

South West RDA

The Economics Story

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These documents have been written as the Agency has been in the process of closing down and transferring some of its responsibilities to other organisations. This knowledge legacy work has had to be fitted in around, not only our busiest ever operational year, but also our intensive Transition & Closure Programme. Several of the staff involved have already been made redundant and the others will be leaving over the coming months. We are delighted, and proud, that our colleagues have continued to show such commitment and professionalism, despite the difficult situation.

These documents have been put together by Sadie Moisan, Kate Relph, Jo Johns, Tim Harris, Kate MacDowall, Donald Barr, Andy King, James Harper, Ian Watson, Nigel Jump and Simon Hooton – supported by many others from across the Agency.

This is one of four documents that have been produced by the South West RDA in order to share our knowledge and experience of delivering economic development across the South West, over 12 years.

The other three are:

South West RDA – A Short History

A look at why and how RDAs were created, and how the South West RDA has developed and delivered over its lifetime.

SH → Read more... p

Reflections and Lessons

A look at what we've learnt, identifying specific and general lessons from our work, based on evaluation, research reports and professional experience.

RL → Read more... p

Economic Development Guide

A practical manual for those involved in economic development.

DG → Read more... p

The arrows above are used throughout and indicate links for further reading in the other documents, shown by colour, initials and page number.

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Executive Summary

The Economics Story explores the principles of economic development, and sets them in the context of our understanding of SW England's economic conditions and experience over the last eight or more years.

The story we have written:

- Looks at those aspects of economics which apply to any sub-national geography, such as South West England
- Identifies the main elements and lessons of SW England's contemporary structural and cyclical performance
- Points to the likely planning and policy context for tomorrow's SW economic development.

By so doing, we intend to help future practitioners with useful principles and lessons, without attempting to write an economic textbook or a universal compendium of facts.

We have ordered the report from foundations and principles, through knowledge and learning, to parameters for the future. The three main Chapters follow a natural order, leading to some practical conclusions cited in **Chapter Four**, but they can still be read in isolation according to the needs or inclination of the reader.

Key Findings

In **Chapter One**, we run through some of the economics principles of sub-national development. We have concentrated on what we think are the most useful considerations for most public or private development officials (in policy or delivery) when approaching economic development. It is not intended as a text for economics professionals.

In short, we think these key tenets are:

- Be clear about what you wish to change and when you are trying to change an economy
- Be sure about why and how you might want to intervene and where the impact will become apparent
- Be focused on what will generate sustained and positive real output and productivity growth.

In **Chapter Two**, we review the South West's economic performance. We identify a range of practical problems with the "numbers" but, more importantly, we summarise the region's absolute and relative performance across a range of economic measures.

We focus on the main findings of our prolonged studies of the region, rather than break these down consistently by place or by activity. You can find that sort of detail in our many other Evidence Bases, Reviews and Reports published over the years.

These main findings are:

- The average performance of SW economy involves a wide spread of outcomes across its different geographies and industries with respect to output, employment and other key economic variables.
- Overall, the SW economy performs as well, or better, than most parts of the United Kingdom but lags behind the 'leaders': In some ways, it is like the Greater South East but, in others, it is more in line with other peripheral UK areas. We share the rest of the United Kingdom's comparatively modest investment record.

- Parts of the SW economy are good at creating jobs (with a relatively high proportion of part-time and self-employed) but the workforce is less productive than it could be. We have skills gaps and mismatches to address.
- Many parts of the SW economy have high numbers of small businesses with low rates of business 'churn' or productive turnover. We have a lot of entrepreneurs numerically but there are doubts about the quality of that entrepreneurship.
- Despite some world class concentrations, most of the SW economy's sectors and businesses do not take full advantage of the potential of international engagement. They need to become more competitive if the region is to re-balance its activities successfully.
- The South West has seen a high degree of low productivity growth recently because many businesses rely too much on consumer demand and public spending. Private innovation is concentrated in only a few sectors and places. Spreading agglomeration effects – the benefits from economic integration across markets - and improving market access - through transport and communications in the broadest sense - would help the SW's relative economic performance.

In **Chapter Three**, we look to the future of economic development and how this relates to other socio-environmental as well as economic measures.

- We distinguish between projections and forecasts and discuss how to inject realism into development planning or targeting.
- We examine how the current 'age of austerity' offers both opportunities and threats to the parts of SW England as its economy seeks to re-balance activity from domestic consumption to competitive investment.

Conclusion

We hope this "Economics Story" will be a stimulating read for all those interested in future economic development of the English regions and their local areas. We trust its shelf-life will extend beyond the immediate, uncertain economic times.

We thank all those who have contributed to or commented on the Economics Team's work in this document and, indeed, over the last eight years: your input has influenced our thinking and is represented here.

Introduction

Aim

Our economics story aims to provide a firm grounding for economic development practitioners: a universal framework built on the experience and accrued knowledge of the economic professionals of the South West England Regional Development Agency.

Consideration

The document considers the economics of development within the context of South West England. It tells an economics story which takes the reader from theory to application and from the past to the future, concluding with some headlines that will, hopefully, be appropriate for future development activities in any economic geography.

Starting from some relevant definitions and principles, the story identifies the main aspects of the SW economy: its structural characteristics and emerging trends. It does not attempt to be a comprehensive, detailed study of the SW economy and all its parts. This is covered in our other many sources and reports. Rather, it focuses on the key elements of sub-national economic development, stressing the importance of growth in output and trade, productivity and employment, and their main drivers.

From this grounding in theoretical and applied economics, the story then considers some forward looking analysis, framing the sort of debate likely to emerge about future growth prospects, before ending with some key messages that should be relevant across time and space.

In summary, those key messages are:

- The foundations of economic development rest on three things: respectable theory, robust data and realistic forecasts
- Imperfections in the knowledge base mean there is a need for continual analysis based on experienced judgement
- Actors in development need to understand the differences and the similarities in and across regional economic geographies of all kinds
- Appreciation of the interaction between the macro and micro detail of a dynamic economy in a changing policy context is crucial to sound investment
- A healthy balance between aspiration and realism, particularly with regard to time, should be maintained with regard to the economic impact of specific interventions.

Context

The document is no more than a brief summary of the knowledge and understanding assimilated by the Economics and Evidence team of the South West England Regional Development Agency. This team is also the Economy Module of the SW Regional Observatory.

Over the last eight years, in the words of Professor Martin Boddy of the University of the West of England " the RDA economics team has made very real contribution to ways of analysing and understanding regional and sub-regional economies and economic intervention in the UK – the 'regional evidence base' that has been built up is impressive and has provided a firm basis for the development of policy and initiatives".

The Economics team has influenced a range of economic interventions and investments. It has done this through work it has produced itself, commissioned from academic and private experts, and disseminated to a range of development and non-specialist clients and audiences in the region and beyond. This work is embodied in an extensive catalogue of research, appraisals and evaluations, publications and presentations available to business, public sector and other partners across the South West. Most of this output can be found on South West RDA and Observatory websites and includes the Evidence Bases produced to support various regional strategies, the economy and labour chapters of the Observatory's State of the South West report, the regular South West RDA Economics Review and other Labour, Business and Spatial Reviews branded from the Economy Module.

We recommend this legacy, selectively reflected in this document, to all future actors in sub-national economic development and we trust that this document will be a useful text for those concerned with the SW economy for many years to come.

Chapter One

Definitions & Principles

This Chapter explores the main concepts of economics that are crucial for anyone engaged with economic development. We are deliberately selective and simplistic: there are many economics textbooks that cover the broader scope of the discipline available for those who wish to investigate further.

At any spatial level, the concepts we review will provide a foundation of understanding that should help to:

- Set strategic direction and develop tactical plans and
- Deliver effective and efficient interventions.

Chapter One explains what economics is, how this relates to place or sector, and the reasons why society may wish to intervene to support economic competitiveness. To that end, it focuses on economic growth and productivity and their determinants over the long run.

This Chapter can not, however, explore all the theories of growth and welfare in the economics literature. To that end, it may seem simplistic to professional economists. Nevertheless, it provides a foundation against which development activities can be assessed by reference to the key policy principles, (whatever your end goal), of “do no harm” and “make things better”.

Reasons for Intervention

Economics Principles

Economics studies the way people (individuals, households, communities, businesses and governments) make choices. Choice is necessary because resources are scarce: at every spatial level, from planet to family, we are limited in the resources we can deploy to satisfy human desires or needs.

Economics, then, is the study of **resource allocation**, whether that relates to a) time and energy, b) land and materials, c) skills and labour, machinery and systems, and d) finance.

All the time, people make choices about the means and ends of resource use. Most of us want to make good choices. Whilst that can mean different things to different people, there is usually some aspect of “getting the best out of life”: doing and acquiring things that bring us positive utility – the economics word for benefit. This includes deriving outputs from our work and leisure that exceed the inputs required, both efficiently and effectively. In turn, effectiveness means the desired outcome is achieved with the most benefit and efficiency means this is done at least cost.

The **market system**, while imperfect, is the best tool that people have developed to make choices that optimise resource allocation effectively and efficiently. The market is “people” undertaking exchange, i.e. putting their choices into action through trade between willing buyers and sellers against a framework of agreed property rights and other legal or cultural norms.

There are always debates, especially in the aftermath of a global economic crisis, about whether markets are ideal or fair. Over the long run, however, the historical evidence largely suggests that market-based resource allocation has been better at raising relative well-being than the alternatives for many people.

This is because markets tend to reward effort and innovation and spread those benefits most widely through the action of Adam Smith’s famous “invisible hand”. The decisions of individuals, firms and other groups to act in their own self-interest, within a regulated framework of fair business practice and law, can accumulate to be socially beneficial in aggregate.

Intervention Principles

That is not to say that people’s choices through markets are perfect. They tend to be better than the alternatives because they require willing and open trade based on mutual interest, clear property rights and the rule of law. They imply the creation of benefit to both sides of any exchange or trade (whether bartered or monetised buyers and sellers) that is entered into freely.

We know, however, that sometimes they “fail” because of inequalities of power or information, inadequate price signals, or because they do not take into account all the relevant costs or benefit. In the jargon, these “externalities” (effects which are external to or outside the market but reflect real value or cost) can mean that we get suboptimal results from market trade and/or that we miss opportunities which could be more beneficial than current practice. In short, economic “progress” is not always as optimal or as “net positive” as it could be.

Examples of market failure that development policies and interventions might wish to address are when:

- The private demand and supply relationships in a market never coincide and the resulting “gap” between potential buyers and sellers can only be closed by public action, to the aggregate benefit of all parties, including tax payers; and
- The private sector is not capturing the ‘public goods’ potentially available to society from risk taking or investment, perhaps because of different understandings about what is a reasonable time frame in which to generate those returns.

Awareness of the “externalities” of **market failure and missed opportunity** can lead to calls for direct intervention to correct such market defects. For example, there may be an inability to capture the public social benefits of SW firms or workers actions, or potential. This may occur because of inadequate access to market information on, for example, procurement, skills gaps or finance availability. Such access issues may stimulate calls for public actors to act as a catalyst that brings putative partners together.

Also, asymmetric ownership and control of assets and information, and other persistent forms of disequilibrium which might relate to spatial distance and monetary or policy distortions to trade, can mean that market solutions are suboptimal or never quite reached in practice. Regeneration activities can fall into this category, as they seek to overcome developers’ different risk profiles, to address asymmetric information held on a project, to coordinate investment outcomes effectively and to internalise externalities for all affected businesses or residents. For example, public spaces can fall into disrepair and affect, indirectly and detrimentally, local business performance. But, because no one “owns” these public realm facilities, it may be in no individual actor’s interests to undertake the necessary regeneration. A public body may be able to fill this market failure, providing net advantages to both private and public entities and the wider community. The Agency did this in several places in the region, such as Weston Civic Pride in Somerset and Gloucester Docks.

Similarly, having a well-skilled workforce is of benefit to specific firms but also a ‘public good’ for the community at large. But, private investment, worried about ‘free rider’ and ‘poaching issues’ (i.e. others benefiting from access to a better trained labour pool thanks to one business’s action without contributing to costs of that training), will not pay for the ‘public good’ that their investment in training might yield for the wider local labour market. Mostly, it falls to the public sector to make such interventions because commercially motivated private actors are not prepared to take on the social costs or to capture the social benefits by funding the necessary institutions or networks. To give just one example, we faced this issue in the SW marine industries, which led to the Agency’s investment in Marine Skills Training Centres in Poole, Plymouth and Falmouth.

The public sector can influence the market through several avenues:

- The fiscal system (tax incentives to correct market failure)
- Regulation (the rules and the referees for the market “game”) and
- Economic development (direct attempts to stimulate market trends or structural changes that fill gaps that might not otherwise occur optimally).

Externalities, then, are an issue because the full social costs and benefits of an activity are not reflected in market prices. This may lead to suboptimal resource allocation in production and/or consumption. Regulation, taxation and/or direct intervention may be used to ensure that non-market costs or benefits are assessed and a better resource allocation is achieved.

Thus, fundamentally, policies for economic development are about making the market work better rather than replacing the market. They are about ‘crowding in’ good behaviour and value-enhancing change - a term that describes the effects of interventions that encourage positive private investment and activity - rather than ‘crowding out’ what the market might otherwise provide perfectly adequately without any intervention.

The Agency's efforts to get the Bristol Science Park off the drawing board, to develop the National Composites Centre in Bristol, to position and promote the 'Wave Hub' facility for tidal power technologies in Cornwall and to build the National Sailing Academy in Weymouth-Portland, which helped to secure the 2012 Olympic sailing events for the town, are cases in point.

Development action is also about balance. Markets distort most often and most severely when they move to extremes: when "bubbles" of excess exchange and spurious value are created and then burst; when aspects of perceived equity are disrupted; and when the self-interest of the few is too far removed from the common interest of the many.

Regional Principles

Against this background, we can begin to see why regional economic development might be pursued by policy makers: when the failures and opportunities for positive advances in certain parts of an economic space are suboptimal, leading to market and social distortions.

First, though, a word of caution - in this Chapter, the word "regional" does not mean any particular definition of specific borders. Indeed, the concept of borders is largely alien to market economics or the real economy where functionality varies from market to market and from place to place. For example, labour and retail flows can be very different from each other around and within a particular town and its surrounding rural area, such as the city of Exeter where the catchment area for consumers and workers extends across a much wider area of Devon and Somerset.

Regional is merely a recognition that, in most economies, there are levels of geography at which it is economically efficient and effective to operate and that these spatial dynamics may not align with other constructs, such as the nation state. Some of these may be quite local whilst others will cover parts of several administrative areas. It is economic functionality that should determine the scope of development interventions based on place.

The first principle of regional economic development, then, is that an intervention needs to be tailored to a spatial context where the current failure or future opportunity can be addressed optimally.

At one level, all development is local – it occurs in a place or series of places. At another, it is national or even international – its market effects are large and widespread, indeed globally integrated. For many types of development activity, however, both intervention and effect is regional with a small "r", producing its best results when it engages over a geographical space or grouping of economic communities between these two extremes. For example, several interventions to improve rural access, business competitiveness or workforce skills are applicable to many areas across SW England where common deficiencies have been identified and addressed. Without an understanding of this potential functionality and impact, there is a risk that costly duplication and scale diseconomies will emerge from partial, local interventions.

Agglomeration benefits and positive spill-over effects, for example, tend to operate at large sub-regional or broad City Region levels. Part of the task of economic development is to extend these positive impacts by promoting better market linkages between such 'regions' and their hinterlands. It is through the improvement of access, dissemination and adoption of information about 'best practice' and the fertile linking of economic actors at all levels, within and across sectors or places, that economic development can build sustainable competitiveness for businesses and workers alike. At the same time, such interventions can help to offset negative factors, such as congestion and pollution.

The second principle is about time, money and scale. 'Regional' economic development really has to be engaged, over the long term, at a scale large enough to produce positive lasting change. Short term palliatives are not compatible with sustained economic development. Many of the evaluations that the Agency has undertaken of its investments show that the expectation of rapid returns within a year or two of the expenditure is totally inappropriate.

By their nature, many of our activities, such as most of our activities to build infrastructure or to support innovation, will yield their returns over 5-10 years rather than over the short term.

Many of the relatively successful economies in terms of international competitiveness, over the last sixty years or more, have been those where regional or federal development has been pursued consistently, regardless of changes in ruling parties, between industry, banks, state agencies and other interested groups or individuals. This has been the case, for example, in Germany, Finland and several Asian “tigers”.

The third principle is that ‘regional’ economic development should recognise, and alter beneficially, the appetites and aspirations of its target household and business population. It is about stimulating positive changes in attitude (an intangible aspect of human capital) as well as building infrastructure or providing other forms of physical capital and systems. Many of our actions in Cornwall, for example our investments in the Eden Project and Newquay airport, have helped to change business outlook, making the county more attractive and, dare we say, fashionable for business. In this sense, development intervention acts as a catalyst for broader inward and local investment.

The appropriate ‘development’ geography, then, can vary widely according to the nature of the intervention justified by market failure and/or opportunity. Economies of scale and scope will lead to optimality that includes and crosses the range of human boundaries. Whilst skills gaps may exist in many local areas, investment may best be delivered sub-regionally. Whilst many local businesses may need to be engaged in innovation, how many science innovation parks can a sub-region successfully develop? Access to market may be a general economic deficiency for rural areas but the efficient solution may be addressed through a cross-regional scheme.

Intervention Rationales

On the basis of an understanding of market failure and opportunity, and how these play out differently across different real areas, from City Regions to peripheral rural communities, we can identify four alternative rationales for intervention through ‘regional’ economic development.

Policy makers often dispute which of these is most appropriate at any particular time or place. An interesting experiment is now underway in the United Kingdom with a relatively “laissez faire” approach to development in the English regions outside London but continued direct intervention in London and the devolved administrations of Scotland, Wales and Northern Ireland.

The different approaches are:

- ‘Regional’ economic development should be about the “best”: investing in parts of the economy which already have competitive strengths and where the biggest “bang for buck” can be achieved within a reasonably short time. In summary, **play to your existing strengths**. In the context of SW England, this could mean a concentration on the Bristol City Region and the corridor to Swindon.
- Invest where change is most feasible, where current weaknesses can be identified and changed relatively easily: areas or sectors for which there are known recipes for successful intervention already at hand. In other words, **play to your unrealised potential**. In the South West, this could focus on boosting the export performance of SW food and drink and/or tourism.
- Address areas of most entrenched bad performance: the “worst” parts of the economy where social deprivation, as well as economic malaise, is in evidence - **play to your areas of most weakness**. This might suggest emphasis on the least well-performing areas of our urban centres, such as Boscombe in Bournemouth-Poole or Stonehouse in Plymouth, or in some of our rural areas, such as parts of north and west Devon and west Somerset.

- Pursue the re-balancing of an economy away from traditional activities to new sources of growth and development: towards different growth. **Play to your aspirations to be in a different economic league.** Here, we may identify 'new' technologies or services, mostly within existing sectors, with local growth potential, perhaps, for example, in 'green' technologies for energy, transport equipment and business services.

It is rare that any one of these approaches is pursued to the exclusion of all the others, especially where non-economic development objectives are influenced by other policy considerations. Each of these four ways to 'play' development face different timescales and, mostly, ones that are longer than normal in the political process. This can impose regrettable and less than efficient bias towards quick fixes and headline-grabbing initiatives, which should be resisted. There is no substitute for a sophisticated and nuanced understanding of an area's industrial economy based on thorough analysis, experience and judgement about what is needed and what can be achieved against whatever policy criteria are laid down by the political masters.

Nevertheless, when considering what might be the right combination of approaches to the real world situation, the role of economics is to ask/ensure that the four "plays" above are considered with regard to the comparative net additional impact related to cost: in terms of the value-added and opportunity cost of specific investments over the long run.

Growth and Productivity

Consideration of these development principles now brings us to the crux of the matter: the economic concepts of growth and productivity. Economic growth is the process by which we raise living standards and economic well-being over time for a growing and aspirant population. Improvements in productivity are the source of attaining those ends through sustainable economic growth.

Growth

Economic growth is the movement in the **flow of value added between two periods of time**. Mostly, this is measured as the rate of change in real gross domestic product between two years or quarters.

Recently, there has been some debate as to whether economic growth is "good for you" and whether, for environmental or other negative externality reasons, we could move to a more sustainable or even "no growth" strategy for development. For the economist and development professional, there are two aspects of this debate that matter most.

First, there is **the measurement problem** for sustainable growth. Can we 'internalise all the 'externalities' such that growth, as accounted for, is a more accurate indication of the true net benefit flows of human activity? For example, if we have a regeneration investment that brings economic benefit but causes congestion elsewhere, affecting a diverse group of constituents, how do we calculate those congestion costs and make sure they are subtracted from the investment returns when measuring net benefit.

In theory we can, but it has not proved easy in practice to get agreement because externalities are, by definition, difficult to measure, especially in monetary terms. Sometimes, less than satisfactory proxies or "shadow" prices have to be used and these can be hard to incorporate into national accounting methodologies. Economists have devised a range of useful methods to do this but they all require careful understanding and implementation in practice.

At the moment, as depicted by the usual measures of real gross domestic product or gross value added per annum, economic growth is normally measured in three related ways:

- **Output** – the aggregation of the value added by all net output in a given period, including industries producing materials (agriculture etc), energy/utilities, production goods (manufacturing and construction) and services, in response to spending decisions.
- **Incomes** – the creation of output generates an equivalent amount of income, as represented by wages and salaries, profits and other forms of “unearned” payments.
- **Expenditure** – in turn, these incomes are spent on consumption, investment, net exports and inventories by households, businesses or government.

In the real world, these flows are rendered quite complicated by, amongst other things, financial intermediation between lenders and borrowers. Essentially, however, output = income = expenditure in aggregate terms over time. In other words, output produced by business creates incomes which are then spent by households, creating more demand for output which is produced and so the economic circle turns.

Second, there is the question of the **socio-economic problems** that a ‘no growth’ economy would create. In a world without real growth (after inflation has been factored out of monetary values) – the economy becomes a zero sum game: one person (community, business or state) can only improve their lot at the expense of someone else. This would return us to a world of “mercantilism” where economic development would be a divisive battle for market share.

Social groups can work together to foster quality of life that might mean some members are happy to lose in relative terms but, as recent events of unequal impact from the ‘credit crunch’ show, this is difficult to maintain over time or larger communities without considerable tension.

There are three other human reasons why growth remains desirable:

- **Human populations grow.** As long as this is true, ‘no growth’ implies falling living standards through time. We must grow to stand still in terms of providing jobs, goods and services, especially if the increasing population is also ageing, with fewer ‘active workers’ to create a steady state of wealth. Work patterns and efficiencies change but, whatever its ingredients, the “cake” still has to be made big enough to satisfy the increase in the number of consumers.
- **Human beings have aspiration.** Most people expect to improve their standard of living – both over their own lifetime and in terms of their aspirations for children and grandchildren. In the ‘zero sum’ world of ‘no growth’, many aspirations would be frustrated. This could lead to difficult issues of equity and civil strife. The detail of human aspirations change over time but this tends to build on and reflect past growth rather than overturn the need for it.
- **Human beings are inventive.** They find new things to do and new ways of doing things. Over time, we produce the same amount of goods and services with less labour and materials. This releases labour and materials for other activities. Without growth, this surplus labour will be, at best, under-utilised. In a utopia, this may be welcomed as more leisure but that too implies growth. In a dystopia, it might imply a loss of social cohesion between the fewer people who have work and the growing number who would not. Many studies show that “happiness” is strongly influenced by our relative position in society rather than our absolute income or wealth.

Unfortunately, without a significant change to human psychology, ‘no growth’ could well lead to potentially negative effects for communities as a whole, as well as those losers directly affected. This is not to deny arguments about the problems that can emerge about inequity in the distribution of the fruits of growth. To the development specialist, however, that is a different order of problem. Also, we acknowledge that the nature of growth will change as we adjust to, for example, increased resource scarcity and new credit and climate regulation. But, this is a normal aspect of the process of economic change and creative destruction. Saying growth will be different fifty years from now, as it was fifty years ago, is a tautology that does not negate the underlying human drivers of growth.

Given a continuing need for economic growth, then, we should consider what drives it. Economic growth is driven by changes in productivity and employment: the former is a result of innovation and aspiration - the latter, population change and education. In turn, by positive feedback, growth brings more employment and productivity.

Productivity and employment growth are, themselves, driven by the resources available for use: the natural, human and physical capital deployed and, over time, the technological and process changes that affect the effective and efficient use of that capital.

This starts to tell us where economic development should be focused: on investment in the aspects of capital accumulation and use (including human capital) that lead to higher productivity and, thereby, employment growth over time.

Importantly, this does not negate the growth related issues of, for example, income distribution, environmental degradation, and broader well-being: that is simply not the point of this document. Here, we start from an appreciation that economic development, per se, means growth (in a dynamic, ever-changing sense without prejudging what might make up its components). Growth is not the end in itself but it is an essential part of the process towards wider goals of development.

Productivity

Productivity is a ratio of outputs to inputs. It measures what you get out of an economic activity from what you put in. There is really no point in doing any activity for which this ratio is negative.

It is desirable to maximise the value added by productivity in any particular period and to see it grow over time. In practice, we need to recognise the inter-temporal elements in decision making about many investments. In other words, the benefits and costs from activity revealed in different time periods can not be taken at face value but need to be discounted to reflect time preference. To explain, a negative ratio of outputs to inputs in period one may be offset by greater positive ratios in periods two and three. If a decision is made just on the returns in period one, it could reject some very positive investments. Suitably discounted, the later returns may make it a better option than an alternative investment that only returns positives in period one. Immediate gratification is not always the best outcome. For example, state subsidies for renewable energy may destroy value in the short term but fill a gap in incentives which bring great investment and other social returns over a longer run, offsetting the high short term costs of disruption .

It is productivity growth that creates the surpluses that lead to the growth of incomes and employment over time. This is not a simple interaction in practice because of the timing elements in resource reallocation. Nonetheless, whilst, in the short term, measures to increase productivity may mean less employment in particular businesses or sectors, in the long run, it is the release and redeployment of these resources that allows a better resource allocation and the creation of more wealth and employment despite being disruptive in the near term.

Because it is easier to collect and compare, and it reflects the value created by human activity, productivity is most often measured in relation to labour used, such as full-time equivalent jobs or hours worked. This **labour productivity**, however, assumes a given physical capital stock and is only one aspect of underlying economic performance. In the real world, capital and labour change together as development evolves and productivity measures need to incorporate this wider denominator.

Total factor productivity (TFP) takes into account the other factors of organisation, culture and law that influence production efficiency. This residual, after physical capital, labour and energy have been considered, can be an important aspect of productive development capacity.

Also, especially with interest in environmental issues growing, there is increased focus on **resource productivity** – productivity in relation to minimising non-renewable natural resource inputs.

All these measures reflect the effectiveness and efficiency of resource use to create value or wealth.

- TFP is concerned with the totality of inputs, building on capital formation, capital intensity and capital deepening, considering wealth creation against the use of all factors of production and institutions.
- Labour productivity is more concerned with the value creation available from employment and effort, using existing physical capital, which, in theory, is available for social distribution as incomes.
- Resource productivity is mostly concerned with the renewability and non-wasteful use of natural resources in the production process, increasingly in relation to minimising carbon emissions.

Permanent improvements in productivity are the “holy grail” of the development process because they underpin sustainable economic growth through time. We next need to understand what drives such productivity growth.

Since we have been concerned with the total resource capital available for allocation, it will be no surprise that the main factor driving productivity is investment in that useful capital stock and its continuing accumulation, dissemination and use:

- Investment in **physical capital** - infrastructure, plant, machinery and virtual systems
- Formal and informal investment in **human capital** – physical and mental skills and other forms of educational enhancement and training – a key competitive asset in an innovative and globalised economy
- Processes of innovation through research and development and organisational change, building productivity through **technological advance and knowledge acquisition, absorption and diffusion** which tends to happen most sharply at the business extremes of start up or multinational culture
- Enhancement of **environmental capital**, in the form of resource stocks and flows and waste capacity management and
- **Social or cultural capital**, in the form of attitudes to risk and uncertainty, collaboration and competition, opportunity and access, the law and regulation.

All these forms of “capital investment” boost the productive potential of human and other resources.

In turn, capital has to be put together with ideas and aspiration in a way that generates markets, growth and development by the continuous identification and exploitation of new opportunities. In this respect, ‘new’ **entrepreneurship** is a key component of a robust modern economy. Next, the combination of investment and entrepreneurship leads to competitiveness in the market place which, in a globalised economy crucially means the **competitiveness** to compete across many markets and sectors.

A number of factors can inhibit or promote the process of comparative regional capital investment in ways that will boost or restrict productivity and generate or dampen growth. The factors that are important in enhancing or inhibiting functional geographies include:

- **Peripherality and access to markets** - relative costs and aspirations, business networks and ICT and transport infrastructure are important elements here;
- **Population structure and flows** through demographic change and distributions influence attitudes to openness, choice and risk;
- The **propensity to engage with direct investment and foreign trade** is an important engine of productivity growth – both in the corporate act of becoming ready to compete internationally and in the feedback stimulus provided by more

intense competition once a business is internationally engaged;

- The incentives bound up in **the fiscal & regulatory framework** can build or destroy the willingness to engage in competitive exchange by defending or removing intellectual property rights and product or service standards;
- The development of urban hubs, local labour markets and **processes of agglomeration** by place or sector and the consequent spill over to neighbouring areas can be important ingredients of productivity growth, suitably 'netted' for any diseconomies of congestion etc;
- **Access to capital funding** is also vital: financial intermediation, providing advice and access to alternative financing options, is key to getting funds from those who are not necessarily using them as productively as they could and, thereby, are not earning an optimal return, to those who will use them and generate new value.

Deficiencies in these additional factors may be important elements of a lack of "regional" economic development because of their indirect effects on productivity and growth through the more direct levers identified earlier.

Conclusion

Economic development should be related to the most relevant time and space in which optimal resource allocation can be promoted by correcting market failures and capturing market opportunities. This means that the appropriate geography will vary by market, from national to local, and is rarely going to match administrative boundaries.

The optimisation of both employment and productivity growth is the aim, operating through a range of capital investments in the instruments and contextual factors and processes that support business competitiveness and aspiration. These are likely to be centred on innovation in technology process, and skills backed by a supportive physical and cultural infrastructure that fosters entrepreneurship.

Keeping these principles in mind is the vital framework for regional economic development and should underpin policy, strategy and delivery in respect to spatial and sector effectiveness and efficiency.

These principles underpin all the analysis in the rest of this document.

Chapter Two

SW Economic Performance

This Chapter looks at the key aspects of our knowledge about the performance of the SW economy in absolute and relative terms.

It does not try to cover every aspect of the region's economy. Nevertheless, it draws on and refers to a plethora of research and analysis undertaken for and by the Economics Team over the last eight years.

The Chapter aims to provide a fairly consistent and objective picture that will give analysts a springboard from which to approach the context of the work in SW economic development at any particular geography. To this end, it covers the main areas of descriptive economic analysis for development, namely, in sequence, Output, Trade, Employment, Incomes, Sectors, Businesses, Spaces and a few main Other Factors.

This sequence derives from the approach to theory adopted in the Chapter One. In other words, we focus on aspects of the economy that are most directly linked to the desired outcome: economic development. Hence, we emphasise those factors that contribute to, and help to measure, economic growth through productivity and employment within the context of business and place.

Under each topic, key data for the region is presented and discussed along with a summary of intra-regional differences and the impact of the 2008-09 recession.

Each topic concludes with some points about the limitations of the evidence: what we know that we don't know. It is a recurrent theme that whilst the regional data is close to the United Kingdom average, there may be more interesting sub-regional stories. For many key economic factors, however, there is no sub-regional data and, where it is available, it is often based on sample sizes too small to produce statistically significant results. This, and the need to keep this Chapter to a reasonable length, means that the sub-regional commentary is limited to the known highlights.

Economic statistics are the raw material which provides the under-pinning for the advice and support that economists can give to policy-makers. In many areas, there is a shortfall in the information available and it is important to openly acknowledge this and the uncertainty it creates. The limits to knowledge sections in this Chapter should be seen in this light and should not be interpreted necessarily either as a criticism of the statistical authorities or a call for greater investment in data collection. It is, however, a signal that the role of expert, analytical judgement in interpreting data and events remains crucial.

Output

In the definitions section of this report, we talked about the importance of output, income and expenditure as the key indicators of annual economic performance over time. At a regional/sub-regional level, this is measured by Gross Value Added (GVA) and GVA per head¹.

Output in South West England has grown broadly in line with that of the United Kingdom over the last twenty years: relative economic performance in the region has neither been notably over or under achieving. This performance distinguishes the region from most other parts of the United Kingdom, which have experienced more marked changes in fortune: good and bad.

What we know about output in the South West²³

- The value of output in the South West has more than doubled in size in the last twenty-five years in real terms. This is some indication that the region's economy has been able to attract and use the people and other resources it has needed to grow successfully.
- Population growth has played a significant part in this overall trend but the great majority of growth has come from other factors.
- The value of SW output per head of population has nearly doubled in the last twenty-five years in real terms.
- Over time, the quantity of SW work per head of population has not changed: the increase in output per head has come from entirely the increased productivity of the hours worked.
- The SW share of UK output is smaller than its share of population and the gap has widened in recent years. But, this is almost entirely attributable to distorting effect that London has on the UK aggregate output.
- The USA apart, the SW output per head is broadly in line with that of other developed economies, especially in the EU.

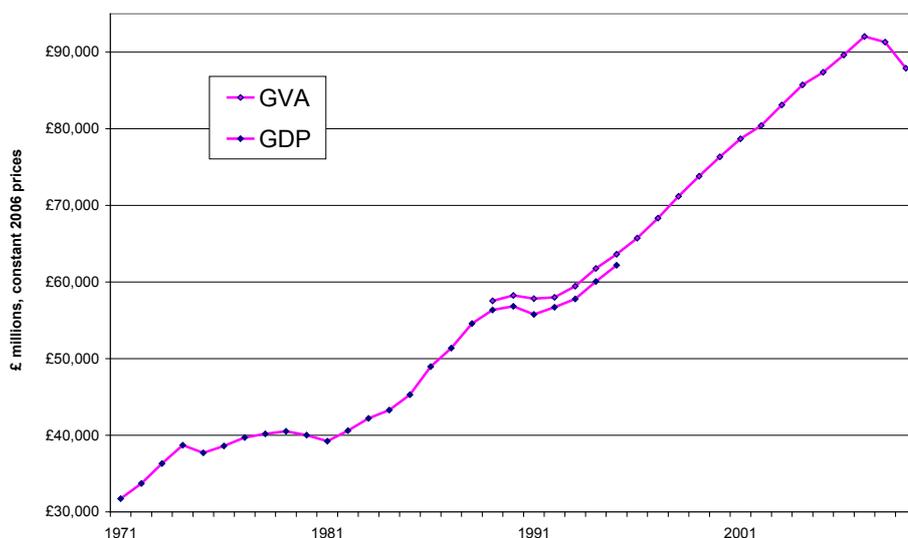


Figure 2.1 Total SW annual output in real terms, 1971–2009

1. BIS, 2010

2. For a fuller presentation and discussion of the long-run output data for the region see South West RDA / SWO Economy Module, 2010

3. The South West Regional Accounts is and Input-Output model which can be used to explore output and productivity in more detail.

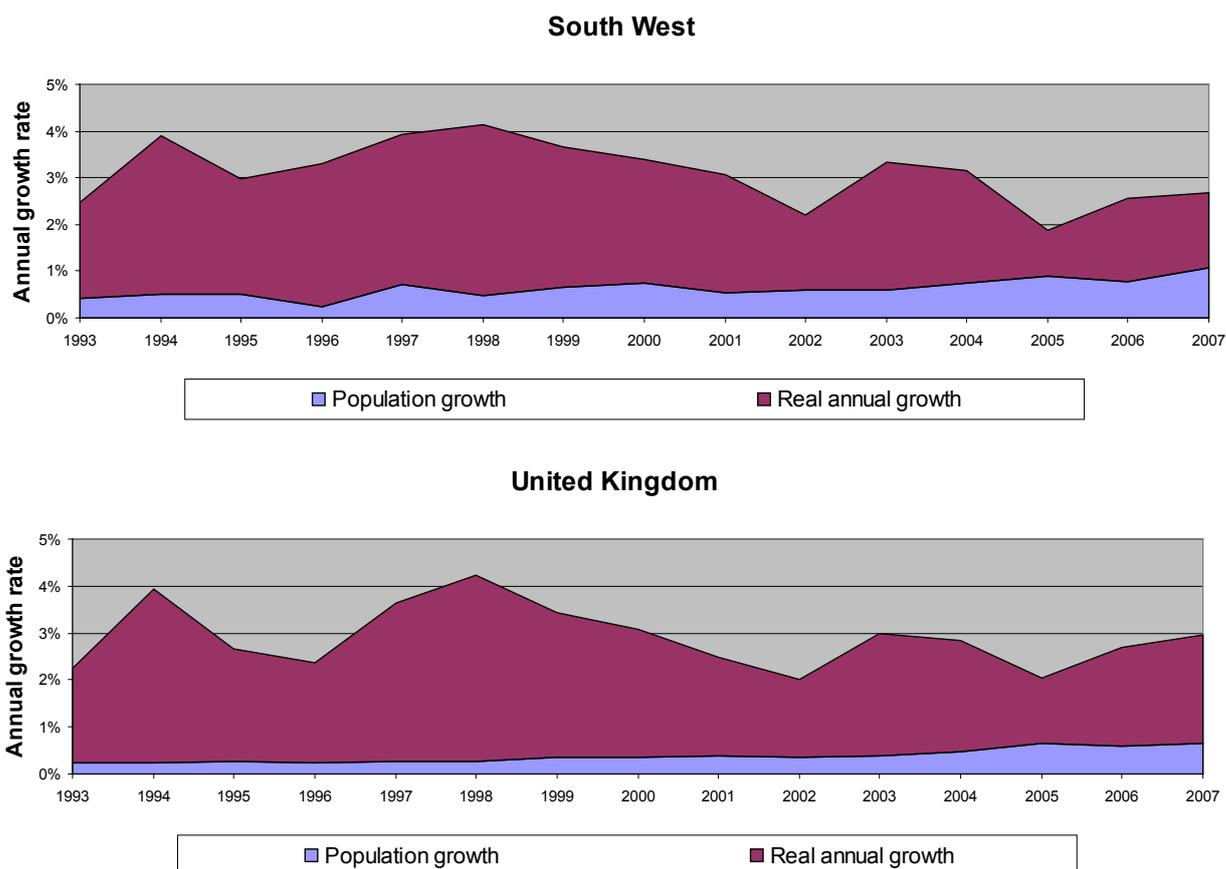


Figure 2.2 SW & UK annual population & real growth rates, 1993–2007

The SW economy experienced a prolonged period of growth between 1981 and 2007, pausing only slightly during the mild recession of the early 1990s, (Figure 2.1). The real annual economic growth rate between 1990 and 2007 in the region was 2.64%, compared to 2.47% for the United Kingdom as a whole⁴. Over the same period, the annual population growth rates were 0.60% and 0.37% respectively, enough of a difference to explain part of the region's greater overall economic growth (Figure 2.2).

Over the same time period, real per head output grew at an annual rate of 2.04%: fractionally less than the average rate of 2.10% for the United Kingdom. As a result, the 'gap' in output per head also widened slightly from 8.1% in 1989 to 8.8% in 2007. However, this does not represent a continuous trend: the gap fluctuated closely around the 8% mark, sometimes narrowing sometimes widening, until 2004 when a marked deterioration started. This saw the gap widen for four successive years to a high of 9.1% before a slight recovery in the most recent year.

If London's performance is taken out of the UK figures, the gap between the South West and the rest of the United Kingdom disappears altogether, even during the most recent period. This strongly suggests that the capital's overwhelming, global advantage in financial services, especially in the latter part of the decade, is at the heart of any notional under-performance of the SW region.

Since 1998, the region has ranked fifth of the UK regions and countries, behind London, the South East, the East and Scotland. However, this has not always been the case: throughout the 1970s the South West was ranked last of the English regions and its output per head exceeded only those in Wales and Northern Ireland. This position progressively improved through the 1980s with the region 'overtaking' the North East, the North West, the West Midlands and finally the East Midlands.

4. Compound annual growth rate. The switch from GDP to GVA makes longer run regional growth rates problematic.

The purest measure of labour productivity is 'output per hour worked', as this removes the effects of the employment rate and the balance between full time and part time working. By this measure, the region has advanced from ranking eleventh out of twelve in 1996 to fifth equal in 2009, (see Figure 2.3). While the region has maintained its position relative to the United Kingdom, it is notable that the general trend has been one of divergence, with the 'tail' becoming weaker and London increasing its dominance.



Figure 2.3 Output per hour, indexed by region, 1996 and 2009

Within the region there is a wide, but not unusual, spread of output per head performance⁵, with a broad east to west incline and pockets of notable weakness (Cornwall, Torbay) and strength (City of Bristol, Swindon). This conforms to a national picture of 'concentric' ellipses of economic performance centred on the capital and declining towards the periphery.

Over time, the intra-regional spread of GVA per head has been fairly constant: in 1995, the most productive sub-region had an output per head 41% above the regional average and the least productive was 43% below. In 2008 the range was +36% to -43%. Within this time period, the spread widened until 1999, with Swindon extending its lead and Cornwall falling further behind but these movements were reversed in the following decade, coinciding with direct intervention to support the weaker economic areas, especially Cornwall. The significant net changes are:

- Bournemouth & Poole gained ground by 10 percentage points (pps) and BANES by 8pps to mover closer to the regional average
- Plymouth lost ground by 10pps and Torbay by 16pps, replacing Cornwall as the weakest sub-region.

Because this measure is comparing the economic activity in each area with the size of its resident population, it can be distorted by the effects of commuting between sub-regions. This tends to flatter the strong performing urban areas and penalise most of the weaker, more rural, sub-regions, although this effect is relatively small.

The 2008/9 recession brought to an end sixteen years of continuous economic growth. Output in the region fell by 0.8% in real terms in 2008 and by 3.7% in 2009 compared with falls of 0.1% and 4.7% for the United Kingdom as a whole. The national economy contracted for six consecutive quarters starting in the second quarter of 2008 meaning that the annual output data for each year is inclusive of one quarter of growth.

The monthly Purchasing Managers' data⁶ indicates that business activity in the region contracted less in the region than in the United Kingdom throughout the recession but, then, it recovered less strongly going in to the first half of 2010.

5. ONS, 2010a

6. markit, 2011

Output per head in the region was 5.5% lower in real terms in 2009 than it had been in 2007, hence taking this measure back to the level seen in 2003. The impact on productivity, as measured by output per hour, would have been much more pronounced, reflecting the relatively muted effect the recession had on labour input.

Locally, the pattern was of relative strength in Cornwall, Bristol and Bournemouth & Poole in overall output growth in 2008, with weaker growth in the 'softer centre' comprising Dorset, Somerset and Devon (particularly Plymouth and Torbay)⁷. Sub-regional data for 2009 will not be released until December 2011.

It is widely recognised that conventional measures of economic performance give only a partial picture, taking no account of environmental externalities or changes to well-being. The **Regional Index of Sustainable Economic Well-being (RISEW)** offers a more rounded picture of economic performance which takes into account some of the costs associated with economic activity that are borne by society and the environment. It also places a value on the unpaid output arising from activity in the home and from volunteering. These non-monetary costs and benefits tend to reduce the value of raw output for all the English regions together by over 40% and produce a significantly different geography of relative economic performance. South West England is not associated with the high energy consumption typical of the Home Counties, the social problems of London, or the environmental damage of traditional "heavy" industry regions of the north. It also has the highest per capita level of unpaid output. As such, its relative economic performance, ranked by this measure, has been either 1st or 2nd of the English regions since 1994 and its adjusted per capita output has been well above the English average⁸.

The limits of our knowledge of output

It is important to consider the limitations to what we think we know about SW output:

- Gross regional data is released one year in arrears, while the industrial breakdown and sub-regional data is a further year behind. This means that the current state of the regional economy can only be gauged by following proxy measures, such as the Purchasing Managers' Indices (PMIs) and employment / unemployment data, alongside more anecdotal evidence. The PMIs are not available below regional level and the confidence intervals for local employment data are so wide that most short-term variations cannot be considered to be statistically significant. The only thing known with any degree of certainty about current state of local economies is the number of benefit claimants.
- The order of magnitude of recent technical revisions to GVA per head and the uncertainties around regional price behaviour are at least as great as the recent variations in the region's notional 'productivity gap'. It is not, therefore, possible to say with confidence when the region's relative productivity has actually been improving or worsening without consistent monitoring on the ground.
- The different productivity measures have a range of complex caveats and nuances, e.g. distortions due to commuting patterns, part-time working, participation rate. These create a high degree of confusion amongst casual commentators about relative performance, with some showing the region doing much better than others. The cleanest of these measures (and the least unflattering), output per hour worked⁹, is not available below regional level.
- Without the benefit of regional price indices, or deflators, national statistics on regional output can only be produced in nominal terms, that is, with a 'fog' of inflation obscuring the true trends. Real, deflated figures can be estimated¹⁰ but this adds a further source of statistical uncertainty.

7. South West RDA/SWO Economy Module, 2010d

8. nef 2010

9. ONS, 2009

10. BIS does this in its regional indicators dataset.

- Having only annual data means that it is not possible, and never will be possible, to know the exact impact of the recession on regional and sub-regional output, 2008 started with a quarter of growth and 2010 finished with one.

In addition to these reservations about using output data, there are also questions over the meaningfulness of the output measures themselves. On the one hand, they are acknowledged to be only a partial account of the value and cost of economic activity. Unfortunately, however, measures attempting to monetise the externalities will always be subjective to some degree. On the other hand, there are difficulties even in valuing traded activity, notably around the treatment of 'intangible assets'¹¹ and accounting for the 'informal' economy, which raise serious questions about the depth of understanding about trends in productivity and investment.

Finally, the national output data alone gives no indication that Financial Services sustained such huge losses in 2008 precipitating the recession. In fact sector output¹² actually grew in 2008 which inevitably raises further reservations about economic output data and its reflection of economic performance.

The particular data issues relating to the recession aside, the limitations to our knowledge of output have not changed significantly from those identified in the Allsopp Review¹³ published 2004. Therefore there is still no substitute for being able to access analysts with a combination of a deep understanding of the data's strengths and weaknesses and a detailed experience of economic activity in the spatial area to be analysed.

Output - Key Messages and Implications

Measures of output are important but complex, making simple headline numbers potentially misleading and in need of careful interpretation.

The overall size of an economy is driven, in large part, by supply-side factors, especially population growth. Hence, the SW economy has grown strongly in the past in keeping with its strong population growth. The willingness and ability to attract, accommodate and retain inward-migrants will be a key determinant of the economy's overall performance in the future.

Output measures of productivity vary greatly depending on the chosen denominator: total population, working aged population, number employed, workforce jobs or hours worked. It is essential to use the measure appropriate for any specific policy. In most cases, the region's productivity performance has been adequate rather than exceptional.

Whilst relative economic performance can be informative, particularly with regard to competitiveness, crudely targeting convergence is generally not helpful. It is better to focus on progress in absolute terms rather than worry about keeping up with London, especially as intra-regional disparities are often more interesting than regional averages.

Any assessment of whether the rate of growth is strong enough needs to consider the degree to which the economy meets the current employment needs and income aspirations of the current and future population whilst maintaining high levels of investment, enterprise and innovation commensurate with future competitiveness. These productivity 'drivers' remain a policy priority across many parts of SW England.

11. HM Treasury, 2007

12. ONS output series EWAK

13. HM Treasury, 2004

Trade

International trade, the quantity and type of business done with other countries, is one of the few areas where the SW region is markedly different from the UK average. At the same time, the sustained and increasing gap between the value of what the country imports and what it manages to export is recognised as being a symptom of an unsustainable economic imbalance. The region, with its unusually poor export performance, is very much a part of this wider story of a need for change.

Engagement with international trade is strongly associated with positive firm-level characteristics. Enterprises that want to export need to reach a level of productivity, research and development, investment and innovation that makes them internationally competitive. Once enterprises start to export these characteristics become even more pronounced¹⁴: the benefits are self-reinforcing.

From the perspective of its own economic performance, and for the national balance of payments, international trade is an important area of competitive weakness for South West England.

What we know about trade in the South West

- The region has long had the lowest overall propensity to export goods of all of the UK's regions and countries.
- However, relative performance is improving: the value of goods exported grew in real terms at a rate of 3.4% per year between 1998 and 2008, faster than the 2.5% equivalent figure for the whole of the SW economy and faster than the 2.2% per annum growth in the value of UK total goods exports.
- Even so, the region's share of total UK goods exports remained very low at 4.9% compared to its 7.9% share of manufacturing.
- What the region does export is highly concentrated by sector - machinery and transport equipment - and by destination - to the European Union (in both cases up to two-thirds of the total).
- The little information available about service exports suggests that the region is also well behind the UK average, although possibly not quite ranking last.
- The region's goods import share is broadly in line with its goods export share and is equally concentrated in the machinery and transport equipment sector.

14 Harris and Lee as cited in UWE, 2007

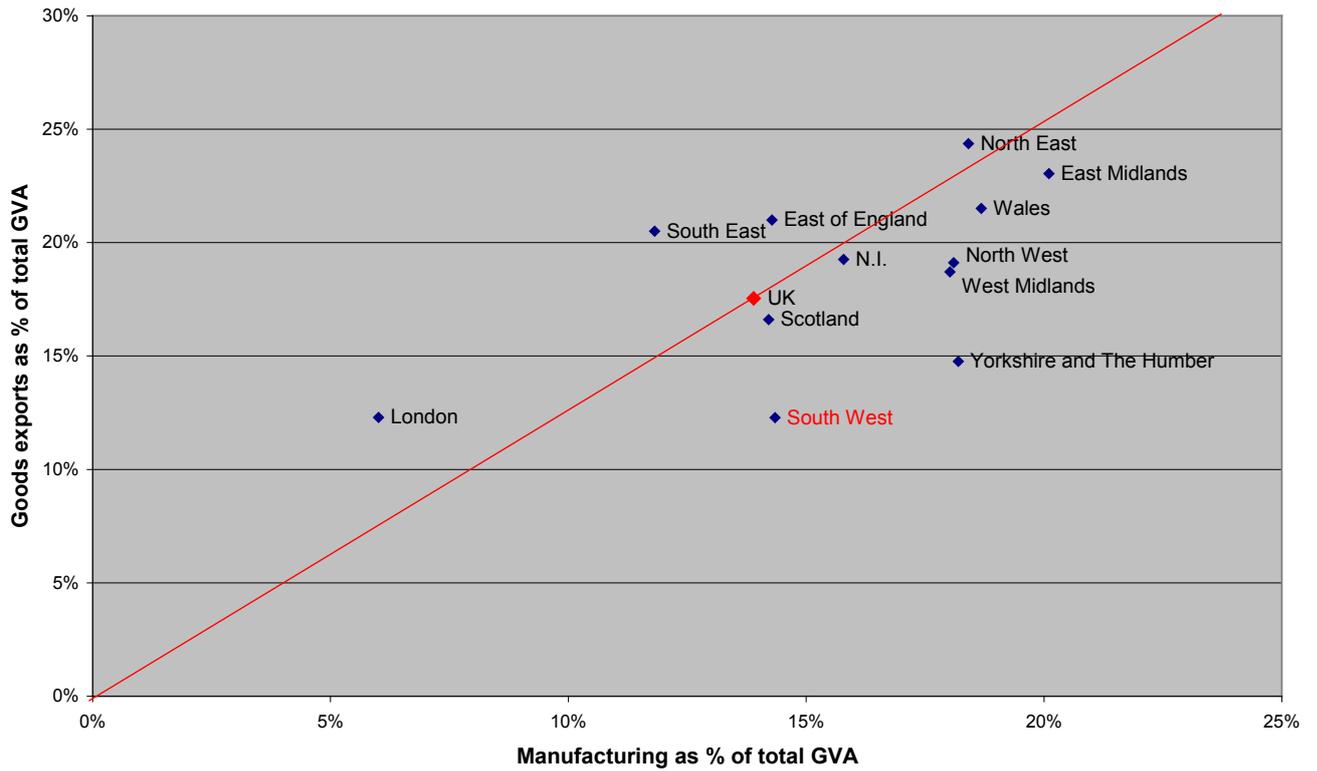


Figure 2.4 Contributions of Manufacturing and Goods Exports to total GVA, UK and regions / countries, average 2002 - 2007¹⁵

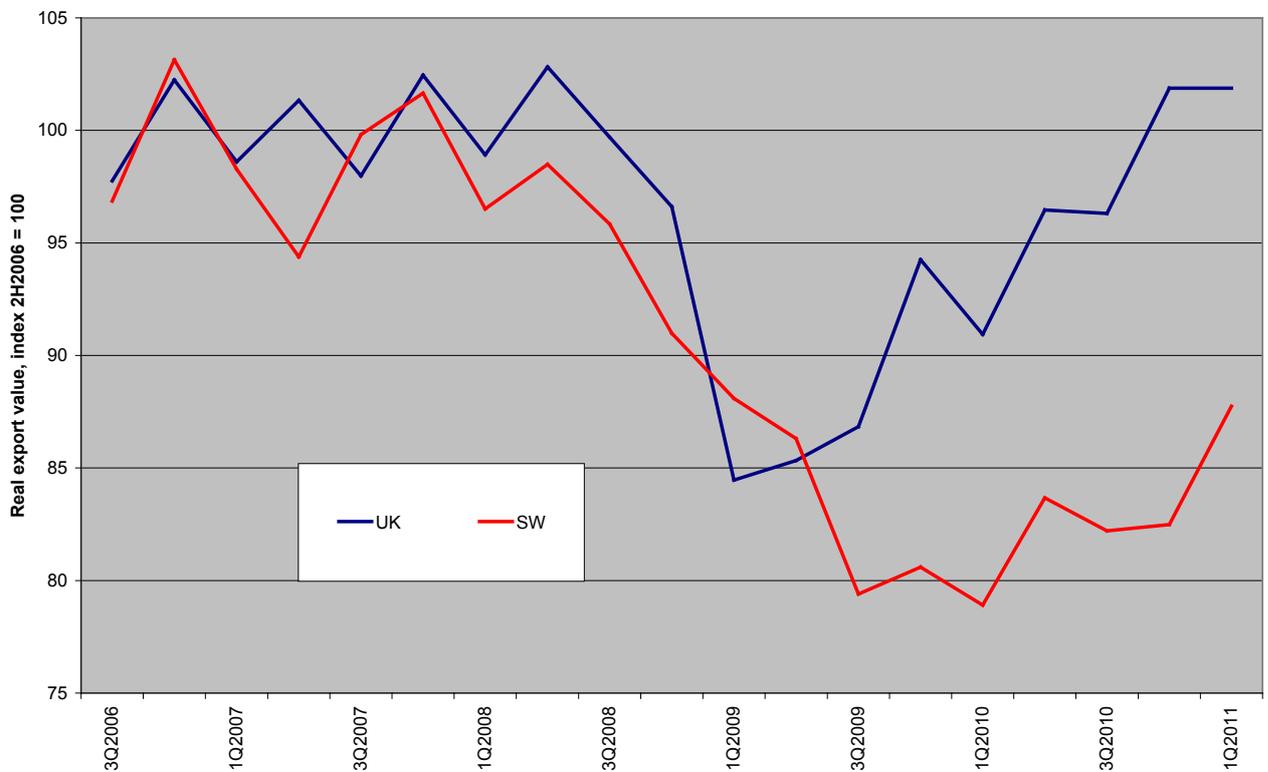


Figure 2.5 Goods exports growth, UK and SW, 1996 - 2010¹⁶

15. The red line shows the UK relationship between the two variables
 16. Export values deflated using ONS price index BQKR.

For some time, the South West region's conspicuously poor performance in goods exports has been a cause for concern¹⁷. Although manufacturing in the region accounts for about the same proportion of total GVA as in the United Kingdom as a whole, its ratios of goods exports are much lower, (Figure 2.4). Goods exports are not weak because of lower levels of manufacturing; they are weak because a low proportion of what is manufactured is being exported.

Neither can the trade performance be explained by the region's manufacturing sector make-up. Research¹⁸ has shown that, if the region's industrial structure were rebalanced to match that of the South East, whilst retaining the sector export propensities of the South West, exports would fall by 22%. If on the other hand, the South East's sector export propensities were achieved, within the South West's current industrial structure, the region's goods exports would more than treble.

Analysis of firm level statistics has shown that the region's export performance can be fully understood in terms of known weakness in a range of factors that predispose firms to export. The region's businesses are, on average, smaller, less R&D intensive and less likely to be foreign-owned. These are all characteristics which lessen the likelihood of engagement in international trade.

Recent growth in exports, see Figure 2.5, shows a recovery from a particularly weak 1997 sustained through to 2006. Over this period, the composition of the region's goods exports was dominated by the machinery and transport equipment sector, accounting for between 60% and 70% of the total. Within this broad sector, exports of electrical machinery dropped off sharply in the late 1990s, coinciding with the winding down of the Nortel operations in Torbay. Since 2000, 'other transport equipment' (largely aerospace) has played an increasingly important role, rising to over half of this broad sector's exports.

Between 2000 and 2008, the number of SW enterprises engaged in exports grew by 37% taking the region's share of UK exporters up to 7.5%, which is much in line with the region's share of total output. This would suggest that the reason for the low propensity to export is not individual enterprises' willingness to export per se but relates to size of the exporting firms and the degree to which they are export facing, that is, how much of their output is exported.

Like the rest of the United Kingdom, the South West exports the larger part of its goods to countries in the European Union; led by Germany. At over 60%, this concentration on the EU has been around four percentage points higher than average. The SW region has significant high exports to Ireland in particular. Exports to India and China, together, account for only around 3% of the total, similar to the ratio for the United Kingdom as a whole. Exports to North America, at 13% to 14% of the total, have tended to be some three percentage points below the UK average.

The services sectors share of total UK exports rose from 25% in the mid-1990s to over 40% in 2007 and the positive trade balance in services has been important in at least partially offsetting the larger trade deficit in goods from 1998 to the present day. Included in service exports are services consumed in the United Kingdom by non-UK residents, in particular those relating to tourism. International visitor survey data for 2001-04¹⁹ suggests that the region accounts for slightly under 6% of spend by international visitors, that is, a little below its share of total output or population. Importantly, however, this is a relatively strong performance compared with most regions, given that London alone accounts for around half of the total.

Within the region firm level knowledge and the geographical concentration in transport equipment activity indicates a strength in goods exports in the north east parts of the region. There are no published export figures below regional level but firm-level data analysis²⁰ confirms that manufacturing firms in the West of England actually have a higher propensity to export than the England & Wales average. The corollary of this is that the rest of the region is even further behind.

17. Deloitte, 2008

18. UWE, 2007, pp 3.11-3.13

19. Op cit pp 3.16-17

20. Op cit p5.4

The 2008/09 recession hit the region's exports more severely than is revealed by the UK average, (see Figure 2.6), reducing the quarterly real value by 20% by the end of 2009. The region has also rebounded more slowly, understandably so given the relatively high exposure to Ireland and lack of market share in North America

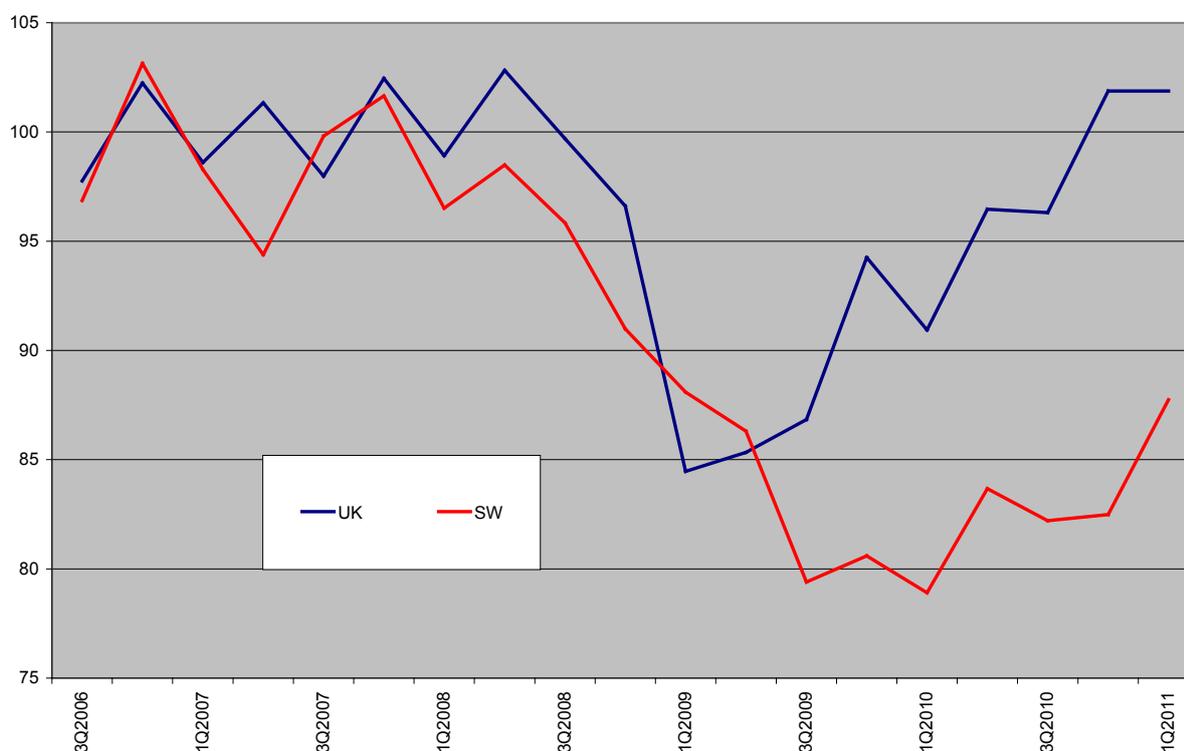


Figure 2.6 Impact of the 2008/9 recession on goods exports

The limits of our knowledge of trade

The focus of nearly all regional analysis of international trade is on goods exports because timely and detailed regional data are published on that area. However, service exports have been much more dynamic, rising from under 30% to over 40% of UK exports in the ten years to 2008. Total service exports have been growing at three times the rate of goods exports and yet we know next to nothing about what is happening at the regional level.

It is not possible to make a meaningful assessment of net trade because the import data is not assigned to English regions in the same way as exports. In particular, no attempt is made to distinguish between the location of the units responsible for importing goods and those actually using or selling them.

The complete absence of data on the imports of services means that no assessment can be made of the impact of off-shoring on the region's economy.

The allocation of exports to regions is thought to be generally good but a significant proportion (14%) of total UK exports is not assigned to regions at all, (mainly oil exported directly from oil fields in the North Sea). This means that regional comparisons with the UK headline totals can overstate the region's relative weakness.

Trade - Key Messages and Implications

Engagement in international trade is both a stimulus to improving competitiveness and a reflection of existing competitiveness. The data strongly suggests that the South West's goods exports are highly concentrated and, in aggregate, very weak compared with nearly all other regions. Better trade performance should be a policy priority for the South West.

Present economic conditions favour a rebalancing of the UK economy towards more exports and the region has an opportunity to address this historical weakness. However, that weakness itself means that the region may struggle to secure a reasonable share of export-led growth.

Employment

The South West has been characterised by a very healthy labour market with high levels of both employment and skills. Its relatively strong position has been maintained over a period of significant change in the type of work available and the skills required to undertake those tasks.

Unlike the great majority of economic measures, where the region's performance is very close to the UK average, in employment, the South West as a whole achieves a significantly better ranking.

What we know about employment in the South West²¹

- The region has had a relatively high participation rate and, of those who are economically active, a relatively high proportion are in work (apart from a relatively few black spots). There is also an unusually high participation rate amongst women.
- Unemployment and claimant rates have been well below the UK averages and amongst the lowest of the UK regions and nations.
- The levels of part-time working and self-employment are amongst the highest in the United Kingdom, as is the proportion of employees with flexible working patterns. Together, these indicate a highly flexible labour market.
- About one-fifth of all employee jobs are in the public sector, a proportion marginally above the GB average.
- The workforce has maintained its position of being the fourth highest qualified of the UK regions, although this only matches the UK average and is significantly below the South East, Scotland and especially London.
- Older workers are more likely to be economically active here than in any other region of the United Kingdom.
- Over time, there has been a significant shift towards higher level managerial and professional occupations and away from secretarial and lower skilled production occupations.
- The 2008/09 recession resulted in a peak to trough fall in employment of 2.9% in the region compared to 2.5% for the United Kingdom as a whole but employment growth in the region has since been markedly stronger (though significantly part-time) such that the region's usual relative labour market advantages have been restored.

21. For a fuller presentation of the evidence on SW employment and skills see: South West RDA / SWO Economy Module, 2010e, South West RDA / SWO Economy Module, 2010c and SWO Skills & Learning Intelligence Module, 2010

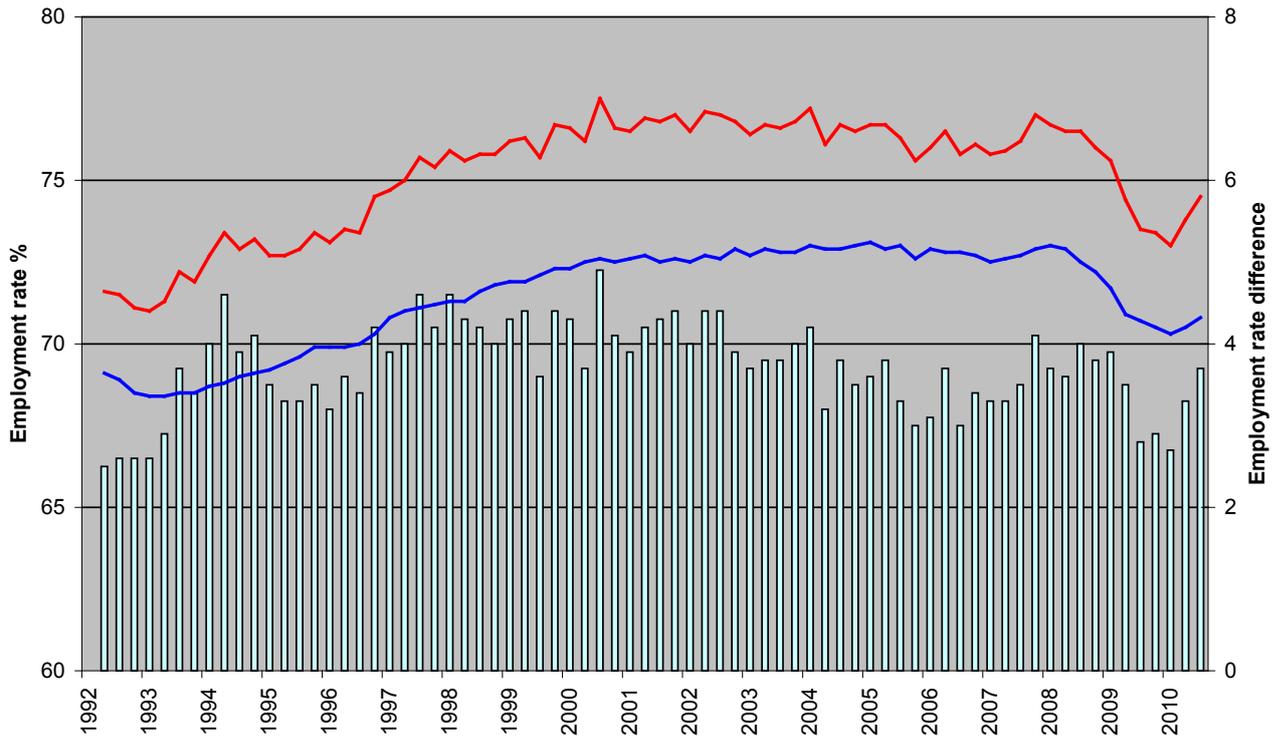


Figure 2.7 SW & UK employment rate 1992 to 2010

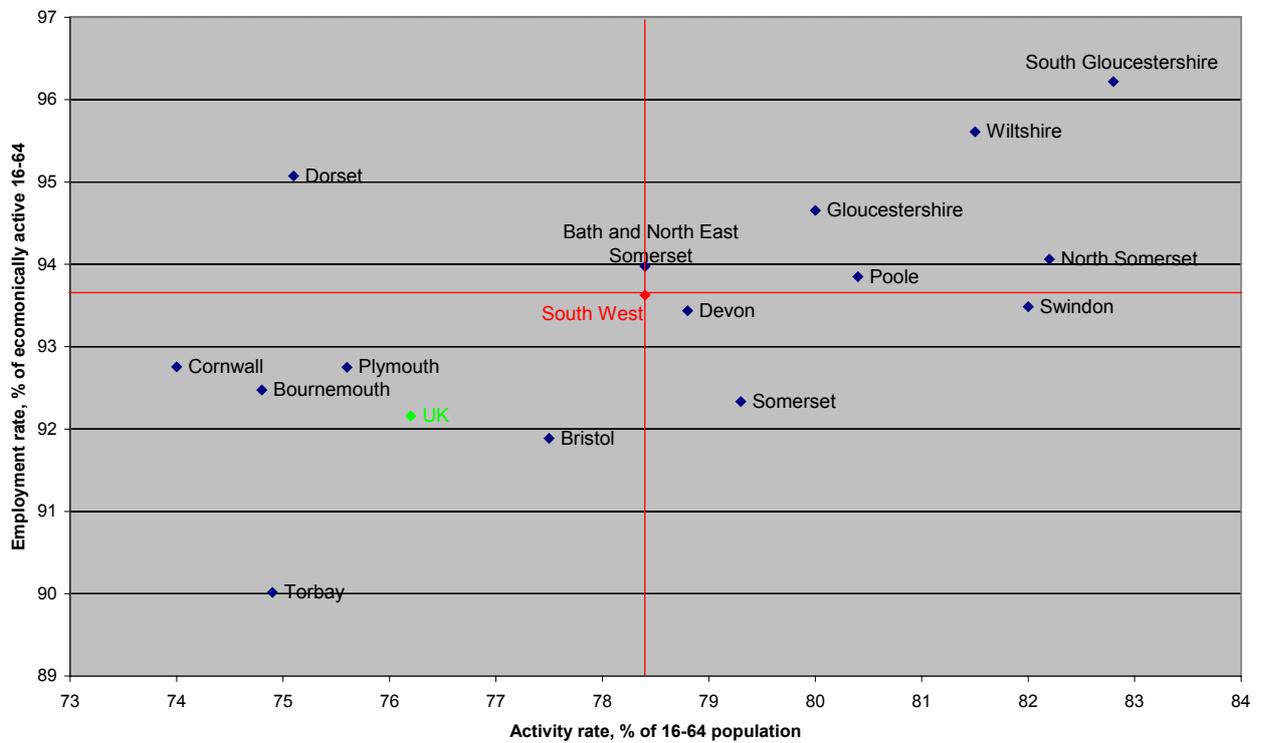


Figure 2.8 Activity and employment, Q2 2010

Within the region, aside from some year on year volatility, the better and worse relative performers have stayed fairly constant. The only significant change in relative performance has been Plymouth, where the activity and employment rates have improved from far below the regional average to just below.

The region has consistently maintained an enviable position of higher than average employment. The employment rate, the percentage of working age people in employment, has on average been 3.7 percentage points higher than that of the UK since regional data started being published in 1992, (see Figure 2.7). This premium extended to well over four percentage points for a period between 1997 and 2002 and was also relatively high in the years immediately before the (2008-09) recession.

The employment rate is determined by two contributory factors: the proportion of the working age population who are economically active (labour supply) and the percentage of those people who are able to secure work (labour demand). This is illustrated in Figure 2.8 which shows that the region's employment rate premium comes from both of these factors - having an activity rate of 78.4% with 93.6% of the economically active being in work compared to 76.2% and 92.2% for the UK (2010 Q2).

A higher proportion of working age people in the region want (or need) to work and the region's economy is able to provide work for a higher percentage of them. The only part of the United Kingdom with a consistently better performance, by this measure, is the South East, while only the East is at a similar level.

As for the United Kingdom as a whole, the employment rate in the region rose steadily from 1993 to 2000 and then maintained this gain for the following eight years. The corollary of this is that unemployment, both as measured by benefit claimants and in the broader ILO terms, fell and remained correspondingly low.

A part, but not all, of the region's higher activity rate can be attributed to the high proportion of women working or actively seeking to work, which is the highest of any part of the kingdom. This is supported by the availability of part-time work, where the region has the highest proportions in the United Kingdom for both men (12.5%) and women (47.8%), and the opportunities for self-employment, where the region is well above the UK average (13.8% vs.12.4%).

In the early 1980s, around one quarter of all employee jobs in the region were in the productive industries; by 2010, the figure was only 12%. In terms of numbers, this shift represents a loss of 150,000 employee jobs across the productive industries at the same time as the total employee jobs in the region rose by 516,000. Change in industrial structure is covered in more detail in a later section but these headline figures give an indication of the degree to which the nature of the employment offered in the region has changed. This has been accompanied by a shift towards managerial and professional occupations and away from operative and elementary work.

The region's occupational structure has changed broadly in line with that of the UK average and the differences in overall structure are very small, a slightly higher proportion of employment in skilled trade occupations balanced by fewer plant and machinery operatives.

As the nature of work has changed, so has the demand for skills. The proportion of the region's working age population with higher level qualifications²² has risen from 22% in 1997 to 30% in 2009, broadly keeping pace with the United Kingdom as a whole. What has changed is that London's lead which has extended from five percentage points to nine with 39% of workers in the capital now qualified at the higher level. It has been estimated²³ that Science, Technology, Engineering and Maths (STEM) skills are important in around 35% of the region's jobs. While the region's school-age students do achieve relatively well in STEM subjects, this is not being carried through into higher education where the growth in the number of STEM subject undergraduates at SW Higher Education institutions has been much slower than the growth for other subjects.

22. NVQ level 4 or higher, equivalent to first degree

23. SWO Skills & Learning Intelligence Module, 2009

The rise in higher level skills in the SW is reflected in the increased share of hours accounted for by higher level occupations, those that are professional or managerial. Between 2001 and 2009 this share rose from 25% to 30% but came at the expense of medium skilled work rather than low skilled. This is exactly matches the UK trend. The proportion of hours of low skilled work has remained absolutely static at 10%: perhaps indicating that the need for postal workers, cleaners and dinner ladies does not diminish even as the work-force becomes ever more qualified²⁴.

Although changes in qualifications and occupation follow similar patterns there is still scope for mismatching, through under- or over-qualification. The fact that the region's relatively well qualified workforce has not led to a commensurate advantage in productivity might be explained by a high incidence of over-qualification. However analysis of employment and skills data indicates that the opposite may be true with the SW recording the third lowest proportion of over-education²⁵ across the British regions.

Public sector employment in the region accounted for 8.6%²⁶ of the UK total in 2009, a proportion which has remained more or less unchanged since 2001 and is exactly in line with the region's share of the UK's total workforce. Between 2001 and 2008, there was an overall increase in the public sector headcount of 33,000 taking the total to 487,000, an increase of 7.3%. Over the same time period, the region's total employment grew by a marginally lower 7.0%. By 2009, a number of banking institutions had been nationalised and the region's public sector head count jumped by 31,000.

Within the region there are two main geographical patterns in employment: firstly, sub-regions in the north-east perform better than those in the south and west and, secondly, urban areas across the region are generally below average. Figure 2.8 illustrates how the activity rates and levels of employment tend to correlate, areas with a higher proportion of working age people working or actively seeking work are also achieving higher 'take-up' of the potential labour available. The exceptions to this are North Somerset and Swindon, where the activity rate is relatively high but employment rate is only average, and Dorset where the activity rate is low but this is balanced by a relatively high employment rate. The likely explanation for these exceptions is differences in age profiles and wealth: for example Dorset has a particularly high proportion of its working aged population over 55 and therefore more likely to be retired.

In 2010, it was Torbay that occupied the low spot in the region's labour market, with both weak activity and employment rates. Over the fifteen years between 1996 and 2010, Torbay has been one of a group of relatively persistently weaker labour market areas within the region, along with Plymouth and Cornwall. Although there is some year-on-year volatility, there has been a discernable improvement in the Plymouth labour market with both the activity rate and the labour usage both recovering from very weak levels at the start of the period.

The impact of the **2008/09 recession** on the labour market was more complex than simply a fall in employment and commensurate rise in unemployment. As the data in Table 2.1 shows, there were a number of sometimes countervailing trends not shown in the headline rate changes:

- Because the active labour force continued to grow, the fall in employment was significantly exceeded by the rise in unemployment.
- The employment lost was concentrated in the full-time employment of the working aged, with part-time employment falling only slightly in the South West and actually rising in the United Kingdom.
- Throughout the recession, the number of employed people aged 65 and over rose, but this was as much a continuation of an established trend rather as a new impetus to delay retirement in response to the recession.

24. ONS, 2011, pp133-140

25. Lenton, P., 2011

26. ONS regional public sector headcount

At the onset of the recession, the region’s working age inactivity²⁷ rate was markedly lower than that of the United Kingdom at around 20% compared to 23%. This appears to have acted as a buffer with the falling working age employment rate translating into an increase in inactivity as well as unemployment. Although the unemployment rate for all age groups has remained significantly below the equivalent national rates, the skewed impact of the recession on the labour market for younger workers was also experienced in the region, see Figure 2.9.

	Active	Employed FT (16-64)	Employed PT (16-64)	Employed 65+	Total employed	Unemployed
South West '000s						
2008 Q3	2,651	1,772	703	72	2,548	103
2009 Q2	2,664	1,706	699	91	2,496	168
Change	+14	-66	-4	+18	-52	+66
%	+0.5%	-3.7%	-0.6%	+25.3%	-2.0%	+63.7%
United Kingdom '000s						
2008 Q3	30,959	21,601	6,999	717	29,318	1,641
2009 Q2	31,164	20,789	7,135	792	28,716	2,449
Change	+206	-812	+136	+75	-602	+808
%	+0.7%	-3.8%	+1.9%	+10.4%	-2.1%	+49.2%

Table 2.1 Peak to trough impact of the recession on the SW & UK labour markets

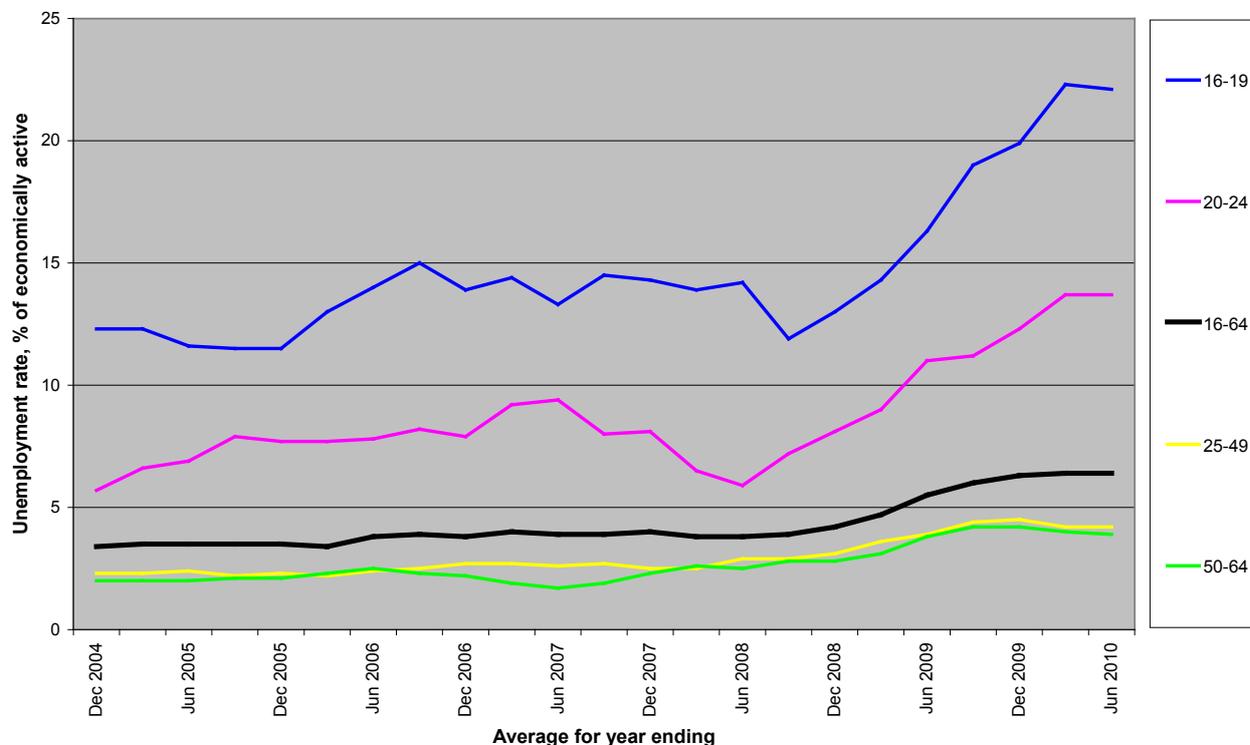


Figure 2.9 Impact of the 2008/9 recession on SW unemployment, by age group

27. The main reasons for inactivity are being in full time education, being at home and being sick.

The limits of our knowledge of employment

- The main source of labour market data is the Annual Population Survey (APS) which incorporates the longer running Labour Force Survey (LFS). Although data is available for lower administrative geographies the confidence intervals are so poor that even the most basic variables, like the employment rate, cannot be meaningfully analysed below county level.
- The robust data that we do have is compromised by changes in definition (e.g. occupation typology and working age) and many series have only become available relatively recently making it impossible to assemble longer term analyses.
- NVQ skills data do not fully reflect the generic personal 'competencies' and technical skills required by employers, so that strong NVQ skills levels do not necessarily imply low levels of skills shortages or gaps. The National Employer Skills Survey reported a sharp rise in the proportion of SW employers reporting skills gaps, from 16% in 2007 to 22% in 2009, moving from below the UK average to well above it. The results for this question are generally somewhat changeable between surveys but there may be a suggestion that, under more economically stressful conditions (when the emphasis is on low capacity utilisation rather than full order books) employers are more likely to identify skills deficiencies in their staff.
- The distinction between unemployment and inactivity has been blurred by policies to put people on to, and then off, incapacity benefits. Within employment, there are also considerable uncertainties around the issue of 'under-employment' which may be particularly relevant to the South West as part-time work and self-employment, as well as being positive in terms of labour market flexibility, can also be signs of a shortage of full-time employee opportunities. There may also be an issue of "hidden" or informal employment in some parts of the region.
- Data on public sector employment is especially poor, leading to a wide range of commonly cited proxy measures being used. Part of this is a failure to adequately collect the data but this omission is compounded by definitional issues, representing a substantial grey area between public and private employment, for example 'public corporations' like universities and more recently the part-nationalised banks. The most commonly used proxy includes all employment relating to education and health which exaggerates the total numbers and presents a misleading picture.

Employment - Key Messages and Implications

Virtually the entire South West region has had a very strong performance in employment: a high proportion of the region's working age population want to work and the region's economy has been able to provide work opportunities for a high percentage of them.

Between 2001 and 2008, the employment rate stayed at around 77% and this level is likely to be the effective ceiling, (allowing for the elective inactivity for full-time education, home-making and early retirement as well as some transitional unemployment).

This suggests that job creation, per se, should only be a policy priority where local conditions are significantly poorer than the regional average.

Incomes

While much of the focus of measuring economy for development is on the capacity to produce and to increase production, the ultimate purpose of all this activity is to support and enhance the well-being of the population. This prompts a different enquiry: how well is the economy working for its people? This section looks at how SW incomes and earnings have developed over time, how well they compare with the rest of the United Kingdom and how they are distributed.

Although individual earnings and household incomes are obviously closely related they should not be confused. Individual earnings can be closely associated with labour productivity and are driven by skills and employment opportunities, and relate only to the people who are in work. Household income brings in the additional factors of employment levels, transfers (such as social security payments and pension income) and notional income from property ownership²⁸.

What we know about incomes in the South West²⁹

- Incomes, as measured by Gross Disposable Household Income (GDHI) per head, have been within a percentage point of the UK average since the series began in 1995. This is much closer than the output measure of GVA because the lower level of income from employment and self-employment is balanced by higher social receipts, including pensions and benefits, and lower contributions to taxes.
- In real terms³⁰ GDHI per head in the South West grew at a compound rate of 2.9% per year between 1995 and 2005 but was more or less flat between 2005 and 2008, a pattern broadly similar to that of the United Kingdom, see Figure 2.10. The region's weaker relative performance in recent years can be attributed to a real terms fall in earnings from self-employment and weak growth in the notional value of income from property ownership³¹.
- The median full-time employee earnings rate of the region's residents in 2010 was £24,450 compared to £25,900 for the United Kingdom as a whole. This difference, 5.5%, has been fairly steady over time and is due to the significantly higher earnings rates in the Greater South East; SW resident median earnings are 10% below those in the East region, 15% below the South East and 23% below London. This is balanced, to some degree, by higher general prices and housing costs in these areas.

28. Note that GDHI is presented either for a whole population or as a per head measure but never per household.

29. For a fuller presentation of regional income and earnings data see ONS Regional Presence, 2010 and South West RDA / SWO Economy Module, 2010a

30. Current price data deflated by the Consumer Price Index

31. Owner-occupiers are credited with the rental value of their homes as well as the actual rental of property.

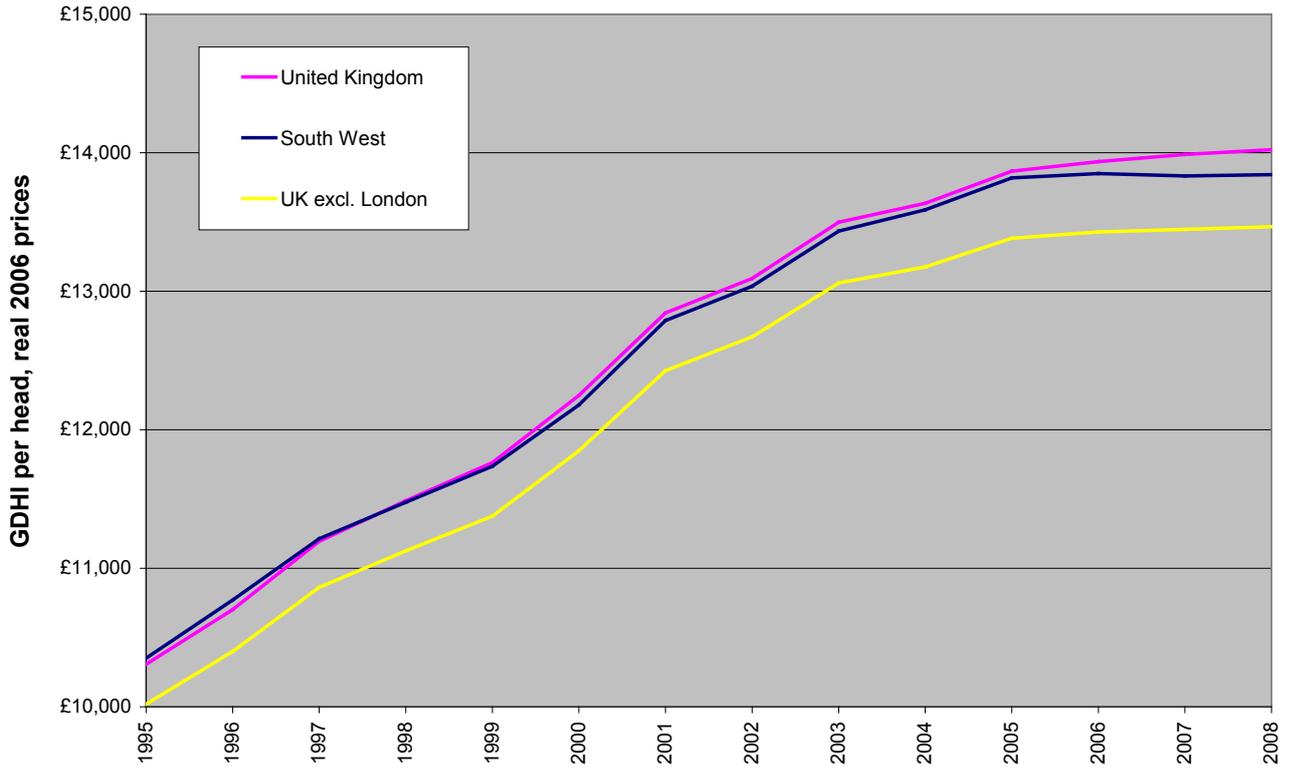


Figure 2.10 Real Gross Disposable Household Incomes 1995-2008

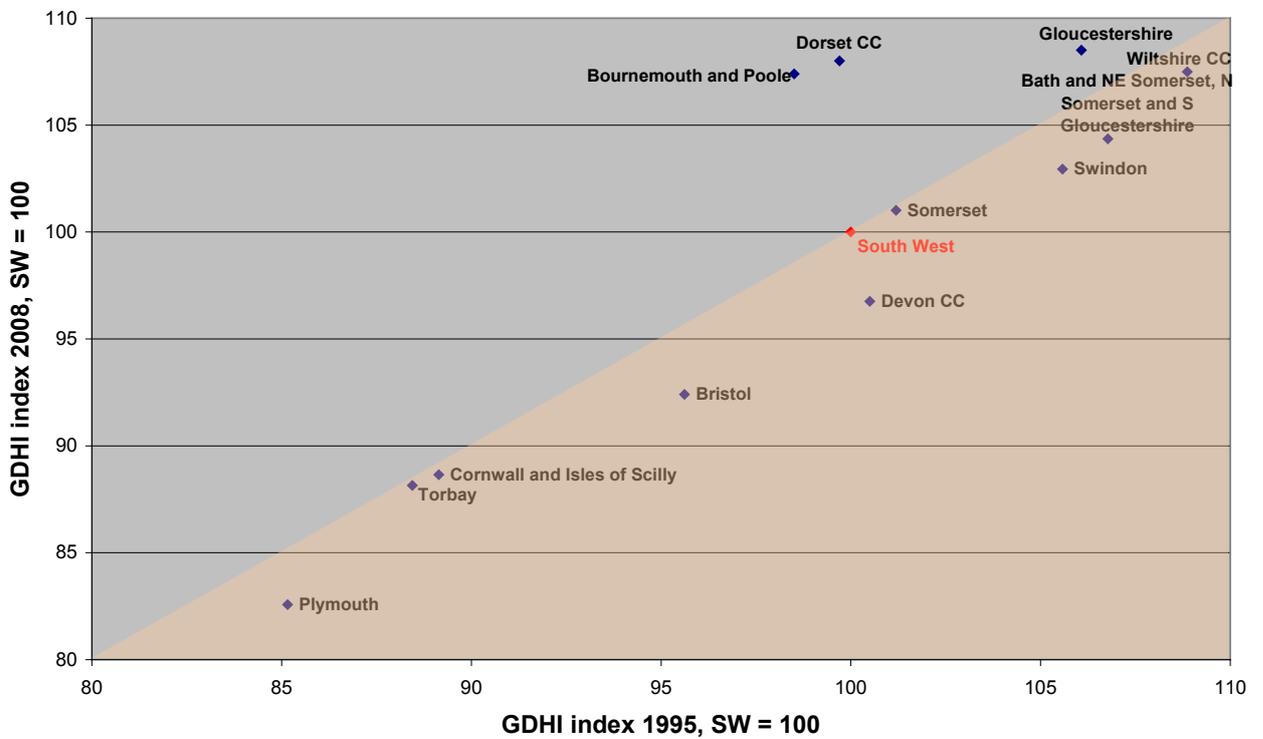


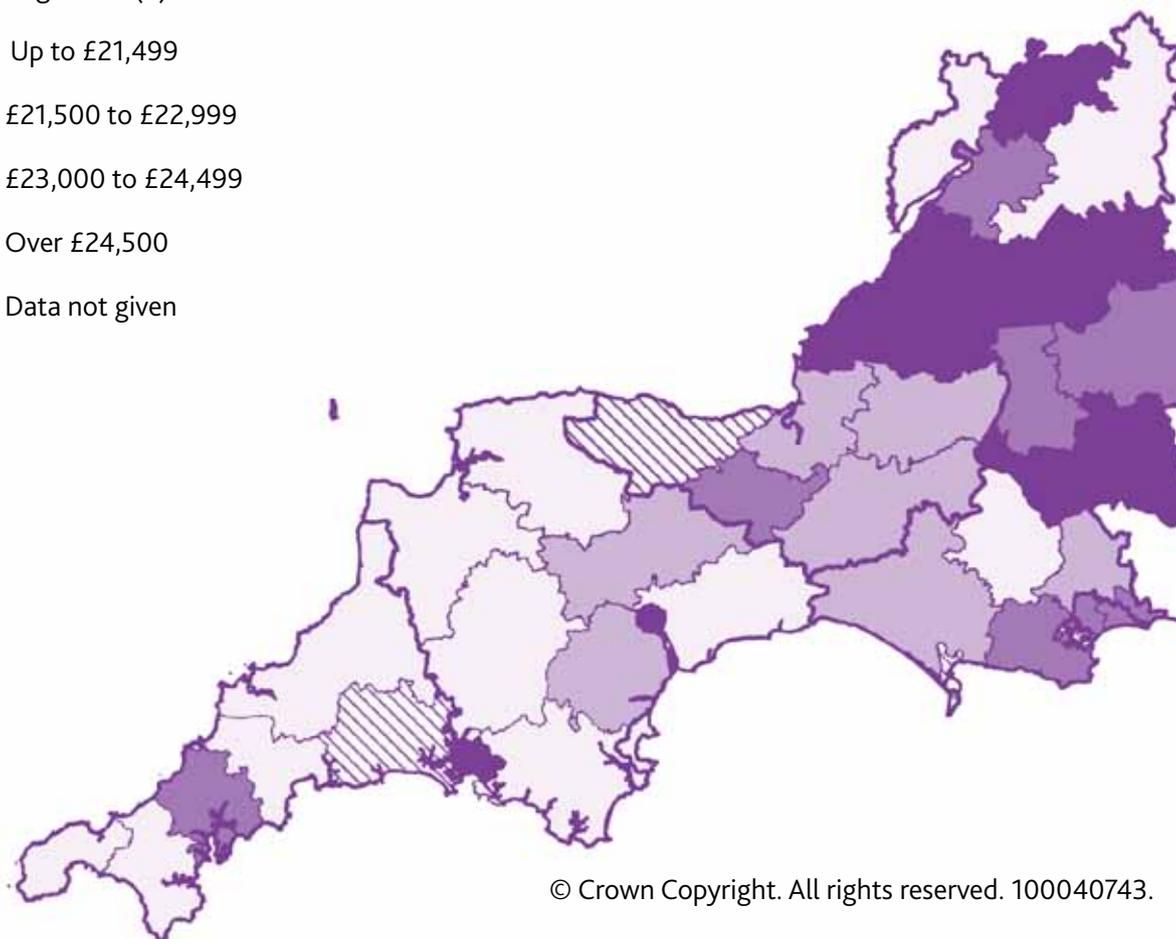
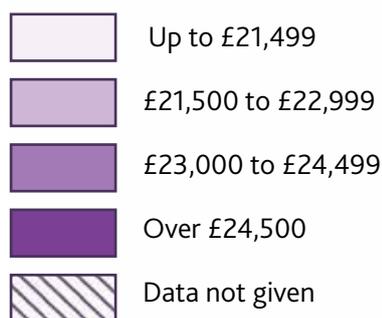
Figure 2.11 Sub-region GDHI 1995 and 2008 relative to South West

- The earnings rate distribution in the region is less dispersed than the United Kingdom but this is mainly seen in the above-median earnings brackets. In 2010, the bottom decile of full-time employees in the SW and UK were being paid 58% of the median or less but, for the top decile, the figures were 192% compared to 210%. Earners at the 10% decile in the region were being paid only 1% less than their national equivalents but for earners at the 90% decile the differential was 9%.
- The proportion of working age households without work in the region has consistently been lower than that of the United Kingdom, at 11.7% of households in 2009 compared to 13.6%. The figures for households with children are about the same in the region, at 11.8% but this compares more favourably with the UK figure of 16.3%.
- The gap between female and male median full-time earnings has narrowed from 28% in 2002 to 22% in 2009, but remains significantly wider than the gap reported for the UK average, which narrowed from 24% to 20%. A small part of the difference can be attributed to the smaller average number of hours worked by women working full-time.
- Overall, the South West benefits from being significantly under-represented in terms of areas of multiple deprivation. In the 2007 Index of Multiple Deprivation exercise, the region had less than half of national proportion of the top decile of most deprived areas. There are, though, some urban areas of high deprivation in the region and, at least, a suspicion that, chiefly in some rural areas, deprivation is hidden³².

Within the region, the spread of per capita GDHI is much smaller than that of GVA per head because transfers (pensions, social security payments and unemployment benefits) compensate in areas where employment and / or activity rates are relatively weak. The northern and eastern parts of the region have higher income figures whereas Cornwall, Torbay and Plymouth are at the lower end. This distribution has been generally consistent over time, with the exception of Bournemouth, Dorset and Poole which were close to the regional average in 1995 but well above by 2008, (see Figure 2.11).

Within the region, Torbay and Cornwall consistently record full-time employed earnings more than 10% below the regional average, while North Somerset records earnings 10% above. Variance in median earnings at the local level (see Figure 2.12) may give an indication of relative labour productivity within the region, itself a reflection of industrial structure. Both Cornwall and Torbay are both significantly over-represented in 'distribution, hotels and restaurants' whereas North Somerset is over-represented in 'banking, finance and insurance'.

Annual Earnings 2010 (£)



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Figure 2.12 Median annual earnings, SW districts, 2010

Earnings need to be seen in the context of costs. The limited information available about sub-national consumer prices in general indicates that the South West moves fairly closely with the UK averages. There would, however, be some expected variation within the region, with prices correlating with earnings to some degree, but also showing some additional distortion due to peripherality. One area where good data has been available is the ratio of house prices to earnings. This measure does throw up anomalies with some extremely high ratios reported in parts of Devon and Cornwall, stressing affordability issues in the peninsula and elsewhere.

- Workless households are markedly concentrated in urban areas with Plymouth, Torbay, Bournemouth and Bristol all having rates close to or over 15%; a statistic also shared by Cornwall.
- Commissioned data indicates that deprivation does exist in the region's rural areas but is thought to be disguised by their overall higher levels of prosperity. Rural areas of deprivation are harder to observe because they are rarely large enough to be reflected within whole administrative boundaries³³.

The 2008/09 recession

Real median full-time annual employee earnings rates rose in 2008 by 0.8% and then fell in both 2009 and 2010 by 0.3% and 1.5% respectively; in each case the earnings 'growth' rate being slightly lower than the UK equivalent. This delayed impact of recession, compared with the fall in employment, reflects the relative rigidity of wages. The data on workless households do show a marked jump from a rate of 10.9% in 2008 to 11.7% in 2009: the rate had actually been rising, albeit more slowly, from 10.2% in 2005.

The limits of our knowledge of incomes

- GDHI data is released over a year in arrears. We will not be able to see the impact of the recession in 2009 until the data is released in March 2011. Even then, the data will be ameliorated by the recovery that occurred in the final quarter of that year.
- The Annual Survey of Hours and Earnings data even at NUTS3 level geography comes with confidence intervals of up to +/- 6% casting doubt on any intra-regional comparisons or time-series analysis at the local/sub-regional level.
- The data we have on the distribution of incomes does not reveal anything about flows into and out of low income, worklessness and deprivation.
- A fuller understanding of prosperity would require more information about wealth, which would be likely to reveal a greater level of dispersion than income, with people with largely owned property and well funded pensions at one end of the scale and people with no equity, no pension and unsecured debt at the other.

Incomes - Key Messages and Implications

Household incomes are a closer determinant of the welfare of the people than output measures such as GVA per head. Because of the effects of workplace dislocation and transfers, the economic health of households can be significantly different from that of an area's economy. The South West is a net beneficiary from incomes not arising from activity taking place in the region: the household figures are better than those for output and match the UK average - even including London. Within the region, income disparities are not as broad as output disparities.

While the general level of SW incomes is not a major cause for concern, one issue is the relatively poor relationship between wages and costs in some areas, particularly housing, energy and transport. The relationship between living costs and living wages can be an important constraint on future prosperity in a region of high part-time and self-employment.

There are inevitably some geographical variations but indicators of poor income distribution, such as workless households and the deprivation indices, show the region to be relatively sheltered from some of the more acute problems of low incomes.

Sectors

Because different sectors have different characteristics in terms of output and employment growth, the changing sector make up of the region, and how this varies from the national make-up, is an important determinant of absolute and relative economic performance.

What we know about sectors in the South West

- The industrial structure of the SW economy is not radically different from that of the United Kingdom and shift-share analysis suggests that industry mix has the smallest role in explaining relative GVA growth of any region³⁴. This analysis shows the region incurred a notional 'loss' of only 1% of nominal GVA growth between 1995 and 2007 due to industry mix, compared to notional gain of 22% for London and a loss of 13% in the East Midlands.
- The most significant variation is the region's under-representation in the Financial Intermediation sector (Figure 2.14) where it accounted for 6.0% of UK output compared to the region's total GVA contribution of 7.7% in 2008. The region is also slightly underweight in the much larger Business Services sector. These differences are balanced by a greater contribution from Public Administration & Defence and from Electricity, Gas & Water Supply.
- Output growth since 1999 has been dominated by Financial Intermediation and Business Services (see Figure 2.14) which together have accounted for about half of all real output growth. But, this is actually less than the equivalent figure of nearer 60% for the United Kingdom.
- Other sectors showing above average rates of growth since 1999 are Construction and Health, again much in line with the national experience. By contrast, Manufacturing output contracted in real terms.
- Growth in the earlier period of 1989-1999 was more centred on Health, Education and other personal services and on Business Services rather than Financial Intermediation.
- The sector composition of employment is less closely aligned with the United Kingdom as a whole, indicating significant differences in output per job. Overall, the region accounts for 7.7% of output compared to 8.5% of workforce jobs and this ratio holds for most sectors, (underlining the productivity "gap" driven by London). Output per job is significantly further below the UK level in Financial Intermediation and in Other Services but is higher in Public Administration and Defence.
- While the total number of workforce jobs grew by 7% between 1999 and 2008, jobs in Business services grew by 45% and in Education, Health and other services by over 20%. The number of jobs in Manufacturing fell by 22% but this was not as great as the 30% fall reported for the United Kingdom.

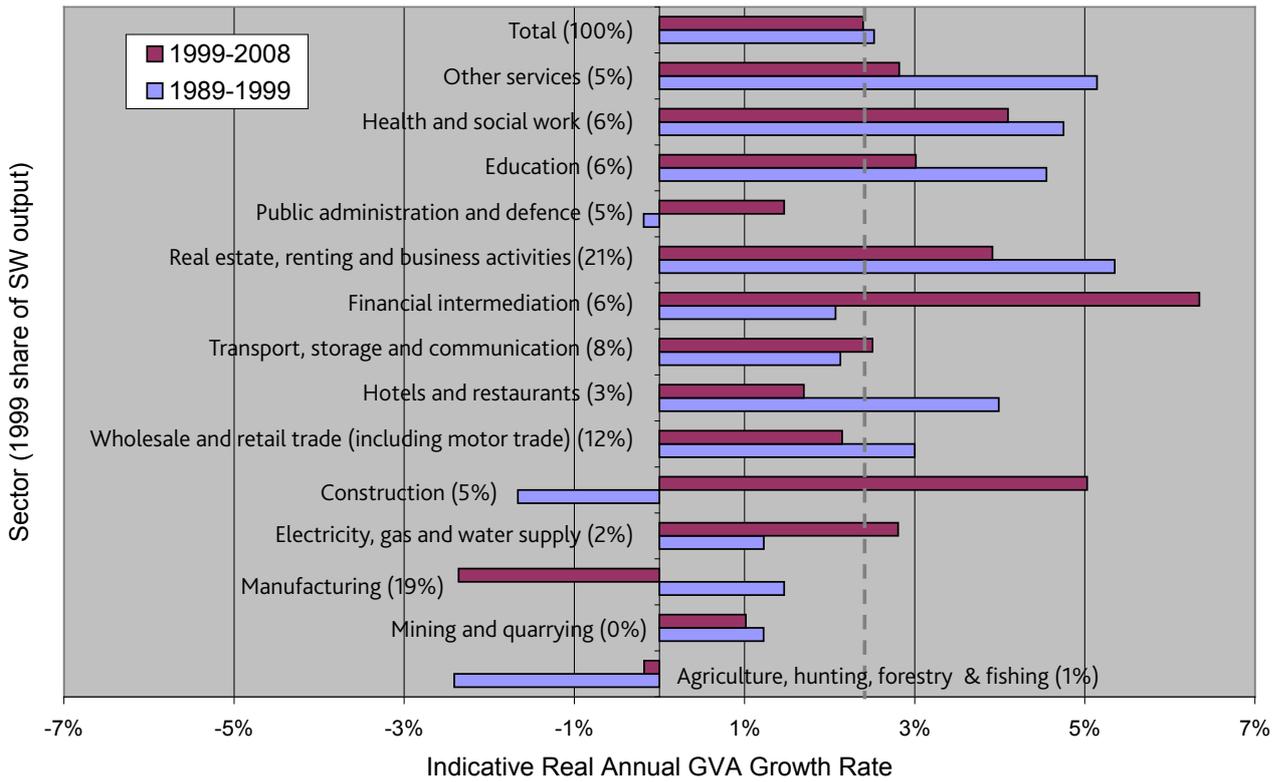


Figure 2.13 SW sector growth

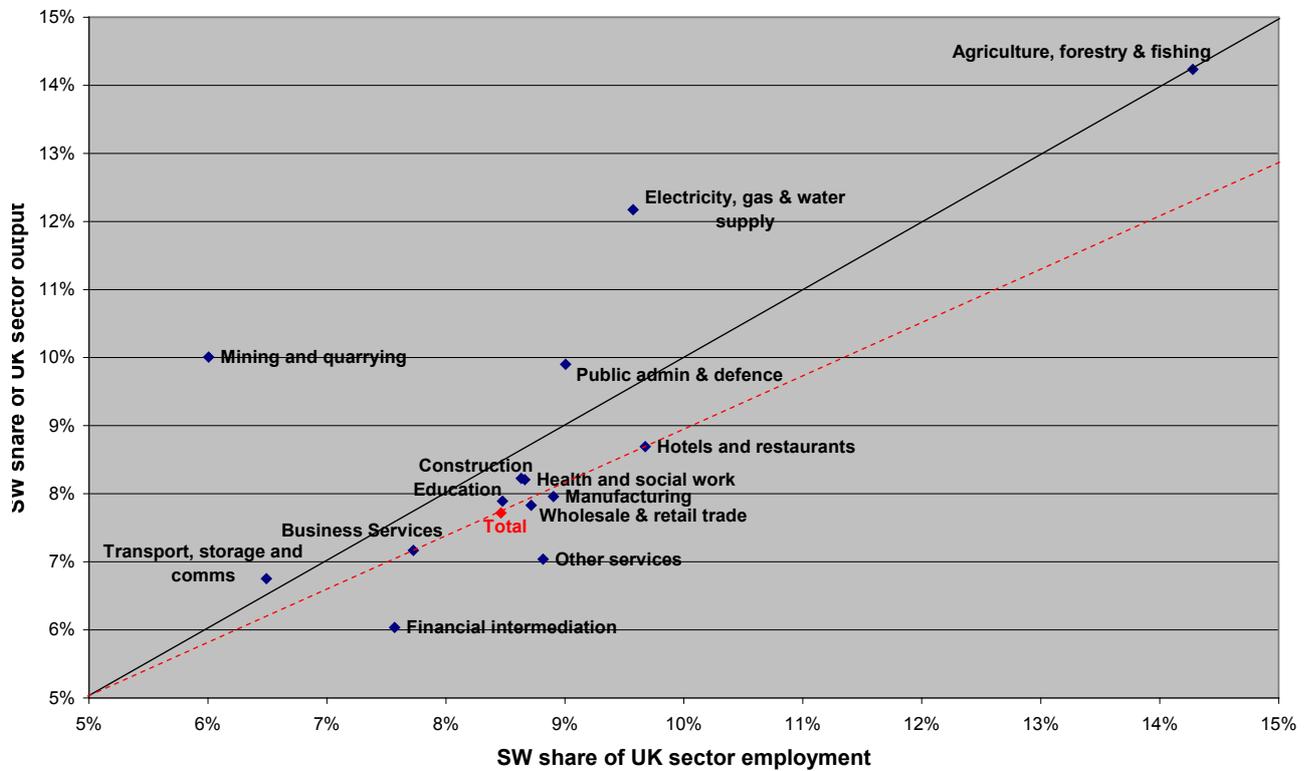


Figure 2.14 SW sector shares of output and workforce jobs, 2008

- Comparison of median full-time annual earnings in different sectors may give some indication of relative labour productivity. While 2010 earnings for all industries in the region were 7% lower than for the UK average, those for manufacturing were only 2% lower, for construction 6% lower but for all services 9% lower. Within services financial and information / communication earnings appear particularly low³⁵ but, interestingly, while Health sector wages were 9% below the UK level, those in Education were only 3%.
- Analysis of technologies³⁶ in the regions has indicated a significant and combined presence of assets in the areas of marine energy, offshore wind, digital and composites.

The public sector has already been discussed with reference to its general contribution to SW employment but can also be better understood through consideration of its constituent parts. With a comparator of the region accounting for about 10% of the English population and workforce, the public sector in the South West is notable for employing 37% of all Civil Service defence staff and hosting 28% of Armed Forces personnel including 58% of Naval personnel. Over-representation in these two areas explains the overall share of English public sector employment being close to 11%.

The region is strongly associated with land-based industries and primary food production. As well as the direct contribution to output, these activities are part of a positive regional brand image and perceived well-being. However, the sector accounts for an ever decreasing share of the region's output, falling from around 3% of GVA in the early 1990s to only a little above 1% in recent years. Conversely, the region's share of UK output in this sector has grown over the same time period from 11% to over 13%, which would become a much more significant factor if food prices were to rise disproportionately in the medium- to long-term.

Within the region, most areas experienced a shift in sector balance between 1995 and 2008 on fairly similar lines to the region as a whole, that is an 8% fall in production sector output as a share of the total, mostly balanced by an equivalent rise in the share coming from business and financial services. Where there is variation across the region, it has tended to be in the size rather than in the direction of shift. For example, Wiltshire CC has seen the production share of output falling by 12% with a corresponding rise in the share from business and financial services. The pattern in Devon, Plymouth and Torbay has differed in that the fall in production share has been greater but balanced, in part, by increases in the share arising from public administration, education, health and other services.

Although, between them, Cornwall and Devon CC account for 40% of the region's agricultural output, even here this only equates to around 3% of their total GVA.

There is a notable concentration of business and financial services in and around Bristol and, in production, in the wider area of Bristol and South Gloucestershire; both accounting for a third of the region's sector output.

The importance of the public sector as a provider of civilian employee jobs³⁷ varies considerably, ranging from around 30% of the total in Plymouth, Exeter, Carrick, Taunton Deane, Gloucester, West Dorset down to less than 15% in Cotswold, Tewkesbury, West Wiltshire, Stroud, Mendip and South Hams.

The best evidence available on the impact of the 2008/09 recession is the reported change in employment in the broad sectors, see Figure 2.15. For statistical reliability at regional level, sector data is based on the previous twelve months survey responses and, therefore, incorporates a considerable lag such that the recession effects would have been picked up only after June 2008. Nonetheless, the data does give an informative picture showing the degree to which the sectors have departed from their earlier trajectories.

35. Data for most of the individual SIC2007 components of business / financial services were outside the 5% confidence band.

36. GHK, 2010

37. ONS analysis of 2008 ABI data for BIS. NB does not include self-employed.

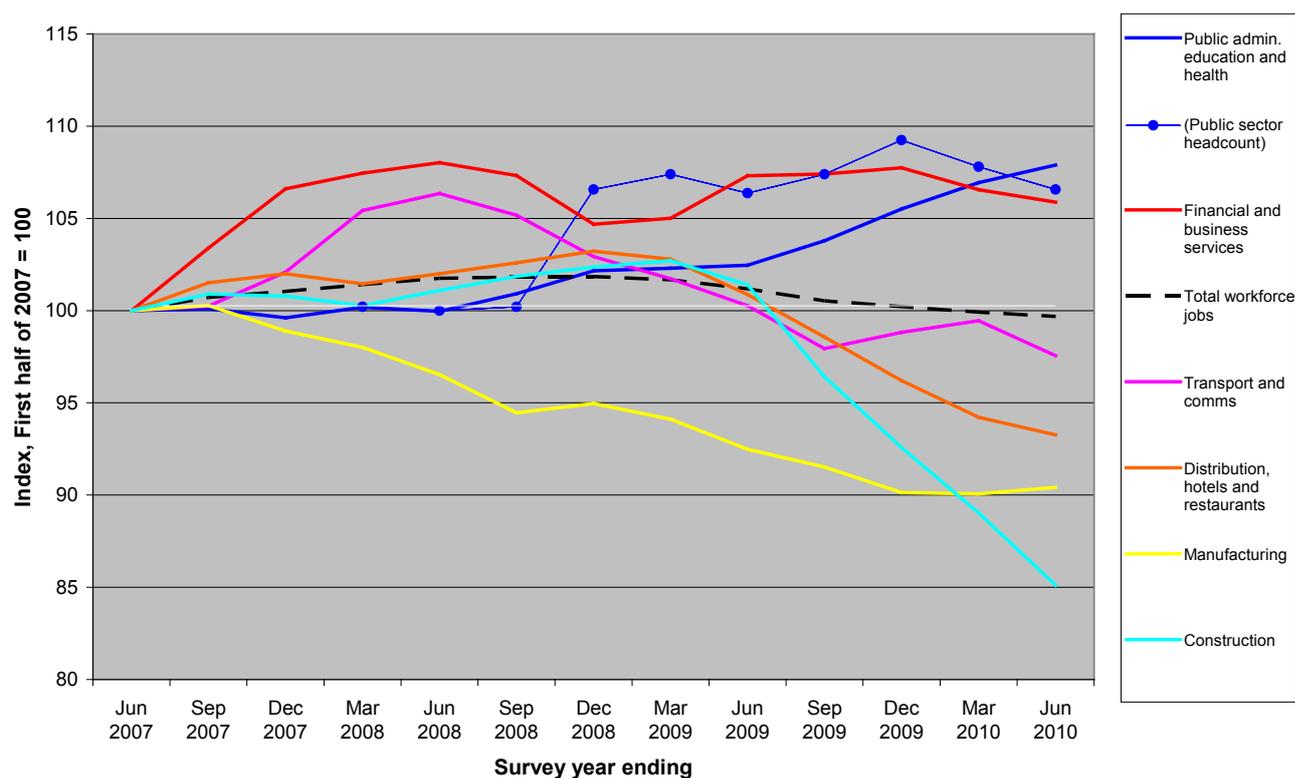


Figure 2.15 Impact of the 2008/9 recession on SW sector employment

The movements of Financial and Business Services and broad public sector grouping are complicated by the reassignment of large numbers of bank employees when institutions were part nationalised during 2008. This shows as a sharp rise in the actual public sector headcounts (dotted line) but seems to take much longer to reach the same outcome in the APS data. In spite of this reassignment, the broad financial / business service sector seems to have more or less held on to the gains in employment seen immediately prior to the recession. If those now counted in the public sector were returned to private sector banking, then this would equate to a continued rise in employment.

The sectors that seem to have particularly suffered in the recession are Distribution, Hotels and Restaurants and especially construction. Employment in manufacturing has also declined but the rate of decline does not appear to be different from the pre-recession trend.

The limits of our knowledge of sectors

- Analysis of broad sector patterns can only give a limited understanding of what is happening in a complex and dynamic reality. An unknown but significant proportion of the fall in manufacturing employment change has been due to the outsourcing of support services traditionally done in-house rather than pure job losses. Similarly, the contracting out of public services to the private sector has blurred our understanding of public sector employment growth. The information that we do have is generally limited to very broad industrial groupings when change is actually occurring at a more detailed level and often the changes in technologies which cut across industrial sectors. Therefore, sector data analysis can only ever be a starting point for understanding industrial change and needs to be accompanied by contextual and qualitative information to create a full and accurate picture.
- Regional employment data broken down by industrial sector is particularly volatile, making any trend analysis highly sensitive to the choice of time points. This volatility also calls into question any crude calculation of labour productivity based solely on sector output and labour input. In any case, this approach is too blunt to be a meaningful indicator of relative sector competitiveness because the differences revealed are mostly a reflection of capital intensity and specialism within each sector.

Sectors - Key Messages and Implications

Like the rest of the United Kingdom, SW England has experienced a marked shift away from productive industries towards services, especially business services. Nevertheless, differences in Business Services and Financial Intermediation, both in employment and output shares, largely explain the region's GVA per head deficit compared to the United Kingdom as a whole. Manufacturing is an important provider of added value but is still experiencing a decline in its share of overall SW activity.

Although the region accounts for a large share of the UK's agricultural output and employment, and land based activities are an important aspect of the SW's self-image, the sector represents only 1% of regional output, about the same as the manufacture of rubber and plastics products.

Looking ahead, the key policy question is how, and which, SW industries can rebalance themselves to more sustainable and private sector orientation.

Businesses

The enterprise size structure, the dynamics of formation and closure, and the levels of innovation and investment all play a part in business competitiveness. By and large, more is better: the bigger the firm, the more they invest, the more they innovate, the more R&D they undertake the better for growth, returns and employment.

Research³⁸ indicates that the significant gap in labour productivity in firms with more the 10 employees could be fully accounted for by associated firm-level characteristics, most notably capital stock, ownership structure and skills levels.

What we know about characteristics of businesses in the South West

- As in all parts of the United Kingdom, enterprises in the South West are overwhelmingly classed as SMEs³⁹ with 75% having no employees and a further 24% having fewer than fifty. What makes the region different is the relatively small share of employment and turnover accounted for by large enterprises: for employment, the figure in 2009 was 27% of employment and 39% of turnover⁴⁰ compared with UK proportions of 40% and 51% respectively (Figure 2.16).
- To some degree, these overall differences can be explained by industrial structure as large firms are more prevalent in some sectors than in others, for example in financial services. However, within manufacturing⁴¹, the differences are still evident, although a little less marked with non-SMEs accounting for 38% of employment (UK 44%) and 60% of turnover (UK 66%).
- Since 1998, the contribution from non-SMEs in the region has been falling for both employment and turnover but, in contrast, in the United Kingdom the turnover contribution has been rising. This suggests some divergence in SW outcome with a general trend away from large private sector employers, increasing the relative SW dependence on small business further.
- The level of entrepreneurial activity and the relatively high business density (628 enterprises per 10,000 population versus 583⁴²) indicate a strong enterprise culture at regional level. This is consistent with a high level of self-employment and a relative scarcity of work opportunities with large employers so higher level of enterprise may reflect necessity as much as opportunity. However, high survival rates and low business churn (birth and death rates), particularly in comparison with the Greater South East, indicate a relatively uncompetitive enterprise environment.

38 UWE, 2005 (based on the Annual Respondents' Database)

39 Businesses with fewer the 250 employees.

40 Excludes turnover of Section J – Financial Intermediation

41 The only major sector with complete employment and turnover data at regional level

42 Enterprises that are either VAT registered or are employers

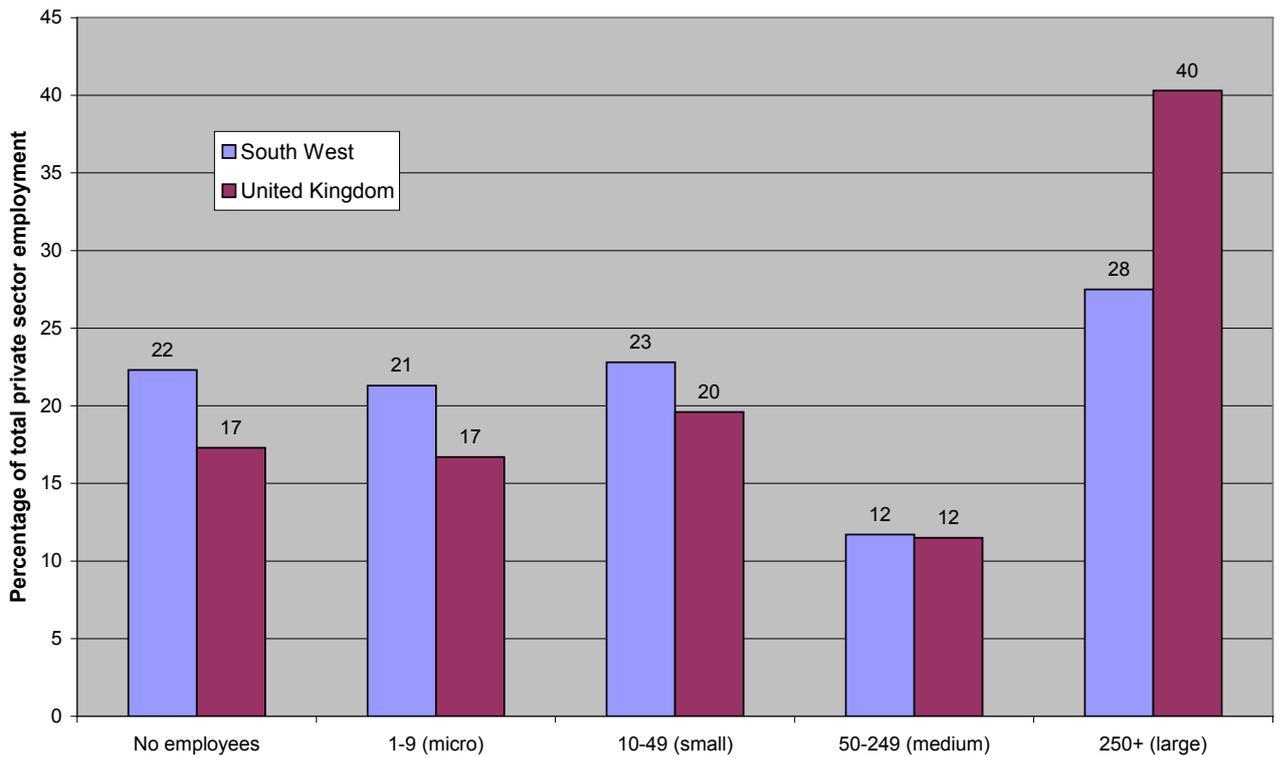


Figure 2.16 Share of Private Sector Employment by enterprise size, SW and UK 2009

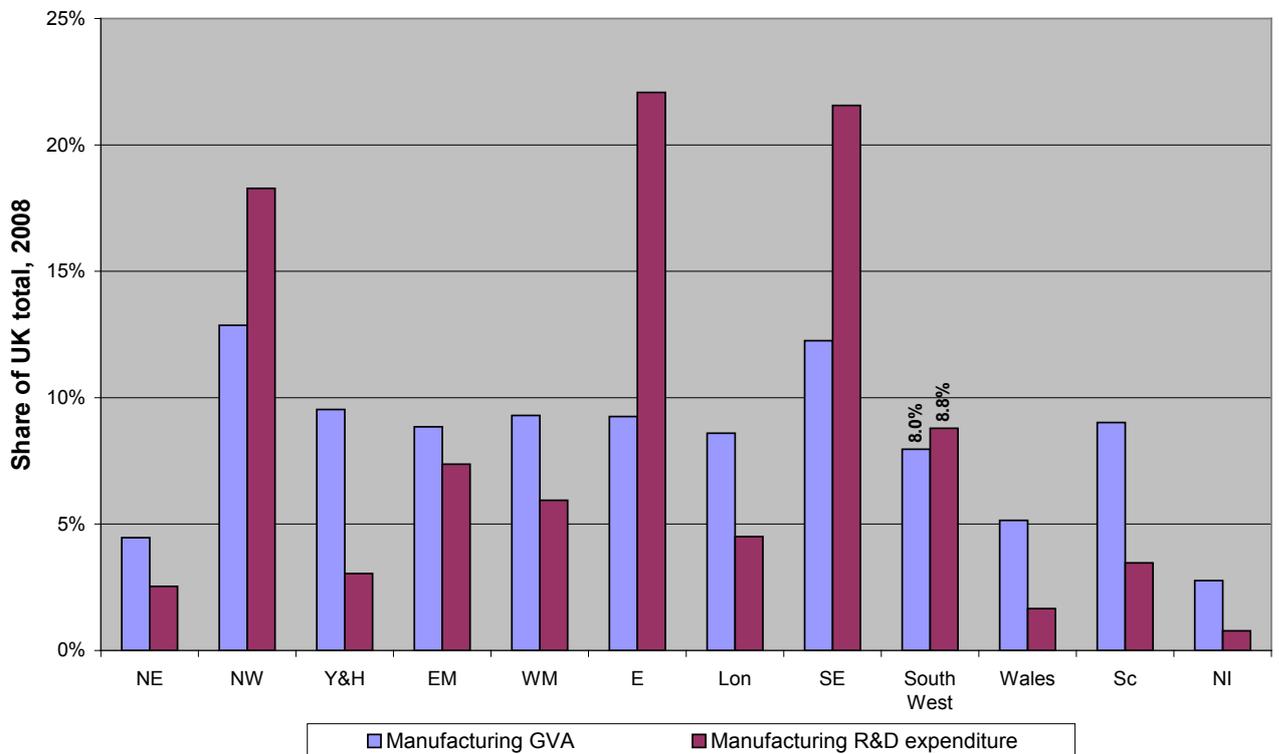


Figure 2.17 Share of Manufacturing GVA and R&D expenditure, GORs, 2008

- Expenditure on Research and Development (R&D) in the region is broadly in line with UK levels, but this is itself rather unusual as R&D activity generally has a very uneven spatial distribution (see Figure 2.17). This tendency to concentration is also likely to be exhibited within the region as the R&D spend is highly concentrated in the aerospace sector, accounting for around 60% of the region's manufacturing R&D and about a third of the sector's UK total R&D. Given the geographical concentration of aerospace in the north west of the region and a few other spots, this suggests most of the region has a relatively low level of R&D spend⁴³.
- The recent, 2006-08, headline level of general innovation activity is also at the UK average of 58% of enterprises with 10 employees or more being 'innovation active'. This figure rose in line with the national trend from 47% of enterprises in 1998-2000 to a high of 64% in 2004-06 before falling back to the current level.
- The SW has a relatively low ratio of capital spending to total GVA, but this is mainly a reflection of sector mix as the level is similar to that of London and the South East. Between 1998 and 2004, the ratio of capital expenditure to labour costs fell from above 25% to around 20% probably reflecting to some degree the shift away from manufacturing.
- Foreign Direct Investment (FDI) activity in the UK is dominated by London, which accounts for about one third of all FDI projects. It is therefore not surprising that the South West's share of projects, at around 4.5%⁴⁴, is well below its share of economic output. This deficit is common to all of the English regions outside London except for the North East. Analysis of ABI data⁴⁵ shows foreign-owned companies have accounted for an increasing proportion of ABI GVA in the region: 6.8% in 2000, 12.1% in 2004 and 16.0% in 2007. The comparable figures for the UK are 15.3%, 20.2% and 23.5% indicating that although region has seen a sharp increase it remains well behind.
- Foreign-owned companies (FOCs) are generally understood to be important for growth and productivity because of their relatively high levels of investment, innovation and exports. However the detailed ABI data for the South West indicates the region's FOCs accounted for only 10% of ABI net capital investment in 2007 that is far less than their share of ABI output.
- The UK Competitiveness Index ranks the SW 6th out of 12 UK regions in 2010, slipping one place from its recent normal position of 5th. The region's overall ranking is depressed by particularly poor rankings in the sub-indices relating to import / exports and to R&D in higher education. Conversely, Bristol is ranked as one of the most competitive cities in the UK.

Within the region, there is a very wide range of enterprise density, with urban areas typically having markedly fewer enterprises relative to their working aged populations. The extremes are in Plymouth, with 344 enterprises per 10,000 population and Cotswold with 1,032. Similarly, there is a wide range in the proportion of employment accounted for by large companies. Reflecting urban and rural factors, in Forest of Dean, Torridge, Teignbridge, West Devon, Penwith, Cotswold, East Dorset, North Cornwall, Mendip and East Devon the proportion is 15% or less, while in Bristol, Plymouth, Exeter, South Gloucestershire and Swindon the proportion is 35% or more.

43 Figures published in EU research support this, see South WestRDA / SWO Economy Module, 2011a

44 Based on figures quoted in Consulting Inplace, 2010

45 Unpublished ABI data, note that this covers only enterprises registered for VAT or PAYE and does not cover the whole economy.

The **2008/09 recession**, not surprisingly, has had an impact on both the rate of enterprise formation and the rate of enterprise closure. Compared to the recent average (2004 to 2007), the number of enterprise 'births' was 8% lower in 2008 and 21% lower in 2009; a significantly greater drop-off than for the United Kingdom as a whole. Enterprise 'deaths' are more complex to interpret because two calendar years of inactivity need to elapse before death is pronounced^{46,47}. This inevitably creates a lag in the reporting of deaths - indeed, the number of deaths for 2008 was lower than the recent trend in the region and nationally. By 2009, the death rate had risen sharply, by 18% in the South West and by 21% nationally.

Data on bank account openings for new enterprises indicate that there was a distinct pick-up in activity from March 2010 compared to the previous two years⁴⁸. Some of this new activity is likely to be related to the "distress" of redundancy and lack of employment opportunities.

The limits of our knowledge of the characteristics of businesses

- Business size is complicated by a number of definitional issues: at the smaller end of the scale, the distinction between simple self-employment and micro enterprises at an early stage of growth and, at the large end, by the complexities arising from head office location. The policy implications are also not always obvious: bigger may currently be associated with more competitive but this has not always necessarily been the case.
- Compared with their peers, SW entrepreneurs do seem to be less aggressively seeking strong business growth but there is no firm evidence to explain this. It is likely that a role is played by a higher element of 'lifestyle' choice and possibly some necessity-driven entrepreneurship arising from a relative lack of alternative employee opportunities.
- A number of key measures rely on data that is either inherently poor in quality or based on inadequate sample sizes. The GEM data on early stage entrepreneurial activity at regional level has confidence intervals so wide that there are virtually no statistically significant inter-regional differences or year-on-year changes. Investment data derived from ABI / BRES has carried a health warning since 2005, with ONS advising users that it is unsound. But, because there is no alternative to these sources, they are used as "better than nothing." This is doubtful logic.
- The UK's poor investment statistics are a major gap for economic analysis. It is a quite fundamental question about how National Accounts data treats most spending on 'knowledge' or 'intangible' assets. Because it is counted as 'intermediate consumption', it does not contribute to either GDP or investment. The result is that there is no measure of capital stock for the knowledge economy.

⁴⁶ An enterprise which traded at any time in 2008 would not show up as a 'death' until it had not shown signs of activity in both of 2009 and 2010.

⁴⁷ Insolvency data is not a better alternative because a) most enterprises cease trading without becoming insolvent, b) those that do become insolvent are encouraged to settle without formal insolvency proceedings and c) the data on proceedings is extremely lagged and based on judicial areas that do not match GO regions.

⁴⁸ South West RDA / SWO Economy Module, 2010b

Business - Key Messages and Implications

Business characteristics are important because they encompass the drivers of productivity, however they do not lend themselves to very meaningful generalisations at the regional economy level. Appropriate levels of innovation, investment and R&D are better considered at industry or even Business level. Although regional level information could provide some useful indicators of economic health, the data available is, for the most part, insufficiently robust for this purpose.

The exception is data on enterprise size which does indicate a significant difference between the region and the UK average due to a relative lack of larger enterprises in the South West. Historically, Business size is positively associated with many of the productivity drivers and this represents a structural weakness across the region, unless those businesses have or can be encouraged to develop an appetite for growth.

Places

Places in the South West

An understanding of 'place' is essential to any understanding of economic performance. Place is not simply a matter of comparing stock and flows of key economic measures, although these are important as indicators. It also requires an understanding of the roles played by geography and history in shaping economic development; in particular the advantages and handicaps these have bestowed. For a detailed place by place narrative, readers should look to the 2010 / 2011 Local Economic Assessments⁴⁹ and their successors. Here, we merely identify a few notable themes. (Evidence of sub-regional differences in performance is summarised under the relevant topic headings earlier while a more detailed assessment can be found in the Spatial Review⁵⁰.)

What we know about places in the South West

- Many key indicators show a clear progression from higher and above UK average levels in the north and east of the region to lower and below average UK levels further south and west. These include output per head, household incomes and employment.
- The range of residence-based incomes is considerably narrower than that of workplace-based output, suggesting a wealth creating north, east and urban focus and a corresponding dependence on commuter incomes and social transfers in the south, west and more rural peninsula.
- Whilst it is true to think of the economy in rural areas being different to the economy in urban areas, there is little economic value in the concept of a South West 'rural economy'. Beyond some narrow land-based activities, a degree of rural economic independence and homogeneity is not supported by the evidence⁵¹. That said, businesses in rural areas are characterised by tending to be smaller and older. The chief intra-rural variance is the degree of dependency and inter-action with urban areas. This is indicated by the right hand map in Figure 2.18 which shows the percentage of businesses⁵² in each local authority area that are located in rural areas⁵³ and contrasts with the rural-urban classification, left hand map.
- Each of the region's urban centres has quite distinct characteristics and, together, they do not lend themselves to generalisations. The most notable centres at opposite ends of the spectrum are probably Bristol, as a story of positive economic development, and Torbay, for a recent history of relative economic malaise. Bristol, together with the surrounding West of England unitary authority areas, accounts for over one quarter of the region's output and is the locus of the region's presence in the agendas for globalisation, structural rebalancing and innovation.
- Parts of the region have at various times attracted specific economic designations associating them with particular characteristics and (often political) objectives, see Figure 2.19. The most notable of these being Cornwall-IO's status as an 'Objective One' area reflecting its relatively weak performance as measured by output per head.
- An important consideration in the development of places is the degree to which progress in one place benefits (or disadvantages) its neighbours. Although core, urban districts do benefit from having larger and more productive hinterlands, rural, peripheral districts benefit very little from spill over effects between districts. Agglomeration and spill-overs are important tracks for economic development. Sadly, beyond the West of England, the South West largely lacks these elements of good economic performance.

49 www.swo.org.uk/local-economic-development/local-economic-assessments

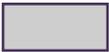
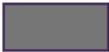
50 South West RDA / SWO Economy Module, 2011b

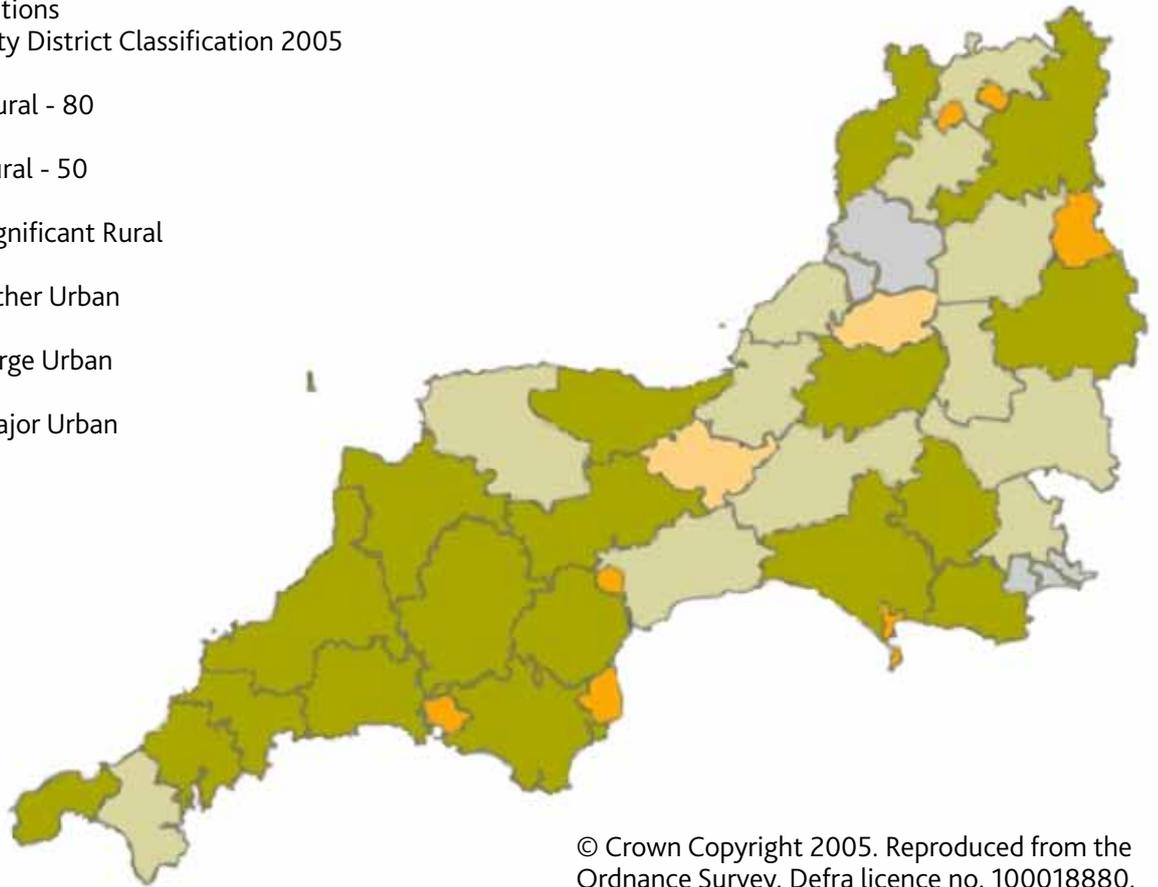
51 South West RDA, 2007

52 IDBR

53 Outside settlements with more than 10,000 population.

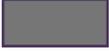
Rural Designations
Local Authority District Classification 2005

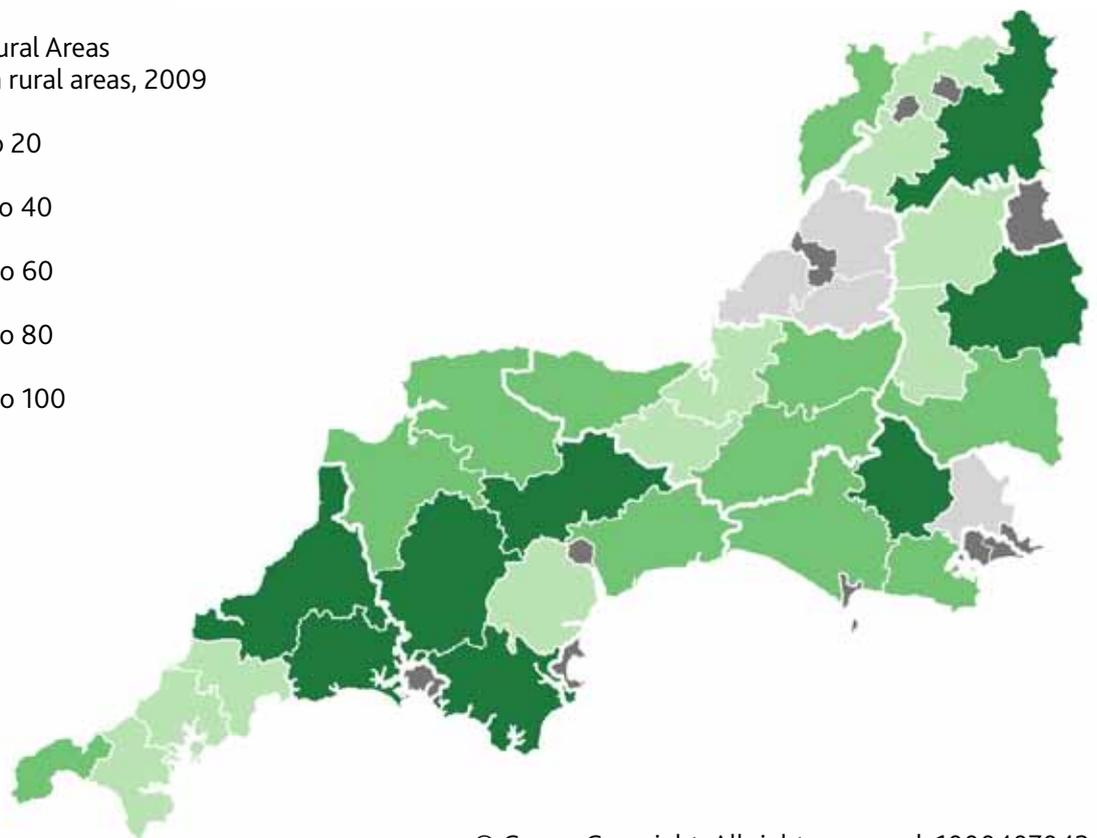
-  Rural - 80
-  Rural - 50
-  Significant Rural
-  Other Urban
-  Large Urban
-  Major Urban



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Businesses in Rural Areas
% businesses in rural areas, 2009

-  0 to 20
-  20 to 40
-  40 to 60
-  60 to 80
-  80 to 100



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Figure 2.18 Map of Rural - Urban

Legend

- ▼ Aerospace Companies
- ICT Companies

- Top Twenty Percentile IMD Nationally
- Convergence Areas
- Competitiveness Area

The Way Ahead (Growth Areas)

- Town Primary Growth Area
- Town Other Growth Area

SFI Assisted Area

- Cornwall and the Isles of Scilly
- Parts of Plymouth and the South Hams
- SW England

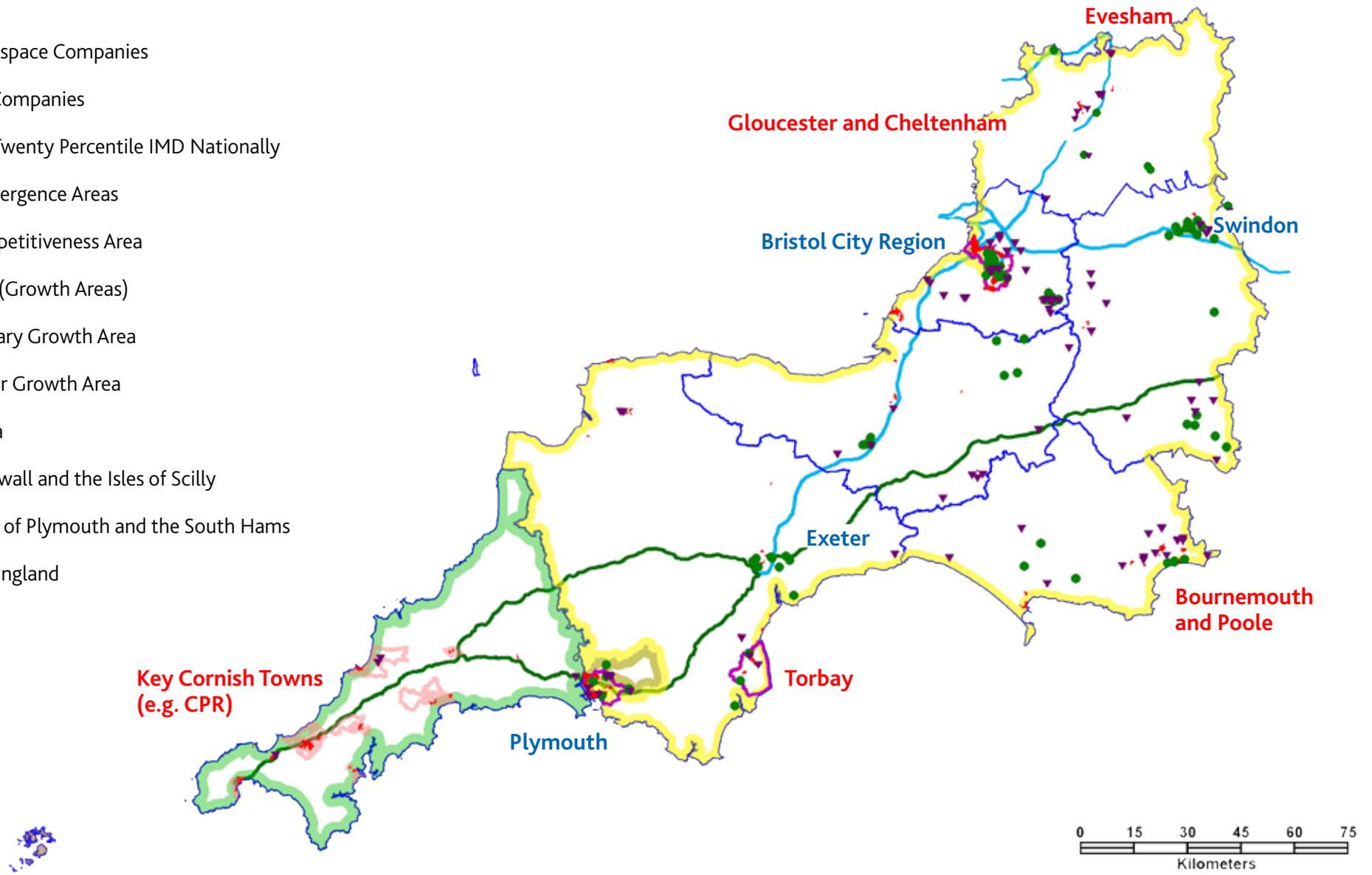
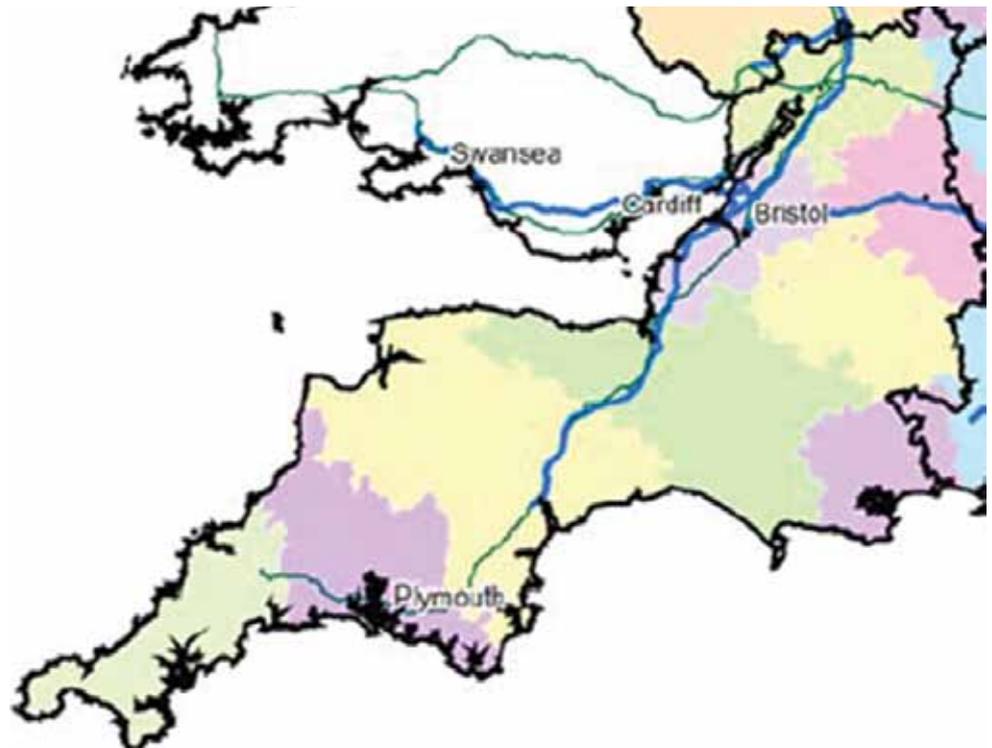


Figure 2.19 Map of economic designations

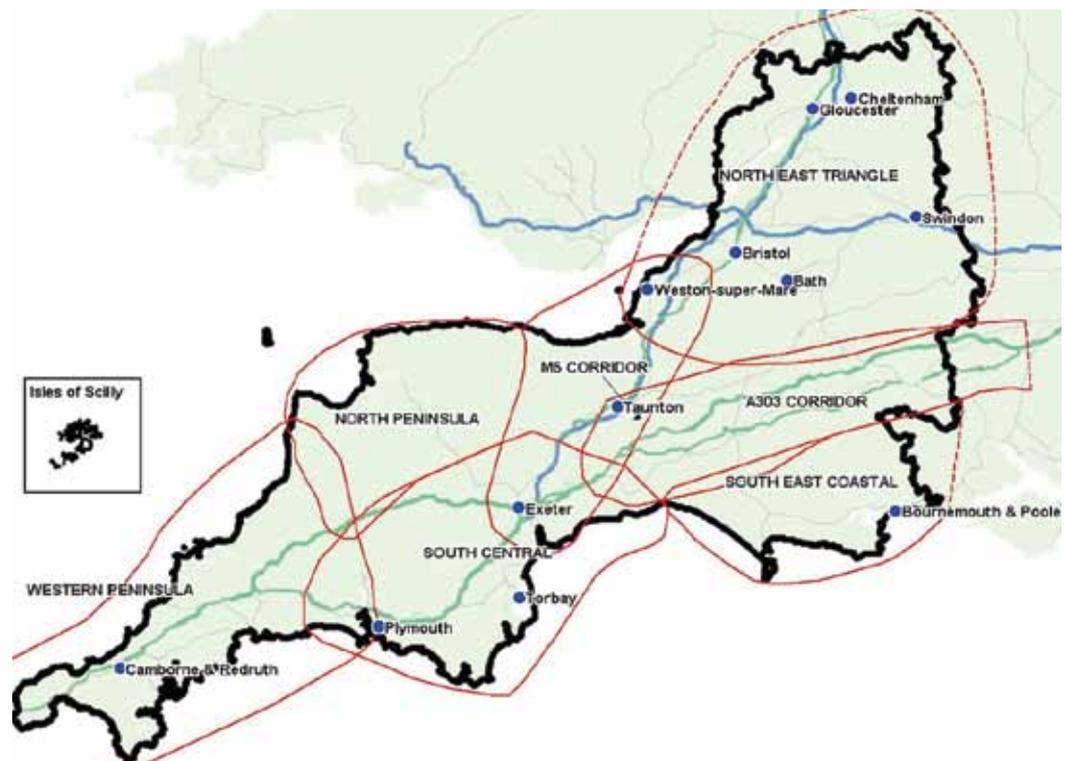
Functional Economic Market Areas - FEMAs

There are two very good reasons why FEMAs are an attractive concept: firstly, that most, if not all, economic activity does have a spatial pattern and, secondly, that these spatial patterns rarely coincide with administrative or other human boundaries. It is not straightforward, however, to conclude that there exists an alternative geography of economic areas that is ready or able to be used as the framework for economic development.

What we know about FEMAs in the South West



Preferred sub-regional map – PACEC 2007



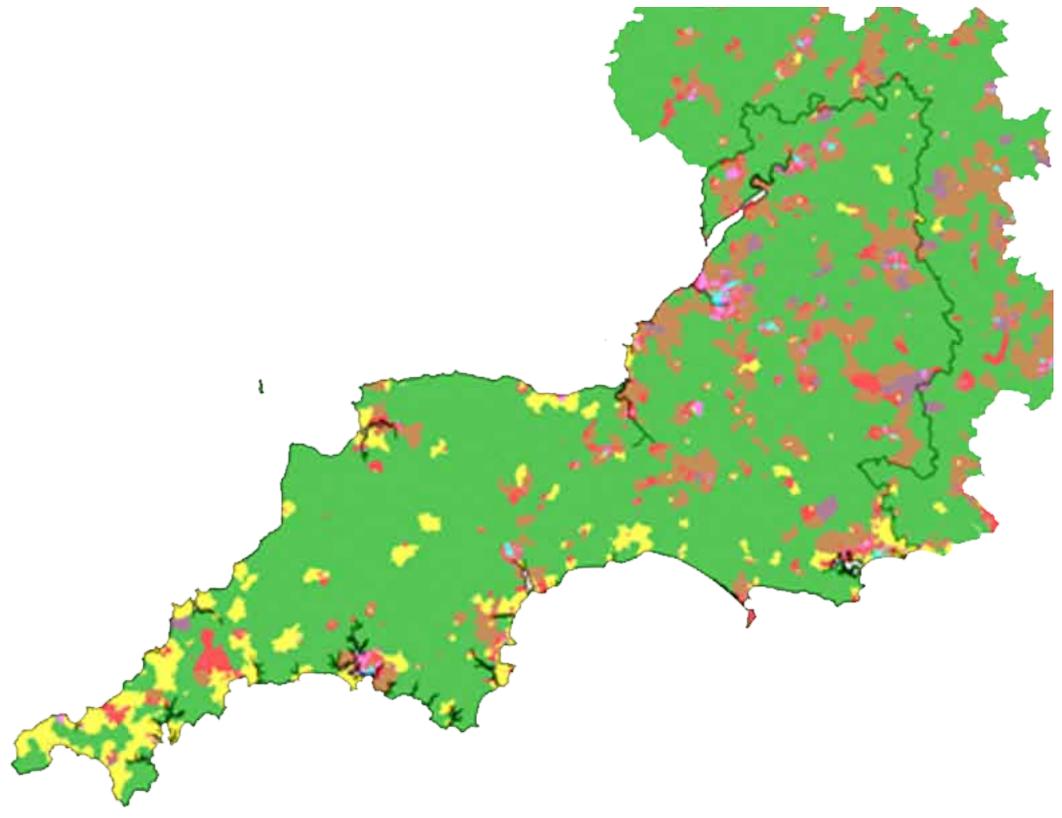
Functional Zones – DTZ 2003



Travel-to-Work-Areas ONS 2001

Cluster Analysis key

- 1
- 2
- 3
- 4
- 5
- 6
- 7



Multivariate analysis SQW 2010

Figure 2.20 Examples of different approaches to market areas

The different approaches understanding and presenting the economic geography of the South West, as illustrated in Figure 2.20, are all based on rational interpretations of the evidence available. Although they are clearly very different, none of them could be considered to be 'wrong'. Each approach can cover only a small part of a complex and dynamic story. In each case, the resultant map benefits policy making in the relevant areas, assuming the underlying rationale (and the quality of the evidence it is applied to) is clearly understood.

Recognising the limited value of the 'best-fit / blackbox' approach to SW FEMAs, work in 2010 was done on creating a shared evidence tool, SEAT⁵⁴, which assembled the best available spatial data to represent the principle components that should be considered in any assessment of economic geography. This is essentially a database and data visualisation tool that allows policy makers to consider the relevant spatial evidence directly and is an alternative to the single best-fit FEMA.

If there was ever an opportunity for FEMAs to inform the landscape of economic development, it was the 2010-11 Local Economic Partnership bid process. In spite of the central government guidance to bidders that LEP areas would need to reflect "the natural economic geography of the areas they serve"⁵⁵, none of the areas proposed in the South West did anything other than simply assemble groups of upper tier authorities.

One alternative to administrative areas is to consider 'city regions' which undoubtedly have a much stronger foundation as functioning economic units. However, a distinction needs to be made between these and the 'Travel to Work Areas' of other significant urban areas. This difference centres on the cities concerned having a particular relationship with each other and with non-core cities within their regions. For the South West, only Bristol has the potential to meet these criteria. Even Bristol, however, is not always included in the list of English city regions.

The main contention of those advocating a FEMA approach is that separation of related economic development responsibilities by non-economic boundaries will lead to a planning mismatch and sub-optimal outcomes. For example, creating the space and conditions for employment activity may fall to an urban authority while impact of the housing demand thus created may fall on its more rural neighbours. If the two are not carefully choreographed, one may have empty offices and/or the other may have empty houses. Whilst it is clearly important to understand and articulate these asymmetries of economic cause and effect, this is not necessarily going to be helped by trying to define a set of boundaries, however fuzzy, at the start.

This is because there are as many economic geographies as there are economic issues and most variables disperse or decay from a concentrated centre rather than arrive at a distinct boundary. FEMAs, therefore, are no substitute for careful consideration (by LEPS, local authorities or other areas) of the spatial dynamics of each and every economic issue they need to address.

54 Spatial Economic Analysis Tool www.swo.org.uk/local-economic-development/functional-geographies/spatial-economic-analysis-tool/

55 BIS / CLG letter to local authorities inviting LEP proposals, 29th June 2010

Places - Key Messages and Implications

It is important to recognise the spatial differences that occur across SW England with respect to all economic characteristics. The region, however, can not be neatly parcelled into a straightforward, alternative economic geography.

That said, there are some broad generalisations that can usefully be made. For example, the north and east of the region are much more like the 'greater south east' than the more peninsular west.

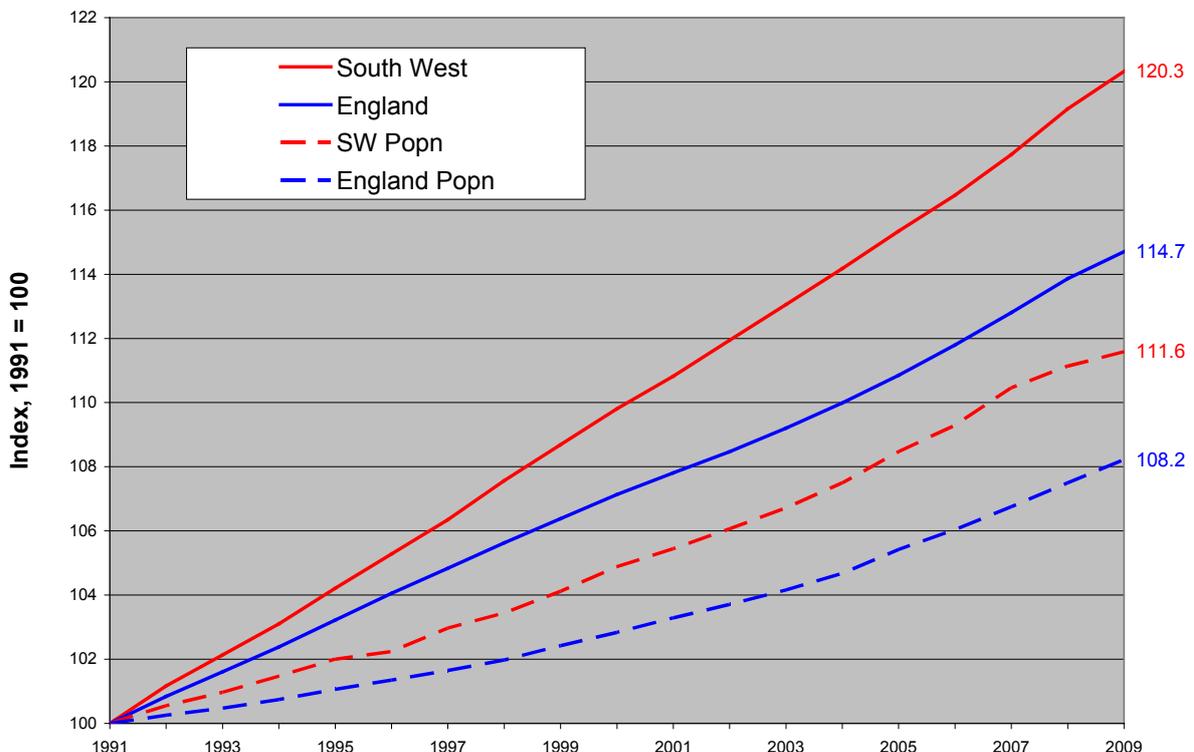
Bristol does function well as an agglomerative 'city region' in close relationship with its neighbouring authorities. Bournemouth-Poole has been comparatively vibrant in several respects. Plymouth has displayed both strengths and weaknesses. Cornwall has benefited from sustained policy intervention over recent years. In contrast, the "soft" centre of parts of Devon, Somerset, West Dorset and South Wiltshire has found it hard to maintain relative status.

Contextual Factors

The foregoing parts of this Chapter have presented a summary of what is known about economic performance. In the main, these were things that could be measured in monetary terms and/or that displayed the characteristics of the principle economic actors: workers and enterprises. This section looks at some of the more contextual issues that, whilst still closely connected to the economy, are not necessarily the direct focus of economic development policy and action.

What we know about contextual issues in the South West

- The South West is one of the least developed of the English regions in terms of land use, but the differences are not all that great. Outside of London, in 2005, 'green space' accounted for between 87.2% (SE) and 92.8% (NE) of the land area, with the South West coming in at 92.6%. It is comfortably the least densely populated English region with 2.1 persons per hectare and, on average, each person accounts for 183m² of domestic buildings and gardens, the most generous residential allocation in the English regions.
- In the 20 years to 2008, some 12,500 hectares of land, an area equivalent to one twentieth of a percent of the total land area, had its land use changed to 'residential'. Although this may seem fairly inconsequential to overall land use, it represents a significant increase in the area of residential land. Over the period 1991 to 2009, the number of dwellings in the region increased by 20%, while the total population increased by only 12%, see Figure 2.21. This differential between the region's growth in dwelling numbers and the growth in resident population mirrored the differential seen across England as a whole and equates to an implied fall in the number of persons per dwelling of about 7%. This, of course, simply compares the stocks of each and takes no account of factors affecting actual usage - for example trends in second homes and unoccupied dwellings. Furthermore, there is an element of 'catch up' in the figures. Arguably, the region still has not made up the housing "gaps" between aspiration affordability and supply in the SW housing stock.



Source: South West of England RDA

Figure 2.21 Growth in dwellings, 1991 to 2009, SW and England

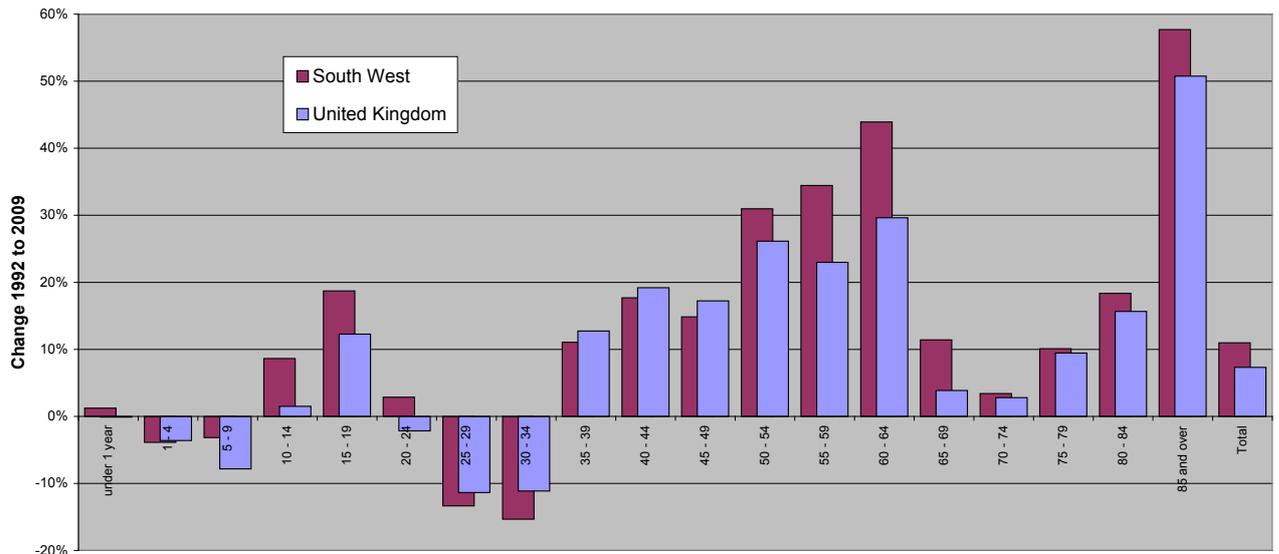


Figure 2.22 Population growth 1992 to 2009, SW and UK, by age band

- Strong population growth has been a characteristic of the southern and eastern parts of the United Kingdom, with the 'Greater South East' and the East Midlands all seeing overall increases at least matching the 11% seen in the South West between 1992 and 2009. This is in marked contrast to Scotland and the northern regions where the total population growth has been close to zero. Figure 2.22 shows the change for different age groups in the region, most notably the 30% to 40% increases in the older working age bands and the huge increase in the number of people aged over 85. This has changed the balance in the region's core working age group, 20 to 64, with the over-fifties' share rising from 28% (UK 26%) in 1992 to 34% (UK 30%) by 2009 and a corresponding fall in share of 24 to 35 year-olds.

The contribution to the labour force from older workers, aged over 64, has changed markedly in the last five years, with South West England at the forefront of these developments. In 2005, 7.7% of people aged over 64 in the region were economically active (UK 6.4%) representing 2.7% of the work-force (UK 1.9%). By 2010, the figures for the region were 10% economically active accounting for 3.6% of the work-force, compared to 8.1% and 2.5% for the United Kingdom overall. Of the 126,700 net increase in the work-force in the region over this five year period, 27,700 - over one in five - came in the over 64s age group.

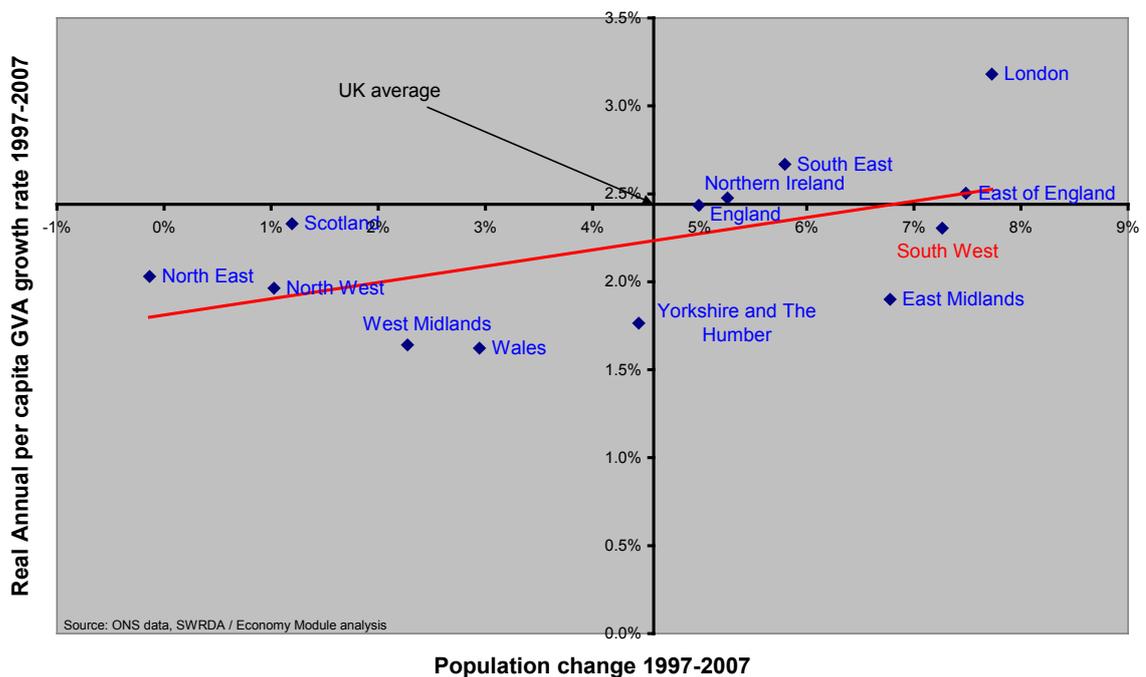


Figure 2.23 Population growth and GVA per head growth, 2007-09, GORs

There is a strong positive correlation between population growth and per capita output growth with regions that are succeeding in attracting inward migration also performing relatively well economically, see Figure 2.23. Interestingly, this strong relationship is not evident at the sub-regional level indicating that commuter effects tend to disassociate population and productivity growth.

The limits of our knowledge of other issues

The other key contextual issues largely concern 'externalities': that is the consequences of economic activity that are not fully reflected in market prices (as discussed in Chapter 1 of this document). There are two categories: human well-being and environmental well-being, and their interactions. The evidence and understanding available to describe these issues and their dynamics is probably in inverse proportion to their importance. However, what evidence we do have suggests that there is a widening gap between the comparatively low amount of emissions the region is directly responsible for through production and those it is indirectly responsible for through consumption. (The latter is arguably some 50% greater than the former.)

Contextual Factors - Key Messages and Implications

The region's economic performance is very largely determined by developments and trends beyond its borders but there are two endogenous contextual factors which do play a very significant role: population and land use.

The economy's strong overall growth has been possible because the population has been able to grow. Less obviously, there is a strong correlation between this and productivity growth at the regional level: regions with weak population growth have lost ground on productivity too.

The quantity and, to at least some extent, the quality of growth is constrained by the potential and willingness to accommodate an expanding population. As the least densely populated of the English regions, it is surprising that this constraint has been important for SW England.

Within the SW population, there has been a huge shift in age balance towards the 50 to 64 age group. In the next fifteen years, this bulge will move into retirement; a change that will dramatically affect labour supply and the nature of demand in the region.

Chapter Three

Forward Analysis

In this Chapter, we consider what might be a realistic framework for South West and local economic performance over the next decade or so.

We do this with reference to economic fundamentals, historical trends, our recent growth scenarios work and a brief synopsis of global and other trends likely to influence development over this period, such as ageing, greening, digitalising, and market rebalancing.

To this end, the Chapter is divided into three short sections:

- Performance Framework
- Growth Scenarios
- Influencing Trends

Performance Framework

A key aspect of our understanding of economics foresight is about how to assess absolute and relative performance objectively against a moving background of policy change, structural adjustment and cyclical uncertainty.

In theory, it is easy to identify the factors that need to be assessed if economic progress is to be judged. Many of those factors have already been explored earlier in this document, i.e. those related to growth and productivity (Chapter One) and, thereby, employment, incomes and wider well-being.

In Chapter Two, we saw how many other variables influence these performance measures, ranging from macro economic factors through sector specific, place, and people elements of activity and business churn. This section re-examines the main ones for the economy as a whole rather than the investment specific elements that are covered in detail in other parts of the Agency's legacy portfolio.

For any spatial or sector definition, however, it is difficult to isolate cause and effect for programme interventions in terms of impact and outcome – even ex post. It is also difficult to agree optimal time frames for measurement of these results, especially if, ex ante, an adequate appraisal, monitoring and evaluation process has not been agreed and implemented.

Elsewhere in the legacy portfolio, there is discussion of the need for longitudinal studies that estimate net additional impacts over time for development initiatives. We do not repeat these arguments or details here. What we do consider is how more fundamental economic progress might be viewed, ex-post

Table 3.1 below shows long term trends in the key variables of economic performance for SW England compared with other English regions outside London. It shows:

- Growth averaged 2.5% (compound in real terms) broadly in line with peers elsewhere, leaving our relative position unchanged
- Productivity grew by nearly 2% per annum in real terms with the region's ranking in terms of GVA per hour rising from seventh to third over the period – this significant change reflected a good performance by the region as well as structural changes in other regions
- Employment grew at almost 1% compound per annum, reflecting both total hours growth and fewer hours worked per person – note that because of the South West's comparatively high part-time workforce, the total number of people employed in the region is closer to 2.5 million
- Well-being remained comparatively high with SW England ranking first in 2008 – it is notable that RISEW per head grew at a faster compound rate than the more straightforward economic performance measures over this decade.

Variable	Definition	Level (£ or no)		Real rate (av ch)	Rank (of 8)	
		1998	2008	CAGR	1998	2008
GVA	Current prices (£bn)	58.7	97.3	5.2%	5	5
	2006 prices (£bn)	71.2	91.3	2.5%		
GVA per head	Current prices (£'000)	12.1	18.7	4.4%	3	3
	2006 prices (£'000)	14.7	17.5	1.8%		
GVA per hour	Current prices (£)	15.1	23.6	4.6%	7	3
	2006 prices (£)	18.3	22.2	1.9%		
FTEs *	Number (mn)	1.95	2.13	0.9%	5	5
GDHI	Current prices (£bn)	49.6	76.5	4.4%	4	4
	2006 prices (£bn)	55.6	72.1	2.6%		
GDHI per head	Current prices (£ '000)	10.2	14.7	3.7%	3	3
	2006 prices (£ '000)	11.5	13.8	1.9%		
RISEW	2008-09 prices (£ '000)	53.2	75.3	3.5%	4	3
RISEW per head	2008-09 prices (£ '000)	10.9	14.5	2.8%	2	1

Table 3.1 Measures of SW Economic Performance 1998 - 2008

* total regional hours divided by national average actual hours worked in each year.
CAGR = compound average growth rate

It is in comparison with these relative historical achievements that we need to consider potential performance outcomes in the future. We now approach how to frame these variables looking forward.

Growth Scenarios

Fundamental to thinking about future growth potential are four main areas of analysis:

1. The current capacity of an economy to develop from observation
2. Historical performance and projection of that performance forward
3. Forecasts based on some idea of the theoretical or econometrically established relationships between key variables through time
4. Target deviations, from both history and projection, on the basis of foreseeable change, investment plans and aspiration.

Economic Capacity

The first of these can be assessed in a number of ways, as identified through the previous two Chapters of this document by reference to the growth process and as revealed in the relationship of inputs and outputs; productivity and its drivers.

This can be considered academically in respect of concepts of productive capacity given current labour and capital stocks and the current state of the **output gap**: the difference between what the economy could produce and what it is producing in a given time period. After the downturn of 2008/9, for example, there was considerable debate about the extent of the UK output gap, how it was depreciating with time (through hysteresis – the process by which unutilised resources lose productive potential) and how quickly the gap would close, raising inflationary pressures, once recovery became sustained. (The OECD estimates that the UK output gap moved from +2.6 in 2007 to -5.0 in 2009.)

During the long expansion up to mid-2008, many commentators estimated that the **UK underlying trend rate of real growth** – the rate at which the UK economy could grow year-on-year without causing capacity and inflationary issues – had risen from a post-war “norm” of about 2.0-2.5% to a new range of 2.5-3.0%. Within those bands, there was considerable discussion of what the point estimate should be assumed for policy and other analysis.

To a large extent, the detail of these technicalities need not detain us. The important point, however, is that even small changes in the underlying trend real rate of growth have an important affect on employment and income prospects, as well as the consequences of particular monetary and fiscal policy decisions and other planning and development initiatives. If an economy can grow without strain (e.g. with respect to concepts such as the non-accelerating inflation rate of unemployment - NAIRU) at 2.75% over the medium to long run, this implies a very different future, against the background of other social, political and environmental factors, than if it can only manage 2.25%.

Since the recession of 2008 and the election of a new government in 2010, the UK Treasury and other bodies have revised downwards their views about the UK’s underlying trend rate of growth. At the time of writing, the new Office of Budget Responsibility believes a rate of about 2.35% is appropriate but suggests that the ageing population may cut this to 2.1% after 2014. This is in marked contrast to the 2.75% being used in the latter stages of the last decade by the previous administration.

For what it is worth, based on a judgement that the latter proved unsustainable, leading to some key market distortions, and the former is too pessimistic, failing to recognise people’s ability to be entrepreneurial and innovative to overcome the effects of a significant adjustment, our view is that both of these estimates are biased. The reality may lie more in a 2.25% to 2.75% range per annum once the economy regains sustainable momentum.

The **SW economy** has had periods when it has found it difficult to achieve the UK trend rate and other periods, especially before the most recent downturn, when it tended to exceed average UK performance (3% plus per annum was not unusual in the 'noughties'). In both cases, however, the under or over-performance was not that marked. As the table above showed, the SW real growth rate for the 1998-2008 period was 2.5% per annum compound. This compares slightly better than the UK average of 2.4% per annum.

The question then is whether we can expect this relative position to be maintained going forward. Since SW England has suffered slightly less than most in terms of under-utilised labour resource during the latest downturn, it might be assumed that our hysteresis factor is less than average. On the other hand, the downturn has yet to run its course. The public sector recession, in the offing as we write, could affect this region more than others, depending on particular decisions as yet unspecified about defence, local authority and other expenditure cuts and closures.

At this point, given the continued uncertainty, it is probably sensible to assume the historical pattern of the relationship remains broadly intact over the long term and to use this for projections.

In the longer term, a range of policy factors will influence SW development trends. To mention a few, without development, these will include reforms to public services, benefits and pensions; changes to EU convergence and competitiveness funding; movements in tourism tastes and patterns related to new realities for real incomes and costs; and shifts in the relative attractiveness of the region for new foreign direct investment and retention. These influences must be factored in, once any projections are completed (see later in this Chapter).

Performance & Projections

Economic projections are based on the continuation of a trend in one or more variables forward in time. They do not require a detailed, dynamic understanding of the varying linkages between factors over time as specified by some complex model of the economy. Essentially, projections are an extrapolation of a variable, such as growth, based on the past behaviour of that variable alone.

We have been using projections of SW economic performance for many years; both in relation to specific development of various regional strategies and in our assessment of investment in particular projects and programmes. As well as our direct investments in sector and place, this has influenced, for example, the SW Regional Economic Strategy, for which the Agency was responsible on behalf of all regional partners, the SW Regional Spatial Strategy, in which we supported other duly responsible partners, the SW International Trade Strategy, and the SW Tourism Strategy.

It is important to note that projections tend to be made for a particular use and should not be used for other needs unless their assumptions and foundations are consistent with the new need.

By their nature, projections should be based on as long a history as possible. For example, a simple projection from early 2009, in the depths of recession, is unlikely to be much use as a benchmark for the next ten to twenty years because it is likely to under estimate capacity for growth over the long economic cycle.

Similarly, a projection based on data going back fifty years, is also prone to error because it will incorporate periods of major structural change that will have affected the economy. These changes can be policy related – e.g. the shift from fixed to floating exchange rates in the 1970s or the switch to predominately anti-inflationary central banking from the 1980s – or they can be business driven – e.g. moves towards 'just-in-time' stock management or the mass adoption of digitalised processes. The biggest change for projections to accommodate in recent years has come from the 'globalisation' process: the opening up China and India (et al) to integration and convergence in the world economy.

It remains a matter of informed judgement as to what the appropriate historical timescale is for a specific economic projection. For UK regional and local economics, however, the choice is limited in practice by the lack of a very long, consistent statistical basis for projection. The limited historical record behoves us to be very careful in projecting and to be humble about the probabilities we attach to any point results.

Nevertheless, projection gives us a vital benchmark against which to assess spatial economic progress. If we can accept a projection (understanding the assumptions that have driven it) as a useful benchmark, it can help us to assess when and why the eventual outturn has deviated from that, ex ante, projection. It can enable the development community to understand how its interventions have influenced outcomes by requiring an appreciation of the other trends and processes that have affected events, ex-post.

For example, in terms of comparative levels and growth in GVA per head through the period 1998-2008, there is a marked contrast between the advance made by Cornwall (from a low base) and the relative retreat made by Plymouth and Torbay (see chart 3.1 below, which shows the marked difference in these comparative indices over ten years).

These areas have structural economic differences and, in each case, we can find unique events in the business churn that explain some of their history. For example, Plymouth and Torbay have both experienced the negative consequences of the closure of capacity from former foreign direct investment and, in Plymouth's case, a number of defence related contractions.

One of the explanatory factors, however, is likely to have been the direct, indirect and induced effects, not least in terms of buy-in and aspiration, of public investment (UK and EU) and the other, catalytic activity brought forth by the resulting change in perception from private investors. In absolute and relative terms, development spending was much greater in Cornwall than in the two urban areas of Devon during this period. For the former, this has helped to leverage in significant other private development activity.

The detail behind the GVA figures confirms that not all of the differentiated performance shown in chart 3.1 was down to public investment. Some of the differential economic effect reflects an element of 'catch up' and a stronger 'housing boom' in Cornwall, but this does not negate the argument. (This, not least, because we can not isolate cause and effect for some of these variables – is the housing boom a driver or an outcome of other publicly funded development?) Given the same UK and SW macro-economic background, the main difference across the peninsula was the difference in development spending by the public sector, which may have introduced some distortion, such as 'boundary hopping' by firms.

Against this background, therefore:

- How do we project relative Devon and Cornwall performance going forward?
- Do we use the 1998-2008 period as our benchmark or do we try to get a longer baseline?
- Are the trends evident in this period enough to suggest lasting structural change or could they prove unsustainable?
- Can we assume similar differentials in development effort in the future or do we factor in lower spending by the public sector and private rebalancing?
- Can we make assumptions about the relative efficiency and effectiveness of public versus private investment?

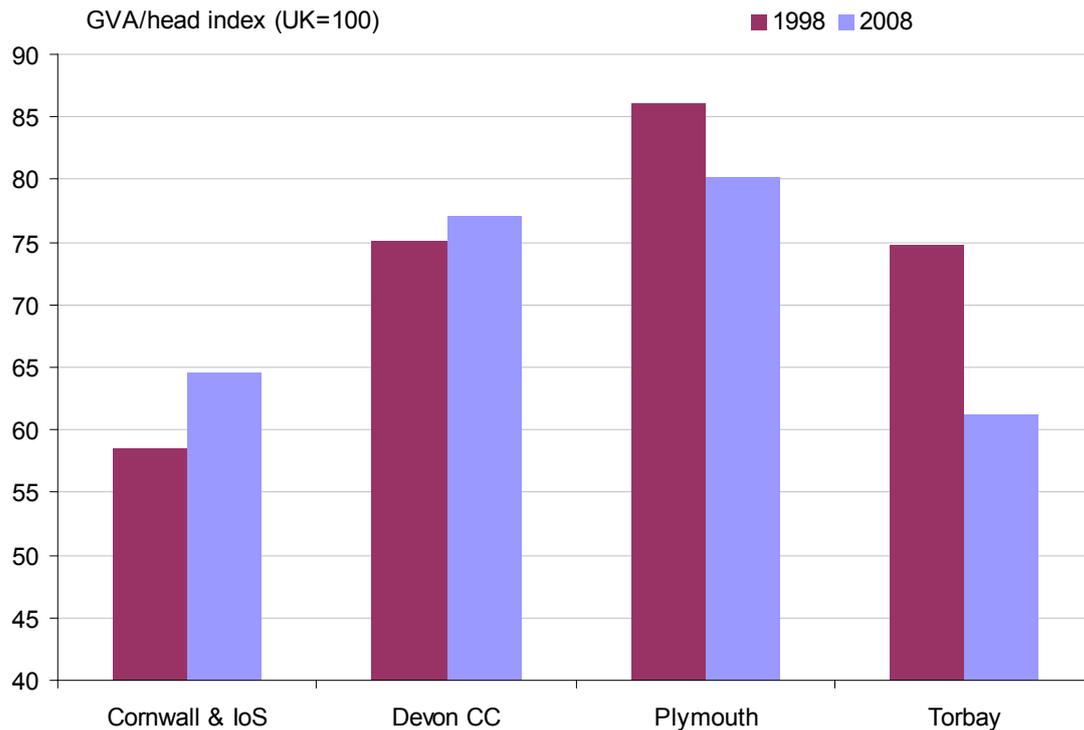


Figure 3.1 Contrasting SW fortunes: Comparative GVA per head indices 1998 & 2008. Source: ONS data, South West RDA representation

As soon as we consider these questions, we can see how simple extrapolation of the recent past needs to be considered against a number of important assumptions. It is impossible to remove the element of analytical informed judgement from even the most sophisticated quantitative model of the sub-regional economy.

Our latest set of projections can be found, in detail, at our usual websites. Based on the consensus view compiled by HM Treasury for the short term and the historical record for the long term, the key messages from these for the period 2010-2015 are:

- The SW economy may grow slightly faster in terms of output and slightly slower in terms of employment than other regions but, overall, less quickly than before the downturn
- The region's relative score slips a bit, but not its rank, reflecting the Greater South East's status as still the centre for growth in any current UK projection
- Industrial rebalancing may be modest without active change - production, construction and private services will lead the recovery and the needed economic rebalancing
- The balance of growth within the region will remain focused in the north and east, rather than the "soft" centre
- Cornwall's "out-performance" may wane as public investment moderates but it will still be moving forward – one of the three highest productivity growth places – the others being South Gloucestershire and North Somerset
- At the opposite end of the spectrum, with falling productivity growth, will be Plymouth, Torbay and Bristol City (acknowledging that this does not mean the whole Bristol City Region and structural change within it over time).

For the longer term, 2015-30, the subdued economic performance of the near term is, if anything, prolonged.

Table 3.2 below summarises some of the main growth figures for the region, showing the adjustment downwards from pre-downturn history.

Average % change	2010-2015	2015-2030	1995-2005
GVA	2.5	2.4	3.2
GVA per head	1.6	1.5	2.6
Employment (FTEs)	1.5	1.1	1.8
Productivity	1	1.3	1.4

Table 3.2 SW growth projections end 2010. Source: SW Economic Projections for South West RDA

Average % change	2010-2015	2015-2030	1995-2005
Bath & North East Somerset	0.4	1.1	1.2
Bournemouth	1.2	2.7	0.7
Bristol	-0.3	0.1	1.9
Cornwall	1.9	1.4	0.5
Devon	1.1	1.1	0.4
Dorset	0.8	1.6	0.6
Gloucestershire	1.1	1.6	2.4
North Somerset	2.2	2	3.8
Plymouth	-1.1	-0.4	-0.2
Poole	1	2.2	1.8
South Gloucestershire	3.1	2.3	1.6
Somerset	1.4	1.6	1.6
Swindon	0.9	0.7	3.2
Torbay	-0.8	-0.8	-0.2
Wiltshire	0.7	1.5	1.8

Table 3.3 shows the productivity data for some key sub-regions. Source: SW Economic Projections for South West RDA

This benchmark evidence shows us the scale of the task in rebalancing the SW economy if it is ever to return to reasonable job and income prospects for most SW citizens over the next twenty years.

To assess future performance, then, one method is to compare outcome with projections over time. Importantly, however, it is necessary to revise projections regularly, but not too frequently, to account for new information about how the economy is operating and changes in its potential. This leads us into a consideration of the difference between projections and forecasts and the effects of policy intervention and aspiration.

Forecasts & Models

Economic projections are extrapolations of the past. Whether they are simple linear models of progress or some more complicated geometric or other mathematical relationship, they are based on the view that the best predictor of the future is revealed by the trend of the recent past. For many economic variables, this assumption is robust enough for most uses.

Forecasts, on the other hand, whilst retaining a necessarily high time series element, are based on some insight or assessment of how much the future will be different from or the same as the past. History is an important guide but economic theory, policy analysis and other factors may need to be incorporated to produce an econometric or other modelling forecast of where the eventual outcome is believed to lie.

The key difference here is that forecasts of growth, for example, incorporate some understanding of the variables that cause the projected growth rates to move over time. Rather than just project the growth trend from the past, it includes some intuition about how growth rates are affected by variables such as the factors of production (labour, capital etc), technological change, intangible drivers such as entrepreneurial or work ethics, institutional factors of regulation and law, and economic policy.

Some of these factors will be 'given' in the sense that they change infrequently, whereas others are themselves bound up in the dynamics of economic change. To capture these dynamics, many forecasters use an econometric approach built on regression analysis of statistical time series that try to capture known and potential cyclical trends and structural change.

Such models are common at national level but less common at regional level. Moreover, many so-called regional models are little more than national models shoehorned into regional form by reference to some simplistic characteristic, such as labour, sector or occupational shares. Private companies sell the outputs of their proprietary models but few users know much about the "black box" that lies at the heart of the model. Perhaps, this is efficient. We can drive a car without knowing how the fuel injection system works. Nevertheless, it is essential for the results of such econometric modelling to be interpreted carefully. Economic relationships are not exactly fixed over time or, more importantly, over the spectrum of experience. There is no value in accepting the numbers generated by econometric models without analysis and judgement of what drives those numbers and what they imply for future development.

In South West England, we have worked with academic experts to develop the SW Regional Accounts as an input-output model of the regional economy. This describes the structure of our region's economy and assesses the impact of changes upon its constituent parts. On this foundation, technical experts have built, and use on our behalf, a Combined General Equilibrium model based on the Accounts to produce our projections, forecasts and simulations. These have been crucial to our understanding of the SW economy, investment appraisal and evaluation, and framing our views about the future.

Investment & Aspiration

After forecasts, we need to incorporate aspiration. It may be a reflection of a desired strategic or policy outcome based on planned interventions that are designed exactly to change the projected trajectory. In this sense, a forecast becomes a target.

It will be for others to set some of these parameters going forward, particularly at a sub-regional level. We provide, nevertheless, three relevant scenarios for the SW economy based on the culmination of our research into history, current trends and our professional views about the future.

Recent history shows the SW region recorded a strong economic growth performance during the long expansion of 1992-2008. Indeed, in the later years of this period, SW real growth often exceeded 3% per annum. The recession of 2008-09, however, re-opened both regional employment and output gaps and threatened some hysteresis.

Accepting the uncertainty about the quantum of these effects, the question is what are the realistic boundaries of future growth on the basis of the factors that will drive that growth? These variables, as discussed throughout this document, are chiefly labour supply components, productivity changes and resource use issues.

This form of analysis can lead to a stylised framework, which sets out the likely boundaries for modelling SW growth in the period ahead.

- “Recovery with loss”. SW real growth recovers to a long term sustainable rate of about +2.25% per annum but does not make up all the potential for activity lost in recession. Labour input grows at a slower pace than in the pre-recession boom, productivity recovers but remains rather modest, and resource use is held down by efficiency gains.
- “Full recovery”. Growth recovers to the pre-recession rate of about 3% per annum and does make up the potential activity lost in recession. All three drivers increase at faster rates than in the central view with a rough balance between productivity and labour use and some increase in resource use.
- “Restricted potential”. The economy suffers a permanent loss to both the level of activity and to its growth potential, which falls to 1.5% per annum: resource use declines, productivity growth is constrained and employment growth is much more subdued than before.

Figure 3.2 shows the real SW GVA possibilities that emerge from this type of analysis, using sensible estimates of alternative ballpark outcomes driven by objective assumptions about demographic and technological change. It does this by reference to the known historical record and current received wisdom, as evidenced by the SW Regional Accounts and related modelling and other econometric relationships of regional economic and environmental impact.

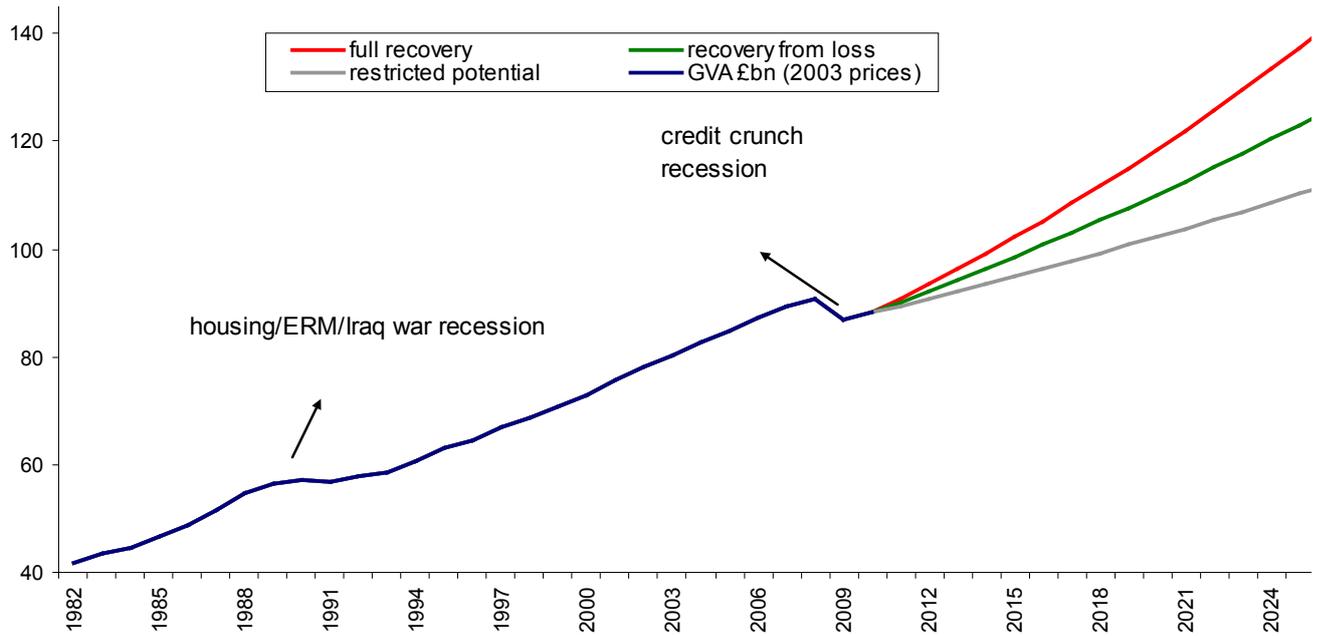


Figure 3.2 Alternative SW growth paths after the recession (real GVA £bn).

In reality, of course, the future will not follow any of the lines shown in figure 3.2. It is possible to forecast more year-by-year fluctuations in trends, which would almost certainly lie mostly between the red and grey lines and involve some cyclical element over time. This would be a brave ‘hostage to fortune’ in this document and is not pursued.

Also, it is vital to stress that the rates shown in the chart combine elements of projection and forecasting but do not take the final step to be targets based on investment or aspiration. For example, the region’s authorities might aspire to achieve a different growth trajectory than those shown via higher labour productivity and less resource use.

The number of potential scenarios based on alternative aspirations is, of course, very large. Before heading down that road, however, it is vital to establish the benchmark, as represented by the ranges considered here, from which debates about future strategy and action can progress.

To summarise this section then, we can envisage a table such as Table 3.4 below, which captures the four elements of foresight. Here, we stick to our concentration on the growth variable at a regional level but, ideally, you would want to duplicate this format across a range of variables and geographies.

Average % change	Projection	Forecast	Target
2010-2015	2	2.2	2.3
2015-2020	2.3	2.6	2.7
2020-2030	2.4	2.4	2.9

Table 3.4 Stylised SW real growth futures. Source: SW RDA Economics

In simple terms, the 'projection' starts from the reality of the recent downturn and moves back to sustainable capacity further out. The 'forecast' incorporates views about structural change, cyclical volatility and variable interaction. The 'target' incorporates aspiration as a result of technical change, investment potential and policy change.

We ascribe no reliability or probability to these figures. Future agents will need to adopt their own views. Being broadly in line with the equivalent offerings of other authorities, however, they should provide a benchmark from which to judge local development reality and evaluate local development intervention.

Influencing Trends

Finally, we need to recognise that the accuracy of historical understanding, projections and forecasts in postulating outcomes will be affected by the broader economic and non-economic factors at work in the world. This section covers four key areas where change over time is likely to affect development outcomes over the next decade or two.

It is easy to be too simplistic about these processes and, unfortunately, we have neither the time nor the remit to give such large analytical areas the detailed coverage they deserve.

Moreover, there are important feedback loops between the various economic markets and constructs and the change factors identified here which need to be understood in making economic foresight. All we can do in this document is flag emergent trends and suggest future economic developers carefully consider these factors in specifying and analysing future strategy and delivery.

Demography

Population dynamics, specifically the ageing and migration patterns of active and non-active people and how they relate to employment and skills, wealth and well-being are important aspects of economic development at all spatial levels and in all eras.

The latest official estimate (ONS) of the SW population is 5.231 million in 2009. Between 2011 and 2030, this total is expected to grow by 0.78% per annum to 6.2 million. This year, 19.9% of the SW population is estimated to be over 65 years old compared with 16.7% for England as a whole. By 2031, the SW rate is expected to rise to 26.3% compared with 22.0% for England.

Within the SW region, there are significant variations in age distribution, from Bristol at 12.3% over 65s this year to Christchurch (30.3%) and West Somerset (30.5%). Over the next twenty years, the Bristol ratio is projected to reach 13.1% with West Somerset at 42% and West Dorset (39.7%).

These official estimates suggest an increase in the total population that exceeds that of the working population. But, the potential working population itself could be 9% bigger and, with a shift to more extended working patterns, this could go above 10%.

These trends represent stark consequences for demand and supply structures across the region and will be important elements of economic development in many areas, including labour and housing markets, tourism and other service sectors, community development and productive change.

In the foreseeable future, then, known demography suggests SW England and many of its parts face a continuation of the move to a larger total population with a higher age distribution.

These demographics are likely to represent both strengths and weaknesses for SW sub-national development in the coming years. It is difficult to foresee exactly how all the interlinkages between economics and demographics will play out but the implications of not planning for such developments will be profound. For example, there is a causal link and series of feedback mechanisms between economic growth and economic inward migration from the rest of the country, and land supply for housing and for employment use.

Environment

Climate change and the related areas of energy resilience and resource depletion and conservation are important economic drivers in their own right. SW England, through various strategies, has long argued that its "environment" is a key component of its production function, competitiveness and broader well-being.

A few key facts can help us understand the importance of these issues:

- The South West is behind the average on renewable energy generation relative to economic activity. Electrical generating capacity from renewable sources in 2009 was 1.76 kWe/GVA (£million) compared to an England average of 2.84 and a UK average of 6.34, showing the greater renewable drive in Scotland and Wales.
- Electricity generated from renewable sources was 6,466 kWh/GVA (£million) compared to averages of 11,090 for England and 19,994 for the United Kingdom.
- The region had 133 sites generating renewable electricity in 2009; some 14% of the England total. The 632.7 GWh produced was only 5% of England total and the 172.5 MWe generating capacity was only 6% of England total.
- Environment technologies were worth £1.7 billion to SW economy in 2009 around 8% of the GB total. Overall, these industries have grown 30% since 1998 and now employ 27,200 people: 8.5% of the GB total and 17% up from 1998.

Part of the economic rebalancing that needs to occur in the years ahead will relate to the adaptation, mitigation and prevention of a range of environmental "bads", such as negative climate change externalities, and the promotion, incentivising and capture of environmental "goods", such as renewable energy capacity: another clear case of both opportunity and threat for the SW region and its parts.

Therefore, it would be surprising if energy and other environmental technologies did not comprise a source of growth and development for SW England. Moreover, environmental (and related technological and policy) changes over time could be important for a number of key SW activities, including amongst others tourism and leisure, food and drink, utilities, transport and aerospace.

In terms of market demand and supply trends and in relation to wider well-being and lifestyle, the environmental driver of SW development can be expected to become more important, not less. This will relate to the ways climate change will affect and be affected by growth and mitigation efforts. It will also relate to the development of energy flows and costs and other potential resource shortages (including water and farm land).

Technology

Technological change is always an important engine of growth in the economy. It has three key aspects to it:

- Technological changes that improve existing market processes and supply chains
- Technical change that replaces existing systems and activities with better alternatives and
- Technology that is genuinely "new", creating previously unknown patterns of demand and supply.

It is difficult to identify winners and losers in advance but, in each of these categories, one would expect to see, in the years ahead, further advances in process and creative digitalisation, renewable energy and transport, and bio-chemical services. These are all areas that SW businesses, universities and localities will want and need to be strongly engaged.

The process of creative destruction is unlikely to lose its speed and efficacy in the years ahead. The question for development, then, is whether we have the institutional and other dissemination processes in place to bring innovation to market and to the workplace competitively by time and through space. This is likely to mean collaboration between and within sectors and the skills markets to build innovations and their application to the market in a way that enhances local competitiveness. Arguably, the northern part of the region is better, indeed well, placed to benefit from technological innovation.

Rebalancing

The economy itself is likely to face further structural and cyclical revolution in the years ahead. Globalisation, and the consequential entry of several large emerging economies as leading players in the world economy, has only begun to run its course.

This massive addition to global capacity brings positives and negatives for all of us.

- First, whilst it cuts the market share of the developed economies like the United Kingdom, it grows the total market and offers new niches of export-led development. In turn, this has externality, environmental impacts on resource use, waste and depletion.
- Second, in the short term, it exaggerates unsustainable imbalances between "surplus" and "deficit" countries, affecting financial flows and raising the risks of "boom and bust" leading to liquidity, debt and default crises. The world needs to consider how it will prevent the imbalances that have caused the recent prolonged downturn and raised the risk of sovereign default in Europe from persisting.
- Third, it affects the policy debate, raising fears of protectionist mercantilism in some countries, affecting fiscal planning and leading to monetary profligacy.

Many countries, regions and localities will have to address the issue of economic rebalancing going forward. In SW England, and particularly outside the more productive and export-orientated northern arc of the region, recent growth has been driven largely by domestic demand from Government and consumers. For some time, it is likely that both these sources of growth will be, at best, dampened, and, at worst, negative.

At the time of writing, the UK Government is engineering a fiscal withdrawal, shrinking the state in the economy. At the same time, household discretionary spend is under pressure from employment loss, real income declines, negative wealth effects (notably housing price declines) and inflationary non-discretionary costs. In due course, this will allow the private sector to be 'crowded in', changing the economy's demand structure, but that process will need to be focused on more on investment and trade than domestic consumption.

The SW has lagged other parts of the country and the wider EU historically with respect to investment and trade. Rebalancing growth in that direction is a significant aspect of forecasting and, more importantly, is the main challenge for SW and local development in the next decade or more, especially if the region fails to capture the relative funding or attention it needs for significant infrastructure (energy, transport and communications) improvements that affect inter-regional competitiveness.

Conclusions

Conducting long-term forward analysis for economic development is a complex process based on the understanding of trends and structures, policy initiatives and strategy, as well as assumptions about global economic and socio-environmental factors. In this regard it needs to consider historical performance, known capacity changes, investment plans and aspiration, and other quasi-economic trends.

There is a need to distinguish between projections and forecasts and to identify realism in assumptions. It is important to recognise the limitations of any forward analysis but also to appreciate the value of achieving an accepted, ex ante, benchmark against which to measure, ex post, outcomes.

We believe the SW economy has a good recent record of economic change and development, helped by both public and private investment. It is also clear that the imminent 'age of austerity' brings strong opportunities and severe threats to the region as it tries to re-balance activity from domestic consumption to competitive investment.

Further out, there is no reason why the requisite structural and cyclical changes can not be made to enhance productive capacity in a sustainable fashion. It is for others to pursue this goal - to collaborate in order to compete - in the years ahead.

Chapter Four

Key Messages

This document has tried to express some of the learning that we have assimilated about the economy of SW England, relating it to economic theory and the application of development practice. In this final Chapter, we bring together some of the key messages from this analysis.

Foundations

The foundations of economic development rest on three things: respectable theory, robust data and realistic forecasts.

For the South West, the world of economic development shifts constantly in the winds of economics trends and the tides of political fashion. Regional and local development exists against a turbulent backcloth of political and social change. Those on this journey need three things: first, a vehicle that can weather inconsistent expectations; second, good maps against which to stay en route; and third, a strong but flexible driver.

The applied theory of economics provides the vehicle. Without an objective consensus as to what drives growth, productivity and employment over time, development will be distracted by the latest half-baked conjecture as to what will bring better jobs and sustainable prosperity.

A deep understanding of the South West's economic structure and history provides the map. Without insight into the sector, business and geographical structure of a sub-national economy and without knowledge of its performance through time on the key variables of competitiveness, development professionals will be ill-equipped in terms of realistic aspirations and decisions for investment and impact.

Sensible consideration of a range of future trends provides the steering that will negotiate the unforeseeable hazards (highs and lows) that will require a change of course.

Imperfections

These foundations are what we have covered in Chapters 1-3. In reality, however, one can not eliminate all the imperfections in the foundations.

- The emphasis on different aspects of applied theory needs to be flexible over both economic and policy cycles. For example, for most of the 2000s, the SW economy exhibited high employment and low unemployment in relative and absolute terms. In that environment, public sector intervention needed to be geared more to the productivity aspects of growth and investment in comparison with earlier periods, when direct job creation may have been a more appropriate focus.
- As indicated in the previous Chapters, many datasets are incomplete, unreliable and untimely at sub-national geographies, particularly at local level. The costs of identifying, capturing and disseminating consistent and regular local statistics is often prohibitive and frequently a low priority. The map tends to be rather incomplete.
- Fixing on specific point forecasts is almost a guarantee of error and lay the ground for disappointment. The steering needs to adjust to "events" if false outcomes are to be avoided and impact is to be evaluated fairly and accurately.

These imperfections mean there is a need for an experienced crew. Pursuing the economics of development is not a mechanical process. There are no ideal models that provide incontrovertible diagnosis and prescription to steer policy, delivery and outcome. Too many are 'black boxes' that follow the RIRO concept of "rubbish in, rubbish out".

Judgement

This means there is no substitute for having economists and researchers who understand theory, performance and foresight and can work with and interpret analysis for specialist users of development intelligence. Objective, expert judgement is a prime ingredient for best development practice.

- This judgement requires a degree of pragmatism with respect to the approach taken to the key variables and their inter-relationships over time. Inevitably, there is an element of iteration in the process and a need to embrace the 'multi-handed' approach of the applied development economist.
- Also, judgement requires an open-minded approach to the limits of truth. Sometimes, we find that what we thought we knew about the SW economy in terms of its structure, trends and relationships is contradicted by new evidence. Sometimes this evidence is itself debatable. The analyst, therefore, has to be able to judge continually the value of emerging evidence on performance and adjust the story being told accordingly when appropriate. Importantly, lots of data can be distorted or biased to a particular lobby. Fundamental understanding should only be sacrificed after detailed research into the provenance of regional statistics and other intelligence.
- Finally, judgement requires a willingness to accept change and diversion from the expected path or outcome. Economic forecasts are nearly always wrong and when they are right it is usually no more than coincidence. This does not mean the analyst should not try to look ahead – having some idea of where you are heading over the horizon is better than setting sail in a random direction. Nevertheless, some humility about the value and probability to attach to particular numbers within a forecast is always useful. The skill is in providing a story that fits the evidence, receives broad acceptance and can respond to the evolution of a dynamic economy.

Headlines

This brings us, without repeating the more detailed findings about performance outlined in Chapter 2, to some main headlines about the SW Economy: the few key elements that we would recommend future development actors to always keep in mind about this part of the world.

- First, the SW economy and its parts are linked intimately with national and international development and other spatial areas are never standing still. **It is difficult for parts of the South West to buck the wider economic trends without significant investment that transforms the productive and competitive base.** In most circumstances, significant progress in shifting the relative ranking of the region takes considerable time and effort, involving infrastructure changes, major inward investments or generational shifts in the skills and entrepreneurial culture. These are rare so there is a need to temper expectations: most progress is gradual, especially when caught up with inconsistent national investment decision making and delay.
- Second, the SW economy tends to perform close to the average relative to other parts of the United Kingdom but this can hide a wide variation locally. In particular, a north-south divide depiction of the English economy and adherence to purely historical administrative boundaries within any region is too simplistic. For example, excluding London, the variation in GVA per head within each English region is greater than the variation between the regions and the variation within the South West is greater than in any other region. **The reality of development is closer to a series of concentric circles radiating out of London with some smaller nodes in other major urban areas. The South West may only have one of these centres of strongly performing economic development, past and potential, in the Bristol City Region.**

There are a few areas where the region is quite different from some of its peers but not many. In particular, the peninsula and highly rural geography of the region and the low density and high age distribution of its population are important because they affect the economics of access, agglomeration and aspiration in this region in particular, but not necessarily unique, ways.

It may be important to concentrate on such differences in order to identify what might be done better, where the economy can be nudged in a new direction and where we can learn from “best practice and achievement” elsewhere.

Nevertheless, we are talking largely about comparisons within the same league. Apart from a few areas, such as the contrast between the weak SW trading performance and the flexible employment record, the differences should not be exaggerated. It is usually only a matter of degree.

For example, in global terms, we face the same issues of low productivity and poor investment as the rest of England. In English terms, we experience the same housing market distortions, the same transport and communication deficiencies and many of the same environmental and social issues as other regions. We exhibit similar issues with regard to skills and innovation, needing to raise our ability to foster their acquisition and dissemination for business competitiveness. Finally, whilst our population of businesses is skewed to the smaller end and this more so than in many other regions, it is still true that all regional economies are skewed that way. In sum, whilst the South West may often display a particular tendency within the range, we are seldom far outside the ‘norm’ for a modern developed economy.

To conclude, a sense of balance needs to be struck between appreciating the differences and the similarities in and across our regional economic geographies. It will be interesting to see if greater emphasis on the ‘local’ will, or will not, enhance the South West’s intra-regional variation.

This is an important aspect of planning for economic development because, without it, we are likely to experience despair about affecting change that corrects market failures; to generate unrealistic expectations about what can be achieved and by when; and to mis-allocate resources against national, regional and local trends.

Chapter Five

Postscript

Postscript

“The Economics Story” is about establishing sound analytical evidence and judgement and getting practitioners to use that intelligently for the long run benefit of the people in a given spatial area.

This requires consistency and flexibility for the future based on a clear sense of the journey to date. As this particular ship gets ready to lay down its anchor for the last time, we wish good luck to the sailors who follow. May your economics be strong, your map more complete, and your direction sound. May your judgement be good and your audience receptive to your analysis.

This document has proved that investment decisions for economic development are best:

- Grounded in strong statistical evidence
- Referenced to robust theoretical economics
- Applied with sound analytical judgement.

In reality, however, there may be a series of non-economic factors that influence decisions. These might include:

- Policy direction by Government, especially where contradictory targets are set for economic and budgetary performance
- Resilience responses to crises or shocks, such as the ‘foot and mouth’ outbreaks or the ‘Gloucester floods’
- Consideration of partners’ priorities, including concentration of intervention effort in less optimal geographies
- Reputational and legal risks, from announced commitments, planning regulations or other judicial/contract pressures
- Other political or social exigencies dictated by a range of external authorities and democratic intent from ‘nimbyism’ to ‘Big Society’
- Strategic decisions of the Board and Executive, partially related to building a sense of spatial cohesion and identity.

Regional policy and investment decision making impacts at several levels:

- Directly through interventions under the full control of the relevant development authority
- Indirectly by co-ordinating groups of local partners (local authorities, businesses and others) to bring forward co-operation for the ‘common good’, particularly when there are spillovers of jurisdiction
- By inducing a collaborative response from neighbours or higher geographies, such as presenting the case to Central Government (based on a detailed knowledge of the relevant region) with respect, for example, to transport, energy and communications needs.

These factors are considered in detail in “Reflections and Lessons”.

 Read more...

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Index of Abbreviations

ABI	Annual Business Inquiry (ONS, replaced by BRES)
APS	Annual Population Survey (ONS, replaces LFS)
BANES	Bath and North East Somerset (unitary authority)
BIS	(Department for) Business, Innovation and Skills
BRES	Business Register and Employment Survey (ONS, replaces ABI)
CAGR	Compound Annual Growth Rate
CC	County Council
CLG	(Department for) Communities and Local Government
Economy Module	Economics service of the South West Observatory provided by South West RDA
ELMR	Economic and Labour Market Review (ONS)
FDI	Foreign Direct Investment
FEMA	Functional Economic Market Area
FOC	Foreign-owned companies
FT	Full time
FTE	Full Time Equivalent
GDHI	Gross Disposable Household Income
GDP	Gross Domestic Product
GOR	Government Office Region
GVA	Gross Value Added
GWe/GWh	Gigawatt hour / equivalent
ICT	Information & Communications Technology
kWe/kWh	kilowatt hour / equivalent
LEP	Local Enterprise Partnership
LFS	Labour Force Survey (ONS, replaced by APS)
MWe/MWh	Megawatt hour / equivalent
NAIRU	Non-accelerating inflation rate of unemployment
NUTS	Nomenclature of Units for Territorial Statistics
NUTS1	Government Office Regions
NUTS2	Counties / groups of counties
NUTS3	Counties / groups of unitary authorities

NVQ	National Vocational Qualification
OECD	Organisation for Economic Co-operation and Development
ONS	Office for National Statistics
PMI	Purchasing Managers Index (Markit Economics)
PT	Part time
R&D	Research and development
RISEW	Regional Index of Sustainable Economic Well-being (nef)
SIC	Standard Industrial Classification
SME	Small and Medium-sized Enterprises
STEM	Science, Technology, Engineering and Maths
SW	the South West Government Office Region
SWO	South West Observatory
TFP	Total Factor Production

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eeth/Petrockstowe Railway | Wrafton Laboratories Ltd | Falmouth Maritime Museum |
mouth to Budleigh Salterton Railway | **Mayflower Heritage Centre**, Plymouth | Pitts
ave, Tavistock | Hayle Foundry | Exeter Sky Park Tiverton Business Park | The Prince's
outh Business Trust | N Hayle Industrial Park Plots 1 & 2 | Newquay Airport | Becton Dick
on Ltd | Yeo Bridge | **Constructing Excellence South West** | 2012: Cultural Olympiad
nnovation Relay Centre | Barnstaple | Tamar Science Park ITTC - Phase 2 | Mylor Yacht
rbour, Falmouth | Okehampton - A30 | **PRIMARE** | RNAS Portland/Osprey Quay | Tripo
ceptor Research Ltd | Cabot Freight Park | South West England Marketing Campaign | M
ds Site, Glastonbury | **Gloucestershire Flood Relief** | Women's Enterprise | SW Region
ence & Industry Council | Jaeger Factory, Plymouth | National Marine Aquarium - Phase
Leadership SW | Peninsula Medical School | Exeter University Innovation Centre - Phas
Advanced Engineering Skills Project (AESP) | **St Austell Town Centre** | Bristol Airport
rminal Infrastructure | Plymouth City Development Company | Frome Market Town Regene
ation | Wessex Rail Franchise Study | **Crediton Town Square** | Media Skills Developme
programme | Torquay Harbour Waterfront Development | **Exeter Science Park** | South
est Regional Infrastructure for Social Enterprise | Radstock Town Centre | SW Quadrant,
dport | **Bristol Foyer** | Broadband4Devon | **Beacon Company Initiative** | Black Devel
ment Agency, Bristol | SW Opportunities for Older People (SWOOP) | NCN Route 3 Avon
ey Greenway, Bristol | Weymouth & Portland Sailing Academy | **Business Link Service**
Bournemouth International Centre | Business Incubation South West | Forest of Dean CA
treach | **Devon Food Links** | Cannington College | Rural ICT Training Project | Equali-
s South West | **Market & Coastal Town Initiative** | UK Micro-nanotechnology Networ
oup | Winfrith Innovation Centre | Regional Venture Capital Fund | **Eden Project** | HM
ylla' | Rural Recovery Initiative - Foot & Mouth | Science City Bristol | Forest of Dean To
n Study | Tamar Science Park | Bournemouth University Incubation Centre | Jurassic Coa
orld Heritage Centre | **Marine South West** | SLIM | Gradsouthwest.com | Cornish Sea
t | SW Angels Network | Manufacturing Advisory Service | **Regional Observatory** | R
naissance | **Culture South West** | South West Food & Drink | Aerospace Sector Support
Knowledge Exploitation SW | Newquay Regeneration | At Bristol | **SW Angels Network**
Combined Universities of Cornwall | Purbeck Business Centre | Princess Yachts Ltd | BAE
stems | **Pendennis Shipyard Ltd** | Archimedia (Knowle West Media Centre) Bristol | H
urside - Bristol 2000 | New Swindon Company (URC) | **Pervasive Media Studio** | Watc
arina | Sutton Seeds, Long Road, Paignton | **West at Work** | Weymouth Skatepark | Ply
th Airport Extension Works | **City Works Project, Gloucester** | Plymouth Cycle Netwo
Phoenix Fund | Devonport Urban Village | Plymouth | The Showground, Bridgwater |
ay Park Engine House, Camborne | Polmarth Park | Tolmen Centre, Falmouth | Construc
g Excellence South West | Living Coasts Marine Aviary | Torquay | Millbay Regeneration
ymouth | Pennygillam Industrial Estate | Launceston | **SW Angels Network** | Coney Hill

Community College, Gloucester | The Cornish Way - China Clay Routes | Poole Arts Centre
Helston Business Park | **The Wave Hub, St Austell** | Helston Business Park | **St Paul's
Sea Regeneration** | Castledown Business Park | Sowton Industrial Estate Improvement
eter | Plymouth Marine Laboratory | St James's Trading Estate Phase 2 | Redruth Hospital
W Coast Scoping Study | **Western Riverside, Bath** | Plymouth Railway Station | **Naval
se Visitor Centre** | Plymouth | St Just Heritage Area | Investment Framework for Inner
e, Bristol | SW Regional Science & Industry Council | **Minehead Regeneration Area** | S
umb Major Ind Estate - Phase 1 | Swindon Incubator Centre | Building Communities Ini
tive | Caradon Hill Heritage Regeneration Project | North Dorset Business Park | **Cabot
eight Park** | Bristol Foyer | Kuumba Project, Bristol | City Works Project, Gloucester | N
n Park & Ride Extension, Wareham | **400KW Wind Turbine Development** | Tiverton
Business Park - Phase 2 | SW Climate Change Impacts Partnership | Bradford on Avon Gas-
orks | **Beacon Technology Park** | Cheltenham Civic Pride | City Business Park, Plymouth
The Cornish Way - China Clay Routes | SW Manufacturing Advisory Service | Mylor Yacht
rbour, Falmouth | Jaeger Factory | Tolvaddon Energy Park | Cricklepit Site Phase 1 | Cat-
market Site | Long Rock Ind Estate | **Dorset Broadband Partnership Project** | Exeter
iversity Innovation Centre | Wincanton Healthy Living Centre | St Austell Brewery Comp
l | **Matson Lane Resource Centre** | Gloucester | Stonehouse Creek Community Centre
Plymouth | Coney Hill Community College, Gloucester | Knowledge Exploitation SW | Sou
ake Railway Path | Poole Arts Centre | **Hengrove Park, Bristol** | Helston Business Par
eymouth Skatepark | Western Riverside, Bath | Eden Institute | St Austell | Frome Marke
wn Regeneration | **Next Generation Access – Broadband** | Kelly's Ice Cream Factory
kP Falmouth Limited | Mere Rural Workspace Project | Swindon Incubator Centre | Carad
l Heritage Regeneration Project | **North Dorset Business Park** | TUC Learning Services
rnwall | New Swindon Company (URC) | Tintagel Heritage Regeneration | Torquay Har-
ur Waterfront Development | **ACT Now Project** | Dorset World Heritage Site | Cornwa
velopment Company | Plymouth Guild of Voluntary Service - One Stop Shop | South We
gional Infrastructure for Social Enterprise | Newquay Airport - Infrastructure Improve
ude Stratton Business Park Extension | Carpenter House - University of Bath | Plymouth
y Growth Strategy | **SW Region Skills For Life** | Gloucester Urban Regeneration Comp
Research Instruments | Bickland Ind. Estate | Exeter Airport Infrastructure | **Gloucester
ire Innovation Centre** | Anaerobic Digestion | Newlyn Seafood Park | Bristol Zoo's Wild
nservation Park Development | Hurd's Spring Valley Watercress | Pathfields Industrial Si
Cannington College | Chronos Technology Ltd | Food Sector Research | Broadband4Devor
Princess Yachts Ltd | Business Start-Up Fund | **Eastbrook Organic Pig Farms** | Rural ICT
ining Project | Rural Renaissance in Dorset | Innovation Relay Centre | Tresco Heliport
grade | South West Fishing Strategy | **Food and Drink Sector "Buy Local" campaign**
ondon 2012 Olympics - Sailing Venue Design | Camborne Pool Redruth URC | Museum o
rtmoor Life | HMS 'Scylla' | Kawasaki Precision Machinery (UK) Ltd | Dorset Village Bake