the research process. This adoption will allow the researcher to enhance their understanding of the way in which a researcher approaches the study of a particular field of activity.

Saunders *et al.* (2007) refer to positivism and phenomenological (which comprises realism and interpretivism) and three research philosophies namely positivism, interpretivism and realism (epistemology). They go on to explain that while they are different, they are not mutually exclusive and that the adoption of one of these philosophies will be dependant on the way in which the researcher thinks about the development of knowledge. This view is also endorsed by many other researchers who feel that it is difficult to slot research into one or other of these philosophies and that a more pragmatic view should be adopted and it is perfectly acceptable to draw methods from both views.

The researchers position is that of a phenomenological approach, interpretivist in nature.

### **3.3 Research Methodology**

The research methodology is a general plan of how the research questions will be answered (Saunders *et al.*, 2007). The method should have clear objectives, derived from the research questions. It should specify the sources from which the data is to be collected and consider the constraints that may

occur, for example access to data, time, location, money and ethical issues (Saunders *et al.*, 2007).

There are effectively two forms of data namely; primary / raw data and secondary data. Primary / raw data is the term used to describe primary data that is collected first hand. The advantage of this is that the data collected can be tailored to match the data required, in order to successfully research the topic. The disadvantages are mainly in resource implications and also the data collection method needs to be clear and appropriate to the task required. Secondary data refers to data that has been collected previously but then reanalysed by the researcher.

There is much secondary data surrounding the area of economic development that the researcher can use for this research; however no research has been published regarding the specific Welsh Government Anchor Company policy.

The most common methods of data collection are classified into qualitative and quantitative research methods.

### **3.3.1 Quantitative and Qualitative Research Methods**

Quantitative research methods require empirical data, which allows a systematic observation via statistical, mathematical or computational measures. Using quantitative research methods allows the researcher to

develop theories and / or test hypotheses. The process of measurement is paramount in quantitative research as it provides a connection between empirical observation and a mathematical measurement.

Quantitative research data is collected via questionnaires, surveys and experiments, which allow the data to be measured statistically (Hittleman and Simon, 1997).

In contrast, qualitative research asks questions and draws on verbal descriptions, which are collected from phenomena and / or participants. This approach does not discount the use of empirical measures (Bryman and Bell, 2007). Using qualitative research methods allows the researcher to describe the perceptions of subjects experiencing a phenomenon and therefore, develops a theory based on observed data.

Saunders *et al.* (2003) points out that there is no standardised approach to the analysis of qualitative data however Tesch (1990) identifies four categories namely: -

- Understanding the characteristics of language
- Discovering regularities
- Comprehending the meaning of text or action
- Reflection



Easterby-Smith and Lowe (2002) refer to the skill of the interviewer and an understanding of the issues by the interviewer as being crucial to the analysis of the data. The skills of the interviewer centre on the ability to recognise what is relevant and to remember it. In addition to this, interviewers need to be able to listen and it is useful to summarise what has been said, to ensure that understanding has been achieved (Easterby-Smith and Lowe 2002).

Lincoln and Guba (1985, p. 290) caution a researchers approach when adopting qualitative methods. They advise that the researchers “biases, motivations, interests or perspectives of the inquirer” should be acknowledged and identified throughout the study.

Guba (1981, p. 76) suggests that a researcher should select a paradigm “whose assumptions are best met by phenomenon being investigated”. This study seeks to understand how Welsh Government is supporting Anchor Companies and the researcher feels that the best approach is that of an inductive nature. This approach has been chosen because the researcher aims to generate a contribution to knowledge, which will emerge from the data.

The nature of the topic together with the practical way the researcher can gather the data, will allow for an in depth communication process. This process will bring rich data, which the researcher can examine, in depth for patterns and ultimately conclusions and theories.

### **3.4 Research Design**

Research design is a plan of how a research study is to be managed and will attempt to address the research questions. Mouton and Marais (1988, p. 175) state that the research design serves to “plan, structure and execute”, which in turn maximises the validity of the findings. Yin (2003, p. 19) adds that “colloquially a research design is an action plan for getting from here to there, where ‘here’ may be defined as the initial set of questions to be answered and ‘there’, is some set of answers”.

The various research strategies as outlined by Saunders *et al.* (2007) that are available to the researcher are experiment, survey, case study, grounded theory, and ethnography and action research. Given the interpretative nature of this research and the nature of the research question, the case study was considered the most appropriate approach. Data is collected and information is analysed in a systematic manner, which allows the researcher to answer the research question. This approach is also supported by van der Westhuizen (2008) who found that qualitative research applications, tended to be case studies.

#### **3.4.1 Case Study**

Robson (2002, p. 178) defines case study as “a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence”.

Yin (2003, p. 23) concurs with a the following definition; “an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used.”

A case study approach is concerned with researching a person, group or situation but can also be a programme, event or activity. Creswell (2009, p. 15) advises that data is collected over a “sustained period of time” to arrive at the best possible responses to the research questions. This approach can allow the researcher to glean a sharper understanding of how and why an instance has happened and importantly, what that could look like in the future.

Given the interpretive nature of this study, the case study approach is considered the most appropriate way forward. This case study is concerned with the specific Welsh Government Anchor Company policy and not that of the individual companies.

This approach will allow the researcher to systematically collect data in a practical manner, analyse the information and report the results. The case study approach has advantages in that predetermined criteria are used to gain depth and detail from the subjects. There is a risk that the researcher relies too heavily on interpretation to guide the findings, which results in the researcher becoming part of the research and knowing the results beforehand. The researcher then guides its subjects to those results.

As the sample size is known beforehand, the researcher can collect the data but avoid the problems of statistical power together with other disadvantages that come with using empirical methods. One of the biggest disadvantages of using the case study method however, is the credibility and validity of the research. This is discussed later in the chapter.

### **3.5 Participants in the Study**

Welsh Government is currently working with Anchor, Regionally Important and Sector companies to understand how all companies can work together and help build strategic relationships between government and the private sector.

This study will focus on how Welsh Government is supporting Anchor Companies in Wales within the specific Anchor Company policy however, a sample of SMEs (from the same sectors) will be interviewed also.

Below is a list of the Anchor Companies that Welsh Government is currently working with and includes those who have been identified as potential Anchor Companies: -

#### **Advanced Materials and Manufacturing**

- Airbus
- BA Wales Plc
- Celsa Manufacturing (UK) Limited
- Control Techniques Drives Limited

- Ford Motor Company
- GE Aircraft Engine Services Limited
- Nu-air Limited
- Qioptic Limited
- Tata Steel Europe
- Toyota Motor Manufacturing (UK) Limited

### **Construction**

- Dawnus Group
- Harris Pye Engineering
- Redrow Plc

### **Energy and the Environment**

- RWE Npower Plc
- Scottish and Southern Energy Plc
- Sharp Manufacturing Company
- Wales and West Utilities Limited
- Western Power Distribution (South Wales) Plc
- Dwr Cymru : Welsh Water
- Centrica
- Valero
- United Paper Mills Shotton (UPM)

## **Life Sciences**

- GE Healthcare
- Norgine Limited
- Penn Pharmaceuticals Services Limited
- Siemens Healthcare Diagnostic Products Limited

## **Financial and Professional Services**

- Admiral Group Plc
- Principality Limited
- RBS
- HSBC
- Moneysupermarket.com Group Plc
- Lloyds TSB Commercial Banking

## **Information and Communications Technology**

- British Telecommunications Plc
- Cassidian Limited
- General Dynamics UK Limited
- IQE Plc
- International Rectifier Newport Limited
- Pure Water Plc
- Sony UK Technology Centre

## **Creative**

- Tinopolis Plc

For this study, three of the nine sectors were interviewed as the researcher felt they would be easier to access, given that these sectors had a presence in North Wales (the same location as the researcher). The sample can therefore be considered in some respects, as a convenience sample though, there were however other reasons which also made these sectors and comparison between them, of relevance.

The three sectors chosen sit within the Construction, Energy and Advanced Materials and Manufacturing sectors. They have much in common, in that many of the companies contained within these sectors could sit in either of the sectors i.e. a company who manufactures solar panels could sit in any of these three sectors. Also, these sectors also tend to have similar requests for support e.g. financial support for capital investment, training, apprenticeships etc.

### **3.6 Data Sources**

The primary data sources for this study are a sample of the Anchor Companies listed above. The collection techniques used in this study are the literature reviews and interviews.

#### **3.6.1 Interviews**

An interview is a purposeful discussion between two or more people (Kahn and Cannell, 1957). Interviews can be highly formalised and structured, using

standardised questions or they can be informal and unstructured more akin to free-ranging conversations (Easterby-Smith and Lowe, 2002).

According to Saunders *et al.* (2007) there are three types of interview, which are described as: -

- I. Structured interviews – the researcher uses predetermined questions, which are read out to the sample. Questions tend to be short and in most cases, are closed which requires precise answers from the respondents. Structured interviews are easy to conduct and the same question is asked of all respondents.
- II. Semi structured interviews – the researcher has a set of themes and questions although they may vary from interview to interview. This method of collecting data has features of both structured and semi structured interviews and allows for both open and closed questioning. This allows the respondent freedom to elaborate on a particular question if they wish to do so.
- III. In depth interviews – are informal and are used to explore an area in depth. These are often referred to as unstructured interviews. There is no predetermined list of questions although it is necessary to have a clear idea about the aspect that is to be explored. Both the researcher and respondents are required to be at ease with each other, as there is no predetermined outcome.



As an interpretative approach has been adopted for this research, the researcher used semi-structured interviews to collect data. Wherever possible, the researcher interviewed the Anchor Companies / SMEs in person. Where the interview wasn't possible face to face, a telephone interview was arranged to undertake the research. This option was decided as the most appropriate method after the face-to-face option because: -

- Telephone interviews are an appropriate means of contacting business leaders
- Telephone interviews take less time than face to face interviews but allows the respondent to express their views
- The sample size meant that telephone interviews were possible given the timescales

Twenty-four Anchor and SME Companies from three sectors; Construction, Energy and Advanced Materials and Manufacturing were invited to take part in the research. The following approach was adopted: -

1. An introduction was requested from the Account Manager to facilitate communication between the researcher and the Anchor Company or SME. Once communications had been established, contact was made with the Company via email to explain the research and request an interview that would last no more than one hour. If no response was received, a further email was sent, again requesting participation.

2. Each interviewee was sent a list of questions however, as the interviews were semi structured, the researcher was able to delve deeper into certain areas.
3. The interviews were conducted in person if possible or via telephone at a time and date convenient to the interviewee. Allowing the subject to choose the time and date was important so that the maximum number of interviews could be secured. The aim of the interviews was to try and make the subjects feel as comfortable as possible so that they would open up about their experiences of working with Welsh Government.
4. At the end of each interview, the transcripts were re-read to the interviewee to ensure the researcher had understood all they had said. Interviewees were sent an email of thanks. The interviews were then analysed for patterns.

The focus of interpretative research understands the human experience. Research is often collected via semi structured interviewing, participant observation and the collation of relevant document. Maykut and Morehouse (1994, p. 46) state: -

*“The data of qualitative inquiry is most often people’s words and actions, and thus requires methods that allow the researcher to capture language and behaviour. The most useful ways of gathering these forms of data are participant observation, in-depth interviews, group interviews, and the collection of relevant documents. Observation and*

*interview data is collected by the researcher in the form of field notes and audio-taped interviews, which are later transcribed for use in data analysis. There is also some qualitative research being done with photographs and video-taped observations as primary sources of data”.*

This method of data collection allowed the respondents the opportunity to talk freely about their perceptions and experiences of how they as an Anchor Company in Wales, have been supported by Welsh Government. The researcher built a rapport with the respondents and questions were asked when the researcher felt it appropriate to do so. Questions were prepared beforehand, however the researcher was able to substitute the original questions depending on the answers from the respondents.

The discussion focused on the expectations, experiences and opinions of respondents and this can provide information about the reasons for opinions, attitudes and perceptions. This is a suitable approach to seek data on the experiences and attitudes of individuals.

The advantage of using the interview method for this study allowed the researcher to probe the sample more deeply than any other method discussed. The results provide depth and detail whilst allowing the respondent the freedom to take their answer wherever they please.

Semi structured interviews can reveal insights, which may not be available to researches working with very large samples. The disadvantages of using this

method of research is that it can be time consuming and to conduct and analyse.

Semi structured interviews are a qualitative method of analysis, which will begin as a confidential and secure conversation between the researcher and the respondent (Anchor Company).

### **3.6.2 Data Collection and Analysis**

Researchers who are interpretive in nature and using a case study approach, will seek the meaning of what is being observed by themselves, as well as what is being experienced by their subjects.

The aim of analysing qualitative data is to see whether patterns exist which could explain links in the research (Yin, 2003). The researcher will initially gather the data, analyse it in its entirety, take it apart and then pull it all back together. Categorising the information such as this, allows the researcher to make comparisons in the findings and reflect on any patterns found. Strauss and Corbin (1990) define this as 'open coding'.

In this case study, the data was collected from the Anchor Companies and SMEs and then transcribed. The responses were analysed and compared and finally interpreted to draw conclusions.

### **3.7 Research Evaluation**

Bryman (2012) advises that the most important criteria for the evaluation of research are reliability and validity. These criteria are often used in experimental or scientific studies as they are based on standardised instruments, which can be easily accessed.

Qualitative studies are not normally based on standardised instruments and the evaluation criteria can be applied. There is however, an on-going debate as to whether these criteria have any value in a study such as this (Merriam, 1998). Many critics are hesitant to accept the trustworthiness of qualitative research but Shenton (2004) advises that Guba's constructs have "won considerable favour".

'Trustworthiness' is a term used in contrast to research evaluation and Guba (1981) suggests four criteria, which should be considered: credibility, transferability, dependability and conformability.

#### **3.7.1 Credibility**

Within this study, credibility is defined as believable and trustworthy data analysis. Lincoln and Guba (1985) argue that credibility is the most important criteria for establishing trustworthiness and the following provisions should be made by a researcher to promote confidence within their studies: -

- The adoption of research methods well established
- The development of an early familiarity with the culture of participating organisations
- Random sampling of individuals to serve as informants
- Triangulation
- Tactics to help ensure honesty in informants when contributing data
- Iterative questioning
- Negative case analysis
- Frequent debriefing sessions
- Peer scrutiny of the research project
- The researcher's 'reflective commentary'
- Background, qualifications and experience of the investigator
- Member checks
- Thick description of the phenomenon under scrutiny
- Examination of previous research findings

### **3.7.2 Transferability**

The findings of a qualitative study have to be understood within the context of particular characteristics of the organisation or organisations. Qualitative findings tend to be specific to a particular environment or individuals, therefore transferability is never possible as all observations are defined within specific contexts (Shenton, 2004).

As this study has adopted the case study approach, it is a requirement that the researcher documents and justifies the methodology and describes processes and procedures, that have helped shape the findings with the phenomenon.

Shenton (2004) questions whether the notion of producing truly transferable results from a single study is realistic, or whether the researcher should disregard this requirement in favour of enriching the situation. The researcher has however, provided: -

- The number of organisation taking part in the study
- The data collection methods that were employed
- The number and length of the data collection sessions
- The time over which the data was collected

### **3.7.3 Dependability**

Merriam (1998) defines dependability as to the extent to which findings can be replicated. Shenton (2004, p. 71) argues: -

*“The positivist employs techniques to show that, if the work were repeated, in the same context, with the same methods and with the same participants, similar results would be obtained”.*

Shenton (2004, p. 72) says that in order to address the dependability issue, a thorough understanding of the research methods should be addressed: -

- The research design and implementation
- The operational detail of data gathering
- Reflective appraisal of the project

Seale (1999) says dependability can be achieved via auditing the researcher's documentation, methods and decision during and after the study.

#### **3.7.4 Conformability**

According to Shenton (2004), the concept of conformability is the qualitative investigator's comparable concern to objectivity. He goes on to say steps must be taken to ensure the findings, should be the result of informants as opposed to the characteristics and preferences of the researcher.

Seale (1999, p. 45) again argues that auditing can be used to achieve conformability, providing the researcher makes provision for a methodological self-critical account of how the research was done.

### **3.8 Ethical Consideration**

As this is a qualitative study, the researcher will be engaging deeply with respondents. Silverman (2000) advises that researchers should always



remember that whilst this is an academic piece of research, they are entering into the respondents' private space.

Appropriate steps have therefore been taken to adhere to strict ethical guidelines. This ensures that participants are in no way harmed and their dignity rights and safety are the primary consideration.

### **3.8.1 Informed Consent**

If research is to be considered ethical, it is necessary for the researcher to disclose the nature and purposes of the research to those involved and proceed only with agreement and consent of those within the sample.

The researcher initially requested approval from the Account Manager to contact the Anchor Company. Once agreement had been confirmed, an email was sent to the Anchor Company detailing the purpose and nature of the study. The Anchor Company was then asked if they would be prepared to participate in the study at a time and date suitable to them. In cases where the researcher did not receive a response to the email and with further agreement of the Account Manager, a second email was sent. If no response was received after the second email, no further contact was made.

If an Anchor Company agreed to interview, they were again reminded as to the purpose and nature of the study and asked if they were happy to proceed.

### **3.8.2 Harm and Risk**

Sapsford and Evans (1984, p. 270) suggest researchers should ask themselves, 'who might be harmed by my research?' And they continue by cautioning that: -

*“Where people are made the subjects of research without their knowledge, and thus have no chance to safeguard their own interests, it should be the special concern of the researcher to look after these interests. The same applies where subjects volunteer and or co-operate with the research but are deceived as to its purpose. The researcher should ideally, anticipate every possible side effect of his [sic] procedures and guard against them”.*

Whilst there was no risk of physical or psychological harm during this research, there was a risk to the participants of the study that they might breach their own confidentiality policies.

### **3.8.3 Honesty and Trust**

The researcher adhered closely to strict guidelines regarding honesty and trustworthiness.

Transcripts from the interviews were stored in a secure location and accessible to the researcher and the supervisory team. On completion of the study, the transcripts will be destroyed.

### **3.8.4 Confidentiality**

The researcher ensured that confidentiality and anonymity of those who participated in the research would be maintained at all times. Any identifying characteristics and or features of both individuals and Anchor Companies would be removed before any information was disseminated.

The names of those interviewed together with the names of the companies, which they represent, will be anonymised and would not be used for any other purpose.

### **3.8.5 Welsh Language**

The researcher promotes the use of the Welsh Language and ensured it was treated no less favourably than the English Language. All interviewees were offered the opportunity to be interviewed in either Welsh or English – whichever was preferable to the interviewee.

Four interviews were carried out in the medium of Welsh and were transcribed in Welsh and then translated into English.

## **3.9 Summary**

This chapter began by outlining the ontology and epistemology of the positivist and interpretivist paradigms. It went on to discuss the research

methodology and design used in this study including detail around the participants, data collection, analysis methods and credibility issues.

The overall approach to this study is from a phenomenological stance and an inductive approach. The research design is an interpretive case study using qualitative collection methods. The case study is that of the specific Welsh Government Anchor Company policy and not the companies themselves.

The following chapter will outline the main findings of the research following the data collection. The main findings will be organised into appropriate themes.

## Chapter 4: Research Chapter

*“If regeneration policy was invented to rehabilitate the coalfield communities of Wales, there would be no way of knowing it because there is little or nothing to commemorate it. Even more worrying is the fact that today, when large sums of money are being committed to regenerating deprived areas, there is still no national centre of excellence, no collective memory banks as it were, to marshal the evidence base as to what works where and why”.*

Morgan (2008, p. 285)

### 4.1 Introduction

The previous chapter discussed the most appropriate methodology for this study by outlining the ontology and epistemology of the positivist and interpretivist paradigms. Consideration was given to the research methodology and design, including detail around the participants, data collection, analysis methods and credibility issues.

This chapter will present the results from the primary research and discuss these in light of the research aim and objectives. Important areas emerged from the research, which will inform discussion, around the research aim, which was developed from the review of the literature: -

The research aim is: -

**To investigate how is Welsh Government supporting Anchor Companies in Wales**

This aim then generates the following objectives, which were derived from the literature: -

1. To evaluate how satisfied Anchor Companies are with the current offering:-

This leads to the following research questions: -

- I. To what extent are Anchor Companies satisfied with the current Welsh Government offering?
  - II. How does this satisfaction level compare with non-Anchor Company SMEs?
2. To determine whether the right business support structures are in place to support Anchor Companies: -

This leads to the following research questions: -

- I. Does Welsh Government have the right business support structures in place to support Anchor Companies?

- II. With increased pressure on internal budgets, how can Welsh Government be more innovative in its delivery of support?
- III. To what extent has support from Welsh Government made a difference to the business of an Anchor Company?

3. To analyse whether and in what ways the offer to Anchor Companies in Wales can be improved: -

This leads to the following research questions: -

- I. To what extent can the Welsh Government offering be improved?
  - II. How can Welsh Government better understand the needs of an Anchor Company's business activities?
  - III. How can Welsh Government improve its relationships with Anchor Companies?
4. To identify whether there are sectoral differences with regards to the Welsh Government offering in terms of the above

This leads to the following research question: -

- I. To what extent has support from Welsh Government made a difference to the business of Anchor Company within the different sectors?

Twenty-four companies from three sectors (Construction, Energy and the Advanced Materials and Manufacturing) were invited to take part in the interviews. At the time of writing this paper, 100 per cent of the Anchor Companies were interviewed within Construction, 40 per cent within Advanced Materials and Manufacturing and 22 per cent within Energy.

These sectors were chosen in particular as the researcher felt they would be easier to access given that these sectors had a presence in the Welsh Government offices in Llandudno Junction, North Wales (the same office as the researcher), and can therefore be considered in some respects as a convenience sample. Some sectors such as Financial and Professional Services only have a presence in South Wales. However, there were other reasons, which also made these sectors and comparison between them, of relevance. The three sectors chosen have much in common, in that many companies could sit in either sector e.g. a company that manufactures solar panels could sit in Construction, Energy or Advanced Materials and Manufacturing. These sectors also tend to have similar requests for support e.g. financial support for capital investment, training, apprenticeships etc.

The research was, however, not limited to Anchor Companies and included SMEs across the three sectors also. This decision was taken to provide comparison with companies, which were not Anchor Companies and were of a different size to those of primary interest. This better allowed the research objectives to be met.



Participants were invited to take part in the research on a day and time convenient to them and were offered the opportunity to complete the interview in English or Welsh. Three companies took the opportunity to complete their interviews through the medium of Welsh.

Nineteen interviews were completed, a response rate of 79 per cent. Three companies declined to take part and one company did not respond despite a second attempt to contact them.

Welsh Government has done extensive work in order to strengthen their relationships with Anchor Companies in Wales. A structured Account Management approach has been developed and delivered to meet this commitment. All Anchor Companies have an Account Director and a dedicated Account Manager and it is the responsibility of the Account Manager to develop an action plan with the Anchor Company to ensure the correct level of support and interaction is in place. In order to continually improve their service, Welsh Government undertake an Anchor Company Customer Satisfaction Survey. This allows them to listen to their Anchor Companies and align their services to the feedback they receive and maximise the benefits of being an Anchor Company. The results of Welsh Government led survey is not in the public domain.

This research therefore, undertakes a series of in depth interviews across three sectors to understand satisfaction and attitudes on the support they receive from Welsh Government and whether the support can be improved.

## 4.2 Anchor Company Quotes and Interpretation

Table 4.1 - Anchor Company Quotes and Interpretation

Energy Sector Illustrative Quotes	Analysis
<ul style="list-style-type: none"> <li>• One of the issues we have is that we have no single point of contact... If we had an Account Manager, they should have oversight of everything we do</li> <li>• We get to sit down with Ministers but there isn't the wider understanding of where we fit in within Welsh Government</li> <li>• Being an Anchor Company allows us to get closer to Welsh Government</li> <li>• We have an Account Manager but when I have emailed in the past, I haven't had anything back, I couldn't even tell you his name as we have only met the once</li> <li>• Having a dedicated Account Manager would improve our relationship with Welsh Government. If I thought there was value, I would contribute to a membership fee</li> </ul>	<p>Many of the Energy Anchor Companies in Wales have contact with several Welsh Government departments e.g. Regulation, Pricing, Communications, Skills and Education, Transport and Economy etc. It would be difficult for one person within Welsh Government to be able to capture all this information unless they were a dedicated Account Manager solely to that particular company.</p> <p>Having a dedicated Account Manager / contact is important not only for Energy Anchor Companies but with most of the companies interviewed. Expectations are high within this sector and comparisons were made with relationships with UKTI and BIS. One company suggested that Officials should spend up to six months with their company so they could see and</p>

<ul style="list-style-type: none"> <li>• Officials should come and spend six months here and the salary would be paid by the company... Another person on the payroll wouldn't make a difference</li> <li>• My background is political and if I don't get what I need from the Account Manager, I go directly to the special adviser</li> <li>• I see a willingness and a desire to engage but unfortunately it doesn't always follow through</li> <li>• There are capacity issues regarding resource levels which is reflective of the devolution settlement</li> <li>• Other departments within this organisation get regional support in the UK but Wales is not a favourable comparison</li> <li>• I don't want Welsh Government to be seen as a company not to deal with</li> <li>• I can't spend my time on something where I have no confidence</li> <li>• Better communication could be achieved with successful and positive Account Management</li> <li>• It's right for you to prioritise and we</li> </ul>	<p>hear things they wouldn't see and hear ordinarily.</p> <p>Capacity issues and resource availability within Welsh Government were also a concern and one Anchor Company made several comparisons between Welsh Government and the old Welsh Office, citing Welsh Government did not have the budgets or resources to deliver.</p> <p>Generally, larger Anchor Companies have a dedicated Government Business employee who has the time to forge strong relationships with both UK and Welsh Governments Officials. Anchors within this sector were pleased that they are able to access the Minister or as one stated 'go straight to the Special Adviser if needed'. They did go on to say however that if they had a better relationship with their Account Manager they would not need to do this.</p> <p>One Anchor within the sector said</p>
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<p>should develop the project, but I don't feel we have that honest dialogue</p> <ul style="list-style-type: none"> <li>I would like awareness of what support other Anchor Companies have received</li> </ul>	<p>Anchor Companies should be encouraged to be responsible businesses in Wales. They said that they committed time and resources to Anchor events and were prepared to share their learnings, which were useful for other businesses.</p>
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<b>AM&amp;M Sector Illustrative Quotes</b>	<b>Analysis</b>
<ul style="list-style-type: none"> <li>I like the fact we have one point of contact into Welsh Government</li> <li>It's nice to be valued and sometimes we feel as though we are getting better treatment than other companies</li> <li>I'm not sure what Anchor status all means</li> <li>Sometimes I wonder if the smaller businesses feel that we are singled out unfairly and I have come across that a couple of times</li> <li>Because we are given special status, I feel we should commit and we should support Welsh Government... we expect to pay something back</li> <li>Influence within our company is at a</li> </ul>	<p>Research from the AM&amp;M sector was very positive. Several of the Anchor Companies said they felt valued and appreciated the Anchor Company status but one in particular said it wasn't important to them. They went on to say that they are quite shy and inward facing so it made no odds to them if they were an Anchor Company or not.</p> <p>There is some confusion about what Anchor Company status means but several said they felt that they got better treatment than those who did not have the status. One company said that they were very aware of their 'special</p>

<p>very high level and spending time at plant level, I'm not sure that would be beneficial</p> <ul style="list-style-type: none"> <li>• Where I would like to see support is change in vehicle excise duty but these are legislative changes.... not sure what impact Welsh Government can have on legislation</li> <li>• If a Minister visits, all this information goes into a newsletter and from a Group point of view, we lever it to say how important it is</li> <li>• Everything we've asked for, we get...We always get what we want</li> <li>• We compete for business internally and the decision has to be slick</li> <li>• If I send an email or call I get a response within 24 hours</li> <li>• Anchor status is not important to us... We don't take the opportunity to engage with other Anchor Companies or any other events organised by Welsh Government</li> <li>• Because we are given special status, I feel we should commit and we should support Welsh Government e.g. attend meetings</li> </ul>	<p>status' and that they should support Welsh Government, that this was a two way relationship they said, and that they should pay something back.</p> <p>As with the Energy sector, access to the Minister is also important within AM&amp;M. Many of the Anchor Companies compete internally for investment and a supportive Government is paramount. One Anchor Company said that an Official got on a plane to speak with their senior staff in Germany. The company was so impressed with their professionalism and the brief they were given, this method they said is now used as a benchmark across Europe. Another Anchor Company said that when they have a Ministerial visit (both at plant and HQ) the detail goes into a newsletter, which is circulated globally.</p> <p>The Anchor Companies value Account Management within AM&amp;M and all the companies who took part in the interviews said they had a good</p>
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<ul style="list-style-type: none"> <li>• I don't think Welsh Government understand how cut throat our business is</li> <li>• You encourage companies to export but don't have the infrastructure in Wales to be able to do it</li> <li>• I am pleased with the relationship that we have with Officials and Welsh Government but this isn't replicated with other businesses</li> <li>• Recent European legislation could potentially result in support and funding drying up for large companies like ours</li> <li>• A bit more joined up thinking with UK Government would be of benefit</li> <li>• Moving away from a 1:1 relationship would dilute our relationship</li> <li>• There is no desire to move suppliers from Europe</li> </ul>	<p>relationship with their respective Account Managers and Directors. Two Anchor Companies did however comment on recent developments around European legislation. State aids rules now state that if new economic activity is not being undertaken within a large company, support will not be available. Whilst the company recognises that they have to be compliant and that Welsh Government has to be compliant, ultimately they could lose out on an investment to a sister company. One Anchor Company went on to say that Welsh Government could do more in terms of fighting their corner with the European Commission.</p> <p>Two companies commented on how pleased they were with their relationship with Welsh Government but both said they were aware that this wasn't replicated or did not exist with other businesses. The Anchor Companies within this sector appreciated that their status meant they</p>
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	<p>were given more time with Officials from Welsh Government than companies who did not have the same status.</p> <p>Maximising supply chain opportunities can be difficult for Anchor Companies within this sector as their purchasing departments often sit outside of Wales (and the UK) and they procure on a global level where cost is paramount.</p>
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<b>Construction Sector Illustrative Quotes</b>	<b>Analysis</b>
<ul style="list-style-type: none"> <li>• We don't expect much if truth be told</li> <li>• We are a big and profitable business and whilst its good to have Anchor status, we expect to look after ourselves</li> <li>• Anchor Company status does benefit us</li> <li>• We don't expect funding</li> <li>• There is a disconnection between Welsh Government policy and how it is delivered on the ground at Local Authority level</li> </ul>	<p>Historically, support for this Sector has been very limited and it's only since the creation of Sectors that Construction Companies have had Account Management support from Welsh Government.</p> <p>Anchor Companies in this sector enjoy their status as it aids them when lobbying Ministers with planning permissions and in particular, the Welsh policy on Sprinklers in new</p>

<ul style="list-style-type: none"> <li>• It's easier to get planning permissions in England than it is in Wales</li> <li>• It seems Welsh Government is set up for FDI and everything is set up for that</li> <li>• Welsh Government should be spending their money on strengthening the economy</li> <li>• We develop relationships with Minister but they move on, so continuity with officials would be good</li> <li>• Surely all funding is targeted at SMEs?</li> <li>• We haven't had any support from Welsh Government.</li> <li>• The key thing Welsh Government needs to do is give us work</li> <li>• We have a certain status to be invited to join the major companies in Wales and have a seat at that table</li> <li>• Supply chain, networking and meet the buyer events are not of interest to us</li> <li>• We are so used to getting on with it ourselves</li> </ul>	<p>homes came up more than once.</p> <p>When Construction Companies try and obtain planning permissions, they feel the Local Authorities are anti development, which goes against Welsh Government policy. One Anchor Company stated that they spend millions of pounds on land but can't develop it because local authorities won't follow Welsh Government policies.</p> <p>Another contentious issue, which came up with the Anchor Companies in this sector, was the policy on sprinklers. This policy brings additional costs to Welsh construction businesses which aren't applicable in England, making it more expensive to build homes in Wales.</p> <p>Account Management continuity came up across all the Sectors. Ideally companies like to deal with the one person all the time but staff have a tendency to turnover, which can make continuity difficult.</p>
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### 4.3 SME Company Quotes and Interpretation

Table 4.2 – SME Company Quotes and Interpretation

Energy Sector Illustrative Quotes	Analysis
<ul style="list-style-type: none"> <li>• The offerings are good, it's the processes involved with those offerings which are difficult</li> <li>• We're desperate to employ apprentices but have no idea how to go about it and no idea who to contact</li> <li>• We have an Account Manager.... He comes to see us every twelve months</li> <li>• Face to face contact is important to me</li> <li>• Had lots of support in areas which has been useful</li> <li>• I'm very pleased with the amount of time we get considering how many we employ</li> <li>• With KPI's, I'm sure Account Managers would get a quicker return from bigger companies</li> <li>• Most start ups go down the pan in the first twelve months so the</li> </ul>	<p>Generally SMEs were much more complimentary about the support they had received from Welsh Government than theirAnchor counterparts. It is not a surprise that companies who have successfully applied for financial support were more positive about their experience with Welsh Government as opposed to those who have had issues. A large proportion of the sample in this sector had successfully accessed financial support via the Wales Economic Growth Fund scheme.</p> <p>Interestingly, one of the smaller SMEs (T/O £140K and 4 staff) said they were very pleased with the amount of time they had received from Welsh Government considering their Account Manager would get a quicker return from a bigger companies. Account Managers within the sectors have a</p>

<p>support we've had has prepared us for growth</p> <ul style="list-style-type: none"> <li>• I don't have a sophisticated expectations and don't expect Welsh Government to run our business</li> <li>• One of the problems I have is I don't know what you (Welsh Government) have</li> <li>• We've had lots of support but whether we could have had more, I don't know</li> <li>• We would not be here without RSA and SIF which meant that we were doing things two years ahead of plan</li> <li>• Without support in the early days we could not have bought our machinery and we would not be employing 60 people... it meant the difference between a start-up on paper to getting a factory and manufacturing from day one</li> </ul>	<p>portfolio of both large and small and companies. The greatest impact can be on the smaller companies, where without Welsh Government support, the business would not have established.</p> <p>Some also said they had access to local government but found that difficult to navigate and that their account manager did not have much influence there.</p> <p>Whilst the SMEs interviewed said they relied on their Account Manager for information on Welsh Government offering, one SME said 'there are companies out there who are so caught up in their idea that they haven't the capability to delegate functions i.e. the owner wears all the hats. They are the guys that need support'.</p> <p>Spending time away from the business is an issue, which came up several times with SMEs. They are eager to engage with Welsh Government but only if it proves to be beneficial. One SME said of a meet the buyer event 'it's</p>
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	always the same old faces’.
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AM&M Sector Illustrative Quotes	Analysis
<ul style="list-style-type: none"> <li>• The important thing for me is having somebody that understands our business to see what we need</li> <li>• I know that I can pick up the phone and speak to my Account Manager immediately</li> <li>• Regular contact is essential</li> <li>• I don't have the time to look for business support, I depend on my Account Manager for that</li> <li>• I prefer 1:1 communication, I don't like going to a computer</li> <li>• Welsh Government support has transformed our business</li> <li>• Welsh Government introduced us to an Anchor Company and could potentially lead to a £1M contract</li> <li>• There is no scheme for capital investment</li> <li>• I would drive to Llandudno for a meeting with other companies so that Welsh Government didn't incur travel costs</li> </ul>	<p>As with the Anchor Companies in the AM&amp;M sector, relationships with Welsh Government are positive. Increased contact is a theme, which comes through all sectors however; some of the SMEs interviewed in this sector queried lack of support in terms of capital and exporting.</p> <p>Two SMEs stated that there was no clarity on budgets and that Welsh Government need to make the budget work better and enhance the message to SMEs. Another SME said 'I say this tongue in cheek; I see this building that you have in Llandudno but I've never been there. I have no idea what goes on there. I think there could be more engagement from Welsh Government'.</p> <p>One SME stated that their Account Manager was not pro active and had</p>

<ul style="list-style-type: none"> <li>• We've grown 50 per cent over the last four years and we could not have done that without support from Welsh Government</li> <li>• There isn't enough contact with Welsh Government... I do feel perhaps that time is limited to support people like us</li> <li>• Welsh Government doesn't do enough to help exporters</li> <li>• The application process has been difficult... I have had issues in the past</li> <li>• My business is up and down the country, I sell nothing into Wales</li> </ul>	<p>never come to them to say "this is available or that's available". They always have to get out and find it.</p> <p>They went on to say that they would be prepared to drive to Llandudno for a quarterly meeting so that Welsh Government did not incur any costs.</p>
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<b>Construction Sector Illustrative Quotes</b>	<b>Analysis</b>
<ul style="list-style-type: none"> <li>• I've had fantastic support from Welsh Government</li> <li>• We can pick up the phone for assistance and the response is quick, thorough and competent</li> <li>• I would like more visits... I'm a people person</li> </ul>	<p>As with the Anchor Companies, Account Management is relatively new in this sector but as with all the others, companies like 1:1 support and would like to have more / increased contact with Welsh Government. An online relationship was not well received with</p>

<ul style="list-style-type: none"> <li>• Historically, we have felt left out as there is so much emphasis on the South</li> <li>• Networking events are a waste of time. Most of the contacts for a meet the buyer event have already been done before hand and it ends up being a baby kissing exercise</li> <li>• We can't access support as we're self funding....this plays against us</li> <li>• Engagement with Welsh Government is far greater than it was 5 years ago</li> <li>• I like 1:1 contact, I don't like online support</li> <li>• There is a piece of work that needs to be done to see what the top 5 issues are within the sector</li> <li>• Training and up skilling is really important to me</li> <li>• Procurement costs for us are becoming a major cause and I am concerned where it will all end</li> </ul>	<p>SME Construction Companies favouring 1:1 support.</p> <p>One SME mentioned that they had felt left out as all the emphasis is on the south. There is a perception that companies in the south do have a greater emphasis but this sector team works on a pan Wales basis and all companies have access to the same business support, regardless of location.</p> <p>If a business is self-funding and does not require funds from a bank then it can be difficult to demonstrate a need from Welsh Government. In this sector however, when construction companies tender for large projects with Local Authorities, their credit history has to be impeccable.</p>
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#### **4.4 Overview of Findings**

The following section discusses the findings from the research against each research objective and question: -

##### **Objective 1**

To evaluate how satisfied Anchor Companies are with the current Welsh Government offering: -

This leads to the following research questions: -

- I. To what extent are Anchor Companies satisfied with the current Welsh Government offering?
- II. How does this satisfaction level compare with Non-Anchor Company SMEs?

##### **I. To what extent are Anchor Companies satisfied with the current Welsh Government offering?**

Respondents were asked how satisfied they were with specific Welsh Government offering and the response from the Anchor Companies was mixed. The Advanced Materials and Manufacturing sector was very positive about the offering whereas the Energy and Construction sectors were less so.

The companies contained within the Advanced Materials and Manufacturing sector are primarily foreign owned companies, who have historically been attracted to Wales as an inward investment. These companies have also subsequently attracted further investment into their plants and most were currently, in negotiation with Welsh Government with regards to a current / live project. The researcher found that the greater the levels of financial support received, the more positive the response: -

*“We are very fortunate due to our stature in Wales... We max out on income which allows us to gain maximum grant”.*

The indigenous sample within the Advanced Materials and Manufacturing sector were also positive about the ‘offering’, but had not received the levels of financial support, their foreign owned counterparts had received. These companies were able cite more innovative solutions they had received from Welsh Government in the areas where they needed support e.g. training, workforce development etc.

There were instances however, where some of the Anchor Companies within this sector said Welsh Government were unable to financially support them where historically, they had. One of the reasons cited for this was state aid restriction and the requirement for new SIC codes, which demonstrates new and different jobs to the company. This is a particular difficult issue as most jobs being created within an existing Anchor Company, generally tend to be the same types of jobs, which already exist. This is a requirement of state aids rules and is out of the control of Welsh Government. Even in these

circumstances, the Anchor Companies were still positive about the offer, as they understood the hands of Welsh Governments were tied.

The responses from the Energy and Construction sectors were less positive about the Welsh Government Anchor Company offering. One Anchor Company said they had received no support from Welsh Government. They said they had requested support (financial) in the past, but it “didn’t get anywhere”. Another Anchor Company cited they were not very satisfied with Welsh Government offering (financial) which was partly because; they did not expect that much. They went on to say that Anchor Company status however, was a benefit to them and that it was important for them to be based in Wales. That recognition they said was paramount to them.

Anchor Company status is appreciated by most of the Anchor Companies across all three sectors, as they feel both Ministers and Welsh Government formally acknowledge them.

For Anchor Companies within Energy and the Advanced Materials and Manufacturing Sectors, financial support was important to them whereas in the Construction Sector, support for planning issues was their priority. Companies within the Construction sector have issues with Local Governments deploying Welsh Government policies regarding planning. The Construction Companies also complained about the costs of building in Wales and how much cheaper it is in England.



## **II. How does this satisfaction level compare with non-Anchor Company SMEs?**

Generally, the response from SME Companies to the standard Welsh Government offering was positive, with only two respondents advising that they were “in the middle” or “reasonably satisfied”.

By the same token as the Anchor Companies, the negative comments were due to unsuccessful applications for financial support, primarily via the Wales Economic Growth Fund. One respondent advised that whilst the offerings were good, the processes involved with those offerings were difficult and that the application process was “tortuous”. They went on to discuss their Wales Economic Growth Fund application which involved a property purchase which had been approved in the August, but they were advised not to do anything until they received formal notification. A formal offer came in October citing all works had to be complete by the following March. The timescales were so tight, the SME had to forgo the grant and did not pursue the project due to a lack of funding / support.

Whilst the Wales Economic Growth Fund is an exception in terms of Welsh Government support, timescales can be a dilemma. It is important for Welsh Government to get money out of the door or there is a risk that it can be lost to another department at the end of the financial year. Company projects however, largely slip to the right regardless of how tightly managed they may be. This would suggest the importance of the relationship between Welsh

Government and the non Anchor SME Company so that they can understand where the project is, at given timescales.

Where budgets are challenged, there is a greater emphasis on value for money and creating / safeguarding jobs. These measures will always be paramount to Welsh Government and is a reflection of how successful they are. Imposing measures such as these means, it has always been easier for larger companies to create or safeguard jobs but this is likely to change going forward.

Most of the SME Companies said they were extremely satisfied and had received fantastic support from Welsh Government. One SME said that they would “always beg for more” but if it hadn’t have been for the financial support they received from Welsh Government, they would not exist today. The investment made by Welsh Government into this particular company meant that they were able to begin manufacturing right from day one. Whilst job creation will always be a measure of success for Welsh Government, it is not so easy to measure the impact Welsh Government support has given to Anchor Companies. SME Companies are far more likely to admit that without support, they would not exist today.

Another SME responded by saying whilst they had been very satisfied in the past, support over the last 9 months had tailed off, and that nothing was available now. They were very pleased and satisfied with the first and second

round of Wales Economic Growth Fund, where they were able to access financial support, but that no longer exists.

The offer for Anchor Companies is marginally better than for SMEs, with additional support for training, fast and easy access to the Minister's office and the opportunity to input into policy development. Whilst the Anchor Companies have very different needs, the financial element appears to be the main focus.

Interestingly one SME Company said there was a piece of work to be done to see what the top 5 issues are within the sector and find out what the difficulties are. Welsh Government they said could then be tasked to develop a programme of activities to mitigate those issues. This could suggest that Welsh Government should analyse and offer rather than wait for a request from either an SME Company or an Anchor Company.

## **Objective 2**

To determine whether the right business support structures are in place to support Anchor Companies: -

This leads to the following research questions:

- I. Does Welsh Government have the right business support structures in place to support Anchor Companies?

- II. With increased pressure on internal budgets, how can Welsh Government be more innovative in its delivery of support?
- III. To what extent has support from Welsh Government made a difference to the business of an Anchor Company?

**I. Does Welsh Government have the right business support structures in place to support Anchor Companies?**

Respondents were asked whether Welsh Government had the right business support structures in place to support an Anchor Company in Wales. The Anchor Companies who had been supported financially by Welsh Government cited that the right business support structures were in place but those who had had difficulties accessing finance indicated that they were not fully aware of what was available and were not so positive.

One Anchor Company said, “I don’t know what I need as I’ve never asked.... There may be an opportunity to communicate better...” This could again suggest, that Welsh Government should ‘analyse and offer’ rather than wait for a request from an Anchor Company.

Many of the respondents were also aware that through their Account Managers, they can co-ordinate fast and easy access to Ministers which was a huge positive and made a difference when competing internally for funds or a project.

One Anchor Company said that if a Minister made a visit to their plant, they ensured it was captured in the Company's newsletter, which is circulated on a global basis. This is a recurring theme and suggests that 'soft support' is important, which can be very useful in a time of financial austerity.

Anchor Companies are eager to engage with Ministers, as they know if they have their blessing, then they have the blessing of Welsh Government also. This should then ease the way for support.

## **II. With increased pressure on internal budgets, how can Welsh Government be more innovative in its delivery of support?**

All of the Anchor Companies interviewed said they would like increased communication with Welsh Government and would not like to go on line for support. This was a constant theme throughout the study whereby the Anchor Companies, regardless of satisfaction levels could see the merits of a close working relationship with Welsh Government. Despite living in a digital age, Anchor Companies still value face-to-face meetings.

Many respondents appreciated that this was a difficult area and limited financial budgets was something that they as an Anchor were currently facing as well. One Anchor Company said that it was a question of priorities and that Welsh Government should set the criteria which drives the Welsh Economy forward i.e. employment opportunities, increase in skills and job creation.

Many of the Anchor Companies felt that the events offered on a one to many basis by Welsh Government, were of no interest as there was no desire to move suppliers from Europe. One respondent went on to say:

*“A lot of suppliers are in Eastern Europe so it’s hard to get purchasing to look at the UK because of the high cost base. That’s the nature of the beast, since the recession, there have been fewer suppliers in the UK but we have to keep pushing to get more British suppliers on the books”.*

Another Anchor Company also replicates this response. They said they didn’t attend supply chain, networking or meet the buyer events as they are always bombarded by companies looking for work. They went on to say that they had no influence on procurement locally and don’t have influence at plant level either. The procurement departments of the larger Anchor Companies tend to work on a global basis and know their markets better than anybody. Whilst Welsh Government do their best trying to get the Anchor Companies and their local supply chains to collaborate, sometimes it isn’t always possible.

In parallel to the above, one Anchor Company did say that because of their ‘special status’ they did feel as though they should give something back which is why they host and attend Welsh Government events. SME Companies are eager to interact with Anchor Companies and largely welcome the events arranged by Welsh Government however there is a risk that the events take place too regularly and it’s the ‘same old faces’ that turn out.

Welsh Government could encourage / put pressure on Anchor Companies to do more with Welsh SME Companies however this highlights a key dilemma for Welsh Government, on the lack of embeddedness which in itself is related to the global strategies of the companies concerned. The way to progress therefore is to apply 'soft' pressure to Anchor Companies by encouraging the local subsidiaries to act as better local corporate citizens, which could then influence the type of support given.

### **III. To what extent has support from Welsh Government made a difference to the business of an Anchor Company?**

A high percentage of respondents felt that the support they received from their Account Managers together with the Anchor Company status, which they enjoyed, had had a positive impact on their business.

Whilst Anchor Companies were not asked directly on their opinion of Anchor Company Status; a number of companies took the opportunity to express an opinion on the Anchor Company programme as a whole. Again another recurring theme; many respondents felt that Anchor Company status brought real tangible benefits leading to greater cost effectiveness and a competitive edge, especially when competing internally within their Group for projects.

Some companies noted that Anchor Company status allowed them to reflect on the benefits of operating in Wales back to their global headquarters. In large, these Anchor Companies were proud of their relationship with Welsh

Government and were keen to 'shout' about this within their respective Groups. Anchor Company status is therefore seen as positive and beneficial, the level of engagement and accessibility is very much appreciated

A small number of Anchor Companies were neutral about their Anchor Company status as they felt they got very little out of the association. Other companies felt that Anchor Company status was more of a badge and its full potential is yet to be explored.

### **Objective 3**

To analyse whether and in what ways the offer to Anchor Companies in Wales can be improved: -

This leads to the following research questions:

- I. To what extent can the Welsh Government offering be improved?
- II. How can Welsh Government better understand the needs of an Anchor Company's business activities?
- III. How can Welsh Government improve its relationships with Anchor Companies?



## **I. To what extent can the Welsh Government offering be improved?**

The results show that generally, Anchor Companies were appreciative of the support they had received from Welsh Government with one stating, “as it stands, everything we’ve asked for we get”. Those who weren’t so positive cited a poor relationship with their Account Manager and lack of clarity on what the support is: -

*“Welsh Government needs to be clear on what’s contained in the support they offer, whether it’s financial or emerging policies. There are certainly areas in regards to signposting to emerging policy decisions which would impact on our business which we need to know about immediately”.*

One area where Anchor Companies can enjoy an increased level of support is within Skills and Training. This is briefly mentioned in the Anchor Company Brochure however, when respondents were asked whether Welsh Government offering could be improved, not one of the Anchor Companies mentioned this additional level support however, several did say they would like additional support in this area. This would suggest that some Anchor Companies are not fully aware of their benefit.

Another area for improvement was the application for funding process; “I like to do a good job but it takes me more than 100 hours to prepare a case” (i.e. an application for financial support). Anchor Companies are keen to see a less bureaucratic process around accessing services such as grant funding and improving speed of delivery. Whilst many of the Anchor Companies

appreciated that financial support from the public purse will always be a bureaucratic process, they did feel this was an area, which can be improved.

This is a dilemma for Welsh Government because when an investment does not go to plan, the processes involved comes under scrutiny. If the processes have not been followed correctly, it can cause embarrassment, especially if the press become involved.

Welsh Government will always try to support a major employer especially if they can be encouraged to create jobs, growth and wealth within the Welsh economy. A day-to-day Account Manager who understands the needs of the business together with the Welsh Government offering is therefore imperative. A strong relationship will ensure an honest two-way dialogue where expectations can be managed and support expedited at speed.

## **II. How can Welsh Government better understand the needs of an Anchor Company's business activities?**

Respondents were asked if their Account Manager and Welsh Government understood their business activities in Wales. Overall the response was positive. One respondent said that Officials were working harder to get an understanding and that there is currently a willingness to assist.

Welsh Government dedicates an Account Director and Account Manger to each Anchor Company and together they co-author an Account Plan, to

ensure the correct level of support and interaction is in place. One Anchor Company said they spend a lot of time engaging with Officials and Ministers so that they have a good understanding of their business, which they acknowledged isn't replicated elsewhere. They went on to say that whilst they have access to support they don't take it for granted.

One particular Anchor Company spoke of their long and established relationship with BIS at a UK level and said: -

*“As a company, we have an induction programme so Officials know the issues that we face. The flip side is the information void of how businesses understand how Welsh Government works. We get to sit down with the Minister but there isn't the wider understanding of where we fit in”.*

This Anchor Company went on to say that they would welcome a secondment (6-12 months) from Welsh Government into their Company, which would allow the secondee to fully understand their business and needs. Welsh Government Account Managers do spend time with their Anchor Companies but only up to a week or so. Whilst a secondment would allow the Account Manger to get to really know the Company, this would be difficult to resource across all of the sectors.

Another Anchor Company appreciated that Welsh Government took the time to understand their business and agenda and said that people, were the key in understanding their business on a day-to-day basis. They said there are

issues that Welsh Government are pursuing and have proactively flagged and are more or less trying to understand.

On the other side of the spectrum, some Anchor Companies have experienced difficulties. One Anchor Company had had difficult issues, and whilst there were signs they can get constructive engagement and there is a potential platform to build engagement, they questioned whether their Account Manager had too many companies to look after.

Some of the Anchor companies were eager to understand what support was available to them: -

*“For me to gain confidence, I would like an awareness of what support other Anchor Companies have received. I would like to get an idea of how Welsh Government works at its best with Anchor Companies. This might also put Anchor Companies in touch with one another”.*

The comment above suggests that the relationship between Welsh Government and the Anchor Company is not as strong as it could be and that increased dialogue needs to be undertaken, so that the Anchor Company fully understands the offer. Anchor Companies do get the opportunity to network with one another however, meetings are held at various locations around Wales, which could make it difficult for some Anchor Companies to meet.

Understanding business needs is the responsibility of the Account Director and Account Manager and if an account plan has been co-authored, then both parties should understand what support can be delivered. All the Anchor

Companies said they would like increased communication with Welsh Government but this may become an issue going forward, especially if the number of Anchor Companies and Regionally Important Companies continues to increase.

Given the choice, all Anchor Companies would like a dedicated Account Manager at their disposal only. The reality is that resources are constrained and Account Managers normally have a portfolio of 25-30 companies. That means they pro-actively work with this number of companies but reactively work with many more.

Another recurring theme which came up several times, was the issue of an Account Manager either leaving their current position or leaving Welsh Government. Some of the Anchor Companies interviewed, said they had developed long, trustworthy and dependable relationships with their Account Manager. If that person left their position, the Anchor Company felt they had to start from scratch again with a new Account Manager. One Anchor Company argued that succession planning does not exist when it comes to Account Management.

### **III. How can Welsh Government improve on its relationships with Anchor Companies?**

Respondents were asked if Welsh Government could improve on their relationships with Anchor Companies in Wales. The level of engagement with

Anchor Companies within this sample varied from non-existent engagement to regular, substantive contact where the relationship between the Anchor Company and Account Manager was very close. Even when engagement was almost non-existent, those companies advised that they saw potential in the relationship and would like to progress and increase their engagement. Again, this is another recurring theme.

Having a strong relationship with Anchor Companies is paramount so that the Account Manager can fully understand the needs of the business and deliver what they need. If the Account Manager cannot deliver what the Anchor Company requires, then expectations have to be managed.

Some companies, however, commented on the lack of structure to the engagement process and would like to see a more formal programme of engagement. This theme recurs throughout the interviews, as well as seeking clarity on what Anchor Company status really means. This would suggest that there is little discussion between Welsh Government and the Anchor Company as to what the status means and what the benefits of being an Anchor Company are.

Respondents commented that they engage with Account Managers over a wide range of issues and projects but again this varied from company to company. For some, the engagement was no more than a phone call and infrequent / informal meetings. Other companies enjoy a close working relationship with their Account Manager and others within Welsh Government

on clearly defined projects. The relationship between the Account Manager and the Anchor Company is paramount and both parties need to strive for a happy medium, in terms of communication and its frequency. One Anchor Company said: -

*“Account Management within Welsh Government doesn’t work. Having had a relationship with BIS, I think I understand what Account Management should look like”.*

Most of the Anchor Companies would like to see a more regular and structured communication however; this could be difficult when resources are under pressure. This is another dilemma for Welsh Government, as it is imperative to maintain an open and honest relationship so that all involved understand and manage expectations. Resourcing that time however can burden an already pressurised department.

The positive aspects of Account Management within Welsh Government were the direct points of contact and access to Ministers. Whilst some Anchor Companies sought greater clarity on what Anchor status actually meant, others commented about giving something back by supporting Welsh Government.

#### **Objective 4**

To identify whether there are sectoral differences with regards to the Welsh Government offering in terms of the above: -

This leads to the following research question: -

- I. To what extent has support from Welsh Government made a difference to the business of Anchor Companies within the different sectors?

**I. To what extent has support from Welsh Government made a difference to the business of Anchor Companies within the different sectors?**

Respondents were asked whether support from Welsh Government had made a difference to their business. The responses were largely positive, where Welsh Government had successfully granted support with most Anchor Companies citing that turnover; profits, employment etc. had all increased due to the support they had received. Where there is a strong relationship between Welsh Government and a Company, there is very likely a positive impact.

As discussed previously, the Advanced Materials and Manufacturing sector turn over more projects than any other sector within Welsh Government and the research confirms that satisfaction is very positive. One Anchor Company within this sector said they had been supported greatly by Welsh Government. This company was not referring to financial support but rather 'soft' support. The 'soft' support offered was not just in Wales but their global headquarters also. The relationship that this Anchor Company has with Welsh Government is what they sell to their headquarters, which is a "nice tick in the box". Ministerial visits are included in their internal newsletter, which puts them in



strong position when competing for internal funds. Again, this 'soft' support is a recurring theme throughout the study.

Another Anchor Company within the Advanced Materials and Manufacturing sector said that, without Welsh Government financial support they would have been at risk and the support given to them had helped secure their plant and the jobs associated with it.

By contrast, the Energy sector tends to have larger projects, which have long lead times and therefore satisfaction is not as high. Comments within this sector included 'the relationship is still very young' or 'it's difficult to quantify what we've had'.

The Anchor Companies within the Construction Sector largely criticised the planning laws, which makes it difficult and expensive for them to develop land and build houses. Whilst planning does not sit within directly with Welsh Government, they felt the local authorities were anti development, which goes against Welsh Government policy. The Construction Sector therefore values their Anchor Company status as they feel they can have direct contact with the Minister in order to 'lobby'.

A strong relationship between Welsh Government and the Anchor Companies is paramount when delivering business support. Account Managers who deal with the Anchor Companies on a day-to-day basis must be able to understand the needs of the business and tailor support to suit them. Research suggests

that this can only be achieved if the Account Manager spends a significant amount of time with the Anchor Company. As mentioned previously this is a dilemma for Welsh Government as resources and budgets are limited going forward.

### **Key Anchor Constraints**

- Global economic situation
- Uncertainty regarding EU economic situation
- Recruitment and retention of skilled staff
- Physical barriers to expansion e.g. buildings, car parking
- Welsh infrastructure – location of road, rail and air transport links
- Ability to invest or incentivise innovation and R&D

### **4.5 Summary**

The results outlined in this chapter have found some very interesting areas from an academic as well as policy point of view. Important patterns and themes emerged from the research, which will inform the next chapter.

The following chapter builds upon the literature reviewed earlier in the study against the findings found in this chapter. This in turn identifies contributions to knowledge and practice together with recommendations for policymakers.

## Chapter 5: Discussion Chapter

*“When an industry has thus chosen a location for itself, it is likely to stay there long: so great are the advantages which people following the same skilled trade get from near neighbourhood to one another. The mysteries of the trade become no mysteries; but are as it were in the air...”*

Marshall (1890, p. 225)

### 5.1 Introduction

The previous chapter presented the results from the primary research in light of the research aim and objectives. Important areas emerged from the research, which will inform this chapter.

This chapter discusses the research in light of the literature reviewed earlier in the study. Contributions to knowledge and practice are identified, together with recommendations for Welsh Government policymakers.

The central research aim that this study explores is: -

**To investigate how is Welsh Government supporting Anchor Companies in Wales**

Four research objectives emerged from the literature, which required empirical examination in order to form a sound discussion. The research objectives are:

- I. To evaluate how satisfied Anchor Companies are with the current offering
- II. To determine whether the right business support structures are in place to support Anchor Companies
- III. To analyse whether and in what ways the offer to Anchor Companies in Wales can be improved
- IV. To identify whether there are sectoral differences with regards to the Welsh Government offering in terms of the above

## **5.2 To evaluate how satisfied Anchor Companies are with the current offering**

When reviewing the Anchor Company policy, policymakers should consider the works of Marshall (1890) who is the most cited author in regional development literature. So-called the trinity of agglomeration economies, Marshall cites three influences; a local pool of skilled labour, local supplier linkages and knowledge spillovers. Tremblay (2006) observes that industrial districts theory stress the importance of skills whereas cluster theory is centred on governance processes and innovation. This would suggest that the skills dimension features less so in cluster theory than it does in industrial districts theory.

The results showed that there is clearly willingness on the part of Welsh Government to support Anchor Companies in Wales and to better understand how departments can work together and help build strategic relationships between Government and the private sector. This governance process can be viewed as a source of information flow, the point at which public and private actors can be brought together to support the cluster development. A partnership-based relationship such as the Welsh Government Anchor Company policy favours a diverse learning base and therefore, a richer learning process.

The Anchor Company policy is focused on the relationships between companies located in Wales that are seen as key to the Welsh economy and the Welsh Government, the policy itself sitting within the clustering area of literature. Because of the varying attributes that can be attributed to a cluster (Pickernell *et al.*, 2007), the Anchor Company policy sits within both Business Network theory, adapted by Brown (2000) but based on Bergman and Feser (1999), and also the Hub and Spoke District identified by Pickernell *et al.*, (2007). Both these areas of literatures are themselves linked to transactions within supply chains and relationships within networks, which are explicitly focused on in the Anchor Company policy. These areas of literature are also linked to theories of agglomeration, which are more implicitly part of the Anchor Company policy.

Many of the Anchor Companies interviewed are based in Wales, which is a direct result of grant assistance being levered into the initial investment. This

is consistent with Hill and Munday (1991) who cite that with such huge investments and resources going into attracting a company into Wales, governments will do their utmost to secure that investment for the longer term and encourage reinvestment (Lovering, 1989; Amin and Thrift, 1994; Dicken and Malmberg, 2011).

Many of the foreign owned Anchor Companies interviewed said they had made significant investments into their plant, which is consistent with Munday (1991). If the initial investment is a success then subsequent investments are more likely to take place. One foreign owned Anchor Company did however, comment: -

*“I don’t think Welsh Government understands how cut throat our business is. Our company is ruthless when it comes to looking where it’s going to locate its plant and I can tell you they don’t take prisoners. There is no emotion attached to it”.*

One particular foreign owned Anchor Company who has levered a large amount of financial support from Welsh Government stated, “we always get what we want”, which would suggest how important they are to the economy of Wales. This finding is consistent with Brooksbank and Pickernell (2001) who said that Wales has been dominated by inward investment and that once a foreign owned Anchor Company has been attracted to Wales, it will continue to seek financial assistance using the threat of relocating elsewhere.

The Anchor Companies who were less satisfied with the Welsh Government offering were indigenous and had not received the levels of financial support their foreign owned counterparts had. This is consistent with Brooksbank and Pickernell (2001) who questioned the large sums of grant aid given to foreign owned companies and that indigenous Anchor Companies should be developed.

The research therefore offers a contribution to knowledge, supporting existing findings, but in the time-specific context of the Anchor Company policy. The results indicate that foreign owned Anchor Companies are very satisfied with the Welsh Government “Anchor Company” offering. This is not however extended to indigenous Anchor Companies who were less satisfied. The difference appears to be related to the levels of financial support they have received i.e. foreign owned Anchor Companies are able to lever large amounts of financial support into their plants, whilst indigenous Anchor Companies find it harder to do so.

The Anchor Company policy is centred on the most successful companies in Wales regardless of origin and attempts to understand the various factors, which can explain their success. Anchor Companies are central to this policy and the performance of the cluster developed by Welsh Government, is dependent on the performance of the Anchor Companies.

Whilst policies continue to exist for attracting inward investors into Wales, there is a real effort within the Welsh Government Anchor Company policy to

pro actively engage with indigenous Anchor Companies. In times of austerity, however, Welsh Government will have to become more innovative in its approach to supporting Anchor Companies in Wales, and this may specifically affect its ability to offer financial support in future.

Budgets are being challenged not only within government but within the private sector too. Welsh Government has previously moved away from a grant based culture when the then Deputy First Minister, Ieuan Wyn Jones announced the policy Economic Renewal: A New Direction (2010). The current policy echoes Brooksbank and Pickernell (2001) who argue that Wales should move away from a grant based culture and cease the dependency on inward investment, which is likely to require an increase rather than a decrease of resources given the growth of countries in Eastern Europe and China (Ali and Guo, 2005).

The implementation of Economic Renewal: A New Direction did try and move away from a grants based culture with the introduction of repayable business finance. Whilst this policy may be well intended, the reality was that companies regardless of size simply were not interested. One foreign owned Anchor Company said, "why would you want repayable finance? It just sits on your profit and loss account".

There was a general consensus within the research of a lack of clarity with regards to the offering. Many of the Anchor Companies interviewed said they were unclear as to what the actual Welsh Government offering was. The



reality is that Welsh Government has a plethora of programmes to support companies of all sizes and this can lead to confusion, which is consistent with Price *et al.* (1994). Welsh Government has attempted to address these issues with the creation of 'one stop shops' where companies can access support at one single point - an approach criticised by Anderton (1995), who says it adds more confusion to the pot. One Anchor Company commented: -

*“Welsh Government needs to be clear on what’s contained in the support they offer, whether it’s financial or emerging policies. There are certainly areas in regards to signposting to emerging policy decisions which would impact on our business which we need to know about immediately”.*

Welsh Government manages the Business Wales website, which is a platform to provide support to businesses of all sizes. Many of the Anchor Companies interviewed said they did not have the time to research what support mechanisms were available to them and relied on their Account Manager to advise them. The frequent replacement and introduction of business support programmes, however, takes its toll on the official who is tasked with the delivery.

This further increases the problems with credibility (Henderson, 1995) and suggests that policies are written in a 'supply-side' manner. The relationship between an Anchor Company and their Account Manager is crucial and unless, there is a mutual respect for each other the relationship won't work.

The contribution to practice from the research, therefore, is that whilst foreign owned Anchor Companies are very satisfied with the Welsh Government offering due to the levels of financial support they have received in the past, this will have to change going forward as government constraints become more apparent.

As a result of the research it is recommended that policymakers should also ensure that innovative solutions are created to support both foreign owned and indigenous Anchor Companies in Wales.

An independent satisfaction survey / interview of all Anchor Companies in Wales should be undertaken on behalf of Welsh Government. This would ensure that all respondents remained anonymous to Welsh Government, which would allow for a completely honest response. This platform would give Anchor Companies the opportunity to discuss in detail what they would like and how it could be delivered.

To summarise, the research found no academic literature with regards to Anchor Company satisfaction levels in Wales and specific to the Welsh Government offering. Welsh Government does however, complete an internal satisfaction survey on annual basis however, this is not published.

The first contribution to knowledge is that foreign owned Anchor Companies are very satisfied with the Welsh Government “Anchor Company” offering however, this is not extended to indigenous Anchor Companies who were less

satisfied. The difference being the levels of financial support they had received.

The first contribution to practice is that whilst foreign owned Anchor Companies are very satisfied with the Welsh Government offering due to the levels of financial support they have received in the past, this will have to change going forward as government constraints become more apparent.

As a result of the research it is recommended that an independent survey / interview is undertaken on behalf of Welsh Government. This would ensure respondents remained anonymous and allow for a completely honest response.

### **5.3 To determine whether the right business support structures are in place to support Anchor Companies**

The most popular method of business support offered by Welsh Government is, financial. The issue with this method of support as previously discussed is the constant threat of companies relocating.

It is no surprise that the Anchor Companies who were most satisfied with offering also thought the right business support structure were in place. They also felt they were important to Welsh Government and were taken seriously. As one Anchor Company commented, they have been given everything they have asked for from Welsh Government. Those who weren't so positive

about the business support structures cited a poor relationship with their Account Manager and a lack of success in their requests for financial support.

The relationship between Welsh Government and an Anchor Company is paramount and policymakers within Welsh Government continually consider how the relationship can be improved.

Aside from a few works (Millman, 1996; McDonald *et al.*, 1997), academic literature, which exists on Account Management, focuses on the business-to-business, supplier perspective. The aim of this study has been to discuss the characteristics, implications and evolutions of a supplier from the moment they decide to implement a key account management programme. Currently, no literature exists on Welsh Government Anchor Company Management.

This research has gone further by observing and discussing perceptions held by Anchor Companies not only of their Account Manager, but also the Welsh Government, its offering and their satisfaction. As with general literature, an Anchor Company Account Manager should be the main point of contact, providing customer support and general relationship management (Millman, 1996). An Anchor Company Account Manager should not be upselling.

The research found that some Anchor Companies had an excellent relationship with their Account Manager however, others did not. Levels of engagement varied from almost no engagement to regular, highly responsive engagement. This finding is interesting, as Welsh Government should treat all Anchor Companies equally.

The Anchor Companies who cited a poor relationship with Welsh Government and whom had difficulties in accessing support were indigenous. One indigenous Anchor Company said this was down to capacity issues regarding resource levels within Welsh Government, which they argued, was reflective of the devolution settlement. They went on to say they were disappointed and opportunities had been missed not just for them but for Wales also. Another indigenous Anchor Company said Welsh Government was well intentioned but the contact they have with their Account Manager was sporadic.

As with cluster theory, interaction is central to the Welsh Government Anchor Company policy and if the Anchor Companies and Welsh Government interact, knowledge and ideas are exchanged.

All Anchor Companies have an Account Director and an Account Manager for the day-to-day aspects of their relationship. There is an opportunity to co-author an account plan, which ensures the Anchor Company gleans the maximum benefit from the relationship. Regular meetings should be diarised with both the Account Director and Account Manager and an agenda should be agreed beforehand. Unfortunately this is not the case with some Anchor Companies where in one case, they do not even know the name of their Account Manager nor have they had a meeting with Welsh Government for over twelve months.

Sabel (1994) argues that public sector officials are rarely viewed as credible business support advisors. This research suggests that the Anchor Companies who had a good relationship with their Account Manager valued

their input with one Anchor Company likening their Account Manager to their Bank Manager – “equal like a business partner”. Even the Anchor Companies who did not have a good relationship with the Account Managers could see the benefits that such a relationship could bring.

Internal resourcing within Welsh Government is however, constrained and whilst most of the Anchor Companies would like to spend more time with their Account Manager, this could be difficult to facilitate. There is a need to integrate the existing Anchor Company policy with other Welsh Government policies which is a necessity given the constraints being faced. One indigenous Anchor Company suggested that a Welsh Government Official should be seconded to them for 6-12 month period. This they said would allow Welsh Government to fully understand the business.

Welsh Government do encourage Account Managers to spend time with their Anchor Companies, but only up to a period of two weeks. One option would be to reduce the number of Anchor Companies, which would allow Account Managers to spend more time with a reduced number of companies. This option however, is unlikely to be considered as firstly there is not enough resource available and secondly, once the ‘badge of honour’ has been given; it would be very difficult and could potentially cause embarrassment if Welsh Government were to take it away.

All of the Anchor Companies interviewed said they would like increased communication with Welsh Government and would not like to go on line for

support. Many respondents appreciated that this was a difficult area and limited financial budgets was something that they as an Anchor were currently facing as well. One Anchor said that it was a question of priorities and that Welsh Government should set the criteria which drives the Welsh Economy forward i.e. employment opportunities, increase in skills and job creation.

The creation of the Anchor Company policy is a commitment by Welsh Government to work with all Anchor Companies on a partnership basis. The indigenous Anchor Companies who were less positive about their relationship with Welsh Government tend to be in the early stages of their relationship and may not be as established as their foreign owned counterparts.

The findings above are consistent with existing literature (Brooksbank and Pickernell, 2001; Hill and Munday, 1991) where governments foster a good relationship with foreign owned companies because they want to protect their investment and provide the right environment for subsequent investments. An indigenous Anchor Company interviewed in this study echoed this sentiment stating that Welsh Government “was set up for FDI”.

Morgan (1996) says the WDA did recognise the dependency on FDI and began to develop a coherent ‘offensive’ approach, which would prove a more sustainable economic policy. He goes on to say, “...some of these plants have more to offer their HQs than the latter have acknowledged to date”. The challenge for Welsh policymakers is to ensure the investment embeds itself into the local economy.

Brand *et al.* (2000) found that foreign owned Anchor Companies spend less locally and again this study supports existing literature. For many of the Anchor Companies interviewed, procurement is out of their hands at a local level and is done on a global basis for the Group. It is therefore difficult to get some of the Anchor Companies engaged in supplier events which echoes Pike (1993, 1996), where government intervention tends to displace local employment.

Previous research suggests that there is a lack of local embeddedness in concentrations of FDI, which can have a disastrous effect on local linkages (Munday, 1995). Much time and effort has been spent on attracting FDI companies to Wales but up until recently, there was no specific policy on integrating a company with the region which had an emphasis on supply chain development and innovation (Acs *et al.*, 2012).

According to Cassidy *et al.*, (2005), governments have become interested in clusters and have adopted it as a public policy instrument as benefits can be gleaned. Developing local supply chains is an area that is encouraged by Welsh Government Account Managers and is at the heart of this spatial debate.

This study found that the SMEs interviewed were eager to engage with Anchor Companies but there is clearly a tension, which exists between them. The SMEs who had networked with Anchor Companies were very positive



about their experiences however; many of the Anchor Companies are reluctant to engage.

One SME said Welsh Government invited them to the opera where a mix of SMEs and Anchor Companies were present. They said it was an excellent event and they had access to many senior level people from Anchor Companies. A different SME said their Account Manager had facilitated a meeting with an Anchor Company, which could potentially lead to a contract with a value of £1 million.

Focussing on local linkages is the main indicator of embeddedness (Turok, 1993) but the reality is, many of the foreign owned Anchor Companies based in Wales do not have the power or desire to source locally which is supported by Phelps *et al.* (2003). The WDA developed the Source Wales Programme (based on clustering theories) to strengthen the SME base and improve interactions with inward investors. Whilst it was considered successful, the programme was terminated. Welsh Government now requires policies that focus on spillovers which local entrepreneurs can exploit.

Indeed, many of the Anchor Companies felt that the events offered on a one to many basis by Welsh Government were of no interest, as there was no desire to move suppliers from Europe. This indicates a lack of decision-making power in Wales. One respondent went on to say:

*“A lot of suppliers are in Eastern Europe so it’s hard to get purchasing to look at the UK because of the high cost base. That’s the nature of*

*the beast, since the recession, there have been fewer suppliers in the UK but we have to keep pushing to get more British suppliers on the books”.*

Another foreign owned Anchor Company also replicates this response. They said they didn't attend supply chain, networking or meet the buyer events as they are always bombarded by companies looking for work. They went on to say that they had no influence on procurement locally and don't have influence at plant level either. The procurement departments of the larger Anchor Companies tend to work on a global basis and know their markets better than anybody.

An example where Welsh Government has encouraged collaboration between large and small companies and other potential partners is the Open Innovation Programme. The programme was launched as a pilot in 2013 and companies are expected to explore 'best practice approaches' and introduce new methods for product and process development. The programme encourages Anchor Companies to share their benefits by encouraging and nurturing Welsh based businesses to engage in innovation.

Welsh Government could encourage / apply pressure on Anchor Companies to do more with Welsh SME Companies. However this highlights a key dilemma for Welsh Government on the lack of embeddedness, which in itself, is related to the global strategies of the companies concerned.

One way to progress therefore could be to apply 'soft' pressure to Anchor Companies by encouraging the local subsidiaries to act as better local corporate citizens, which could then influence the type of support given.

There is an opportunity for Welsh policymakers to put pressure on Anchor Companies to do more within their local economy. Whilst some of the Anchors are blasé about their Anchor status, there are those who feel they should be giving something back to the local economy. One Anchor Company advised that, "Anchor Companies should be encouraged to be responsible businesses in Wales".

Mulgan and Lee (2001) note that politicians and governments are judged by how they deliver results, which means successful policy delivery is as important as ever and this is still the case today. There has historically been a focus on creating new indigenous businesses (Birch, 1979 and Doyle and Gallagher, 1986) and there have been policies for attracting foreign direct investment (Hill and Munday, 1992; Evans *et al.*, 2008). There is little to suggest, however, that policymakers in Wales have linked the two together.

Whilst Acs *et al.* (2012) found that foreign owned companies have become more embedded with the emphasis on supply chain integration, this study found little evidence of this which is consistent with Gripaos (1998) who found limited integration between foreign companies and local suppliers.

The second contribution to knowledge that this study makes, therefore, is that the research found little evidence to support Acs *et al.* (2012) who found that Multinational companies have become more embedded with the emphasis on supply chain integration. Rather, this research is consistent with Gripaos (1998) who found little integration between foreign companies and local suppliers.

Audretsch and Keilbach (2007) have highlighted the benefits of linking inward investment policy to indigenous policy, which can bring opportunities in terms of knowledge and technology being brought into the region.

Generally, the Anchor Companies interviewed within the sample said that having Anchor Company Status brings real tangible benefits leading to greater cost effectiveness and a competitive edge, especially when competing internally within their Group for projects. This echoes Jacob *et al.*, (1997) who identified four sources of learning related to clustering: -

- Cluster accelerate the circulation of information between members, all the more so when trust is important, and this makes analysis of information much easier and quicker, favouring business and cluster development
- Clustering helps firms to compare themselves and this leads to a more competitive attitude between firms, as well as continuous learning and more innovation

- Clusters offer new and non-routine information and facilitate the multiplication and exchange within the group. The observation of others, the concentration of information from many sources favour the active search of new information (tacit information especially) and multiply the new ideas which support innovation
- Finally, when useful or needed, the cluster can transform competitive relations into cooperative relations, without completely eliminating competitive relations

Anchor Company status is therefore seen as positive and beneficial; generally the level of engagement and accessibility is very much appreciated by both foreign owned companies as well as indigenous.

For many of the Anchor Companies interviewed, having Anchor status is a formal acknowledgement that they are important to both Welsh Government and Welsh Ministers. This means that when an Anchor Company competes internally for a project, Welsh Government is there with them, supporting them every step of the way. For some Anchor Companies, having this status allows them to reflect on the benefits of operating in Wales back to their global headquarters. They are proud of their relationship with Welsh Government and are keen to get this message across to their respective sister companies.

There were however, some Anchor Companies who were unclear as to what Anchor Company Status actually means and whether it was purely a badge of honour. Whilst an Anchor Company brochure exists explaining the benefits of

being an Anchor, it is the Account Manager who is the interface. This relationship is paramount so that the Anchor Company understands the importance of Anchor Status, what it means and how they can use it to their advantage.

One foreign owned Anchor Company said Anchor Company Status was not important to them and whilst this may be true, being an Anchor Company does bring benefits, which this particular Anchor Company has received in large amounts. This Anchor Company went on to say that they were an inward facing company and did not take the opportunity to engage with other Anchors Companies. They did not attend events and did not want to engage with local suppliers. The possible reason for this view, could be that they are such a large and important company to Wales and Welsh Government; they can simply do as they please. Whether they acknowledge the status is irrelevant as Welsh Government will always try to meet their requests for support.

Fast and easy access to Ministers is largely a huge benefit for Anchor Companies which makes a difference when they competing internally for funds. This again suggests that 'soft support' is important which can be very useful during a time of financial austerity.

One non-indigenous Anchor Company said that if a Minister made a visit to their plant, they ensured it was captured in the Company's newsletter, which

was circulated on a global basis. They were keen to shout about the Minister making a visit to their plant, which in turn put Wales on the map.

This example of “soft power” may increasingly have to replace the “hard power” of grants that used to work so well. Therefore the second contribution to practice that this study makes is that the results found that ‘soft support’ e.g. access to Ministers is equally as important as ‘hard support’ e.g. finance. It would be difficult and unrealistic for a Minister to embark on a programme of engagement with all Anchor Companies. A more suitable approach would be for the Minister to host an event where an introduction could be made to all the Anchor Companies followed by a focussed question and answer session. Generally, the Anchor Companies who were interviewed said having Anchor Company status brought real tangible benefits.

To summarise, the research found no academic literature with regards to the right business support structures being in place to support Anchor Companies in Wales.

The second contribution to knowledge that this study makes is that the research found little evidence of integration between Welsh foreign owned companies and their local suppliers.

The second contribution to practice that this study makes is that access to Ministers is equally as important as ‘hard support’ e.g. finance. Generally, the

Anchor Companies who were interviewed said having Anchor Company status brought real tangible benefits.

As a result of the research, it is recommended that policymakers should reflect on the existing Anchor Company policy and consider how this can be linked with business support other policies. Consideration should also be given as to how Welsh Government can put pressure on Anchor Companies to do more locally.

#### **5.4 To analyse whether and in what ways the offer to Anchor Companies in Wales can be improved.**

The suggestions offered to improve the offer to Anchor Companies in Wales tended to be specific to their areas of work e.g. planning regulations, state aid restrictions etc, however the most common areas for improvement were:

- Formal Meetings with the Account Manager
- Further Development of the Anchor Network
- Less Bureaucracy with Regards to Financial Support



## **Formal Meetings with the Account Manager**

Companies within this sample commented on the lack of structure to the engagement process and would like to see a more formal programme of engagement.

The level of engagement with Anchor Companies within this sample varied from non-existent engagement to regular, substantive contact where the relationship between the Anchor Company and the Account Manager was very close. Even when engagement was almost non-existent, those Anchor Companies advised that they saw potential in the relationship and would like to progress their engagement.

Academic literature, which exists on Account Management, focuses on the business-to-business, supplier perspective (Millman, 1996; McDonald *et al.*, 1997). This study discusses the characteristics, implications and evolutions of a supplier from the moment they decide to implement a key account management programme.

Having a strong relationship with Anchor Companies is paramount, so the Account Manager can fully understand the needs of the business and deliver what they need. This helps to embed the Anchor Company into the region.

Porter and Gallardo (2007) emphasise a need for strengthening aftercare for foreign owned companies to ensure they continue to operate at a particular

location. The Welsh Government specific Anchor Company policy aims to ensure companies regardless of origin continue to operate in Wales.

One indigenous Anchor Company within the sample did comment about their location and how much cheaper it would be from a business point of view, if they were located over the border in England. The distance in question is only a few miles and whilst they are embedded in the local supply chain, relocating the business to England would not significantly impact on their business.

The failure of a foreign owned plant and the job losses that come with that can have a devastating effect on a region (Tomaney *et al.*, 1999). This however is not exclusive to foreign owned companies. One indigenous Anchor Company who was interviewed told of the devastation their region had sustained almost thirty years ago. They said the huge job losses had had such an impact; the region had still not recovered.

Aftercare for foreign owned companies has historically, been very important as policymakers have wanted to safeguard their investments and maintain the locations of their inward investors despite the fierce competitions from other locations. Foreign owned companies are considered particularly vulnerable to economic conditions (O'Farrell and Crouchley, 1987) but this study found, that indigenous companies are vulnerable too.

If the Account Manager cannot forge a strong relationship with the Anchor Company and deliver what they require, then the least they can do is to manage expectations.

One foreign owned Anchor Company said they spend a lot of time engaging with Officials and Ministers so that they have a good understanding of their business, which is consistent with existing literature. Wales has historically attracted a huge amount of FDI into Wales (Acs *et al.*, 2012; Brooksbank and Pickernell, 2001; Morgan, 1991; Hill and Munday, 1992; Evans *et al.*, 2008), which can only be achieved if there is a strong relationship between the inward investor and Welsh Government. This relationship has to continue to grow and foster so that potential re investments will be considered in Wales.

An indigenous Anchor Company spoke of their long and established relationship with BIS at a UK level and compared it with their relatively new relationship with Welsh Government:

*“As a company, we have an induction programme so Officials know the issues that we face. The flip side is the information void of how businesses understand how Welsh Government works. We get to sit down with the Minister but there isn’t the wider understanding of where we fit in”.*

This Anchor Company went on to say that they would welcome a secondment (6-12 months) from Welsh Government into their Company, which would allow the secondee to fully understand their business and needs. Welsh Government Account Managers do spend time with their Anchor Companies

and are encouraged to do so, but only up to a maximum of two weeks. Whilst a secondment would allow the Account Manager to get to really understand the Company, this could be difficult to resource in a time of government constraint (Wilcox, 1989; Diamond, 1965; Eisner and Pieper, 1984).

Another Anchor Company appreciated that Welsh Government took the time to understand their business and agenda and said that people were the key in understanding their business on a day-to-day basis. They said there are issues that Welsh Government are pursuing and have proactively flagged and are more or less, trying to understand.

At the other end of the spectrum, some Anchor Companies have experienced difficulties. One Anchor Company had had difficult issues, and whilst there were signs they can get constructive engagement and there is a potential platform to build engagement, they questioned whether their Account Manager had too many companies to look after. Some of the Anchor Companies were eager to understand what support was available to them:

*“For me to gain confidence, I would like an awareness of what support other Anchor Companies have received. I would like to get an idea of how Welsh Government works at its best with Anchor Companies. This might also put Anchor Companies in touch with one another”.*

The comment above suggests that the relationship between Welsh Government and the Anchor Company is not as strong as it could be and that increased dialogue needs to be undertaken so that the Anchor Company fully

understands the offer. Anchor Companies do get the opportunity to network with one another however meetings are held at various locations around Wales, which could make it difficult for some Anchor Companies to meet.

Understanding business needs is the responsibility of the Account Director and Account Manager. If an account plan has been co-authored, then both sides should understand what support is available to them.

Respondents were asked if their Account Manager and Welsh Government understood their business activities in Wales. Overall the response was positive. One respondent said that Officials were working harder to get an understanding and that there is currently a willingness to assist. The relationship between Welsh Government and an Anchor Company is crucial to ensure the correct levels of support are in place.

Respondents commented that they engage with Account Managers over a wide range of issues and projects but again this varied from company to company. For some, the engagement was no more than a phone call and infrequent / informal meetings. Other companies enjoy a close working relationship with their Account Manager and others within Welsh Government on clearly defined projects.

The relationship between the Account Manager and the Anchor Company is paramount and both parties need to strive for a happy medium in terms of communication and its frequency. Most of the Anchor Companies would like

to see a more regular and structured communication however this could be difficult when resources are under pressure. This is another quandary for Welsh Government as it is imperative to maintain an open and honest relationship so that all involved understand and manage expectations. Resourcing that time however can burden an already pressurised department.

Being awarded Anchor status means that Welsh Government has recognised the importance of that company to Wales and therefore has a desire and willingness to support. A contented Anchor Company is an appreciative Anchor Company and will become an Ambassador for Wales.

Where Anchor Companies were negative in their comments, generally the relationship was poor and expectations had not been managed. This would suggest that Welsh Government do not understand the needs of the business and delivery becomes difficult. The key is spending more time with Anchor Companies but at what cost to Welsh Government? Account Managers generally have a portfolio of 25-30 companies but are also required to manage re-active enquiries also.

One option could be to cut the number of Anchor Companies and spend more time with those who remain. The issue with this option is that once Anchor Company status is given, it would be very difficult to remove and could be embarrassing.

Different Anchor Companies clearly have different needs. Some seek only on-going financial support, whilst others cite a need to change a particular policy in order for them to be able to do business in a more productive manner. The one area that binds all of this together is the relationship between the Anchor Company and Welsh Government. The third contribution to knowledge that this study makes therefore is the importance of a strong relationship between an Anchor Company and Welsh Government. This also leads to the third recommendation, which is for Welsh government to increase their levels of engagement with Anchor companies.

### **Further Development of the Anchor Company Network**

Dankbaar (1994) says “companies learn most and most quickly from other companies” and this study is consistent with this finding although the Anchor Company Network does requires further work. Cassidy *et al.*, (2005) identified four stages of cluster development: latent, developing, established and transformation. Many clusters can be at different stages and the Welsh Government Anchor Company policy is in the latent or development stage.

The Welsh Government Anchor Company network is a relatively inexpensive support mechanism, which can be used to reinforce growth. Much learning and knowledge exchange can take place at Anchor Company meetings, which allows them to air any issues, or concerns, which leads to communities of practice. Tremblay (2006) argues that communities of practice could be viewed as a form of human capital development within clusters. This is a

useful tool in a partnership-based policy such as the Welsh Government Anchor Company policy. The communities of practice approach stress the importance of sharing and learning and promotes on-going interaction, which can lead to innovation and improved performance.

Whilst a small number of the Anchor Companies said they were content with the format, a large proportion of Anchor Companies said the network needed to be strengthened to clarify the purpose and value of attending. Some also highlighted the need to identify the outcome of each event so that they could justify the time and commitment (typically half a day). There is a need to reinforce the Anchor Company policy now that it has been developed. The attractiveness of being an Anchor Company in Wales has real merit, especially when Anchor Companies are competing internally for projects.

Competitiveness is a broad concept used in economic development but can from an Anchor Company perspective be described as the ability to sell products or services at a profit over a sustained period of time. Armstrong and Taylor (2000) found that in order to increase competitiveness, government had an obligation to provide support for the development of networks. This study is consistent with this finding as all the Anchor Companies interviewed found merit in the Anchor Company Network despite its faults. Some of the Anchor Companies who regularly attended the meetings said the events had 'the same old faces' and that encouragement from other Anchor Companies to attend, could re-invigorate the event and the associated networks.



Whilst the Anchor network is still very much in its infancy, some of the respondents felt further work should be undertaken to establish what the Anchor Companies really want. Welsh Government could also facilitate strategic networking between certain companies who may be in the same sector or have similar issues.

Interestingly some respondents advised those with 'big personalities' or the larger companies could easily dominate any meaningful discussions and the smaller, more intimate Anchor Company meetings could prove more productive. One Anchor Company advised that they did not like the events as they felt it was used as a sales pitch for Welsh Government or the external organisations that Welsh Government had arranged for the event. They went on to say that as they were already located in Wales, they did not need further convincing about the merits of being located in Wales.

Facilitating Anchor Company meetings and events is a simple task for Welsh Government, the difficulty is providing the right content for the right companies.

### **Less Bureaucracy with regards to Financial Support**

Financial support will always be the most popular business support tool offered by an Account Manager. All the Anchor Companies and SMEs interviewed commented about the bureaucracy surrounding financial incentives, which supports existing literature (Evans, 2000). Whilst some of

the Anchor Companies interviewed understood the need for government to be diligent and spend public money wisely, there were still negative comments.

One Anchor Company commented, “I like to do a good job but it takes me more than 100 hours to prepare a case” (i.e. an application for financial support). Anchor Companies are keen to see a less bureaucratic process around accessing services such as grant funding and improving the speed of delivery. Whilst many of the Anchor Companies appreciated that financial support from the public purse will always be a bureaucratic process, they did feel this was an area, which could be improved. This is a dilemma for Welsh Government, as processes have to be followed correctly to minimise any risks, which may be involved. Nobody wants to see an investment go pear shaped and Welsh Government must be seen to do everything to ensure the investment is safe.

Welsh Government will always try to support a major employer especially if they can be encouraged to create jobs, growth and wealth within the Welsh economy. Politicians and government are measured crucially by how many jobs have been created and an investment will always be a good news story, which is consistent with Mulgan and Lee (2001). A day-to-day Account Manager who understands the needs of the business together with the Welsh Government offering is therefore imperative. A strong relationship will ensure an honest two-way dialogue where expectations can be managed and support expedited at speed.

The third contribution that this study makes to practice therefore is that different Anchor Companies want different areas of support so a one size fits all policy simply won't work.

To summarise, the research found no academic literature with regards to whether and what ways the Welsh Government offer to Anchor Companies in Wales can be improved in terms of the specific Anchor Company policy. The research found that Anchor Companies, who had high levels of satisfaction, did not think the Welsh Government offering could be improved and Anchor Companies with lower levels of satisfaction gave suggestions as to how the offer could be improved.

Different Anchor companies have different needs and the one area that binds this together is Account Management. A strong relationship between Welsh Government and an Anchor Company will see a plethora of support being offered. This could be in the form of finance, skills training, supply chain support etc. 'Soft' support is also as important as 'hard' support. In some instances, a conversation with a Minister, brokered by an Account Manager can have a huge impact. The third contribution that this study makes to knowledge is the importance of a strong relationship between an Anchor Company and Welsh Government.

The third contribution that this study makes to practice is that different Anchor Companies want different areas of support, so a one size fits all policy simply won't work.

The third recommendation that this study makes therefore is to increase the level of engagement Welsh Government has with its Anchor Companies.

**5.5 To identify whether there are sectoral differences with regards to the Welsh Government offering in terms of the above.**

Clustering policies have become popular amongst policymakers on a regional as well as national level. In a time of austerity, a clustering policy offers the policymaker a low cost solution with potential high returns (Benneworth and Charles, 2001). The Welsh Government Anchor Company policy is a low cost intervention, which promotes contact between companies.

This study found there are sectoral differences with regards to the Welsh Government offering, however the sectors are very different in need related to the non-comparability of different sectoral needs.

Welsh Government has been working with sectors since 2010, following the implementation of Economic Renewal: A New Direction. Welsh Government at this time restructured the Department for Economy and Transport so that Account Managers were based within one of the sectors rather than being County based. This would allow them to understand the needs of not only the Anchor Company, but also the sector as a whole.

Evans *et al.* (2008) found that different sectors have different impacts on the economy and this study is consistent with that finding. The Advanced

Materials and Manufacturing sector turn over, more projects than any other sector within Welsh Government and the research found satisfaction is very high.

One Anchor Company within this sector said they were delighted with the support they had received and were currently getting from Welsh Government, but they also went on to say they knew this wasn't replicated elsewhere. The impact they have on the Welsh economy means that Welsh Government takes them very seriously. Another Anchor Company within the Advanced Materials and Manufacturing sector said that without Welsh Government financial support, they would have been at risk and the financial support given to them, had helped secure their plant.

The Energy sector in comparison to the Advanced Materials and Manufacturing sector tends to have larger projects, which have long lead times. The research found that satisfaction levels within this sector are not as high, although some of the relationships are still in their infancy.

Comments within this sector included "the relationship is still very young" or "it's difficult to quantify what we've had". The companies within this sector tend to be complex in nature and can have multiple entry points for Welsh Government. One criticism of Welsh Government was that an Anchor Company within this sector wanted a single point of contact that could capture all the information from all of the other departments. Whilst this may be a solution to the needs of this Anchor Company, the reality is that resources

within Welsh Government are constrained and other Anchor Companies could suffer if the levels of engagement were to significantly increase.

Currently there is one Anchor Company in Wales that has a dedicated full time Account Manager that works solely with them and only them. However, Welsh Government does not have the capacity to provide this resource to all Anchor Companies.

Anchor Companies within the Construction Sector largely criticised the complicated planning laws, which makes it difficult and expensive for them to develop land and build houses. These Anchor Companies went on to say that local authorities were anti development, which went against Welsh Government policy and creates an even more complicated legislative picture.

Anchor Companies within the Construction Sector are indigenous and therefore fully integrated with the local supply chain. They do not seek financial support as a priority but rather Ministerial influence to foster, encourage and if possible, force local authorities to follow Welsh Government policy. One of the Construction Companies interviewed said they had had several meetings with the Minister and also with the First Minister therefore, the 'soft' support of Ministerial influence is important to them.

Interestingly, one Anchor Company within the Construction sector advised that sales are better in South Wales as opposed to North Wales "so you get a better return for your money in the South". Sales values they said are

depressed in the North but that it is also so much harder with the added issues of trying to get planning permissions with the local authorities.

Historically, only the foreign owned companies have used the threat of relocating elsewhere, but the researcher was advised by one indigenous Anchor Company that they would consider relocating to England, which is only a short distance from their head office. Anchor Companies who are fully integrated with the local supply chains tend to be indigenous and should be fully supported by Welsh Government, to ensure they do not relocate elsewhere.

The final contribution that this study makes to practice is where indigenous Anchor Companies are fully integrated with the local supply chains, Welsh Government should seek innovative solutions to their issues to ensure they remain in Wales.

A strong relationship between Welsh Government and the Anchor Companies is paramount when delivering business support. Account Managers who deal with the Anchor Companies on a day-to-day basis must be able to understand the needs of the business and tailor support to suit them.

Research suggests that this can only be achieved if the Account Manager spends a significant amount of time with the Anchor Company. As mentioned previously this is a dilemma for Welsh Government as resources and budgets are limited going forward.

One Company advised that a piece of work could be done to see what the issues were within each sector and then packages of support could be tailored for each Anchor Company. The final contribution that this study makes to knowledge therefore, is that the research found that there are sectoral differences with regards to the Welsh Government Anchor Company offering, related to the non-comparability of different sectoral needs.

The sectors are very different in need and the companies within the sectors will also have different needs or issues. A structured Account Management approach with a service level agreement will ensure that expectations can be managed and support tailored.

To summarise, whilst there are sectoral differences with regards to the Welsh Government offering, the needs of the Anchor Companies are very different and should not be compared.

The final contribution that this study makes to knowledge is that the research found that there are sectoral differences with regards to the Welsh Government Anchor Company offering.

The final contribution to practice that this study makes is that where indigenous Anchor Companies are fully integrated with the local supply chains, Welsh Government should seek innovative solutions to their issues to ensure they remain in Wales.



The final recommendation that this study makes is that Welsh Government Account Managers should have a service level agreement with their Anchor Companies so that expectations can be managed and support can be tailored to ensure they become embedded in the area.

## **5.6 Summary**

This chapter has discussed the four research objectives around the central research aim utilising the inductive analysis of the interview responses. Key areas emerged from the findings, which helped inform contributions to knowledge and practice. Recommendations are also presented.

The terms cluster has grown in popularity since first being coined by Porter and has been seized by policymakers as a way of identifying and / or creating industrial clusters. There are critics who question the understanding of policymakers particularly as to how clusters work and whether they should intervene. This is of particular interest as clusters begin to move from a spatial phenomenon to a tool for use in economic development. The specific Welsh Government Anchor company policy whilst still in its infancy has real tangible merit but further work is required.

The following chapter presents the conclusions of the study together with recommendations that Welsh Government can undertake to support Anchor Companies in Wales.

## Chapter 6: Conclusion

*“The development of clusters promised a seemingly easy answer to the challenges created by increased international competition and the growing importance of innovation in the knowledge economy – particularly for smaller regions tied up to traditional industries. Policy analysts, academics, and industry were happy to follow as it simplified their task of explaining and promoting regional development economics. This enthusiasm was further fuelled by the significant amounts of public money that flowed to cluster development initiatives.”*

Cassidy et al., (2005)

### 6.1 Introduction

The last chapter discussed the results of the study, identified contributions to knowledge and practice and offered recommendations.

This chapter will present the conclusions of this study and suggest ways in which the recommendations can be progressed.

### 6.2 Overview of Aim, Objective, Research Questions and Key Findings

This study has examined results from primary research in relation to the central research aim: -

## **To investigate how is Welsh Government supporting Anchor Companies in Wales**

Four research objectives emerged from the literature, which required examination in order to form a sound discussion. The research objectives are: -

1. To evaluate how satisfied Anchor Companies are with the current offering
2. To determine whether the right business support structures are in place to support Anchor Companies
3. To analyse whether and in what ways the offer to Anchor Companies in Wales can be improved and
4. To identify whether there are sectoral differences with regards to the Welsh Government offering in terms of the above

### **6.3 Relevance of the Research Question**

In 2013, thirty nine per cent of the private sector workforce in Wales was employed by a large company i.e. more than two hundred and fifty employees (Meechan, 2014). Historically, Wales has placed great emphasis on attracting inward investment (Hill and Munday, 1992; Evans *et al.*, 2008) and has been successful in doing so. What Wales has been relatively poor with, is its aftercare not only of FDI companies (Porter and Gallardo, 2007) but indigenous companies also.

The specific Welsh Government Anchor Company policy, which has been designed with both FDI and indigenous companies in mind, has its roots within cluster theory. Cluster theory highlights the importance of knowledge exchange and interaction, which can result in increased R&D and innovation. Cluster theory however, is not without its critics. Martin and Sunley caution, “the cluster concept should carry a public health warning”. Both Cassidy *et al.*, (2005) and Anderson *et al.*, (2004) advise that cluster theories have become dangerously fashionable and have become a ‘magic recipe’ to meet the challenges of the modern economy.

Analysing clustering and its relationship to both national and regional government policy has been considerable over the last twenty years. From an economic development point of view, its understanding has been the subject of scrutiny. Policymakers can be criticised for trying to create clusters in areas which they think will bring economic growth, rather than providing the conditions to allow clusters to develop themselves.

This study has investigated how Welsh Government is supporting Anchor Companies in Wales and whether the offer can be improved. Whilst there is no literature available on how Welsh Government is supporting Anchor Companies in Wales i.e. in the specific context of the Anchor Company Policy, a substantial literature review examined previous policies and programmes relating to regional economic policy. In a time of austerity, consideration for public money together with value for money underlines the importance of the research question.

Welsh Government considers its Anchor Companies as strategically important to the economy of Wales and has developed and implemented the specific Anchor Company policy in order to enhance those relationships. Despite a partnership approach to this policy, this study found levels of dissatisfaction.

In achieving the aim and objectives, this study has made a number of important contributions to knowledge and practice:

#### **6.4 Contributions to Knowledge**

The main contribution to knowledge involves extending previous analysis of policy in Wales aimed at large indigenous or foreign firms, in a range of sectors, into a current sectorally based Anchor Company policy.

The policy is aimed at both indigenous and foreign owned companies, however the study found it was the foreign owned Anchor Companies who were most satisfied. This contribution to knowledge is not a surprise given that these are the companies who have historically been able to lever large amounts of financial support into their plants and who continue to do so. The indigenous Anchor Companies find it harder to lever the same levels of support, as they are unable to use the threat of relocating or haven't done so historically.

The second contribution to knowledge within this study, found little evidence of integration between the Anchor Companies and the local supply chain. All

of the SMEs interviewed were eager to engage with the Anchor Companies but many are reluctant to do so.

The purchasing powers of many foreign owned Anchor Companies generally sit outside of Wales and the reality is, they neither have the desire or power to engage with Welsh suppliers.

The third contribution to knowledge made by this study links with the first contribution. Anchor Companies, who had high levels of satisfaction, did not think the Welsh Government offering could be improved, whilst the Anchor Companies with lower levels of satisfaction gave suggestions as to how the offer could be improved.

As previously discussed foreign owned Anchor Companies are most satisfied because it is harder for indigenous Anchor Companies to lever financial support into their plants. This can adversely affect the relationship between the Welsh Government and the indigenous Anchor Company.

The final contribution to knowledge made by this study is that the research found that there are sectoral differences with regards to the Welsh Government Anchor Company offering, relating to the non-comparability of different sectoral needs.

The needs of the sectors are very different and it may not always be possible for Welsh Government to deliver what they need. The relationship between

the Anchor Company and Welsh Government is paramount, so that each organisation understands what is expected of them. Even when little is delivered in terms of support, if the relationship is good then satisfaction will be high.

## **6.5 Contributions to Practice**

The contributions to practice identify how the current Anchor Company policy is perceived by the firms themselves and identifies alternative future approaches that may be necessary because of resource constraints.

The first contribution to practice that this study makes is that policymakers should ensure that innovative solutions are created to support both foreign owned and indigenous Anchor Companies. Satisfaction levels are high with foreign owned Anchor Companies but less so with their indigenous counterparts. As government constraints become more apparent, satisfaction levels need to be kept as high as possible further cementing relationships.

The second contribution to practice that this study makes is that 'soft support' e.g. access to Ministers is equally as important as 'hard support' e.g. finance. This was particularly evident with the foreign owned Anchor Companies who used the Minister and Welsh Government to their advantage when competing internally for projects. This benefit was however appreciated by almost all of the Anchor Companies.

It would be difficult and unrealistic for a Minister to embark on a programme of engagement with all of the Anchor Companies. A more suitable approach would be for the Minister to host an event where an introduction could be made to all the Anchor Companies which could be followed by a focussed question and answer session.

The third contribution to practice that this study makes is that a one size fits all policy, simply won't work especially when the needs of the Anchor Companies are so varied. The Anchor Companies sit within several sectors so policymakers should link specific support to specific sectors in order to get real impact.

The final contribution to practice that this study makes is that sectoral differences do exist and the needs of the sectors are quite different. There is a requirement to embed all the Anchor Companies in Wales as much as possible however, indigenous Anchor Companies who are already fully integrated with the local supply chains will have differing needs to their foreign owned counter parts. Welsh Government should seek innovative solutions to support indigenous Anchor Companies to ensure they too remain embedded in Wales.

## **6.6 Recommendations for Welsh Government Policymakers**

The recommendations identify ways in which, as a result of this study, practice may beneficially change in terms of the way the Anchor Company



policy is undertaken. The aim was to give policymakers a better understanding of the relationship between Welsh Government and its Anchor Companies. From a business development perspective, this study may also help with skilled labour gaps, supply chains, knowledge spillovers etc. For policymakers, this can also inform and assist prioritisation in a time of austerity and increasing budget cuts.

Whilst Welsh Government completes an internal satisfaction survey of the Anchor Companies in Wales, this study recommends that an independent satisfaction survey should be undertaken as an alternative. There is a risk that with an internal survey, the Anchor Companies will not be as open and honest with their responses for fear of upsetting Welsh Government.

The second and most important recommendation from this study is that policymakers should see how the existing Anchor Company policy could be linked with other Welsh Government business support policies. There is an opportunity for policymakers to put pressure on Anchor Companies to do more with their local supply chain. This recommendation could become a condition of having Anchor Company status.

Whilst this could be difficult to implement for foreign owned Anchor Companies who say their hands are tied with regards to sourcing, it would force management at a local level to become more creative with their supply chain activities.

This study found that the relationship between an Anchor Company and Welsh Government is paramount. The third recommendation from this study is that Account Managers should increase its level of engagement with Anchor Companies. Despite low levels of satisfaction with some of the Anchor Companies, even they could still see the benefit of having a fruitful relationship with Welsh Government.

The final recommendation that this study makes is that the relationship between Welsh Government and the Anchor Company should be formalised. An agreement such as this (which differs from the Account Plan), would set out the expectations from both parties thus reducing dissatisfaction levels and increasing embeddedness.

## **6.7 Limitations of the Study**

As with all research, this study has limitations that need to be discussed so that the results can be considered in the correct context.

The first limitation of this study is that only firms from three of the nine sectors were interviewed as the researcher felt they would be easier to access, given that these sectors had a presence in North Wales (the same location as the researcher). The sample can therefore be considered in some respects as a convenience sample, though; there were however other reasons which also made these sectors and comparison between them, of relevance. The three sectors chosen have much in common in that many Companies could sit in

either sector e.g. a company that manufactures solar panels could sit in Construction, Energy or Advanced Materials and Manufacturing. These sectors also tend to have similar requests for support e.g. support for capital investment, training, apprenticeships etc.

The second limitation of this study is that the research did not specifically measure the knowledge spillover effect of the Anchor Companies in their particular regions. This study found that the foreign owned Anchor Companies have no appetite or desire to engage with their local supply chains. SMEs are eager to engage as much as possible but the Anchor Companies argue that their purchasing powers are outside of Wales.

## **6.8 Suggestions for Future Research**

As a result of these limitations, this study indicates a number of avenues for future inquiry into how Welsh Government is supporting Anchor Companies in Wales.

The first recommendation for future research would be to conduct a study on all Anchor and strategically important companies in Wales, rather than a limited number of sectors. The study should aim to capture all or as many companies within the sectors as possible.

The research could also focus on impacts on productivity, employment, training, R&D, supply chains and exports of both indigenous and foreign

owned companies. For policymakers, the results of this research could help them to decide where they get the best value for money.

The second recommendation for further work would be, to measure the knowledge spillover effect of the Anchor Companies in their particular regions. Again, whilst research has been done in this area previously with foreign owned companies, no literature exists with regards to the specific Anchor Company policy. Whilst this can be difficult to analyse (Acs *et al.*, 2012), found foreign owned companies can have a positive effect on indigenous companies (Grög and Strobl, 2002), which is inconsistent with this study.

The findings from this further work would allow policymakers to measure the spillover effects of the Anchor Companies and allow for comparisons. Where knowledge travels well from an Anchor Company, which encourages innovation and growth, this could be used as a benchmark with other Anchor Companies where knowledge does not travel as well.

Where budgets are constrained going forward, this further work would again allow the policymaker to decide which companies should be supported and how.

## **6.9 Final Comments**

This study has not closed the debate on how Welsh Government is supporting Anchor Companies in Wales, but rather it has reinvigorated a whole new field of study.

Clusters have become the object of desire for many cities and regions which policymakers hope, will ultimately lead to high levels of productivity, growth and employment. Interestingly, Porter (1990) rejects industrial targeting and encourages policymakers to strengthen clusters that already exist. Whilst clusters may not be the 'magic recipe' to meet the challenges of the modern economy, they are a fascinating phenomenon which governments will no doubt continue to target.

## References

Abraham, F. and Van Rompuy, P. (1992) 'Convergence-divergence and the implications for community structural policies', *Cahiers Economiques de Bruxelles*, 3(92), pp. 279-318.

Acemoglu, D., Johnson, S. and Robinson, J.A. (2005) Institutions as a fundamental cause of long-run growth, *Handbook of Economic Growth*, 1, pp. 385-472.

Ache, P. (2004) 'Cluster concepts — The social engineering of a new regional institutional fix', *Cluster Development and Policy*, pp. 1 -20.

Alchian, A.A. (1950) 'Uncertainty, evolution, and economic theory', *The journal of political economy*, pp. 211-221.

Acs, Z.J., Brooksbank, D.J., O'Gorman, C., Pickernell, D. and Terjesen, S. (2012) 'The knowledge spillover theory of entrepreneurship: an application to foreign direct investment', *International Journal of Entrepreneurship and Small Business*, 15(2), pp. 237-261.

Alden, J. (1996) 'The transfer from a problem to powerful region: the experience of Wales', *Regional Development Strategies: A European Perspective*, pp. 129-158.

Ali, S. and Guo, W. (2005) 'Determinants of FDI in China', *Journal of global business and technology*, 1(2), pp. 21-33.

Allen, J. and Thompson, G. (1997) 'Think global, then think again—economic globalization in context', *Area*, 29(3), pp. 213-227.

Alonso, W. (1964) *Location and land use. Toward a general theory of land rent*. Cambridge MA: Harvard University Press.

Amin, A. and Thrift, N. (1994) Living in the global. *Globalization, institutions, and regional development in Europe*. Oxford University Press, pp.1-22.

Andersson, T., Schwagg Serger, S., Sorvik, J. and Wise Hansson, E. (2004) *The Cluster Policies Whitebook*, International Organisation for Knowledge Economy and Enterprise Development: Malmo.

Anderton, S. L. (1995) 'Are the new business connects capable of successfully fulfilling their aims and objectives?', *Unpublished Diploma thesis, Department of City and Regional Planning, Cardiff University*.

Arita, T. and McCann, P. (2000) 'Industrial alliances and firm location behaviour: some evidence from the US semiconductor industry', *Applied Economics*, 32(11), pp.1391-1403.

Armstrong, H.W. (1995) 'Convergence among regions of the European Union, 1950–1990', *Papers in Regional Science*, 74(2), pp.143-152.

Armstrong, H.W. (2001) 'Regional selective assistance: is the spend enough and is it targeting the right places?', *Regional Studies*, 35(3), pp. 247-257.

Armstrong, H. and Taylor, J. (2000) *Regional economics & policy*. Oxford: Blackwell Publishing, 3, pp. 5-63.

Athey, G. (2009) 'Economic development in the UK: challenges during and after the recession', *Local Economy*, 24(6-7), pp. 604-611.

Audretsch, D.B. and Keilbach, M. (2007) 'The theory of knowledge spillover entrepreneurship', *Journal of Management Studies*, 44(7), pp. 1242-1254.

Audretsch, D.B. and Link, A.N. (2012) 'Entrepreneurship and innovation: public policy frameworks', *The Journal of Technology Transfer*, 37(1), pp. 1-17.

Aydalot, P. (1984) *The reversal of spatial trends in French industry since 1974*. New York: Finn publishers.

Aydalot, P. and Keeble, D. (1988) *High technology industry and innovative environments: the European experience*. New York: Routledge.

Backhouse, R.E. and Backhouse, R. (2002) *The Penguin history of economics*. London: Penguin.

Baden-Fuller, C. (1989) 'Exit from declining industries and the case of steel castings', *Economic Journal*, 99, pp. 949-69.

Balchin, P.N. and Bull, G.H. (1987) *Regional and urban Economics*. London: Harpercollins.

Baldwin, R.E. and Lyons, R.K. (1994) 'Exchange rate hysteresis? Large versus small policy misalignments', *European Economic Review*, 38, pp.1-22.

Bannock G., Baxter R. and Davis E. (1992) *The Penguin Dictionary of Economics*. 5<sup>th</sup> Ed. London: Penguin Books.

Barber, M. (2007) *Instruction to deliver*. Michigan: Politico's Publishing.

Barro, R.J., Sala-i-Martin, X., Blanchard, O.J. and Hall, R.E. (1991) 'Convergence across states and regions', *Brookings papers on economic activity*, pp.107-182.

Barro, R.J. and Sala-i-Martin, X. (1992) 'Convergence', *Journal of political Economy*, pp. 223-251.

Barry, M. (2011) 'A Metro for Wales' Capital City Region: Connecting Cardiff, Newport and the Valleys', Cardiff *Business Partnership and IWA*. Cardiff.



Baumol, W.J. (1993) *Entrepreneurship, management and the structure of payoffs*. Cambridge: MIT Press.

Bayoumi, T.A. and Rose, A.K. (1993) 'Domestic savings and intra-national capital flows', *European Economic Review*, 37(6), pp.1197-1202.

Becattini, G. (2004) *Industrial districts: a new approach to industrial change*. MA, USA: Edward Elgar Publishing.

Bechtold, B. (2014) 'Neoclassical Economics and Federal policies: The Case of the Minimum Wage', *Review of Radical Political Economics*, Vol. 46, pp. 496-501.

Bell, D. (1973) 'The coming of the post-industrial society', *The Educational Forum*, 40, pp. 574-579.

Benneworth, P. and Charles, D. (2001) 'Bridging cluster theory and practice: learning from the cluster policy cycle', *Innovative Clusters*, p.389.

Bergman, E. and Feser, E. (1999) *Industrial and Regional Clusters: Concepts and Comparative Applications*, Regional Research Institute, West Virginia University.

Birch, D.L. (1979) 'The Job Generation Process: Final Report to Economic Development Administration', *MIT Program on Neighborhood and Regional Change*, 17, pp. 302.

BIS (2012) Industrial strategy: UK sector analysis. Available at: <https://www.gov.uk/.../uploads/.../12-1140-industrial-strategy-uk-sector-analysis.pdf> (Accessed 26 September 2015).

Blackburn, R.A. and Smallbone, D. (2008) 'Researching small firms and entrepreneurship in the UK: Developments and distinctiveness', *Entrepreneurship Theory and Practice*, 32(2), pp. 267-288.

Blanche, M.T., Durrheim, K. and Painter, D. (2006) *Research in practice: Applied methods for the social sciences*. Cape Town: UCT Press.

Blakely, E. (1994) *Planning local economic development – Theory and practice*. 2<sup>nd</sup>Edn. Newbury Park (CA): SAGE Publications.

Bolton, J.E. (1971) *Small firms: Report of the commission of inquiry on small firms*. London: HMSO.

Borts, G.H. and Stein, J.L. (1964) *Economic growth in a free market*. New York: John Wiley.

Brand, S., Hill, S. and Munday, M. (2000) 'Assessing the impacts of foreign manufacturing on regional economies: the cases of Wales, Scotland and the West Midlands', *Regional Studies*, 34(4), pp. 343-355.

Brenner, N. and Schmis, C. (2014) 'The Urban Age in question. The role of economic development and community self reliance in rural South Africa', *The Journal of Modern African Studies*, 37 (3), pp. 731-755.

Britain, G. and Barlow, M. (1940) *Royal Commission on the Distribution of the Industrial Population Report: Presented to Parliament by Command of His Majesty January 1940*. London: HMSO.

Brooksbank, D.J. and Pickernell, D.G. (1999) 'Regional competitiveness indicators. A reassessment of method', *Local Economy*, 13(4), pp. 310-326.

Brooksbank, D.J., Clifton, N., Jones-Evans, D. and Pickernell, D.G. (2001) 'The end of the beginning?, Welsh regional policy and Objective One', *European Planning Studies*, 9(2), pp. 255-274.

Brooksbank, D., Griffiths, D., Miller, C., Morse, L., Packham, G., Pickernell, D. and Thomas, B. (2002) *WEI Working Paper Series Paper 22* 'Teaching the Welsh to fish', The Reasons for, Structure of and Preliminary Results of Enterprise College Wales.

Brooksbank, D.J. and Pickernell, D.G. (2001) 'Changing the name of the game? RSA, indigenous and inward investors and the National Assembly for Wales', *Regional Studies*, 35(3), pp. 271-277.

Brown, R. (2000) 'Clusters, Supply Chains and Local Embeddedness in Fyrstad', *European Urban and Regional Studies*, 7, 4, pp. 291-306.

Bryman, A. (2012) *Social research methods*. New York: Oxford University Press.

Bryman, A. and Bell, E. (2007) *Business Research Methods*. 2nd ed. Oxford: Oxford University Press.

Burrell, G. and Morgan, G. (1979) *Social paradigms and organizational analysis: Elements of the sociology of corporate life*. Oxford: Taylor and Francis Group.

Cameron, W.B. (1963) *Informal sociology: A casual introduction to sociological thinking*. New York: Random House.

Cantwell, J. (1991) The International Agglomeration of R&D, in M. C. Casson (Ed.), *Global Research Strategy and International Competitiveness*. Oxford: Basil Blackwell.

Cantwell, J. (1995) 'The globalization of technology: what remains of the product cycle model?', *Cambridge Journal of Economics*, 19, pp. 155-155.

Cassidy, E., Davis, C., Arthurs, D., Wolfe, D. (2005) '*Measuring the National Research Council's Technology Cluster Initiatives*', Presented at the CRIC. Cluster Conference, Beyond Cluster –Cluster Practices and Future Strategies, Ballarat, Australia.

Castells, M. (2011) *The rise of the network society: The information age. Economy, society, and culture* (Vol. 1). John Wiley & Sons.

Castells, M. and Hall, P. (1994) *Technopoles of the World: the Making of 21<sup>st</sup> Century Industrial Complexes*. New York: Routledge.

Castro, E. and Jensen-Butler, C. (1999) '*Regional economic inequality, growth theory and technological change*'. Discussion Paper 9903, Department of Economics. St Andrews: University of St Andrews, Scotland.

Cato, M. S. (2004) *The Pit and the Pendulum: A Co-operative Future for Work in the Welsh Valleys*. Cardiff: University of Wales Press.

Charles, D. and Howells, J. (1992) *Technology Transfer in Europe: Public and Private Networks*. London: Belhaven.

Chinitz, B. (1961) 'Contrasts in agglomeration: New York and Pittsburgh', *The American Economic Review*, pp. 279-289.

Chinitz, B. (1964) *City and Suburb: The Economics of metropolitan growth*. Englewood-Cliffs NJ: Prentice-Hall.

Christaller, W. (1933) *Die zentralen Orte in Süddeutschland: eine ökonomisch-geographische Untersuchung über die Gesetzmässigkeit der Verbreitung und Entwicklung der Siedlungen mit städtischen Funktionen*. Trans. Baskin, C., 1966. *Central places in southern Germany*. Wiesbaden: Prentice-Hall.

Cobb, C.W. and Douglas, P.H. (1928) 'A theory of production', *The American Economic Review*, 18(1), pp.139-165.

Conlisk, J. (1967) 'A modified neoclassical growth model with endogenous technical change', *Southern Economic Journal*, pp. 199-208.

Cooke, P. (2003) 'The regional innovation system in Wales: Evolution or eclipse', in Cooke, P, Heidenreich, M. & Braczyk, H.(eds) (2003) *Regional Innovation Systems*.

Cooke, P.N. and Morgan, K.J. (1998) *The associational economy: Firms, regions and innovation*. New York: Oxford University Press.

Cooke, P., Roper, S. and Wylie, P. (2003) 'The golden thread of innovation and Northern Ireland's evolving regional innovation system', *Regional studies*, 37(4), pp. 365-379.

Cornwall, J. (1993) *Economic malfunction and the role of the State*, Keynes and the Role of the State. London: Macmillan.

Cowie, P. (2012) 'SME policy evaluation: Current issues and future challenges', *Government, SMES and entrepreneurship development: Policy, practice and challenges*, pp. 243-257.

Crafts, N. (1998) 'Post – neoclassical endogenous growth theory: What are the policy implications?', *Oxford Review of Economic Policy*. (12) 2, pp. 30-47.

Creswell, J. (2009) *Research design; Qualitative and quantitative and mixed methods approaches*. London: Sage.

Crone, M. and Roper, S. (1999) 'Knowledge transfers from multinational plants in Northern Ireland', *Regional Science Association European Congress*.

Crone, M. and Watts, H.D. (2000) 'MNE supply linkages and the local SME sector: evidence from Yorkshire and Humberside', *Local Economy*, 15(4), pp. 325-337.

Cross, R. (1993) 'On the foundations of hysteresis in economic systems', *Economics and Philosophy*, 9(1) pp. 53-74.

Dankbaar, B. (1994) 'Research and technology management in enterprises: issues for Community policy: overall strategic review', SAST Project 8, Brussels: Commission of the European Communities.

Davies, J. (1993) *A history of Wales*. London: Penguin.

Day-Peters, A. (2000) 'Testing out meaning, an empirical investigation of what is good research', *Unpublished MA assignment Lancaster University*.

de Castro, E.A. and Jensen-Butler, C. (1999) 'Regional economic inequality, growth theory and technological change' (No. 9903) *Centre for Research into Industry, Enterprise, Finance and the Firm*. St Andrews: St Salvator's College.

de Groot, H.L. and van Schaik, A. (1995) *Relative convergence in a dual economy with tradeable and non-tradeable goods*. Tilburg: Tilburg University

Department of Trade and Industry (1988) DTI White Paper: DTI The Department for Enterprise. Available at: <http://www.dti.gov.uk/regional/regional-dev-agencies/tasking-framework/page12978.html>. (Accessed 12 November 2012).

Department of Trade and Industry, National Assembly for Wales and Scottish Executive (2000) 'Evaluation of regional selective assistance 1991-1995', *Arup Economics and Planning*. September.

Department of Trade and Industry (2006) 'Evaluating the impact of England's regional development agencies: Developing a methodology and evaluation framework', Occasional Paper No. 2. PA Consulting SQW Ltd. February.

Department of International Trade (2016) Department of International Trade figures show over 5000 new jobs in Wales. Available at: <https://www.gov.uk/government/news/department-of-international-trade-figures-show-over-5000-new-jobs-in-wales> (Accessed 13 October 2016).

Diamond, D.R. and Spence, N. (1983) *Regional policy evaluation: a methodological review and the Scottish example*. Aldershot: Gower.

Diamond, P.A. (1965) 'National debt in a neoclassical growth model', *The American Economic Review*, 55(5), pp. 1126-1150.

Dicken, P. and Malmberg, A. (2001) 'Firms in territories: a relational perspective', *Economic geography*. 77(4), pp. 345-363.

Dixon, R. and Thirlwall, A.P. (1975) 'A model of regional growth-rate differences on Kaldorian lines', *Oxford Economic Papers*, 27(2), pp. 201-214.

Doyle, J.R. and Gallagher, C.C. (1986) *The Size-distribution, potential for growth, and contribution to job-generation of firms in the UK: 1982-84*. University of Newcastle upon Tyne Department of Industrial Management.

Driffield, N. and Taylor, K. (2000) 'FDI and the labour market: a review of the evidence and policy implications', *Oxford Review of Economic Policy*, 16(3), pp. 90-103.

Dunn, E.S. (1954) *The location of agricultural production*. Gainesville: University of Florida Press.

Dunning, J.H. (1999) Trade, location of economic activity and the multinational enterprise: A search for an eclectic approach. *The Internationalization of the Firm*. University of Reading: Department of Economics.

Dunning, J.H. (2001) 'The eclectic (OLI) paradigm of international production: past, present and future', *International journal of the economics of business*, 8(2), pp. 173-190.

Duranton, G. and Puga, D. (2001) 'Nursery cities: Urban diversity, process innovation, and the life cycle of products', *American Economic Review*, pp. 1454-1477.

Easterby-Smith, M. T. and Lowe, A. (2002). *Management research: An introduction*. London: Sage Publications.

Eisner, R. and Pieper, P.J. (1984) 'A new view of the federal debt and budget deficits', *The American Economic Review*, 74(1), pp. 11-29.

Engelen, E., Sukhdev, S. and Williams, K. (2016) From Engels to the grounded city. *Wuppertal KW Conference Paper: CRESC*, Manchester.

English Partnerships (2004) *Calculating additionality*. 2<sup>nd</sup> Edition. September.

Erlenkotter, D. (1989) 'The general optimal market area model', *Annals of Operations Research*, 18(1), pp. 43-70.

Ethier, W.J. (1982) 'National and international returns to scale in the modern theory of international trade', *The American Economic Review*, 72(3), pp. 389-405.



European Commission. Cohesion Policy 2007-2013 Commentary and Official Taxes. Available at:

[ec.europa.eu/regional\\_policy/sources/docoffic/.../guide2007\\_en.pdf](http://ec.europa.eu/regional_policy/sources/docoffic/.../guide2007_en.pdf).

(Accessed July 2013).

Evans, A.W. (1973) *The economics of residential location*. London: Macmillan.

Evans, P., Holz, R. and Roberts, A. (2008) Empirical investigation of foreign direct investment in Wales. *Report sponsored by Welsh Assembly Government research Unit*.

Evans, T. and Pickernell, D. (2002) 'A review of regional selective assistance in Wales', *Welsh Economic Review*, 14(1), pp. 31–35.

Feldman, M. (2003) 'The locational dynamics of the US biotech industry: knowledge externalities and the anchor hypothesis', *Industry and Innovation*, 10(3), pp. 311-329.

Firn, J.R. (1975) 'External control and regional development: the case of Scotland', *Environment and Planning A*, 7(4), pp. 393-414.

Florida, R. (2002) '*The Great Creative Class Debate: Revenge of the Squelchers*', *Disposable Cities*, Issue 5.

Fothergill, S. (2005) 'A new regional policy for Britain', *Regional Studies*, 39 (5), pp. 659-667.

Fothergill, S. and Guy, N. (1990) *Retreat from the regions: Corporate change and the closure of factories*. London. Jessica Kingsley.

Friedman, M. (1968) 'The role of monetary policy', *American Economic Review*, 58, pp. 1–17.

Fujita, M., Krugman, P. and Venables A. (1999) *The Spatial Economy: Cities, Regions and International Trade*. Cambridge MA: MIT Press.

Gallent, N., Hamiduddin, I. and Madeddu, M. (2013) 'Localism, down scaling and the strategic dilemmas confronting planning in England', *Town Planning Review*, 84 (5), pp. 563-582.

Galliers R. J. (1991) *Choosing appropriate information systems research approaches: A revised taxonomy. Information Systems Research: Contemporary Approaches & Emergent Traditions*. (eds. Nissen, H. -E.; Klein, H. K. & Hirschheim, R.). Amsterdam: North Holland.

Garnise, S. (1997) 'The impact of European regional policy on the development of the regional tier in the UK', *Regional & Federal Studies*, 7(3), pp. 1-24.

Geary, F. and Stark, T. (2011) 'Regional GDP in the UK, 1861–1911: new estimates', *The Economic History Review*, 68(1), pp.123-144.

Gertler, M.S. (1992) 'Flexibility revisited: districts, nation-states, and the forces of production', *Transactions of the Institute of British Geographers*, pp. 259-278.

Gill, J. and Johnson, P. (1997) *Research methods for managers*. London: PCP.

Gill, S.F. (2005) 'A new regional policy for Britain', *Regional Studies*, 39(5), pp. 659-667.

Gilmore, A. and Carson, D. (1996) "Integrative" qualitative methods in a services context', *Marketing Intelligence & Planning*, 14(6), pp. 21-26.

Girma, S., Kneller, R. and Pisu, M. (2005) 'Exports versus FDI: an empirical test', *Review of World Economics*, 141(2), pp. 193-218.

Glaeser, E.L. (2000) The new economics of urban and regional growth. *The Oxford handbook of economic geography*.

Glaeser, E.L., Laibson, D. and Sacerdote, B. (2002) 'An economic approach to social capital'. *The Economic Journal*, 112(483), pp. 437- 458.

Glennerster, H. and Hills, J. (1998) *The state of welfare*, 2nd edn. Oxford: Oxford University Press.

Golledge, R.G. (1969) 'Geographical Relevance of Some Learning Theories'. *Association of American Geographers*. (59) 1, pp. 182-182.

Gordon, I. (2002) 'Regional policy and labour market adjustment', In Johansson, B., Karlsson, C. and Stough, R. *Regional Policies and Comparative Advantage*.

Gordon, I.R. and McCann, P (2000) 'Industrial Clusters: complexes, agglomeration and / or social networks', *Urban Studies*, 37, p. 513-532

Görg, H. and Greenaway, D. (2004) 'Much ado about nothing? Do domestic firms really benefit from foreign direct investment?', *The World Bank Research Observer*, 19(2), pp.171-197.

Graham, B. (2006) *Strategic fit, sustainability and rationale for intervention*. Presentation to Welsh Development Agency. Copthorne Hotel, Cardiff. 2 March.

Granovetter, P. (1985) 'Economic action and social structure: The problem of embeddedness', *American Journal of Sociology*, 91, pp. 481-510.

Granvotter, M. (1992) 'Economic institutions as social constructions: a framework for analysis', *Acta Sociologica*, 35, pp. 3-11.

Green, S.D., Newcombe, R.A., Fernie, S. and Weller, S. (2004) *Learning across business sectors: Knowledge sharing between aerospace and construction*. University of Reading: Reading, pp. 84.

Gripaios, P. (1998) 'The Welsh economy: an outside perspective', *Contemporary Wales*, 10, pp. 32-49.

Grög, H. and Strobl, E. (2002) 'Multinational companies and indigenous development: an empirical analysis', *European Economic Review*, 46 (5), pp. 1305-1322.

Guba, E.G. (1981) 'Criteria for assessing the trustworthiness of naturalistic inquiries', *Journal of Educational Technology Research and Development*, 29(2), pp. 75-91.

Gummesson, E. (2000) *Qualitative methods in management research*. London, New Delhi: Sage.

Gunn, L.A. (1978) 'Why is implementation so difficult?', *Management Services in Government*, 33(4), pp. 169-176.

Haltiwanger, J., Jarmin, R.S. and Miranda, J. (2013) 'Who creates jobs? Small versus large versus young', *Review of Economics and Statistics*, 95(2), pp. 347-361.

Hanson, G. (2001) 'Should countries promote FDI?', G-24 discussion paper 9, *Centre for Inter- national Development*, Harvard University.

Harvey, D. (1969) *Explanation in geography*. London: Edward Arnold.

Hayter, R. (1982) 'Truncation, the international firm and regional policy', *Area*, pp. 277-282.

Hazari, B.R. (1970) 'Empirical identification of key sectors in the Indian economy', *The Review of Economics and Statistics*, pp. 301-305.

Healey, M.J. and Ilbery, B.W. (1990) *Location and change: Perspectives on economic geography*. Oxford: Oxford University Press.

Heckscher, E.F. (1919) 'The effect of foreign trade on the distribution of income', *Ekonomisk Tidskrift*, 497–512. Translated as chapter 13 in *American Economic Association*.

Heckscher, E.F. and Ohlin, B.G. (1991) *Heckscher-Ohlin trade theory*. California: The MIT Press.

Heilbrun, J. (1974) *Urban economics and public policy*. New York: New York Press.

Heilbrun, J. and McGuire, P. (1987) 'Site rent, land-use patterns, and the form of the city', *Urban economics and public policy*, 20 (4), pp. 12-26.

Henderson, D. (1995) *Innovation and technology support infrastructure: Issues and priorities for Wales*. Report prepared for the Wales Regional Technology Plan.

Henning, E., Van Rensburg, W. and Smit, B. (2004) *Finding your way in qualitative research*. Pretoria: Van Schaik.

Hewings, G.J. (1982) 'The empirical identification of key sectors in an economy: a regional perspective', *The Developing Economies*, 20(2), pp.173-195.

Hildreth, P. and Bailey, D (2013) 'The Economic Behind the Move to 'Localism' in England', *Cambridge Journal of Regions, Economics and Societies*, 6, pp. 233-249.

Hill, J. and McGowan, P. (1999) 'A qualitative approach to developing small firm marketing planning competencies', *Qualitative Market Research: an International Journal*, 2(3), pp. 167-175.

Hill, S. and Morgan, B. (1998) *Inward investment, business finance and regional development*. London: MacMillan.

Hill, S. and Munday, M. (1991) 'The determinants of inward investment: a Welsh analysis', *Applied Economics*, 23(11), pp. 1761-1769.

Hill, S. and Munday, M. (1992) 'The UK regional distribution of foreign direct investment: analysis and determinants', *Regional Studies*, 26(6), pp. 535-544.

Hill, S. and Munday, M. (1994) *The regional distribution of foreign manufacturing investment in the UK*. Basingstoke: Macmillan.

Hill, S. and Williams, D. (2005) 'Accounting for real resource cost in regional development projects: Issues for appraisal and evaluation', Paper presented to the ESRC Urban and Regional Seminar. Leeds. October.

Hittleman, D.R. and Simon, A.J. (1997) *Interpreting educational research: An introduction for consumers of research*. Prentice-Hall, New Jersey.

HM Treasury (2003) *The Green Book: Appraisal and Evaluation in Central Government*.

Hood, N. and Young, S. (1976) 'US investment in Scotland-aspects of the branch factory syndrome', *Scottish Journal of Political Economy*, 23(3), pp. 279-294.

Hoover, E.M. (1937) *Location theory and the shoe leather industries* (Vol. 55). Cambridge, Mass: Harvard University Press.

- Hoover, E.M. (1948) *The location of economic activity*. London: McGraw-Hill.
- Hoover, E.M. and Vernon, R. (1962) *Anatomy of a metropolis: The changing distribution of people and jobs within the New York metropolitan region*. Cambridge: Harvard University Press.
- Hotelling, H., (1990) Stability in competition. In *The Collected Economics Articles of Harold Hotelling* (pp. 50-63). London: Springer.
- Huggins, R., Morgan, B. and Williams, N. (2015) 'Regional entrepreneurship and the evolution of public policy and governance: Evidence from three regions', *Journal of Small Business and Enterprise Development*, 22(3), pp. 473-511.
- Hule, R and Stocker, H. (2000) *Economic consequences of hysteresis effects in FDI*, Working Paper, University of Innsbruck.
- Industrial Communities Alliance (2015) *Whose Recovery? How Upturn in Economic Growth in Leaving Older Industrial Britain Behind*, Industrial Communities Alliance: Barnsley.
- Isard, W. (1956) *Location and space-economy*. New York: John Wiley.
- Izushi, H. (1999) 'Can a development agency foster co-operation among local firms? The case of the Welsh Development Agency's Supplier Association Programme', *Regional studies*, 33(8), pp.739-750.
- Jacob, R., P.A. Julien and L. Raymond (1997) 'Compétitivité, savoirs stratégiques et innovation; les leviers de l'apprentissage collectif en contexte de réseau'. *Gestion*. Vol. 22 no 3, p. 93-100.
- Jones, A. (1989) 'Japanese investment – Welcome to Wales', *Welsh Economic Review*, 1 (2), pp. 60-64.

Jones, G. (1996) '*Wales 2010: Three years on*', Cardiff: Institute of Welsh Affairs.

Jones, M (1989) '*The Japanese are here - for better or worse?*', *Welsh Economic Review*, 1 (1), pp. 45-47.

Jones-Evans, D. (2002) 'Research and development in Wales', *Economic Development Committee, WAG*.

Kaldor, N. (1970) 'The case for regional policies', *Scottish Journal of Political Economy*, 17(3), pp. 337-348.

Kahn, R.L.C. and Cannell, C.F. (1957) *The dynamics of interviewing; Theory techniques and cases*. New York: Wiley.

Karlsson, C. (2008) *Handbook of research on innovation and clusters: Cases and policies* (Vol. 2). Cheltenham, UK and Northampton, MA, US: Edward Elgar Publishing.

Karlsson, C. and Stough, R. (2002) Introduction: Regional Policy Evaluation in the New Economic Geography. In Johansson B., Karlsson C. and Stough R. *Regional Policies and Comparative Advantage*. Cheltenham, UK and Northampton, MA, US: Edward Elgar.

Keynes, J.M. (1923) *A Tract on Monetary Reform*. London: Macmillan and Co

Kindleberger, C.P. (1969) 'American business abroad', *The International Executive*, 11(2), pp. 11-12.

Knickerbocker, F.T. (1973) 'Oligopolistic reaction and multinational enterprise', *The International Executive*, 15(2), pp.7-9.



KPMG (1994) *Supporting business success: A survey of business support services in Wales*, Report for CBI Wales and Business in the Community Wales.

Krugman, P. (1979) 'Increasing returns, monopolistic competition, and international trade', *Journal of international Economics*, 9(4), pp. 469-479.

Krugman, P. (1980) 'Scale economies, product differentiation, and the pattern of trade', *The American Economic Review*, 70(5), pp. 950-959.

Krugman, P. (1998) 'What's new about the new economic geography?', *Oxford review of economic policy*, 14(2), pp. 7-17.

Kuhn, T.S. (1962) *The structure of scientific revolutions*, International Encyclopaedia of Unified Science Vol. II, No. 2. Chicago: University of Chicago Press.

Kuhn, T.S. (1977) *Second thoughts on paradigms*. Selected studies in scientific tradition and change. Chicago: University of Chicago Press

Lang, M. (2016) All Around us: The Pontypool Deep Place Study. Available at: <http://www.cardiff.ac.uk/sustainable-places/research/projects/the-deep-place-study>. (Accessed February 2017).

Launhardt, W. (1885) *Mathematische begründung der volkswirtschaftslehre*. Leipzig: B. G. Teubner.

Leigh, N.G. and Blakely, E.J. (2013) *Planning local economic development: Theory and practice*. California: SAGE.

Lester, S (1999) An introduction to phenomenological research, Stan Lester Developments (online). Available at: [www.sld.demon.co.uk/resmethy.pdf](http://www.sld.demon.co.uk/resmethy.pdf) (Accessed 10 October 2016)

Lincoln, Y.S. and Guba, E.G. (1985) *Naturalistic inquiry*. (Vol. 75). Sage: London.

Lloyd, P.E. and Dicken, P. (1977) *Location in space: a theoretical approach to economic geography*. London; New York: Harper & Row.

Local Government Commission (2004) *Local economies. Smart Growth: Economic development for the 21<sup>st</sup> Century*. Available at: <http://www.lgc.org/economic/localecon.html>. (Accessed 12 February 2012).

Lösch, A. (1944) *Die räumliche ordnung der wirtschaft* (Gustav Fischer, Jena). English translation by Woglom, W (1954) *The economics of location*. New Haven: Yale University Press.

Lovering, J. (1984) *The " success" of Bristol, the " failure" of South Wales*, Department of Town Planning, University of Wales Institute of Science and Technology.

Lovering, J. (1996) 'New myths of the Welsh economy', Planet, *The Welsh Internationalist*, 116, pp. 6-16.

Lovering, J. (1999) 'Celebrating globalization and misreading the Welsh economy: the 'new regionalism in Wales'', *Contemporary Wales*, 11, pp. 12-60.

Lucas, R.E. (1988) 'On the mechanics of economic development', *Journal of Monetary Economics*, 22(1), pp. 3-42.

Mackay, R.R. (2003) 'Twenty-five years of regional development', *Regional Studies*, 37(3), pp. 303-317.

Malerba, F. (2004) *Sectoral systems of innovation: concepts, issues and analyses of six major sectors in Europe*. Cambridge: University Press.

Mankiw, N.G., Romer, D. and Weil, D.N. (1990) *A contribution to the empirics of economic growth* (No. w3541). National Bureau of Economic Research.

Markusen, A. (1996) 'Sticky places in slippery space: a typology of industrial districts', *Economic geography*, 72(3), pp. 293-313.

Markusen, A. and Park, S. (1994) 'Generalising New Industrial Districts: A Theoretical Agenda and an Application from a Non Western Economy', *Environment and Planning A*, Vol 27, p. 81-104.

Markusen, J.R. (1983) 'Factor movements and commodity trade as complements', *Journal of international economics*, 14(3-4), pp. 341-356.

Markusen, J. and Venables, A. (1999) 'Foreign direct investment as a Catalyst for industrial development', *European Economic Review*, 43, pp. 335-56.

Marlow, D. (2013) 'England's non-metropolitan cities: The long march to unlocking economic growth', *Local Economy* 28 (7-8) pp. 875-883.

Marshall, A. (1890) 1916, *Principles of economics: An Introductory Volume*. London: Macmillan.

Marshall, A. (1920) *Principles of economics*. 8th edn. London: Macmillan.

Marquand, H. A. (1932) *South Wales Needs a Plan*. London: Allen and Unwin.

Martin, P. (1998) 'Can regional policies affect growth and geography in Europe?', *The World Economy*, 21(6), pp. 757-774.

Martin, R. (1989) *The new economics and politics of regional restructuring: the British experience. Regional Policy at the Crossroads*. London: Jessica Kingsley.

Martin, R. and Sunley, P. (2001) 'Rethinking the "economic" in economic geography: broadening our vision or losing our focus?', *Antipode*, 33(2), pp. 148-161.

Martin, R. and Sunley, P. (2003) 'Deconstructing clusters: chaotic concept or policy panacea?', *Journal of economic geography*, 3(1), pp. 5-35.

Martin, R. (2008) 'National Growth Versus Spatial Equity? A Cautionary Note on the New "Trade-Off" Thinking in Regional Policy Discourse', *Regional Science Policy and Practice*, 1, pp.1-13.

Mason, C. (2009a) 'Policy as a focus for small business research', *Environment and Planning C: Government and Policy*, 27(2), pp. 191-194.

Massey, D. (2010) *World City*. Polity: Cambridge.

Massey, G. (2009) 'Review of *International Business Wales*', Report for the Welsh Assembly Government. Available at: [devbip.bipsolutions.co.uk/go/economic-renewal-programme-for-wales-announced/](http://devbip.bipsolutions.co.uk/go/economic-renewal-programme-for-wales-announced/) (Accessed 12 June 2015).

Maykut, P. and Morehouse, R.E. (1994) *Beginning qualitative research: A philosophic and practical guide* (Vol. 6). London: Psychology Press.

McCann, P. (2001) *Urban and regional economics*. Oxford: Oxford University Press.

McCann, P. and Sheppard, S. (2003) 'The rise, fall and rise again of industrial location theory', *Regional Studies*, 37(6-7), pp. 649-663.

McCombie, J.S. (1982) 'Economic growth, Kaldor's laws and the static-dynamic Verdoorn law paradox', *Applied Economics*, 14(3), pp. 279-294.

McCrone, G. (1969) *Regional policy in Britain*. London: Allen and Unwin.

McDonald, M., Millman, T. and Rogers, B. (1997) 'Key account management: Theory, practice and challenges', *Journal of Marketing Management*, 13(8), pp.737-757.

McInroy, N. (2016) 'Forging a Good Local Society: Tackling Poverty through a Local Economic Reset, CLES: Manchester.

McKenna, C.J. and Thomas, D.R. (1998) *Regional policy. The Welsh economy*, ed by K.D. George and Lyn Mainwaring. Cardiff: University of Wales Press, pp. 263-290.

Meechan, B. (2014) Six firms named 'anchor companies' to work with Welsh Government, *BBC* (Online). Available at: <http://www.bbc.co.uk/news/uk-wales-politics-25718039>. (Accessed 20 September 2016).

Merriam, S.B. (1998) *Qualitative research and case study applications in education. Revised and expanded from*. Jossey-Bass Publishers: San Francisco.

Mertens, D.M. (2005) *Research methods in education and psychology: Integrating diversity with quantitative and qualitative approaches*. 2nd ed. Thousand Oaks: Sage.

Meyer, K.E. and Estrin, S. (2001) 'Brownfield entry in emerging markets', *Journal of International Business Studies*, 32(3), pp. 575-584.

Miller, C., Packham, G. and Pickernell, D. (2002) 'It's regional economic development Jim, but not as we know it: The reasons for, structure of and preliminary results of Enterprise College, Wales', *The Australasian Journal of Regional Studies*, 8(3), pp. 275.

Millman, T.F. (1996) 'Global key account management and systems selling', *International Business Review*, 5(6), pp. 631-645.

Mills, E.S. (1970) 'Urban density functions', *Urban Studies*, 7(1), pp 5-20.

Mills, E.S. and Nijkamp, P. (1987) Advances in urban economics. In Mills, E. (Ed) *Handbook of Regional and Urban Economics*. Vol II: Urban Economics. Amsterdam: Elsevier Science Publishers B.V.

Ministry of Labour (1928) Memorandum on the shortage, surplus and redistribution of juvenile labour during the years 1928 to 1933 based on the views of local juvenile employment committees. London: HMSO. (Cmd, 3327).

Monastiriotis, V. and Alegria, R. (2011) 'Origin of FDI and intra-Industry domestic spillovers: The case of Greek and European FDI in Bulgaria', *Review of Development Economics*, 15(2), pp.326-339.

Moore B., Rhodes J. and Tyler, P. (1986) *The Effects of Government Regional Economic Policy*. London: HMSO.

Morehouse, R.E. (1994) *Beginning qualitative research: A philosophic and practical guide*. Vol. 6. London: Psychology Press.

Morgan, B. (1992) 'The changing relationship between the manufacturing and service sectors in the Welsh economy?', *Welsh Economic Review*, 52, pp. 45-52.

Morgan, B. (1995) 'Sectoral growth and Welsh Development Agency activity', *Paper to University of Glamorgan Business School*.

Morgan, B. (1996) 'An endogenous approach to regional economic development: the emergence of Wales', *European Planning Studies*, 4(6), pp. 705-715.

Morgan, B. (1998) Regional issues in inward investment and endogenous growth. In *Inward Investment, Business Finance and Regional Development*, ed by Stephen Hill and Brian Morgan. pp. 13-29. London: Macmillan.

Morgan, B. (2009) 'Ministerial logjam frustrated economic dynamism', *Institute of Welsh Affairs*, pp.30.

Morgan, K. (1981) *Rebirth of a nation: Wales, 1880-1980* (Vol. 6). New York: Oxford University Press.

Morgan, K. (1982) 'State policy and regional development in Britain: the case of Wales', (Doctoral dissertation, University of Sussex).

Morgan, K. (1991) 'Competition and collaboration in electronics: what are the prospects for Britain?', *Environment and Planning A*, 23(10), pp. 1459-1482.

Morgan, K. (1994) The fallible servant: making sense of the Welsh Development Agency, *Department of City and Regional Planning*, University of Wales College of Cardiff.

Morgan, K. (1996) 'Learning-by-interacting: inter-firm networks and enterprise support. *Local systems of small firms and job creation*', *Regional Studies*, pp. 491-504.

Morgan, K. (1997a) 'The learning region: institutions, innovation and regional renewal', *Regional Studies*, 41(S1), pp.147-S159.

Morgan, K. (2008) Where's Wales in the regeneration game? *Western Mail*, 3<sup>rd</sup> January, p. 4.

Morgan, K. and Cooke, P. (1998) 'The associational economy: firms, regions, and innovation', *University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship*.

Morgan, K. and Henderson, D. (1997) *The fallible servant: Evaluating the Welsh Development Agency. Nationality and Planning in Scotland and Wales*. Cardiff: University of Wales Press.

Morris, J. (1974) House of Commons Hansard Archives. Vol. 870.

Moses, L.N. (1958) 'Location and the theory of production', *The Quarterly Journal of Economics*, 72(2), pp. 259-272.

Mouton, J. and Marais, H.C. (1988) *Basic concepts: Methodology of the behavioural sciences*. Pretoria: Human Sciences Research Council.

Moxon, J.W.J. (1972) 'The industrial development certificate system and employment creation', *Urban Studies*, 9(2), pp. 229-233.

Mulgan, G. and Lee, A. (2001) 'Better policy delivery and design: a discussion paper', *Cabinet Office UK, Performance and Innovation Unit*.

Munday, M., Pickernell, D. and Roberts, A. (1999) August. The effectiveness of regional grant aid: A Welsh perspective. In *39th European Congress of the Regional Science Association*.

Munday, M., Pickernell, D. and Roberts, A. (2001) 'Regional policy effectiveness and local governance issues: Some Welsh perspectives', *Policy Studies*, 22(1), pp.51-60.

Munday M. and Williams, G. (2006) 'Comparing gross and net employment outcomes from structural fund programmes: Some issues from the Mid-Term Evaluations of the Objective 1 Programme in West Wales and the Valleys', Paper for 46<sup>th</sup> Congress of the European Regional Science Association "Enlargement, Southern Europe & the Mediterranean". University of Thessaly, Greece, August 30<sup>th</sup>-September 3<sup>rd</sup>.



Murphy, A., Walsh, B.M. and Barry, F. (2003) 'The economic appraisal system for projects seeking support from the industrial development agencies', *Journal of Economics*, 113(1), pp. 79-119.

Muth, R.F. (1969) *Cities and housing: The spatial pattern of urban residential land use*. Chicago: University of Chicago Press.

Myrdal, G. (1957) *Economic theory and underdeveloped regions*. London: Gerald Duckworth & Co Ltd.

Neck, H.M., Meyer, G.D., Cohen, B. and Corbett, A.C., (2004) An entrepreneurial system view of new venture creation, *Journal of Small Business Management*, 42(2), pp.190-208.

Nightingale, P. and Coad, A. (2014) 'Muppets and gazelles: political and methodological biases in entrepreneurship research', *Industrial & Corporate Change*, 23(1).

Nourse, H.O. (1968) *Regional economics*. New York: McGraw Hill.

Nutley, S., Davies, H. and Walter, I. (2002) Evidence based policy and practice: cross sector lessons from the UK, *ESRC UK Centre for evidence based policy and practice: working paper, 9*.

OECD (2010), Cluster Policies. Available at:  
<http://www.oecd.org/innovation/policyplatform/48137710.pdf>. (Accessed 30 October 2017).

O'Farrell, P.N. and Crouchley, R. (1987) 'Manufacturing-plant closures: A dynamic survival model', *Environment and Planning A*, 19, pp.313-29.

Office National Statistics (2015) UK Countries GVA 2014. Available at:  
<http://www.ons.gov.uk/economy/grossvalueaddedgva/bulletins/regionalgrossvalueaddedincomeapproach/december2015> (Accessed 30 September 2015).

Ohlin B. (1933) *Interregional and international trade*. Cambridge MA: Harvard University Press.

Olfert, M.R., Partridge, M., Berdegué, J., Escobal, J., Jara, B. and Modrego, F. (2014) 'Places for Place-Based Policy', *Development Policy Review*, 32(1), pp. 5-32.

Olsen, M.E., Lodwick, D.G. and Dunlap, R.E. (1992) *Viewing the world ecologically*. Boulder: Westview Press.

Olson, M. (1969) 'The principle of fiscal equivalence: the division of responsibilities among different levels of government'. *The American economic review*, 59(2), pp.479-487.

Osmond, J. (1976) *Creative conflict – The politics of Welsh devolution*. Llandysul: Gomer.

O'Toole, L.J. (2000) 'Research on policy implementation: Assessment and prospects', *Journal of Public Administration Research and Theory*, 10(2), pp. 263-288.

Palander, T. (1935) *Beiträge zur standortstheorie*. Uppsala: Almqvist & Wiksell.

Paniccia, I. (2002) *Industrial districts: Evolution and competitiveness in Italian firms*. New York: Basic Books.

Parkin, M., Powell, M. and Matthews, K. (2000) *Economics*. 5th edn. Harlow: Addison Wesley.

Parr, J. (2002) The Location of Economic Activity: Central Place Theory and the Wider Urban System. In McCann P. (Ed.) *Industrial Location Economics*. Cheltenham: Edward Elgar.

Parr, J.B., Hewings, J. and Nazarra, S.S. (2002) 'Agglomeration and trade: some additional perspectives', *Regional Studies*, 36, p. 675-684.

Parsons, W. (1988) *The political economy of British regional economic policy*. London: Routledge.

Partridge, M.D. and Olfert, M.R. (2011) 'The Winners' Choice: Sustainable Economic Strategies for Successful 21st-Century Regions', *Applied Economic Perspectives and Policy*, 33(2), pp.143-178.

Patton, M. (1980) *Qualitative evaluation methods*. California: Sage.

Peck, F. and Stone, I. (1993) 'Japanese inward investment in the northeast of England: reassessing 'Japanisation'', *Environment and Planning C: Government and Policy*, 11(1), pp.55-67.

Pepper, G.T. and Oliver, M.J. (2001) *Monetarism under Thatcher: lessons for the future*. Cheltenham and London: Edward Elgar Publishing.

Perroux, F. (1950) 'Economic space: theory and applications', *The Quarterly Journal of Economics*, pp. 89-104.

Perroux, F. (1988) *Growth pole theory and strategy reconsidered: Domination, linkages and distribution. Regional economic development: Essays in honour of François Perroux*. Australia: Allen & Unwin.

Phelps, E.S. (1967) 'Phillips curves, expectations of inflation and optimal unemployment over time', *Economica*, pp.254-281.

Phelps, N.A. (1993) 'Branch plants and the evolving spatial division of labour: a study of material linkage change in the Northern region of England', *Regional Studies*, 27(2), pp. 87-101.

Phelps, N.A., Lovering, J. and Morgan, K. (1998) 'Tying the firm to the region or tying the region to the firm? Early observations on the case of LG in South Wales', *European Urban and Regional Studies*, 5(2), pp. 119-137.

Phelps, N.A. and Fuller, C. (2000) 'Multinationals, intracorporate competition, and regional development', *Economic Geography*, 76(3), pp.224-243.

Phelps, N.A., Mackinnon, D., Stone, I. and Braidford, P. (2003) 'Embedding the multinationals? Institutions and the development of overseas manufacturing affiliates in Wales and North East England', *Regional Studies*, 37(1), pp. 27-40.

Pickernell, D. (1999) Assessing the scope and effectiveness of government assistance to companies in Wales. A report prepared for the Welsh Development Agency. *Welsh Enterprise Institute*. June.

Pickernell, D., Rowe, P.A., Christie, M.J. and Brooksbank, D. (2007) 'Developing a framework for network and cluster identification for use in economic development policy-making', *Entrepreneurship and Regional Development*, 19(4), pp. 339-358.

Pike, A. (1993) 'The SEM and uneven development: Automotive production and the 'older' peripheral regions of the UK', *European Planning Studies*, 1(3), pp. 319-349.

Pike, A. (1996) 'Greenfields, brownfields and industrial policy for the automobile industry in the UK', *Regional Studies*, 30(1), pp. 69-77.

Pike, A., Rodríguez-Pose, A. and Tomaney, J. (2007) 'What kind of local and regional development and for whom?', *Regional Studies*, 41(9), pp. 1253-1269.

Pike, K.L. (1960) 'Toward a theory of change and bilingualism', *Studies in Linguistics*, 15(1 & 2), pp. 1-7.

Pike, A. and Tomaney, J. (2009) 'The State and Uneven Development: The Governance of Economic Development in England in the Post-Devolution UK', *Cambridge Journal of Regions, Economies and Societies*, 2, pp. 13-34.

Porter, M. (1990) *The Competitive Advantage of Nations*. New York: Free Press. London: Macmillan.

Porter, M. (1998a) 'Clusters and the new economics of competition', *Harvard Business Review*, 76 (6) pp. 77-90.

Porter, M. (2003) 'The economic performance of regions', *Regional Studies*, 37(6-7), pp. 549-578.

Porter, J. and Gallardo, G.M. (2007) Foreign direct investment, internationalisation strategies and economic development in Valencia, Spain, OECD Final Report.

Potter, J. (1995) 'Branch plant economies and flexible specialisation: Evidence from Devon and Cornwall', *Tijdschrift voor economische en sociale geografie*, 86(2), pp.162-176.

Potter, A. and Watts, H. D. (2012) 'Revisiting Marshall's Agglomeration Economies: Technological Relatedness and the Evolution of the Sheffield Metals Cluster', *Regional Studies*, 48 (4), pp. 603-623.

Pred, A. (1967) 'Behaviour and location, foundations for a geographic and dynamic location theory', *Part I*. University of Lund, *Lund Studies in Geography B*, No 27.

Price, A., Morgan, K. and Cooke, P.N. (1994) *The Welsh renaissance: inward investment and industrial innovation*. Cardiff: Regional Industrial Research.

Pugalis, L. and Bentley, G. (2014) '(Re) appraising place-based economic strategies', *Local Economy*, 29, (4-5) pp. 273-282.

RAE (1999b) *Research Assessment Exercise: Guidance to submissions*. RAE 2/99. Available at: [http://www.hero.ac.uk/rae/niss/2\\_99.html](http://www.hero.ac.uk/rae/niss/2_99.html) (Accessed July 2014).

Rasmussen, P. (1952) *Studies in intersectoral relations*. Amsterdam: Holland.

Rees, G. (1997) The politics of regional development strategy: the programme for the valleys. *Nationality and Planning in Scotland and Wales*, pp. 98-110.

Rees, G. and Thomas, M. (1994) 'Inward investment, labour market adjustment and skills development: recent experience in South Wales', *Local Economy*, 9(1), pp. 48-61.

Remenyi, D., Williams, B., Money, A. and Swartz, E. (1998) *Doing research in business and management: An introduction to process and method*. Cardiff: University of Wales Press.

Ricardo, D. (1821) *On the principles of political economy and taxation*. London: John Murray.

Richardson, H.W. (1978) *Regional and urban economics*. Penguin Books. Hammondsworth.

Richmond, K. (2001) The Scottish experience. In Hill S. (ed) 'The impact of regional development agencies', *Regional Science Association International (British and Irish Section) Report of a Seminar held at West Bromwich, Birmingham. 26-27 November, 2001*.

Ritchie, J. and Lewis, J. (2003) *Qualitative research practice: A guide for social science students and researchers*. London; Thousand Oaks, California: Sage.

Robson, C. (2002) *Real world research (Vol. 2)*. Oxford: Blackwell Publishers.

Roche, B. (1997) Government support for small firms, Speech to IBA National Conference.

Roelandt, T. J.A. and den Hertog, P. (1999) 'Cluster Analysis and Cluster-Based Policy Making: The State of The Art', *Boosting Innovation: The Cluster Approach*, OECD, Paris.

Rodrik, D. (1996) 'Understanding economic policy reform'. *Journal of economic Literature*, 34(1), pp.9-41.

Romer, P.M. (1986) 'Increasing returns and long-run growth', *The Journal of Political Economy*, pp. 1002-1037.

Romer, P.M. (1990) 'Endogenous technological change', *The Journal of Political Economy*, pp. 71-102.

Rosenfeld, S. A. (1995) *Industrial Strength Strategies: Regional Business Cluster and Public Policy*. Washington, DC. The Aspen Institute.

Sabatier, P.A. (1986) 'Top-down and bottom-up approaches to implementation research: a critical analysis and suggested synthesis', *The Journal of Public Policy*, 6(01), pp. 21-48.

Säbel, C. (1994) *Learning by monitoring. The institutions of economic development*. S. 137-165 in: N. Smelser/R. Swedberg (Hrsg.), *The Handbook of Economic Sociology*. pp.137-165.

Sala-i-Martin, X.X. (1996) 'The classical approach to convergence analysis', *The economic journal*, pp. 1019-1036.

Sala-i-Martin, X.X. (1996) 'Regional cohesion: evidence and theories of regional growth and convergence', *European Economic Review*, 40(6), pp. 1325-1352.

Samuelson, P.A. and Nordhaus, W.D. (2001) *Economics* . 17<sup>th</sup> Edn. New York: McGraw Hill Irwin.

Sandelowski, M. (1993) 'Rigor or rigor mortis: the problem of rigor in qualitative research revisited', *Advances in Nursing Science*, 16,1-8.

Sapsford, R. and Evans, J. (1984) *Evaluating a research report. Conducting small-scale investigations in educational management*. London: Harper & Row.

Saunders, M. and Lewis, P. and Thornhill, A. (2007) *Research methods for business students*. 4<sup>th</sup> Edn. England; New York: Financial Times / Prentice Hall.

Saxenian, A. (1994) *Regional networks: industrial adaptation in Silicon Valley and route 128*. Cambridge Mass: Harvard University Press.

Schaefer, F.K. (1953) 'Exceptionalism in geography: A methodological examination', *Annals of the Association of American geographers*, 43(3), pp. 226-249.

Scott, A.J. (1988) *New industrial spaces: Flexible production organization and regional development in North America and Western Europe* (Vol. 3). London: Pion Ltd.

Scottish Business Grants - [www.scottishbusinessgrants.gov.uk](http://www.scottishbusinessgrants.gov.uk)

Seale, C., (1999) 'Quality in qualitative research', *Qualitative inquiry*, 5(4), pp.465-478.

Segal Quince Wicksteed (1996) *Evaluation of source Wales*. Welsh Development Agency. Cardiff.



Sforzi, F. (1990) 'The quantitative importance of Marshallian industrial districts in the Italian economy', *Industrial districts and inter-firm co-operation in Italy*, pp. 75-107.

Shenton, A.K. (2004) 'Strategies for ensuring trustworthiness in qualitative research projects', *Education for information*, 22(2), pp.63-75.

Siebert, H. (1969) *Regional economic growth: Theory and policy*. Scranton: International Textbook Company.

Silverman, D. (2013) *Doing qualitative research: A practical handbook*. London; thousand Oaks; California: SAGE Publications.

Smallbone, D., Kitching, J. and Blackburn, R. (2015) '*Anchor institutions and small firms in the UK: a review of the literature on anchor institutions and their role in developing management and leadership skills in small firms*', UK Commission for Employment and Skills.

Smith, D.M. (1981) *Industrial location: an economic geographical analysis*. 2<sup>nd</sup> edn. New York: John Wiley & Sons.

Solow, R.M. (1956) 'A contribution to the theory of economic growth', *The quarterly journal of economics*, pp.65-94.

Solow, R.M. (1957) 'Technical change and the aggregate production function', *The Review of Economics and Statistics*, pp. 312-32.

Stats Wales - [www.statswales.wales.gov.uk](http://www.statswales.wales.gov.uk)

Stilwell, F. (1972) *Regional economic policy*. London: Macmillan.

Stone, I. and Peck, F. (1996) 'The foreign-owned manufacturing sector in UK peripheral regions, 1978–1993: restructuring and comparative performance', *Regional Studies*, 30(1), pp.55-68.

Storey, D. J. (2008) *Evaluating SME Policies and Programmes: Technical and Political Dimensions*. Oxford Handbooks Online. Oxford University Press.

Available at:

<http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199546992.001.0001/oxfordhb-9780199546992-e-10>>. (Accessed 10 February 2014).

Storey, D.J. and Johnson, S. (1987) *Are small firms the answer to unemployment?* Employment Institute.

Storper, M. (1997) *The regional world: territorial development in a global economy*. New York: Guilford Press.

Strauss, A. and Corbin, J. (1994) Grounded theory methodology. *Handbook of qualitative research*, 17, pp. 273-85.

Styles, K. and Goldsworthy, M. (2002) 'GI extranet: a case study in applying technology for competitive advantage', *International Journal of Networking and Virtual Organisations*, 1, p. 82-90.

Suarez-Villa, L. (1999) 'The dynamics of regional invention and innovation: innovative capacity and regional change in the twentieth century'. *Geographic Analysis*, 25, pp. 147-164.

Swales, J.K. (1997) 'The ex post evaluation of regional selective assistance', *Regional Studies*, 31(9), pp. 859-865.

Taylor, J. and Wren, C. (1997) 'UK regional policy: an evaluation', *Regional Studies*, 31(9), pp. 835-848.

Temple, M. (1994) *Regional economics*. New York: St. Martin's Press; Houndsmills, Basingtoke, Hampshire: Macmillan Press.

Tesch, R. (1990) *Qualitative analysis: Analysis types and software tools*. Falmer Press, London.

Tewdwr-Jones, M. and Phelps, N.A. (1999) Unsustainable Behaviour? The "Subordination" of Local Governance in creating Customised Spaces for Asian FDI', Paper prepared for Regional Potentials in an integrating Europe, In *5th RSA International Conference University of the Basque Country, Bilbao*, pp. 18-21.

The Independent (1994) *How clean was my valley*, 28 August, p. 5.

Thirlwall, A.P. (2003) *Growth and development: With special reference to developing economies*. Houndsmills, Basingstoke, Hampshire: Macmillan Press.

Thomas, D. (1996) 'Winner or loser in the new Europe? Regional funding, inward investment and prospects for the Welsh economy', *European Urban and Regional Studies*, 3(3), pp. 225-240.

Thomas, D.A., 1986. 'War and the economy: the South Wales experience', *Modern South Wales: Essays in Economic History*, pp.251-77.

Thomas, M. (1995) 'Business support services in Europe', *Welsh Economic Review*, Vol. 8(1), pp. 6-7.

Thomas, M.D. (1975) 'Growth pole theory, technological change, and regional economic growth', *Papers in Regional Science*, 34(1), pp. 3-25.

Thwaites, A.T. (1978) 'Technological change, mobile plants and regional development', *Regional Studies*, 12, pp. 445-461.

Tomaney, J. (2010) 'Place-based approaches to regional development: Global trends and Australian implications'. Sydney: *Australian Business Foundation*, pp. 6.

Tomaney, J., Pike, A. and Cornford, J. (1999) 'Plant closure and the Local Economy: The Case of Swan Hunter on Tyneside', *Regional Studies*, 33, pp. 401-11.

Turok, I. (1993) 'Inward investment and local linkages: how deeply embedded is "Silicon Glen"?', *Regional Studies*, 27(5), pp. 401-417.

Tremblay, D.G. (2006) 'Networking, Clusters and Human Capital Development', *Canadian Policy Research Networks*.

UNCTAD (2007) World Investment Report, pp. 245.

Van der Westhuizen, G. (2008) 'Estimating technical and scale efficiency and sources of efficiency change in banks using balance sheet data: A South African Study', *Journal for Studies in Economics & Econometrics*, 32(1).

Vaughan-Thomas, W. (1985) *Wales, a history*. London: Michael Joseph.

Venables, A.J. (1998) 'The assessment: trade and location', *Oxford Review of Economic Policy*, 14(2), pp. 1-6.

Venables, A.J. (2003) 'Winners and losers from regional integration agreements'. *The Economic Journal*, 113(490), pp.747-761.

Verma, G.K. and Beard, R.M. (1981) *What is educational research?: Perspectives on techniques of research*. Aldershot: Gower Publishing Company.

Vernon, R. (1966) 'International investment and international trade in the product cycle', *The Quarterly Journal of Economics*, pp.190-207.

Vernon, R. (1979) 'The product cycle hypothesis in a new international environment', *Oxford bulletin of economics and statistics*, 41(4), pp.255-267.

Vom Hofe, R. and Chen, K. (2006) 'Whither or not industrial cluster: conclusions or confusions', *The Industrial Geographer*, 4(1), pp. 2-28.

Von Thünen J. (1826) *Der Isolierte Staat in Beziehung auf Landschaft und Nationalökonomie*. Translated by Wartenburg, C., 1966. Von Thunen's Isolated State. New York: Pergamon.

Wainwright, S.P. (1997) 'A new paradigm for nursing: the potential of realism', *Journal of Advanced Nursing*, 26(6), pp.1262-1271.

Wales: A Vibrant Economy (2005). Available at:  
<http://wales.gov.uk/topics/businessandconomy/publications/wave/?lang=en>  
(Accessed 10 December 2012).

Wales Spatial Plan (2004). Available at:  
<http://wales.gov.uk/topics/improvingervices/spatialplan/documents/2004wsp/?lang=en>. (Accessed 22 July 2013).

Walras, L. (1954) *Elements of Pure Economics: Or, the Theory of Social Wealth*. Translated by William Jaffe. Published for the American Economic Association and the Royal Economic Society.

Wand, Y. and Weber, R. (1993) 'On the ontological expressiveness of information systems analysis and design grammars', *Information Systems Journal*, 3(4), pp. 217-237.

Watts, H.D. (1981) *The branch plant economy: a study of external control*. Longman. London; New York: Longman.

Webber, D. and White, P. (2003) 'Regional factor price convergence across four major European countries', *Regional Studies*, 37(8), pp. 773-782.

Weber, A.(1909) *Über den Standort der Industrien*. Translated by Friedrich, C. (1929) Alfred Weber's Theory of the Location of Industries. Chicago: Univeristy of Chicago Press.

Weber, A. (1911) 'Die Standortslehre und die Handelspolitik', *Archiv für Sozialwissenschaft und Sozialpolitik*, 32(1), pp. 667-688. English translation: 'Location theory and trade policy', *International Economic Papers*, (1958), 8, pp. 133-146.

Welsh Assembly Government (2008) A Review of the economic evidence on the determinants and effects of Foreign Direct Investment. Available at: <http://wales.gov.uk/about/aboutresearch/econoresearch/completed/?lang=en> (Accessed 18 July 2013).

Welsh Assembly Government (2009) Economic Renewal Programme  
Internal Welsh Assembly Government Bulletins.

Welsh Development Agency (1984) Report and Accounts, 1983-84, Cardiff: WDA.

Welsh Development Agency (1990) Report and Accounts, 1989-90, Cardiff: WDA.

Welsh Development Agency (2004)\_Property strategy for employment in Wales (2004-2013). Available at: [www.breconbeacons.org/.../Wales/OD-W-23-w51-](http://www.breconbeacons.org/.../Wales/OD-W-23-w51-) (Accessed 22 July 2013).

Welsh Government Business innovation (Funded by ERDF). Available at: <http://business.wales.gov.uk/growing-business/welsh-government-support-1/support-innovation-0>. (Accessed 20 June 2012).

Welsh Government (2010) Economic Renewal: A New Direction. Available at: <http://wales.gov.uk/about/cabinet/cabinetstatements/2010/100705econ/?lang=en>. (Accessed January 2013).

Welsh Government (2009) For our future strategy. Available at: <http://wales.gov.uk/topics/educationandskills/publications/guidance/forourfuture/?lang=en>. (Accessed June 2013).

Welsh Government (2010) Labour Market Framework. Available at: <http://wales.gov.uk/topics/educationandskills/publications/guidance/labourmarketframework/?lang=en>. (Accessed 23 September 2013).

Welsh Government (2009) One Wales. Available at: <http://wales.gov.uk/topics/sustainabledevelopment/publications/onewalesoneplanet/?lang=en>. (Accessed 11 November 2011).

Welsh Government (2008) Our Skills that Work for Wales Strategy. Available at: <http://wales.gov.uk/topics/educationandskills/publications/guidance/skillsthatforwales/?lang=en>. (Accessed 20 September 2012).

Welsh Government (2012) Communities First Programme. Available at: <http://gov.wales/topics/people-and-communities/communities/communitiesfirst/?lang=en>. (Accessed 19 October 2017).

Welsh Government (2015) Well Being of future Generation (2015) Act 2015. Available at: <http://gov.wales/topics/people-and-communities/people/future-generations-act/?lang=en>. (Accessed 19 October 2017).

Western Mail (1976) 'Guarded Guidelines', *Western Mail*. 28 January, pp. 10.

White Paper (1988) DTI – The Department for Enterprise, CM 278, HMSO, London.

Wilcox, D.W. (1989) 'The sustainability of government deficits: Implications of the present-value borrowing constraint', *Journal of Money, Credit and Banking*, 21(3). pp. 291-306.

Williams, G. (1971) *Economic Planning Machinery in Wales 1965-1968*. Occasional Papers Series A, London: Regional Studies Association.

Williams, J.L. (1995) *Was Wales Industrialised?: Essays in Modern Welsh History*. Llandysul, Dyfed: Gomer Press.

Williams, N. (2013) 'Entrepreneurship and the role of policy', *Environment and Planning C: Government and Policy*, 31(1), pp.1-4.

Williamson, O.E. (1975) *Markets and hierarchies*. New York: Free Press. pp. 26-30.

Winnick L. (1966) Place prosperity vs. people prosperity: welfare considerations in the geographic redistribution of economic activity. *Essays in Urban Land Economics*, pp. 273-283. Los Angeles Real Estate Research Program, UCLA.

Witt, P. (2004) Entrepreneurs' networks and the success of start-ups. *Entrepreneurship & Regional Development*, 16(5), pp.391-412.

Wolfe, D.A. and Lucas, M. (2004) *Clusters in a cold climate*. Montreal & Kingston: McGill-Queen's University Press.

Woodward, D. and Guimarães, P. (2009) 'Porter's cluster strategy and industrial targeting', *Targeting regional economic development*, pp. 68-83.

World Bank (2009) *World Development Report: Reshaping Economic Geography*. Washington, DC: World Bank.

Wren, C. (1996) *Industrial Subsidies: The UK Experience*. Basingstoke: MacMillan.

Wren, C. (2001) 'The industrial policy of competitiveness: a review of recent developments in the UK', *Regional Studies*, 35(9), pp. 847-860.

Wren, C. (2002) *UK Regional Policy: does it Measure Up?*, Paper presented to the Alliance for Regional Aid conference, Royal Institute of British Architects. London. April.



Wren, C. and Jones, J. (2003) 'Re-investment, Survival and the Embeddedness of Foreign-Owned Plants', *European Regional Science Association*, 03, pp. 19.

Yin, R.K. (2013) *Case study research: Design and methods*. Thousand Oaks: Sage publications.

Young, S. Hood, N. and Peters, E. (1994) 'Multinational enterprises and regional economic development', *Regional Studies*, 28, pp. 756-77.