

Data Annex¹

A.1. Data source

The data source is the International Comparison Program (ICP) data for 1980 and 1990, used by Dowrick and Quiggin (1997). For reasons of data availability, Dowrick and Quiggin (1997) restricted their sample to 17 OECD member countries. The 1980 ICP data cover 38 components of GDP expenditure and are from United Nations and Commission of the European Communities (1987), while the 1990 ICP data cover 40 components of GDP expenditure and are from World Bank (1993). The original data files constructed by Dowrick and Quiggin (1997) were retrieved from: <ftp://coombs.anu.edu.au/coombspapers/coombsarchives/economics-rsss/dowrick/>.

A.2. Perl programs for data analysis

The Perl code and data files used to generate the results in this paper are available for use by other researchers, and are contained in the file `minimum_subsistence_code` (tar.gz and zip versions are available). Additional documentation is available in this file.

A.3. Estimated income elasticities

The nonparametric bounds to income elasticities for the average OECD country are presented in Tables A1 and A2 (see Section 4.1 for more details). The tables also show the income elasticity constraints that were placed on each good (goods were constrained to be either necessities or luxuries, or else were unconstrained) – see column 3 of Table 1.

References

- DOWRICK, S., AND J. QUIGGIN (1997): “True Measures of GDP and Convergence,” *American Economic Review*, 87(1), 41–64.
- UNITED NATIONS AND COMMISSION OF THE EUROPEAN COMMUNITIES (1987): *World comparisons of purchasing power and real product for 1980, Part Two*. United Nations, New York.
- WORLD BANK (1993): *Purchasing power of currencies: Comparing national incomes using ICP data*. World Bank, Washington, DC.

¹This is the data annex to “Incorporating Minimum Subsistence Consumption into International Comparisons of Real Income”, by Robert Ackland. Version: 16th April, 2008

Table A1: Estimated income elasticities for 17 OECD countries, 1980

	minimum	midpoint	maximum	constraint
Bread and cereals	0.33	0.82	1.31	n
Meat	0.89	1.07	1.25	n
Fish	0.74	0.98	1.21	n
Milk, cheese & eggs	0.68	0.95	1.21	n
Oils and fats	0.89	1.11	1.32	n
Fruits and vegetables	0.57	0.86	1.14	n
Other food	0.74	0.98	1.21	u
Non-alcoholic beverages	0.61	1.05	1.48	l
Alcoholic beverages	0.74	1.00	1.26	l
Tobacco	0.95	1.17	1.39	u
Clothing including repairs	0.46	0.89	1.31	n
Footwear including repairs	0.55	0.94	1.32	n
Gross rent & water charges	0.65	1.05	1.45	u
Fuel and power	0.78	1.00	1.21	u
Furniture, floor coverings & repairs	0.87	1.06	1.24	u
Household textiles & repairs	0.83	1.15	1.46	u
Household appliances & repairs	0.64	0.98	1.31	u
Other household goods	0.58	0.95	1.32	u
Medical products, drugs	0.55	1.00	1.44	l
Medical & health services	0.62	1.03	1.43	l
Personal transport equipment	0.91	1.14	1.37	l
Operation of transport equipment	0.87	1.04	1.21	l
Transport services	0.78	1.12	1.46	l
Communication	0.80	1.12	1.43	l
Recreational equipment & repairs	0.87	1.10	1.32	l
Recreational & cultural services	0.66	0.96	1.26	l
Books, magazines and newspapers	0.72	1.10	1.47	l
Education	0.65	1.04	1.43	l
Restaurants, cafes and hotels	0.79	1.07	1.34	l
Non-electrical equipment	0.76	0.99	1.21	u
Electrical equipment	0.87	1.10	1.32	u
Transport equipment	0.75	1.04	1.32	u
Residential buildings	0.67	1.05	1.43	u
Non-residential buildings	0.99	1.15	1.31	u
Civil engineering works	0.91	1.12	1.32	u
Change in stocks	0.93	1.13	1.32	u
Balance of exports and imports	1.00	1.81	2.61	u
Government	0.67	1.02	1.37	u

Note: The last column indicates whether the item was constrained to be a necessity (n), luxury (l) or was unconstrained (u).

Table A2: Estimated income elasticities for 17 OECD countries, 1990

	mininum	midpoint	maximum	constraint
Bread & cereals	0.64	0.95	1.26	n
Meat	0.78	1.01	1.23	n
Fish	0.74	1.04	1.34	n
Milk, cheese & eggs	0.63	0.88	1.12	n
Oils & fats	0.88	1.17	1.46	n
Fruit & vegetables	0.44	0.90	1.35	n
Other food	0.85	1.01	1.17	u
Non-alcoholic beverages	0.82	1.02	1.22	l
Alcoholic beverages	0.67	1.05	1.43	l
Tobacco	0.63	1.04	1.45	u
Clothing including repairs	0.52	0.89	1.26	n
Footwear including repairs	0.68	1.03	1.37	n
Gross rent & water charges	1.00	1.23	1.46	u
Fuel and power	0.71	0.95	1.18	u
Furniture, floor coverings & repairs	0.83	1.04	1.25	u
Household textiles & repairs	0.66	1.05	1.44	u
Household appliances & repairs	0.56	0.91	1.26	u
Other household goods	0.51	0.85	1.18	u
Medical products, drugs	0.64	1.05	1.45	l
Medical & health services	0.88	1.17	1.45	l
Personal transport equipment	0.83	1.03	1.23	l
Operation of transport equipment	0.70	0.94	1.18	l
Transport services	0.75	1.05	1.35	l
Communication	0.65	1.05	1.45	l
Recreational equipment & repairs	0.80	1.03	1.26	l
Recreational & cultural services	0.86	1.10	1.34	l
Books, magazines and newspapers	0.78	1.02	1.26	l
Education	1.00	1.25	1.49	l
Restaurants, cafes and hotels	0.66	0.92	1.18	l
Other goods & services	0.76	1.07	1.37	u
Government collective services	0.46	0.90	1.34	u
Government individual services	0.72	1.06	1.40	u
Residential buildings	0.66	1.05	1.44	u
Non-residential buildings	0.81	1.02	1.22	u
Civil engineering works	0.71	0.98	1.25	u
Transport equipment	0.84	1.05	1.26	u
Non-electrical equipment	0.66	0.89	1.12	u
Electrical equipment	0.84	1.15	1.45	u
Increase in stocks	0.85	1.03	1.21	u
Balance of exports and imports	0.99	1.23	1.47	u

Note: The last column indicates whether the item was constrained to be a necessity (n), luxury (l) or was unconstrained (u).