

Glossary

Where this Glossary does not involve factual information, it seeks to explain terms as used in this book

Balance sheets A two-sided snapshot of Assets and Liabilities belonging to a person, business or a nation – the latter frequently cited in the national accounting literature. A one-sided list of assets is sometimes wrongly referred to as a balance sheet.

BEA Bureau of Economic Analysis of the United States Government Department of Commerce. It is the branch of the United States administration responsible for the national accounts, publishing its estimates in the official publication, '*Survey of Current Business*.'

Bretton Woods institutions The International Monetary Fund and the World Bank (including the latter's affiliates). Keynes once described the IMF as a *bank* that would offer loans to national central banks, and the World Bank as a *fund* for financing reconstruction and development.

Brundtland Report An influential report, 'Our Common Future', published in 1989 by an international commission created by the United Nations under the chairmanship of Gro Harlem Brundtland, formerly a Prime Minister of Norway. This popularized the phrase 'sustainable development' and called for reconciling current demand for natural resources with future needs, as well as balancing the interests of the poorer nations against those of the affluent countries.

Capital consumption Used interchangeably with Capital Depreciation or amortization. This covers the periodic downward adjustment of the book value of assets due to wear and tear and obsolescence. Natural resource extraction is qualitatively different from Capital Consumption, being akin to withdrawal from inventories.

Dutch disease Adverse macroeconomic structural developments which afflict an economy receiving unrequited inflows of foreign funds in the

absence of corrective economic policies. This phenomenon is usually, though not always, associated with a natural resource boom leading to excessive consumption and over-valuation of the domestic currency, which encourages imports and shrinks traditional exports. Previously active industries get discouraged and employment falls as the share of untradable activities rises in the economy's structure.

El Serafy 'rule' This is based on splitting the surplus realized in the extraction of depletable natural resources into two portions: 'true income' and 'user cost' – the latter representing a disinvestment. Unlike Hartwick's rule (see below), the El Serafy approach is not normative, in that it does not urge any particular action, but 'positive': merely proposed to guide income estimation. If taken in a normative sense, however, the identified income portion indicates the maximum that could be allocated to consumption in the current accounting period.

EUROSTAT A Directorate of the European Commission in Luxembourg that provides statistical information to the European Union and coordinates statistical methods among member states. EUROSTAT was an active participant in the production of SNA93.

G-7 A group formed in 1975 of finance ministers from France, (West) Germany, Italy, Japan, United Kingdom and the United States with the addition of Canada in 1976. The group, assisted by support staff, met intermittently to coordinate economic policies. Later this became G-8 when Russia joined the set. At times larger groups were assembled including G-9, G-20 and G-30.

GDP Gross Domestic Product. This is the aggregate gross product of a society, usually in a year. It relates geographically to a locality, and provides the first step in estimating the aggregate income of residents before this is adjusted for 'factor payments' across national boundaries to arrive at GNP. When capital consumption is taken out of GDP, the result is NDP (net domestic product).

GNP Gross National Product. This adjusts GDP for income flows across national or geographical boundaries. Inflows of interest, wage remittances and investment dividends are added, and outflows of interest, wages and dividend payments are deducted. In most cases GDP and GNP do not much differ. When Capital Consumption is taken out of GNP the result is NNP which, strictly speaking, is National Income.

Green accounts These are the traditionally estimated nation accounts, but now adjusted for ecological change.

Hartwick rule A rule advising that no part of the surplus realized in the extraction of depletable resources should be consumed in the current period but invested. Returns on such investment may be considered as income and consumed only in future. This 'rule' denies any rights in the assets to the current owners – a view which Beckerman has described as 'immoral', himself (Beckerman) disallowing any rights to 'future generations' since they do not yet exist.

Hicksian income This is the standard definition of income which has become popular in environmental economics. For reckoning 'Hicksian income', all capital, including natural resources, must be kept intact for the purpose of estimating income. 'Keeping capital intact', though desirable in itself, is only proposed here as an accounting device.

IARIW International Association of Research in Income and Wealth. This was founded in 1947 to promote the study of national accounting. It usually convenes international conferences every other year in different countries and publishes the quarterly, *International Review of Income and Wealth*.

ICOR Incremental Capital Output Ratio. This relates an increment in output to a previous capital increment (or investment) that had 'caused' it. This ratio used to be popular in applied research for estimating the size of investment needed to promote a targeted increase in output.

IDA International Development Association. IDA is an affiliate of the World Bank with no physical presence. It is a 'facility' operated by World Bank staff following Bank procedures. Established in 1960 it offers grants and Credits ('Credits' meaning loans on very soft terms) to the poorest nations with limited access to international capital markets. IDA's funds are replenished every three years through 'subscriptions'. Because of its limited resources an annual exercise identifies eligible recipients and decides their shares, and these will back the investments the Bank decides to make in the country concerned.

IECSE International Economics Socio-Economic data division. A unit of the World Bank currently engaged in improving international income comparisons including using 'purchasing power', rather than official exchange rates, for converting currencies.

IEEA Integrated Environmental and Economic Accounts. SNA93 in effect pronounced that environmental concerns were not economic concerns, after which great efforts have been made to 're-integrate' them via the Satellite Accounts – so far to no avail.

IMF International Monetary Fund, established in 1944 simultaneously with the World Bank, both making up the 'Bretton Woods' institutions.

IS–LM A simplified model devised by Hicks in 1937 giving the gist of Keynes's *General Theory of Employment, Interest and Money*. It connects investment and saving (IS) with liquidity and money (LM) via aggregate demand and the interest rate.

London Group A group of national accountants originating in Statistics Canada that has now assumed the mantle of elaborating the Satellite accounts for the Environment.

Mining Extracting subsoil assets including aquifer waters, metals, petroleum and other minerals usually classified as 'depletable resources'. Renewable resources can also be mined if their restoration is insufficient to offset deterioration. The user-cost method is applicable to mining, whether the resource is depletable or renewable.

NAMEA National Accounts Matrix including Environmental Accounts. This was devised in Statistics Netherlands as an integrated system to indicate interactions between economic activity and the environment (covering both pollution and sources). It is not meant to change estimates of the national income.

Natural resource curse An affliction said to retard economic progress in countries endowed with commercially exploitable natural resources. There is no robust evidence for the curse's existence, and its symptoms are amenable to treatment by economic measures.

Net price method A method for 'greening' the traditionally estimated national accounts by using prices other than market prices for natural products. Advocates of this method deduct from the market price the 'marginal' costs of extraction, including an estimated return on capital. However, failing to obtain marginal costs in practice, average costs have been used instead, and this has attracted the charge that 'resource rents' were being overestimated.

OAPEC Organization of Arab Petroleum Exporting Countries. Established in 1968 OAPEC is based in Kuwait for the purpose of fostering economic cooperation among its members and develop petroleum industries. It publishes *Oil and Arab Co-operation*, a quarterly journal of academic contributions. Its members are Algeria, Bahrain, Egypt, Iraq, Kuwait, Libya, Qatar, Saudi Arabia, Syria, Tunisia and the United Arab Emirates. OAPEC has no authority over petroleum extraction or prices.

OD An operational directive intended for use by World Bank staff in an attempt to guide and standardize policies and operations.

OECD Organisation for Economic Cooperation and Development, based in Paris, France. Established in 1961, its members number 34 rich countries accounting for four-fifths of world GDP. Its proclaimed purpose is to promote democratic and free market policies as a means for improving economic and social wellbeing the world over. OECD staff have made substantial contributions to national accounting methods and estimation.

OPEC Organization of Petroleum Exporting Countries. OPEC, headquartered in Vienna, Austria, was established in 1960 by Iran, Iraq, Kuwait, Saudi Arabia and Venezuela, to be joined later by nine other petroleum exporting countries. Its stated objective is to coordinate extraction policies among member countries and secure better and stable terms for their principal export. OPEC's monopoly power is routinely exaggerated, and when it tried to act as a cartel indicating export quotas it failed to control supply, essentially owing to conflicting interests of its members. In 2011 OPEC accounted for 43 percent of oil extraction and 60 percent of world exports. It issues many publications including an *Annual Statistical Bulletin*.

Resource rent A magnitude that is not always well defined, meant to indicate the financial surplus realized in resource extraction, used analogously with the rent of land as viewed by the classical economists. Unlike classical or 'Ricardian' rent, the gains obtained from extraction are not all income, but partly rent and partly 'royalty'. See THR (Total Hotelling Rent).

Royalty Particularly in the work of Alfred Marshall, Royalty complements Ricardian Rent to make up the net revenue obtained in extraction.

SAL A SAL is a Structural Adjustment Loan (or Credit if on IDA terms). It is a type of loan offered by the World Bank in conjunction with an IMF operation in support of macroeconomic policy changes. It was introduced in 1980 to assist countries encountering financial difficulties over meeting their external debt servicing obligations, but broadened in purpose gradually later.

Satellite accounts Subsidiary accounts placed outside the main frame of the national accounts. These were introduced by SNA93 possibly to keep the traditional accounts – described as *economic* – immune or fairly immune from change.

SECAL Sectoral Adjustment Loan. A policy-based loan which developed as an offshoot of SAL (but sometimes initiated without a SAL) to induce policy changes in a sector, such as agriculture or transport, and not in the economy as a whole.

SEEA System of Integrated Environmental and Economic Accounts as advocated in SNA93 and expected to be realized through the Satellite Accounts.

SNA System of National Accounts as distinguished from the national account estimates themselves which are made within it.

SNA93 The System of National Accounts that came out in December 1993, ‘prepared under the auspices of the Inter-Secretariat Working Group on National Accounts’, and issued in the name of five agencies, namely, (1) Commission of the European Communities – EUROSTAT, (2) International Monetary Fund, (3) Organisation for Economic Cooperation and Development, (4) United Nations, and (5) the World Bank.

Stationary state In classical thought is the ultimate state an economy can reach given its natural resources and relative position vis-à-vis other countries, and beyond which it could advance no further. Marshall called it ‘a famous fiction’ and even ‘mischievous’. Hicks thought it was worse than a steady state.

Steady state Hicks thought a steady state was ‘a curse’, but he envisaged it as describing an economy growing at a constant rate. According to Herman Daly, following a path broken by John Stuart Mill, it means no growth at all. This position was endorsed even by Keynes describing it as

an 'ultimate state'. Daly has in mind a state of no growth after all economic problems have been solved, but failing that, no growth in 'throughput'.

Throughput According to Daly throughput is the metabolic flow of resources through the economy beginning with raw material inputs extracted from the ecosystem and ending with waste outputs returned to the ecosystem.

THR Total Hotelling Rent. This is a hybrid expression that mixes Hotelling's scarcity rent (the user cost) with Ricardian rent, and incongruously bestowing the name of Hotelling on the total. Ricardian rent enters the mixture from the fact that mines of different fecundity co-exist – a fact which recalls the differential rents of Ricardo. Extraction typically does not exhaust a mine in any one year so market price will exceed marginal cost by Marshall's royalty (Hotelling's scarcity 'rent').

Time Time in accounting is usually divided in discrete segments such as years or quarters, but to economists, time is a continuous flow through which economic variables change, often in infinitesimal steps. Using geometry and calculus this allows the emergence of such quantities as marginal costs and marginal revenues.

UNCTAD United Nations Conference on Trade and Development. This is a permanent organization headquartered in Geneva, Switzerland, set up by the United Nations General Assembly in 1964 to assist developing countries in matters of development, trade and investment, and in general help them to be integrated in the world economy. Among its achievements has been securing for some of its members trade preferences in a few richer country markets.

UNEP United Nations Environment Programme – a program not an agency – that has played the most sustained role behind green accounting.

User cost A temporal opportunity cost associated with mining or with fixed asset depreciation, perceived to vary with the intensity with which a fixed asset is worked. This is sometimes identified with scarcity rent. Behind the concept of the user cost is the notion that current utilization preempts future availability.

Utility This is the benefit obtained from acquiring or consuming a good or service. In microeconomic analysis it is the force behind demand, just as 'cost' is the force behind supply.

Value added it is the difference between inputs and outputs which constitutes income, out of which the owners of the factors of production get compensated for their factor services. Value-added contaminated with elements of capital, such as the user cost, does not qualify as income however 'gross' it is described. The capital elements should be removed first before the remainder is considered in gross or net terms.

Washington Consensus An unflattering description of a consensus among the US Treasury, the IMF and the World Bank. In return for financial assistance, externally indebted countries had to adopt a recipe of free market measures that tended to be similar for all countries.

Wealth Wealth is a stock and income is a flow. In *The Wealth of Nations*, 'Wealth' was used by Adam Smith as a flow, synonymously with Income. As a stock, wealth is broader than capital, the latter sometimes identified with that part of wealth that is used for production.

Welfare The pleasure or joy experienced by those who acquire goods and services. Being a state of mind it defies direct estimation. Many people wrongly assume that income estimates denote welfare estimates.

WRI World Resources Institute in Washington DC under whose auspices the pioneering study for greening the national accounts of Indonesia was conceived.