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GDP per capita in OECD countries: the UK's relative position

This Paper presents estimates of GDP per capita in OECD countries based on the latest available information. These suggest, contrary to previous estimates, that the UK has improved its position relative to the OECD average since the 1970s and has closed the gap with countries such as Canada, France, Sweden and Switzerland.

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I Introduction

Comparisons of gross domestic product (GDP) growth and levels of GDP per capita (i.e. per resident) are two of the most frequent ways in which countries' economic performance is judged. The UK's relatively poor performance on both measures has been a cause for concern. For example, the July 1997 Budget Red Book stated:

Over the past 25 years, GDP growth has been slower in the UK than in any of its major competitors. The level of GDP per head in the UK is below the level in all other major industrial (G7) countries, and the UK has failed to narrow the gap with the OECD average since the 1970s.¹

Similarly the 1997 DTI publication *Competitiveness: our partnership with business UK* stated:

The UK has suffered two of the five deepest recessions in any G7 country since 1973. Reflecting this uneven pattern of growth, GDP per head has fluctuated sharply relative to the OECD average. And, partly as a result, the gap in GDP per head between the UK and other OECD countries is just as wide now as it was in the 1970s.²

Estimates of GDP per capita are often revised many years after they are first published. This Paper presents tables based on the latest available information that suggest that the UK has, in fact, improved its position relative to the OECD average since the 1970s and has closed the gap with countries such as Canada, France, Sweden and Switzerland.

Provisional data for 1997 suggests that the UK was ranked 16th among 25 OECD countries in terms of GDP per capita and had a GDP per capita of 95% of the OECD average.³

¹ HM Treasury, *Financial Statement and Budget Report: July 1997*, HC 85 1997-98 para.3.01

² p.3

³ Source: OECD, *Main Economic Indicators*, May 1998 p.223

II Technical issues

A. What does GDP measure

Gross domestic product is a measure of the output of an economy resulting from the production of marketed goods and services within the national boundary. Goods and services are (for this purpose) valued at their market price and output is gross of capital depreciation.

Although GDP per capita is often used as an indicator of living standards or prosperity, it has a number of weaknesses:

- GDP is a measure of output rather than income. The residents of a country can derive income generated by assets overseas or be the recipients of other income transferred from abroad (e.g. pensions).
- GDP excludes production that is non-marketed. This includes housework, D-I-Y and allotment produce.
- GDP takes no account of the depletion of resources that results from the generation of output or of non-material factors that might be viewed as contributing to standards of living in a broader sense (e.g. life expectancy, pollution levels and civil liberties).
- GDP per capita is a single figure that provides no indication as to how prosperity is distributed within a country.

B. Converting data to a common currency

International comparisons of monetary amounts are highly dependent on the method used to convert data to a common currency. The most obvious method is to use market exchange rates. In many contexts, however, they have limitations: exchange rates can be volatile (as shown by recent experience in South East Asia) and do not necessarily reflect relative price levels. In order to make comparisons of real output it is common practice to use purchasing power parities (PPPs) as an alternative to exchange rates. PPPs are artificial exchange rates that are specifically calculated to reflect relative price levels. For example, if a basket of goods and services costs £100 in the UK and \$200 in the USA then the PPP would be £1=\$2.

C. Reliability & revisions

The calculation of GDP per capita requires three elements: GDP, population and PPP. All three are of necessity estimates and are liable to a margin of error. In addition there are revisions from time to time which may necessitate changes to published data for a number of previous years. Although there are international guidelines on the construction of national accounts, differences in methodology and reliability between countries persist.

As a result, data on GDP per capita are not accurate to the nearest dollar, and small differences between countries may not be significant. In particular, where countries are clustered with similar levels of GDP per capita, rankings may be misleadingly precise. Although recent revisions have tended to suggest better UK's economic performance than was previously thought, future revisions could have the opposite effect. Major revisions to GDP data for EU countries will occur in the next year or so as countries adopt the 1995 European System of National and Regional Accounts (ESA 95).

III Sources and results

A. Sources

The main source for the data used in this paper is the OECD publication *National Accounts 1960 to 1996*. The data are generally those provided by member countries, however, in order to provide a complete dataset, a number of figures have been estimated by the OECD secretariat. In particular, the OECD has produced estimates for Germany that relate to the unified country throughout the period since 1970. Three adjustments have been made to the data as originally published.

- In 1995 the UK revised its methodology for collecting the price data that are used to construct PPPs. The UK price level (relative to other countries) is now thought to be higher than previously estimated and the UK's GDP in dollar terms is consequently lower when converted at PPPs. The OECD has not adjusted UK PPPs for years prior to 1995 to reflect the new methodology. This results in a discontinuity in the published series. The perverse result is that data published by the OECD suggest that UK GDP per capita fell relative to the average between 1993 and 1995 despite real per capita GDP growing at an above average rate. Further background was given in an article in the March 1997 edition of the ONS publication *Economic Trends*.⁴ In order to remove this discontinuity, the 1995 PPP has been projected back to 1970 on the basis of relative inflation rates in the UK and USA. (The OECD already use this method to calculate PPPs for years prior to 1990.) The OECD average has also been adjusted to reflect the changes to the data for the UK.
- Eurostat (the Statistical Office of the European Communities) has recently published benchmark estimates of PPPs for the EU 15, Iceland, Norway and Switzerland in 1996.⁵ (The original data published by OECD for 1996 used projected PPPs based on benchmark data for 1995.) The tables incorporate revised 1996 estimates (calculated by the Library) for these 18 countries and the OECD total.
- The tables include projected figures for 1997 as published by the OECD in the May 1998 edition of *Main Economic Indicators*.

⁴ "International comparisons of GDP per head over time", March 1997 pp 66-67

⁵ Source: Euostat, "Comparisons in real terms of the GDP for the EU, Iceland, Norway, Switzerland and Poland – results for 1996", *Statistics in Focus: Economy and Finance*, 1998/10

Only 25 OECD countries are included. Four countries that have recently joined the OECD (the Czech Republic, Hungary, Poland and South Korea) are excluded. None of these four had a GDP per capita in excess of the UK's in 1996. The table also excludes non-OECD countries. Of these, Hong Kong and Singapore and some oil producing countries are likely to have per capita GDPs in excess of the UK's.

B. Results

Table 1 (page 10) sets out estimates of GDP per capita in various years since 1974. The accompanying chart illustrates the provisional data for 1997. Table 2 (page 11) expresses all the data as proportions of the UK figure. Table 3 (page 12) shows the ranking of each country in each year.

In 1996 the OECD average was 6% above the UK level compared with 11% higher in both 1974 and 1979. Thus the UK has modestly improved relative to the OECD average. Although the UK has performed less well in terms of GDP per capita than countries such as Japan, Germany and Ireland, there has been a significant narrowing of the differential between the UK and countries such as Canada, France, Sweden and Switzerland.

The UK is provisionally ranked 16th of the 25 countries in 1997 compared with 18th in both 1974 and 1979. The UK is ranked higher than Italy, Ireland and Finland which, on the basis of data for 1996 published this time last year, had higher per capita GDPs than the UK.

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Table 1

GDP per capita US\$ at current PPPs

Country	1974	1979	1984	1989	1994	1995	1996 (estimated)	1997 (prov)
Australia	4,845	7,733	11,538	15,322	18,583	19,519	20,376	21,104
Austria	4,563	7,669	11,510	15,459	20,040	20,613	21,968	22,854
Belgium	4,870	7,741	11,575	15,550	20,579	21,105	21,986	22,921
Canada	5,318	8,947	13,236	17,859	20,314	20,992	21,529	22,484
Denmark	4,851	7,870	12,006	15,664	20,422	21,491	22,678	23,251
Finland	4,312	6,818	10,928	15,586	16,340	17,921	18,642	19,829
France	5,182	8,406	12,211	16,327	19,272	19,908	20,470	21,169
Germany (a)	4,414	7,466	11,136	14,976	19,754	20,510	21,570	22,462
Greece	2,674	4,719	6,726	8,864	11,613	12,174	13,083	13,856
Iceland	4,536	8,111	12,332	16,513	19,459	21,755	23,138	24,600
Ireland	2,678	4,636	7,030	10,039	15,766	17,201	18,137	20,006
Italy	4,361	7,307	11,041	15,259	18,682	19,460	20,233	20,093
Japan	4,180	7,193	11,311	16,312	21,223	21,916	23,235	23,759
Luxembourg	6,005	8,868	13,667	21,626	30,176	31,210	31,674	33,051
Mexico	1,813	3,069	4,415	5,033	7,824	7,367	7,776	8,306
Netherlands	4,932	7,797	11,113	14,795	18,802	19,874	20,467	21,448
New Zealand	4,961	6,891	10,782	12,989	16,331	16,963	17,473	17,858
Norway	4,408	7,897	12,665	16,514	21,937	22,743	24,528	25,885
Portugal	2,562	3,966	5,715	8,554	12,042	12,457	12,962	14,205
Spain	3,489	5,220	7,621	10,979	13,743	14,318	15,161	15,941
Sweden	5,279	8,155	12,356	16,217	17,616	18,750	19,287	20,344
Switzerland	7,155	10,217	15,155	19,837	24,198	24,984	24,618	25,130
Turkey	1,334	2,152	3,174	4,213	5,276	5,682	6,114	6,521
United Kingdom	4,259	6,889	10,051	14,284	17,063	17,862	19,153	20,144
United States	6,816	11,055	16,020	21,270	25,764	26,711	27,821	29,180
OECD 25	4,710	7,670	11,282	15,179	18,827	19,469	20,364	n.a.

Note: (a) Estimated whole Germany throughout.

GDP per capita: 1997 (prov)

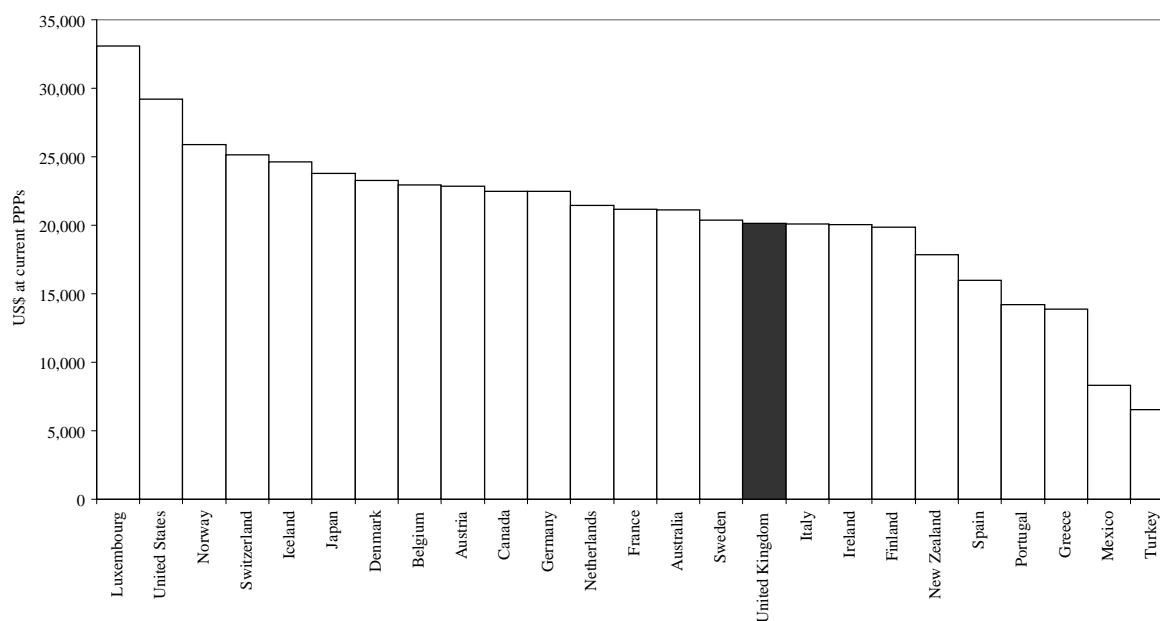


Table 2

GDP per capita
UK=100

Country	1974	1979	1984	1989	1994	1995	1996 (estimated)	1997 (prov)
Australia	114	112	115	107	109	109	106	105
Austria	107	111	115	108	117	115	115	113
Belgium	114	112	115	109	121	118	115	114
Canada	125	130	132	125	119	118	112	112
Denmark	114	114	119	110	120	120	118	115
Finland	101	99	109	109	96	100	97	98
France	122	122	121	114	113	111	107	105
Germany (a)	104	108	111	105	116	115	113	112
Greece	63	68	67	62	68	68	68	69
Iceland	107	118	123	116	114	122	121	122
Ireland	63	67	70	70	92	96	95	99
Italy	102	106	110	107	109	109	106	100
Japan	98	104	113	114	124	123	121	118
Luxembourg	141	129	136	151	177	175	165	164
Mexico	43	45	44	35	46	41	41	41
Netherlands	116	113	111	104	110	111	107	106
New Zealand	116	100	107	91	96	95	91	89
Norway	104	115	126	116	129	127	128	128
Portugal	60	58	57	60	71	70	68	71
Spain	82	76	76	77	81	80	79	79
Sweden	124	118	123	114	103	105	101	101
Switzerland	168	148	151	139	142	140	129	125
Turkey	31	31	32	29	31	32	32	32
United Kingdom	100	100	100	100	100	100	100	100
United States	160	160	159	149	151	150	145	145
OECD 25	111	111	112	106	110	109	106	n.a.

Note: (a) Estimated whole Germany throughout.

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Table 3

GDP per capita

Rankings

Country	1974	1979	1984	1989	1994	1995	1996 (estimated)	1997 (prov)
Australia	11	12	11	14	15	14	14	14
Austria	12	13	12	13	9	10	9	9
Belgium	9	11	10	12	6	8	8	8
Canada	4	3	4	4	8	9	11	10
Denmark	10	9	9	10	7	7	7	7
Finland	17	19	17	11	18	17	18	19
France	6	5	8	7	12	12	12	13
Germany (a)	14	14	14	16	10	11	10	11
Greece	22	21	22	22	23	23	22	23
Iceland	13	7	7	6	11	6	6	5
Ireland	21	22	21	21	20	19	19	18
Italy	16	15	16	15	14	15	15	17
Japan	19	16	13	8	5	5	5	6
Luxembourg	3	4	3	1	1	1	1	1
Mexico	24	24	24	24	24	24	24	24
Netherlands	8	10	15	17	13	13	13	12
New Zealand	7	17	18	19	19	20	20	20
Norway	15	8	5	5	4	4	4	3
Portugal	23	23	23	23	22	22	23	22
Spain	20	20	20	20	21	21	21	21
Sweden	5	6	6	9	16	16	16	15
Switzerland	1	2	2	3	3	3	3	4
Turkey	25	25	25	25	25	25	25	25
United Kingdom	18	18	19	18	17	18	17	16
United States	2	1	1	2	2	2	2	2

Note: (a) Estimated whole Germany throughout.