

## Chapter 2

### Regional income

This chapter examines differences in the levels and growth of income across regions. It shows how personal disposable income varies due to differences in wages, private transfers such as profits, dividends and rent, grants and social security benefits and taxes. A further source of variation, when incomes are measured per head of population, is found to be the dependency ratio (the proportion not working to those working).

The analysis relies on the set of regional accounts given in the Appendix. It must be emphasised at the outset that the accounts themselves are provisional; figures quoted here for 1966, in particular, are least reliable.

The analysis reveals a significant convergence of both wage incomes and per capita incomes with problem regions moving up to the national average and the richer regions, notably the South-East, moving

down towards the national average. The system of taxes and social security does bring about some redistribution of incomes among regions, particularly from the South-East and to Northern Ireland, but it has not been responsible to any significant extent for convergence of incomes.

The main regional contrasts examined in more detail in subsequent sections are shown in Table 2.1. Of the four problem regions in the North of the UK which suffered emigration, only Northern Ireland has had a markedly low average level of per capita income. The low level of income per capita in Northern Ireland reflects, at least in part, a higher ratio of dependants (children, old people, inactive or unemployed) to those at work. Conversely, of the four regions in the South and East only one, the South-East, has an above-average level of per capita income; in this region the ratio of dependants to workers is particularly low.

Table 2.1 Income per capita in problem regions and dynamic regions relative to UK average, 1966-1978

	Increase in employment, 1966-78 (percentage difference from UK average)	Net immigration of working age, 1966-78 (percentage of working age population, difference from UK average)	Number of dependants per 100 workers (difference from UK average)		Personal disposable income per capita (relative to UK = 100)	
			1966	1978	1966	1978
<i>Problem regions</i>						
Northern Ireland	+ 5.8	-10.1	+56	+40	-27	-19
Scotland	- 0.4	- 4.5	+12	+ 7	- 8	- 2
North	+ 0.3	- 3.8	+15	+ 8	-13	- 6
North-West	- 5.8	- 3.0	- 2	+ 5	- 7	- 3
<i>Intermediate regions</i>						
Wales	- 0.8	+ 1.9	+20	+23	-13	- 9
West Midlands	- 3.9	- 0.7	-19	- 8	+ 3	+ 1
Yorkshire and Humberside	- 2.0	- 1.8	- 1	+ 1	- 5	- 5
<i>Dynamic regions</i>						
East Anglia	+15.3	+14.5	+28	+13	0	- 7
South-West	+ 7.4	+ 8.8	+17	+15	- 5	- 3
East Midlands	+ 4.6	+ 3.6	+ 4	+ 3	- 5	- 5
South-East	- 0.1	+ 0.3	-11	-15	+15	+10

The other region where per capita income has been high, the West Midlands, has also had a low proportion of dependants.

The lack of correlation between per capita income and job opportunities partly reflects the degree to which migration has accommodated regional differences in the growth of employment. As will be shown below, the distribution of per capita income has tended to become more equal among regions. This has happened because of a convergence of levels of productivity and wages as well as a narrowing of differences in dependency ratios. Differences in job opportunities have been neither the result nor the cause of major differences in productivity or wage levels among regions. The tax and social security system has redistributed income from rich to poor regions, but only to a minor degree. The income differences which persist are mainly those between employed and unemployed, and the elderly and people of working age, which are to be found within every region as well as among regions.

Personal income is a very incomplete measure even of the economic aspect of relative living standards. For one thing, the figures used here make no allowance for regional differences in the cost of living (a shortcoming which we shall in future make some attempt to rectify). Apart from this a substantial part of regional expenditure – notably public services and investment – is not financed from personal income. The last part of this chapter summarises differences in the relationship between total spending and income among regions. These differences are quite large. On the other hand, not all of the expenditure financed by government or business within each region should necessarily be regarded as a specific benefit to the region. For example, whether an army camp or an oil refinery is seen as a benefit or a disbenefit in the region where it is located is a matter of individual points of view.

### Determinants of personal income per head

We shall measure factors influencing the level of personal income per head in each region relative to averages for the UK as a whole. Table 2.2 shows the make-up of national average figures in 1975.

Income generated by production is given by value-added per worker, including gross profits and rent. This may be used as a crude comparative measure of productivity across regions. A large part, employment income, is directly transferred to households in each region. To this must be added net personal receipts of profit income, dividends and interest as well as rent (including imputed rent of owner-occupiers). Finally, to arrive at disposable income we add grants and social benefits paid out by the government and subtract income taxes and social security contributions. It will be seen that, for the UK as a whole, the various transfers roughly cancel out so that personal disposable income is nearly equal to income from employment and self-employment. On the other hand disposable income per capita is just under half the average level of income from employment per worker because on average each worker must directly or indirectly support at least one other person.

### Productivity and employment income

The average level of value-added per worker has been rather uniform across regions in the UK and tended to converge even more closely in the 1970s (see Table 2.3). The main difference is between the South-East, where productivity has been 6-10% above average, and Northern Ireland, where productivity outside the industrial sector has been some 15% below average in money terms. In the East and West Midlands industrial productivity per worker appears to be some 10% below average (this probably reflects the specialisation of these regions in labour-intensive branches of manufacturing). Overall, leaving aside the South-East and Northern Ireland, value-added per worker lies within a very narrow band (95-100% of

Table 2.2 Average income per capita in the UK, 1975

	(£ per capita)
Population (thousands)	55,962
Workers: civilian employees, armed forces and self-employed – full-time and part-time (thousands)	24,828
Workers/population (%)	44.37
Value-added per worker (excluding offshore)	3,759
less profits and rent per worker	– 674
Income from employment and self-employment per worker	<u>3,085</u>
Income from employment and self-employment per capita of population	1,369
plus net profits, dividends, interest and rent per capita	+ 145
equals personal income per capita before income tax and social security	<u>1,513</u>
plus grants and social benefits per capita	+ 184
less income taxes and social contributions per capita	– 392
equals disposable income per capita	<u>1,305</u>

**Table 2.3 Value-added per worker by region relative to UK average, 1966-78<sup>a</sup>**

(index, UK average = 100)

	Industry			All sectors		
	1966	1973	1978	1966	1973	1978
Northern Ireland	95	93	97	86	90	88
Scotland	98	100	101	94	98	100
North	99	100	96	98	98	97
North-West	99	100	101	96	98	99
Wales	105	100	101	92	97	97
West Midlands	90	93	91	98	96	96
Yorkshire and Humberside	97	93	97	97	94	95
East Anglia	110	96	96	100	98	97
South-West	99	92	101	93	91	98
East Midlands	99	92	91	98	96	97
South-East	106	110	108	109	108	106
<i>RMS deviation from mean</i>						
(including SE and N. Ireland)	5.2	5.3	4.7	5.4	4.5	4.0
(excluding SE and N. Ireland)	5.2	3.6	3.9	2.5	2.2	1.4

<sup>a</sup> Value-added at factor cost. See Appendix for definitions.

the national average). In particular value-added per worker in the North-West (where employment declined most) has been as high as or higher than in most other regions.

The distribution of average employment income per worker among regions very closely follows the distribution of value-added per worker. Again the only significant departures from the national average have been in Northern Ireland (where it has been 10% below average) and the South-East (6-10% above average). However the distribution of employment income per capita of population is much more unequal and has followed a different pattern (see Table 2.4). The disparity between Northern Ireland and the South-East is much accentuated; in 1978 the gap was still 35% of the national average, having been as high as 48% in 1966. Moreover there are significant differences among other regions (although these have tended to fall through time). In Wales employment income per head remained 13% below average in 1978. The West Midlands had a 10% above-average figure in 1966 but by 1978 had fallen back to a near-average position.

### Dependants

There are regional differences not only in the size but also in the composition of the dependent population (see Table 2.5) which need to be taken into account in income comparisons. In the problem regions of the North (including Northern Ireland) the number of old people per 100 workers is about average. The higher number of dependants in these regions is mainly a matter of unemployment, low activity and, especially in Northern Ireland's case, a larger number

of children. In Wales, although the dependency ratio is above-average in all categories, the largest factor is a comparatively low activity rate for women of working age. In the South-West there are larger numbers of old people. In the West Midlands the low dependency ratio reflects high activity and a below-average proportion of old people. In the South-East, in addition to high activity rates there are comparatively few children.

In a complex way, and perhaps often with long time lags, there is a tendency for dependency ratios to reflect differences in job opportunities relative to population. Thus in Northern Ireland whose employment shortfall is due to natural growth of population, the lack of jobs is compounded by the fact that workers have larger families to support. In dynamic regions it is to be expected that activity rates will be high, raising earnings per person or per family. It might also be expected that problem regions would have above-average proportions of old people, although this does not appear to have been true in the UK. Although differences in dependency ratios are the main source of disparities in per capita income, the differences are still on the whole surprisingly small.

### Transfers of personal income

The pattern of income per head is little modified by transfers in aggregate. Comparing employment income per capita with disposable income per capita (Table 2.6), it can be seen that transfers bring the South-East down 2-3% towards the average and raise the relative income level in Northern Ireland by 3-5%. Wales and the South-West also benefit relatively from transfers.

**Table 2.4 Income from employment and self-employment by region relative to UK average, 1966-78**

(index, UK average = 100)

	Per worker			Per capita of population		
	1966	1973	1978	1966	1973	1978
Northern Ireland	86	91	92	69	74	78
Scotland	94	98	100	88	93	96
North	94	96	97	88	91	93
North-West	99	100	101	95	94	95
Wales	94	97	96	86	89	87
West Midlands	100	97	98	110	102	101
Yorkshire and Humberside	95	94	96	96	92	95
East Anglia	92 <sup>a</sup>	98	97	86 <sup>a</sup>	94	92
South-West	94	99	98	88	94	92
East Midlands	93	97	97	92	96	96
South-East	111 <sup>a</sup>	107	106	117 <sup>a</sup>	115	113
<i>RMS deviation from mean</i>						
(including SE and N. Ireland)	6.0	3.8	3.4	12.1	9.3	8.2
(excluding SE and N. Ireland)	2.5	1.6	1.6	7.2	3.4	3.6

<sup>a</sup> Estimates of total income from employment and self-employment in East Anglia and the South-East in 1966 used in this and the following tables differ slightly from those based on CSO estimates in the Appendix, since the latter have several implausible implications.

**Table 2.5 Dependants per 100 workers by region relative to UK average, 1978**

	Children <sup>a</sup>	Old people <sup>a</sup>	Inactive <sup>b</sup>	Unemployed	Total
Northern Ireland	+24	-2	+13	+5	+40
Scotland	+ 4	-1	+ 2	+3	+ 7
North	+ 2	0	+ 3	+4	+ 8
North-West	+ 2	+1	0	+2	+ 5
Wales	+ 5	+6	+12	+2	+23
West Midlands	0	-4	- 3	-1	- 8
Yorkshire and Humberside	+ 1	0	0	0	+ 1
East Anglia	+ 2	+2	+ 9	-1	+13
South-West	0	+8	+ 8	0	+15
East Midlands	+ 2	-1	+ 4	-1	+ 3
South-East	- 5	-1	- 6	-2	-15

<sup>a</sup> Children aged under 15, old people aged over 65.

<sup>b</sup> Balance of inactive of working age, less employed and self-employed over 65.

Estimates of net personal receipts of profits, dividends, interest and rent by region in the Appendix have been derived as residuals and are too unreliable to be a basis for inference, except perhaps in their implication that the South-East has higher per capita receipts than most other regions.

However the other part of transfers, namely those which occur through the tax and social security system, is better measured and shows a remarkably stable pattern of redistribution. Regional differences in receipts of grants and social benefits have been

minor (although increasing in importance as real benefit levels were improved). But income tax has produced a substantial effective transfer from the South-East to most other regions, notably Northern Ireland (see Table 2.7).

#### **The relationship between expenditure and income**

Thus far we have examined the regional distribution of personal income. However a considerable part of regional expenditure, notably public services and

Table 2.6 Personal income by region relative to UK average, 1966-78

(index, UK average = 100)

	Income from employment and self-employment per capita			Personal disposable income per capita		
	1966	1973	1978	1966	1973	1978
Northern Ireland	69	74	78	73	79	81
Scotland	88	93	96	92	93	98
North	88	91	93	87	92	94
North-West	95	94	95	93	96	97
Wales	86	89	87	87	92	91
West Midlands	110	102	101	103	100	101
Yorkshire and Humberside	96	92	95	95	93	95
East Anglia	86	94	92	100	96	93
South-West	88	94	92	95	97	97
East Midlands	92	96	96	95	96	95
South-East	117	115	113	115	112	110
<i>RMS deviation from mean</i>						
(including SE and N. Ireland)	12.1	9.3	8.2	10.0	7.4	6.7
(excluding SE and N. Ireland)	7.2	3.4	3.6	5.0	2.5	2.8

Table 2.7 Tax and social security transfers by region, 1966-78

(receipts per person relative to UK as a whole, £ per capita at 1975 prices)

	Grants and social benefits			Income tax and social contributions <sup>a</sup>		
	1966	1973	1978	1966	1973	1978
Northern Ireland	- 5	+15	+ 8	+120	+117	+114
Scotland	+19	+11	+16	+ 38	+ 23	+ 38
North	0	+ 9	+16	+ 48	+ 41	+ 38
North-West	0	+11	+15	+ 32	+ 32	+ 27
Wales	+12	+21	+28	+ 56	+ 56	+ 56
West Midlands	-12	-15	-16	- 7	- 7	- 13
Yorkshire and Humberside	+ 5	+ 8	+ 5	+ 23	+ 33	+ 18
East Anglia	+ 4	-10	-25	+ 45	+ 20	+ 31
South-West	+10	0	0	+ 11	+ 18	+ 41
East Midlands	+ 1	-13	-24	+ 21	+ 38	+ 28
South-East	- 7	- 7	- 9	- 72	- 72	- 79

<sup>a</sup> + indicates below-average payments.

nearly all fixed investment, is not financed directly from personal income. The pattern of regional expenditure per capita therefore differs from that of personal income (see Table 2.8). The North-West, West Midlands and Yorkshire and Humberside all have comparatively low total expenditure relative to income while the South-East, the South-West and now also Scotland and Northern Ireland have comparatively high total expenditure.

Differences between income generated by production in each region and total regional expenditure are financed by a variety of transfers. On the government account, expenditure on public services, subsidies, grants and social security benefits is offset to a greater or lesser degree by indirect taxes and income tax levied in each region. The business sector contributes investment spending offset by retained profits. In addition the personal sector may borrow to finance

**Table 2.8 Personal income and regional expenditure relative to UK average, 1966 and 1978**

(£ per capita at 1975 prices)

	1966		1978	
	Personal income	Regional expenditure <sup>a</sup>	Personal income	Regional expenditure <sup>a</sup>
Northern Ireland	-292	-283	-159	- 51
Scotland	- 85	-125	- 31	+ 20
North	-140	-172	- 80	-139
North-West	- 76	-149	- 39	-242
Wales	-134	- 42	-122	-175
West Midlands	+ 37	- 92	+ 8	-188
Yorkshire and Humberside	- 52	-184	- 63	-157
East Anglia	- 5	+ 14	- 95	- 13
South-West	- 58	+113	- 42	+117
East Midlands	- 54	-182	- 68	-171
South-East	+159	+253	+136	+259

<sup>a</sup> Regional expenditure comprises private and public consumption and fixed investment all valued at 1975 market prices.

**Table 2.9 Regional balances relative to UK average, 1978**

(£ per capita at 1975 prices)

	Government expenditure and transfers <sup>a</sup>	Business investment and transfers <sup>b</sup>	Personal net borrowing <sup>c</sup>	Excess of expenditure over value-added <sup>d</sup>
Northern Ireland	+367	+28	+97	+492
Scotland	+ 93	+39	-31	+101
North	- 38	+62	-32	- 6
North-West	- 81	-49	-46	-176
Wales	+ 52	+36	-25	+ 62
West Midlands	-119	-10	-57	-187
Yorkshire and Humberside	- 47	- 1	- 8	- 57
East Anglia	+ 56	-16	+91	+131
South-West	+228	+14	+25	+267
East Midlands	- 44	-24	- 8	- 76
South-East	- 36	- 6	+34	- 8

<sup>a</sup> Public consumption and fixed investment *plus* grants and social benefits to personal sector *less* net indirect taxes *less* personal income tax and social security contributions.

<sup>b</sup> Business fixed investment *plus* dividends and interest payments to personal sector *less* profits and rent earned in region.

<sup>c</sup> Personal fixed investment *less* saving.

<sup>d</sup> Regional expenditure (excluding stockbuilding) *less* value-added at market prices: equal to imports of goods and services *less* exports of goods and services *less* stockbuilding.

investment (mainly house purchase) offset by savings deposited in the banking and insurance system. Table 2.9 gives estimates for 1978 of the net contribution of government, business and personal borrowing to the finance of expenditure in each region in excess of, or below, income generated by production in the region.

Estimated business transfers are small and, surprisingly, mainly in favour of Northern Ireland, Scotland and the North of England. Personal borrowing less saving results in a transfer in favour of Northern Ireland (where saving is low) and East Anglia (where house building is high). But by far the largest net transfers are those in the government

account. These include the income tax and social security transfer discussed above. The figures are large mainly because of differences among regions in per capita spending on government services (including defence) and infrastructure. Northern Ireland, Scotland and Wales all have higher levels of public spending than England has. Within England, the South-West and East Anglia have positive net transfers. The North-West and West Midlands lose out heavily on the government account as well as on business transfers

and net personal borrowing. Both regions have had low overall levels of fixed investment.

The final column of Table 2.9, showing the excess or shortfall of regional expenditure over value-added in the region (relative to the UK average) is a measure of each region's relative per capita trade deficit. It should by now be clear that the pattern of these deficits has little to do with the competitiveness of production in each region, but depends mainly on government tax and expenditure decisions.