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INTERNATIONAL RESEARCH ON REGIONAL ECONOMIES

IMPLICATIONS FOR DELIVERING INCLUSIVE GROWTH IN SCOTLAND

MAY 2019

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EXECUTIVE SUMMARY

- For Scotland, the primary purpose for thinking regionally is to help make growth more inclusive, and not to create competition between regions for resources.

- However, the conceptual and empirical cases for thinking strictly in terms of formally defined 'functional' regional economies are not strong. And indeed, internationally, regional arrangements have instead tended to develop pragmatically, taking into account historical relationships and 'common-sense' perceptions of where the main local linkages are likely to be.

- So although going forward, collecting more data on regional linkages, particularly between businesses, may be helpful, that is not a precondition for effective partnership working in Scotland.

- Indeed, the evidence already supports the view that transport infrastructure and land use decisions need to be made at least partly at the regional level. An important message is that the potential returns on any public investment may be under-estimated if only local and not regional impacts are considered.

- In developing regional partnership-based governance, key questions include at what level should various decisions be made, and responsibilities assigned, and how does this relate to democratic accountability as well as efficiency. And any expectations placed on a partnership need to be consistent with the resources made available to it, the degree of independence that it is granted, and the strength of leadership that it is able to offer.

- There is a case for a transparent relationship between regions and nations, in which central government explicitly and publicly justifies its investment decisions on the basis of the criteria that it sets—which in Scotland's case includes whether investments foster inclusivity.

- That could involve providing evidence of which communities, localities, sub-regions and sectors benefited from any intervention—to aid understanding of the extent to which benefits are expected to spill-over beyond immediate recipients.

Thanks to City and Growth Deals and several fledgling Regional Economic Partnerships there is currently discussion within Scotland about how the regional level (alongside the national and local) can collectively deliver the Scottish government's objective of promoting inclusive growth. This report brings together evidence to help inform that debate. Specifically, it addresses four questions:

i) what are Functioning Regional Economic Geographies (FREGs);
ii) what evidence is there for the best way to deliver inclusive growth in Scotland at different geographical levels;

iii) what implications does this have for how to assess infrastructure investments; and
iv) what are the implications for governance structures in Scotland?

We set out the questions in full in Section 5 of this report, together with our answers to them.

These questions arise in the context of changes underway in Scotland that have involved a range of Deals and the creation, or planned creation, of a number of Regional Economic Partnerships. The reason for asking the questions is not to second-guess those developments but to inform and support them and any future changes.

To answer these questions, we have examined the academic literature, looked at the structure of Scotland's regional economies, and undertaken a number of telephone consultations and face-to-face meetings across Scotland. Importantly, we have also considered five international case studies, to see how regional economies are managed elsewhere, and what lessons Scotland might be able to learn from them.

WHAT ARE FUNCTIONING REGIONAL ECONOMIC GEOGRAPHIES (FREGS)?

A common view in the research and policy literature (as set out in the main body of this report) is that local or regional policies should be understood and acted upon on the basis of "functional economic areas", which will often cross local council areas—sometimes many of them. This is based on the notion that local and regional economies tend to have identifiable geographical boundaries, and that both analysis and policy should be implemented in accordance with those boundaries.

There are indeed sound reasons for thinking that local policy interventions and investments need to be considered in the light of their impacts, not just very locally, but across neighbouring areas; that collaboration across boundaries may enable economies of scale and scope; and that coordination between neighbouring authorities may increase the impact of what they do.

However, it may be unhelpful to think about this too rigidly in terms of functional areas. The applicability of the concept can be over-stated, for two broad reasons. First, the concept is very ambiguous, and there are not in reality fixed, clear boundaries to local or regional economies. There are many different markets (including labour markets, consumer markets, business-to-business markets, and markets for ideas) which are likely to have their own geographies. Sometimes they may have no geography at all—especially for services delivered online. And the geographies they do have may change through time. Indeed, it is often the intention of policy that they will do so by, for example, helping people to find work further afield, or helping companies to broaden their markets or their business relationships. We provide more detail on this in Section 2.3.

Second, the data with which to identify functional economic areas are mostly not available. Even labour market data (the main exception to this "rule") typically relate to 2011 commuting patterns, and produce geographies that are

even smaller and more localised than existing local government boundaries, not regions that spread across boundaries.

Instead, we think there is a case for pragmatism, taking account not just of historical labour market data, but also the distinctive characteristics that help define regions. City regions are the clearest example of this, but as we discuss in section 2.6, natural geography, sectoral structures, and recent patterns of economic growth are other candidates. And it would be useful to seek to cultivate new data sources, especially on how businesses relate to one another across places, and the role of online trading in reshaping or even removing economic geographies.

In this report we examine the various areas within Scotland that are emerging through the process of developing City Region and other Growth Deals and resultant Regional Economic Partnerships. Most but not all are reasonably self-contained in labour market terms; some have very distinctive sectoral structures; and several have seen their growth rates diverge markedly from Scotland as a whole. We advocate looking at this sort of evidence as part of the process of thinking about how well regional arrangements are likely to work in practice, from the perspective of encouraging inclusive economic growth. We recognise that the REP space is developing and evolving, and therefore there will be flux in the shape of such bodies. This report does not intend to seek the optimal basis of these partnerships, but rather provide information which will inform thinking and the way forward.

We also look at experience from elsewhere in the world, to see how different places address the issue of delivering policies and investments, notably transport infrastructure, that have impacts at regional as well as local levels.

WHAT EVIDENCE IS THERE FOR THE BEST WAY TO DELIVER INCLUSIVE GROWTH IN SCOTLAND AT DIFFERENT GEOGRAPHICAL LEVELS?

The Scottish government defines “inclusive growth” to mean economic growth that combines increased prosperity with greater equality, creating opportunities for all and distributing the benefits of increased prosperity fairly. This is a multi-dimensional definition, and from the international case studies examined for this report, it is not obvious that much explicit attempt is currently made elsewhere to deliver similarly broad inclusive growth ambitions at the regional level. We undertook five case studies deliberately chosen to have a wide diversity of characteristics, and on the basis of these, the broader research literature mentioned in subsequent sections, and our own professional knowledge, we think it very unlikely that there is an “off-the-shelf” inclusive growth model anywhere that can be simply applied to Scotland.

However, there are lessons to be learnt. For example, in **Denmark**, the concept of inclusive growth is so deeply embedded that it hardly needs to be stated. Denmark is divided into five regions, but the differences between them in economic and social conditions are not great. In part, this reflects the country’s strong commitment to using infrastructure to (literally) unite the nation, and is a deeply rooted part of a national “business model” that tends to reduce inequalities. Denmark has regional councils that unite together local authorities

to address economic issues jointly, an arrangement helped by high degrees of consensus to do so, within the nation.

In contrast, the **San Francisco Bay Area** is poor at transport infrastructure because an absence of regional governance means that local special interests are able to block transport improvements—and also housing developments. The consequence is an economy that grows rapidly, but with big problems of social exclusion, despite a highly engaged political culture. The Bay Area also has a distinct business culture, especially in Silicon Valley, which has played a big role in making it so successful in terms of overall growth. That provokes us to ask what Scotland's business culture is, and whether it can become both more growth-orientated *and* more inclusive at the local and regional level.

Solent in south-east England provides an example of how a regional economic partnership, the Solent Local Enterprise Partnership, struggles in the face of limited resources and a high degree of central government control, so that its ability to match what it delivers to what the region needs is constrained. This impacts on the region's overall growth rate, but also on the ability to reduce inequalities between the different local areas within the region. The challenge is probably made more difficult because Solent lacks a real identity, something that affects how easily local partners can work together.

In **Southern Ireland**, a large and largely rural area, a new regional council resembles the Danish arrangement in that it contains members nominated or elected by local councils. Its purpose is to link together the spatial plans and economic development ambitions of those councils and the national government. The main challenge for these arrangements is the multitude of objectives, policies and programmes that the resultant strategy contains, and the difficulty of establishing priorities.

Finally, in **South East Queensland**, there is also a regional plan, but no regional level of governance. This slightly curious outcome partly reflects the fact that this part of Queensland contains many of the state's growth opportunities, and that the Queensland government is keen to support it. As in Denmark, neither a clear level of regional government nor a strongly explicit focus on inclusive growth seems to be necessary here, in order to deliver growth that, by most standards, scores quite highly in terms of being inclusive. Again, that partly reflects the advantages that the region has, in terms of broader economic growth and few conflicting interests and priorities, plus a strong emphasis on delivering transport infrastructure that meets the needs of a growing population and expanding business base.

WHAT IMPLICATIONS DOES THIS HAVE FOR HOW TO ASSESS INFRASTRUCTURE INVESTMENTS?

In **Denmark** and in **South East Queensland**, investment in transport infrastructure appears to improve social inclusion—not because it is an explicit objective, but because it is consistent with the broader business model. In the former case, the private and public sectors' mutual willingness to invest in infrastructure reflects a confidence in future returns that (in turn) reflects how widely spread economic prosperity already is. In the latter case, it reflects an aim of providing land allocated for development with an available workforce.

In contrast, in **Solent**, Treasury investment criteria set a hurdle that the region struggles to overcome: it underperforms its peers so does not get the investment, and therefore continues to underperform. Part of the solution to this is to raise prospective returns by simultaneously investing in other drivers of growth, such as skills, and then build that into the business case. This is linked to the rationale for City Growth Deals, which exist both in England and Scotland (and in South East Queensland). Solent has two cities within it, and that may have complicated the process there, but nevertheless the point remains that it is harder to make the investment case for a place that is performing poorly than one that is performing well. Being able to show that there are large regional and not just local advantages ought to help, but is very difficult when other places have easier cases to make and are assessed by the same criteria.

Meanwhile, in the **Bay Area**, the lack of regional governance is a clear inhibitor to infrastructure spending, because of local municipal self-interest.

WHAT ARE THE IMPLICATIONS FOR GOVERNANCE STRUCTURES IN SCOTLAND?

An absence of regional governance has not been problematic in the Bay Area in terms of overall economic growth, but has meant that growth has scored poorly from the perspective of social inclusion. Traffic congestion and housing costs are serious problems for many people. Indeed, they may be starting to undermine growth itself. For a large city region, the importance of collaborative working on such issues seems self-evident.

In the expansive geographies of Southern Ireland and Denmark there are regional councils whose members are nominated by local authorities, and which mainly play coordinating rather than leadership roles. This is clearly sufficient in Denmark's case, but partly because the nation is prosperous and culturally very united, so that it is almost taken for granted that growth must be inclusive. An important element in that is the use of transport infrastructure investment to ensure that all parts of the country share in growth. That investment would be harder to secure if the growth was not both strong and widely shared geographically—so the elements tend to be self-reinforcing. A similar situation prevails in South East Queensland, where regional governance does not seem to be needed.

But a key point here is that part of the purpose of regional governance is to help kick-start virtuous circles of the sort that Denmark and to a lesser extent South East Queensland can almost take for granted. That has indeed been the thinking in Solent, which has a well-established regional partnership. Unfortunately, it has achieved only modest success, in the sense that Solent underperforms south-east England, and some parts of Solent markedly under-perform other parts. It is likely that tight central government control combined with very limited budgets mean that the partnership has not been able to address the most important issues facing the region in the way that it would have wanted to. But lack of clear identity for the region and hence difficulties in getting partners to pull together on issues such as transport may also have made the partnership's task more difficult.

This issue of common purpose is important, and addressing it is likely to be vital for the success of regional arrangements. It relates to the matter of

democratic accountability, something that is present locally and nationally but not automatically so at the regional level. And developing a common purpose may be particularly challenging when objectives are complex, nuanced, and multi-dimensional, as is the case with inclusive growth. But the need to think how interventions in one place affect another place, and how there may be larger gains from an intervention regionally than are apparent locally, for example when some of the jobs created in one place are taken by people resident in another, as well as economies of scale to be exploited, all argue strongly against narrow arrangements.

1. INTRODUCTION

The Scottish government has an objective of promoting and sustaining inclusive growth across Scotland—defined as growth that combines increased prosperity with greater equality, creates opportunities for all, and that distributes the benefits of increased prosperity fairly.

As part of this objective, it has asked those local councils and their partners that are seeking growth deals, or benefitting from existing deals, to form regional economic partnerships (REPs) that set out clear economic visions for their regions, together with robust governance arrangements. Details were set out in the Enterprise and Skills Review.[1]

To help understand and inform these developments, SFT, in partnership with Scotland's Centre for Regional Inclusive Growth (SCRIG), commissioned Oxford Economics to provide an understanding of regionalisation in an international context. The aim is to show how regionalisation or regional policy can be pursued in Scotland to achieve inclusive growth, and to suggest how the emerging REPs can support well-functioning regional economies.

We have been asked to answer four questions:

- What are Functioning Regional Economic Geographies (FREGs)?
- What evidence is there for how best to deliver inclusive growth in Scotland at different geographical levels?
- What implications does this have for how to assess infrastructure investments?
- What are the implications for governance structures?

In this report, we address these questions through:

- A review of the academic literature and evidence base, including data availability (Section 2);
- A summary of some relevant characteristics of Scotland's regional economies (Section 3);
- A series of five case studies drawn from outside Scotland (Section 4); and
- A concluding section which draws the material together and seeks to answer the questions (Section 5).

To produce this report, we have also undertaken a number of telephone consultations and face-to-face meetings across Scotland, (listed in Annex C) the results of which are interwoven into the analysis. We are grateful to all those who have helped us with our research.

[1] https://www.gov.scot/policies/economic-growth/enterprise-and-skills-review/

2. IDENTIFYING REGIONAL ECONOMIES

2.1 ECONOMIES, REGIONS AND INCLUSIVE GROWTH

In this Section we start by thinking in broad terms about what regionalism means in an economic context, with a particular focus on the idea of Functional Economic Areas, and how well that idea relates to political or administrative geographies, and hence the spatial levels at which policies are designed and implemented. We also consider whether introducing regional as well as local and national levels of geography is particularly helpful with regard to the pursuit of inclusive economic growth.

This Section therefore provides analytical background to what follows, with respect to the underlying concept of functional areas, their relationship to inclusive growth, empirical evidence about them, alternative ways of identifying them, and alternative governance arrangements. While we do make some references to specific Scottish dimensions here, for the most part we leave that until the next section of the paper.

2.2 OVERVIEW: LOCAL, REGIONAL, & NATIONAL TIERS OF GOVERNMENT

A basic point with which to start is the simple observation that around the world, some elements of government policy are invariably designed, and/or delivered, at the **national** level and others are designed and/or delivered **locally**.

Generally, a mix prevails. Indeed, national defence is almost the only government activity which is usually delivered only at the national level—and even in that case, there are exceptions.

In addition, however, some nations have a third tier of government: an intermediate **regional** level of policy design and/or delivery. This has been important in, for example, Australia and the United States. In other countries there are more informal regional arrangements, often in the form of partnerships. Sometimes these exist in every part of a nation, and in other examples they exist on a ‘where needed’ or ‘where wanted’ basis.

Accordingly, some activities that formally reside at the local level may be designed and/or delivered by groups of neighbouring local authorities or local agencies, acting together in **partnership**. Similarly, some functions that formally reside with central government may be **devolved** down to regional bodies, possibly created specifically for that purpose.

The reason for having regional as well as local arrangements is the belief that for some types of policy, advantages are gained if policy design and/or delivery occurs regionally as well as locally and nationally.

One reason for this is that although local electoral and administrative boundaries are long-established, even centuries-old, and typically command strong loyalties, they do not necessarily align with modern patterns of where people live and work. As a result, alternative and typically broader geographies may be adopted, to complement those local arrangements.

However, a related suggestion is that some issues may inherently lend themselves to a more regional level of governance. And the likelihood of that may have grown through time, as economic relationships have gradually tended to become less local. Examples include people travelling further to work, or companies buying from suppliers further away.

So local policy interventions and investments need to be considered in the light of their impacts, not just very locally, but across neighbouring areas. Indeed, the main impact might not be local at all, if for example job creation in one place reduces unemployment not in the immediate locality but further afield. Complicating this, sometimes an intervention can create an immediate, definite and local cost but only a delayed, more diffuse and less predictable benefit. Road improvements often have this characteristic, and it is sometimes important to see 'the bigger picture', of how for example the biggest benefits of transport investment in one location may be felt in other place.

The case for thinking regionally as well as locally also arises when collaboration across boundaries enables economies of scale and scope. And coordination between neighbouring authorities may increase the impact of what they do, by putting together projects that amount to more than the sum of their parts. There is indeed pan-European evidence that in city-regions and in regions more generally, collaboration improves economic performance. (Cheshire & Magrini, 2005)

2.3 REGIONS AS FUNCTIONAL ECONOMIC AREAS

Beyond these broad common-sense statements, the case for thinking and indeed working regionally is often presented in a more academic fashion in terms of 'functional economic areas'.

The underlying logic here is usually presented in terms of **markets**—for manufactured products, for services, for jobs, homes and indeed anything else. There is a suggestion that these markets have clear identifiable geographical boundaries. The conclusion is then drawn that economic **analysis** should be undertaken in accordance with these clearly defined spatial patterns. (P Cheshire, Urban Growth drivers in a Europe of Sticky People and Implicit Boundaries, 2009) (Kumar, 1965)

Taking this a step further, it is also argued in the research literature that **government policy interventions** should be designed or at the very least implemented according to the resultant functional economic geographies. (CLG, 2010)

These functional areas are typically given the following characteristics:

- **Autonomy**: they are largely self-contained
- **Balance**: the scale of any (modest) outflows is roughly equal to the scale of inflows
- **Cohesion**: they are internally-integrated, rather than a set of neighbouring but unrelated places

This academic approach is clearly a useful and challenging way of thinking. But it is important not to take it too far, not least because the concept of a functional area is not quite as analytically clear-cut as is sometimes suggested.

We think that there are various reasons why it might be difficult—indeed impossible—to ever identify 'perfect' functional areas, even in principle.

First, there are few clear 'cliff-edge' boundaries between local economies. For example, while some businesses may only sell locally and some sell not-at-all locally, most companies are not like that. They sell on a spectrum to customers at different distances. Similarly, although in the case of travel-to-work areas (which we discuss and explain below), the main definition adopted in the UK is that two thirds of people must live or work within them, that is an arbitrary cut-off. The number could be higher or lower—or ideally no cut-off at all, and instead some sort of a gradient. (Indeed as we explain, the two-third is not universally applied.) Similarly, in the EU, Functional Urban Regions (FURs) are defined which are centred on at least one core 'urbanized area' with 20,000 or more jobs, plus any adjacent NUTS3 regions from where more workers commute into to that core than commute to any other core. These too are arbitrary boundaries (and in this example they are used specifically to define regions with single urban centres).

Second, what geographical boundaries do exist may well change through time. Indeed, it is often a specific objective of both company and government policy to make that happen. Businesses typically seek to grow their markets, and governments also seek to alter economic geographies. Examples of the latter include encouraging the emergence of local clustering, or encouraging exports, or seeking to raise local skills and hence inclusivity, by increasing the employment of local residents rather than in-commuters. Or seeking to reduce transport movements for sustainability reasons. Indeed, a major reason for investing in transport infrastructure is surely to increase the effective size of a market area, of one sort or another.

It is also true, of course, that policy makers may resist change. This might occur where a city's catchment area expanded through time. The market response would be the provision of extra housing in the outer area, together with improved transport links from there to the centre. Logically that means that the functional area is expanding. However, local authorities might be concerned about the negative impacts of that spread, especially if property prices increased in the outer areas but funding for services lagged behind. This is the sort of circumstance in which a regional partnership model might be effective, involving collaboration between authorities to address the strategic issues, while leaving in-place existing delivery arrangements, and also existing local democratic arrangements.

Third, boundaries will also clearly differ according to different markets. For most purposes the Edinburgh labour market can reasonably be thought of as a lot smaller than the market for Edinburgh-based financial services. The market for hairdressing is usually smaller than the market for building repairs, which is geographically smaller than the market for computer games (and indeed computer games designers). And even when different markets are on the same

scale, they will frequently have different shapes to one another, especially if they rely on different transport methods and networks.[2]

Fourth, a few important markets will jump across local geographies. This is particularly true in the case of tourism, with many visitors making trips that combine very separate parts of Scotland—a city-break, together with a trip to some of the more remote Scottish islands, for example. This combination is itself a market, but one which has a non-contiguous geography.

Fifth, there is also the obvious point that the rise of the online economy means that geography matters less than it once did. It is important not to overstate this—but it is likely to be true that functional areas (and local areas and national economies) are all slightly less significant than they once were. Perhaps the 'death of distance' is finally happening? (Cairncross, 2001) If so then this could be particularly important in rural areas. The traditional view is that urban areas tend to grow faster than rural ones because they are able to exploit agglomeration or scale economies (such as access to key transport facilities or large labour forces). However, internet-based commerce creates scope for low-cost rural micro-and small businesses to trade globally; and there is some limited evidence that such businesses are indeed increasing their exporting. That implies that a new regional rural model may be emerging that is no longer a second-best—with an important impact on inclusive growth.

So as a theoretical concept, the idea of functional areas is not 100 percent robust.

2.4 REGIONS, FUNCTIONAL AREAS & INCLUSIVE GROWTH

Furthermore, in the context of **inclusive growth**, it can be argued that the aim should be to think beyond the existing functional area as it actually is, and to consider what it might be if, for example, transport improvements were to be put in place, or local people were to be helped to acquire the skills and qualifications that would allow them to find work beyond their immediate surroundings.

This reflects the point made above, that governments may seek to change economic geography and not simply reflect it, in just the same way that businesses frequently seek to expand their markets, or their labour pools.

So, while the concept of a functional area may be helpful if it means that a **wider perspective** is adopted, it may also be unhelpful if it causes too **fixed and narrow** a perspective to be selected.

2.5 IDENTIFYING FUNCTIONAL ECONOMIC REGIONS USING DATA

Even without those arguments, there is the practical matter of whether the necessary geographical information on the various markets actually exists. At present, the answer is a little disappointing. We look at a range of markets, or activities, in turn.

[2] This is one reason why local administrative areas are sometimes located in more than one region, such as for example Fife in the Scottish context.

2.5.1 Consumer markets

It is clear that many consumer markets have a geographical dimension. Few people will travel 100 miles to buy something that they could buy locally. As a result all retailers think in terms of catchment areas, as do leisure operators, and as a result there are data sources on this, based on shopper surveys, which companies use to decide where to site stores, restaurants and the like, or to understand the relative performance of those shops or establishments that they already have.

But these sources are commercial and are not usually very comprehensive—they focus mainly on the larger shopping centres. And the geographies involved tend to be quite local. So, there may be information on the geography of consumer markets, but it is not free, and its value may not be huge.[3]

In addition, the rise of online services such as streaming and internet shopping clearly reduces the importance of geography, at least to some extent. That said, consumer goods still need to be delivered, and hence for those, the geography of logistics remains important. And for online services, the geography of the necessary infrastructure may also be relevant if in rural areas there is poorer capacity than in urban areas. But data on these matters also tends to be a matter of commercial competitiveness for companies, and they are typically reluctant to provide details of what their distribution arrangements actually are.

An area where it could be particularly useful to collect information is the extent to which micro-and small businesses in rural areas (including towns and small cities such as for example Elgin or even Inverness) are increasing their long-distance trading. There is an established model of high-value rural craft goods being exported to high income urban markets, and indeed while many rural areas suffer population losses, some experience productivity gains as their economies focus more on exporting higher value added-products. (G Bosworth, 2018) And building on that, there is a poorly-documented but probably emerging model of internet-based rural trading at national and even global levels. This may simply involve businesses using websites to gain customers and make sales, but in the case of some services, it may involve digital delivery too. The point here is that the notion of a functional area is increasingly irrelevant for such businesses.

2.5.2 Business to business markets

The point just made blurs the boundary between consumer and business markets. Business catchment areas also exist, but are usually harder to draw on maps than for consumer markets, and indeed harder to define at all. Companies typically have rather scattered customer bases, and business customers often change substantially over fairly short periods, as companies

[3] National statistical agencies sometimes have other sources. In Denmark, for example, the national agency has in the past conducted telephone surveys asking people about their journeys the previous day, and has used that to map shopping patterns. The average over the period 1995-97 was 9.8km—a figure inflated by a small number of extremely long journeys in the more rural areas. As we note in Annex B, the issue of providing transport infrastructure for remote areas is taken very seriously in Denmark. (Andersen, 2002)

win and lose contracts. So, business geographies tend to change a lot and rapidly through time.

Under this heading, however, comes the important concept of **supply chains**. Although these can be global, they sometimes have regional patterns to them, and these can become quite well entrenched. They may also have regional implications. If, for example, a large increase or decrease in sales by a firm at the front of a supply chain then feeds back through the chain, the impact of the initial loss may be partially felt in different locations. If so, it may be helpful to understand exactly where those impacts are felt.

And the same may be true in reverse. Supplier problems can impact through the supply chain on final manufacturers located elsewhere. The aerospace sector globally is an extreme example of this.

Here too, a big issue is that the information on supply chains is highly commercially valuable to companies, so that reliable direct sources are not generally available.[4] That is most true where the supply chain is internal to the firm, and hence there are no commercial transactions that are recorded anyway, but even when the relationship is a market one, the data is unlikely to be publicly available.

It is, however, possible to model where supply chains **are likely to be**, by looking at i) the detailed sectoral composition of a local economy; ii) input-output information from national statistical agencies about the sectors that those industries buy from and sell to; iii) the locations where those other sectors are; and iv) the so-called 'gravity relationships' between them, based on distance, absolute scale and share of the relevant local economy.[5] This methodology can be used to identify where potential supply relationships may exist—and also where they clearly do not exist. It cannot however provide hard evidence of where they do exist. Also, it mainly works in manufacturing—for other sectors it is harder, since although the ability to trade some services over distance is extremely low (office cleaning, for example), other services can be traded over long distances, so that there is not really a gravity relationship (accountancy is increasingly coming under that heading, for example).

2.5.3 Business & other networks

Another dimension of potentially large importance in identifying regional economies is the extent to which businesses are linked together as members of networks, for the exchange of opportunities, information and ideas, and also the extent of their linkages to other economic agents, perhaps most importantly, colleges and universities.

Indeed, there are reasons for thinking that networks may have a large but under-appreciated impact on business performance. And if these networks have regional characteristics, then that may be helpful in thinking about how to improve performance at both the local and national levels. (A Venables, 2004).

[4] Companies do sometimes commission impact studies, and hence reveal their supply chains to researchers, but this is the exception not the rule and is always subject to confidentiality restrictions.

[5] The methodology partly relies on input-output tables, which are available for both Scotland and the UK as a whole.

To take an extreme but important example, a major reason why Silicon Valley in the US has succeeded is likely to be because of its strong networks, connecting companies together. We consider that in Section 4 below, in our case study of the San Francisco Bay Area.

Once again, however, **no comprehensive data on business networks exists**. It might be possible to identify the **membership patterns of organisations** such as Chambers of Commerce, of which there are 22 in Scotland, and indeed their own geographies might be a possible pointer to an alternative geography for Scotland. However, the reality is that these and other membership organizations mostly have geographical footprints that reflect their own histories, and it is the geographies of the organizations that generate the geographies of their networks, rather than vice versa.

Furthermore, organizations such as Chambers of Commerce may not be the best conduits for fostering **commercial and entrepreneurial engagement between companies**. Instead their focus tends to be on local policy matters such as planning, and on regulatory issues more generally, and on providing networking opportunities that they themselves broker, particularly events. And they involve formal membership arrangements, and have fixed rules and structures. In contrast business networks that are used to generate both trading and investment decisions are more likely to be very informal and concerned with creating mutual opportunities, rather than engaging with local politics. **Social media** lends itself to this type of networking, through forums and the like.

In some countries, information is available on telephone network usage, especially mobile networks, and perhaps this can be used to help identify the geographical extent of networks. The information is not, however, generally available for the UK. Another possibility may be the use of online social media, and indeed **online searching**. Thus, the extent to which people or companies in one place undertake online searches about another place may provide information on whether or not they are effectively both part of the same region. The information is likely to be especially useful when the reason for the search is known—most obviously, job search. Indeed, this may be a potentially important supplement to the more conventional labour market information considered in Section 2.3.6 below.

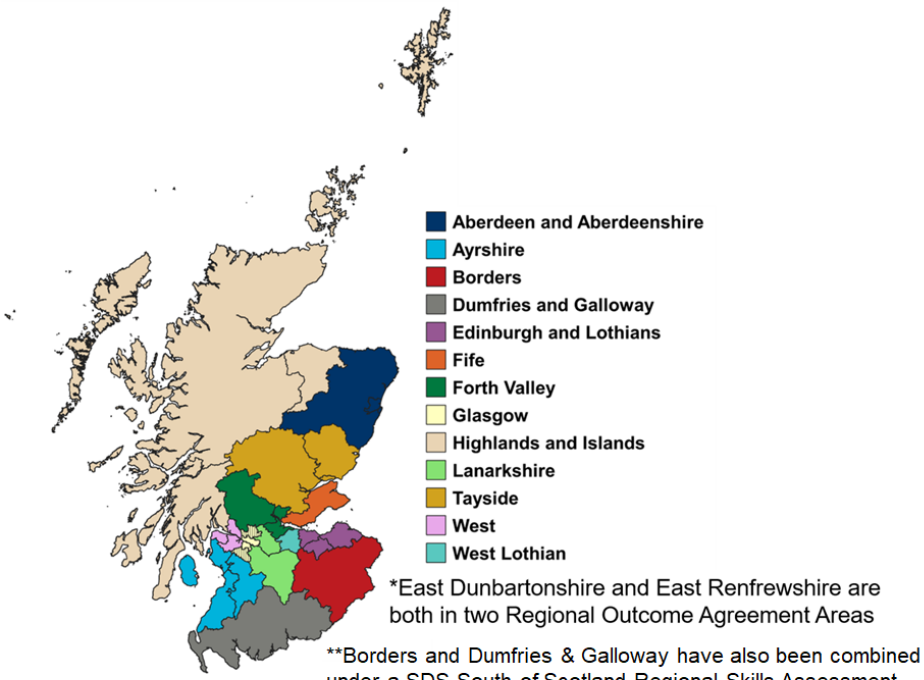
The good news is that **information on online activity is in principle available** from search engine providers, and also from those who run networking and job-search websites. And although here too, commercial considerations may be a barrier, they may not be insurmountable. (Goldfarb, 2006). (Forman C, 2012). However, there may be technical difficulties to interpreting the information, if for example online searching involves a high but unmeasurable degree of duplication. The evidence on all of this is not clear.

2.5.4 The education & training ‘market’

‘Travel-to-learn’ is another important feature in local geography, and may be very different to travel to work, discussed below. Colleges and universities all have up-to-date information on where their students live or originate, and so can map their individual catchment areas. But like businesses, they tend to be reluctant to share the information, for commercial and confidentiality reasons.

However, Skills Development Scotland (SDS) has produced its own set of Scottish regions, as shown in Figure 1.

Fig. 1. Skills Development Scotland Regional Skills Assessment Areas



Source: Oxford Economics

In addition, SDS is a participant in City Region and Growth Deals, so that those regions are also important to plans and proposals around skills and employability, explicitly as part of wider economic development aims. Furthermore, local authorities in Scotland play a role in supporting Careers Advisers, Work Coaches and others, and SDS therefore also looks to local authorities to provide local-level insight into needs.

As with other sectors of the economy, it is of course also a feature of education that it is increasingly delivered, at least in part, online. **So, the importance of geography to learning may be diminishing**. It is, however, highly unlikely ever to disappear completely—particularly for those parts of learning that are literally 'hands-on'.

2.5.5 Housing markets

Housing markets tend to be very local. Most 'migration' between places in reality involves people moving house a short distance, even if sometimes in doing so they cross local authority boundaries. Housing Market Areas (HMAs) are defined as areas in which people search for new homes without changing jobs. Researchers have sought to define these using data from the 2011 census, in some cases backed up by information from local estate agents, and imposing a condition of 'self-containment'—a proportion (typically 70 percent) of local homes being taken up by local people and 70% of local people taking up local homes. Evidence from North West England has shown that these areas are poorly correlated to local authority boundaries. They are generally

smaller than and often nestle within Travel to Work Areas (see below). (S Hincks, 2010)

That said, attracting newcomers, especially the highly skilled to a local or regional area is often a feature of economic development strategies, and hence having a sense of where they might be attracted to is potentially important, not least as an input into planning decisions for new housing developments. This is a classic case where a regional perspective may give a different answer to a local perspective.

The other sense in which housing geography matters a great deal is with regard to deprived local neighbourhoods, characterised by multiple needs. Residents in those neighbourhoods are often unable or unwilling to move away from them, either to work or to live, while newcomers are reluctant to move in. This can make the problems of the neighbourhoods more deeply entrenched. However, this is quintessentially a very local issue, and is not hugely relevant to the definition of regions.

In terms of information on migration, the most robust source is the 2011 Census—so clearly not very recent. In contrast, GP registration data is produced monthly and is extremely up-to-date, and in principle can also be used for tracking migration. The data is available for over 6,000 postcodes across the UK. In practical terms, however, the information is not easy to use and is not completely reliable, given that many people do not update their registrations, or indeed register at all.

An alternative is to use relative land or house prices to identify where one housing market begins and another ends. This approach tends to generate a few large regions in densely populated places and more but smaller regions in sparsely populated areas. (Bode, 2008) However it ignores a range of other factors that influence land and house prices, though it may be useful for mapping changing house and land prices over time—which is certainly an aspect of social inclusion/exclusion.

2.5.6 Labour markets

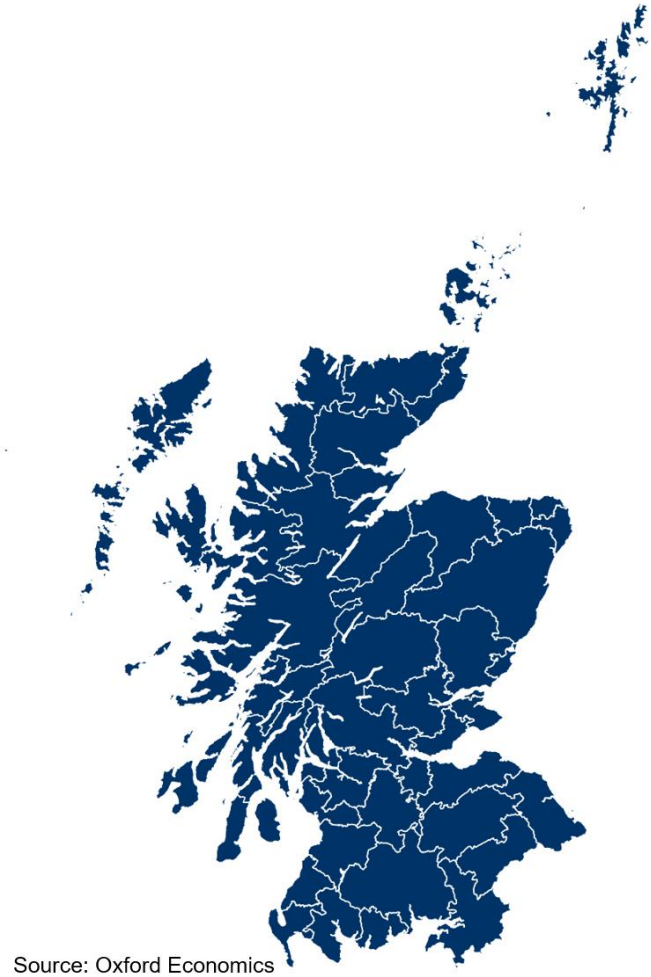
This is the main source of information that in practice tends to be used to define functional areas. The ONS defines Travel to Work Areas (TTWA) for the whole of the UK. They are contiguous and exhaustive areas, defined using 2011 Census data, and are mostly defined as areas where at least two-thirds of residents work locally, and at least two-thirds of the workforce live locally.[6]

In spatial terms, most TTWAs tend to be quite small—unsurprisingly so. What this means is that if they are to be used for defining regions, then a way of aggregating them together is needed. There is an obvious argument for saying

[6] *The method for identifying TTWAs also sets a minimum threshold of an economically active population of at least 3,500, while the thresholds for self-containment extend to 75 percent for areas with a population below 25,000. An iterative process of generating TTWAs seeks to contain each area within a given local authority if possible. More information can be found in the following link:* https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/traveltoworkareaanalysisingreatbritain/2016

that regions should not bisect or disregard TTWAs, but not an obvious argument for saying what the aggregations of the TTWAs should be. Thus, TTWAs help with defining regions but do not themselves define them. Figure 2 maps all the TTWAs across Scotland. [7]

Fig. 2. Scotland's Travel to Work Areas



Source: Oxford Economics

There is an obvious problem that TTWAs are based on 2011 data and hence may be out of date. To address that it is possible to produce more recent estimates for commuting, based on the difference between ONS data on employment of **residents**, and up-to-date ONS data on employment by **workplace**. The gap between these is a measure of commuting, but only in net turns, rather than gross inflows and outflows.

So, if for example we know that employment by workplace in an area has risen but that employment by residents has not, then we can infer that either more non-residents are commuting in, or fewer residents are commuting out, but not which.

[7] *Two TTWAs, Berwick and Carlisle, are partly located in England.*

This is still useful to know. It relates to the concern that is sometimes expressed, when the creation of new jobs in a local area appears to offer no benefit to local residents, since local employment does not rise, and local unemployment does not fall. But if it is the case that local residents no longer need to travel so far for work, then there may be a welfare gain to them. That said, the places that the residents previously commuted to might now be experiencing skill shortages. So by implication it is the local area that has benefitted after all, and the wider area that has suffered—contrary to perceptions. This regional rather than purely local perspective may be helpful.

It is important to note that the design of TTWA used by ONS does not, implicitly or explicitly, start with the assumption that the areas are centred on large towns or cities. That is what they often show, but it is a consequence, not a driver, of the method, and sometimes a TTWA has no obvious centre. (Coombes M. , From City-Region concept to Boundaries for Governance: the English Case, 2014)

However, starting with a central place is sometimes used in the analysis of labour markets.[8] In the US, for example, Metropolitan Statistical Areas (MSAs) all comprise at least one core city with a population of 50,000 or more, plus any adjacent counties from where at least 25 percent of the employed residents commute to the core city. Similarly, in the EU, the Functional Urban Regions mentioned above are also based around an urban core, in contrast to the UK approach.

A similar approach has been used in the UK to define Primary Urban Areas. And when Greater Manchester was defined as part of the process of establishing the case for giving the city region a higher than normal degree of autonomy, the process was taken further. The definition was based on the commuting patterns of the **highly skilled**, not all workers. And indeed, for the whole of the UK including Scotland the ONS has developed TTWAs for the high, medium and low skilled, for older and for younger workers, and also for both men and women and for part-time and full-time jobs. All of these are therefore available, although not often used.

The Greater Manchester case does, however, raise another important issue. It could be argued that the regional economy has two centres: Manchester and Liverpool. But that possibility was excluded by assumption. In Section 4 we discuss a contrary case where a regional economy has been defined to include cities of similar size to one another—Solent in south east England. Some have asked whether Edinburgh and Glasgow are another example. (N Bailey, 2001)

2.5.7 Trends-based data

The measures discussed above are mainly concerned with mapping flows across geographies—flows of people, of ideas, of business transactions, and so on. The alternative is to try to identify regions on the basis of their having

[8] *Another alternative but rarely used methodology is not to use flow data at all but to look instead at travel times. However, there are huge problems of comparability with such data—as well as availability. (ESPON, 2014).*

differences with their neighbours which persist through time, implying that they are driven by different factors, or different combinations of factors, and therefore should be addressed differently.

One way to address this is to examine data on trends in output or employment over time for all regions and districts in an economy, and then to define regions based on there being smaller variations between the districts **within** the region than between those districts and others **outside** the region. Algorithms can be devised to identify where regions 'naturally' fall.

A variation of this compares **industrial structures** between different places. If a place has a distinctive industrial structure, then that may imply that it has a distinct economy. This argument clearly cannot apply at very local levels of geography, since these usually do vary from one another. But it may help in trying to decide whether a place with a large geographical area really is different to its neighbours, or indeed to the nation as a whole, or whether those differences are not as important as they are sometimes thought to be.

Neither of these approaches seems likely to work on its own as a way of identifying economic regions. However, they may provide some information that more conventional methods do not reveal---especially if those methods are reliant on out-of-date information, or only on travel-to-work information, or both. Accordingly we look at simplified forms of both of these approaches in the brief profiles of Scotland's 12 regions, contained in Annex A below which have been organized into geographies developed for various purposes, including City and Growth Deals and emerging Regional Economic Partnerships.

2.6 OTHER WAYS TO IDENTIFY REGIONAL ECONOMIES

In the two previous sections we suggest, first, that the case for functional economic areas is not theoretically watertight; and second, that most of the data needed to define them is not readily available. One implication of this is that in Scotland, those who are forming Regional Economic Partnerships (or similar arrangements) should not feel under pressure to justify their choice of geography exclusively in terms of functional areas. Instead, other criteria can be adopted which may also help to guide what is an appropriate geography at which to work.

First, there may be important **interactions** within different parts of a region, such that an economic event or policy intervention in one part of the region has an impact in another part. Commuting and travel to work areas have this characteristic, but so do supply chains. And planning new infrastructure in order to improve linkages may be an important element of making growth more inclusive, by improving access to employment or business opportunities (and of course healthcare and so on).

Second, and particularly with a view towards encouraging inclusive growth, it may be helpful to focus, not so much on the geography of where markets are (the functional model) but instead on the geography of **where market failures are**. These might take the form of unemployment, homelessness, under-

investment, skill shortages, poor transport connectivity, and so on.[9] It is market failures that generate the case for policy interventions, and if failures are prominent within particular places, then that is the geography at which policy interventions should be delivered. Historically this has tended to be used as the basis for very local neighbourhood-level programmes, but it also tends to provide the basis for very large geographical areas, where poor access to resources and opportunities is likely to be a problem.

Third, there may be a case for spotting geographical **clusters** or **agglomerations** of economic activity, and using those as the basis for the geographical organisation of governance.[10] An example of this might be North Sea related activities, which although concentrated in Aberdeen extend northwards and southwards along the coast. More ambitiously, there may be a link between that cluster and others elsewhere in Scotland.

Fourth, and related to the above, there may be significant **networking** relationships around which to build geographies of governance. This is particularly the case where infrastructure networks are concerned, and hence transport systems in particular. In the case study on the San Francisco Bay Area in Annex B we discuss a classic case where the development of regional transport networks has been impeded by local opposition, and hence where there has been a resultant overall welfare loss. This is the biggest argument for city-regions. But it is definitely not an argument for trying to fit the idea of city regions to every single location, since sometimes these networking effects may be quite small.

Fifth, historical links do matter. This is not just a matter of sentiment, although that is also relevant, but the reality is that some regions or local areas **persistently** do better or worse than others over many years, and indeed many generations. Technically this is called path-dependency, and it mirrors a technical issue with investment appraisal, in which the return on investment of a project is substantially a function of the existing economic success of the local area. (R Martin, 2008). That makes it very hard to change local trajectories. But one of the mechanisms for changing this is to change perceptions of a place—which means local or regional identity matters, even when that identity is based on history as much as current market relationships.

Taken together, these factors suggest that in thinking about regionalism, in Scotland or elsewhere, a degree of pragmatism and 'horses for courses' may be in order.

[9] In this context market failure refers to immobility in the factors of production—typically labour. The immobility may be geographical (people do not commute and/or migrate) or occupational (people do not retrain/switch career) or indeed both at once.

[10] Clusters apply within sectors or production processes, whereas agglomerations apply across sectors. There is evidence that the latter help to generate stronger economic performance at the regional level whereas the former do not. (H Overman, 2009)

2.7 REGIONAL GOVERNANCE AND DELIVERY ARRANGEMENTS

Where policy is concerned, important issues are what the purpose of having both local and regional tiers of government is, and what the responsibilities of the two are, compared with one another and with central government.

Practice differs around the globe, with examples that include:

- Situations where the design of policy resides at the same level as the delivery of policy, versus ones where policies are designed centrally but delivered locally;
- Situations where revenue-raising powers reside at the same level as spending powers, versus ones where revenue is raised centrally and then shared out, either via a formula or a bidding process (such as City Growth Deals);
- Where regions exist, situations where their purpose is essentially to coordinate funding bids and lobbying, or ones where they help bring about consistencies between local activities and strategies, or ones where they have delegated authorities and decision-making powers.

For all of these there is an issue of where in reality accountability ultimately lies. In general, views on this are likely to be affected by opinions on two issues: the importance of democratic control (and what exactly that means), and the competence/knowledge of the relevant tier or agency of government, and hence its practical ability to make the best decisions.

With regard to the latter, and at the most basic level, small geographical areas may be too small to be able to afford enough staff with the necessary technical skills, but large areas may mean that local information and nuance is lost (and some would argue, local advocacy too). This is a familiar trade-off, and one of the benefits of regional partnerships may be that they are able to strike a useful equilibrium between the two forces.

We examine these issues in our international case studies. Amongst evidence in the literature, an evaluation of Local Strategic Partnerships in England suggested that success or otherwise for partnerships tended to involve either virtuous or vicious circles, with a history of partnership working being an important factor promoting success, but also adequate resources, evidence that the partnership could genuinely add value, positive outcomes, and success in lobbying for funds. All of these tended to reinforce one another, and their absences would undermine one another. (Coombes M. , 2006)

The implication would seem to be that for regional partnerships, questions of buy-in, leadership and so on may be as important as questions of functional geography.

The extreme case is where local or regional government has powers to both spend and also raise revenue. While this is not in itself an immediate issue in Scotland, the OECD has offered some evidence that **devolution of revenue raising can sometimes improve decision making**, if it results in the relevant lower tier of government having more to gain from generating successful outcomes within its local or regional economy. (Blochliger, 2013) Crucially, however, success here is defined mainly in terms of overall growth rates, and

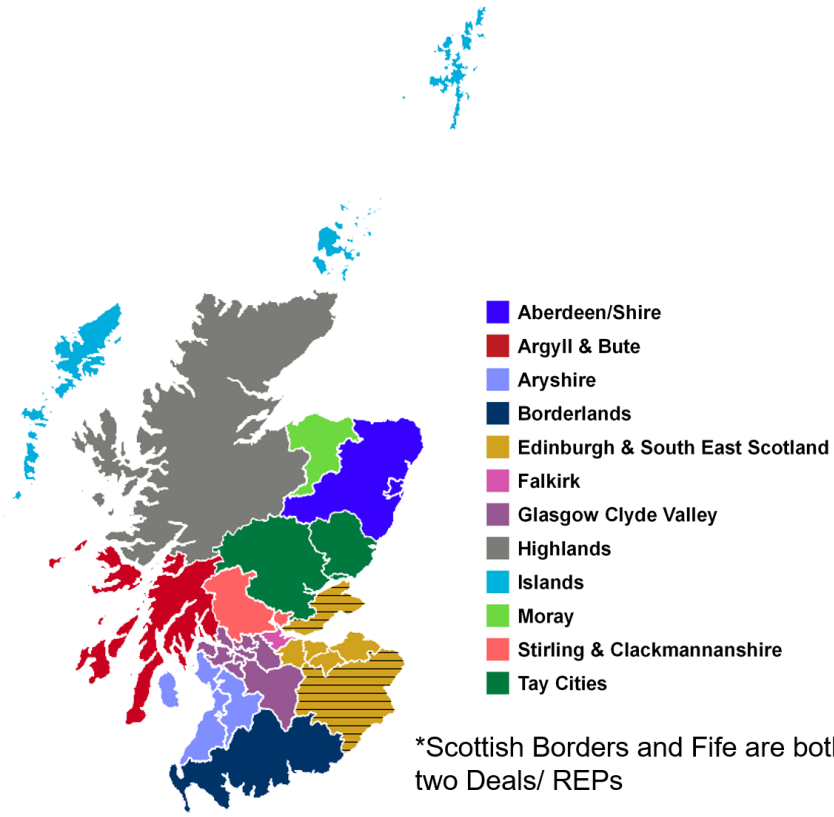
not primarily in terms of inclusive growth, since an exclusive focus on the former is more likely to be revenue-enhancing than a strong focus on the latter. Nevertheless, the more general issue of the extent to which any organisation or partnership has ‘skin in the game’ is a relevant one.

3. SCOTLAND'S AREAS

3.1 OVERVIEW

As we noted in the Introduction, a number of Regional Economic Partnerships (REPs) have already been formed in Scotland by local councils and their partners, while others are under active consideration. Six regions have clearly committed to forming REPs. Of these, some are more advanced than others. The starting point tends to be delivery of City Region and Growth Deals, but broader ambitions for REPs are included in the Enterprise and Skills Review and the Economic Action Plan. The figure below captures these Deal groupings.

Fig. 3. Scotland's Deal Geographies



Source: Scottish Futures Trust, Oxford Economics

The resultant geography is therefore currently very much informed by that of the Growth Deals and is not necessarily therefore a map of future partnerships. Of the six REPs already in place, the **Glasgow City Region** REPis formally established. It is building on several years of partnership work and governance development, linked to the City Region Deal, and its aims align closely to the ambitions to accelerate inclusive growth set out by the Scottish government.

The **Aberdeen Partnership** is also well-advanced, and is unique in that a private sector organisation (Opportunity North East or ONE) backed by a

charitable foundation plays a pivotal role in its operation. In this document we refer to Aberdeen/shire.

In addition, Ayrshire Regional Economic Partnership (including the geography covered by all three Ayrshire local authorities) had its first formal meeting in Spring 2019. The Tay Cities Partnership came together ahead of agreeing their City Region Deal. Edinburgh and South East Scotland and Stirling/Clackmannanshire are firming up future plans for their own REPs. Outside these six, the Moray Economic Partnership and the Highland Economic Partnership each comprise a range of partners and both report a range of common challenges and opportunities to the Convention of Highlands and Islands.

For the reasons set out in the previous section it is a little hard to say definitely whether or not Scotland's emerging areas conform closely to the concept of functional economies. However, there are some broad remarks that we can say, not least about Travel to Work Patterns, and hence the extent to which the 12 are distinct economies from the perspective of being reasonably self-contained economies. Figure 4 sets out the basis information, as contained in the 2011 Census.

Fig. 4. Travel to Work Patterns, 2011[11]

	Workforce			Residents		
	Total employment in local workplaces	Of which, non-residents commuting in	Local employment opportunities taken by residents (%)	Local residents in employment	Of which, local residents commuting out	Local residents in work who work locally (%)
Aberdeen/Shire	211,700	14,900	93.0	209,400	12,600	94.0
Argyll & Bute	31,600	7,100	77.4	30,100	5,700	81.1
Ayrshire	110,600	9,900	91.1	130,400	29,600	77.3
Edinburgh & South East	520,700	48,700	90.6	510,200	38,200	92.5
Falkirk	50,200	14,200	71.7	62,700	26,700	57.4
Glasgow City Region	676,700	62,900	90.7	662,500	48,700	92.6
Highland	83,200	3,400	95.9	85,300	5,600	93.5
Islands	27,200	900	96.7	27,800	1,500	94.6
Moray	32,200	2,700	91.6	36,300	6,700	81.4
South of Scotland	83,900	5,600	93.3	91,800	13,400	85.4
Stirling & Clackmannanshire	51,500	16,600	67.8	51,800	16,800	67.5
Tay Cities Region	265,400	16,400	93.8	287,500	38,400	86.6

Source: ONS Census 2011

Irrespective of the issue of commuting flows, it is worth noting that the table offers two alternative ways of measuring employment in a region: one based on those who work there (**workforce**) and the other on those who live there

[11] Note that this analysis follows ONS guidance in excluding those workers classed under "no fixed place" or "mainly work at home or from home". Note that estimates of Workplace Population and Residents in Work within the 2011 Census data on the origins and destinations or workers do not align with other Census estimates for (people-based) workplace and resident employment, and hence do not align with Oxford Economics' data.

(**residents**), with commuting explaining the difference between the two. There is no sense in which either of these is the 'correct' measure: the former gives an indication of how many jobs a particular place offers to people, and the second gives an indication of how successful local people are at finding work. A successful, inclusive and sustainable economy scores highly on both counts, not on just one or the other.

There is a further question of whether an economy with low levels of commuting (in either direction) is, in some sense, functioning better or worse than one with high commuting. The former implies less use of transport and hence environmental impact; it may also mean a stronger local community and sense of cohesion, with local people working locally. However, it could indicate a loss of both economic efficiency and opportunity, if it indicates for example that local people are insufficiently qualified for jobs elsewhere, or cannot access them because of poor transport, or equally if it means that employers have to advertise and compete beyond the local area to fill local vacancies.

An important feature of these geographical areas is that they are all much larger than the Travel to Work Areas shown in Figure 2. As Figure 4 shows, in terms of the 2011 data, most of the 12 do indeed meet the twin criteria of a large proportion of residents working within the area, and a large proportion of jobs in the area being taken by residents. In that sense, they can be seen as 'super-travel to work areas'.

Unsurprisingly, that is most true for the two **Highlands** and **Islands** regions, with 96 percent of jobs in the Highland undertaken in 2011 by local residents and 97 percent of Islands jobs performed by locals, while 94 percent of Highland residents worked within the region (matched by **Aberdeen/shire** residents) and 95 percent of Islands residents did. So high levels of self-containment.

The only areas that are doubtful in terms of being distinctive travel-to-work locations are neighbours **Falkirk** and **Stirling & Clackmannanshire**, in which only 72 percent and 68 percent respectively of local jobs were taken by residents in 2011, and only 68 percent and 68 percent of local residents worked locally. So for these two in particular, the argument for being regarded as distinct regions perhaps needs to be based on other criteria.

In addition, **Argyll & Bute** is marginal where commuting flows are concerned, in the sense that only 78 percent of local jobs were taken by residents. However, a slightly higher 81 percent of residents worked locally in 2011.

Furthermore, two regions, **Ayrshire** and **Tay Cities Region**, saw substantially higher levels of out-commuting than in-commuting. In the former case the gap was nearly 20,000 and in the latter case 22,000. Even in absolute terms these are substantially higher than the net commuting into the two big city regions of Glasgow City Region (to which the Ayrshire commuters tend to flow) and Edinburgh & South East (to which the Tay Cities Region commuters mostly flow). Essentially this means that part of the two regions could arguably be included in the adjacent city region—and in the case of Fife it does indeed sit on more than one regional partnership. Given that the concept of a functional

area is not theoretically or empirically 100% robust, that is a compromise that is hard to criticise from first principles.

A second point, implicit in Figure 4 but made more explicit (and more up-to-date) in Figure 5 is that the 12 regions vary hugely in terms of scale. The city regions of Glasgow and Edinburgh are closely matched in terms of GVA, even though Edinburgh city region is smaller in employment terms than Glasgow city region—a clear sign that there is a difference in productivity between the two.

Fig. 5. Scotland's 12 regional/Deal groups, as shares of the national economy

	GVA		Employment	
	£m, 2016 prices	Share of Scotland (%)	000s	Share of Scotland (%)
Glasgow Clyde Valley	41,614	30.1%	947	33.5%
Edinburgh & South East Scotland	40,623	29.4%	733	26.0%
Tay Cities Region	18,494	13.4%	357	12.7%
Aberdeen/Shire	18,281	13.2%	311	11.0%
Highland	5,939	4.3%	132	4.7%
Ayrshire	5,729	4.1%	147	5.2%
South of Scotland	4,697	3.4%	127	4.5%
Falkirk	3,585	2.6%	73	2.6%
Stirling & Clackmannanshire	3,524	2.5%	71	2.5%
Moray	1,940	1.4%	44	1.5%
Argyll & Bute	1,890	1.4%	48	1.7%
Islands	1,810	1.3%	44	1.6%
Scotland	**138,225**	**100%**	**2,825**	**100%**

Source: Oxford Economics

One thing that all of the regions share in common is that their unemployment rates have been declining. To that extent they have all experienced growth that has been inclusive in the sense of drawing more people into work and leaving fewer people without a job.

But a key issue here is whether all parts of the regions have shared in that trend. As a generalisation the story is that they have, as Figure 6 illustrates. The table shows unemployment rates in 2013 and 2018, using the International Labour Organization (ILO) definition.

Fig. 6. Variations in unemployment by region: 2013 and 2018

%	2013	2018	%	2013	2018
Aberdeen City	4.4	3.7	Dumfries & Galloway	6.8	2.6
Aberdeenshire	4.0	3.5	Scottish Borders	3.4	4.2
Glasgow City	9.4	4.9	Edinburgh, City of	6.5	2.7
Inverclyde	5.7	5.6	East Lothian	4.6	3.7
North Lanarkshire	9.0	3.8	Midlothian	4.8	2.4
Renfrewshire	6.9	4.5	West Lothian	6.9	2.9
South Lanarkshire	8.7	3.6	Fife	8.7	3.3
West Dunbartonshire	9.5	4.8	Angus	7.2	6.1
East Dunbartonshire	4.5	3.5	Dundee City	12.1	3.1
East Renfrewshire	7.3	2.6	Perthshire & Kinross	5.4	3.3
Stirling	6.3	2.6	Argyll & Bute	4.7	2.7
Clackmannanshire	9.2	5.1	Eilean Siar	6.4	3.1
East Ayrshire	10.6	7.2	Orkney Islands	4.8	3.6
North Ayrshire	12.5	7.3	Shetland Islands	6.5	4.7
South Ayrshire	6.4	4.3	Falkirk	6.3	4.5
Moray	5.7	6.3	Highland	4.9	4.7

Source: Oxford Economics

So, for example, within Glasgow City Region in 2013 the unemployment rate in Glasgow City was 4.9 points higher than it was in East Dunbartonshire (9.4% versus 4.5%) but in 2018 it was only 1.4 points higher (4.9% versus 3.5%). And the gap between Dundee City and Perthshire & Kinross is down from 6.7 points to just 2 points—indeed it has reversed, with Dundee having slightly lower unemployment.

Unemployment is of course only one of many measures of social inclusion/exclusion. As Scotland pursues inclusive growth, the many different dimensions need to be tracked and interventions, if appropriate, adopted. Nevertheless, the point remains that there is at least some evidence that growth in Scotland is currently proceeding in a way that is more inclusive than it appears to have been in the past.

In Annex B we provide some pen-portraits of the 12 regions/Deal areas. The key region-by-region messages from those portraits are summarised below. Thought needs to be given as to whether the Deal areas may form into regional partnerships in the future.

3.2 REGION BY REGION

In the last decade, and especially in recent years, **Aberdeen/shire's** economy has diverged markedly from Scotland's in terms of GVA growth. That suggests that it has special characteristics of its own—as of course it does, because of the importance of North Sea activities. By similar reasoning, the two parts of the region are clearly connected to each other, with Aberdeenshire's GVA heavily influenced by the fortunes of the oil and gas sector, just as the city obviously is. And in commuting terms the region has low reliance on its

neighbours, either for jobs that people can commute to, or for workers who can commute in, and do the jobs that the region needs done. So, in all these ways, this does appear to be a **distinctive and identifiable region**.

Argyll & Bute tracked Scotland between the global and financial crisis and 2014 but has since fallen away in relative terms. Its economy tends to be biased towards sectors such as agriculture and public services that have not seen the fastest growth. The region itself is quite varied: we do not have more detailed output or employment data, but it is clear that the eastern and southern parts of the region are closely linked to Glasgow City Region through commuting. **The extent to which this is a homogenous and distinctive region is therefore less clear than it is for Aberdeen/shire.**

Ayrshire has in some respects a similar story to Argyll & Bute. As a whole it has demonstrated a tendency to under-perform Scotland as a whole, but that conceals big differences between South Ayrshire, where employment fell from 2013 to 2018 and North and (especially) East Ayrshire, which have seen employment grow and which are close to Glasgow City Region. Related to that, commuting into Glasgow City Region is important in the northern parts of the region but not (for obvious reasons) in the south. Where sectors are concerned, the main difference with the Scottish average is a much larger manufacturing sector in Ayrshire. Some of this may reflect supply chain and other links to Glasgow, but the evidence on that is not available. **But it is hard to avoid the view that Ayrshire is a distinct identity in its own right, more as a matter of history than of economic geography.**

Over towards the east, **Edinburgh & South East Scotland** has tended to grow very closely in line with the Scottish average. That is partly because, as Scotland's second largest region, it has to some extent set the pace for the nation overall. However, we need to be cautious not to overstate this: Edinburgh city itself has under-performed the region, with the Lothians showing stronger growth in workplace employment. A likely reason, at least in part, is the dominance of financial services in the city's economy. Once a huge driver of growth, that has now ceased to be the case, slowing the growth rate of the city centre. The result is a regional economy which is becoming more evenly balanced both sectorally and geographically. **Clearly there is a city-region here, though where to draw the exact boundaries is inevitably less clear.**

Falkirk is a geographically small place, although less-so in employment terms. As noted above it is hard to claim that it is self-contained in travel-to-work terms. There are large outward commuter flows, in both net and gross terms. However, these flows go in several directions, towards Edinburgh, Glasgow and (to a lesser extent) Stirling, so that Falkirk is hard to characterise in terms of which other region it might fit into. In employment terms, the region has tended to see faster-than Scottish average employment growth in the past five years, but in output terms the growth has been slower, implying an unhelpful shift underway towards sectors with weaker productivity growth. There is of course a strong reliance on petrochemicals and associated transport and storage, and in that sense the Falkirk economy is very different to that of other parts of Scotland. **That may be a reason why it has its own Growth Deal, but going forward it does not justify thinking of it as a distinct region.**

Glasgow City Region is Scotland's largest region, accounting for 30 percent of the nation's economic activity. In 2011 63,000 people commuted into the region, but that was still only 10 percent of all the local employment. The structure of the economy is not hugely different to that of Scotland overall, and no one sector stands out as being dominant. Manufacturing, historically closely associated with Glasgow and the Clyde, is a smaller share than nationally. The economy has tended to grow in line with, but a little slower than the Scottish average, with Renfrewshire and East Renfrewshire showing the strongest growth, at least in employment terms—so mimicking the situation with Edinburgh and the Lothians. As with Edinburgh it is clear that **this is a city-region, even if defining the exact boundaries is difficult.**

Highland is a large region in employment terms as well as geographically. As noted above, commuting into and out of the region is modest, implying a relatively self-contained economy. That is reinforced by several recent years in which the region's economy grew faster than Scotland's. The hospitality sector is unusually large, reflecting the importance of tourism, but so too is manufacturing (not uncommon for rural areas). But high value-added service sectors are not prominent. Since there are no local authority boundaries within the region we cannot comment on how homogenous it is. That apart, Highland is clearly **a good example of an identifiable and distinct region.**

The Islands are Scotland's most clearly self-contained region in commuting terms—and probably in other terms too, although it is important to remember that in some regards relatively small and scattered offshore islands such as Scotland's tend to be highly dependent upon, and hence integrated into, the national economy and its major cities. Reasons include their reliance on cities such as Inverness or Aberdeen for hospital facilities, and the often symbiotic relationship between their tourism offer and that of other parts of Scotland, not least Edinburgh. In addition, as the only delivery of both commercial and public services increases, the Islands will probably become more integrated into the wider nation via that technology.

This is also partly why not only financial services but also retail and wholesale are under-represented sectors. In GVA growth terms, however, the Islands have shown their own largely independent trajectory for several of the last ten years. One issue here, however, is the extent to which the Islands themselves are similar to one another. Certainly, Orkney has experienced much stronger employment growth in the last five years than have the Shetlands or Eilean Siar. **So the concept of the islands as a distinct economic region is potentially challenging, whereas the cultural logic is very clear.**

Moray is another relatively isolated region within Scotland, but unlike Highland its employment levels are modest—closely akin to those of Argyll & Bute and the Islands. In 2011 few people commuted into the region, with rather more commuting out—although still small in absolute terms. Significantly, the outflows were split between Inverness to the west and Aberdeen to the east. The region has been showing a bit of a tendency to be left behind in GVA growth terms, with a lower level of output in 2018 than in 2008—something that is rare at the UK level, let alone the Scottish level. Moray's major town, Elgin, has an important manufacturing sector that represents a significant part of the regional economy but that has struggled in the face of global competition.

Other sectors have more-than taken up the slack in employment but not in output terms. **Overall, it is hard to argue for Moray as an economic region in its own right from purely economic terms**, and it may be that this is another place that could arguably be part of two different partnerships.

South of Scotland is a complex region, in the sense that Scottish Borders is part of both this region and also Edinburgh and South East Scotland—. So, some areas are very linked into the Edinburgh economy, while others are more remote. The region has, however, tended to grow rather faster than Scotland as a whole in terms of GVA (economic activity), and without huge divergences between the two local authorities within the region. Manufacturing and agriculture are both important to the South of Scotland, which looks partly southwards towards England as well as northwards into the rest of Scotland. **Overall this is a reasonably distinctive region in its own right.**

Stirling & Clackmannanshire is a medium-sized region in employment terms with (for its size) high levels of both inward and outward commuting, reflecting its central location and proximity to Scotland's two largest cities. The region's own city, Stirling, has tended to out-perform Scotland in employment terms while (smaller) Clackmannanshire has under-performed, so in that sense it is not an especially homogenous region. Its overall sectoral structure is similar to the national average, with Stirling contributing some helpful sectors in growth terms, notably professional and related services. **It is difficult to see a strong sense in which Stirling & Clackmannanshire is a distinct region from an economic perspective.**

Tay Cities Region is characterised by relatively large flows of out-commuters, primarily from Fife towards Edinburgh. Indeed, Fife is also in the Edinburgh & South East Scotland region. Tay Cities Region show considerable variations amongst themselves in terms of workplace employment growth over the past five years, with falls for both Perthshire & Kinross and Angus, but rises for Fife and Dundee. These have broadly balanced-out, and the region over all has performed slightly better than Scotland, but not hugely so. The sectoral structure is not especially distinctive. **Overall it is not completely clear in what sense this might be a distinct economic region**—although going forward there may be scope for building stronger relationships between the cities, and this might be a good case-study for trying to identify what the business-to-business linkages might be and how they could be strengthened.

4. INTERNATIONAL COMPARISONS

4.1 OVERVIEW: CHOICE OF COMPARATOR REGIONS

In this section we consider some examples of regionalism outside Scotland, to see how it compares with the emerging domestic variety.

The regions that we have examined are deliberately very different to one another, and to some extent the way in which we analyse them differs accordingly. The comparators were chosen by the project team, both on the basis of an understanding/familiarity with the region and its relevance to the commission.

1) We start by looking at regionalism across all of **Denmark**, since as a nation it is similar to Scotland, has a clear regional level of government using regional assemblies nominated by local councils, and also because as a nation it attaches importance to both inclusiveness and investment in transport infrastructure. Denmark therefore represents a good 'benchmark'.

2) From other nations we focus on individual regions, starting with the **San Francisco Bay Area**. It is a region that is huge in Scottish terms but not in US terms, and which is economically successful, despite not having strong regional governance. That has not hampered economic growth—far from it—but has meant that the growth has not been inclusive, despite the region having a reputation for 'progressive' politics.

3) From England we look at **Solent** in the south east, because it has a long-standing regional partnership in place very similar to the model developing across some parts of Scotland. Solent also combines urban and rural areas around a coastal geography, which creates parallels with many parts of Scotland, and it struggles in terms of growth, including inclusive growth, partly for lack of transport infrastructure, despite the partnership working.

4) Our fourth case study is the **Southern Region** of Ireland, because it is a little ahead of Scotland in developing its regional governance arrangements. These are on a similar basis to those of Denmark but with a clear requirement for the regional assembly to consolidate the views of both the local and national tiers of government into a strategic plan. The region is largely rural with scattered small cities, which has parallels with Scotland.

5) And from Australia we consider **South East Queensland**, another large region in which, as in Denmark there is particularly emphasises on investing in transport infrastructure, partly to secure that job opportunities can be easily accessed: there is an explicit policy of locating people and jobs closer together, and moving people and goods more efficiently and reliably, though this is couched in terms of sustainable rather than inclusive growth, which is more of an implicit than an explicit policy goal. The region has also used City Deals to target and draw-together higher-level funds. There is a regional planning agency with substantial powers but rather opaque reporting and governance arrangements.

These five are set out in detail in Annex B. Here, we summarise some of the key messages from each.

4.2 CASE STUDY BY CASE STUDY

4.2.1 Denmark

Denmark is similar to Scotland in several ways, but in one important respect it is very different. Denmark has little historical legacy of industrial decline to contend with. Culturally therefore, it is very homogenous in the sense that the histories of its regions are all very similar, and so are people's life experiences and expectations. Denmark has high levels of government spending that are devoted to promoting social inclusion—which is therefore fundamental, and not an add-on.

The country is split into five regions (fewer than in Scotland). These provide strategic coherence to the work of 98 local municipalities (more than in Scotland). The regional councils have few formal powers and no revenue-raising capabilities, but they do have significant spending budgets.

The regions' economic development strategies are all very different to one another, and there is an acceptance that the regional economies will not necessarily converge. Greater Copenhagen alone outperforms the national average. Nevertheless, in practice the regions' growth rates differ less than those of Scotland's regions.

Large infrastructure projects are funded by private sector investment with state guarantees from central government. These are very important to the regional economies. **The key lesson from Denmark** is that regional arrangements and significant investment in infrastructure are both important to delivering inclusive growth, but in circumstances which are very favourable: a nation with a simple common heritage and little in the way of past de-industrialisation to contend with, so that the 'inclusive' aspect of growth is non-controversial and almost taken-for-granted. It is seen as a positive from a return-on-investment perspective, since all regions tend to perform similarly, making decisions easier.

4.2.2 San Francisco Bay Area

The San Francisco Bay Area has a larger population and economy than Scotland, which might make it seem a poor comparator to Scottish regions. But by US standards it clearly classes as a region. And it includes Silicon Valley—surely the most successful regional or local economy in the world, at least in straight GDP terms.

The Bay Area's success is not down to a strong regional government—there is none. Instead, a variety of municipal-level authorities operate with little overall cooperation, and with a clear tendency to put their own interests before those of the wider region, notably with respect to housing and transport. There is some danger that this could eventually undermine the economic growth model, but more immediately it has clearly made growth much less inclusive.

That growth has come partly from a clear entrepreneurial culture at the level of the firm, which crucially involves strong informal ties between companies, easy

transfer of people and ideas, and easy access to finance. Effectively, therefore, the private sector has delivered the economic growth without a need for strong regional governance—but with the consequence that the growth tends to involve high levels of inequality.

At the same time, political activism in the Bay Area is strong and both neighbourhood and state-level politicians are very vocal. This too can help to force a regional perspective on disparate local municipalities—although sometimes it can do the reverse. Overall, however, the distinctive business culture of the Bay Area means that although it boasts a strong left-of centre and even alternative political culture, the reality is that social inclusion in the region is not high up the policy agenda. **The key lesson from the Bay Area** is that lack of regional government has not been bad for overall growth, but it has been bad for inclusive growth—and despite the prevailing political culture which purports to be pro- inclusive growth. It seems that aspirations that are not backed by appropriate governance arrangements are likely to remain just aspirations.

4.2.3 Solent

Solent, a region within south east England, has a mainland and island population of 1.2 million people, scattered around an area of sea, and with a mix of cities, towns and rural areas (including a national park). It has a long legacy of reliance on the public sector, and a sustained tendency to under-perform both the south east and UK averages in terms of economic growth.

Since 2010 Solent has had in place a regional partnership, the Solent Local Enterprise Partnership (LEP) which itself has roots in an earlier partnership. The LEP connects all the constituent local authorities, and the universities, under private-sector leadership.

The difficulties that the LEP has had in raising Solent's relative performance are likely to reflect a variety of factors. Its resources are limited, and like all LEPs it is under tight central government control, with less attention paid to local variations in terms of strategic challenges than perhaps there should be. Solent LEP has been required to produce a plethora of strategy documents and action plans. And Solent itself is a geographical area without a strong identity, which has probably reduced buy-in on the part of local partners. **The key lesson from Solent** is that forming and maintaining a partnership in itself is not enough to generate either higher overall growth or inclusive growth, if the partnership is not in a position to make the necessary decisions. The LEP has not been able to close gaps in economic performance, and without the ability to really address transport shortfalls or to fund upskilling in a major way it has not made major inroads into making growth more inclusive.

4.2.4 Southern Region of Ireland

This region accounts for a third of Ireland's population of 4.8 million people but rather more of its land area. It is mainly rural but with small cities and towns, some of which have aspirations to develop as 'tech-hubs' or local knowledge economy centres. In many parts of the region the population is in decline as residents seek better opportunities elsewhere, notably in Dublin—one of Europe's fastest growing cities. Since 2014 there has been a regional assembly, whose members are nominated by the ten constituent local and city

councils. The latter retain most of the powers, with the assembly charged with producing a regional spatial and economic strategy that brings local plans into line with one another and also into line with the policy objectives of the central government's national planning framework. The regional plan is subject to formal public consultation.

This is therefore a very demanding arrangement in terms of coordination, made more so because there is little tradition of collaboration between local councils. There are also perceptions that the interests of towns and cities are difficult to reconcile with those of rural areas. Partly as a result the draft spatial plan includes a wide variety of objectives, policies and programmes, in order to satisfy a similarly wide variety of interests. The scale of ambition is large relative to the resources and experience of the regional council, and is at odds with a tradition (arguably not very successful) of incrementalism at the local level. And although inclusive growth is a clear feature of the plan, the emphasis seems to be in terms of delivering this through welfare programmes rather than shaping growth itself. **The key lesson from the Southern Region** of Ireland may turn out to be that in its early days, any regional body needs to think carefully about the scale of its ambition, and specifically where inclusive growth fits within that, and how promoting inclusive growth might be approached from several directions at once (skills, transport, sector priorities as well as welfare provision) rather than having a very wide range of initiatives each heading in a different direction to meet a multiplicity of goals.

4.2.5 South East Queensland

South-East Queensland (SEQ) is the capital-city region of the state of Queensland in Australia. It is experiencing strong economic and especially population growth, particularly in and around Brisbane and other urban centres. Much of the region is rural, but land for development is plentiful.

There are 12 local government areas within SEQ but no formal regional government. Instead the state government has produced a regional plan, which is well-resourced by a combination of local, state and federal funds. There is a strong focus on land use planning and transport planning, and also significant use of the City Deals model. The commitment to inclusive growth is clear, but tends not to be expressed strongly in those terms—as with Denmark, there is not much legacy of deindustrialisation and so little in the way of inherited deprivation that needs to be tackled. Instead the focus is on providing people with access to jobs and providing employers with access to labour, and therefore delivering this through transport infrastructure which meets the needs of both. There are also programmes designed to raise skills and reduce unemployment, but these have the benefit of operating in the context of rising employment opportunities. Thus, the absence of strong clear regional government is probably not likely to become a problem, so long as these conditions remain favourable. **The key lesson from South East Queensland** may be that growth that is relatively inclusive can be achieved if there is sensible planning and sufficient resources, even if there is not much focus on inclusiveness as a goal in its own right.

5. ANSWERS TO THE QUESTIONS WE WERE ASKED

5.1 THE OVERALL BRIEF

To establish a baseline of knowledge on regionalisation in the context of aspirations to drive inclusive economic growth with the dual potential to grow economies and assist societal equity, including existing good practice guidance to inform future policy development and delivery in Scotland. It is anticipated this baseline will inform future activity by SCRIG and its partners, therefore the conclusions would seek to identify any weakness in the available knowledge base and potential areas for enhancement through future workstreams. This study recognises that strong collaborations between local authorities and others are emerging within Scotland ("regional economic partnerships") which form a component part of regional economies' governance, particularly in the driving of economic development. As such the study is intended to inform and support this evolving position. In addition, any recommendations or good practice should be contextualised to existing Scottish powers, providing a clear focus to inform future action.

5.2 QUESTIONS ON FUNCTIONAL AREAS

What is a Functioning Regional Economic Geography (FREG) (also known as Functioning Economic Market Areas (FEMA)) and are there tangible recommendations that can be used to build on the early work underway in Scotland. This includes, but not limited to, considering the following:

a. Drawing on international research and knowledge, what is understood to be the key characteristics and components of a FREG that could help inform possible coordination and alignment as well as the success of a FREG? It is anticipated that the inclusion of case studies will enhance the presentation of this question. This should consider the following:

We discuss this in Section 2.3. Whilst there is significant thinking, the basis of a FREG or FEMA is essentially conceptual and there is little conclusive evidence that sufficiently defines their fit or application for such thinking. The common practice of using travel to work areas generates small spatial districts rather than large regional economies, so does not really answer the question. Our case studies (Sections 4 and 8) do not suggest that the concept is adopted at all strictly internationally. So, in Section 2.6 we suggest a broader way of deciding how to identify economic regions, and the use of pragmatism in deciding how to balance different considerations.

i. FREGs are anticipated to be defined at different spatial levels e.g. local, regional/strategic and national: the research should include a clear definition of these spatial levels. Consideration should also be given to whether there is a requirement for an urban/rural sub-definition.

Regarding the first part of this, in Section 2.2 we discuss different tiers of government, and how these inform and relate to different spatial levels, and in Sections 4 and 7 we offer examples where in other countries regional structures of different types have been adopted. In our case studies the geography of those structures does not reflect any rigorous arguments based on economic geography, and indeed we do not know what arguments might be offered. Instead, regional arrangements have tended to develop pragmatically, taking into account historical relationships and 'common-sense' perceptions of where the main local linkages are likely to be, rather than strict economic criteria or robust data.

Regarding the second part, we discuss in Sections 2.6 and 5.1 how consideration of clusters and agglomerations means that large cities and their hinterlands deserve to be treated as distinct regions, but it is likely there would be no clear advantage that would flow from creating a specific typology for these – essentially given the likely need for pragmatism, such definition may be too constricting. Our research has also noted some similarities in the recent economic performance of local authorities of Scotland, for example, Argyll & Bute and Moray, and we suggest that regions might be able to learn from and pool ideas with other regions similar to themselves, but we do not see a case for being over-precise as to what 'similar' means.

ii. *Are there multiple economies or definitions within or overlaying these spatially defined locations e.g. labour flows, sectors, services (health etc), of national or international significance etc?*

We discuss in Section 2.3 that geographies will differ between different types of market and sectors, and that this is one of the reasons why it is not reasonable to think that the concept of functional areas will generate unambiguous geographies for where regional boundaries should lie. The academic arguments do not justify prescriptive views on this, hence our preference for pragmatism. However, there may be a case for reviewing different boundaries and the potential for improving delivery through formal or informal alignment between different policy functions. Against that, the disruption costs of reorganization need to be taken into account.

iii. *How do these economies (spatially or otherwise) relate to each other i.e. is there a framework available to interpret these layers?*

There is no single framework or classification in the academic literature that does this. But we note in Section 2.7 what the key issues are: at what level should various decisions be made, and responsibilities assigned, and how does this relate to democratic accountability as well as efficiency. The case study evidence in Sections 4 and 8 suggests that there may be costs associated with making decisions at the purely local level when those decisions have regional influences and impacts; that these costs include lower inclusivity; and that there is a consequent case for regional coordination, as well as for exchanging information and ideas with different places. It may also be important to emphasise that the primary purpose for thinking regional is to help make growth more inclusive, and not to create competition between regions for resources.

b. How does this context practically guide a future regional approach to economic development activities within Scotland and, looking outward, enable Scotland's international competitiveness? This strand should consider:

i. How might the above analysis apply to the emerging regional economic partnerships driven by local authorities in Scotland?

We suggest in Sections 3 and 7 that there is an easy case to be made for the emerging Glasgow and Edinburgh city-region partnerships. Also, most of the other emerging arrangements show a degree of autonomy in terms of labour market flows, although there are inevitable ambiguities with respect to places near to, but not within, the emerging Glasgow and Edinburgh partnerships. But it is not clear that in labour market terms either Stirling & Clackmannanshire or Falkirk passes this test. There are probably gains to be made for both of these areas by thinking about the best ways to foster coordination with one another, and with neighbouring regions.

In terms of the geography of business relationships there is little data available. If more data existed it would be easier to at least approximate functional areas in identifying where regions genuinely exist. But even without that, and at the anecdotal level, there are already mostly justifications for the partnership arrangements that are emerging in terms of perceptions about where the business relationships (sales, supply chains, collaborations etc) are. Thus, for example Moray has links to both Highland and Aberdeen/shire, and being part of one or the other partnership would not reflect that. However, some regions such as Argyll & Bute and Tay Cities Region do seem to include places within them that are somewhat disparate rather than homogenous (for example quite isolated communities such as the various islands within Argyll & Bute compared with places with high commuting into the big cities). Realistically, however, it would be surprising if no such cases existed.

And some of the emerging geographies are very small in economic terms: the issue here is whether they have the administrative resources needed to deliver economic development policies, and if not whether and how they should be supported.

ii. With available evidence, what does question ii & iii above suggest for the Scottish context?

The evidence from Denmark suggests that a streamlined approach of a small number of regions with close alignment of different functions such as health, skills and transport works well—but crucially, in the context of a society which is relatively homogenous with plentiful resources, which probably makes the task much easier. In the Bay Area of San Francisco it is clear that lack of a regional tier of government is detrimental to overall coordination and planning. This has impacted transport and housing policy, or lack of, and has thereby made growth less inclusive and responsive to wider societal need.

iii. Is there sufficient evidence to suggest the good practice identified in a) could be applied to the Scottish context?

As we noted, our case studies do not show examples where the notion of a functional area has been used rigorously enough to define a political and administrative geography, so it is difficult to identify the 'good practice' referred to here. The Danish and Irish cases do involve larger and more consistent geographies than are emerging in Scotland, while the Solent case is one where a geography exists at a sensible scale, but for an area without a strong historical, political or cultural identity. That may have made the partnership's task harder, and also made it harder for strong leadership to emerge. This does not mean that there are no lessons to be learned, but simply that doing so is not about transferring a perfect or ideal model to the Scottish context, without any reference to the particular circumstances of Scotland's different locations.

iv. *Are there any appropriate case studies that could be utilised, either in the UK or internationally, to help inform and guide development of Scottish regional economies? This question seeks to provide a more focused response to the Scottish context with related Governance covered in section 2.1.5. Therefore, this question specifically looks to practically apply the response to a) above. It is however recognised that these two sections may be closely linked in informing a good practice response.*

This follows on from the point just made. We do not think it realistic to expect to find a model that can be simply lifted and applied to Scotland. Solent is the nearest equivalent of a model to the one that Scotland is evolving towards, and a major lesson from there is that the expectations placed on a partnership need to be consistent with the resources made available to it, the degree of independence that it is granted, and the strength of leadership it is able to offer. In Solent the LEP is required to devote a lot of effort towards writing glossy highly-aspirational strategies, but it delivers small-scale initiatives that are very similar to those of most other LEPs across England. Meanwhile one of the region's major challenges—improving transport infrastructure to overcome its difficult geography—gets less attention and funding than it deserves. This is partly responsible for the fact that income and other disparities within Solent remain quite large, and growth is not as inclusive as it could be. If the reality is that there is little scope for granting more autonomy and resources, then the LEP might be better served by having more realistic and localised ambitions.

This in turn emphasises why the case for regions is really about helping to make growth more inclusive, and not a way to foster competition between regions.

5.3 QUESTIONS ON INCLUSIVE GROWTH

What evidence is there to inform how inclusive growth (Scottish Government definition* - https://www.gov.scot/policies/economic-growth/inclusive-growth/*) can be delivered at different spatial levels. Research should include:

a. *Taking account of different approaches to and definitions of inclusive growth.*

Our case studies do not suggest that different places have clearly articulated, distinctive, concepts of inclusive growth which result in equally distinctive approaches to the pursuit of economic growth. Nor is it clear what different

definitions might have been adopted or how they might make a difference. In Solent there is an objective that growth should be more inclusive in the spatial sense, but central government tends to undercut that: it requires a dominant focus on raising productivity which tends to take precedence over promoting inclusive growth, and it provides the LEP with few powers that would allow it to make much difference to the performance of less advantaged parts of the region.

In South East Queensland inclusivity is not explicitly high on the agenda, but the policy of bringing people to the jobs and jobs to the people by a mix of planning decisions and transport investment tends to generate growth that is reasonably inclusive. Key to this, however, is that the growth happens anyway and that the resources (finance, land) are there. In Denmark there is an underlying assumption that a major purpose of transport infrastructure is to improve the connectivity of remote places, as part of an over-arching assumption that all places should share in prosperity. But this works partly because the economy is highly homogenous to start with, so that it is more a matter of **keeping** growth inclusive than **making** it inclusive.

b.An understanding of the spatial element of inclusive growth, and how inequalities and economic competitiveness play out at different levels.

In terms of city-regions within Scotland, there has been a clear tendency over time for unemployment rates to converge, suggesting that the benefits of growth have gradually become more widespread within them and that pockets of deprivation have become less widespread. This is not a reflection of the **type** of growth that cities have experienced, except in the important sense that growth has not been confined very narrowly by sector and occupation, but has been generally reasonably diverse.

It would be a matter of concern if thinking regionally made it easier for some parts of Scotland to prosper, without offering much assistance to other parts, and as a result, cross-regional disparities widened. That might be the case, for example, if city-regions were able to make stronger economic arguments than rural regions, because they have stronger linkages. Conversely, thinking regionally may be helpful to rural areas if it helps a richer understanding of how those economies work, and also more awareness that in aggregate they can be quite large.

It is also the case that in rural Scotland a similar unemployment convergence has occurred to that seen in the city-regions, though clearly not to the extent that there are no variations. Rural areas typically have a dependency on agriculture and tourism, and this tends to mean relatively low incomes, plus a high reliance on transport infrastructure (notably including boats and hence jetties and the like). At the same time, mainly rural areas can also be very dependent on manufacturing, via towns and small cities. This has historically been a big challenge in terms of competitiveness. But with the emergence of internet-based trading there is a new opportunity for micro businesses that manufacture products (as well as ones that sell services) and this may have a radical impact going forward. It means however that digital connectivity and skills is very important to inclusive growth in Scotland.

Overall, if the aim is to pursue inclusive growth, then logically the economic case for public sector investment must include an inclusivity element. The implementation of this will vary by location but the principle is the same across different places.

c. A review of good practice to support understanding of how to deliver inclusive growth at different levels and address competing priorities (for example, spending priorities and need at different spatial levels).

It is clear that three fundamental requirements are a) that there should be growth in the first place; b) that there should be some form of regional governance or partnership to ensure that transport and land use decisions are made from a pan-regional and not purely a local perspective; and c) that there should be effective small-scale interventions to address specific market failures which will often be concentrated very locally.

It is not clear that in other parts of the world, local, regional or national governments have any formulae or typologies or methodologies that tell them what their priorities should be, let alone how to make growth happen in one place rather than another. There is no text book. Best practice does, however, require both resources and a degree of autonomy. That in turn means accountability. The Danish and Irish models use regional assemblies appointed by local councils to achieve that, while the Solent model relies on upward accountability through departmental officials.

This last is very much a 'closed-door' approach; an alternative is a much more transparent relationship between regions and nations, in which central government explicitly and publicly justifies its investment decisions on the basis of the criteria that it sets—which in Scotland's case includes whether investments foster inclusivity.

In addition, a more public approach could involve providing evidence of which communities, localities, sub-regions and sectors benefited from any intervention—to aid understanding of the extent to which benefits were expected to spill-over beyond immediate recipients. This could be placed within a larger framework that encouraged cooperation, within and between regional partnerships.

d. A review of where a regional structure provides more opportunities for inclusive growth (including examples/case studies of where regional inclusive growth happens - both domestically and further afield).

The Danish arrangement mentioned above seems to work well. It is early days for the similar Irish approach, but there are concerns that the latter may be impeded by a) a belief that rural and urban interests are at odds and b) the sheer weight of the task of reconciling local and national policies without an easy way to influence either. But even in the Danish case it is not obvious that regional government is growth-enhancing, while the Bay Area is a case where absence of regional government has not at all prevented rapid growth over a very long period. However, in the Bay Area what the absence has done is make growth very far from inclusive. It has also caused infrastructure challenges. Essentially, land use permissions and transport infrastructure

decisions are key here. If those are over-localised, inclusive growth will be very hard to deliver.

5.4 QUESTIONS ON INFRASTRUCTURE

Building on the above, what international best practice or evidence is available to understand planning for infrastructure investment at different spatial levels, to include:

a. Are there lessons/good practice on planning for infrastructure investment at different spatial levels? (NB previous research was gathered on international good practice planning regimes; this question is specific to understanding approaches and lessons on infrastructure investment at different spatial levels);

Much of our research supports the view that transport infrastructure and land use decisions need to be made at least partly at the regional level. In particular, the case of the Bay Area indicates that the consequence of not doing so is congestion and economic loss, and social exclusion. The Irish are adopting an approach in which a regional assembly aggregates up and disaggregates down the decisions of local and national governments respectively. This seems likely to be very challenging, depending on the extent to which the objectives of local and national governments are in alignment. The Danish approach is similar but with more flexibility and probably more political convergence. The South East Queensland approach is that there is a regional planning system which includes transport; which does not have obviously strong accountability arrangements, but which is making decisions that tend not to be contentious.

b. Are there any useful definitions/classifications for the different asset-types at these different spatial levels?

The case studies have not presented any clear conclusions, however, in those examples where inclusive economic growth is seen to successfully occur, transport has been a key factor. In several regions investment in housing is seen as important, and as we have noted there is a particular emphasis in South East Queensland on locating jobs and housing in close proximity to one another.

c. Are there lessons on addressing competing versus complementary investments at different spatial levels?

An important message is that the potential returns on any investment may be under-estimated if only local and not regional impacts are considered. An implication is that investments in different localities within a broader region may be mutually reinforcing, but that this will not be apparent if the regional dimension is ignored. We are not able to cite specific examples where this has arisen, but the principle is likely to be robust.

Our case studies have not revealed examples of competing investments that have occurred because of weak regional governance. In the Bay Area the problem has been lack of investment, not duplication.

But it is clear that in Solent there are anxieties that some parts of the region may allegedly get more favourable treatment than others. An underlying issue here may include a lack of historical regional identity for Solent, and for Scotland this is an argument against regions that feel artificial. But it is also likely that to the extent that Treasury investment-rules create a preference for improving transport infrastructure in places that are already successful, a sense of the system being biased against some places is likely to emerge. Paradoxically, a regional partnership or agency may then be seen as being responsible for this, or failing to make sufficient arguments to central government to prevent such an outcome from happening. The Scottish approach of having Growth Deals that are as much rural as urban seems a good response to this, especially if it evolves into broader partnerships that meet local needs and have local buy-in.

5.5 QUESTIONS ON GOVERNANCE

What evidence is available on the governance structures that best support successful regional economies and regional inclusive growth?

a.Are there different models or key components that suggest good practice governance at a regional level e.g. structure, membership, stakeholders involved, strategy approach, spatial relationships?

We have addressed this in our responses above. There is no one model of good practice, but as we indicate in Section 2.7 it is important to be clear about: a) the level at which policy is designed versus the level at which it is implemented; b) whether resources are raised locally or shared out (and how); whether regions are intended to lobby, coordinate or control.

In Scotland's case a common perception is that the main purpose of partnerships has been bidding for funds, and that were it not for that, the partnerships would not exist. However, this clearly reflects their origins in the Growth Deals, and it is to be hoped that as the partnerships mature and evolve there will develop a broader understanding of what they can achieve, particularly with respect to ensuring that a) the broadest case for any investment is made and b) it includes an assessment of how an investment can make growth more inclusive, by taking into account for example how interventions in one local area can have benefits elsewhere. And in general there is agreement that policy collaboration is desirable, even if in some cases there is a hesitation about whether that needs to be embedded in a formal partnership arrangement.

b.Are there any lessons learned on the relationship between governance structures at different spatial levels, to facilitate effective regional and national economies, including but not limited to, Community Planning Partnerships?

There is no international evidence that the effectiveness of regional and national economies is primarily determined by the relationship between governance structures at different spatial levels. There is evidence that growth may be less inclusive when land-use and transport decisions are made only locally, and that regions that under-perform may continue to do so if they are given what appears to be a regional partnership but which is in practice a very

resource constrained delivery mechanism for national decisions. There is also evidence that inclusive growth is easier to achieve where there is an underlying absence of strong rivalries over resources, whether for cultural reasons or simply because the resources are relatively plentiful or focussed in the right way.

c. Is there an understanding of the enablers such as skills, culture etc to facilitate this good practice governance?

Skills and culture are not normally thought of as enablers of governance good practice, but the Danish example does seem to show that a highly educated and culturally united society is likely to find governance issues less problematic than one that is not. In the Bay Area, the presence of very skilled people and a progressive political culture have not generated particularly inclusive growth, because very localised political power structures act to prevent the necessary housing and transport decisions.

5.6 EVIDENCE GAPS / FURTHER RESEARCH

In the light of the points we have made about shortage of data, it is clear that more data would be useful—even if the 'ideal' of actually being able to define unambiguous functional area would still be illusive. Within that, we have some simple observations.

First, and building on points already made, a potentially rich source of information is to identify what online contacts, via searches and emails, businesses and their customers in one local area have with businesses and suppliers in other local areas, to form a sense of what the economic geographies are. Companies such as Google have this information, and it is possible that they would be willing to share it, as part of an ongoing project to map Scotland's evolving economic geography. Approaching such companies is something to be considered. The resultant regional geographies could then form the basis for growth-enhancing infrastructure decisions.

Second, all regional partnerships and similar arrangements should seek to identify within their boundaries those local areas and neighbourhoods in which market failures are most intense. This is already done in terms of household deprivation indices but that information could be combined with information on for example business start-ups and failures to form a richer picture. Then, the transport links (road, rail, other) between those places and other places with strong opportunities (such as development land) should be mapped, to understand better how, through sensible infrastructure decisions, regional assets can be best used to promote inclusion.

Third, and linked to that, a map of poorly-performing neighbourhoods and local areas should be used nationally across Scotland, to inform larger infrastructure decisions.

Fourth, as Scotland's regional economic geography beds down, we recommend monitoring the resultant areas on a consistent basis, to see to what extent they are growing at similar rates, and/or existing inequalities are being reduced. It is a well-established principle that monitoring is important to evaluation, which is in turn part of the process of good policy design.

6. FURTHER THOUGHTS

In this section we draw the strands together.

6.1 REGIONS & FUNCTIONAL AREAS

In Section 2 we looked at the academic concept of a functional economic market area, as set out in the research literature, and we asked how useful it is.

Our conclusion is that we do not think it is necessary to rely on the concept of functional areas to justify either regional policy arrangements in general, or any particular choice of regions—and indeed it may not even be possible to use functional areas. This is because the concept of a functional area is far from straight forward. Economies are not bound by rigid geographies, and even if they were, we do not have the data with which to identify let alone track them.

Attempts to do so generally rely on travel-to-work data, but travel-to-work is just one of many dimensions, and the data is liable to be out-of-date. Also, the resultant geographies tend to be very small, and although the areas can certainly be aggregated together into regions, that merely pushes back the question of on what basis such aggregation should be done.

We think that an explicitly multi-dimensional approach to picking regions is appropriate. Our suggested list is:

1. **Identify interactions,** of which commuting flows are one, but so too are supply chains, and business networks, for example. And the resultant geographies may be defined as much by what partners hope to achieve—for example, widening access to employment—as by what is there already. A problem here is that a lot of the information that would be helpful is commercially valuable and hence not readily available.

2. **Identify market failures,** since it is these that provide the strongest case for policy interventions. There is a case for asking regional partnerships to identify those places within them where the market seems to be failing, and then developing strategies to make sure that policy interventions at the very least focus on those places, even if they do not go so far as to target them.[12]

3. **Identify clusters and agglomerations,** by which we mean either places where similar companies tend to co-locate, or places (usually cities) where different types of companies come together for their mutual benefit. Large cities and their hinterlands usually deserve to be treated as distinct regions.

4. **Respect historical identities and institutions,** where those help to shape communities (of both people and businesses). But ensure that they are open rather than closed, and not just defined by existing patterns of advantage or economic success, so that they foster inclusive growth and not just local self-

[12] *The Ayrshire Toolkit, developed in conjunction with SCRIG, provides an example of a useful framework for identifying and supporting such places.* http://www.inclusivegrowth.scot/wp-content/uploads/2018/06/SCRIG-Content-North-Ayrshire-Inclusive-Growth-Diangostic-FINAL-1.pdf

interests. In this regard, Growth Deals in which councils are encouraged to band together to bid for funds may be useful devices for reducing historical rivalries, but equally they may make competition for the same funding all the more apparent.

6.2 REGIONS & INCLUSIVE GROWTH

It is not clear that in abstract terms the concept of functional areas has much alignment to the ambition of achieving inclusive growth. But a regional rather than a local perspective may be helpful, in various ways.

First, the tendency for jobs created in one place to provide opportunities for people living in another, and the possibility that transport improvements may help people to access jobs outside their local areas, both provide reasons for taking a larger-than-local perspective on economic geography. This is especially true in dense urban city-regions. At the same time, it is important not to reduce the issue of access to work simply to a matter of enabling or encouraging people to travel further to work, since alternatives or complements such as upskilling also need to be part of any inclusive growth strategy. That is especially so since there is a cost to the people involved (and to the environment) in expecting them to travel further.

At the same time, redrawing boundaries on its own will not have a fundamental impact either in terms of raising growth rates or making growth more inclusive, if more basic issues are not addressed. These include i) the **competitiveness** of the regional and national economies and hence their ability to generate growth at all; ii) the extent to which attention to inclusive growth is **comprehensive** across policy areas rather than being a welfare-policy or social policy add-on; and iii) the extent to which there is genuine **decision-making power** at the regional level.

The international case studies in Section 4 and Annex B illustrate this.

1. In Denmark the concept of inclusive growth is so deeply embedded that it hardly needs to be stated—it is almost taken for granted as just part of good practice. It is true that of the five regions, the Copenhagen city region consistently grows faster than the others, but by Scottish standards the gaps are not large. One important reason for that is that Denmark has little legacy of industrial decline with which to grapple. A second is that extensive transport infrastructure links to remote locations are widespread—this is a deeply rooted part of the national 'business model' and one which tends to reduce inequalities. Denmark therefore scores highly on the three criteria.

2. In the San Francisco Bay Area the prevailing political culture is superficially very favourable towards inclusive growth, but the reality is somewhat different. There is no regional governance, and partly as a result the Bay Area experiences transport congestion and a lack of new housing developments, both of which tend to impact negatively on social inclusion. Economic growth itself has of course been remarkably strong in recent decades, and this reflects a business culture especially in Silicon Valley that is extremely open and so in some senses inclusive, at least as far as providing opportunities for the highly qualified are concerned. At the same time the political culture seems to be very favourable towards issues of

inclusivity. But without a governance framework to back that up, this tends to be reduced to the provision of welfare support at the local level, to reduce the adverse impact of non-inclusive growth, rather than larger measures to make growth more inclusive in the first place. So the Bay Area scores poorly in terms of the extent to which there is genuine decision-making capability at the regional level—there is not.

3. In Solent in south east England the situation is the opposite: the regional partnership takes inclusive growth seriously, but the competitiveness of the regional economy is not high enough to match growth rates in the rest of the south east, and there is only limited real genuine decision-making capability at the Solent level. As a result the LEP has not been as successful as it would like at closing either the gap in performance between Solent or the gap in performance between the different local authorities within its boundaries. This is not for want of trying. Part of the reason is surely lack of resources, which is a concern that has been raised with us in the Scottish context, but also likely to be important is that the LEP has not had the autonomy to focus on its own priorities, and instead has tended to deliver projects very similar to those of most other LEPs, and to produce a variety of strategy documents requested from it by central government. Solent also lacks a clear identity, and local partners sometimes have very different perspectives. Solent's transport infrastructure shortcomings have not yet been resolved.

4. In Southern Ireland, a large and largely rural area, a new regional council resembles the Danish arrangement in that it contains members nominated or elected by local councils. Its purpose is to link together the spatial plans and economic development ambitions of those councils and the national government. However, there is only modest decision-making power at the regional level, and the regional assembly has to embrace a multitude of objectives, policies and programmes, which will inevitably make it difficult to weave inclusive growth throughout the policy-making process. The danger is that it becomes an afterthought.

5. Finally, in South East Queensland, there is also a regional plan, but no regional level of governance. This slightly curious outcome partly reflects the fact that this part of Queensland contains many of the state's growth opportunities, and that the Queensland government is keen to support it. As in Denmark, neither a clear level of regional government nor a strongly explicit focus on inclusive growth seems to be necessary here, in order to deliver growth that, by most standards, scores quite highly in terms of being inclusive. Again, that partly reflects the advantages that the region has, in terms of competitiveness and few conflicting interests and priorities, plus a strong emphasis on delivering transport infrastructure that meets the needs of a growing population and expanding business base, so that inclusive growth is embedded in thinking and not an add-on.

6.3 REGIONS & INFRASTRUCTURE

Following on from the previous section, it is clear that in **Denmark** and in **South East Queensland** transport infrastructure is taken seriously and that this is likely to be a factor that has been helpful with respect to social inclusion.

In Solent, transport infrastructure is nominally important, but the LEP and other regional-level partners have been unable to secure the investments that the region needs. In the **Bay Area**, infrastructure is insufficiently prioritised partly because there is no coordinating body and so local municipalities make their own decisions based on narrow self-interests. In **Southern Ireland** the issue has not been prominent and there is no obvious comment for us to make.

The **Solent** experience demonstrates an important issue, which is that since the area is a relative under-performer, it is hard to demonstrate the same returns to new infrastructure investment that more successful regions are able to claim. This makes the situation self-reinforcing. In defence of the modelling involved, the **Solent** case for better infrastructure would only be convincing if it went alongside a plausible set of policies for remedying other deficiencies—with respect to skill levels, for example—and hence difficulties with demonstrating likely success in those areas may be the fundamental problem.

This is central to the argument for City Growth Deals and similar packages of interventions. **Denmark** provides another route to the same outcome—those private sector investors who help fund transport infrastructure are sufficiently confident about the trajectory of the economy and the degree of public sector spending on skills, industrial policy and so on, that they do not necessarily need an equivalent of a formal city deal to make the commitment. But as we noted, this reflects a deeply engrained tradition—it is not something that can be generated overnight.

In **South East Queensland** a general principle applies of focusing economic development on places with public transport access, while equally delivering public transport access to places that are earmarked for economic development. By allowing people to access new opportunities this tends to be effective in terms of social inclusion, even if it is not presented in those terms. However, it does benefit from the fact that the region is experiencing economic expansion and has plentiful development land and funding; it might be much harder to deliver in Scotland's more constrained conditions.

Drawing these strands together, The Danish case suggests that infrastructure is a facilitator but not primarily a creator of growth, while the Bay Area example suggests that lack of infrastructure may do more harm to inclusiveness than the rate of growth. In Solent, lack of infrastructure has probably been detrimental to both. In Denmark and also in South East Queensland the infrastructure makes growth more inclusive, but that rests upon a situation where this itself is not a huge challenge—which emphasises our point made previously about not thinking that better transport alone is the way to make growth more inclusive.

The question of how to assess the impact of infrastructure is also important. The challenge is that those schemes with the highest impact on growth may not do most to enhance inclusiveness, and vice versa. This argues against a 'shopping-list' of schemes from which those with the highest expected returns are chosen, and in favour of thinking about how infrastructure investment can complement and be complemented by other policy interventions, to achieve the widest combined economic benefits. In Denmark this is easiest because remoter regions tend not to significantly under-perform—to the extent that

private sector funding of transport infrastructure is relatively easy to obtain. In Solent it has been difficult to make happen.

In addition, infrastructure is not just about transport. Energy matters for growth, and going forward, digital infrastructure may be particularly important. According to Eurostat's Digital Economy Survey, Scotland scores reasonably well compared with the rest of Europe for business digital connectivity, and badly for household connectivity. But for rural parts of Scotland, household connectivity may matter more, if one way to raise inclusive growth in those areas is via internet-based trading. It is possible that regional partnerships or equivalent arrangements are better placed to argue this case then local councils, given that their combined size in GVA terms is sometimes quite large—certainly so in the case of Highland.

6.4 REGIONS & GOVERNANCE

In none of the regions that we have considered is there a strong structure of formal regional governance. In **Solent** there is an explicit but not completely harmonious partnership primarily involving local authorities, while both **Denmark** and **Ireland** have regional councils whose members are elected by the underlying local governments. Anecdotally the evidence is that this is easier in the case of culturally very united Denmark than in the case of Southern Ireland, where local cultural differences persist, including a rural versus urban divide.

In **South East Queensland** the geographically-broader Queensland government manages the regional plan, which is funded by a mixture of national government and local governments—a curious top-down, bottom-up hybrid arrangement that presumably relies upon a relative absence of conflicting interests for its apparent success. In the **Bay Area** there is only limited coordination at the regional level; but it does, however, have strong local and even neighbourhood government, as well as a very politically involved population. The result is that regional issues receive politicians' attention despite the absence of regional governance. Political activism is thus an important governance model. Nevertheless, it is difficult to avoid the view that the strong growth of the Silicon Valley economy has been very far from inclusive.

The over-arching lesson is that formal structures matter, but so too do the powers that are given to regional bodies and the extent to which the pursuit of regional growth is embedded in values or tacked on; and that values are not so much a matter of ambitious aims, as a matter of what is commonly agreed or taken as implicit.

6.5 IMPLICATIONS FOR SCOTLAND

One thing that we are sure of is that there is no single off-the-shelf model of regional economic development that Scotland can simply adopt. But the same point can be put round the other way: that various different arrangements within Scotland are probably appropriate, if there are relevant justifications in each case.

Any regional arrangements within Scotland should take full account of where their 'functional' boundaries exist in terms of travel-to-work. But in thinking about regional arrangements, partners should seek information about business-to-business and possible other linkages, to produce a broader understanding of what the term means. And they should have ambitions for how they want any linkages to develop and evolve going forward, and not just be content with today's patterns (let alone those of 2011). As part of that, regions should be ready to consider the possibility that boundaries may change through time.

For this to be possible, the Scottish government and other partners may want to develop new information on such linkages, and then seek to strengthen the linkages themselves, and then use that as the basis for thinking about infrastructure investments, as opposed to just basing investments on where people and businesses have historically lived, worked and traded. On-line data sources may be a key component of that.

That said, it is important to respect historical cultural identities and boundaries—but on the basis that regions new or old need to demonstrate external linkages and forward-looking ambitions, and not just a sense of historical regional 'difference'.

As part of that some regions may coalesce around business clusters. However, this is the exception more than the rule. More likely is that geographical features will tend to influence economic linkages, and these can therefore be used to help define regional economic geographies.

And as we said above, large cities and their hinterlands clearly deserve to be treated as distinct regions, and the partnerships centred on Edinburgh and Glasgow already reflect that. These are likely to require governance arrangements that are tighter than those that might apply in more rural or multi-centred regions, simply because the number and complexity of intra-regional links are likely to be very high.

Across all parts of Scotland, if social exclusion is to be tackled, then while some implementation must clearly occur at the local level (upskilling, for example), that needs to be within the context of understanding the larger spatial economy, because there are so many interlinkages that themselves are not purely local. The key issues that we have identified are that the regional economy must be **competitive**, but that inclusive growth must be embedded **comprehensively** across policy-making and not just a welfare policy or social policy add-on, and that there must be a degree of genuine decision-making **power**, if it is to be delivered.

Indeed, it is **linkages that often generate virtuous or vicious circles**, which are sometimes hard to spot precisely because they are not confined very locally. A key challenge for policy makers is to help kick-start virtuous circles of the sort that appear to be in place of some of our case study areas, notably in Denmark but to a lesser extent in South East Queensland and, in a very narrow sense, in the Bay Area. In that context, very tight control from central government combined with very limited budgets may make this more difficult. So too may a lack of clear identity for a region if it means that partners struggle to pull together. That is an important reason why any regional partnerships need to be coalitions of the keen, and not just coalitions of the cash-strapped.

This issue of **common identity and hence common purpose** is important, and addressing it is likely to be vital for the success of regional arrangements. It relates to the matter of democratic accountability, something that is present locally and nationally but not automatically so at the regional level.

But it is also important to recognize that developing a common purpose may be particularly challenging when objectives are complex, nuanced, and multi-dimensional, as is the case with inclusive growth.

But we return to the point that it is important to think how interventions in one place affect another place, and how there may be larger gains from an intervention regionally than are apparent locally, as well as economies of scale to be exploited. Economic governance should reflect that, even if the particular model of a functional regional economic area is not necessarily relevant.

7. ANNEX A: SCOTLAND'S AREAS

This Annex contains short pen-portraits of Scotland, organized into the geographies that have been developed for various purposes including City Growth Deals and emerging Regional Economic Partnerships. They reflect desk-based analysis, coloured by the discussions that we have had with partners in local and central government across Scotland.

7.1 ABERDEEN/SHIRE

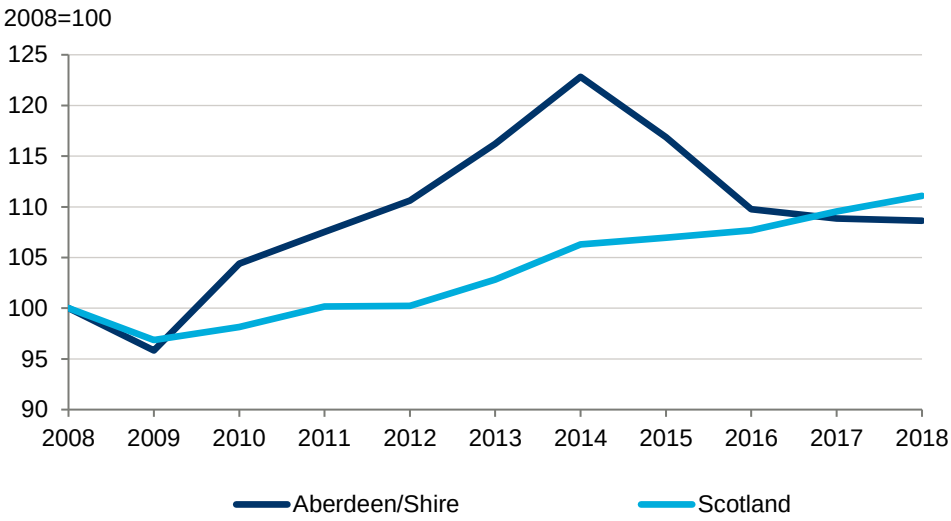
A City Region Deal is in place and sets out an economic strategy for the region. A Regional Economic Strategy was published before the CRD and is separate from the CRD, with an accompanying Action Plan, refreshed in 2018. Aberdeen City Council, Aberdeenshire City Council, and Opportunity North East (ONE) sit on a Joint Committee to oversee the CRD, while The Regional Economic Strategy Group sits alongside the Joint Committee and also have an oversight role for the CRD. While the RESG is not a formal decision-making body partners have agreed to work collaboratively to monitor and deliver the activity set out in the original RES and Action Plan, with representation from academia, Scottish Enterprise and the Chambers of Commerce. There is also a desire to extend the membership further. Uniquely, the impetus has come very much from the private sector and in particular the major shareholder in the region's largest employer. The city in particular has considerable reliance on the North Sea, and while that means high average income levels in the short run, the topic of what will take the sector's place over the long run has been debated over many years, without a strategy ever really being put in place.

The issue is all the more acute because Aberdeen/shire is one of the more remote parts of Scotland and, as Figure 4 shows, of the 212,000 people who worked in Aberdeen/shire according to the Census in 2011, 93 percent were residents of the region, with fewer than 7 percent commuting in. It is likely that those who did commute into the region were travelling relatively short distances across the boundaries.

Similarly, of the 210,000 Aberdeen/shire residents, 94 percent worked within the region with only 13,000 or 6 percent commuting out. That picture is unlikely to have changed significantly since then. It suggests that in travel-to-work terms, the region, like most others, is largely self-contained.

Figure 7 suggests that over the past decade the region's economy has performed rather differently to that of Scotland as a whole, suggesting that it has some significantly different economic drivers. GVA rose much faster over the period to 2014 and then fell in absolute terms. The explanation is of course likely to be the oil and gas sector, which is clearly distinctive.

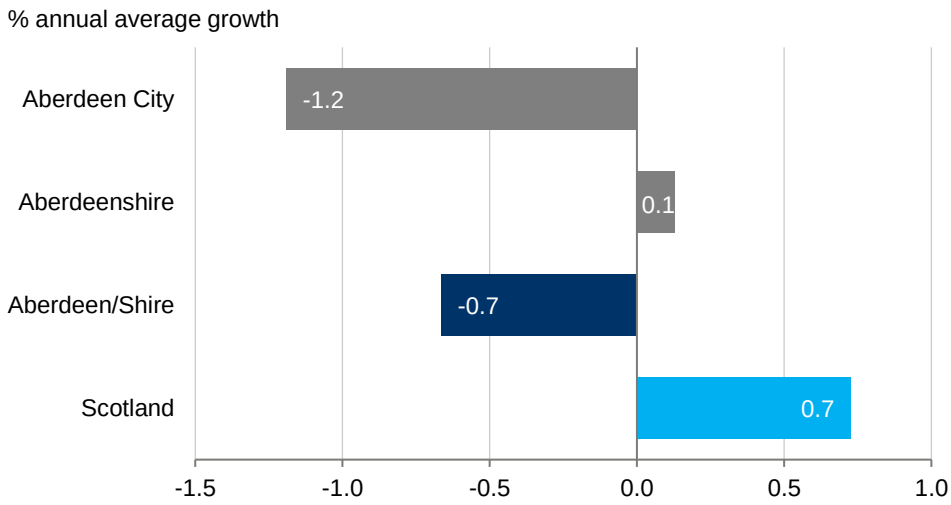
Fig. 7. Index of GVA, Aberdeen/Shire and Scotland, 2008-2018



Source: Oxford Economics

Figure 8 shows that in employment terms the two parts of the region have had very different experiences. These are, however, workplace based figures: the large job falls that are apparent in Aberdeen City will have been felt by many people resident in Aberdeenshire. And the fact that the latter grew markedly less strongly than Scotland demonstrates how linked to the city the Aberdeenshire economy is.

Fig. 8. Workplace based employment growth, Aberdeen/Shire and its LADs, 2013-2018

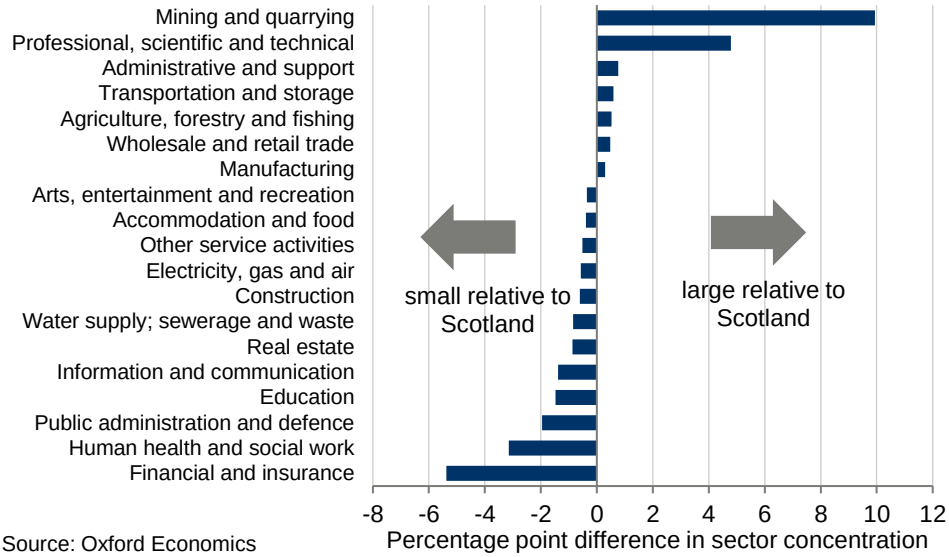


Source: Oxford Economics

Figure 9 draws attention to the unusual importance of the oil and gas sector in Aberdeen/shire, here picked up by both the Mining and quarrying category of output and the Professional, scientific and technical category, with the latter reflecting companies providing technical services in to the sector. Aberdeen/shire also has relatively low amounts of public services and

administration: something that is typical of a region that has historically had relatively high incomes levels and lower than average deprivation levels.

Fig. 9. Sector GVA share, Aberdeen/Shire vs Scotland, 2018



Source: Oxford Economics

7.2 ARGYLL & BUTE

Argyll & Bute is a largely self-contained employment area. Nevertheless, as Figure 4 shows, a larger number of workers from elsewhere are attracted to take up jobs in the region than residents of Argyll & Bute who travel elsewhere for work. In 2011, 7,000 residents of other regions commuted into the region, equivalent to almost a quarter of the 32,000 workplace population. Similarly, 5,700 residents or 19 percent of those in work commuted elsewhere.

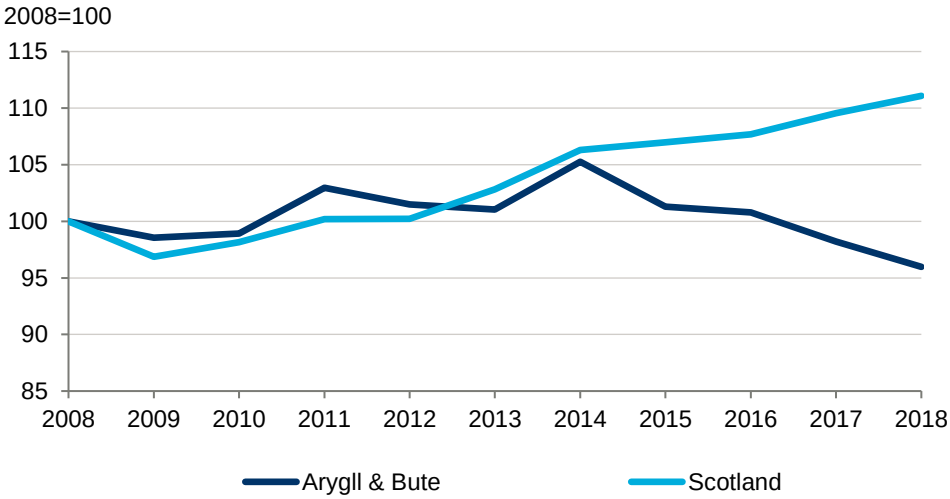
This overall profile of commuting flows disguises differing patterns at a sub-regional level. Residents of the northern and western parts of Argyll & Bute, and in particular its islands, have limited opportunities to commute elsewhere due to their relatively peripheral location. By contrast, those residing towards the south of the district—including areas bordering Stirling & Clackmannanshire and in particular Glasgow City Region—have greater access to these employment markets, and in turn are more likely to out-commute. But given that overall, in-commuting exceeds out-commuting, it is clear that that some parts of Argyll & Bute are closely tied into the Glasgow City region.

Argyll & Bute is not currently in the process of developing a regional economic partnership, and instead has been focused on securing a rural growth deal. There is business involvement, but not much evidence of strong pan-regional business collaboration. (Indeed there is no Chamber of Commerce.)

Figure 10 indicates that Argyll & Bute's economy has diverged from national trends over the previous five years, implying that its economic drivers are somewhat different and distinct to those of Scotland as a whole. GVA

contracted in real terms by 1.0 percent per year over this period, despite sustained growth across the national economy. The scale of economic activity across the region is at its lowest level in the past decade. That provides some evidence for thinking of it as a distinctive (and perhaps quite challenged) region in its own right.

Fig. 10. Index of GVA, Argyll & Bute and Scotland, 2008-2018

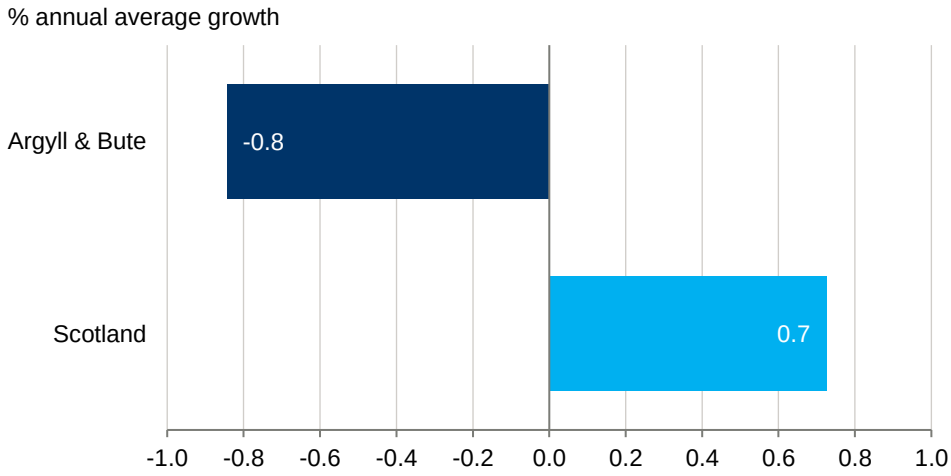


Source: Oxford Economics

Figure 11 shows that employment has also contracted across the region. Over the period 2013 to 2018, the region experienced a net loss of 2,100 jobs. While a slight reduction in the productivity of workers has partly contributed to the contraction of economic activity, this is largely due to Argyll & Bute's shrinking workforce.

Falling employment may be linked to the aging demographic profile of the resident population. The working age population of Argyll & Bute has contracted over the past five years at an equivalent rate. As over three-quarters of jobs are taken up by it is residents, this may act as a constraint on growth.

Fig. 11. Workplace based employment growth, Argyll & Bute and its LADs, 2013-2018

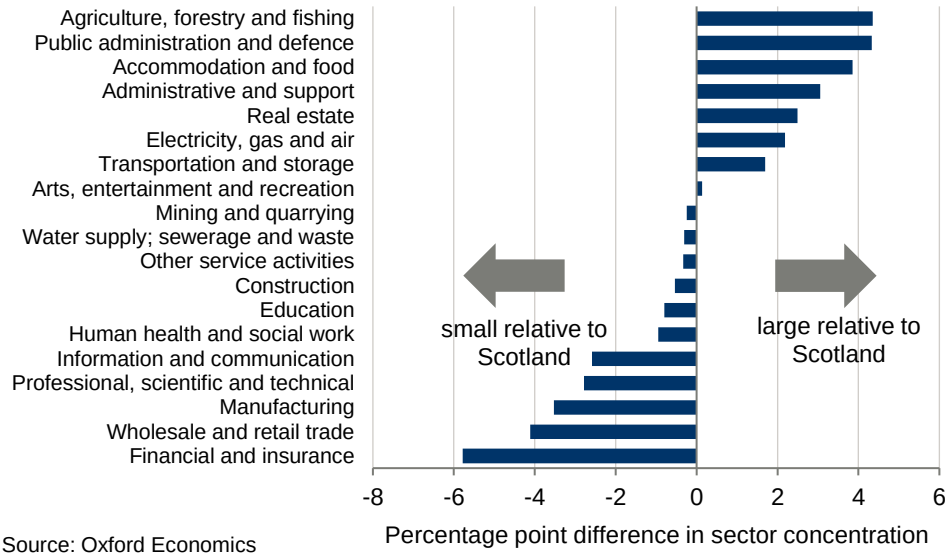


Source: Oxford Economics

The relatively weak performance of the local economy is partly a reflection of its sectoral structure. Figure 12 highlights the relative concentration of employment across sectors which are typically less productive, including agriculture, forestry & fishing and accommodation & food.

By contrast, those sectors which tend to drive growth at a national level, including professional services and financial & insurance, are less well represented locally. Again, this is consistent with the notion of Argyll & Bute being geographically distinct. Indeed much of the region comprises islands, and the issue of maritime infrastructure (quays, landing-stages etc) is important. But securing the necessary funding is not easy.

Fig. 12. Sector GVA share, Argyll & Bute vs Scotland, 2018



Source: Oxford Economics

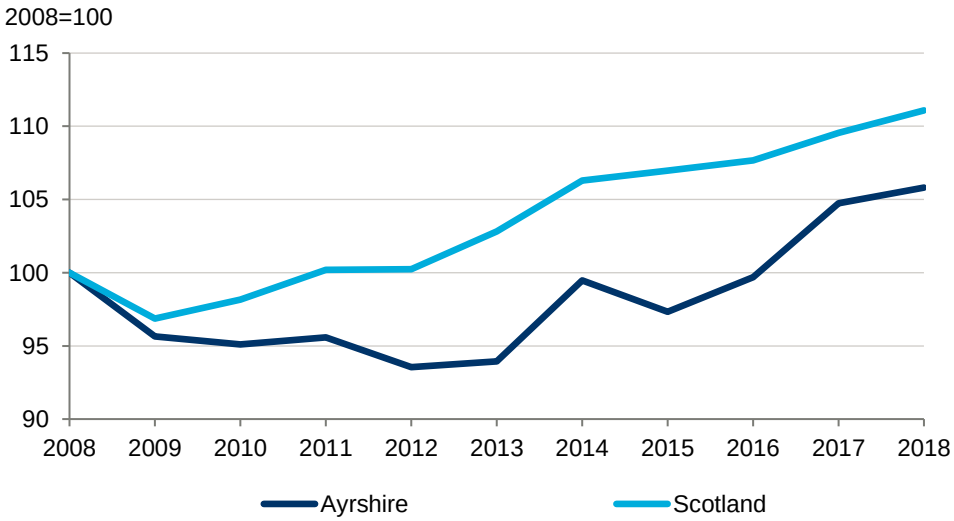
7.3 AYRSHIRE

Ayrshire is another area that comes partly within the orbit of the Glasgow economy, but also has parts that are remote, making for a rather disparate place. Despite that the three Ayrshire local authorities are developing a shared regional economic strategy and will be working with others to form a Regional Economic Partnership.

As Figure 4 implies, of the 111,000 people who worked in Ayrshire in 2011, just 10,000 (or 9 percent) commuted in from other regions. Commuting movements out of the region however were much more prevalent: 30,000 residents, equivalent to 16 percent of all residents in employment, commuted to other regions, mainly Glasgow City Region. This is equivalent to almost three-times the movements into the region, and may be indicative of a shortage of higher value job opportunities available locally. This also suggests that the economic fortunes of the region are closely tied to other nearby, more dominant regional economies. And this imbalance between inflows and outflows might be taken by some as raising a question make over whether Ayrshire is a properly-defined labour market area.

Figure 13 suggests that growth across the Ayrshire economy has persistently underperformed Scotland as a whole over the previous decade. While Scotland quickly recovered from the 2008-9 recession, levels of GVA across Ayrshire only recovered to pre-recession levels in 2016. More recent data however has been promising, with strong growth over recent years—particularly in the manufacturing sector—outperforming the national economy.

Fig. 13. Index of GVA, Ayrshire and Scotland, 2008-2018

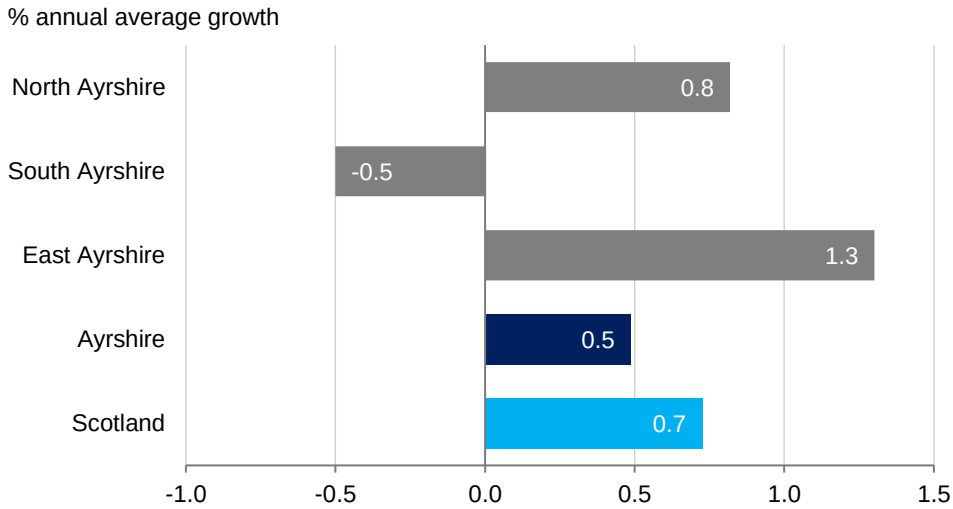


Source: Oxford Economics

Figure 14 shows that Ayrshire as a whole has slightly underperformed the national economy in terms of recent employment growth. This however masks varying performance across its local authorities. While both East Ayrshire and North Ayrshire have outperformed workplace employment growth across Scotland as a whole, South Ayrshire has seen workplace employment levels decline over this period. This relates to the point made above: firms operating

across North and East Ayrshire may benefit from spill-over activity linked to their close proximity to the large and relatively more successful Glasgow City, while those in South Ayrshire are less able to do so.

Fig. 14. Workplace based employment growth, Ayrshire and its LADs, 2013-2018

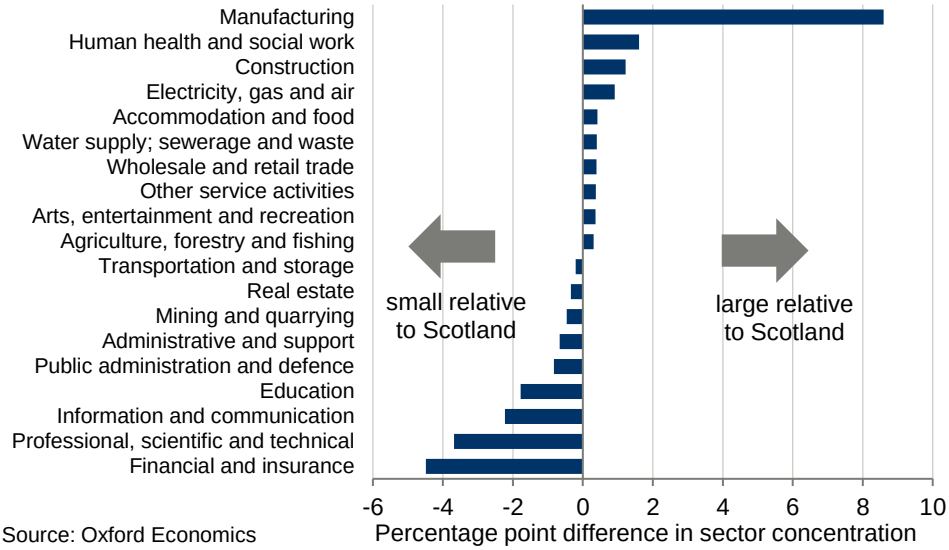


Source: Oxford Economics

Figure 15 highlights the particular importance of the manufacturing sector across Ayrshire. This sector alone constitutes just under a fifth of the region's overall economic activity, and has grown in importance to the Ayrshire economy over recent years. Ayrshire's manufacturing intensity is quite distinct, at least relative to Scotland as a whole. Some of it exploits the presence of Prestwick airport, which has a small number of regular scheduled cargo flights.

Human health & social work is also relatively well represented across Ayrshire although this is partly indicative of its aging population profile; a relatively small education sector may also be reflective of this. Ayrshire has no university.

Fig. 15. Sector GVA share, Ayrshire vs Scotland, 2018



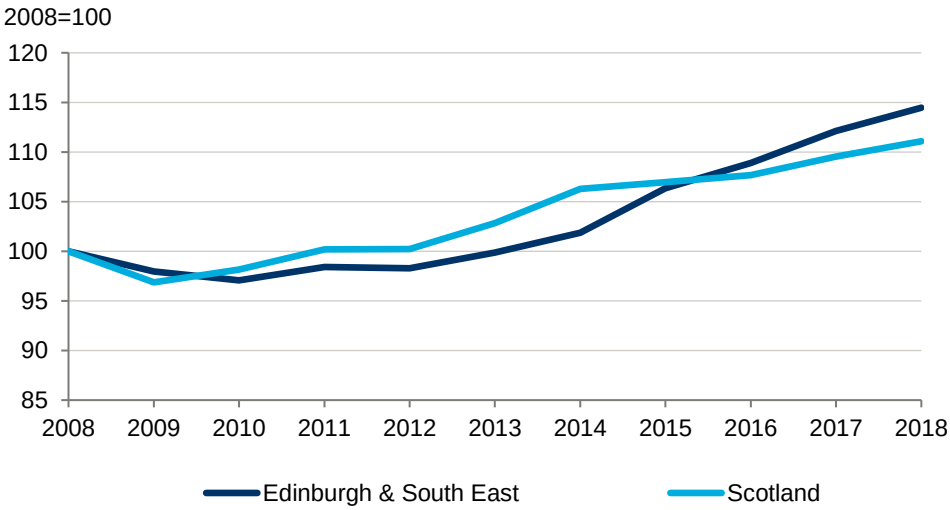
Source: Oxford Economics

7.4 EDINBURGH & SOUTH EAST SCOTLAND

Edinburgh & South East Scotland is the second largest region in terms of both economic activity and employment. While commuting patterns within the region internally show a large concentration of movements towards Edinburgh City, the wider region is also able to attract a large number of workers from elsewhere. As Figure 4 implies, 49,000 residents of other regions commuted into Edinburgh & South East Scotland for work in 2011, equivalent to 9 percent of the region's workplace employment.

Figure 16 suggests that the Edinburgh & South East Scotland economy has outperformed Scotland as a whole over the previous decade. The close alignment of growth at a regional and national level is partly a function of the size of the region, which represents 30 percent of all economic activity across Scotland. As with Glasgow City Region, this therefore causes regional trends to be part-reflected in the national economy. But it is also striking that, for example, Edinburgh City used to have relatively high unemployment rates by Scottish standards and some pockets of serious deprivation, whereas now it performs relatively well. The ILO unemployment rate in 2018 was just 2.7%.

Fig. 16. Index of GVA, Edinburgh & South East Scotland and Scotland, 2008-2018

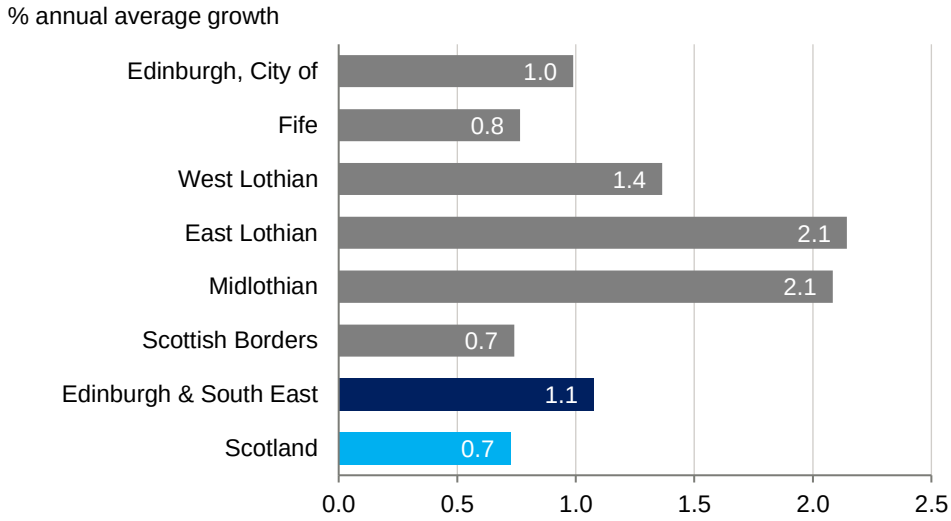


Source: Oxford Economics

Strong economic growth has also been reflected in increasing levels of workplace employment. Figure 17 shows that Edinburgh & South East Scotland has outperformed the national total, growing by 1.1 percent each year since 2013. Each of the local authorities within the region has outperformed the national total, with the exception of Scottish Borders, which has performed broadly in line with Scotland.

Significantly, however, within the region, Edinburgh City ranks only fourth highest of the six local authorities, growing at a rate (1.0 percent per year) below the region as a whole. This is likely to be partly a function of high land values and limited development capacity in the city, forcing businesses that would otherwise operate within the city to locate elsewhere. This possibility is supported by the highest growth rates occurring in East Lothian and Midlothian, the two local authorities that are geographically best located to benefit from businesses being priced out of the city.

Fig. 17. Workplace based employment growth, Edinburgh & South East Scotland and its LADs, 2013-2018



Source: Oxford Economics

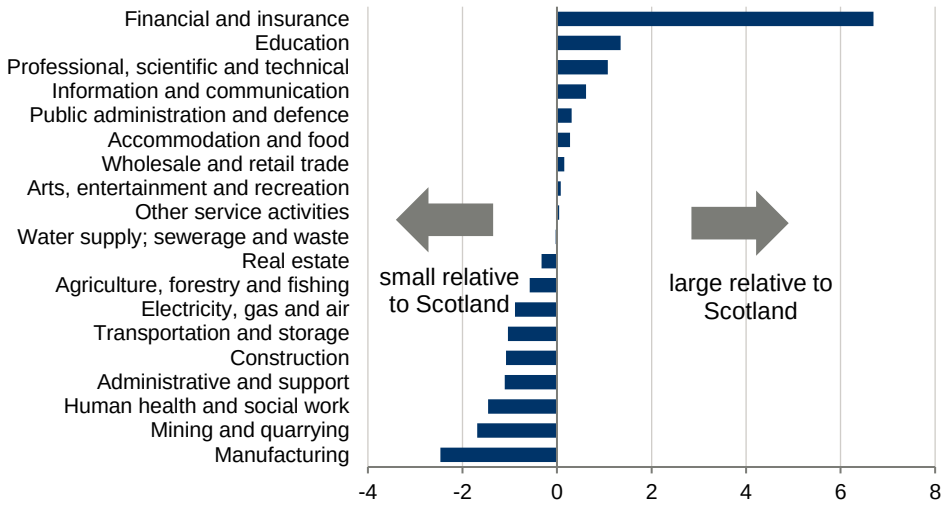
The economic success of the region overall is predicated on its strong financial & insurance sector, which is particularly concentrated in Edinburgh City. The region as a whole generates around 60 percent of Scotland's GVA in this sector, forming a share the region's economic activity (13 percent) that is almost twice the equivalent share across Scotland.

There are concerns about the future strength of the financial sector, which was hard-hit by the global financial crisis and the subsequent partial consolidation of UK banking in London, and which may also be vulnerable to Brexit. The shift within fund management (the city's particular strength) away from managed funds and towards tracker funds could also have a strong negative impact on employment.

Our clear impression is that business networks within the city are strong and that they extend to Scotland's other cities as well. Crucially, they also extend to London.

Education and professional, scientific & technical activities are also relatively well represented, reflecting the large number of universities and other higher education institutions across the region, and their knowledge-sharing links and associated commercial activities within the private sector. Edinburgh University has strength in medical research and there are hopes for major commercial spin-offs. However, the sector is hugely competitive globally and it is difficult to see comparisons with Silicon Valley and San Francisco.

Fig. 18. Sector GVA share, Edinburgh & South East Scotland vs Scotland, 2018



Source: Oxford Economics

But perhaps the major dynamic for the region is the increasing extent to which the city's workers commute in from the surrounding local areas—including from Fife. Transport infrastructure needs therefore seem to be very much at the forefront of the minds of local partners. They have recently agreed a growth deal with the Scottish and UK governments, and are moving towards the formation and development of a wider REP.

7.5 FALKIRK

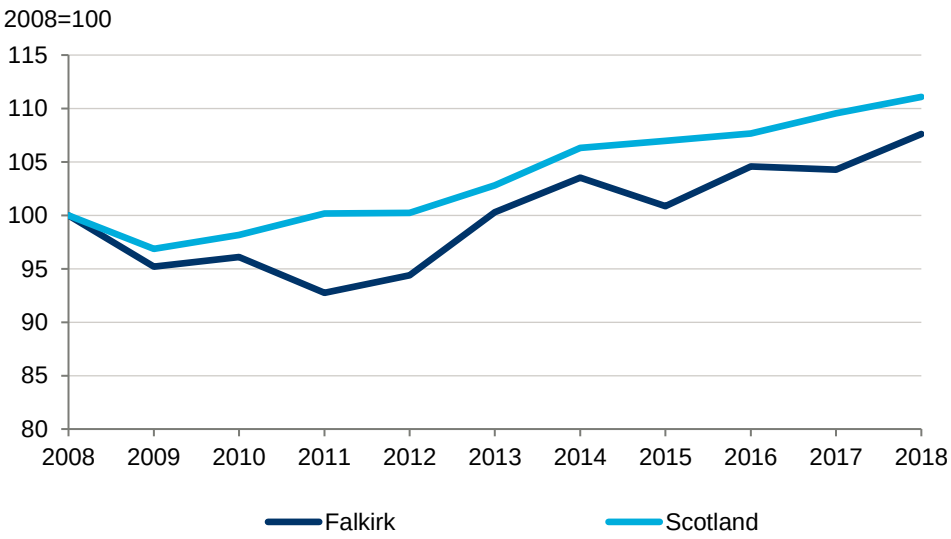
Falkirk is not part of any multi-council regional arrangement, and is instead currently in the process of agreeing its own growth deal with the Scottish and UK governments. That is despite being a close neighbour of Stirling and Clackmannanshire, within the Forth valley. It is located between the large employment hubs of Glasgow and Edinburgh, and the smaller hub of Stirling, and as a result there are large outflows of commuters from Falkirk in all three directions. As Figure 4 shows, in 2011 of the 63,000 residents of Falkirk that were in employment, 27,000 or a very high 43 percent commuted elsewhere to work. This is the highest rate of gross commuting outflows across all 12 areas, and is only partially offset by the opposite movement of 14,000 workers travelling into the region from elsewhere.

From the point of view of a region needing to be substantially self-contained in labour market terms for it to be described as 'functional', it is hard to make a case for Falkirk. However, the fact that local people flow in different directions arguably makes a difference—Falkirk is not obviously part of any one of its three neighbouring regions.

Figure 19 demonstrates that Falkirk has underperformed the national economy over the previous decade. While growing over this period, the economy has suffered several year-to-year contractions in output despite steady growth across the national economy. This implies that Falkirk's economy has some

distinct economic drivers that are not necessarily reflected across Scotland as a whole. (We discuss its sectoral structure below.)

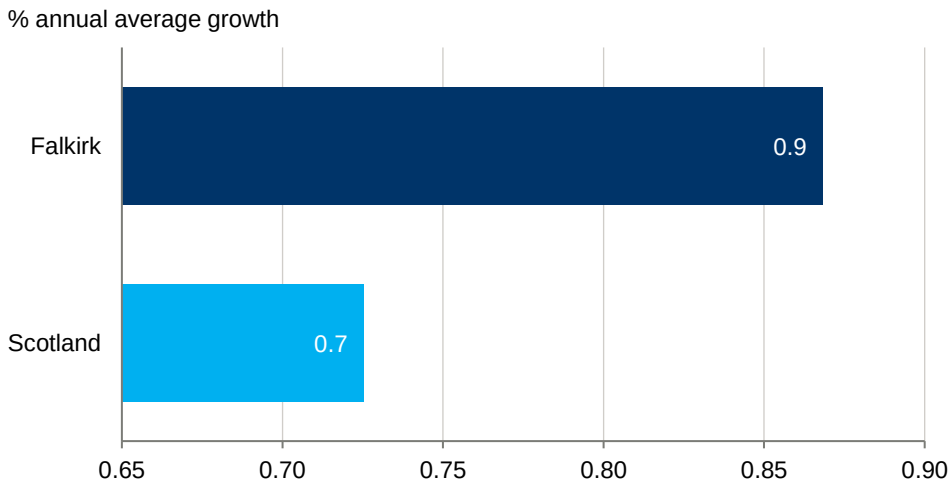
Fig. 19. Index of GVA, Falkirk and Scotland, 2008-2018



Source: Oxford Economics

Figure 20 shows that in employment terms Falkirk has outperformed the Scottish economy over the past five years, with employment growing at a yearly rate (0.9 percent) higher than elsewhere. When coupled with slightly weaker GVA performance (highlighted in Figure 17) over the equivalent period, this suggests that Falkirk's economy may be growing in and increasingly reliant on relatively less productive sectors.

Fig. 20. Workplace based employment growth, Falkirk and its LADs, 2013-2018

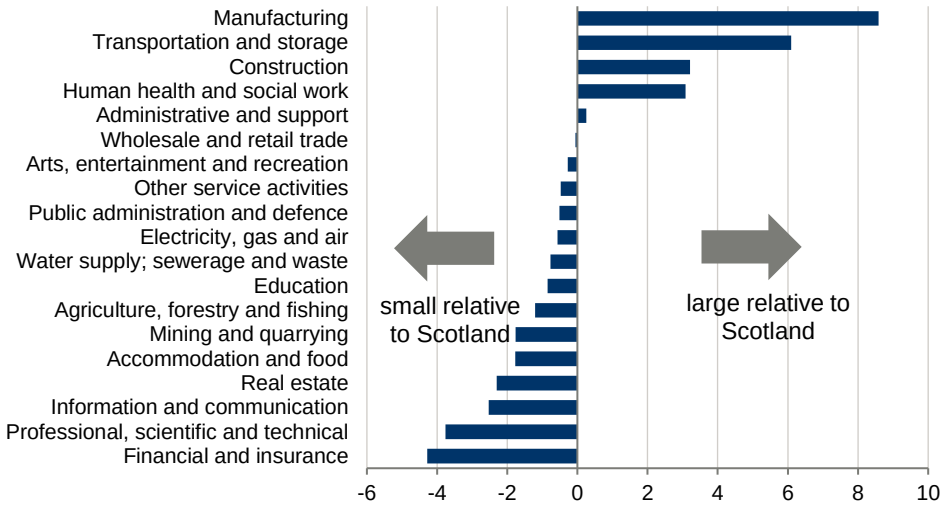


Source: Oxford Economics

However, Falkirk's economy is dominated by manufacturing activity, mostly linked to the petrochemical industry associated with Grangemouth refinery, and

also transport which includes both pipeline and tanker operations. The region has a large share of economic activity concentrated in both manufacturing (19 percent) and transportation & storage (10 percent) that is largely associated with operations at the refinery. A relatively strong construction industry may also be linked to housebuilding to support the region's growing population.

Fig. 21. Sector GVA share, Falkirk vs Scotland, 2018



Source: Oxford Economics

The importance of Grangemouth to Scotland's GDP, alongside the multi-dimensional commuting patterns, doubtless explains why Falkirk is not part of a broader regional partnership. There is anecdotal evidence of strong business networking within the region which does not spill-over much beyond it, and there seems to be a strong sense that local decision makers are keen to be seen as a 'special case' with a seat at the national table, rather than being absorbed into a broader regional narrative.

7.6 GLASGOW CITY REGION

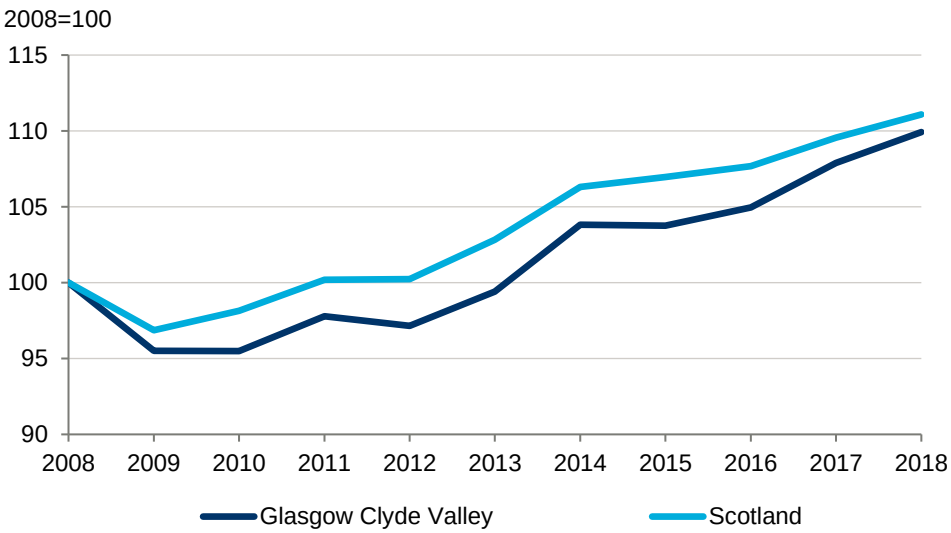
Glasgow City Region is the largest region of Scotland, accounting for £42 billion (in 2016 prices) of GVA in 2018, equivalent to 30 percent of economic activity nationally. The region also accounts for a third of all jobs.

As a result, the Glasgow City Region labour market attracts a particularly large number workers from other regions. As Figure 4 implies, 63,000 residents of other regions commuted into the region to work in 2011, equivalent to 10 percent of the workforce population. By contrast, only 7 percent of residents of the region commuted elsewhere to work. This may partly reflect the broad range of job opportunities available across the region's large labour market, which reduces the need for residents to commute elsewhere.

The city region's relative size is also reflected in patterns of GVA growth, presented in Figure 22. While underperforming across Scotland as a whole over the previous decade, the year-on-year variations in growth are generally also reflected to some degree across the national economy, reflecting the

important role that the economic success of the region plays in supporting growth nationally.

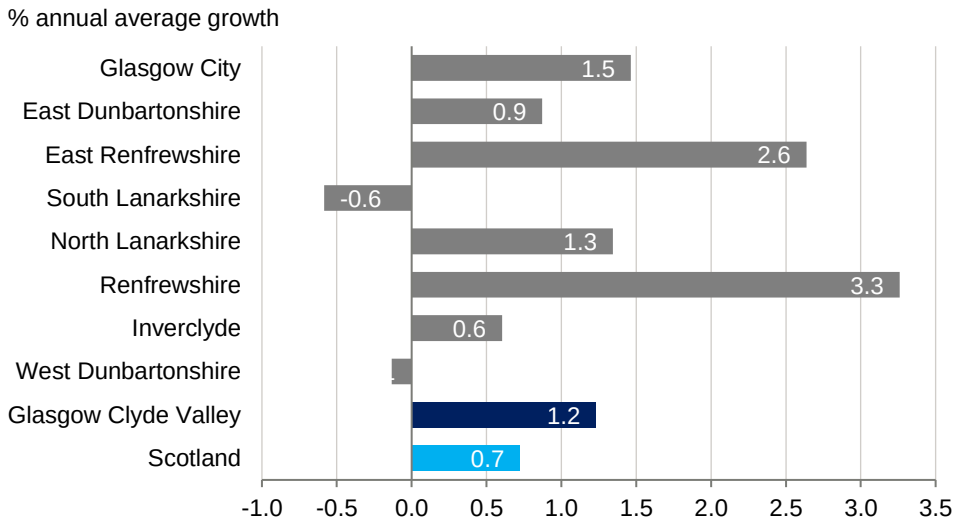
Fig. 22. Index of GVA, Glasgow City and Scotland, 2008-2018



Source: Oxford Economics

Figure 23 shows that, while the Glasgow City Region as a whole has outperformed Scotland in employment growth, there has been mixed performance across its component local authorities. Renfrewshire and East Renfrewshire have experienced the strongest employment growth, at 3.3 and 2.6 percent per year respectively. Glasgow City Region and North Lanarkshire have also outperformed the region total. However, both South Lanarkshire and West Dunbartonshire have both seen employment contract over the past five years. So we need to be a little careful about thinking that all of these are unambiguously part of a single highly integrated economy.

Fig. 23. Workplace based employment growth, Glasgow City Region and its LADs, 2013-2018

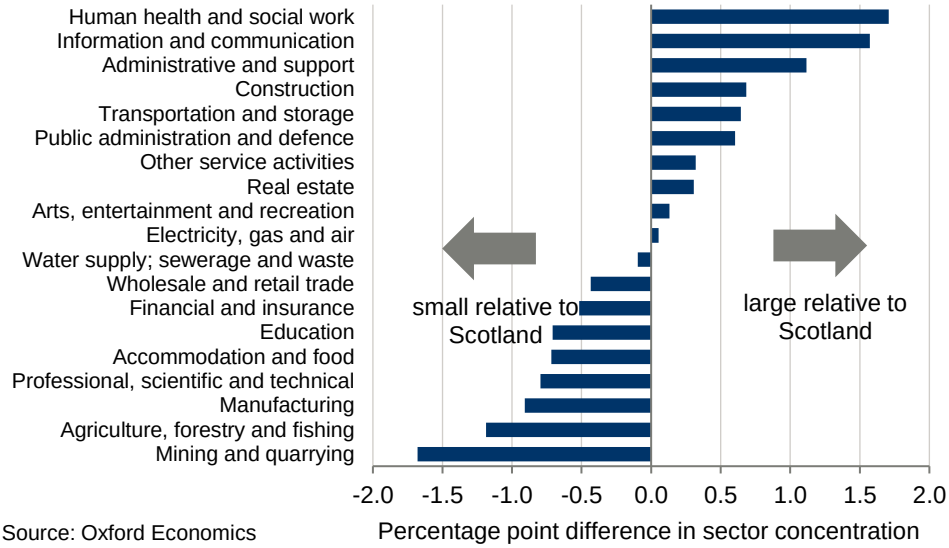


Source: Oxford Economics

As Figure 24 shows, the region's sectoral structure is particularly similar to Scotland as a whole. This is partly as a result of the region forming a large share of national GVA, which skews the sectoral mix of the Scottish economy towards the profile of Glasgow City Region, and vice versa. It also makes the region quite different to its neighbours.

While no sectors are particularly dominant, the region does have a slight advantage in human health & social work, partly linked to its large and growing population. The region is also home to a relative concentration of activity in the information & communication and administrative & support service sectors, which are key growth sectors across both the national and UK economies.

Fig. 24. Sector GVA share, Glasgow City vs Scotland, 2018



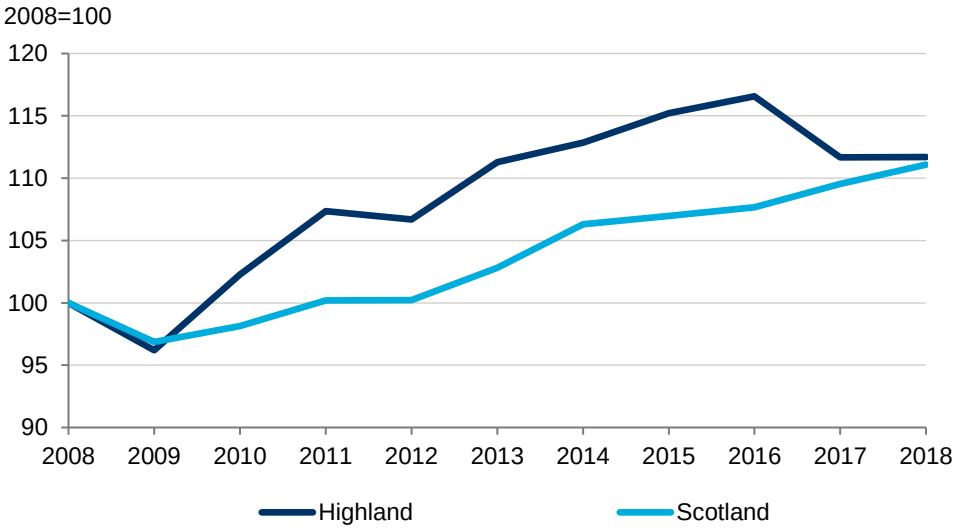
Source: Oxford Economics

7.7 HIGHLAND

As Figure 4 shows, of the 83,000 workers in Highland measured by the 2011 Census, 96 percent were also residents of the region, with only 3,000 workers (or 4 percent of the workforce) commuting-in from other regions. Similarly, only 6,000 workers, or 7 percent of working residents, travelled elsewhere to work. Owing to the long distances and significant journey times between many of the Highland's conurbations and Scotland's larger employment centres, those who did commute in and out of the region will have likely travelled relatively short distances across the region's boundaries.

Figure 25 shows that the Highland economy has grown in line with Scotland over the past decade. However, the profile of growth has been distinctly different to the national economy, suggesting that its economic drivers are somewhat different, and reinforcing the common-sense notion of Highland as a distinct region in its own right.

Fig. 25. Index of GVA, Highland and Scotland, 2008-2018

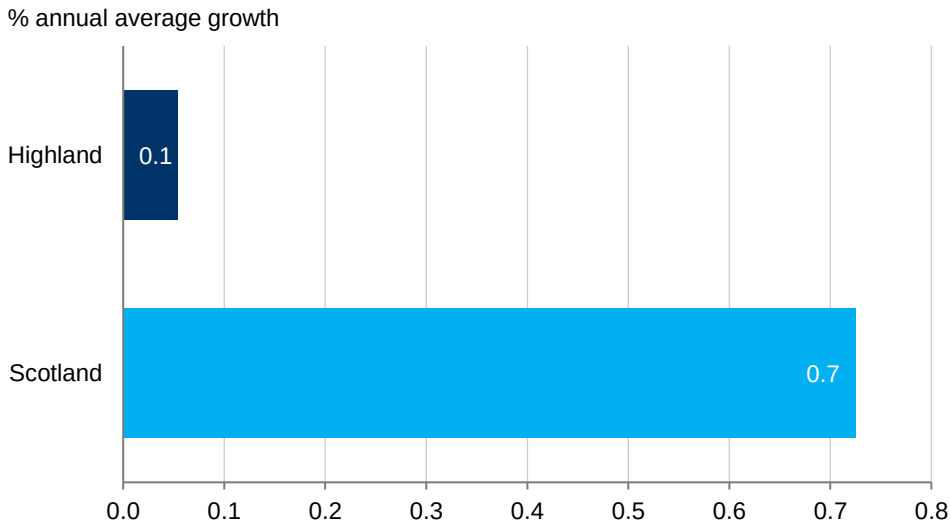


Source: Oxford Economics

Figure 26 shows that in employment terms the region has remained largely unchanged over recent years. This is partly a reflection of the overall scale of economic activity which, as detailed in Figure 24 above, is little changed compared to in 2013.

Given the region's limited reliance on attracting workers from other regions, the local labour market is closely tied to the demographic profile of residents. Unlike other rural areas of Scotland, where contractions in the working age population have been notable, the Highland has seen only a slight contraction in its working age population over recent years. This in turn has allowed it to support a relatively stable level of workplace employment.

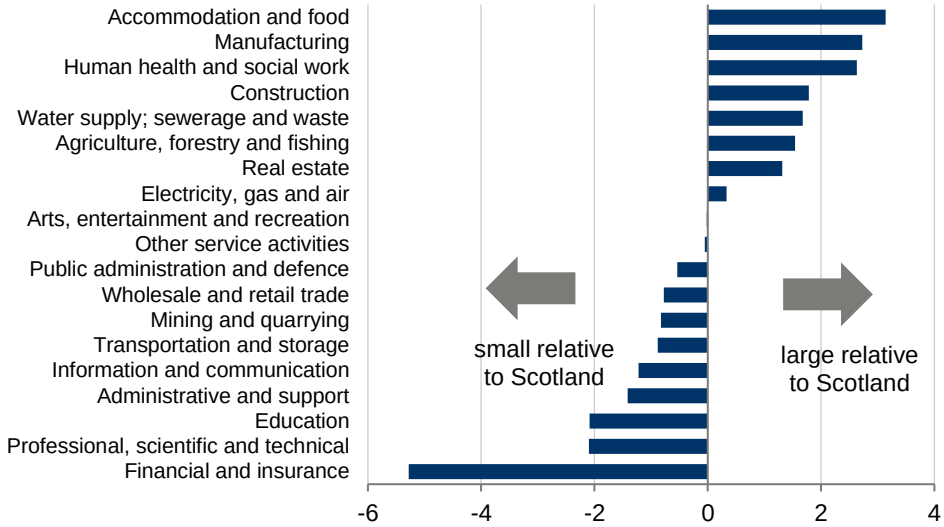
Fig. 26. Workplace based employment growth, Highland and its LADs, 2013-2018



Source: Oxford Economics

Highland does have a relatively large accommodation & food sector, reflecting the importance of tourism to its economy. Manufacturing is also a key sector locally, essentially because in a very rural region, those firms that do manufacture tend to stand out, statistically. By contrast, higher-value service sectors such as information & communication, professional services and particularly finance & insurance are all relatively underrepresented.

Fig. 27. Sector GVA share, Highland vs Scotland, 2018



Source: Oxford Economics

Highland shares characteristics with neighbours Argyll & Bute and Moray, including a large number of micro-businesses and some SME's located in and around rural towns. There is anecdotal evidence of growing importance of internet trading, along the lines discussed in Section 2. That has the potential for addressing issues of social inclusion which have traditionally been quite acute because of access to jobs and to markets. That clearly requires, however, enough digital infrastructure to be able to compete, and hence a business model that can meet such special demands.

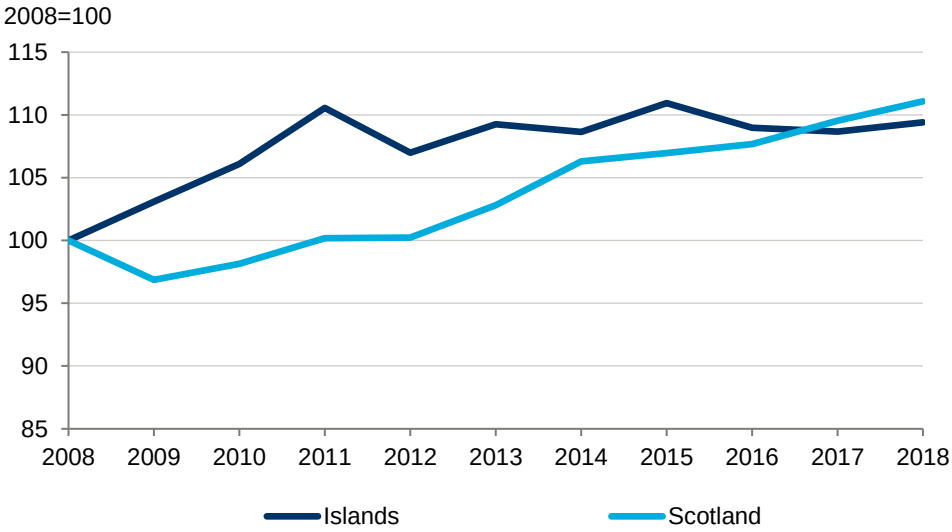
7.8 ISLANDS

The Islands, which share an economic development agency with the Highlands—namely Highlands & Islands Enterprise or HIE—are currently developing an Islands Regional Growth Deal. The three local authorities within the Islands have a long tradition of working well together, whereas it can sometimes feel that Inverness is almost as remote to them as is Edinburgh.

For obvious reasons economic inclusion is a huge issue for the Islands—there are additional logistical challenges for everything, and also some of the worst digital connectivity in the country. And as Figure 4 demonstrates, in commuting terms the Islands are unsurprisingly Scotland's most economically self-contained region. Only 5 percent of residents in work commuted elsewhere for work in 2011, while the region attracted 1,000 workers—or just 3 percent of the workplace total—from elsewhere. Unsurprisingly, given the difficulties in travelling between the islands, local authority-level data also shows a high degree of self-containment across each of the islands individually.

Figure 28 suggests that the Islands operate in their own distinct economic environment, which tends to be only loosely linked to overall economic trends at a Scottish level. The Islands are the only region across Scotland that did not see a contraction in economic output during the 2008-9 recession. However, by contrast overall GVA has fallen slightly from 2011 onwards, despite broadly consistent growth across Scotland.

Fig. 28. Index of GVA, Islands and Scotland, 2008-2018

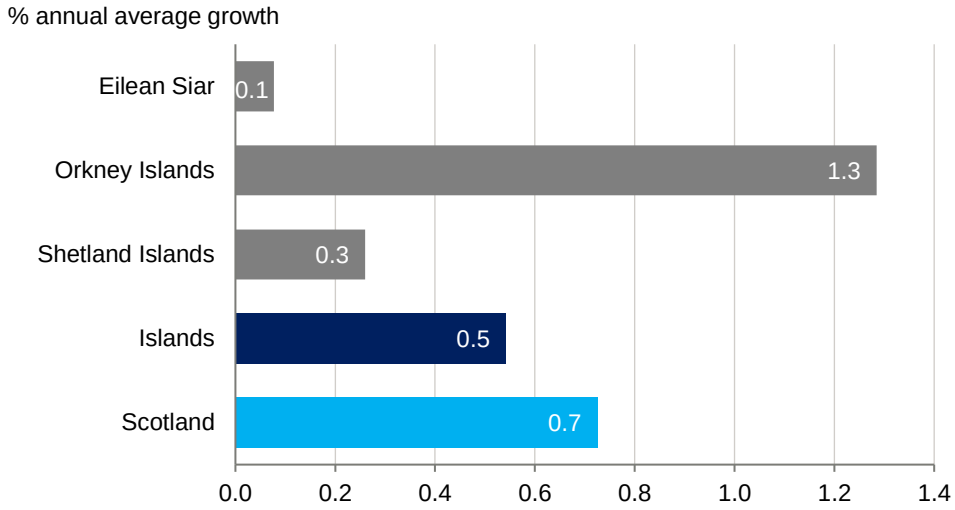


Source: Oxford Economics

Figure 29 shows that in employment terms the three parts of the Island region have had very different recent experiences. Orkney has seen the fastest employment growth of the three local authorities, at a rate almost twice that of the Scottish average. Eilean Siar (0.1 percent per year) and Shetland Islands (0.3 percent per year) have also seen workplace employment expand, albeit at a somewhat lower rate.

Given the small economic size of the Islands, these figures may be subject to a 'low-base' effect: any additional job created on the Islands will have a larger impact in percentage terms than an equivalent job created within a larger economy. Over this five-year period, the growth detailed below resulted in an increase of just 1,200 additional jobs, compared to over 100,000 jobs nationally.

Fig. 29. Workplace based employment growth, Islands and its LADs, 2013-2018

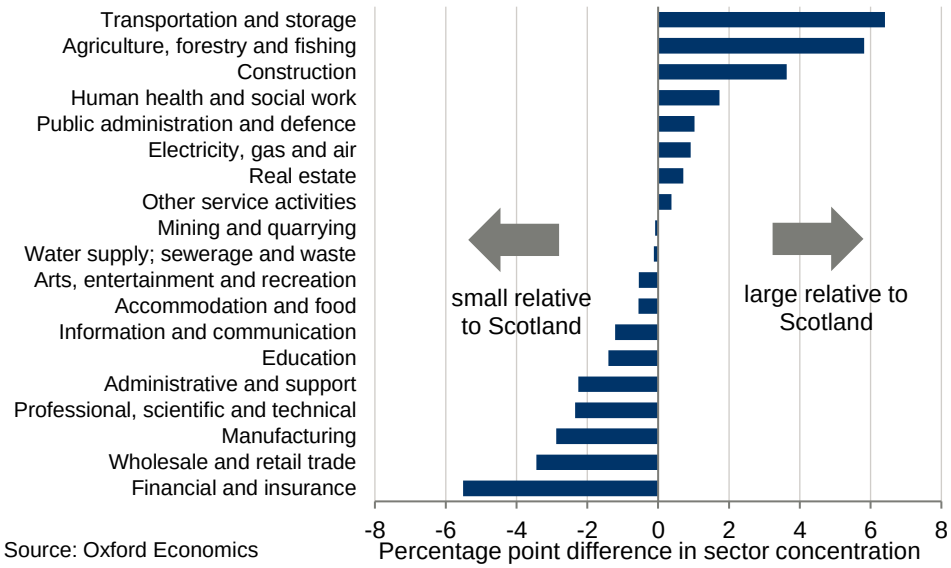


Source: Oxford Economics

The peripheral location of the Islands is in part reflected in their structural mix, adding to the obvious conclusion that this is a distinct economic area, different to elsewhere in Scotland.

Transportation & storage is the Island's second largest sector, accounting for 11 percent of GVA, over twice the Scottish equivalent. Agriculture, forestry & fishing is also relatively well represented across the Islands, although financial & insurance and wholesale & retail trade—among Scotland's larger and more successful sectors—are both comparatively underrepresented.

Fig. 30. Sector GVA share, Islands vs Scotland, 2018



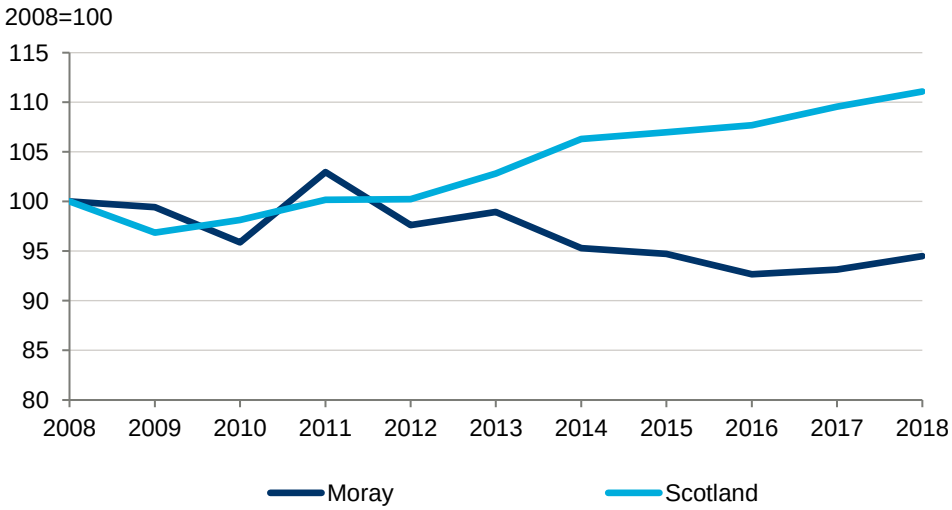
Source: Oxford Economics

7.9 MORAY

Moray is a largely rural area located midway between Inverness and Aberdeen, with its major town, Elgin, also roughly midway between the two. As a result, and as Figure 4 shows, the Moray economy tends not to attract a large influx of workers from other regions. In 2011, only 3,000 workers from elsewhere commuted into the district—the second lowest level behind the Islands—forming just 8 percent of those working within the region. By contrast, almost 7,000 residents or 19 percent of those in work commuted to other regions—with the numbers probably split fairly evenly between those heading east and those heading west, to Aberdeen and Inverness respectively.

Moray is also remote, and the need to have a voice in Edinburgh decision-making is strongly felt. Moray clearly faces challenges, not least with respect to social inclusion. It is one of only two parts of Scotland not to see a decline in unemployment in the 2013-18 period. Figure 31 shows that Moray's economic performance has diverged from national trends over the previous decade—and not in a positive direction. While Scotland has experienced fairly consistent growth from 2011 onwards, Moray's economy has contracted. The volatility of Moray's economy, reflected in large changes to year-on-year growth, is also a function of its small economic size.

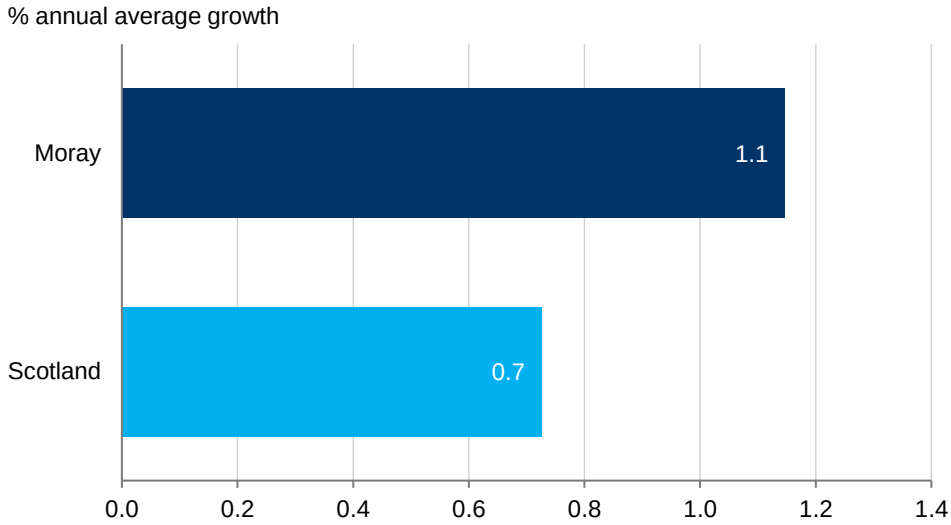
Fig. 31. Index of GVA, Moray and Scotland, 2008-2018



Source: Oxford Economics

As Figure 32 shows, recent trends in workplace employment have been more positive. Moray has seen growth of 1.1 percent per year since 2013, outperforming the Scottish economy as a whole. However, as observed across the Islands region, Moray's high employment growth rate may be subject to a low base effect: the district has added just 2,400 jobs over this period.

Fig. 32. Workplace based employment growth, Moray and its LADs, 2013-2018

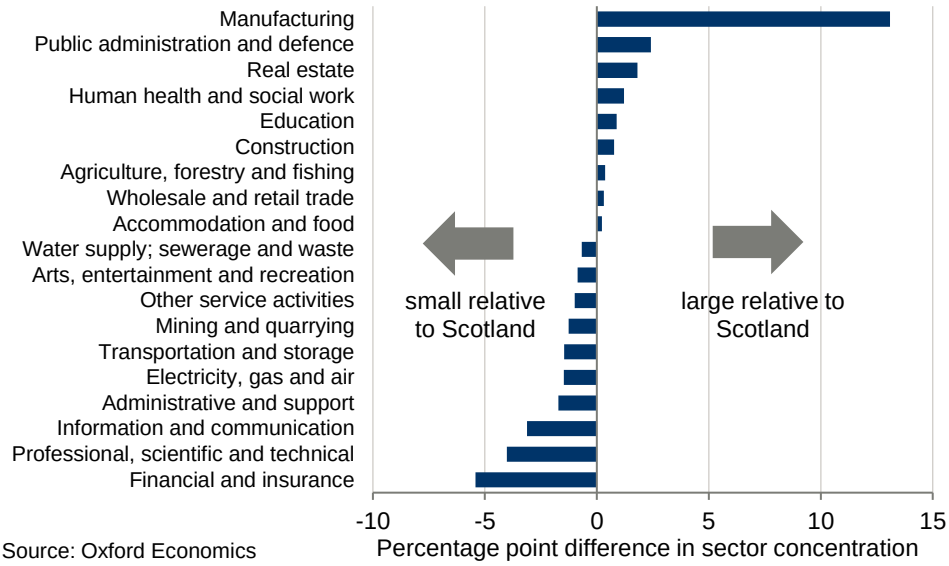


Source: Oxford Economics

One explanation for Moray's seemingly contradictory trends in GVA and employment growth is found in its sectoral mix. The local economy is dominated by the manufacturing sector, which forms almost a quarter of economic output. Elgin contains some manufacturers which export well beyond Scotland, and in the context of a small economy, their impact is relatively large.

Reliance on a single economic sector can be very positive for a region, but it can also leave the economy vulnerable to external factors or shocks. Moray's recent trends are a clear example of this: the manufacturing sector has contracted at a rate of 4.1 percent per year since 2013, driving the overall contraction in GVA over this period. The rest of the economy however has seen output remain almost unchanged. As manufacturing is a relatively capital-intensive sector, contracting output has had a limited effect on overall workplace employment, as shown in Figure 33.

Fig. 33. Sector GVA share, Moray vs Scotland, 2018



Source: Oxford Economics

Moray is a single local council area and we understand that there is little enthusiasm for being absorbed into a single over-arching partnership with a neighbour. Instead there is case-by-case working with the two neighbouring councils and also with HIE. The council and its partners have submitted a bid for a Growth Deal, and the experience of doing so is seen as being helpful in terms of partnership working at the local level. There is also a strong sense locally that having direct access to decision-makers in Edinburgh is important to the local area. There are some reasonably large employers in Elgin and elsewhere, but awareness of Moray is not strong outside of Scotland. There is a local Chamber of Commerce, but not much evidence of widespread business networking.

7.10 SOUTH OF SCOTLAND

The South of Scotland is in the process of acquiring a new much stronger regional identity—albeit one with some distinctly 'fuzzy' edges. The Enterprise and Skills Review contained a provision for the creation of a new South of Scotland Enterprise Agency, to drive inclusive growth across the entire South of Scotland. Subject to securing Parliamentary approval for the primary legislation establishing a new public body, the agency will be established on 1 April 2020. Meanwhile, a South of Scotland Economic Partnership has been established, tasked with developing a new approach to economic development with a clearly prioritised work plan. It brings together the private sector and higher education, as well as the various local councils and key economic development agencies. Additionally, Dumfries & Galloway and Scottish Borders and 5 English local authorities have come together in the Borderlands Partnership.[13] Scottish Borders is also included in the Edinburgh and South East Scotland partnership, as well as in South of Scotland.

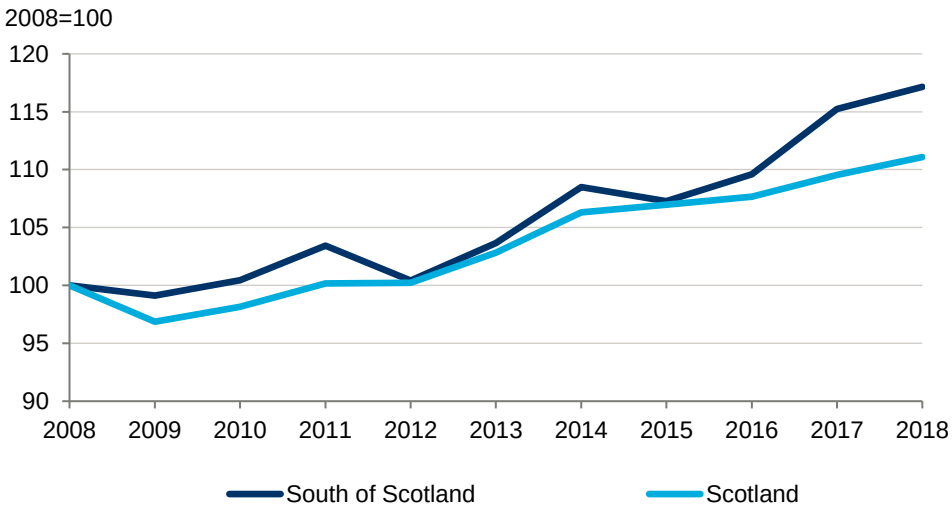
[13] *Allerdale, Barrow-in-Furness, Carlisle, Copeland, Eden, Northumberland and South Lakeland.*

For the most part the region is relatively self-contained in commuting terms. As Figure 4 shows, of the 84,000 people who worked in the South of Scotland in 2011, 6,000 or 7 percent commuted in from elsewhere. Movements of those living in the region to work elsewhere were over twice as large, equivalent to 13,000 residents or 15 percent of those in work. But this was very much concentrated in Scottish Borders, hence its participation in the Edinburgh & South East region.

Other common destinations for out-commuting residents of the South of Scotland also include the five English local authorities which, alongside Dumfries & Galloway and Scottish Borders, incorporate the Borderlands Partnership. Since the Census, the start of operations of the Borders Railway in 2015 may have altered the profile of commuting across the region.

Figure 34 shows that over the past decade the South of Scotland has outperformed the national economy in terms of GVA growth. The region suffered only a slight contraction in economy output in 2008/9, and has seen growth exceed Scotland as a whole most notably since 2015.

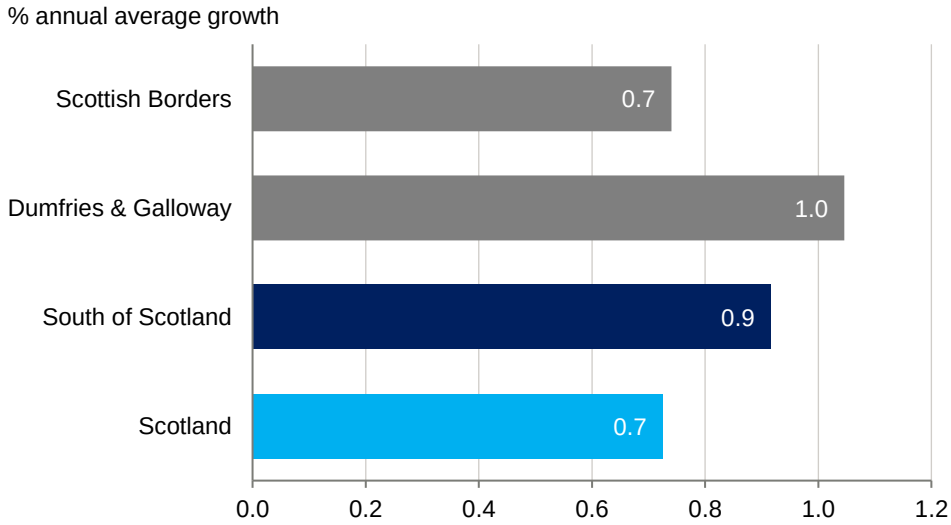
Fig. 34. Index of GVA, South of Scotland and Scotland, 2008-2018



Source: Oxford Economics

Figure 35 draws attention to the relatively strong employment growth experienced across the South of Scotland over recent years. Dumfries & Galloway has been the faster of the two, at 1.0 percent per year, while Scottish Borders has grown in line with Scotland as a whole. The relatively close levels of growth across the two local authorities supports the view that they collectively form a relatively synchronised economic area.

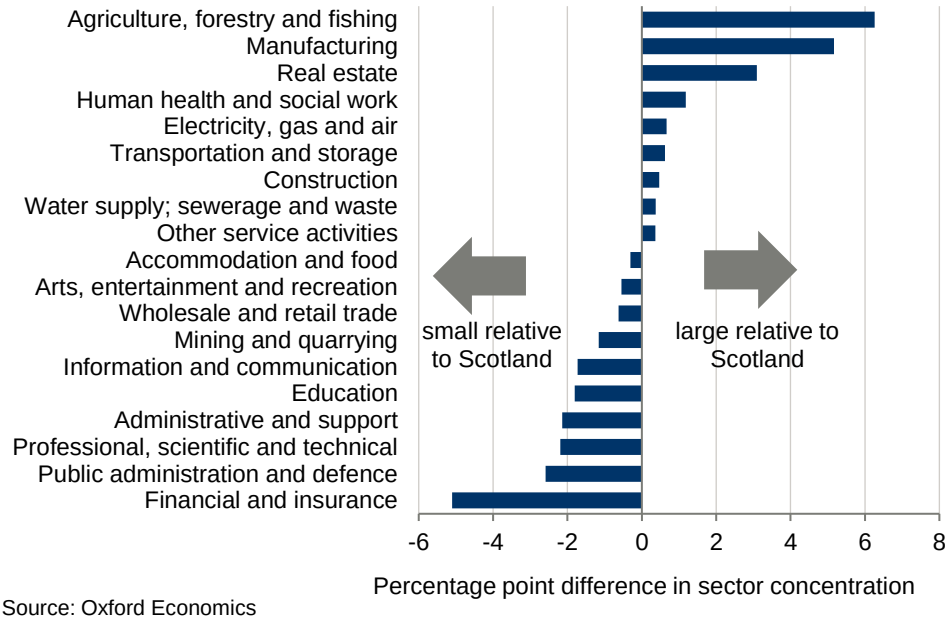
Fig. 35. Workplace based employment growth, South of Scotland and its LADs, 2013-2018



Source: Oxford Economics

Figure 36 shows that the South of Scotland has a relative concentration of agriculture, forestry & fishing activity, reflecting its rural context. The local economy also has a relatively large manufacturing sector, a characteristic that is shared with neighbouring Ayrshire as well as with some other rural areas. Recent data suggests that this sector in particular has made a significant contribution to the region's faster GVA growth observed across recent years.

Fig. 36. Sector GVA share, South of Scotland vs Scotland, 2018



Source: Oxford Economics

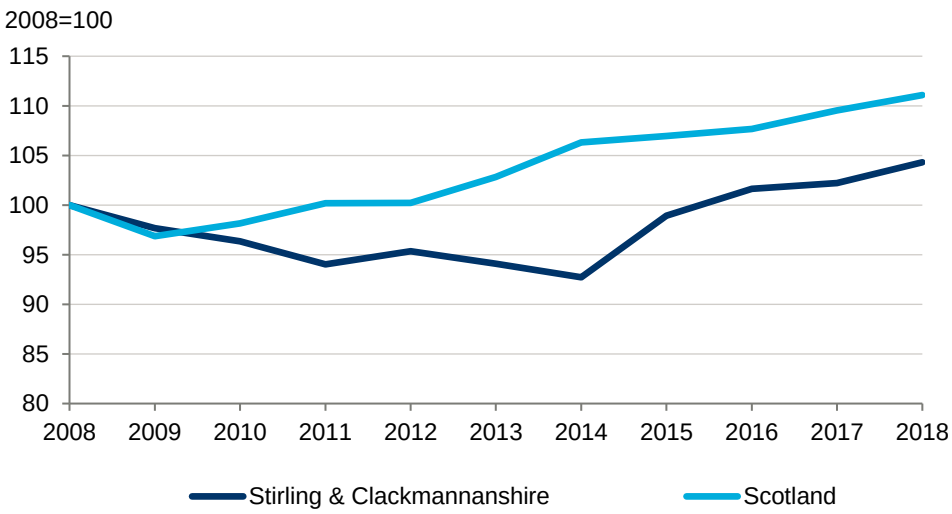
7.11 STIRLING & CLACKMANNANSHIRE

Compared with other parts of Scotland, Stirling & Clackmannanshire has a particularly high rate of in-commuting. As figure 4 shows, of the 52,000 workers in the region, approximately a third (17,000 workers) live elsewhere. A similar share of local residents also commute to elsewhere for work. Only neighbouring Falkirk demonstrates a larger share of commuters moving in and out of the district. This pattern reflects Stirling & Clackmannanshire's central location, which enables access to various large labour markets across Scotland, particularly in Glasgow and Edinburgh.

The area has a growth deal, and it has arguably been successful in ensuring that rural as well as urban areas have participated in that. Nevertheless, both together are still small by Scottish standards, as is neighbouring Falkirk. Indeed the three local authorities together have an historical link as the Central region, or Forth Valley.

Despite the large inflows of people, Figure 37 shows that over the past decade the local economy has underperformed Scotland as a whole. It suffered from a gradual contraction in output over the early half of the previous ten years and only attained its pre-recession levels of output in 2016, five years later than Scotland as a whole. Data across recent years however demonstrates an upturn in levels of growth.

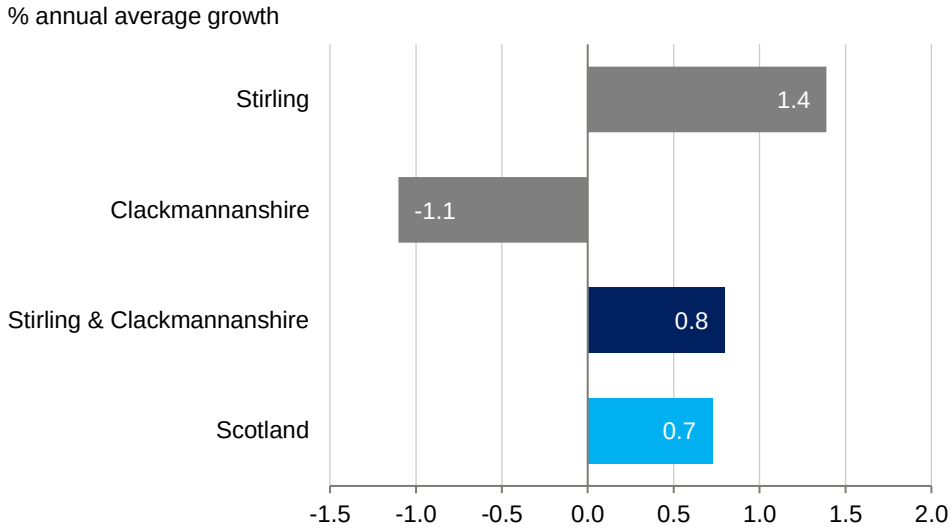
Fig. 37. Index of GVA, Stirling & Clackmannanshire and Scotland, 2008-2018



Source: Oxford Economics

Figure 38 shows differing trends in employment growth. Stirling has grown at twice the Scotland average over this period (1.4 percent per year), although the regional performance has been lagged by Clackmannanshire, which has contracted by 1.1 percent per year. Stirling's workforce of 55,000 jobs in 2018 is over three-times larger than Clackmannanshire, meaning that the area as a whole has slightly outperformed the national economy.

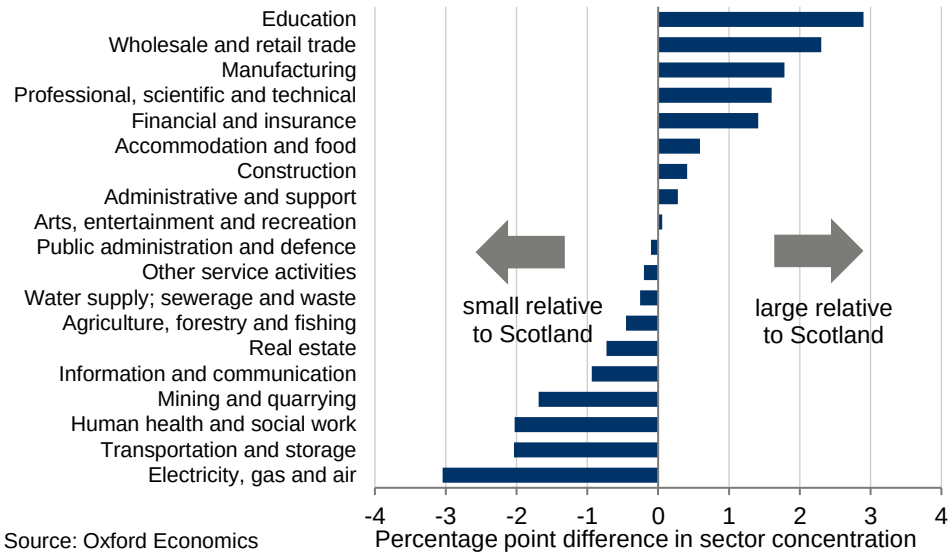
Fig. 38. Workplace based employment growth, Stirling & Clackmannanshire and its LADs, 2013-2018



Source: Oxford Economics

Figure 39 shows that the sectoral profile of the Sterling & Clackmannanshire economy is broadly similar to Scotland as a whole. It has a comparatively large share of activity in the education sector, linked to the local university. It also holds a similar advantage in sectors such as professional services and finance & insurance, which are key growth sectors across both the national and UK economies.

Fig. 39. Sector GVA share, Stirling & Clackmannanshire vs Scotland, 2018



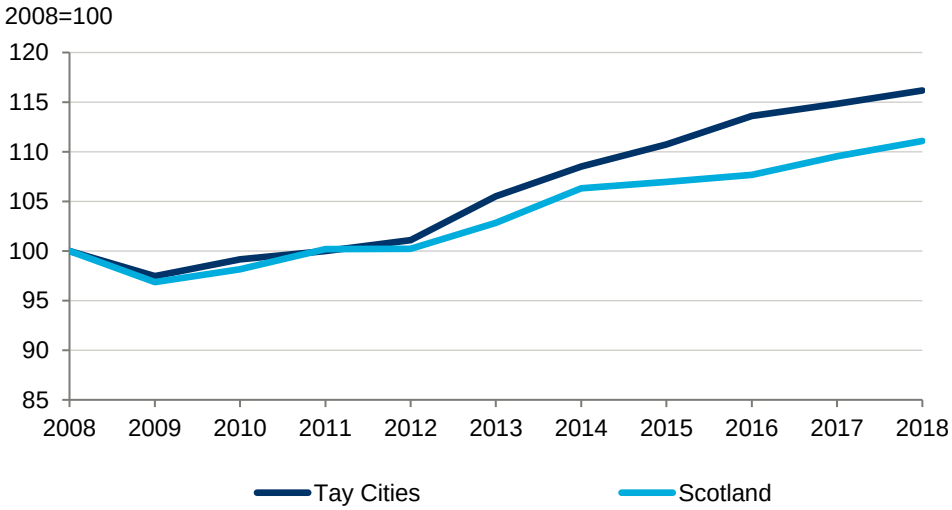
Source: Oxford Economics

7.12 TAY CITIES REGION

This region has a mix of rural and urban areas. As Figure 4 implies, of the 265,000 people who worked in Tay Cities Region in 2011, 16,000 or 6 percent commuted in from elsewhere. Movements of those living in the region to work elsewhere were over twice as large, equivalent to 38,000 residents or 13 percent. Unsurprisingly the net outflow of workers was highest in Fife, which also forms part of the Edinburgh and South East region.

Figure 40 shows that patterns of growth across the Tay Cities Region's economy are generally representative of Scotland as a whole. While closely matched to national trends up to 2012, the region has suffered from slightly slower growth from this point onwards.

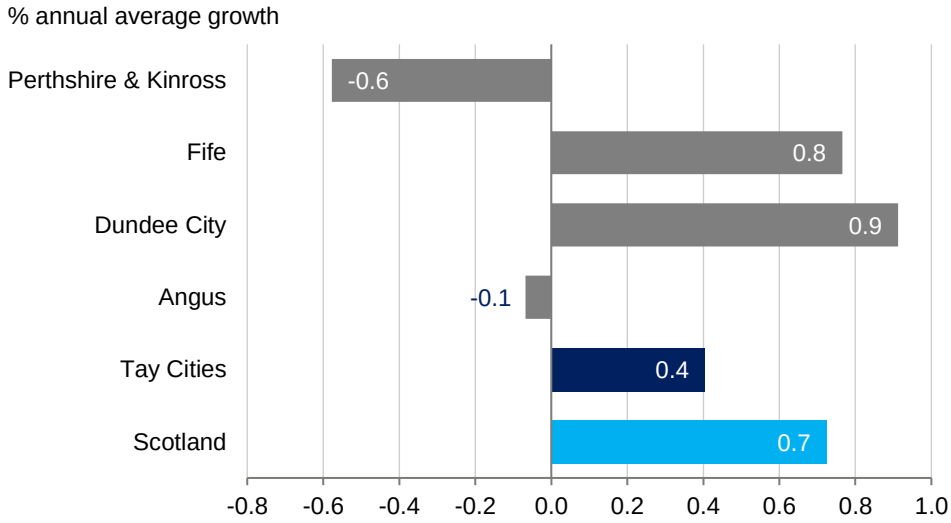
Fig. 40. Index of GVA, Tay Cities Region and Scotland, 2008-2018



Source: Oxford Economics

Figure 41 indicates that recent growth in workplace employment, like GVA, has slightly underperformed Scotland as a whole. Both Dundee City (0.9 percent per year) and Fife (0.8 percent per year) have seen relatively strong growth, slightly outperforming the national economy, although by contrast levels of employment within both Perthshire & Kinross and Angus have contracted over this period. However, as these local authorities are smallest in level terms, this has only partially offset overall employment growth.

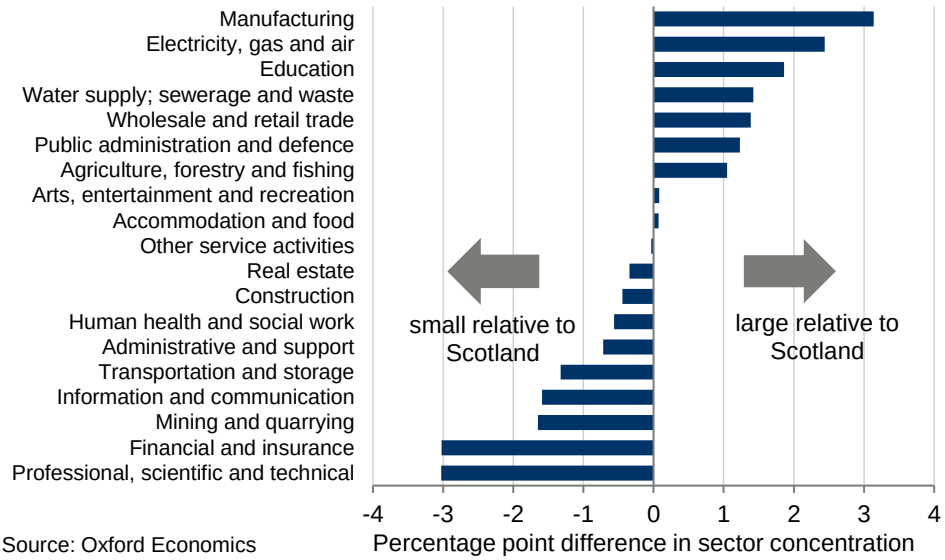
Fig. 41. Workplace based employment growth, Tay Cities Region and its LADs, 2013-2018



Source: Oxford Economics

Tay Cities Region's similar recent economic performance to Scotland is in part a reflection of its similar sectoral mix. The region has a relatively high concentration of activity in the manufacturing sector, although activities in service sectors such as professional services, financial & insurance and information & communication are on the whole less prevalent, despite the region being defined in terms of several (admittedly small) cities.

Fig. 42. Sector GVA share, Tay Cities Region vs Scotland, 2018



Source: Oxford Economics

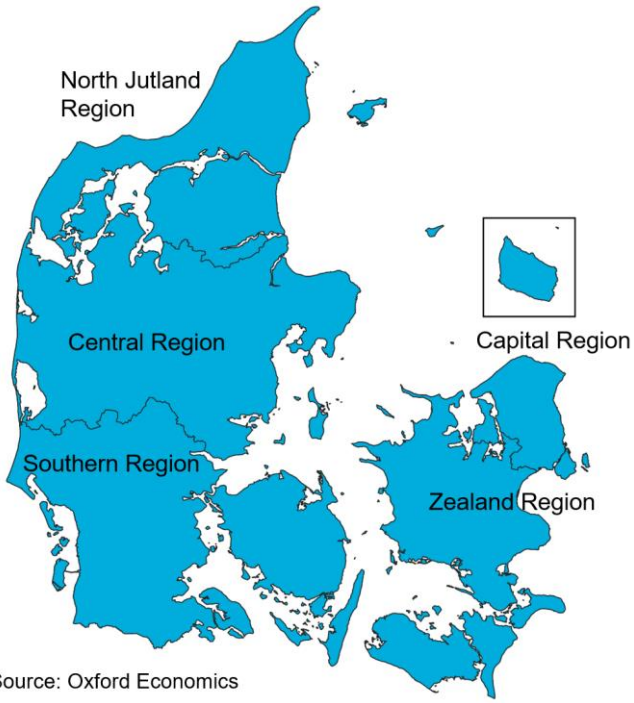
8. ANNEX B: INTERNATIONAL CASE STUDIES

8.1 DENMARK

8.1.1 Key characteristics of the economy

Denmark is located in Northern Europe, situated between the North Sea and the Baltic Sea, and partly as a result the country shares several characteristics with Scotland, with more than 70 populated islands surrounding its mainland and a mixture of rural and urban areas throughout the country. It is split into five regions, containing a total of 98 municipalities.

Fig. 43. Regions of Denmark



Source: Oxford Economics

Denmark's population totalled just over 5.8m in Q1 2019. The Capital Region houses 23 percent of the population, while covering only 6 percent of total landmass. The more rural North Jutland region covers 18 percent of the land area but accounts for just 10 percent of Denmark's population—resulting in a population density of around one tenth that seen in the urban Capital Region.

Historically, Denmark's economy remained largely agricultural well into the nineteenth century, with little of the large-scale industrialisation that some parts of Scotland experienced. That initially resulted in Denmark underperforming compared to its neighbours in terms of growth, but it also meant that it avoided the deindustrialisation that created such large challenges for many European nations, Scotland included. More recently, the country has gained ground in high-tech sectors, such as renewable energy and medical research.

By 2018, employment in Denmark totalled 2.97m – a similar size to Scotland. Agriculture's importance has lessened and in 2018 accounted for just 2.3 percent of total employment. The largest number of employees can be found in the low value-added retail and healthcare service sectors. And a rising tourism base has boosted employment in the hospitality sectors.

8.1.2 Governance

The 2007 Danish Municipal Reform saw the replacement of 13 existing counties with five larger regions. These were established as administrative entities at a level above municipalities but below the central government. With no devolved decision-making power, they were intended to provide a link between local area plans and the national economic strategy.

The 2007 reforms also included a voluntary merger of municipalities, reducing the total number from 271 to 98. The aim was to adapt local government to be ready for technological change and to be more financially efficient, while leaving delivery of services decentralised.

Each region is led directly by its elected councils – each with 41 members and elected every four years. Following the 2007 restructuring, the only devolved regional level power is the responsibility of providing healthcare. As there is no power for taxation, the regions rely on central state funding (which accounts for 70 percent of the total) while 30 percent comes from the municipalities.

The now larger municipalities have responsibility for delivering social welfare programs and developing local communities. Local Action Plans are created for each municipality and feed through to the strategies at a regional level. Additional responsibilities were devolved post-2007, including environmental control, social services and employment policies. And their income tax level was raised by 3pp (a tax that was previously levied by the former counties but was not passed on to the regions).

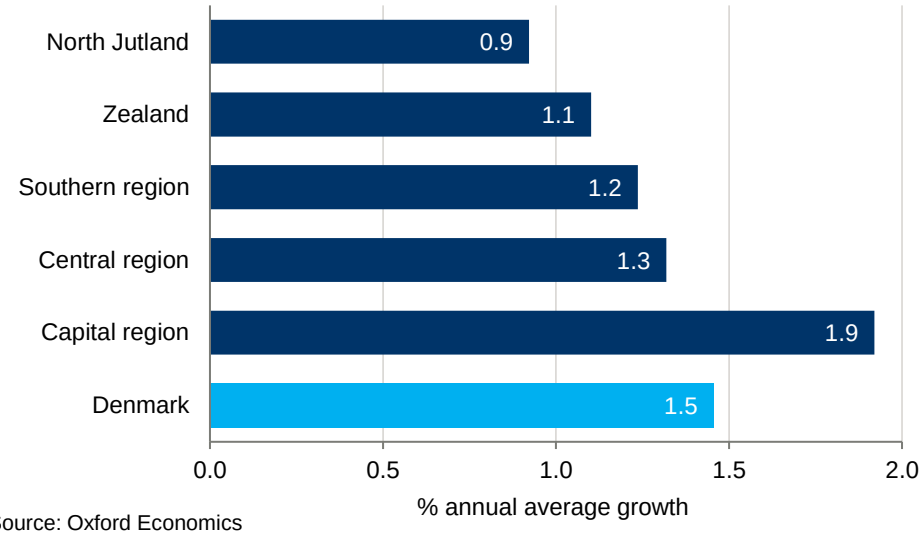
The merging of municipalities and counties into regions aims to create economies of scale, resulting in a greater sustainability in the provision of services in addition to being able to provide a wider array of services closer to the public. Some of the smaller and more rural 271 municipalities were not financially able to provide the range of services that the rest of the country enjoyed. With fewer municipalities it was intended to alleviate these financial problems of depopulation in some areas due to limited job opportunities and an aging population, thus ensuring inclusive growth and access to services throughout the rural regions. It also aims to make the introduction of new technology and innovation more affordable by combining these smaller municipalities to create a larger base in each.

In each of the regions, a Regional Growth Forum was established (with an additional forum in the island of Bornholm due to its unique needs as an island with an aging population). The aim was for each forum to act as a stimulus for growth and innovation in their respective region, with more understanding of the unique challenges and opportunities of each area. As a function, they develop a business strategy, monitor regional and local trends and provide recommendations on financing. The forums themselves have no legal status; they act as an advisory committee and present their findings to the regional council.

The importance of a regional advisory committee rather than central decision making power is evidenced by the difference in the targets each region has set for development, both in terms of exploiting opportunity and in addressing challenges.

There will always be differences in the growth rates of the regions as a result of the urban/rural divide. The metropolitan areas in Denmark are hubs for education, innovation and green technology and see greater growth, whereas the rural areas are more reliant on the low-value added agriculture and public sectors. Employment in the NUTS 2 metropolitan Capital region outperformed the national average by 0.4 percentage points per year over the past five years, while North Jutland lagged by 0.6 points each year.

Fig. 44. Workplace based employment growth, Denmark and its NUTS2 areas, 2013-2018



Source: Oxford Economics

Looking at the historic employment growth of the more detailed NUTS3 areas, only the top two performers (Copenhagen and the Copenhagen surrounding area) outperformed the national average, indicating how important these two areas are in underpinning growth and the regional disparities that exist. Looking at its share of employment, Copenhagen has a much larger business services base compared to the national average.

With the exception of East Jutland (containing Aarhus), which grew alongside the national average, the remaining eight NUTS 3 areas underperformed over the past five years. West & South Zealand was the furthest behind, with employment growing by -0.8 points less than Denmark's average each year over the last five years. The rural area is relatively more dependent on the low value-added agriculture and public sectors. This mirrors the challenges faced by Scotland in terms of its different regions. The strong growth of Edinburgh & the South East region area which is underpinned by its strong financial base contrasts starkly with the weakness in the agriculturally dependent Islands region

Fig. 45. GDP, NUTS 3 areas, difference from national average, top three and bottom three performers, 2013-2018

Denmark NUTS 3	% point per year	Scotland NUTS 3	% point per year
Copenhagen (surrounding area)	1.1	East Lothian & Midlothian	1.6
Copenhagen	0.7	Inverclyde, East Renfrewshire and Renfrewshire	1.1
North Zealand	0.6	North Lanarkshire	1.0
Southern Denmark	-0.3	Aberdeen/shire	-1.8
North Jutland	-0.6	Eilean Siar	-2.0
West Jutland	-0.6	Inverness & Nairn and Moray, Badenoch & Strathspey	-2.2

Source: Oxford Economics

While the divergence of regional growth is a challenge in both Denmark and Scotland, the differences in disparities are greater in the latter. Over the past five years, Inverness & Nairn and Moray, Badenoch & Strathspey's GDP has lagged the national average by an estimated -2.2 percentage points each year, while East Lothian & Midlothian has outperformed by 1.6 points per year. Denmark has seen relatively less variation in its NUTS 3 regions' growth rates.

8.1.3 Challenges and opportunities

The Denmark economy saw a shift in the mid to late 20th century, in part due to the agricultural trade barriers now in place throughout Europe. There was a fall in the share of agricultural employment, replaced instead with a growing welfare state and construction sector. Again, there was no immediate focus on industry or establishing itself as an international competitor. In essence, the country does not have the same industrial legacy seen in many of the other European countries.

But this unique set-up enabled the country to focus on providing high quality public services and infrastructure developments. Spending on both the welfare state and on construction in Denmark was higher than its western neighbours, and this continues to be the trend today. Health-care, education and social welfare programs are among the best in the world, and public child-care facilities have enabled the country to have one of the highest female participation rates globally.

Even as the economy shifts to establishing itself in innovative and high-tech sectors, investment in public services and infrastructure is embedded in the nation's idea of growth. Thanks to this attitude, the country is among the world leaders in terms of quality of life and is often used as an example for the world to emulate in terms of inclusivity, non-corruption, prosperity and public investments.

In a country with physical challenges, spending in infrastructure to increase connectivity and equality of access to services enabled the country to ensure inclusive growth and equality of access for islands, rural and metropolitan areas. In 2016, subnational government expenditure per capita was over USD 17,100 compared to an OECD average of USD 6,800, equivalent to 65 percent of total public expenditure and 34.8 percent of total GDP. But public investment was more centralised, with 40 percent of investment by subnational

government compared to an average of 56.9 percent in the OECD. (Although this figure may be skewed by the very large scale infrastructure projects funded by the state).

The OECD Better Life Index shows the high quality of life and inclusive growth enjoyed in Denmark. The country ranks in second behind Norway on the overall index, compared to the UK down at 16th. And on the individual indicators, Denmark outperforms on every measure except income compared to the UK. The country scores particularly well in areas of community and personal wellbeing, with life satisfaction, work-life balance civic engagement and community among the top of all countries in the index. In contrast, the UK scores relatively low in some indicators, including education, work-life balance and life satisfaction.

Aarhus, the country's second largest city and the fastest growing, is a prime example of success from significant infrastructure investment and a key local area economic strategy. With extensive construction projects and ambitious targets for development, it is setting itself up to continue as a major engine of growth for the country. Its development strategies have business, education and social cohesion at their core. Investments include the Aarhus University Hospital, one of the largest infrastructure developments in Europe. Expected to be fully operational in 2020, the hospital will focus on specialised medical treatment, research and education.

The city is also seeing large scale redevelopment along its harbourfront, changing old industrial sites into high quality mixed use developments. By focusing on economic and social development with key investments in research innovation and education, Aarhus has been successful in attracting a large student population and young workforce. According to the Local Action Plan, the average age of a citizen in Aarhus is 24.

Aarhus is also a good example of the cultural identity that exists in Denmark. People are proud of their cities in addition to the strong national culture, and success of this is evidenced by Aarhus's European Capital of Culture award in 2017. But this may pose a problem to the wider regional areas, as residents see themselves from, for example, Aarhus or from Denmark but not necessarily from East Jutland. And combining these separate city identities together into a regional base could heighten any existing rivalries or simply not lead to the same cultural collective identity.

As infrastructure investment is embedded in the idea of growth for the country, Denmark is committed to large scale investment projects with the view to increase long term socio-economic growth. The State Guarantee Model (SGM) was used when constructing the Storebaelt and Oresund Bridge links – these are two huge infrastructure projects to improve connectivity both within Denmark and with neighbouring Sweden. The SGM means that the state underwrites loans used for the infrastructure construction, made possible due to the high credit rating of the country, and the guarantee is on loans either raised from financial markets or from the state itself. These are long-term investments that would not have been possible if spending was straight from the public purse. And further investment in the form of the Fehmarn Belt, which will serve to improve connectivity between Denmark and Germany, is also to be operated under the SGM funding.

Smaller infrastructure projects at a municipal level can be financed through a public-private partnership (PPP), which has been in place in Denmark since 2005. Inspiration came in part from the UK, where this model has been in place for some time. More than 45 projects have been contracted through PPP so far and more than half of these since 2013, so on a much smaller scale than the UK where more than 700 infrastructure projects have been contracted this way. The nature of the model means that it relies on the interaction of both public and private investment. This means it follows the economic cycle and thus there are few projects during times of recession. It also is slightly more expensive than the SGM, as private financiers demand an uncertainty premium. So far, investments have included hospitals, car parks and schools.

In addition to the investments to address the challenges arising from Denmark's tricky geography, there are significant innovative infrastructure investments also underway. The country is a world leader in renewable energy, with ambitious plans to have 100 percent renewable energy in all sectors (including transport) by 2050. Denmark shares similar geographical advantages with Scotland in terms of wind energy production. With Scotland's Infrastructure Commission at the first stages of a 30-year strategy, there is potential for the country to follow in Denmark's footsteps in terms of large scale, inclusive public investments and low carbon initiatives.

8.2 SAN FRANCISCO BAY AREA

8.2.1 Definition and sketch of the region

The San Francisco Bay Area is home to 7.9 million people, making it the USA's fourth largest largely-urban region, as well as being larger in population terms than the whole of Scotland. It might therefore seem an odd choice of comparator. However, the Bay Area is recognized in the popular imagination as a single region, and is treated as such in the US Census, and by associations of local governing bodies (the Association of Bay Area Governments) and by private sector economic development associations (the Bay Area Council). And there are other reasons for seeing it as a useful comparator, as we explain below.

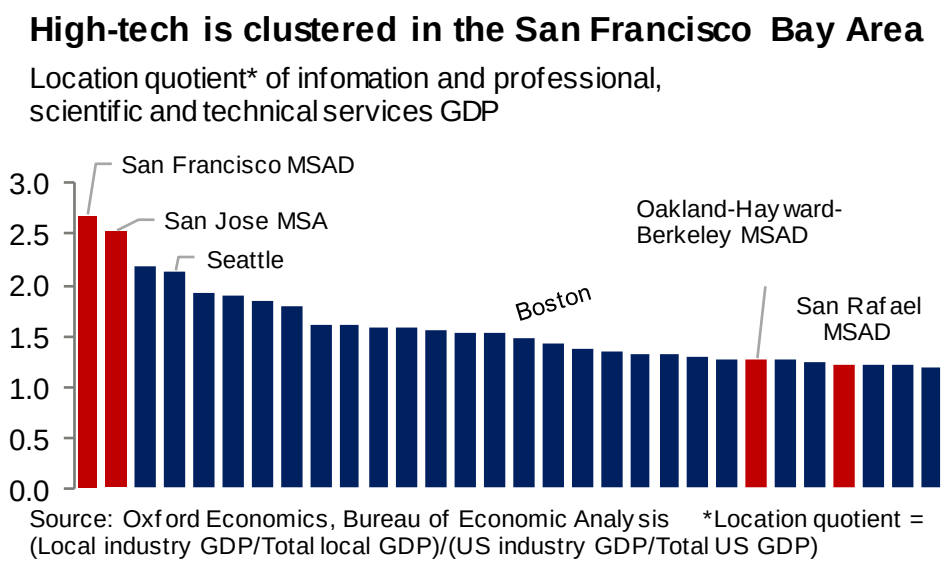
Fig. 46. The San Francisco Bay Area

Economically and demographically the Bay Area boomed in the mid-nineteenth century, initially with the discovery of gold and then as railways connected it to the rest of north America. More recently, during 1950-1970, the Bay Area's economy flourished with support from federal defence spending and a budding new electronics industry in the Santa Clara Valley, which would eventually evolve and be rebranded as 'Silicon Valley'. It was also during this period that a distinct politically progressive regional culture developed in the Bay Area.

Today the technology sector plays a major role in the region, to the extent that the Silicon Valley part of it can lay claim to being the most successful local economy in the world. San Francisco is also a clearly successful city, with very high personal income levels and large numbers of managerial and professional jobs, plus a strong cultural scene and identity. It is a major tourism destination, and is home to more corporate headquarters than any city in the US, with the exception of New York.

The Bay Area's GDP grew by 5.9 percent annually from 2014-18 compared to 2.4 percent nationally, with the bulk of this clustered in San Francisco and the two Silicon Valley counties of San Mateo and Santa Clara. The region as a whole is the most important US centre for high-technology, and has over two and a half times more exposure to the information and professional, scientific and technical services sectors than the US overall, and more than any other US metropolitan areas. In 2018 it attracted nearly half (46 percent) of the country's venture capital placements.

Fig. 47. High Tech in the Bay Area



8.2.2 Governance

Despite all of that, the Bay Area has no single regional tier of government holding it together. There are three city governments (San Francisco, Oakland and San Jose), ten counties and over 100 municipalities, many of which have long histories of self-governance, and which independently pursue their own transport, housing and educational agendas.

A few region-wide agencies nevertheless do exist: the Metropolitan Transportation Commission was established in 1970, to distribute state and federal transport funds, and the Bay Area Rapid Transit system now manages the region's metro network, while the Association of Bay Area Governments focusses on regional land-use planning, coordinated on a purely voluntary basis. However, the Bay Area Council, a private regional economic development group, has questioned the effectiveness of these regional, since they are composed of officials from individual Bay Area communities who are accused of being more committed to their respective municipalities than to tackling regional problems.[14]

This fragmentation is reinforced by the Bay Area's multipolar urban structure. Although the City of San Francisco is undoubtedly the cultural nucleus of the region, only 17 percent of the regional labour force works in the city. A consequence is that many voters are hesitant to see tax revenues spent on unfamiliar corners of the region.

The fragmented structure and weak regional governance of the Bay Area has several negative consequences. The region's traffic woes provide a perfect case study of the consequences of localized policy-makers failing to take a holistic, regional approach. A large share of workers cross city- and county-

[14] *"A Roadmap for Economic Resilience: The Bay Area Regional Economic Strategy". Bay Area Council Economic Institute.* http://www.bayareaeconomy.org/report/a-roadmap-for-economic-resilience/

boundaries when travelling to work, but many transit projects are funded at the local level, and coordination between jurisdictions to connect commuter suburbs with major employment nodes tends to be quite limited.

The result is inadequate transit infrastructure and chronic road gridlock. Although public transport use is higher than in most US cities, it is woefully behind European standards. According to the Texas A&M Transportation Institute, the typical commuter in the San Francisco-Oakland MSA faces a cumulative 78 hours of delays due to congestion annually. This places San Francisco third amongst large metro areas (just behind Washington and Los Angeles). The situation is only modestly better in San Jose, where commuters waste an estimated 67 hours every year.

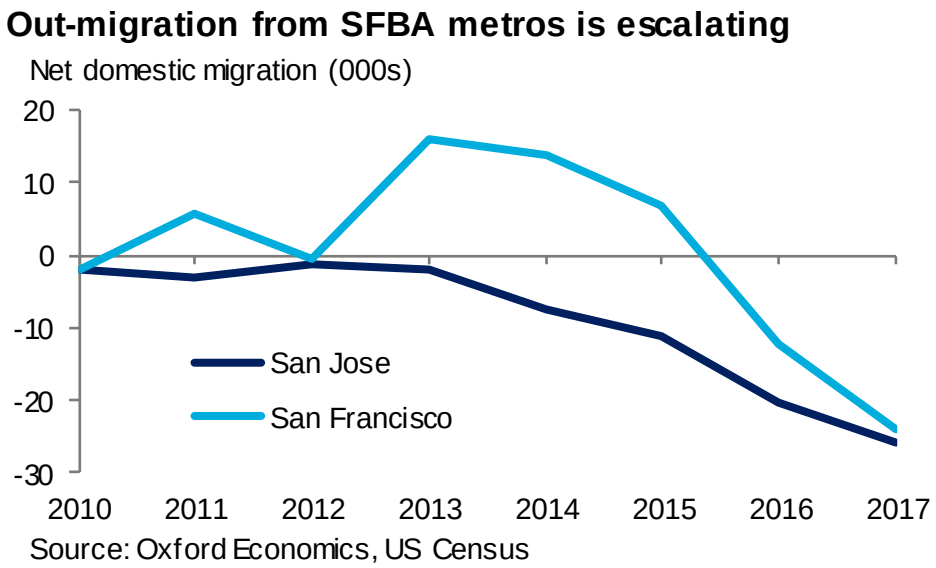
Poor housing affordability is another issue that the Bay Area's fragmented governance has failed to solve and has probably made worse. Currently the median cost of a home in the city of San Jose is $1.1 million, or five times the median house price in the comparably sized urban super-region centred on Dallas.[15] Partly this reflects higher income and wealth levels, but decades of under-supply are also to blame, reflecting the ability of local residents to resist, via the political system, new residential construction or the redevelopment of existing buildings. California's Legislative Analyst's Office estimates that the SFBA built 1.5 million fewer housing units than necessary from 1980-2010.

Ironically that pressure is itself partly a consequence of residents' fear of increased traffic and overcrowded schools—which can be traced back to the highly decentralised political system. In addition, the passage of state-wide Proposition 13 in 1979 has prevented local governments from increasing residential property taxes—the financial lifeblood of many local school districts and governments—in step with rising home valuations. Consequently, tax revenue from residential properties have failed to keep pace with inflation. Instead, local governments have typically prioritized commercial that generate tax revenues through sales taxes, rather than residential developments. This may have been strongly positive for employment and GDP growth in the short run, but it has raised challenges in terms of sustainability and inclusive growth.

Indeed, in San Jose net domestic out-migration has escalated in recent years, averaging 19,000 from 2015-17 up from 3,100 annually during 2010-14. The consensus view is that this net-outflow reflects housing affordability. San Francisco's migration numbers have seen greater buoyancy in past years—mainly because it has more pockets of relative affordability in the East Bay (Oakland). Nevertheless, affordability is seen as a growing crisis for the city—with the tech sector portrayed by many people as a major problem, and not an asset, for the city, while others blame the city government for failing to support the interests of local residents.

[15] *Reference Zillow*

Fig. 48. Migration from the Bay Area



8.2.3 Key factors explaining regional success and key challenges

And yet despite these governance problems, the Bay Area has very clearly prospered. That could be taken to imply that having an appropriate regional tier of government is in reality no disadvantage. Indeed, the Bay Area is sometimes presented as epitomising the benefits of minimal government coordination of business and economic activities, and of leaving economic development to the market.

To be fair, one explanation that is sometimes offered for the Bay Area's success is that while **local government** has been dysfunctional and **regional government** largely lacking, **national government** has been particularly important—primarily via defence spending. Going back over a century ago, the region's ports, growing railway industry and remote location made it a notable centre for telegraph and radio technology. That specialism was then significantly boosted when the US military increased R&D spending during the Second World War. Long-distance communication and air transport were both particularly vital for the conduct of the Pacific war. The US Navy established Moffett Field and the Ames Research Center as centres of aerospace research. Meanwhile, private actors, such as William Hewlett and Dave Packard, began making radar equipment for the US government.

Subsequently, innovations in transistors and semiconductors increased demand for scientific labour, and attracted electrical engineering talent from the more established eastern-half of the US. These engineers established companies, notably as Fairchild Semiconductor, and some transitioned into finance, creating the region's first venture capital firms.

The image of the Silicon-Valley sub-region as recognized today—sprawling corporate campuses adorned with ethereal corporate logos—began to take shape in the late 1960s when Xerox built the Palo Alto Research Center (PARC), which pioneered graphical user-interface ethernet computing. These

technologies, combined with integrated circuits, enabled the emergence of computers as mass consumption objects, and hence a transition away from reliance on federal defence sector spending. It was at this time that journalist Donald Hoefler popularized the term “Silicon Valley”.

More recently, the Bay Area has also enjoyed **indirect or non-targeted benefits from national government policies**. US intellectual property laws have created a fertile environment for costly R&D initiatives and the productization of scientific breakthroughs. Also, the Federal Reserve’s accommodative monetary policies during the past decade, such as quantitative easing and abnormally low Fed Fund Rates, have encouraged investors to seek riskier, higher return asset classes, such as venture capital funds.

However, none of these national level policies is unique to the Bay Area. Military investment was also significant in the Midwest and the Northeast, but did not produce the sustained high growth that the Bay Area has enjoyed. And clearly federal and central bank policies have been nation-wide. All of these explanations therefore provide only partial explanations for the Bay Area’s success.

The alternative explanation is that Silicon Valley has prospered by having an economy in which the need for government to take a strategic approach has been low simply because barriers to growth that operate within and between companies have been particularly low.

According to this account the Bay Area’s fundamental value-proposition (the development and productization of new technologies) has been made possible by an entrepreneurial ecosystem that combines world-class research, investment capital and a cultural affinity for risk taking. During the rapid growth of Silicon Valley companies, local firms were typically younger with flatter, more casual hierarchies that allowed for a greater flow of ideas. This was itself partly the result of the ‘t-shirt and jeans’ mentality of Silicon Valley in contrast to the more ‘buttoned-up’ Ivy League culture of the East Coast.

Engineers and developers often relocated to California because they were passionate about emergent technologies; they had little loyalty to a specific organization, and the transfer of people and ideas between firms therefore became greater than in traditional industry clusters. That was greatly helped by the fact that California’s courts do not honour non-compete clauses.

That then generated greater start-up activity, which made possible a venture-capital led corporate growth dynamic, which in turn has resulted in wealth being disproportionately channelled back into local companies, so that the process has been self-reinforcing. The resultant excess levels of economic rent-generation have so far easily been large enough to offset the costs of under-investment in infrastructure and in housing.

Without that very special corporate ecology, the weakness of governance in the Bay area would probably have been very problematic—as it has been in many other US cities and regions. Generally, if an economy is succeeding for other reasons, then the need for highly-tuned and hence regionally designed and delivered government policies is lower than if the economy is failing for other

reasons. Equally, it is reasonable to infer that those regions that have the greatest challenges are likely to benefit most from policy support, if it substitutes for the particular market failures or natural hurdles that the regions in question face.

A second relevant lesson is that the relationships between and amongst businesses, and between and amongst highly qualified people, and between companies and universities, may all be very important. So, in thinking about functional areas, being able to map what these relationships might be, and then think about how to reinforce them, might be particularly helpful. We return to this in Section 5.

8.3 SOLENT

8.3.1 Definition and sketch of the region

Fig. 49. The Solent region within South East England

Source: Oxford Economics

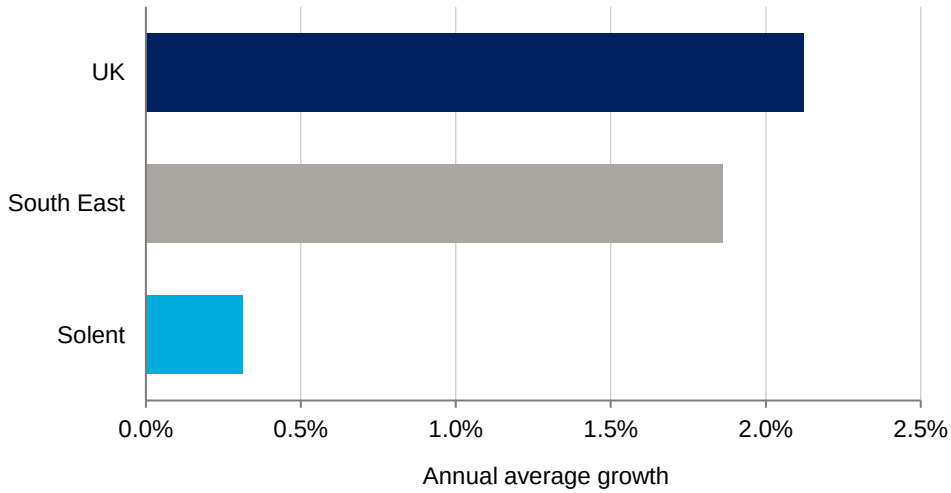
Solent is a region in south east England located at the centre of the south coast. It has a population of 1.4 million people and accounts for around 12 percent of total south east output. As Figure 41 shows it has a complex geography, with different parts of the region divided from one another by the sea. Indeed, Solent includes the Isle of Wight, which as an island is cut-off from the mainstream south east economy—unfortunate since short travel distances are an important feature of the south east economy, and doubly so since in recent decades the south east has been amongst the most successful regions in Europe, and hence a good place to be linked into.

Historically, Solent's economy has been heavily shaped by the defence and maritime sectors, notably the navy and Portsmouth dockyard, but also ship manufacturing and (at one time) aircraft manufacturing. Equally important has been the commercial part of the maritime sector, in terms of ferries, trans-Atlantic liners (largely discontinued) cruise-liners (growing strongly) and freight—Southampton is the UK's third busiest port by freight volume. In the post-war period the region became a prominent manufacturer of vehicles and consumer goods, especially electrical items, but those activities have largely moved away. There are some very high-tech companies in the region, but

mostly defence-orientated. Compared with the rest of the south east, Solent lacks strength in both professional and financial services. Tourism is important, although mostly lower-value added.

Partly because of these factors, economic growth in Solent has been weaker over the past five years than either the south east or UK growth rates. The economy grew each year by 0.3 percent on average over the six-year period from 2012 to 2018, which compares with equivalent regional and national rates of 1.9 and 2.1 percent respectively.

Fig. 50. GVA, Solent, South East and UK, 2012-18



Source: Oxford Economics

Employment growth in Solent has also lagged both the south east and UK average, rising by just 0.4 percent over the past 6 years.

8.3.2 Governance in Solent

Where governance is concerned, the region has a slightly longer history of regional partnership working than most places in England. The current Solent Local Enterprise Partnership (LEP) dates back to 2010 and the abolition of the Regional Development Agencies, but unusually it was preceeded by an earlier body, the Partnership for Urban South Hampshire (PUSH) with a similar geography to that of the LEP (although it excluded the Isle of Wight). PUSH operated in addition to the South East Economic Development Agency (SEEDA), and rather curiously it continues to exist, even though the LEP has taken over much of its role.

The LEP area itself is currently being reorganized to cover three unitary authorities (Portsmouth, Southampton and the Isle of Wight) and five districts, all of the districits being part of the much larger county of Hampshire. This replaces a rather confusing arrangement, in which the LEP previously included some wards in three other Hampshire districits (East Hampshire, Test Valley and Winchester) which are now excluded from Solent, but only some of the New Forest wards, all of which are now included. The reorganization has involved trading places with Solent LEP's neighbour, Enterprise M3. The latter, as its name implies, is largely defined by the tech- intensive M3 corridor,

leading up towards London. Solent, in contrast, has rather more the feel of a somewhat distant and 'legacy' economy.

Significantly, there were proposals in 2018 that the LEP area should become a combined authority, as has happened in several other places in England. However, Hampshire County Council objected to the plan, regarding it as a threat to its own position, and as a result central government declined to take the proposal forward.

This means that Solent has a slightly complicated local governance geography, with the LEP area and the county overlapping one another, and the five district councils being part of both. Indeed, to an outside observer it is not obvious why there is not a single LEP area covering all of Hampshire and the three unitary authorities.

That is all the more the case since there are some large commuter flows between the two LEPs. Although in 2011, 88 percent of Solent jobs were carried out by Solent residents, and 83 percent of Solent residents were employed in Solent, jobs (thereby easily meeting the criteria for being a TTWA), for the district of Eastleigh the gross outflows were rather higher than the 25 percent cut-off. Most of these were commuters travelling to neighbouring Winchester—a city which is very close by, and indeed which previously had some of its wards within the old boundaries of Solent LEP. We estimate that since 2011 commuting flows have increased markedly, and hence the Solent and Enterprise M3 regions have become more closely integrated, at least as far as labour markets are concerned. Some parts of Solent have increased their housing supply more rapidly than neighbouring parts of Hampshire where resistance to new housing is rather greater, but also where employment is rising at least as fast, if not faster. The M3 makes out-commuting to Winchester quite easy, for example.

One factor that may partly explain the local administrative or political geography is the sense that different places are engaged in competitive bidding for funds. This is a major pre-occupation for all of England's LEPs. In Solent's case, the Solent Growth Deal, agreed in 2014, included measures that the LEP said would enable Solent to meet growth targets, set out in its parallel Strategic Economic Plan. These included raising annual GVA growth to 3 percent; creating 15,500 new jobs; and increasing productivity, business survival, new homes and the skills of the workforce by 2020.

The LEP secured a total of £183m from the UK Government's Local Growth Fund in three separate investments, with Whitehall disbursing funds annually in advance. These funds have been used to invest in projects highlighted in the Deal, with the LEP having devolved management responsibility over the delivery of the projects.

Investments have included the development of research centres for cancer immunology, marine technology and advanced manufacturing; improvements to road infrastructure; creation of new homes; and the establishment of an investment fund for business support. The third round of funding for the Growth Fund is about to be agreed and is likely to include provision for a bypass to improve connectivity to the Solent Enterprise Zone (every LEP are in England has such a zone) and a skills and productivity investment fund.

Further streams of funding have also been sourced from the European Union, and the LEP has, crucially, secured a City Deals covering both Southampton and Portsmouth and generating a further £900m investment. [more details on the city deal, to follow in next draft]

8.3.3 Key factors explaining regional success and key challenges

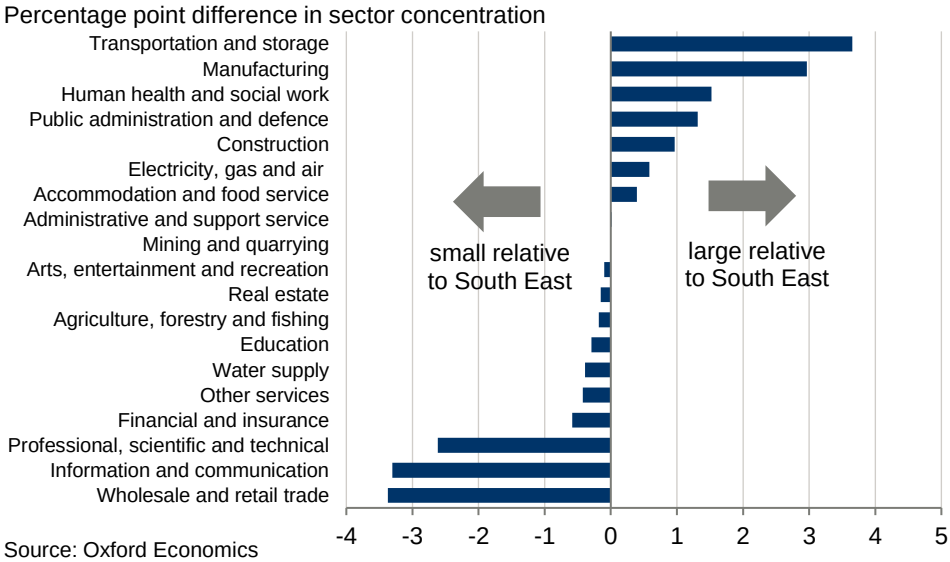
Solent is therefore the opposite of the Bay Area, in the sense that the Bay Area lacks a regional economic development agency working on partnership principles, but nevertheless has a very well-performing economy, whereas Solent has a well-established development agency, but in relative terms a poorly-performing economy. So why should this be?

One possible factor is that Solent lacks a clear identity. While 'the Solent' as a waterway is a defining feature of the region, 'Solent' as a place does not have much resonance with local people or businesses. There is not a strong sense of a Solent identity, and few local people would describe themselves as living in Solent. A likely consequence is that potential inward investors do not recognize Solent as a distinctive place with assets that set it apart from anywhere else, and that makes it harder to attract them in. A second consequence may be that it is perhaps harder for the LEP (or other bodies) to build collaborative working between the districts and cities than it would be in places with a stronger regional identity.

A more basic explanation is that the local economy's sectoral structure continues to be relatively reliant on Government spending, and also on manufacturing which, even when it is growing in GVA terms (not always the case—closures have including Ford, Seagate, Hovis and Gurit), tends to be a weak generator of additional jobs.

There is also a related competitiveness issue: the region has a history of providing what were once very secure and well-paid jobs for people with low or narrow qualifications, such as dockyard or port workers. Many of these jobs have disappeared, but the individuals concerned have not easily been absorbed back into the labour market. And within-company performance is, on average, not great. Solent's productivity level in 2018 is close to the UK average but below the south east figure by almost nine percent. Indeed, the region has seen productivity fall over the past five years, while the south east and UK have seen rises.

Fig. 51. Sector GVA share, Solent vs South East, 2018



Source: Oxford Economics

Linked to that, the reliance on defence companies has implications for the degree of cross-firm collaboration, supply-chains, and also mobility of labour. Portsmouth Naval Base is managed by BAE Systems, employs upwards of 10,000 people, and is arguably the largest advanced-engineering manufacturing site in the UK. However, largely because of security issues, its local linkages are relatively weak, and with a few exceptions there is not a surrounding cluster of businesses, likely to generate above-average economic growth.

The region's challenging geography, already mentioned, is another factor. Not only does the sea represent a natural constraint on expansion, but with one national park inside the area (the New Forest) and a second (the South Downs) just to the north, the scope for land-based physical expansion is also limited. Indeed, Portsmouth is the most densely populated city in England apart from London.

The Isle of Wight presents additional transport and infrastructure needs. The physical separation from the mainland has negative effects on the cost of conducting business, attracting new private investment, retaining a young educated workforce and results in a heavy reliance on low productivity sectors including healthcare, reflecting the older population, and tourism. And travel times within the region

However, Solent is by no means the only region to have challenges. The issue is the extent to which the regional partnership has helped to address these, by for example finding pan-Solent ways to address its geographical challenges; or by adopting ambitions sufficiently large-scale to turn its sectoral structure to its advantage.

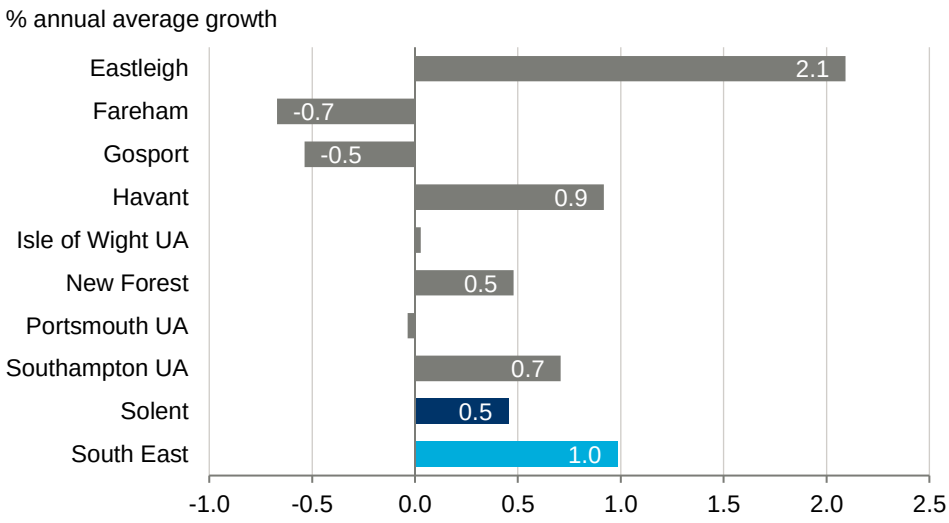
Given that the region's performance has not converged on the south east average, the conclusion must be that the LEP has not been able to radically improve the region's trajectory-although clearly it may have helped to make it worse. A likely part of the reason for this is that the resources at its disposal have been insufficient to the task, or that they have been misdirected, because

of the need to meet the expectations of Whitehall, or because the reality is that the LEP's role has been to make local improvements to decision-making that has essentially been centralised in Whitehall.

One piece of evidence here is the sheer number of strategic plans of one sort or another that the LEP has produced. [details to follow in next draft.] While this represents commendable effort on the organisation's part, there may be a problem if these are being produced mainly for consumption by Whitehall, and paradoxically are making it harder rather than easier for the LEP to focus. This is a concern that is not unique to Solent, but relates to a criticism that the LEP network as a whole is possibly 'micro-managed' by Whitehall.

It is also striking that while Solent's difficult geography features high on the region's challenges, progress at improving the region's transport infrastructure has been modest. In 2016 the LEP did work with its three neighbouring LEPs to attract additional government investment in transport, and since then, there has been increased transport spending in Solent, particularly with regard to road capacity and improving access to the port of Southampton. However, this extra spending has not been distinctive to the region, and so it is hard to see it as a regionally-devolved policy. Instead it has been part of a national story of increased spending. It is not clear that any LEPs, in Solent or elsewhere, have been able to radically alter the decisions that would have been made anyway. In particular, plans for a metro system linking Southampton to Portsmouth have been discussed a number of times, without real progress being made.

Fig. 52. Workplace based employment growth, Solent and its LADs. 2013-2018



Source: Oxford Economics

There are other examples. Investment has been made in a science park in Southampton, and a new Digital and Creative Innovation Centre is to open next year [date to be checked], but these initiatives are hardly unique to Solent, and it would therefore be unrealistic to expect them to do much to close the gap with other regions.

And although by 2017 the LEP had delivered more than £7m in grant funding and supported over 141 new start-ups, the business start-up rate remained

below the averages seen in both the south east and England. And while one of the LEP's main strategies has been to provide an environment encouraging development and growth of innovative SMEs, implemented through a Solent Growth Hub, exactly the same model is operated across most if not all English LEPs.

None of this means there is not case for regional partnerships of the sort that Solent LEP represents. But it does suggest that partnerships themselves, even after over a decade of work, do not have transformational impact when (for perhaps good reasons) if they lack the necessary resources and—just as important—the autonomy that allows them to set their own priorities across spending categories, and not just within categories.

8.4 SOUTHERN REGION OF IRELAND

8.4.1 Definition and sketch of the region

The southern region of Ireland spans 42 percent of Ireland but accounts for only one third of the population and 31 percent of total economic output. The region is mostly rural: agricutlre and tourism account for a relatively larger share of output compared to the national average. Urban areas are mainly concentrated in and around the 'Gateway Cities' of Waterford, Cork and Limerick-Shannon, plus small feeder towns which supply workers to the Gateway Cities.

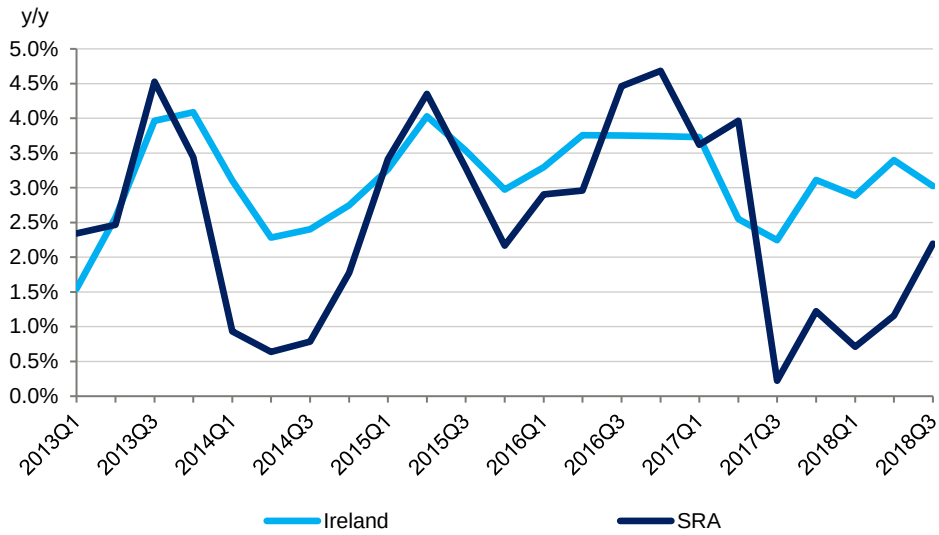
Fig. 53. Southern Region of Ireland

Source: Oxford Economics

The southern region has a population of 1.6 million. In recent years it has grown, but more slowly than the national average, and in over a quarter of local districits the population has declined. The strongest population growth has been centred around commuting areas. Total employment reached a high of 736,000 in Q3 2018. In recent years growth has generally remained under the national average, with the latter being pulled upwards by the particular strength of the Dublin economy (consistently amongst Europe's fastest growing cities). And unemployment has fallen to less than half the level that was seen back in

2013, at 51,200 in Q3 2018. But the unemployment rate, at 6.5 percent, is the highest of the three Irish regions.

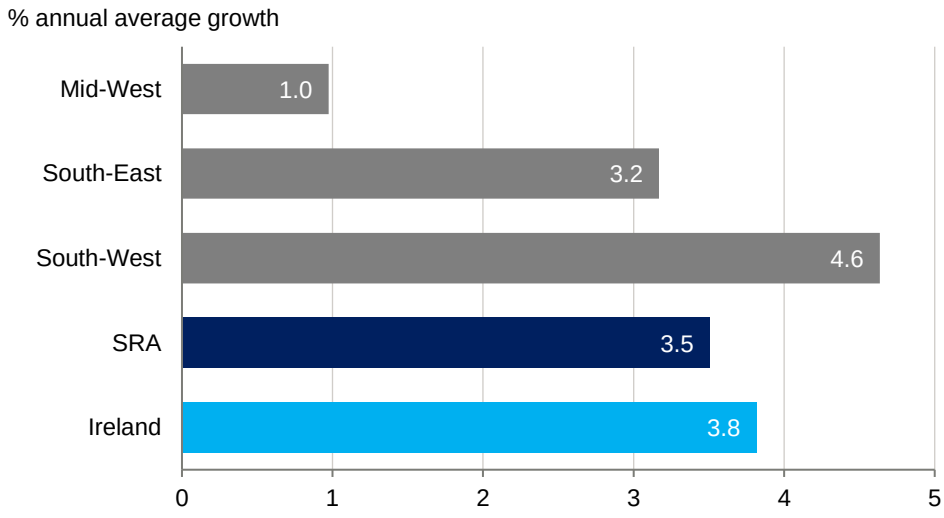
Fig. 54. Employment growth, Southern Region & Ireland, Q1 2013 to Q3 2018



Source: Oxford Economics

Within the region, the three sub-regional areas have seen very different growth rates. The South-West, boosted by the cities of Cork and Kerry, averaged growth of 4.6 percent per year between 2010 and 2014, while the more rural Mid-West region saw an increase of just 1.0 percent per year.

Fig. 55. GVA growth, Southern Region and its sub-regions, 2010-2014



Source: Oxford Economics

8.4.2 Governance

Before the Local Government Reform Act of 2014, Ireland had two over-arching regional assemblies and eight regional authorities. In 2014 these were simplified into just three regions, each with a regional assembly: Northern &

Western, Eastern & Midlands (which includes Dublin) and Southern. The assemblies comprised representatives from each of the councils within their domains. In Southern's case, there are nine such counties.

[At the same time – to be checked] central government sought to devolve power in a number of areas to the counties, while charging the assemblies with exercising coordinating roles. The increased responsibilities included planning, roads, housing, environmental, recreation, community and economic development. The assemblies have been asked to produce **regional economic strategies**, oversee local authority performance and national policy implementation, and also perform functions in relation to EU funding programmes. The government has pledged that no separate structures of public service will be established, outside of this elected local government system, unless clearly necessitated.

The **Southern Regional Assembly** (SRA) has therefore been formed and has assumed responsibility for preparing a Regional Spatial and Economic Strategy (RSES). The RSES is currently subject to consultation. In its draft form it links together the top-down National Planning Framework (which sets out Ireland's nationwide development plan up to 2040) with bottom-up city and county development plans and local and community plans. The SRA is expected to use these as a basis of planning, and develop a strategic that is consistent with the priorities of the national, county and local level plans. This is clearly ambitious.

The draft RSES covers the period 2019-2031. Since it is currently in its public consultation phase, the existing eight council plans and two city plans are still in place for the area. What that means in practice is that central government currently retains the large bulk of higher-level powers that it plans to hand over. Thus the SRA is to some extent still a shadow-organisation—albeit one that is clearly expected to play a significant role, going forward.

8.4.3 Key factors explaining regional success and key challenges

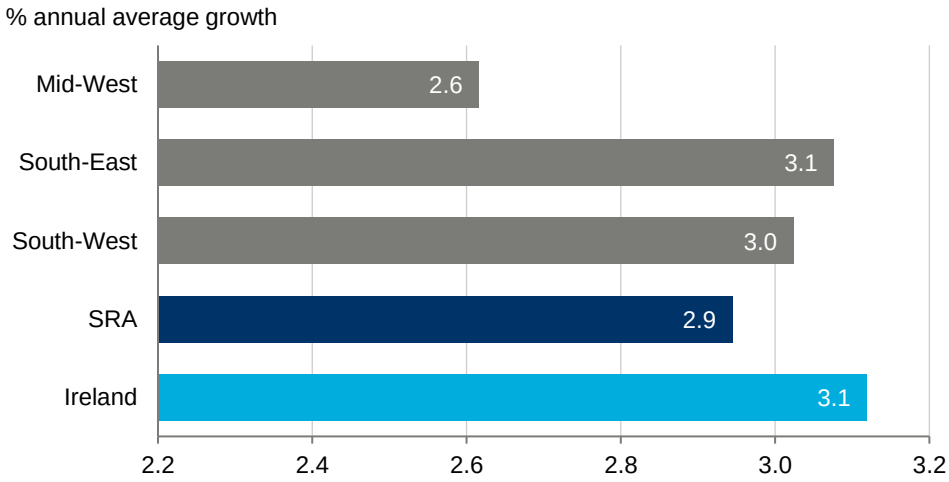
What are the challenges that the southern region will face? One is that it is slightly unclear how much autonomy the national government intends to give the region, and whether or not it will use its control over purse-strings to mean that in practice it exercises a veto over regional priorities.

A second challenge is that there will be temporary issues of administration change, and it will take time to fully set up goals for the SRA, and establish links with neighbouring regions. The eight councils within the new arrangement will also need to establish how easy it is to work with one another, and with the SRA itself; close collaboration has in the past not always been easy. And with few devolved powers historically, there is little history of partnership and shared assets between local authorities, as they have not previously been in a position to operate on that basis. So collaboration is not 'in the DNA' of local partners.

Part of the likely answer to this is that the extent to which any local rivalries (or simple lack of experience in partnership working) remain problematic is likely to depend heavily on how easy or difficult to resolve the underlying issues are. In that respect, a challenge for the region may be that it is a mix of urban and rural areas, and as such needs to develop a strategy sympathetic to the needs of both. The 'Golden Vale' area of high-quality farmland spans across three

counties, but contrasts starkly with the neighbouring city of Cork and its high-tech research economy and numerous multinational pharmaceutical corporations.

Fig. 56. Workplace based employment growth, Southern Ireland and its LADs. 2013-2018



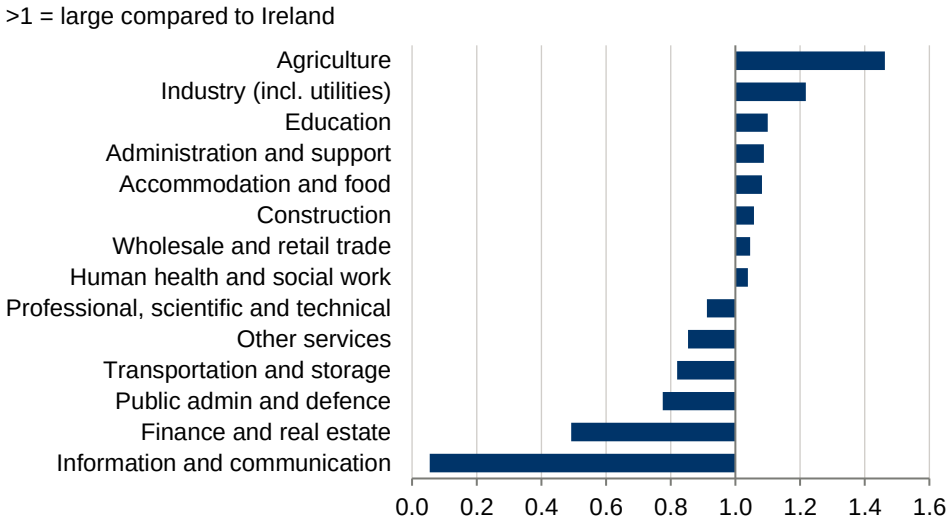
Source: Oxford Economics

Certainly at the national level, the government has listed Cork, Limerick and Waterford among the fastest growing locations in the state over the next 20 years, and a challenge for the SRA will be to ensure that these cities meet their growth potential without neglecting the differing needs of the more rural areas.

In response to this, the RSES includes a framework in its draft proposal to include a Metropolitan Area Strategic plan, Key Town plans and a rural area plan. The question here is whether writing more words resolves any underlying conflicts between priorities.

These spatial tensions are mirrored in terms of sectoral diversity and potentially competing priorities. In sectoral terms the SRA has highlighted agri-food, tourism, business services, and specialised engineering (including green and marine) as key sectors for inclusion in its development framework. It says that its aim is to establish a nationwide role for southern Ireland as a high skilled region, with specialties in innovation, research and pharmaceuticals, while also recognising the need to invest in the agriculture and tourism sectors in rural areas. But it is not yet obvious that it has a response to those challenges that amounts to more than the sum of many different parts.

Fig. 57. Employment by sector, SRA vs Ireland, location quotient, Q3 2018



Source: Central Statistics Office

Another theme that appears in the draft strategy of the RSES has to do with **inclusive growth**, via increasing accessibility and equality of access in both rural and urban areas. This includes access to quality childcare, healthcare, education, improved digital connectivity, improving transport infrastructure and creating networking links between the rural and urban areas.

The expectation is that this focus on inclusive growth will be made possible by the newly devolved powers regarding the provision of local services. But the danger is that these various elements are just too many, and will be too hard to deliver all together, so that either growth will be pursued at the expense of inclusiveness, or vice versa.

Any challenges are likely to be particularly great because of the geographical scale of the region and its low population density, together with the demographic profile of the population. The region has a lower population density compared to the national average, at 48 people per km compared to 70 on average. Also, as is usually the trend in rural areas, the population is of a higher average age than the national average. Those who are 65+ account for 14 percent of the total regional population, compared to 11 percent in Ireland. And while the working age population is only 1pp smaller in comparison to the Irish average, it is comprised of older workers who will soon move into retirement. There are fewer in the 15-45 age category in the region (42 percent compared to 47 percent in Ireland), and a larger proportion in the 45-64 category.

Complicating the picture further, the Regional Assembly says that a key aim is to retain and attract young people to the area, and that to address this it is creating a ‘learning region’ which will not only build upon the existing universities and the Science and Innovation Centre in Cork, but also establish two new technological universities (Munster Technological and Technology University for the South East). Job opportunities and economic potential are expected to increase from this investment, aiming to offset the movement of

skilled people to Dublin. However, given that Dublin is amongst the most dynamic cities in Europe, that challenge is a daunting one.

The Assembly says that it will build on a system of cross-boundary networks already in place to develop the strategic economic strengths of regional clusters. These involve a range of sectors, from agriculture, marine, tourism and innovation, in addition to a number of innovation hubs linking towns of similar economic performance. And the Assembly has highlighted what it says is a particular opportunity to attract small and medium enterprises. Cork and the Limerick-Shannon corridor have already established a strong MNC base, and the new strategy is to encourage smaller start-up firms to function as an extension to these, as a compliment to rather than in competition with the current business base. To facilitate this, a Small Business Innovation Research Fund has been established to help new businesses financially, to provide a route to market and to reduce the risk of investment.

All of these are laudable, but the scale and range of ambition for an organization with shallow roots and scarce resources looks challenging. Significant further investment is likely to be needed to establish the region with a defined role in the national economy, balancing both the innovation hubs in the cities with the agricultural dependence of the rural areas. There may be a credibility problem to be addressed, in a context in which local players have sometimes tended towards scepticism. The Regional Assembly has set out very wide-ranging ambitions, but that approach has itself come at the behest of national government, and it contrasts starkly with the more incremental approach that many of the local councils are used to following, and may want to revert to.

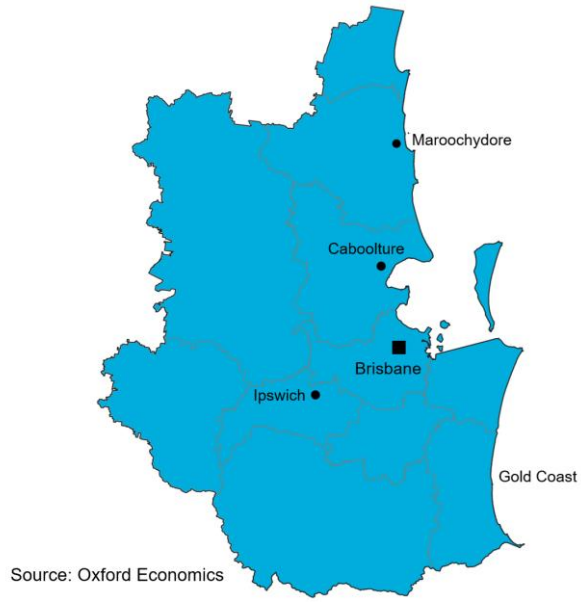
8.5 SOUTH EAST QUEENSLAND

8.5.1 Definition and sketch of the region

South East Queensland (SEQ) is one of Australia's most desirable and fastest-growing regions. Located within the state of Queensland (QLD), it is Australia's third-largest capital city region by population: home to 71 percent of the state's population, at around 3.5 million people. Over the next 25 years, SEQ is expected to grow to 5.3 million people, requiring almost 800,000 new dwellings and around 950,000 new jobs.

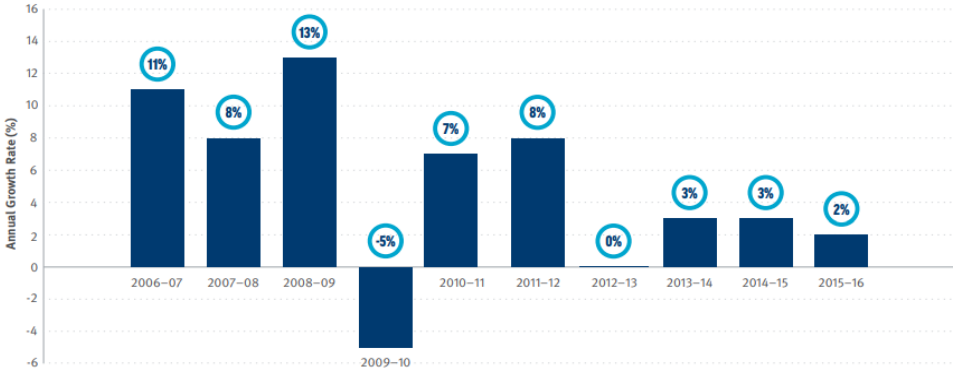
The region has a high-performing regional economy, generating almost two-thirds of QLD's GDP. It supports more than 80 percent of the state's employment in professional, scientific and technical services; education and tourism; financial and insurance services; and the information, media and telecommunication sectors. SEQ contains world-class knowledge and technology precincts linked to high-quality research and development facilities, training and education institutions, and organisations that specialise in commercialising innovation.

Fig. 58. South East Queensland – consider format



Although reliable economic growth statistics are not available at a regional level, QLD's economic growth has generally exceeded the national average over the past two decades, indicating comparable trends for SEQ. Gross State Product (GSP) trends for Queensland have been volatile over the past decade, as shown in Figure 1 below.

Fig. 59. Queensland Gross State Product (GSP)



Source: ABS 5220.0, Australian National Accounts, State Accounts, 2015–16

Unemployment rates for SEQ are typically slightly below the national average, at 7.3 percent in 2016 compared with 6.9 percent in Australia as a whole. And average annual employment growth rates were 3.6 percent for SEQ and 3.1 percent for Brisbane between 2001 and 2011, so above the national rate of 2.3 percent.

8.5.2 Governance

SEQ comprises 12 local government areas within the larger Queensland state. It does not have a formal level of regional governance as such, and no revenue-raising powers. Indeed, even the state does not have significant

revenue powers. So as a region without Queensland, SEQ does not have its own autonomous forms of funding. Rather, economic development and other major project funding is allocated to it, often from constituent local governments, the state or even federal budgets in select cases.

Queensland's government does, however, have significant planning powers, and in 2017 it put in place a new regional plan for South East Queensland ('Shaping SEQ') which it identified as a 'major development area'—meaning a large proposed growth area, requiring coordinated land use and infrastructure planning, in addition to significant state infrastructure investment for its urban development.

ShapingSEQ therefore sets the **land-use pattern** for SEQ over a 25-year planning horizon, with the aim of integrating land use planning and transport systems. Goals and strategies then feed into **Regional Transport Plans** (RTPs), which set the priorities and objectives for the transport system within each region. RTPs are prepared and delivered by the Department of Transport and Main Roads for each of the 12 districts. Establishing the SEQ region therefore facilitates strategic planning and policy formulation relevant to the region's distinctive profile and priorities. Regionally-integrated urban infrastructure and transport development are (or should be) central to the plan's implementation and the cohesiveness of its constituent local government priorities.

Key examples of implemented regional development programs and policies include a $445 million 'Building our Regions' Regional Infrastructure Fund: a targeted infrastructure programme that delivers support for local government projects. There is also a Regional Skills Investment Strategy, although this is only a $9 million initiative funded over four years, that supports selected regional communities to identify current and emerging jobs in key industries and ensure there is a supply of skilled local people to meet this demand.

These and other programmes and policies allocate funding for local economic development via a tendering process, which is approved by the state government Department of State Development, Manufacturing, Infrastructure and Planning. The Department distinguishes development priorities on a regional basis; recognising that SEQ has distinct priorities compared with the rest of the state.

Alongside Shaping SEQ there is a major focus on urban areas, delivered through a City Deals framework. In November 2016, the then Prime Minister and Premier of Queensland signed a historic memorandum of understanding (MOU) that set out how the Commonwealth and Queensland Government would work together, cooperatively with local governments, on City Deals in Queensland. As in Scotland, City Deals are long-term agreements between the federal, state and local governments to deliver a shared platform of investment and reform; specifically focussing on economic growth, jobs and housing, reduced travel times, and improved environmental outcomes to deliver measurable improvements to peoples' quality of life and standards of living. Queensland has been at the forefront of City Deals in Australia with the implementation of Australia's first City Deal in Townsville during December 2016. Very recently in 2019 the Prime Minister committed the Commonwealth

Government to develop a City Deal for SEQ, in partnership with the Queensland Government and the Council of Mayors.

8.5.3 Key factors explaining regional success and key challenges

Planning has been very important to the economic success of SEQ. The region is very much driven by the growth of relatively large urban cities within a relatively small geographical space: namely Brisbane, The Sunshine Coast, The Gold Coast, Ipswich and Toowoomba. A direct consequence of that is that the quality of the transport network is of huge significance. For example, the provision of good road links between the Sunshine and Gold Coasts is of benefit to them both. Indeed, the expansion of the Gateway Motorway between these two centres is also a benefit to Brisbane, as it allows through traffic to bypass the centre of the city.

While the development of SEQ was a natural one, driven by geographical and planning logic, it is worth considering a counterfactual in which such integration never occurred. In such a case it is possible that the region's web of transport infrastructure might have been poorly developed as a result of less consideration for the interconnected needs of regions. Moreover, that could have been combined with a greater degree of uncontrolled development along the coast as opposed to the hinterland. The SEQ Regional Plan 2017 has instead identified a need for **sustainable growth** and identified several inland regions as targets for new growth centres.

Transport networks and development projects are strategically directed, in part, on a regional level – though projects are heavily reliant on state and federal funding. In SEQ, one million people, out of 3.5 million, live within 800 metres of a high-frequency public transport. The region also has four airports, one servicing each of SEQ's four sub-regions, which each have international connections. SEQ contains Australia's largest, northernmost capital city port closest to major markets in Asia and elsewhere and is likely to become the largest container port in the country. And connecting these ports is an extensive freight network of major interstate rail and road connections. SEQ has an extensive heavy rail network and world-class busways.

Brisbane as the largest city has the best public transport connections in the region, as well as nearly half of regional employment, and a wide range of public and private services. But both Brisbane and the Gold Coast have the most developed existing and emerging networks of high-frequency public transport within SEQ and in the state of QLD.

While substantial investment in upgraded and new infrastructure will be needed to service the region's growth, the established mass transit and freight network already connecting SEQ's large urban areas provide an opportunity for consolidating urban growth in a way that supports economic productivity.

The degree of transport planning to address that is considerable. The SEQ Infrastructure Plan is updated annually by the Department of Infrastructure and Planning (DIP) as part of the State Budget process. For example, the Cross River Rail in Brisbane has been proposed in regionally strategic terms, and a wide-range of advantages are attributed to it: unlocking broader capacity that improves efficiencies across the entire rail network; improved access across the region to employment and business; improved connectivity across the

region, particularly between knowledge and technology precincts and the CBD; better efficiency and greater productivity through increased scale and intensity; attracting more business activity, and enhancing global competition. This suggests a very committed approach to making transport investment deliver.

There is also a clear commitment to **economic inclusion alongside sustainability**—although not necessarily phrased in those terms. Partly that means a commitment to rural development. Within the overall planning framework, the SEQ Rural Futures Strategy identifies a need to better manage and plan for appropriate economic and employment opportunities to support the region's rural communities. Indeed, the non-urban and rural areas of the region account for around 80 percent of the SEQ land area.

Generally, however, the strategy is to focus economic development to increase residential densities in and around centres, supported by high-frequency public transport, with prioritised transport infrastructure and associated land use changes to significantly increase the share of trips made by walking, cycling and public transport. Newer suburbs have been planned and are designed to support enjoyable walking, biking and public transport options; mixed and integrated land uses; housing diversity; a high level of connectivity; natural features and functions; and authentic place-making.

And in conjunction with ShapingSEQ policies and strategic priorities, a Housing Supply Expert Panel has the objective of housing two million additional people in south-east Queensland by 2041, providing "independent advice to the government on how to manage housing supply and affordability issues in south-east Queensland". Meanwhile, the Greater South East Queensland National Disability Insurance Scheme (NDIS) Workforce Action Plan is a strategy of WorkAbility Qld: a state organisation led by a consortium of both national and state peak bodies in collaboration with key government agencies.

These are clearly initiatives and plans which are being taken very seriously—but they have the advantage of being pursued against a background of strong and reasonably stable economic growth. While rapid growth in the Bay Area seems to come at the expense of inclusive growth, and in Solent include growth is hampered by low overall growth. SEQ is in the sweet-spot where a high growth rate alongside reasonably generous public resources facilitates moves towards more inclusive growth.

9. ANNEX C: CONSULTATIONS

As part of this project we undertook a series of telephone interviews with stakeholders across Scotland. The purpose of the interviews was to inform our research, and it was therefore not a formal consultation exercise. Our list of interviewees was intended to be representative rather than comprehensive. And those that we interviewed spoke on the basis of their own expertise and knowledge, providing us with their personal opinions, rather than as representatives of their organisations. Nothing in this report should be regarded as expressing the views of any other organisation.

Interviewees were all at senior management or executive director level, with responsibility for economic development, planning, strategy and programme management. We are grateful to all the individuals involved for their assistance and advice.

The following organisations and partnerships participated in the interview programme:

- Argyll & Bute
- Edinburgh & South East Scotland
- Falkirk
- Highlands
- Islands
- South of Scotland
- Tay Cities Region
- Economic Development Association of Scotland
- Improvement Service
- Scotland Office
- Scottish Enterprise
- Scottish Government
- Transport Scotland
- Visit Scotland

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