

A WINNING WALES: ECONOMIC ANALYSIS

**AN ANALYSIS OF THE WELSH ECONOMY TO
UNDERPIN THE NATIONAL ECONOMIC
DEVELOPMENT STRATEGY**

-DRAFT FOR CONSULTATION – NOVEMBER 2001



Cynulliad Cenedlaethol Cymru
The National Assembly for Wales

A WINNING WALES: ECONOMIC ANALYSIS

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1.0 INTRODUCTION

1.1 This economic analysis underpins the National Economic Development Strategy "A Winning Wales". It provides an analysis of:

- where we are now;
- the global context within which the Welsh economy operates; and
- targets - where we want to be.

1.2 It is based on currently available statistical information on the Welsh economy. It is recognised that this information is not as comprehensive as we would like in certain areas and this is addressed in "A Winning Wales".

1.3 The analysis highlights the main issues in the Welsh economy. It contains an overview of the current situation and measures the performance of the key economic drivers in the Welsh economy compared to other regions and countries within the UK. There is also a statistical picture of the sub-regions of Wales which highlights the diversity across the country.

1.4 The issues raised are translated into actions in "A Winning Wales" and supported by appropriate targets.

2.0 WHERE WE ARE NOW

Summary

2.1 The Welsh economy is constantly renewing and reinventing itself. It is undergoing a lengthy period of structural change. It has moved from one dominated by heavy industries such as coal and steel to a much broader base of modern manufacturing and services. This has seen some 200,000 jobs absorbed by the rest of the economy from declining industries in the past 30 years. This is just the net transfer of jobs and ignores the constant churn and renewal that goes on in the economy which sees tens of thousands of jobs replaced each year. This is a remarkable feat in a workforce of just over 1 million people.

2.2 More recently, parts of Wales have been hit by a number of large blows. The steel industry has suffered, manufacturing faces severe competitive pressures and the rural economy is facing enormous challenges.

2.3 The Welsh economy performs relatively poorly when compared to other UK regions on most economic indicators. Incomes are low on average and we have too few people in jobs. The industrial structure is under-represented in high growth or high value-adding industries.

2.4 In 1999, Wales accounted for some 4.9% of the total UK population, 4.5% of the economically active population, 3.9% of GDP and 4.3% of household income. Activity levels and incomes are lower than would be expected based on our population size.

2.5 Our share of household income is higher than GDP because of transfer payments (unemployment and sickness benefits, pensions, etc.). The figures show that Welsh households source more of their income from pensions and social benefits and less from employment income than the UK average.

Table 1 Key regional statistics - percentages of the UK

Region	Area 1999	Population 1999	Total economically active June-99	Gross Domestic Product ¹ 1999	Individual consumption expenditure	Household Income ² 1999
England	53.4	83.6	84.4	84.0	85.3	85.2
Wales	8.5	4.9	4.5	3.9	4.1	4.3
Scotland	32.0	8.6	8.5	8.1	8.3	8.2
Northern Ireland	5.8	2.8	2.5	2.2	2.4	2.3

1. Excluding Extra-Regio and the statistical discrepancy
 2. Excluding Extra-Regio
- Source: Office for National Statistics

2.6 Unemployment and inflation are very low by historical standards. Female participation rates have risen while male rates have fallen over time – as many women as men now work in Wales.

2.7 Wales has a good record of attracting inward investment. Around a third of employees in the manufacturing sector work in overseas-owned plants. There are emerging and established clusters of industries which can be developed for the future.

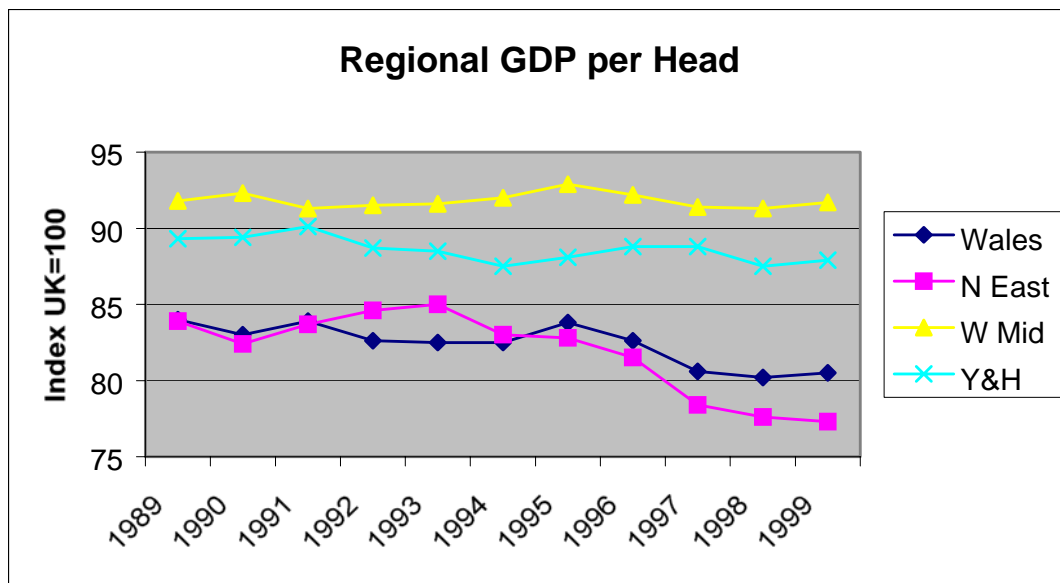
2.8 The environment and quality of life in Wales are high and Wales and the cost of living is relatively low: house prices, in particular, are low compared to average incomes.

Where we are now – the main issues

GDP

2.9 The traditional indicator of overall economic health is Gross Domestic Product (GDP). For comparative purposes this is translated into GDP per person which adjusts the figures for different size regions. Wales performs relatively badly on this measure when compared both to other UK regions and the EU average (hence Objective 1 funding). GDP per head in Wales is now about 80 per cent of the average for the UK.

Chart 1



2.10 Wales is well down the GDP per head league. The regions of the south east of England are at the top followed by a group of English regions plus Scotland clustered in the high 80s and 90s. Wales, the North East of England and Northern Ireland are at the bottom.

2.11 Chart 1 shows the gap between Wales and English regions with a similar manufacturing heritage – the West Midlands and Yorkshire & Humber. It is these regions that Wales should be seeking to emulate in GDP per head terms, at least initially.

Why is GDP per head low?

2.12 There are a number of reasons for this. GDP per head in a region will tend to be low if:

- productivity is low;
- the ratio of jobs to employment ratio is low;
- the employment rate is low;
- the ratio of dependants (children and retired people) is high.

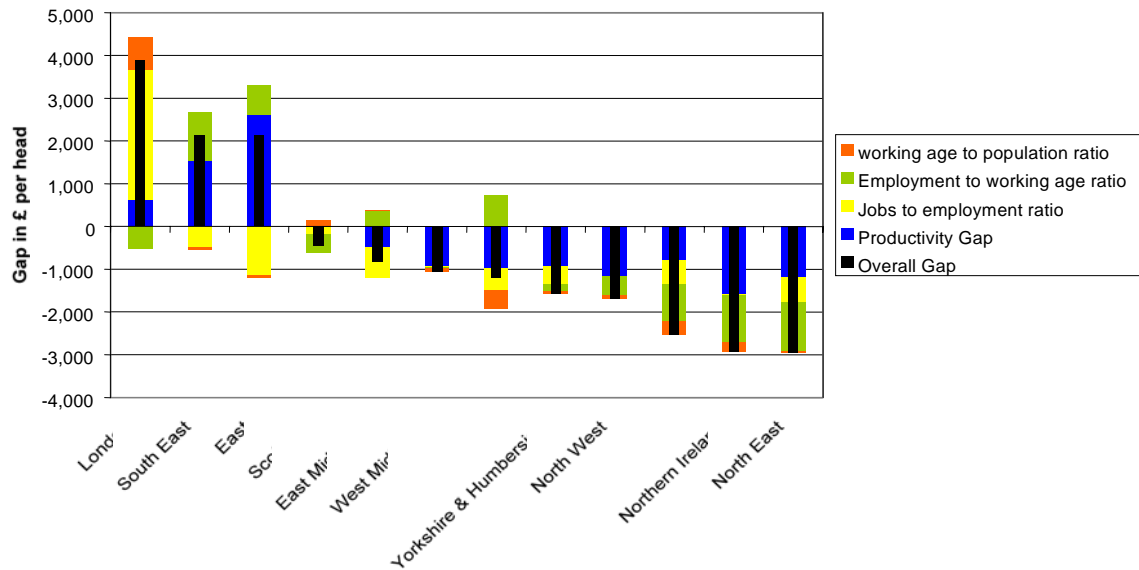
2.13 Chart 2 breaks down the gap between the UK regions' GDP per head and the UK average into these components. The black bar shows the total gap and the colours the composition of the gap. For example, for London the gap has both positive and negative components. GDP per head in Wales is about £2,500 per head lower than in the UK as a whole. All four components are negative for Wales. Part of the explanation is that Wales has a slightly more elderly population than the UK average: this effect is larger in Wales than in any other region apart from the South West. But it is only a small part of the explanation.

2.14 A more important factor is Wales' relatively low ratio of jobs to employment. This is partly explained by net out-commuting from Wales, especially to the north west and south west of England.

2.15 Output per job explains more of the gap than either the jobs/employment ratio or the working age/population ratio. Nevertheless, the shortfall is not large by the standards of the English regions outside the South East: only the East Midlands has a smaller productivity gap. Scotland has higher productivity than any of the English regions outside the South East.

2.16 The largest component of the gap in Wales is the employment rate. This gap (roughly five/six percentage points of working age population) is large by UK standards, comparable only to that in Northern Ireland and the North East of England.

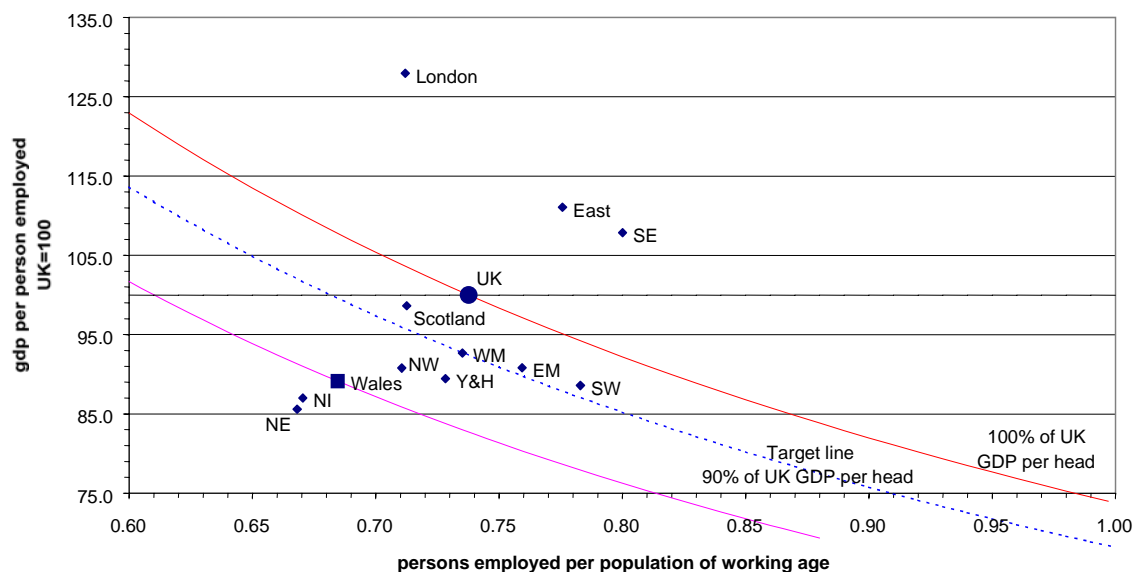
Chart 2 Components of GDP gap



2.17 Chart 3 focuses on output and employment rates. It uses the Labour Force Survey measure of persons employed as a proportion of working age population. Productivity is defined as output per employed resident, wherever that resident works, rather than output per member of the workforce. The dotted line through the West Midlands (WM) shows combinations of productivity and employment rates that would raise GDP per person of working age by enough to increase Welsh GDP per head to 90% of the UK average (after allowing for our higher dependency ratio).

2.18 Welsh output per head is similar to that for most of the English regions outside the South East. It is our low employment rate that depresses our GDP per head. The picture is similar if jobs are used instead of employment (GDP per workforce job).

Chart 3 Employment and Output



2.19 Chart 3 shows that to reach 90 per cent of UK GDP per head solely by increasing output per job faster than the UK average would require relative output per job in Wales to exceed the UK average by over 4 per cent. Moreover, there are no other UK regions in the relevant part of the Chart – i.e. no UK region has attained 90 per cent of UK relative GDP per head by this combination of low jobs to working age population ratio and high productivity.

2.20 Interpretation of this is difficult. In principle, relative GDP per head in Wales could be increased by creating jobs for in-commuters, adding to Welsh GDP but not to the incomes of current Welsh residents. This would raise jobs per person employed, but many would not see this as a policy objective.

2.21 Trying to achieve 90 per cent of UK GDP per head by increasing employment rates, while maintaining relative output per head, would require an increase in *employment rates* which would make Wales similar to most of the more northern regions, except the North East. Moving in this direction on the Chart would probably also require a change in occupational structure because it is likely that the additional workers employed would, at least in the short term, have lower than average productive capacity. Policies which acted on employment alone would therefore tend to move the Welsh position, south east on the chart rather than due east. A move due east or even a little south east would place us close to many of the English regions.

Household incomes

2.22 Total household income per head is 86% of the UK and the gap closes further to 90% when *disposable* household income is used (based on 1999 provisional data).

Table 2 Regional Household Sector Accounts 1999

Per Head Index UK=100			
Region	GDP per Head	Household Disposable Income	Consumption Expenditure
United Kingdom	100.0	100.0	100.0
North East	77.3	82.9	81.1
North West	86.9	93.0	94.5
Yorkshire and the Humber	87.9	92.3	90.3
East Midlands	93.6	92.7	91.8
West Midlands	91.7	91.2	93.9
East	116.4	111.7	102.2
London	130.0	119.4	124.2
South East	116.4	111.6	115.5
South West	90.8	97.5	97.3
England	102.4	101.6	102.0
Wales	80.5	90.4	83.2
Scotland	96.5	94.8	95.9
Northern Ireland	77.5	85.9	83.9

Source: Office for National Statistics

2.23 The reasons for the gap closing are first that total household income includes pensions and social benefit payments, items that are not included in GDP. Second, disposable household income is adjusted for housing costs and profits which are lower in Wales than other parts of the UK.

2.24 The dependence on social benefits and pensions can be seen more clearly in the sources of household income. These sources provide 24% of Welsh incomes but only 20% of UK incomes. The other component of this gap is pay which accounts for 53% of Welsh income compared with 56% of UK.

2.25 Recent work by Cambridge Econometrics shows that the ratio of house prices to household incomes in Wales is relatively low compared to the UK average. House prices would need to rise by some £11,000 in Wales to restore the ratio to its long term average.

2.26 Average wages in Wales were around 90% of UK average in 2000 (average gross weekly earnings, full time). Within Wales, non-manual employees earn just over 30% more per week than manual and men earn 28% more than women. Average wage levels are likely to be largely a result of job mix rather than getting paid a lower rate for the same job.

Productivity

2.27 Over the long term, productivity improvements are the main driver of economic growth. It is estimated that 50% of productivity improvements are the result of entry and exit of firms/plants and the other 50% comes from improvements within existing plants.

2.28 As Chart 3 shows, Wales is reasonably comparable with other UK regions outside the south east of England in terms of output per worker. However, the UK does not perform particularly well in international comparisons. The key issue for Wales is at least maintaining the rate of productivity growth relative to the UK while finding good jobs for the inactive:

- The problem is not one in manufacturing, where Wales' productivity is usually close to or above the UK average (though partly this just reflects capital intensive industries in Wales).
- Nor generally is one of low output per job in comparable jobs.
- The problem is more one of industrial structure, with relatively low Welsh representation in high productivity financial and business services and higher dependency on public services.
- Raising productivity faster than the UK average is most likely to come from changes in industrial structure (better jobs)

2.29 The factors driving productivity remain an issue for research, but – as the OECD has indicated - there is general agreement that human capital, innovation, enterprise and investment are central to the growth process.

2.30 Furthermore, a recent report by management consultants McKinsey highlights the fact that British firms tend to lag behind their international counterparts in productivity. They found that British manufacturing's below par performance can be explained largely by the failure to adopt at an early enough stage leading edge management methods implemented by global rivals. Equally as important, McKinsey confirm that the weakness of many UK-based manufacturers is not related in the main to low investment or the quality of the workforce.

Economic activity

2.31 As discussed above, the main reason why our economic performance differs from that of other parts of the UK is relatively low economic participation of people of working age. Data on economic activity rates shows that around 5 fewer people of working age participating in the Welsh labour market compared to the UK average. This equates to some 100,000 jobs.

- Employment rates in Wales are low by UK (but not European) standards because of high inactivity rates rather than high unemployment rates.
- The difference between Welsh and UK average activity rates is largely explained by the high proportion of people in Wales reporting as long-term sick.
- These people are mainly aged 45 plus, and there are more men than women.
- The number of incapacity/invalidity benefit claimants more than doubled in Wales and the UK between the late 1970s and the mid 90s.

2.32 Broadly, employment rates overall have fluctuated over time. But the trend is relatively flat. Within this, male employment rates have tended to fall while female employment rates have risen. Male employment rates are now not much higher than female. This general picture is true for both Wales and the UK, though Welsh employment rates are lower than UK for both men and women.

The drivers – how do we measure up?

Innovation

2.33 Innovation or innovative activity is a difficult concept to measure. One of the better proxies for innovation is expenditure on research and development. In terms of the proportion of UK business R&D expenditure, Wales performs poorly ranking near the bottom of the table. The picture changes somewhat when a suitable scaling factor is used such as R&D as a percentage of regional GDP. On this measure, Wales moves up to mid-table, above Scotland, Northern Ireland and even London. UK business R&D is 1.3 percent of GDP and the equivalent figure in Wales is 0.6%. The UK figures are heavily influenced by the East and South East which have 2.7% and 2.1% respectively.

Enterprise

2.34 Using the number of businesses in Wales as a proxy for enterprising activity, Wales performs relatively badly compared to other UK regions. Data for VAT registered firms shows that both Welsh registration and de-registration rates are among the lowest in the UK and the total stock of businesses has been declining for the last decade. We also have fewer VAT-registered businesses per head of working age population than the UK average, though Wales is far from being the lowest on this measure.

Table 3 Enterprises registering and de-registering for VAT by country and region, 1999

	Stock	Registrations		De-registrations		Stock		Stock per 10,000 population (aged 16+)
	Start of 1999	1999	Rate	1999	Rate	Start of 2000	Net change during 1999	
United Kingdom	1,651,680	178,460	10.8	171,970	10.4	1,658,125	6,445	354
England	1,402,675	157,490	11.2	149,705	10.7	1,410,410	7,735	360
Wales	75,230	5,995	8.0	6,740	9.0	74,485	-745	320
Scotland	119,160	11,410	9.6	11,900	10.0	118,670	-490	286
Northern Ireland	54,615	3,565	6.5	3,625	6.6	54,555	-60	437

Source: DTI SME Statistics Unit

2.35 Once businesses become established in Wales, they have a better chance of survival. Over 60% of Welsh businesses survive at least 3 years which places Wales above the averages for both England and Scotland, though behind Northern Ireland.

Table 4 Survival rates of VAT registered businesses, three years after registration (a)

	<i>Percentage</i>								<i>Rank</i>
	<i>Year of registration</i>				<i>Year of registration</i>				
	1993	1994	1995	1996	1993	1994	1995	1996	
England	59.7	59.4	62.0	62.4	3	3	3	3	3
Wales	58.7	60.5	62.6	63.1	4	2	2	2	2
Scotland	60.6	59.2	62.0	61.2	2	4	4	4	4
Northern Ireland	65.0	69.6	71.2	70.1	1	1	1	1	1

Source: DTI SME Statistics Unit

2.36 An international study of entrepreneurship (GEM 2000) found a lack of entrepreneurial behaviour and attitudes in Wales. The study found:

- Wales had a low percentage of the population involved in emerging or new firms.
- Wales has one of the lowest rates of individuals involved in starting a business. There is a low rate of start-up activity generally and there is a low level of 'business angel' activity.

- The proportion of graduates and post-graduates starting a business is higher than for others – Wales' lower educational attainment is, therefore, restrictive.
- Wales has few growth businesses.
- Attitudes to entrepreneurship are not favourable and few people believe that there are good opportunities to start a business.

A fresh direction - industrial structure

2.37 Part of the reason for economic under-performance in Wales is our industrial structure. In the past, Wales has relied heavily on major employers in the extractive and basic manufacturing industries. Although most of the jobs shed by these industries over the last 20 years have been replaced, in relative terms the quality and pay of those jobs has not been a match for those lost.

2.38 Wales is typically under-represented in high growth sectors and high value-added sectors such as financial & business services and high value adding manufacturing. We also lack local head offices, research & development establishments and local autonomy in decision-making.

Table 5

Gross Domestic Product by industry group (percentage)	1998	
	UK	Wales
Agriculture, hunting, forestry and fishing	1.3	1.8
Mining and quarrying of energy producing materials	0.3	0.4
Mining and quarrying except energy producing materials	0.2	0.5
Manufacturing	20.3	27.0
Electricity, Gas and Water	2.1	1.6
Construction	5.2	5.2
Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	12.3	10.8
Hotels and restaurants	3.3	3.5
Transport, storage and communication	8.4	6.0
Financial intermediation	6.2	3.9
Real estate, renting and business activities	21.4	15.1
Public administration and defence; compulsory social security	5.2	5.9
Education	5.5	6.6
Health and Social work	6.7	8.9
Other Services	5.1	4.9
Adjustments for financial services	-3.7	-2.3
Total	100.0	100.0

Source: Office for National Statistics

2.39 Historically, Wales has been highly successful at attracting inward investment. We have attracted a far larger share of investment into the UK than our size would predict. This has been important in the restructuring of the Welsh economy both in terms of replacing lost jobs and modernising the industrial structure.

2.40 The employment structure of Wales has changed significantly in just the last 10 years. The numbers employed in the production industries have fallen while there has been growth in construction, business services and health & social work.

Table 6 Welsh Employment Structure

1992 SIC	Employment (thousands)		
	1990	2000	Change 1990-2000
Agriculture, hunting, forestry & fishing	20	20	0
Mining & Quarrying	..	6	6
Manufacturing	220	205	-15
Electricity, Gas & Water Supply	22	4	-18
Construction	49	61	12
Wholesale & retail trade & repairs	151	159	8
Hotels & restaurants	59	62	3
Transport, storage & communication	53	42	-11
Financial intermediation	25	24	-1
Real estate, renting & business activities	74	91	17
Public admin, defence, compulsory social security	73	79	6
Education	89	85	-4
Health & social work	112	132	20
Other community services	44	49	5

Source: Office for National Statistics

Wales and the World

2.41 Access to world markets and international investment are important in an economy the size of Wales. The primary destination for goods exported from Wales is the EU – some 70% of the total in 2000. In value terms, Wales is one of the smallest exporting regions in the UK. However, Welsh exports represent around 4% of the UK total in line with our share of GDP.

2.42 As emphasised earlier, Wales has an excellent record of attracting inward investment projects coming to the UK. In the early 1990s Wales attracted around 20% of both projects and new jobs though the share has settled back to about 6.3% of new jobs in the light of increasing competition from low cost locations overseas.

A Learning Country

2.43 more skilled population is a key driver of long term productivity improvement which, in turn, is the major component of increasing wealth. A major issue in Wales is the lack of basic skills. The proportion of adults in Wales with functional basic skills in literacy and numeracy is lower than in England.

Table 7

	Percentage of population aged 16-60 with functional basic skills in literacy	Percentage of population aged 16-60 with functional basic skills in numeracy
Wales	72	68
England	76	76

Source : Basic Skills Agency. Data relates to the period Autumn 1996 to Autumn 1999.

2.44 Wales also has a lower proportion of it's population with higher level qualifications than the UK average (22% vs 24% with NVQ level 4 and above) and a higher proportion of the population with no formal qualifications. However, school results tend to be similar to the English average in terms of GCSE/GNVQ points per pupil. Higher Education performance is broadly similar across England and Wales with just over 50% of students achieving first or upper second class degrees.

2.45 Nonetheless, the Welsh workforce has shown itself to be adaptable and committed though the Future Skills Wales project found that nearly half of working age people undertake no training or learning, a figure which increases to nearly 70% in some parts of Wales.

Communities

2.46 GDP per head shows wide variations across Wales. The Objective 1 area of West Wales and the Valleys had GDP per head of 70% of the UK average in 1998. This compares with a figure of nearly 98% in East Wales. However, this masks the true extent of the variation – Powys in East Wales has GDP per head of only 81%, comparable with Bridgend, Neath & Port Talbot in Objective 1. The Gwent valleys are the lowest at less than 64%, closely followed by Anglesey (64.1%). In income or output terms, this equates to a gap of some £4,700 per person per year between the best and worst areas in Wales.

Table 8 GDP per head by NUTS3 area

NUTS Level 1 NUTS Level 2 NUTS Level 3	Gross Domestic Product (£ per head UK=100)					
	1993	1994	1995	1996	1997	1998
Wales	82.5	82.5	83.8	82.6	80.6	80.2
West Wales & the Valleys	71.6	71.5	72.5	72.3	70.9	70.2
Isle of Anglesey	68.2	66.5	66.4	67.8	66.3	64.1
Gwynedd	82.8	81.2	80.2	76.7	75.4	78.7
Denbighshire	69.9	66.2	63.5	67.0	67.4	66.1
South West Wales	70.7	70.5	71.7	70.7	66.5	65.8
Central Valleys	68.2	68.7	70.2	69.3	65.5	67.1
Gwent Valleys	64.1	65.8	68.7	69.1	67.5	63.6
Bridgend & Neath Port Talbot	75.3	76.6	78.7	81.4	83.1	80.7
Swansea	80.9	79.9	80.2	76.2	77.5	79.2
East Wales	102.2	102.6	104.1	101.1	97.6	97.8
Monmouthshire & Newport	98.7	99.7	101.1	98.5	95.1	99.0
Cardiff & Vale of Glamorgan	114.5	113.9	115.5	108.5	103.9	101.3
Flintshire & Wrexham	96.5	97.7	100.3	101.5	99.0	98.9
Powys	78.6	79.1	80.3	79.2	77.3	80.8

2.47 The dispersion narrows when household income per head is used instead of GDP. In 1995, Wales stood at 91% of the UK level on this measure and the counties within Wales ranged from just under 80% to just over 100%. Mid Glamorgan recorded the lowest relative level of any area in the UK.

Table 9 Gross Domestic Product compared with household income, by county 1995

	GDP Per Head (UK=100)	Household income per head (UK=100)	Net in-commuting (a) (%)	Persons over pensionable age (b) (%)
United Kingdom	100	100	-	18.2
Wales	84.3	91.1	-1.2	19.9
Clwyd	93.9	93.5	-5.1	20.5
Dyfed and Powys	72.4	91.7	-2.7	22.1
Gwent	88.0	90.0	-2.3	19.0
Gwynedd	76.2	95.9	-0.4	22.8
Mid Glamorgan	67.3	79.6	-15.0	18.1
South Glamorgan	114.2	100.7	19.8	18.0
West Glamorgan	80.9	91.9	0.4	20.7

(a) Commuters coming into an area minus those going out as a percentage of the workforce in the area (based on the 1991 Census)

(b) Men aged 65 and over, women aged 60 and over.

2.48 The reason why the gap within Wales narrows is shown by the third column in the table above. GDP is measured at place of work while household income is residence-based. Therefore, South Glamorgan has lower household income per head because of in-commuting while Mid Glamorgan has lower GDP because of out-commuting.

2.49 As for the counties of North Wales, Clwyd is above the Welsh average on both GDP and household measures while Gwynedd scores lower on GDP but higher on household incomes due to high receipts of social benefits, especially pensions. The pattern in rural areas in the mid and west is similar to Gwynedd.

2.50 Economic inactivity tends to be concentrated in particular areas of Wales, most notably, the south Wales valleys. Merthyr Tydfil and Blaenau Gwent have inactivity rates as high as 35%. At the other end of the scale, Powys and Monmouthshire have inactivity rates below the UK average.

Table 10 Labour Market Summary 1998/99

	In Employment (000s) ⁽¹⁾	Economically Active (000s) ⁽¹⁾	Economically Inactive (000s) ⁽¹⁾	Economic Activity Rate (%) ⁽²⁾	Employment Rate (%) ⁽²⁾
Isle of Anglesey	31	33	22	77.7	73.8
Gwynedd	43	47	43	71.1	64.0
Conwy	44	48	39	79.4	74.1
Denbighshire	37	40	31	78.3	73.8
Flintshire	70	74	48	79.8	75.9
Wrexham	50	55	46	71.8	64.9
Powys	57	60	37	85.6	81.3
Ceredigion	33	34	23	80.7	77.8
Pembrokeshire	40	44	50	67.7	61.9
Carmarthenshire	67	73	60	75.9	70.0
Swansea	100	108	80	76.7	71.1
Neath Port Talbot	56	61	50	69.8	64.1
Bridgend	55	58	43	75.1	71.5
Vale of Glamorgan	52	56	33	81.2	75.7
Cardiff	130	139	107	72.1	67.7
Rhondda, Cynon, Taff	101	109	82	72.3	66.8
Merthyr Tydfil	18	21	24	65.2	56.3
Caerphilly	70	76	52	73.6	67.5
Blaenau Gwent	22	26	29	65.2	56.0
Torfaen	39	42	28	75.6	70.2
Monmouthshire	40	43	24	86.2	79.9
Newport	56	60	41	76.6	71.2
Wales	1212	1306	991	75.1	69.7

Source: Labour Force Survey

(1) Aged 16 and over

(2) Aged 16-59/64

2.51 Educational attainment varies widely across Wales. Typically, the more rural parts of Wales perform significantly better than urban areas in terms of school results. The top performing authorities at GCSE level are Ceredigion, The Vale of Glamorgan, Gwynedd, Conwy and Powys (based on 1999/00 data). Pupils in these authorities also perform well at A level. The proportions of adults with no qualifications or with no access to training or learning are more evenly spread though again there are concentrations in the valleys.

2.52 The chart below shows the number of VAT registered businesses per 10,000 people aged 16+. As can be seen, the rural areas of Wales have a much higher business density than the urban areas. This is reflected in both the size of the businesses and the industrial structure set out below.

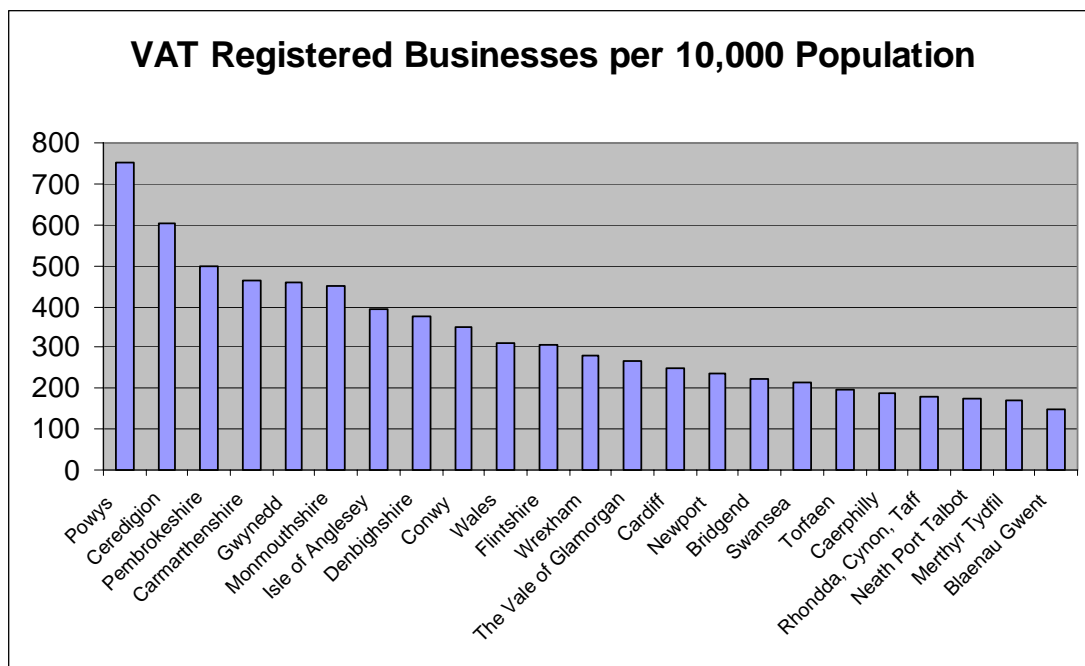
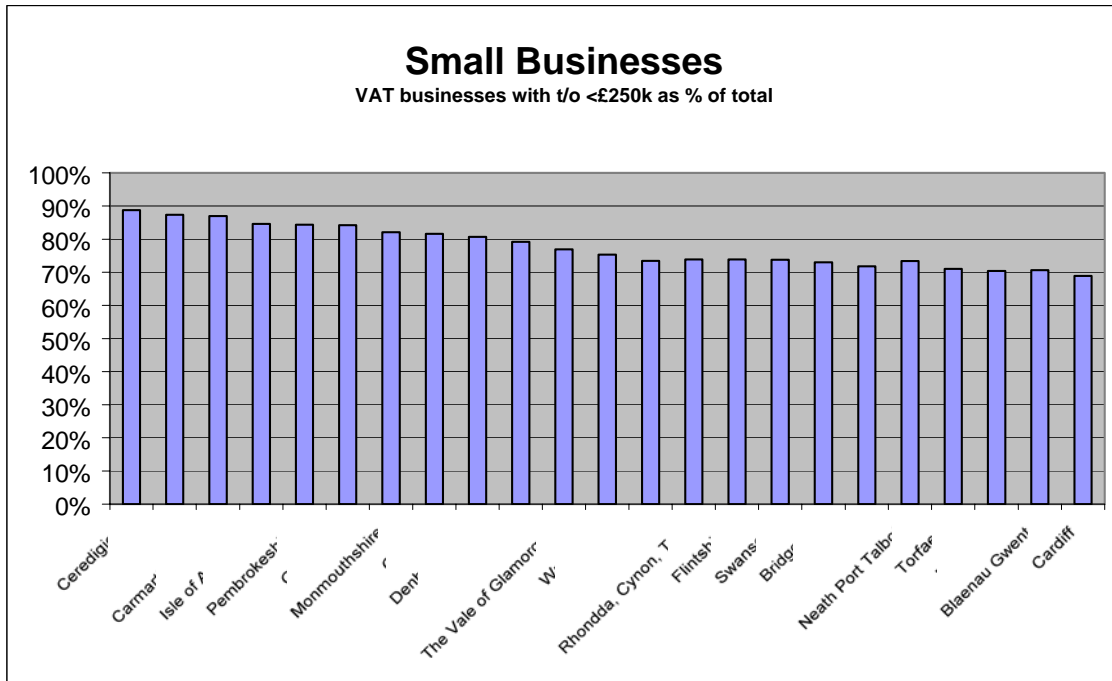


Chart 4

2.53 Taking size first, it can be seen that the areas in Wales with the highest business density are those areas with the highest proportion of smaller businesses (measured as those with an annual turnover below £250k). This is mainly a reflection of the agricultural industries in these areas which create a bias towards small businesses.

Chart 5



2.54 The sectoral distribution of VAT registered firms demonstrates the huge differences in industrial structure across Wales. Areas such as Powys and Ceredigion are heavily dependent on agriculture which makes up around 50% of the businesses. Cardiff on the other hand has a higher proportion of businesses in the Property & Business Services sector.

Table 11 VAT Registered Enterprises

VAT-based enterprises, April 2000 Unitary Authority	Number	Proportion of VAT-based enterprises in (percent):						
		Agriculture	Production	Construction	Retail	Hotels & Catering	Property & Business services	All other
Isle of Anglesey	2,045	36	5	11	14	10	9	15
Gwynedd	4,310	33	5	10	15	11	9	17
Conwy	3,215	26	5	10	15	12	13	19
Denbighshire	2,745	25	7	11	14	9	13	21
Flintshire	3,575	13	11	12	12	7	18	27
Wrexham	2,795	16	12	14	11	7	15	25
Powys	7,700	52	5	8	7	6	8	14
Ceredigion	3,570	48	5	9	10	7	8	14
Pembrokeshire	4,540	38	4	10	12	11	9	16
Carmarthenshire	6,330	44	5	9	10	6	8	18
Swansea	3,960	6	8	11	18	10	20	27
Neath Port Talbot	1,955	6	12	14	18	12	14	24
Bridgend	2,315	5	10	13	16	11	18	27
Vale of Glamorgan	2,535	10	9	12	15	7	22	25
Cardiff	6,390	1	8	11	15	7	31	27
Rhondda, Cynon, Taff	3,400	4	11	17	18	11	14	25
Merthyr Tydfil	735	3	9	14	21	16	12	25
Caerphilly	2,500	6	13	13	17	11	13	27
Blaenau Gwent	850	3	16	12	21	13	11	24
Torfaen	1,380	5	15	15	15	9	17	24
Monmouthshire	3,150	27	5	9	9	7	21	22
Newport	2,530	5	10	12	15	8	22	28
Wales	72,525	23	8	11	13	9	15	21

Promoting ICT

2.55 The use of ICT by businesses in Wales does not compare favourably with other parts of the UK. The DTI publishes an annual survey which compares the performance of UK regions on a range of e-commerce measures (E-Business Benchmarking Study).

2.56 The DTI study measures “connectivity” - a composite indicator based on factors such as company access to internet, percentage of employees using e-mail regularly, use of marketing web sites and electronic data interchange (EDI). Wales was the worst performing region of the UK on this connectivity indicator in 2000 with an index 14 percentage points below the UK average. However, there was a significant improvement in our

performance between 1999 and 2000 and further improvement is expected in 2001.

2.57 Wales performs better in terms of e-commerce, particularly for customers. Relatively high proportions of Welsh firms providing information, allowing ordering and making payments online (these figures tend to be dominated by the wider south east of England area). A similar study undertaken by the Office for National Statistics shows Wales performing less well on a range of indicators.

3.0 GLOBAL CONTEXT

3.1 The Welsh economy does not exist in a vacuum. It is highly dependent on conditions elsewhere in the world, particularly Europe. Many of the economic policy levers are similarly located elsewhere with macro policy decisions on interest rates, tax and global public spending taken at UK level.

World economy

3.2 The world economy is characterised by a trend towards globalisation. Economic activity is no longer defined by national boundaries and huge trans-national corporations with globally recognised brands are key players. This trend is being driven by improvements to information and communications technology which allow instant information transfer anywhere in the world. This has effectively created markets that are open 24 hours a day, seven days a week.

3.3 However, the emergence of global markets has opened up opportunities for niche marketing. Whereas previously niche markets were small and limited by national boundaries, it is now possible to sell the same specialist product to niche markets around the world, significantly increasing market size. This provides a major opportunity for countries such as Wales which do not have locally managed trans-national corporations.

European framework

3.4 In policy terms, Wales is affected by decisions taken in Europe on a range of issues. Most obviously (and immediately) two thirds of the Welsh population are covered by Objective 1 status for the period 2001-2006. This qualifies Wales for the highest levels of state aid allowed under EU rules. European funding of some £1.2 billion will be available over the next 6 years for the purpose of regenerating West Wales and the Valleys. This provides a major opportunity for change.

3.5 The EU also sets rules on industrial support. There are restrictions on the types of industry and firm that can be assisted with government aid. There are also financial caps on the level of assistance that is possible.

UK

3.6 Macroeconomic policy is determined at the UK level. The Assembly has no direct control over taxation, interest rates, the legal framework or overall levels of public expenditure. Similarly, policies on employment, social security, competition and foreign affairs are reserved for the UK Government.

3.7 UK economic conditions are central to the Welsh economy as we tend to export less overseas compared to other UK regions. Macro-economic stability has delivered simultaneous low inflation and unemployment. But

despite being the fifth biggest economy in the world the UK is still only 19th in the world productivity league, as measured by GDP per head.

Growth sectors and clusters

3.8 There is little doubt that the industrial structure of Wales needs to change. Part of the solution could be to develop growth sectors or clusters of related activity. Broadly, a sector could be a particular industry in which Wales has some form of natural or competitive advantage while a cluster involves related industries co-locating to increase the economic benefits.

3.9 Economic opinion on the ability of government to develop sectors and clusters is mixed. Most would agree that successful policy should be market and industry led rather than the government “picking winners”. But there is evidence of economic benefits from integrating inward investors into the local supply chains to create local clusters of SMEs. This is based on the technical and managerial efficiency of the inward investor and requires a significant effort to embed within the economy and supply chain.

3.10 In their response to the NEDS consultation, the Small Firms Research Unit at Cardiff Business School highlighted the importance of integrating Welsh SMEs into growth clusters. They pinpoint specialisation as the key to the development and internationalisation of SMEs.

3.11 Work undertaken on a UK level by the Department of Trade & Industry identified a number of industrial clusters in Wales though the degree of embeddedness and development varied. These were agri-food, automotive, aerospace, clothing, electronics, industrial equipment, metal products, opto-electronics, plastics, tourism, bio-technology and wood/furniture. A number of these clusters were identified as being of international importance – biotechnology, opto-electronics and aerospace. Others such as consumer electronics, tourism and automotive components are described as being of national importance.

3.12 One emerging cluster with potential is the media and creative industries cluster. These industries provide an important starting point for the development of clusters in Wales.

3.13 A paper from EMTA, the National Training Organisation for engineering manufacture, proposed a set of criteria to identify the kind of dynamic, high value-adding sectors that Wales requires:

- The sector produces high value-added products or services.
- The sector is a source of highly recyclable products.
- High added value products meet the criteria for recyclability levels.
- Apply the Japanese model – firstly, get it right at home, then export and, finally, globalise.
- The sector has a discernible knowledge economy characteristic.
- The sector has special features that, if controlled, will result in companies in the sector residing in Wales.

- The capacity and capability exists to manage the key market shapers in order to create and meet the demand for the sectors products.

3.14 A number of the clusters outlined above meet some or all of these criteria. Other sectors in Wales with the potential for growth are in the field of environmental goods and services and renewable/clean energy. These sectors fulfil several of the criteria outlined above in terms of value-added, recyclability, potential for export (of knowledge as well as products), high knowledge component as the technologies and products are relatively new and Wales specific advantages. There are two main advantages for Wales. Firstly, the geography and climate of Wales is conducive to the development of clean energy and environmental goods and services, and, secondly, the Assembly's duty to promote sustainable development place such industries at the heart of policy-making.

4.0 TARGETS – WHERE WE WANT TO BE

4.1 The current economic targets for Wales were originally set out in betterwales.com. They are to increase GDP per head in Wales to 90% of the UK level by 2010 and to create a net additional 135,000 jobs. The appropriateness and feasibility of these targets has been questioned during the consultation on NEDS. The issues that have been raised are:

- Is GDP per head a suitable variable to target?
- Is 90% of UK GDP per head by 2010 achievable?
- What other targets should be used?
- Should there be sub-regional targets?
- Should hard targets be set at all?

Background

4.2 There are a number of difficulties in setting whole-economy targets based on public sector intervention:

- Most economic activity takes place outside the public sector.
- Economic activity is affected in the main by factors outside the control of the Assembly (macro variables, European/global trends, business attitudes/actions, etc.).
- There is currently no reliable mechanism through which the impacts of policy actions and changes on the wider economy can be measured with any confidence. The WDA is attempting to link its activities to impacts such as GDP and wages but these are tentative estimates at the moment.
- Targets need to be based on *changes* to current policies or an *increase* in resources since all current activity is already included in GDP figures.
- The possibility of a manufacturing-led recession in the UK in the near future may set us back relative to the UK because of the higher proportion of GDP and employment that come from manufacturing in Wales.

An issue of influence and control

4.3 There are two factors entirely outside the control of the Assembly which will have a bearing on our ability to achieve significant convergence with the UK economy and the rate at which the gap is closed:

- the Euro/Sterling exchange rate; and
- competition from both the EU candidate countries and countries further afield such as China: the pool of relatively cheap labour in these countries has implications for manufacturers of goods with a high labour cost component.

4.4 Euro/Sterling exchange rate has particular significance for Wales' relative GDP position because of our:

- high dependence on manufacturing and in particular industries such as metals and consumer goods which are heavily traded between UK and EU: and
- low representation in financial & business services which do well when interest rates and the Sterling exchange rate are high – the very combination of factors which hurt manufacturing. At these times, regions such as the South East of England have a tendency to become more prosperous in relation to Wales and other areas which focus heavily on manufacturing.

4.5 If the Euro remained low relative to Sterling for most of the decade, Wales would need to put even greater effort into promoting financial & business services. However, if Sterling was to fall to a level where manufacturing could expand, efforts to modernise our manufacturing base and climb up the value chain would receive a welcome boost. Higher added value manufacturing would also reduce our exposure to direct competition with the relatively low wage economies among the prospective EU candidate countries.

4.6 In either case, gaining an increased representation in financial and other services would not be at the expense of modernising the manufacturing sector but in addition to it. Companies which have their HQs and R&D functions in a region tend to:

- create local demand for financial and professional services in those regions, both directly and indirectly; and
- give rise to more (and more substantial) business start-ups, which in turn then create more demand for financial and professional services at the regional level.

4.7 The aim, therefore, must be to both diversify our industrial base and continue to modernise our existing industries, building on strengths.

4.8 In doing so, it will also be important to make a real effort to give more people an opportunity to join the workforce. By UK, but not European standards, Wales has a relatively low participation rate in the economy. In part, this reflects our heavy industrial inheritance as can be seen in the sharp variations between the regions and communities of Wales.

4.9 At the beginning of the decade, it is difficult to forecast the extent to which low participation rates are a self-extinguishing, one-off inheritance from industrial change and how much they are a reflection of deeper social, economic and environmental problems.

4.10 Making good the low participation rate by end-decade will be both a by-product and a key element of making the required step-change in the economy. Objective One assistance, with its focus on the lagging two thirds of Wales in the former industrial valleys and the rural west and north, will play a major part in achieving this transformation.

Alternative targets

4.11 A range of alternative targets have been mooted. The purpose in using targets that are not GDP based is to capture quality of life issues of which GDP is not a good measure. One such indicator is the Index of Sustainable Economic Welfare which is being developed in Wales by the University of Wales. The ISEW is a method of adjusting GDP to arrive at an overall (single) measure of sustainable wellbeing.

4.12 The problems with such measures are that they are not governed by any international standards (as GDP is) and the weighting methods are highly subjective. This makes it difficult to compare across borders and over time.

4.13 The Index of Multiple Deprivation is a useful way of comparing economic and social conditions in small areas. It highlights places where a number of factors combine to reinforce poverty or exclusion. There are issues surrounding the Index over whether appropriate weighting is used for factors that affect rural and urban areas differently.

4.14 These alternative targets (ISEW and IMD) are both useful indicators. They may not be sufficiently well developed and robust at this time. However, they should be monitored alongside the main economic indicators rather than used as targets and could be used more with improvements in methodology and data sets.

Recommendations

4.15 The targets we pursue must be linked to our long term vision and objectives. Our goal is to raise the standard of living and the opportunities available to the people of Wales through the development of a modern, knowledge-based economy

4.16 We have sought to identify high-level targets which capture the essence of the change we wish to see. In a number of areas we are restricted by the lack of data, relevant measures or ability to quantify the objective; these difficulties will be addressed as part of our research programme.

4.17 Success would mean Welsh GDP per person rising from 80 per cent to 90 per cent of the UK average over the next decade - with the ultimate aim of achieving parity. This is the main goal of our economic policies, though, realistically, the time-scale for achievement cannot be set with precision - there are too many imponderables.

4.18 To achieve this goal we need to do two things. The first is to modernise the industrial structure of the Welsh economy to ensure that Wales has a higher share of employment in high-growth, high-skill and high value-adding industries and occupations. The second is to ensure that more of our people have jobs and opportunities to benefit from the new industries.

4.19 The targets for 2010 are all linked to achieving one or both of the aims set out above.

Employment

Target:

- 135,000 increase in employment (employed plus self-employed) with particular emphasis on communities and groups with low participation rates

Supporting businesses

4.20 This covers a multitude of different actions and objectives which are difficult to capture in a single indicator. Much of the evidence will be qualitative rather than quantitative because it will deal with the attitudes and perceptions of the business community to public sector policies. Therefore, survey work will be needed to gauge the effectiveness of our actions - this is impossible to quantify as a 10 year target. The Small Business Service are currently developing such a survey for England and Wales. Ultimately, the effect of our policies and programmes will be felt in an improvement in business competitiveness while accepting that many factors are beyond our control.

Target: Improvements in survey evidence and methods.

Encouraging innovation

4.21 Innovation is the process of turning knowledge into commercial activity. The main proxy measure of innovation activity levels is expenditure on business research and development (R&D) activities. For comparison purposes this needs a suitable scaling factor such as measuring expenditure as a proportion of GDP. We will also measure this by the access sought to innovation support services. There are other indicators which can be used such as university spin-outs or number of patents filed but there are difficulties measuring these on a consistent basis though such indicators could support the headline target.

Target: Increase business R&D expenditure to more than 1% of Welsh GDP

Encouraging entrepreneurship

4.22 A crude measure of the level of business enterprise activity is simply the number of active businesses relative to total population. Wales lags the UK both in terms of the business birth rate and the number of extant businesses per head of population. Therefore, the business birth rate needs to be raised and failure rates minimised increase the stock up to the UK average.

Target: Raise the stock of Welsh businesses to achieve the UK average level of VAT-registered businesses per 10,000 people.

Setting a fresh direction

4.23 As with Supporting Businesses this can be measured in a number of ways. The key issue is modernising the industrial base of Wales which involves both structural change and more efficient businesses. This means moving into growth areas such as environmental goods and services. We also need to capture changes in the way companies do business.

Target: 10% of energy production to come from clean sources

Wales & the World

4.24 This is about developing new markets for Welsh products and raising the profile of Wales as a location. There are a number of facets such as increasing the goods we send abroad, raising the quality of inward investment and attracting more tourists to Wales. Quality of inward investment is a difficult concept to measure so no target is currently set though one could be added at a later date. Despite the quality problems regarding the quality of data available on exports and exporters a target is being set for this area of activity.

Targets:

- At least match the UK export growth rate over the period.
- Tourism expenditure in Wales to increase by an average of at least 6% per year over the period.

The Learning Country

4.25 There are a number of variables that can be used to measure improvements in skills and education. These are dealt with in detail by the relevant agencies. For economic development purposes we need to capture two main concepts - reducing the number of people with no qualifications and increasing the number with higher level qualifications.

Targets:

- The proportion of adults of working age without qualifications to reduce from 1 in 4 in 1996 to 1 in 10
- The proportion of adults of working age with a Level 4 qualification to increase from 1 in 5 in 1996 to over 3 in 10

Promoting Information & Communication Technology

4.26 A range of issues dealing with ICT are outlined in Cymru Ar Lein, the National Assembly's information age strategic framework for Wales. However, there are specific measures of ICT "business connectivity" which measure the use of technology for e-commerce by businesses. The Department of Trade and Industry produces one such indicator annually on a UK regional basis.

Target: Increase the proportion of Welsh businesses using e-commerce to the UK average as measured by the DTI Connectivity Index.

Alternative measures of economic performance

4.27 Gross domestic product is an imperfect indicator of economic performance and well-being. It fails to take into account some quality of life issues and the environmental degradation question. It is measured at where people work rather than where they live. Household income measures incomes where people live and includes incomes excluded from GDP such as pensions. The alternative measures such as the Index of Sustainable Economic Welfare (ISEW) and the Index of Multiple Deprivation (IMD) are not yet suitable alternatives to GDP but we will monitor both alongside other indicators and assess developments in both methodology and data to see if they can play a part in future thinking.

Target: Household disposable income to increase to 95% of UK average from 90%.