

Appendix 5E

Australia's Wealth Compared to that of Other Countries

This appendix displays two separate wealth assessments conducted by the World Bank in 1995 and 2005, and then compares the GDP values of different countries in past decades from 1870 to 2000 using data presented in the OECD publication titled *The World Economy: Historical Statistics* (Maddison 2003).

World Bank Wealth Assessments

A 1995 World Bank report ('Monitoring Environmental Progress (MEP): A Report on Work in Progress') listed Australia as the wealthiest of 192 countries in 1990 on a per capita basis, taking into account combined totals of produced assets, natural resources and human resources, as shown in Tables 5E-1 and 5E-2 below.

Table 5E-1: Comparison of Selected Countries in Terms of Estimated Per Capita Wealth in the Year 1990 (in US\$ per capita)

Country	OECD?	Human Resources	Produced Assets	Natural Resources	Total Wealth
Australia	YES	177,121	59,040	598,838	835,000
Austria	YES	295,500	70,920	27,580	394,000
Belgium	YES	315,564	60,832	7,604	384,000
Brazil	no	17,218	8,842	20,941	47,000
Canada	YES	154,880	63,360	485,760	704,000
China	no	5,082	990	528	6,600
Czech Republic	YES	33,000	7,500	9,500	50,000
Denmark	YES	351,880	78,710	32,410	463,000
Finland	YES	117,980	97,160	131,860	347,000
France	YES	314,861	69,515	28,624	413,000
Germany	YES	312,089	67,158	19,752	399,000
Greece	YES	106,500	19,880	15,620	142,000
Hungary	YES	45,360	10,080	7,560	63,000
Iceland	YES	111,780	77,760	296,460	486,000
India	no	2,752	1,075	473	4,300
Ireland	YES	161,120	31,800	19,080	212,000
Italy	YES	305,860	55,950	11,190	373,000
Japan	YES	453,119	100,693	11,188	565,000
Luxembourg	YES	551,657	79,758	26,586	658,000
Malaysia	no	33,040	8,960	14,000	56,000
Mexico	YES	54,020	8,140	11,840	74,000
Netherlands	YES	303,200	68,220	7,580	379,000
New Zealand	YES	82,680	48,760	80,560	212,000
Nigeria	no	738	2,214	1,148	4,100
Norway	YES	203,520	93,280	127,200	424,000
Poland	YES	28,000	6,500	15,500	50,000
Portugal	YES	114,210	16,920	9,870	141,000
Russian Federation	no	14,700	14,700	68,600	98,000
Singapore	no	260,100	45,900	0	306,000
Slovakia	YES	25,740	5,610	1,650	33,000
South Korea	YES	108,240	12,300	2,460	123,000
Spain	YES	209,040	34,840	24,120	268,000
Sweden	YES	275,010	78,574	142,416	496,000
Switzerland	YES	504,660	122,930	19,410	647,000
Turkey	YES	24,480	5,100	4,420	34,000
United Kingdom	YES	268,920	45,360	9,720	324,000
United States	YES	248,390	67,360	105,250	421,000
median of 37		154,880	45,900	15,620	306,000
OECD median		190,321	59,936	19,245	376,000

Table 5E-2 shows the ranks corresponding to the figures in Table 5E-1 above.

Table 5E-2: Comparison of Selected Countries in Terms of Estimated Per Capita Wealth in the Year 1990 (in US\$ per capita) – Ranks

Country	OECD?	Human Resources	Produced Assets	Natural Resources	Total Wealth
Australia	YES	17	16	1	1
Austria	YES	10	9	12	13
Belgium	YES	5	15	28	14
Brazil	no	33	29	15	32
Canada	YES	19	14	2	2
China	no	35	37	35	35
Czech Republic	YES	29	31	27	30
Denmark	YES	4	6	10	8
Finland	YES	20	3	5	17
France	YES	6	10	11	11
Germany	YES	7	13	16	12
Greece	YES	24	23	19	23
Hungary	YES	27	27	30	28
Iceland	YES	22	8	3	7
India	no	36	36	36	36
Ireland	YES	18	22	18	21
Italy	YES	8	17	23	16
Japan	YES	3	2	24	5
Luxembourg	YES	1	5	13	3
Malaysia	no	28	28	21	29
Mexico	YES	26	30	22	27
Netherlands	YES	9	11	29	15
New Zealand	YES	25	18	8	21
Nigeria	no	37	35	34	37
Norway	YES	16	4	6	9
Poland	YES	30	32	20	30
Portugal	YES	21	24	25	24
Russian Federation	no	34	25	9	26
Singapore	no	13	19	37	19
Slovakia	YES	31	33	33	34
South Korea	YES	23	26	32	25
Spain	YES	15	21	14	20
Sweden	YES	11	7	4	6
Switzerland	YES	2	1	17	4
Turkey	YES	32	34	31	33
United Kingdom	YES	12	20	26	18
United States	YES	14	12	7	10

A 2005 World Bank report ('Where is the Wealth of Nations?: Measuring Capital for the 21st Century') produced a set of country rankings different to those established a decade earlier as above. These new figures examine 120 countries in terms of 2000 data using per capita GDP as the fundamental measure of total wealth and a factor called *Intangible Capital* which makes up the difference between GDP and *Tangible Wealth* levels. Under this more recent formulation, Australia is no longer the highest ranked country as was the case in the 1995 study summarised above. Tables 5E-3 and 5E-4 below compare the 32 countries among the 37 selected countries used extensively herein which were also among the 120 countries compared in this 2005 World Bank report. These tables show that Australia's total wealth is only ranked 15 out of these 32

countries, but is ranked 4 or higher in terms of *subsoil assets* (rank = 4), *crop land* (rank = 2), *pasture land* (rank = 3) and *natural capital* (rank = 4). Norway, New Zealand and Canada are the three countries which rank higher than Australia in terms of natural capital per capita.

Table 5E-3: Comparison of Selected Countries in Terms of Estimated Per Capita Value of Assets and Wealth in the Year 2000 (in US\$ per capita)

Country	OECD ?	Subsoil Assets (SSA)	Timber Resources (TR)	Non Timber Forest Resources (NTFR)	Protected Areas (PA)	Crop Land (CL)	Pasture Land (PL)	Surface Land Assets (SLA = TR + NTFR + PA + CL + PL = NC - SSA)	Natural Capital (NC = SSA + SLA)	Produced Capital + Urban Land (PCUL)	Tangible Wealth (TW = NC + PCUL)	Intangible Capital (IC = W - TW)	Total Wealth (W)
Australia	YES	11,491	748	551	1,421	4,365	5,590	12,676	24,167	58,179	82,345	288,686	371,031
Austria	YES	485	829	144	2,410	1,298	2,008	6,689	7,174	73,118	80,291	412,789	493,080
Belgium-Luxembourg	YES	20	254	20	0	575	2,161	3,010	3,030	60,561	63,591	388,123	451,714
Brazil	no	1,708	609	724	402	1,998	1,311	5,044	6,752	9,643	16,394	70,528	86,922
Canada	YES	18,566	4,724	1,264	5,756	2,829	1,631	16,205	34,771	54,226	88,997	235,982	324,979
China	no	511	106	29	27	1,404	146	1,712	2,223	2,956	5,179	4,208	9,387
Denmark	YES	4,173	211	25	1,377	2,184	3,775	7,573	11,746	80,181	91,926	483,212	575,138
Finland	YES	58	6,115	1,259	1,090	843	2,081	11,387	11,445	61,064	72,508	346,838	419,346
France	YES	87	307	77	1,026	2,747	2,091	6,248	6,335	57,814	64,150	403,874	468,024
Germany	YES	269	263	39	1,113	1,176	1,586	4,176	4,445	68,678	73,124	423,323	496,447
Greece	YES	318	82	101	57	3,424	573	4,236	4,554	28,973	33,527	203,445	236,972
Hungary	YES	536	152	42	366	2,721	1,131	4,411	4,947	15,480	20,427	56,645	77,072
India	no	201	59	14	122	1,340	192	1,727	1,928	1,154	3,082	3,738	6,820
Ireland	YES	385	222	51	172	1,583	8,122	10,149	10,534	46,542	57,076	273,414	330,490
Italy	YES	361	0	51	543	2,639	1,083	4,317	4,678	51,943	56,621	316,045	372,666
Japan	YES	28	38	56	364	710	316	1,485	1,513	150,258	151,771	341,470	493,241
Malaysia	no	6,922	438	188	161	1,369	24	2,181	9,103	13,065	22,167	24,520	46,687
Mexico	YES	6,075	199	128	176	1,195	721	2,418	8,493	18,959	27,452	34,420	61,872
Netherlands	YES	2,053	27	7	527	1,035	3,090	4,686	6,739	62,428	69,167	352,222	421,389
New Zealand	YES	3,596	1,648	611	11,786	5,824	19,761	39,630	43,226	36,227	79,453	163,481	242,934
Nigeria	no	2,639	270	24	6	1,022	78	1,401	4,040	667	4,707	-1,959	2,748
Norway	YES	49,839	573	586	1,339	567	1,925	4,989	54,828	119,650	174,478	299,230	473,708
Portugal	YES	41	438	107	385	1,724	934	3,588	3,629	31,011	34,640	172,837	207,477
Russia	no	11,777	292	1,228	1,317	1,262	1,342	5,440	17,217	15,593	32,809	5,900	38,709
Singapore	no	0	0	0	0	0	0	0	0	79,011	79,012	173,595	252,607
South Korea	YES	33	0	30	441	1,241	275	1,987	2,020	31,399	33,418	107,864	141,282
Spain	YES	50	81	105	360	2,806	971	4,324	4,374	39,531	43,905	217,300	261,205
Sweden	YES	263	2,434	908	1,549	1,120	1,676	7,687	7,950	58,331	66,281	447,143	513,424
Switzerland	YES	0	493	50	2,195	809	2,396	5,943	5,943	99,904	105,847	542,394	648,241
Turkey	YES	190	64	34	86	2,270	861	3,314	3,504	8,580	12,085	35,774	47,859
United Kingdom	YES	4,739	44	14	495	583	1,291	2,428	7,167	55,239	62,406	346,347	408,753
United States	YES	7,106	1,341	238	1,651	2,752	1,665	7,646	14,752	79,851	94,603	418,009	512,612

Table 5E-4: Comparison of Selected Countries in Terms of Estimated Per Capita Value of Assets and Wealth in the Year 2000 (in US\$ per capita) - Ranks

Country	OECD ?	Subsoil Assets (SSA)	Timber Resources (TR)	Non Timber Forest Resources (NTFR)	Protect- ed Areas (PA)	Crop Land (CL)	Pasture Land (PL)	Surface Land Assets (SLA = TR + NTFR + PA + CL + PL = NC - SSA)	Natural Capital (NC = SSA + SLA)	Produced Capital + Urban Land (PCUL)	Tangible Wealth (TW = NC + PCUL)	Intangible Capital (IC = W - TW)	Total Wealth (W)
Australia	YES	4	7	8	7	2	3	3	4	13	7	15	15
Austria	YES	16	6	11	3	18	10	9	13	7	8	6	7
Belgium-Luxembourg	YES	30	17	28	31	30	7	23	27	11	16	8	10
Brazil	no	13	8	5	18	12	17	13	15	28	28	24	24
Canada	YES	2	2	1	2	4	14	2	3	16	6	17	17
China	no	15	22	25	29	15	29	29	28	30	30	30	30
Denmark	YES	9	19	26	8	11	4	8	7	4	5	2	2
Finland	YES	25	1	2	12	26	9	4	8	10	12	10	12
France	YES	24	13	16	13	7	8	10	17	14	15	7	9
Germany	YES	20	16	22	11	22	15	20	22	8	11	4	5
Greece	YES	19	23	15	28	3	25	19	21	23	22	19	21
Hungary	YES	14	21	21	20	8	19	16	19	26	27	25	25
India	no	22	26	29	26	17	28	28	30	31	32	31	31
Ireland	YES	17	18	18	24	14	2	5	9	18	18	16	16
Italy	YES	18	30	18	14	9	20	18	20	17	19	13	14
Japan	YES	29	28	17	21	28	26	30	31	1	2	12	6
Malaysia	no	6	11	10	25	16	31	26	10	27	26	28	28
Mexico	YES	7	20	12	23	21	24	25	11	24	25	27	26
Netherlands	YES	12	29	31	15	24	5	15	16	9	13	9	11
New Zealand	YES	10	4	6	1	1	1	1	2	20	9	22	20
Nigeria	no	11	15	27	30	25	30	31	24	32	31	32	32
Norway	YES	1	9	7	9	31	11	14	1	2	1	14	8
Portugal	YES	27	11	13	19	13	22	21	25	22	21	21	22
Russian Fed	no	3	14	3	10	19	16	12	5	25	24	29	29
Singapore	no	31	30	32	31	32	32	32	32	6	10	20	19
South Korea	YES	28	30	24	17	20	27	27	29	21	23	23	23
Spain	YES	26	24	14	22	5	21	17	23	19	20	18	18
Sweden	YES	21	3	4	6	23	12	6	12	12	14	3	3
Switzerland	YES	31	10	20	4	27	6	11	18	3	3	1	1
Turkey	YES	23	25	23	27	10	23	22	26	29	29	26	27
United Kingdom	YES	8	27	29	16	29	18	24	14	15	17	11	13
United States	YES	5	5	9	5	6	13	7	6	5	4	5	4

Ranks Based on Study by Maddison (2003)

Tables 5E-5 to 5E-12 compare the GDP values of different countries in past decades. These tables employ data presented in the OECD publication 'The World Economy Historical Statistics' (Maddison 2003).

Tables 5E-5 and 5E-8 below compare the per capita GDP values of 20 countries at 10 year intervals ranging from 1870 to 2000, in rank order based on values in 2000. Tables 5E-9 and 5E-12 similarly compare the per capita GDP values of 32 countries, again at 10 year intervals but this time ranging from 1950 to 2000, again in rank order based on 2000 values. The countries employed in Tables 5E-5 to 5E-12 are those for which per capita GDP data is available in Maddison (2003) for the years considered.

Tables 5E-5 and 5E-9 provide actual per capita GDP values in 1990 international dollars (which are US dollars assuming exchange rates to achieve purchasing power parity [PPP]). Tables 5E-6 and 5E-10 provide these per capita GDP values normalised relative to the highest per capita GDP value achieved each year among the countries considered. Tables 5E-7 and 5E-11 provide per capita GDP values normalised relative to United States values. Tables 5E-8 and 5E-12 provide the ranks of the respective values for each country and each year considered.

Table 5E-5: Per Capita GDPs (in 1990 International Dollars) in 20 Countries from 1870 to 2000, in Rank Order Based on 2000 Values

Country	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000
United States	2,445	2,880	3,392	4,091	4,964	5,552	6,213	7,010	9,561	11,328	15,030	18,577	23,201	28,129
Norway	1,432	1,588	1,777	1,937	2,256	2,780	3,712	4,088	5,463	7,208	10,033	15,129	18,466	24,364
Denmark	2,003	2,181	2,523	3,017	3,705	3,992	5,341	5,116	6,943	8,812	12,686	15,227	18,452	23,010
Canada	1,695	1,816	2,378	2,911	4,066	3,861	4,811	5,368	7,291	8,753	12,050	16,176	18,872	22,198
Switzerland	2,102	2,450	3,182	3,833	4,331	4,314	6,246	6,397	9,064	12,457	16,904	18,779	21,482	22,025
Netherlands	2,757	3,046	3,323	3,424	3,789	4,220	5,603	4,831	5,996	8,287	11,967	14,705	17,262	21,591
Australia	3,273	4,285	4,458	4,013	5,210	4,766	4,708	6,166	7,412	8,791	12,024	14,412	17,106	21,540
Japan	737	863	1,012	1,180	1,304	1,696	1,850	2,874	1,921	3,986	9,714	13,428	18,789	21,069
France	1,876	2,120	2,376	2,876	2,965	3,227	4,532	4,042	5,271	7,546	11,664	15,106	18,093	20,808
Belgium	2,692	3,065	3,428	3,731	4,064	3,962	4,979	4,562	5,462	6,952	10,611	14,467	17,197	20,742
Sweden	1,662	1,846	2,086	2,561	2,980	2,802	3,937	4,857	6,739	8,688	12,716	14,937	17,695	20,321
Finland	1,140	1,155	1,381	1,668	1,906	1,846	2,666	3,220	4,253	6,230	9,577	12,949	16,866	20,235
Austria	1,863	2,079	2,443	2,882	3,290	2,412	3,586	3,959	3,706	6,519	9,747	13,759	16,905	20,097
United Kingdom	3,190	3,477	4,009	4,492	4,611	4,548	5,441	6,856	6,939	8,645	10,767	12,931	16,430	19,817
Italy	1,499	1,581	1,667	1,785	2,332	2,587	2,918	3,505	3,502	5,916	9,719	13,149	16,313	18,740
Germany	1,839	1,991	2,428	2,985	3,348	2,796	3,973	5,403	3,881	7,705	10,839	14,114	15,929	18,596
New Zealand	3,100	3,747	3,755	4,298	5,316	5,641	4,960	6,300	8,456	9,465	11,189	12,347	13,909	16,010
Spain	1,207	1,646	1,624	1,786	1,895	2,177	2,620	2,080	2,189	3,072	6,319	9,203	12,055	15,269
Portugal	975	947	1,128	1,302	1,228	1,229	1,571	1,615	2,086	2,956	5,473	8,044	10,826	14,022
Brazil	713	752	794	678	769	963	1,048	1,250	1,672	2,335	3,057	5,198	4,923	5,556
Highest	3,273	4,285	4,458	4,492	5,316	5,641	6,246	7,010	9,561	12,457	16,904	18,779	23,201	28,129

Note: The countries in this table are the 20 among the selected 37 for which complete data was available for all years 1870, 1880, ... through to 2000 in Maddison (2003).

Table 5E-6: Per Capita GDPs in 20 Countries from 1870 to 2000, in Rank Order Based on 2000 Values, Normalised Relative to Highest = 100

Country	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000
United States	74.7	67.2	76.1	91.1	93.4	98.4	99.5	100.0	100.0	90.9	88.9	98.9	100.0	100.0
Norway	43.8	37.1	39.9	43.1	42.4	49.3	59.4	58.3	57.1	57.9	59.4	80.6	79.6	86.6
Denmark	61.2	50.9	56.6	67.2	69.7	70.8	85.5	73.0	72.6	70.7	75.0	81.1	79.5	81.8
Canada	51.8	42.4	53.3	64.8	76.5	68.4	77.0	76.6	76.3	70.3	71.3	86.1	81.3	78.9
Switzerland	64.2	57.2	71.4	85.3	81.5	76.5	100.0	91.3	94.8	100.0	100.0	100.0	92.6	78.3
Netherlands	84.2	71.1	74.5	76.2	71.3	74.8	89.7	68.9	62.7	66.5	70.8	78.3	74.4	76.8
Australia	100.0	100.0	100.0	89.3	98.0	84.5	75.4	88.0	77.5	70.6	71.1	76.7	73.7	76.6
Japan	22.5	20.1	22.7	26.3	24.5	30.1	29.6	41.0	20.1	32.0	57.5	71.5	81.0	74.9
France	57.3	49.5	53.3	64.0	55.8	57.2	72.6	57.7	55.1	60.6	69.0	80.4	78.0	74.0
Belgium	82.2	71.5	76.9	83.1	76.4	70.2	79.7	65.1	57.1	55.8	62.8	77.0	74.1	73.7
Sweden	50.8	43.1	46.8	57.0	56.1	49.7	63.0	69.3	70.5	69.7	75.2	79.5	76.3	72.2
Finland	34.8	27.0	31.0	37.1	35.9	32.7	42.7	45.9	44.5	50.0	56.7	69.0	72.7	71.9
Austria	56.9	48.5	54.8	64.2	61.9	42.8	57.4	56.5	38.8	52.3	57.7	73.3	72.9	71.4
United Kingdom	97.5	81.1	89.9	100.0	86.7	80.6	87.1	97.8	72.6	69.4	63.7	68.9	70.8	70.5
Italy	45.8	36.9	37.4	39.7	43.9	45.9	46.7	50.0	36.6	47.5	57.5	70.0	70.3	66.6
Germany	56.2	46.5	54.5	66.5	63.0	49.6	63.6	77.1	40.6	61.9	64.1	75.2	68.7	66.1
New Zealand	94.7	87.4	84.2	95.7	100.0	100.0	79.4	89.9	88.4	76.0	66.2	65.7	60.0	56.9
Spain	36.9	38.4	36.4	39.8	35.6	38.6	41.9	29.7	22.9	24.7	37.4	49.0	52.0	54.3
Portugal	29.8	22.1	25.3	29.0	23.1	21.8	25.2	23.0	21.8	23.7	32.4	42.8	46.7	49.8
Brazil	21.8	17.5	17.8	15.1	14.5	17.1	16.8	17.8	17.5	18.7	18.1	27.7	21.2	19.8
Highest	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

According to Table 5E-6 above and Table 5E-8 below, only five of these 20 countries have been the wealthiest country in the world, in terms of per capita GDP levels, in one or more of the years considered. Australia was wealthiest in 1870, 1880 and 1890, the United Kingdom in 1900, New Zealand in 1910 and 1920, Switzerland in 1930, 1960, 1970 and 1980, and the United States in 1940, 1950, 1990 and 2000.

Table 5E-7: Per Capita GDPs in 20 Countries from 1870 to 2000, in Rank Order Based on 2000 Values, Normalised Relative to US = 100

Country	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	Percentage Gain from 1870 to 2000	Rank Based on Percentage Gain
United States	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	9
Norway	58.6	55.1	52.4	47.3	45.4	50.1	59.7	58.3	57.1	63.6	66.8	81.4	79.6	86.6	47.9	3
Denmark	81.9	75.7	74.4	73.7	74.6	71.9	86.0	73.0	72.6	77.8	84.4	82.0	79.5	81.8	-0.1	10
Canada	69.3	63.1	70.1	71.2	81.9	69.5	77.4	76.6	76.3	77.3	80.2	87.1	81.3	78.9	13.8	5
Switzerland	86.0	85.1	93.8	93.7	87.2	77.7	100.5	91.3	94.8	110.0	112.5	101.1	92.6	78.3	-8.9	13
Netherlands	112.8	105.8	98.0	83.7	76.3	76.0	90.2	68.9	62.7	73.2	79.6	79.2	74.4	76.8	-31.9	15
Australia	133.9	148.8	131.4	98.1	105.0	85.8	75.8	88.0	77.5	77.6	80.0	77.6	73.7	76.6	-42.8	18
Japan	30.1	30.0	29.8	28.8	26.3	30.5	29.8	41.0	20.1	35.2	64.6	72.3	81.0	74.9	148.5	1
France	76.7	73.6	70.0	70.3	59.7	58.1	72.9	57.7	55.1	66.6	77.6	81.3	78.0	74.0	-3.6	11
Belgium	110.1	106.4	101.1	91.2	81.9	71.4	80.1	65.1	57.1	61.4	70.6	77.9	74.1	73.7	-33.0	17
Sweden	68.0	64.1	61.5	62.6	60.0	50.5	63.4	69.3	70.5	76.7	84.6	80.4	76.3	72.2	6.3	8
Finland	46.6	40.1	40.7	40.8	38.4	33.2	42.9	45.9	44.5	55.0	63.7	69.7	72.7	71.9	54.3	2
Austria	76.2	72.2	72.0	70.4	66.3	43.4	57.7	56.5	38.8	57.5	64.9	74.1	72.9	71.4	-6.2	12
United Kingdom	130.5	120.7	118.2	109.8	92.9	81.9	87.6	97.8	72.6	76.3	71.6	69.6	70.8	70.5	-46.0	19
Italy	61.3	54.9	49.1	43.6	47.0	46.6	47.0	50.0	36.6	52.2	64.7	70.8	70.3	66.6	8.7	7
Germany	75.2	69.1	71.6	73.0	67.4	50.4	63.9	77.1	40.6	68.0	72.1	76.0	68.7	66.1	-12.1	14
New Zealand	126.8	130.1	110.7	105.1	107.1	101.6	79.8	89.9	88.4	83.6	74.4	66.5	60.0	56.9	-55.1	20
Spain	49.4	57.2	47.9	43.7	38.2	39.2	42.2	29.7	22.9	27.1	42.0	49.5	52.0	54.3	10.0	6
Portugal	39.9	32.9	33.3	31.8	24.7	22.1	25.3	23.0	21.8	26.1	36.4	43.3	46.7	49.8	25.0	4
Brazil	29.2	26.1	23.4	16.6	15.5	17.3	16.9	17.8	17.5	20.6	20.3	28.0	21.2	19.8	-32.3	16
Highest	133.9	148.8	131.4	109.8	107.1	101.6	100.5	100.0	100.0	110.0	112.5	101.1	100.0	100.0		

The percentage gain figures in the second column from the right in Table 5E-7 above show that eight of these 20 countries have gained relative to the United States over the period 1870 to 2000, in terms of their per capita GDP levels. In 11 countries, including Australia, per capita GDP values have fallen relative to the US value over this 130 year period. Australia is one of only three countries which have lost over 40% relative to the United States in terms of per capita GDP over the period 1870 to 2000. The seven countries in which the loss in per capita GDP has been greatest relative to the United States, over the period 1870 to 2000, have been New Zealand (55% loss relative to the US), the United Kingdom (46% loss), Australia (43% loss), Belgium (33%), Brazil (32%), the Netherlands (32%) and Germany (12%).

In respect of geographic remoteness, there is no clear pattern among the countries which have gained and lost relative to the United States over the period 1870 to 2000. As shown in Appendix 5F, New Zealand, Australia and Brazil are among the most remote countries in the world, and the United Kingdom is remote in the sense of being located on islands, but significant reductions in per capita GDP levels relative to the US have also been observed in Belgium (33% loss) and the Netherlands (32%), which are among the *least* remote of all countries. The fortunes of Australia and New Zealand seem connected with the declining significance of the British Empire (see for example Leamer and Storper 2001: 648).

Table 5E-8: Ranks of the 20 Countries Based on Per Capita GDPs from 1870 to 2000 as in Table 5E-5

Country	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	change in rank from 1870 to 2000
United States	6	6	5	3	3	2	2	1	1	2	2	2	1	1	5
Norway	15	15	14	14	15	13	13	12	10	12	13	5	5	2	13
Denmark	8	8	8	8	9	7	5	8	6	4	4	4	6	3	5
Canada	12	13	11	10	6	9	8	7	5	6	5	3	3	4	8
Switzerland	7	7	7	5	5	5	1	3	2	1	1	1	2	5	2
Netherlands	4	5	6	7	8	6	3	10	9	9	7	8	9	6	-2
Australia	1	1	1	4	2	3	9	5	4	5	6	10	11	7	-6
Japan	19	19	19	19	18	18	18	17	19	17	16	13	4	8	11
France	9	9	12	12	13	10	10	13	12	11	8	6	7	9	0
Belgium	5	4	4	6	7	8	6	11	11	13	12	9	10	10	-5
Sweden	13	12	13	13	12	11	12	9	8	7	3	7	8	11	2
Finland	17	17	17	17	16	17	16	16	13	15	17	15	13	12	5
Austria	10	10	9	11	11	15	14	14	15	14	14	12	12	13	-3
United Kingdom	2	3	2	1	4	4	4	2	7	8	11	16	14	14	-12
Italy	14	16	15	16	14	14	15	15	16	16	15	14	15	15	-1
Germany	11	11	10	9	10	12	11	6	14	10	10	11	16	16	-5
New Zealand	3	2	3	2	1	1	7	4	3	3	9	17	17	17	-14
Spain	16	14	16	15	17	16	17	18	17	18	18	18	18	18	-2
Portugal	18	18	18	18	19	19	19	19	18	19	19	19	19	19	-1
Brazil	20	20	20	20	20	20	20	20	20	20	20	20	20	20	0

The rightmost column of Table 5E-8 shows that Australia's rank among these 20 countries has fallen 6 places between 1870 and 2000. Only New Zealand and the United Kingdom have experienced a greater loss in their rank position.

Tables 5E-9 to 5E-12 repeat Tables 5E-5 to 5E-8 but now include 32 countries over the period 1950 to 2000 only.

Table 5E-9: Per Capita GDPs (in 1990 International Dollars) in 32 Countries from 1950 to 2000, in Rank Order Based on 2000 Values

Country	1950	1960	1970	1980	1990	2000
United States	9,561	11,328	15,030	18,577	23,201	28,129
Norway	5,463	7,208	10,033	15,129	18,466	24,364
Denmark	6,943	8,812	12,686	15,227	18,452	23,010
Singapore	2,219	2,310	4,439	9,058	14,365	22,207
Canada	7,291	8,753	12,050	16,176	18,872	22,198
Switzerland	9,064	12,457	16,904	18,779	21,482	22,025
Ireland	3,453	4,282	6,199	8,541	11,818	22,015
Netherlands	5,996	8,287	11,967	14,705	17,262	21,591
Australia	7,412	8,791	12,024	14,412	17,106	21,540
Japan	1,921	3,986	9,714	13,428	18,789	21,069
France	5,271	7,546	11,664	15,106	18,093	20,808
Belgium	5,462	6,952	10,611	14,467	17,197	20,742
Sweden	6,739	8,688	12,716	14,937	17,695	20,321
Finland	4,253	6,230	9,577	12,949	16,866	20,235
Austria	3,706	6,519	9,747	13,759	16,905	20,097
United Kingdom	6,939	8,645	10,767	12,931	16,430	19,817
Italy	3,502	5,916	9,719	13,149	16,313	18,740
Germany	3,881	7,705	10,839	14,114	15,929	18,596
New Zealand	8,456	9,465	11,189	12,347	13,909	16,010
Spain	2,189	3,072	6,319	9,203	12,055	15,269
South Korea	770	1,105	1,954	4,114	8,704	14,343
Portugal	2,086	2,956	5,473	8,044	10,826	14,022
Greece	1,915	3,146	6,211	8,971	9,988	12,044
Malaysia	1,559	1,530	2,079	3,657	5,132	7,872
Mexico	2,365	3,155	4,320	6,289	6,119	7,218
Poland	2,447	3,215	4,428	5,740	5,113	7,215
Hungary	2,480	3,649	5,028	6,306	6,459	7,138
Turkey	1,623	2,247	3,078	4,015	5,445	6,597
Brazil	1,672	2,335	3,057	5,198	4,923	5,556
China	439	673	783	1,067	1,858	3,425
India	619	753	868	938	1,309	1,910
Nigeria	753	854	1,190	1,402	1,161	1,156
Highest	9,561	12,457	16,904	18,779	23,201	28,129

Note: The countries in this table are the 32 among the selected 37 for which complete data was available for all years 1950, 1960, ... through to 2000 in Maddison (2003).

Table 5E-10: Per Capita GDPs in 32 Countries from 1950 to 2000, in Rank Order Based on 2000 Values, Normalised Relative to Highest = 100

Country	1950	1960	1970	1980	1990	2000
United States	100.0	90.9	88.9	98.9	100.0	100.0
Norway	57.1	57.9	59.4	80.6	79.6	86.6
Denmark	72.6	70.7	75.0	81.1	79.5	81.8
Singapore	23.2	18.5	26.3	48.2	61.9	78.9
Canada	76.3	70.3	71.3	86.1	81.3	78.9
Switzerland	94.8	100.0	100.0	100.0	92.6	78.3
Ireland	36.1	34.4	36.7	45.5	50.9	78.3
Netherlands	62.7	66.5	70.8	78.3	74.4	76.8
Australia	77.5	70.6	71.1	76.7	73.7	76.6
Japan	20.1	32.0	57.5	71.5	81.0	74.9
France	55.1	60.6	69.0	80.4	78.0	74.0
Belgium	57.1	55.8	62.8	77.0	74.1	73.7
Sweden	70.5	69.7	75.2	79.5	76.3	72.2
Finland	44.5	50.0	56.7	69.0	72.7	71.9
Austria	38.8	52.3	57.7	73.3	72.9	71.4
United Kingdom	72.6	69.4	63.7	68.9	70.8	70.5
Italy	36.6	47.5	57.5	70.0	70.3	66.6
Germany	40.6	61.9	64.1	75.2	68.7	66.1
New Zealand	88.4	76.0	66.2	65.7	60.0	56.9
Spain	22.9	24.7	37.4	49.0	52.0	54.3
South Korea	8.1	8.9	11.6	21.9	37.5	51.0
Portugal	21.8	23.7	32.4	42.8	46.7	49.8
Greece	20.0	25.3	36.7	47.8	43.0	42.8
Malaysia	16.3	12.3	12.3	19.5	22.1	28.0
Mexico	24.7	25.3	25.6	33.5	26.4	25.7
Poland	25.6	25.8	26.2	30.6	22.0	25.6
Hungary	25.9	29.3	29.7	33.6	27.8	25.4
Turkey	17.0	18.0	18.2	21.4	23.5	23.5
Brazil	17.5	18.7	18.1	27.7	21.2	19.8
China	4.6	5.4	4.6	5.7	8.0	12.2
India	6.5	6.0	5.1	5.0	5.6	6.8
Nigeria	7.9	6.9	7.0	7.5	5.0	4.1
Highest	100.0	100.0	100.0	100.0	100.0	100.0

As in the earlier Tables 5E-6 and 5E-8, Table 5E-10 above and Table 5E-12 below show that the United States was the wealthiest country in the world in terms of per capita GDP in 1950, 1990 and 2000, and Switzerland was in 1960, 1970 and 1980.

Table 5E-11: Per Capita GDPs in 32 Countries from 1950 to 2000, in Rank Order Based on 2000 Values, Normalised Relative to US = 100

Country	1950	1960	1970	1980	1990	2000	Percentage Gain from 1870 to 2000	Rank Based on Percentage Gain
United States	100.0	100.0	100.0	100.0	100.0	100.0	0.0	26
Norway	57.1	63.6	66.8	81.4	79.6	86.6	51.6	14
Denmark	72.6	77.8	84.4	82.0	79.5	81.8	12.6	20
Singapore	23.2	20.4	29.5	48.8	61.9	78.9	240.2	3
Canada	76.3	77.3	80.2	87.1	81.3	78.9	3.5	23
Switzerland	94.8	110.0	112.5	101.1	92.6	78.3	-17.4	30
Ireland	36.1	37.8	41.2	46.0	50.9	78.3	116.7	7
Netherlands	62.7	73.2	79.6	79.2	74.4	76.8	22.4	18
Australia	77.5	77.6	80.0	77.6	73.7	76.6	-1.2	27
Japan	20.1	35.2	64.6	72.3	81.0	74.9	272.8	2
France	55.1	66.6	77.6	81.3	78.0	74.0	34.2	16
Belgium	57.1	61.4	70.6	77.9	74.1	73.7	29.1	17
Sweden	70.5	76.7	84.6	80.4	76.3	72.2	2.5	24
Finland	44.5	55.0	63.7	69.7	72.7	71.9	61.7	13
Austria	38.8	57.5	64.9	74.1	72.9	71.4	84.3	9
United Kingdom	72.6	76.3	71.6	69.6	70.8	70.5	-2.9	29
Italy	36.6	52.2	64.7	70.8	70.3	66.6	81.9	10
Germany	40.6	68.0	72.1	76.0	68.7	66.1	62.9	12
New Zealand	88.4	83.6	74.4	66.5	60.0	56.9	-35.6	31
Spain	22.9	27.1	42.0	49.5	52.0	54.3	137.1	5
South Korea	8.1	9.8	13.0	22.1	37.5	51.0	533.1	1
Portugal	21.8	26.1	36.4	43.3	46.7	49.8	128.5	6
Greece	20.0	27.8	41.3	48.3	43.0	42.8	113.8	8
Malaysia	16.3	13.5	13.8	19.7	22.1	28.0	71.6	11
Mexico	24.7	27.9	28.7	33.9	26.4	25.7	3.7	22
Poland	25.6	28.4	29.5	30.9	22.0	25.6	0.2	25
Hungary	25.9	32.2	33.5	33.9	27.8	25.4	-2.2	28
Turkey	17.0	19.8	20.5	21.6	23.5	23.5	38.2	15
Brazil	17.5	20.6	20.3	28.0	21.2	19.8	12.9	19
China	4.6	5.9	5.2	5.7	8.0	12.2	165.2	4
India	6.5	6.6	5.8	5.0	5.6	6.8	4.9	21
Nigeria	7.9	7.5	7.9	7.5	5.0	4.1	-47.8	32
Highest	100.0	110.0	112.5	101.1	100.0	100.0		

The percentage gain figures in the second column from the right in Table 5E-11 above show that 25 of these 32 countries have gained relative to the United States over the period 1950 to 2000, in terms of their per capita GDP levels. The six countries which have fallen relative to the United States over this 50 year period, in terms of per capita GDP levels, have been: Nigeria (48% loss), New Zealand (36%), Switzerland (17%), the United Kingdom (2.9%), Hungary (2.2%) and Australia (1.2%). Geographic remoteness may, to some extent at least, explain New Zealand's significant loss (36%) here, but Australia's loss has been much more modest (just 1.2%) and hence less obviously associated with geographic remoteness.

Table 5E-12: Ranks of the 32 Countries Based on Per Capita GDPs from 1870 to 2000 as in Table 5E-9

Country	1950	1960	1970	1980	1990	2000	change in rank from 1870 to 2000
United States	1	2	2	2	1	1	0
Norway	10	12	13	5	5	2	8
Denmark	6	4	4	4	6	3	3
Singapore	21	26	23	19	17	4	17
Canada	5	6	5	3	3	5	0
Switzerland	2	1	1	1	2	6	-4
Ireland	17	17	20	21	20	7	10
Netherlands	9	9	7	8	9	8	1
Australia	4	5	6	10	11	9	-5
Japan	24	18	16	13	4	10	14
France	12	11	8	6	7	11	1
Belgium	11	13	12	9	10	12	-1
Sweden	8	7	3	7	8	13	-5
Finland	13	15	17	15	13	14	-1
Austria	15	14	14	12	12	15	0
United Kingdom	7	8	11	16	14	16	-9
Italy	16	16	15	14	15	17	-1
Germany	14	10	10	11	16	18	-4
New Zealand	3	3	9	17	18	19	-16
Spain	22	23	18	18	19	20	2
South Korea	29	29	29	27	23	21	8
Portugal	23	24	21	22	21	22	1
Greece	25	22	19	20	22	23	2
Malaysia	28	28	28	29	27	24	4
Mexico	20	21	25	24	25	25	-5
Poland	19	20	24	25	28	26	-7
Hungary	18	19	22	23	24	27	-9
Turkey	27	27	26	28	26	28	-1
Brazil	26	25	27	26	29	29	-3
China	32	32	32	31	30	30	2
India	31	31	31	32	31	31	0
Nigeria	30	30	30	30	32	32	-2

The rightmost column of Table 5E-12 shows that Australia's rank among these 32 countries has fallen five places between 1950 and 2000. The ranks of Sweden and Mexico also fell five places over this period. Only New Zealand, the United Kingdom, Hungary and Poland experienced a greater loss in their rankings.

Bibliography for Appendix 5E

Leamer, E. E. and Storper, M. (2001), 'The Economic Geography of the Internet Age', *Journal of International Business Studies*, Vol. 32, No. 4, pp. 641-665.

Maddison, A. (2003), *The World Economy: Historical Statistics*, OECD, Paris.

World Bank (1995), *Monitoring Environmental Progress (MEP): A Report on Work in Progress*, Washington, DC.

World Bank (2005), *Where is the Wealth of Nations?: Measuring Capital for the 21st Century*, Washington, DC.