



International Yearbook of INDUSTRIAL STATISTICS 2 0 0 4



INTERNATIONAL YEARBOOK OF INDUSTRIAL STATISTICS 2004



UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION VIENNA 2004

Copyright © 2004, by United Nations Industrial Development Organization (UNIDO). All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical or photocopying, recording, or otherwise without the prior permission of the publisher.

Published by Edward Elgar Publishing Limited Glensanda House Montpellier Parade Cheltenham Glos GL 50 1UA UK

Edward Elgar Publishing, Inc. 136 West Street Suite 202 Northampton Massachusetts 01060 USA

A catalogue record for this book is available from the British Library

The description and classification of countries and territories in this publication and the arrangement of the material do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries, or regarding its economic system or degree of development. The designation "country or area" covers countries, territories, cities and areas. The designation "region, country or area" extends the preceding one by including groupings of entities designated as "country or area". Designations such as "industrialized" and "developing" countries and "newly industrialized countries" are intended for statistical convenience and do not necessarily express a judgement about the stage reached by a particular country or area in the development process.

ISBN 1843765934

Printed and bound in Great Britain by MPG Books Ltd, Bodmin, Cornwall

Explanatory notes

Unless otherwise indicated, "manufacturing" includes the industry groups listed under major division 3 of the *International Standard Industrial Classification of All Economic Activities* [Statistical Papers, Series M, No.4/Rev.2 (United Nations publication, Sales No. E.68.XVII.8)]. It should be noted, however, that many countries have made a switchover from their national industrial classification schemes that were based on, or related to, Revision 2 of the International Standard Industrial Classification of All Economic Activities (ISIC) to those based on, or related to, Revision 3 of ISIC [Statistical Papers, Series M, No.4/Rev.3 (United Nations publication, Sales No. E.90.XVII.II)]. In these instances, "manufacturing" refers to table category D in that classification.

ISIC code numbers are accompanied by a descriptive title (for example in the case of Revision 2 of ISIC, ISIC 323: "Manufacture of leather and products of leather, leather substitutes and fur, except footwear and wearing apparel"). For considerations of space, however, the description is sometimes shortened (that is, ISIC 323 may be described simply as "Leather and fur products"). For both Revisions 2 and 3 of ISIC, all 3- and 4-digit codes and their corresponding descriptive titles are listed in appendix II to the introduction.

In the presentation of several tables individual countries and areas are listed alphabetically, whenever appropriate, within two successive categories: industrialized countries and developing countries. Data relating to selected groups of countries are presented in part I. In addition to regional groupings, developing countries have been further classified into three income categories: developing countries with low income (less than \$1,000 per capita gross domestic product in 1995 at current prices), those with middle income (\$1,000-\$5,000) and those with high income (more than \$5,000). This group has also been arranged in four development categories: newly industrialized countries (NICs), second-generation NICs, least developed countries and other developing countries. NICs are defined as major exporters of manufactures among developing countries in the mid-1970s, with a share of manufactures in total merchandise exports exceeding 20 per cent. Second-generation NICs are developing countries with a high average annual growth rate (over 15 per cent during the period 1970-1985) and having manufactured exports exceeding \$500 million in value in 1985.

Countries and areas included in the groups are listed in appendix I to the introduction. Because of a lack of data, some countries could not be included in their respective groups in some tables.

Taking into account the large size of its economy, China is not included in the group classified according to income level or the group classified according to development level.

Hong Kong became the Hong Kong Special Administrative Region (SAR) of China on 1 July 1997. Macao became the Macao Special Administrative Region (SAR) of China on 20 December 1999. In the present publication, unless otherwise stated, data for China do not include data for Hong Kong SAR, for Macao SAR or for Taiwan Province of China, which are presented separately under China (Hong Kong SAR), China (Macao SAR) and China (Taiwan Province).

In part I, references to dollars (\$) are to United States dollars. National currencies have been converted to dollar equivalents by using period average exchange rates as published in *International Financial Statistics* (International Monetary Fund publication) and other sources.

Data converted to dollars by using current exchange rates are liable to be strongly influenced by fluctuations in exchange rates. Annual variations of data converted in that manner may not reflect movements in the national data.

Regardless of the year/period referred to, the country group European Union (EU) is related to the group consisting of the 15 countries shown under that country group in appendix I to the introduction.

For all member countries of the European Monetary Union (EMU), national data are expressed in Euros. Data relating to years prior to entry into the EMU have been converted from the former national currency using the appropriate irrevocable conversion rate. The presentation facilitates comparisons within a country over time and ensures that the historical evolution (i.e. growth rates) is preserved. However, pre-EMU Euros are a notional unit and are not normally suitable to form area aggregates or to carry out cross-country comparisons.

Unless otherwise noted, average annual growth rates are calculated from the data available for each year of a given period (for example, 1992-1997), using a semi-log regression over time. Growth rates are expressed in percentages.

Periods set off by a hyphen (for instance, 1992-1997) include the beginning and end years.

Apparent arithmetical discrepancies, such as percentages that do not add up to precise totals, result from the rounding of basic data or figures known to different degrees of precision.

Three dots (...) indicate that data are not available or are not separately reported.

A dash (-) indicates that an amount is nil or negligible.

The letter "x" designates the item applicable to a country when several options exist.

To avoid ambiguity, the letters "l", "o" and "O" are not used to designate footnotes.

The following abbreviations and acronyms are used:

VAT

•	
ASEAN	Association of South-East Asian Nations
CACM	Central American Common Market
CARICOM	Caribbean Community
CEMAC	Central African Economic and Monetary Community
CEPGL	Economic Community of the Great Lakes Countries
ECOWAS	Economic Community of West African States
EMU	European Monetary Union
EU	European Union
GDP	gross domestic product
ISIC	International Standard Industrial Classification of All Economic Activities
LAIA	Latin American Integration Association
LDCs	least developed countries
MVA	manufacturing value added
n.e.c.	not elsewhere classified
n.e.s.	not elsewhere specified
NICs	newly industrialized countries
OECD	Organisation for Economic Co-operation and Development
OECS	Organization of Eastern Caribbean States
UMA	Union of the Arab Maghreb
UNIDO	United Nations Industrial Development Organization
UNSD	Statistical Division of the United Nations Secretariat

value added tax

CONTENTS

	I	Page
Exp	lanatory notes	v
INT	RODUCTION	7
App	endices	
I.	List of countries and areas included in selected groupings	13
II.	Detailed description of International Standard Industrial Classification of All Economic Activities (ISIC) - Revisions 2 and 3	18
III.	Description of data used in section 1.2	26
PAR	RT I. SUMMARY TABLES	
SEC	TION 1.1. THE MANUFACTURING SECTOR	
Tabl	le e	
1.1.	Distribution of world MVA, 1990-2003	32
1.2.	Distribution of MVA and population among selected groups of developing countries, selected years	33
1.3.	Annual growth of MVA, 1992-2002 and per-capita MVA, 2002	34
1.4.	Share of MVA in GDP, selected years	40
SEC	TION 1.2. THE MANUFACTURING BRANCHES	
1.5.	Distribution of world value added, selected branches and years	48
1.6.	Distribution of value added of selected branches among developing regions, 1995 and 2002	50
1.7.	Leading producers in selected branches, 1995 and 2002	
	Food products and beverages (ISIC 311/2/3)	. 51
	Textiles (ISIC 321) Wearing apparel, leather, footwear (ISIC 322/3/4) Wood and cork products (ISIC 331)	. 52 . 53
	Paper (ISIC 341) Printing and publishing (ISIC 342) Chemicals (ISIC 351/2)	. 54 . 54
	Petroleum including coal products (ISIC 353/4) Rubber and plastic products (ISIC 355/6) Non-metallic mineral products (ISIC 361/2/9)	.55 .56
	Basic metals (ISIC 371/2)	.56 .57
	Electrical machinery (ISIC 382) Transport equipment (ISIC 384)	.58

	Structure of MVA in selected count	try groups, se	ected years	59			
1.0		. 1 1	1002 1007				
1.9.	ted country groups, 1992-1997 and	42					
	1997-2002			02			
1.10.	Share of females in total employment by branch, selected years						
	Austria	64	Kenya	68			
	Bangladesh	64	Kyrgyzstan	68			
	Bermuda	64	Latvia	68			
	Bulgaria		Lithuania	68			
	Chile		Malaysia				
	China (Taiwan Province)		Mauritius				
	Colombia		Morocco				
	Croatia		Mozambique				
	Cyprus		Myanmar				
	Denmark		New Zealand				
	Egypt		Oman				
	El Salvador		Panama				
	Eritrea		Puerto Rico				
	Ethiopia		Republic of Korea				
	India		Serbia and Montenegro				
	Indonesia		Slovakia				
	Iran (Islamic Republic of)		Sri Lanka				
	Italy		St. Vincent and the Grenadines				
	Japan		Turkey				
	Jordan	67	United Kingdom	71			
1.11.	Food products (ISIC 311/2)	,,,,,,		72			
1.11.	Food products (ISIC 311/2) Textiles (ISIC 321)			74			
1.11.	Food products (ISIC 311/2) Textiles (ISIC 321) Wearing apparel (ISIC 322)			74 76			
1.11.	Food products (ISIC 311/2) Textiles (ISIC 321) Wearing apparel (ISIC 322) Leather and fur products (ISIC 323)			74 76 78			
1.11.	Food products (ISIC 311/2))		74 76 78			
1.11.	Food products (ISIC 311/2))		74 76 78 80			
1.11.	Food products (ISIC 311/2)	(ISIC 332)		74 76 80 82			
1.11.	Food products (ISIC 311/2)	ic (ISIC 332).					
1.11.	Food products (ISIC 311/2)	c (ISIC 332).					
1.11.	Food products (ISIC 311/2)	c (ISIC 332).					
1.11.	Food products (ISIC 311/2)	c (ISIC 332)					
1.11.	Food products (ISIC 311/2)	ic (ISIC 332).					
1.11.	Food products (ISIC 311/2)	ic (ISIC 332).					
1.11.	Food products (ISIC 311/2)	ic (ISIC 332).					
1.11.	Food products (ISIC 311/2)	ic (ISIC 332)					
1.11.	Food products (ISIC 311/2)	ic (ISIC 332).					
1.11.	Food products (ISIC 311/2)	ic (ISIC 332).					
1.11.	Food products (ISIC 311/2)	(ISIC 332)					
1.11.	Food products (ISIC 311/2)	61)					
1.11.	Food products (ISIC 311/2)	(ISIC 332)					

PART II. COUNTRY TABLES a/

Albania 121	Malaysia	
Armenia 129	Maldives	399
Aruba 133	Mauritius	403
Australia	Mexico	41 1
Azerbaijan145	Morocco	419
Bahamas 153	Myanmar	427
Bangladesh161	Netherlands	433
Bermuda	Netherlands Antilles	441
Botswana	Norway	443
Brazil181	Oman	
Bulgaria 189	Panama	459
Cambodia	Papua New Guinea	467
Canada 205	Philippines	
China213	Poland	
China (Hong Kong SAR)217	Portugal	485
China (Macao SAR)223	Puerto Rico	493
Cook Islands	Qatar	499
Costa Rica	Republic of Korea	
Croatia	Republic of Moldova	
Cyprus243	Romania	523
Eritrea	Russian Federation	531
Estonia	Serbia and Montenegro	539
Ethiopia	Singapore	
Finland	Slovenia	551
Georgia 283	South Africa	555
Germany	Sri Lanka	563
India 299	St. Vincent and the Grenadines	569
Indonesia	Suriname	573
Iran (Islamic Republic of)315	Sweden	575
Israel 323	Switzerland	583
Italy331	Tajikistan	587
Japan 339	Trinidad and Tobago	595
Kazakhstan347	Tunisia	
Kyrgyzstan355	Turkey	609
Latvia 363	Ukraine	
Lithuania 371	United Kingdom	
Luxembourg	Uruguay	631
Malaszi 202		

a/ For information on the countries/areas that are not presented, please see page 119.





DATA AVAILABLE ON CD-ROM

UNIDO maintains several databases on industrial statistics, of which new sales versions are made available annually.

UNIDO Industrial Statistics Database, 3-Digit Level of ISIC (Revision 2) Code	Time series for more than 170 countries/areas compiled on eight items, including number of establishments, total employment, female employment, wages and salaries paid to employees, output, value added, gross fixed capital formation and production indexes.
	Data reported by country for 28 industrial branches.
	Time series on most items starting in 1963.
UNIDO Industrial Statistics Database, 4-Digit Level of ISIC (Revision 2 and 3) Code	INDSTAT-REV3 contains time series data on seven selected data items (number of establishments, total employment, female employment, wages and salaries paid to employees, output, value added and gross fixed capital formation) starting 1990 onwards. The data are arranged at the 3- and 4-digit level of ISIC (Revision 3) pertaining to the manufacturing sector, which comprises 151 manufacturing categories.
	To supplement INDSTAT-REV3, a CD-ROM version of INDSTAT4 is available to the user. The data refer to the seven variables and period 1981 onwards and are arranged according to ISIC (Revision 2) at the four-digit level, which comprises 81 manufacturing industries.
	All value data are originally stored in national currency values at current prices. The system allows for data conversion from national currency into current U.S. dollars.
UNIDO Industrial Demand- Supply Balance Database, 4-Digit Level of ISIC (Revision 2 and 3) Code	Time series (starting in 1981) for more than 70 countries on output, imports, exports and apparent consumption (all in current US dollars) at the 4-digit level of ISIC (Revision 3), supplemented with a similar database in accordance with ISIC (Revision 2).

Further details on these three databases may be obtained from:
Statistics and Economic Research Section
Strategic Research and Economics Branch, UNIDO
P.O. Box 300, A-1400 Vienna, Austria
Fax: +43-1-26026-6802

Email: stat@unido.org INTERNET: http://www.unido.org

INTRODUCTION

This is the tenth issue of UNIDO's annual publication, the International Yearbook of Industrial Statistics. The Yearbook succeeded the Handbook of Industrial Statistics which was published biennially by UNIDO up to 1992, and, at the same time, replaced the United Nations' Industrial Statistics Yearbook, volume I (General Industrial Statistics), which was discontinued after its 1991 edition published in 1993. These changes were in accordance with the recommendations of the United Nations Statistical Commission at its twenty-seventh session, namely that UNIDO, in collaboration with the Organisation for Economic Co-operation and Development (OECD), assumes responsibility for the collection and dissemination of world-wide general industrial statistics, effective The present Yearbook pertains to the manufacturing sector only.

The main purpose of the Yearbook is to provide statistical indicators to facilitate international comparisons relating to the manufacturing sector. The data presented were compiled bearing in mind the requirements of international comparability and the standards for this work promulgated by the United Nations. Concepts and definitions are drawn from the International Recommendations for Industrial Statistics [Statistical Papers, Series M, No.48/Rev.1 (United Nations publication, Sales No.E.83.XVII.8)] and the classification by industry follows Revision 2 or Revision 3 of ISIC.

The present Yearbook consists of two parts. Part I deals with the manufacturing sector as a whole (section 1.1) and with its branches (section 1.2). Statistical indicators are presented in terms of percentage distributions, cross-country averages, ratios and real growth rates that facilitate international comparison among selected country groups and/or countries. Data for manufacturing branches are arranged according to Revision 2 of ISIC at the three-digit (or major-group) level. Part II consists of a series of country/area-specific tables showing detailed data on selected basic statistics that were reported by national statistical offices. For some countries, data are presented in accordance with Revision 2 of ISIC. However, many countries have made a switchover from their national industrial classifications compatible with Revision 2 to those compatible with Revision 3 of ISIC. Consequently, data for those countries are presented in accordance with Revision 3 of ISIC.

Sources and methods

In section 1.1 of part I, manufacturing value added (MVA) was estimated in accordance with the national accounting concept, which represents the net contribution of the manufacturing sector to

gross domestic product (GDP). The data on MVA and GDP were obtained from various national and international sources including the World Bank, OECD, the Statistical Division of the United Nations Secretariat (UNSD), the International Monetary Fund and regional development banks. These sources were supplemented with estimates generated by UNIDO.

In the present publication UNIDO shows for the first time data on GDP and MVA at constant prices re-based from 1990 to 1995. This is in line with the recent changes in the base year made by the major international data sources. Owing to the change in the base year, there might be significant differences between the data shown in the present edition of the *Yearbook* and those shown in its previous editions. With respect to population, the information draws on the 2000 revision of the data compiled by the Population Division of the United Nations Secretariat.

The information in section 1.2 is drawn from the UNIDO Industrial Statistics Database. A large portion of the data for the years up to 1992 maintained in the database are those communicated to the United Nations by official national sources. The data for 1993 onwards, as well as additions and revisions of data referring to previous years, were reported by national statistical offices through the UNIDO General Industrial Statistics Questionnaire. With regard to the member countries of OECD, data were compiled by that organization. Information is solicited through a questionnaire issued jointly by the two organizations.

To facilitate the comparability of the data over time and across countries, UNIDO has supplemented originally reported data with information obtained from various other sources. The latter include: industrial censuses, statistics supplied by national and international organizations, unpublished data collected in the field by UNIDO as well as estimates made by the UNIDO secretariat.

The indicators presented in tables 1.5 to 1.9 of section 1.2 were derived from estimates of value added at constant 1995 prices. For each country and industrial branch, these value-added estimates were generated by applying production indexes to the 1995 value-added base weights, which in turn were generated by UNIDO from various national and international sources.

¹ UNIDO's procedures for estimation are described in "UNIDO Industrial Statistics Database — Methodological Notes" (IRD/R.11).

Because of the increasing number of countries that have made a switchover in their reporting systems from Revision 2 to Revision 3 of ISIC, the compilation of data in accordance with Revision 2 of ISIC required considerable data estimation. Consequently, the data shown in the present edition of the *Yearbook* might not be strictly comparable with those shown in previous editions.

Except for index numbers of industrial production, the information for the countries and areas other than the OECD member countries presented in part II were compiled from (i) the 2001 edition of UNIDO General Industrial Statistics the Questionnaire completed by national statistical offices and (ii) relevant publications issued by national statistical offices. Information referring to OECD member countries is based on data compiled by OECD via questionnaire and incorporated in OECD's Information System on Industrial Statistics as well as in the UNIDO database. With respect to production indexes, data were supplied by UNSD that compiles these data regularly from national sources through the quarterly United Nations Index of Industrial Production Questionnaire.

In section 1.2 of part I and in part II, the measures generally used are census output and census value added. Thus, the costs of non-industrial services are included in value added, whereas the receipts for these services are excluded from output. For a quick reference, appendix III to this introduction provides notes on certain aspects of the data used, and it is recommended that the reader consult them when using the *Yearbook*. A detailed version appears in the individual country notes in part II, which also covers deviations from the standards applied. In general, these notes are also applicable to the estimates that supplement the officially reported data.

The co-operation of national statistical offices, OECD and UNSD in the provision of the information that is the basis of the current publication is gratefully acknowledged.

PART I. SUMMARY TABLES

Section 1.1: The manufacturing sector

Section 1.1 comprises tables 1.1 to 1.4. Table 1.1 shows the distribution of world MVA for various regions and groups of countries at constant 1995 prices as well as at current prices.

The reader should be aware that due to variation in official exchange rates the world distribution may change considerably depending on the choice of the base year.

To maintain comparability over time, composition of each group of countries was kept the same throughout the period. In this connection, EU

refers to the 15 countries that are listed in appendix I to this introduction. However, due to data limitations, several developing countries listed in appendix I are not included.

Table 1.2 shows the shares of selected groups of developing countries in MVA and in population of all developing countries. For the definitions of the income categories, see "Explanatory notes".

Table 1.3 shows real growth rates and index numbers (1995=100) of total and per-capita MVA as well as values of per-capita MVA for the latest year (2002) for individual countries and areas and for selected country groups. Data referring to country groups were based on cross-country aggregates of MVA in constant 1995 US dollars.

Table 1.4 shows the percentage shares of MVA in GDP estimated both at constant 1995 prices and at current prices. The data are presented by individual countries and areas as well as by selected country groups. With respect to the selected country groups, common country samples were taken for both indicators and for all reference years. Furthermore, the shares of MVA in GDP are aggregated at the level of the grouping by dividing the sum of MVA by the sum of GDP.

Section 1.2: The manufacturing branches

Section 1.2 comprises tables 1.5 to 1.11. It focuses on the branches of the manufacturing sector. Branches are defined as major ISIC (Revision 2) groups, reported in accordance with a three-digit code. The ISIC definition of manufacturing comprises 28 major groups or branches. In tables 1.5 to 1.9, the data shown refer to industrial branches that are presented either individually or combined with others.

Users should be aware that, in section 1.2 of part I (except table 1.11), owing to a lack of relevant data, China is not included.

Table 1.5 shows the world distribution of the respective value added of selected branches among selected country groups. Three branches, namely ISIC 332, 385 and 390, are omitted from the table because the data are too scanty to ensure comparability between years. To derive world totals for the latest years, a number of estimates at the country level, especially for many developing countries, were generated.

Table 1.6 shows the shares of developing regions and the least developed countries in the value added of all developing countries in selected branches. Due to lack of sufficient data, estimates at the country level had to be generated to enable regional aggregation. As in the case of table 1.5, three branches (ISIC 332, 385 and 390) had to be excluded from the presentation due to data limitations.

Table 1.7 shows the world's leading producers in various industrial branches as well as the leading developing countries and areas in terms of value added. As in the case of table 1.5, data for 2002 include many estimates generated for individual countries.

Table 1.8 shows the shares of individual branches in total MVA by country grouping.

Table 1.9 shows real growth rates of value added of individual branches, calculated for selected country groups. The reference periods are 1992-1997 and 1997-2002.

Table 1.10 presents the share of female employees in total employment in individual branches. For some countries, employment refers to number of persons engaged instead of number of employees (see appendix III of the present introduction). Only a limited number of countries and areas have reported data on female employment at the branch level.

Table 1.11 shows, for individual countries and areas, basic indicators that are characteristic of the manufacturing branches. Costs of input materials and utilities are calculated as output minus value added. Costs of labour refer to wages and salaries of employees only. Operating surplus is calculated as value added minus wages and salaries paid to employees.

Information concerning the following branches is excluded from table 1.11: beverages (ISIC 313); tobacco (ISIC 314); petroleum refineries (ISIC 353); and petroleum and coal products (ISIC 354). Production indicators (output, value added) for those four branches are highly sensitive to the valuation method (which may or may not include indirect taxes and subsidies). Because that method is not applied uniformly among countries, international comparison of the branches concerned is not advisable. Two more branches were excluded due to lack of sufficient data, i.e., professional and scientific equipment (ISIC 385) and other manufactures (ISIC 390).

PART II. COUNTRY TABLES

Part II comprises country/area-specific tables presenting the following selected industrial statistics: number of establishments, number of employees (or, if not reported, number of persons engaged), wages and salaries paid to employees, output, value added, gross fixed capital formation and index numbers of industrial production. All value data are presented in current national currencies. The data on these items (except gross fixed capital formation and index numbers of industrial production) relate to the last four years for which data were reported. Gross fixed capital formation refers to the last two years for which data

were reported. Index numbers of industrial production refer to the period 1990-2001. When presented in accordance with Revision 2 of ISIC, production indexes for total manufacturing were derived as weighted averages across branches employing 1995 value-added base weights which were estimated by UNIDO.

Coverage of countries/areas

The countries/areas that are presented in part II are those which reported data during the current round of the UNIDO annual compilation programme of global industrial statistics. Those countries/areas, which reported data only in previous rounds of the UNIDO compilation programme, are not included in the present *Yearbook* but were included in previous editions. At the beginning of part II, those countries/areas are listed together with a reference to the respective editions of the *Yearbook* in which their latest data were presented.

Industrial classification

The classification of industrial activity set out in the tables follows either Revision 2 or Revision 3 of ISIC depending on the individual country's data reporting scheme. In either case, the employed levels of detail are the three- and four-digit levels of ISIC, or the three-digit level if no data on four-digit groups were reported. With regard to production indexes, data are arranged either in accordance with the 3-digit level of Revision 2 of ISIC or in accordance with the 2-digit level of Revision 3 of ISIC. Where information was not provided in this form, the estimates are shown in the most applicable category. Aggregates for total manufacturing are included.

It should be noted that in several cases a figure presented for a 3-digit group does not agree with the sum of data given for the corresponding 4-digit categories. As far as possible, UNIDO resolved these discrepancies with the help of available supplementary information.

Reference unit

For most countries and areas represented, the data shown relate to the activity of "establishments" in the specified industries rather than any other type of industrial unit. In a few cases, however, the concepts of "kind-of-activity unit", "local unit" or "enterprise" are found. An "establishment" is ideally a unit that engages, under a single ownership or control, in one, or predominantly one. kind of activity at a single location; for example, workshop or factory. A "kind-of-activity unit" differs from the establishment in that there is no restriction with respect to the geographical area in which a given kind of activity is carried out by a single legal entity. A "local unit", on the other hand, comprises all activities carried out under a single ownership or control at a single location and differs from the establishment-type of unit in that

there is no restriction on the range of these activities. An "enterprise" is a legal entity possessing the right to conduct business in its own name; for example, to enter into contracts, own property, incur liability for debts, and establish bank accounts. Specific information on the character of the units covered in the tables for each country is set out in the corresponding country note.

Reference period

The statistics in the tables relate, in general, to the calendar year. It should be noted, however, that in many cases where the basic reference period of the industrial inquiry is the calendar year, returns covering proximate fiscal years may be accepted for reporting purposes and the data for these years incorporated in the calendar-year aggregates without adjustment. In a few countries, fiscal years normally used for public accounting purposes have been adopted as the basic reference periods. In the case of fiscal-year coverage, the year indicated in the tables refers to the calendar year in which the major part of the fiscal year falls. In the case of fiscal years from 1 July to 30 June, the year referred to is normally the one in which the fiscal year ends.

Concepts and definitions of the items

The United Nations standards that have been applied in preparing the tables are set out below. All values are in national currency units and are at current prices unless otherwise indicated. For countries other than the OECD member countries, deviations from these concepts and definitions are described in the respective country notes. The country notes referring to OECD member countries are based on information presented in part B, section II ("Sources and classifications") of OECD's annual publication "Structural Statistics for Industry and Services".

(1) Number of persons engaged and number of employees

The number of persons engaged is defined as the total number of persons who worked in or for the establishment during the reference year. However, home workers are excluded. The concept covers working proprietors, active business partners and unpaid family workers as well as employees. The figures reported refer normally to the average number of persons engaged during the reference year, obtained as the sum of the "average number of employees" during the year and the total number of other persons engaged measured for a single period of the year. The category "employees" is intended to include all persons engaged other than working proprietors, active business partners and unpaid family workers. In this publication, preference has been given, whenever possible, to employees over persons engaged.

(2) Wages and salaries

Estimates of wages and salaries include all payments in cash or in kind made to "employees" during the reference year in relation to work done for the establishment. Payments include: (a) direct wages and salaries; (b) remuneration for time not worked; (c) bonuses and gratuities; (d) housing allowances and family allowances paid directly by the employer; and (e) payments in kind.

Compensation of employees is equivalent to wages and salaries plus employers' contributions on behalf of their employees paid to social security, pension and insurance schemes, as well as the benefits received by employees under these schemes and severance and termination pay.

(3) Output

The measure of output normally used in the tables is the census concept that covers only activities of an industrial nature. The value of census output in the case of estimates compiled on a production basis comprises: (a) the value of all products of the establishment; (b) the net change between the beginning and the end of the reference period in the value of work in progress and stocks of goods to be shipped in the same condition as received; (c) the value of industrial work done or industrial services rendered to others; (d) the value of goods shipped in the same condition as received less the amount paid for these goods; and (e) the value of fixed assets produced during the period by the unit for its own use. In the case of estimates compiled on a shipment basis, the net change in the value of stocks of finished goods between the beginning and the end of the reference period is also included.

Gross output is equivalent to census output plus the revenue from activities of a non-industrial nature. Valuation may be in factor values, excluding all indirect taxes falling on production and including all current subsidies received in support of production activity, or in producers' prices, including all indirect taxes and excluding all subsidies.

(4) Value added

The measure of value added normally used in the tables is the census concept, which is defined as the value of census output less the value of census input. Items covered in the latter include: (a) value of materials and supplies for production (including cost of all fuel and purchased electricity); and (b) cost of industrial services received (mainly payments for contract and commission work and repair and maintenance work). If input estimates are compiled on a "received" rather than on a "consumed" basis, the result is adjusted for the net change between the beginning and the end of the period in the value of stocks of materials, fuel and other supplies.

Total value added is the national accounting concept. It is ideally represented by the contribution of the establishments in each branch of activity to the gross domestic product. For the measure of total value added, the cost of non-industrial services is deducted and the receipts for non-industrial services are added to census value added. The estimates, whether in terms of census value added or total value added, are gross of depreciation and other provisions for capital consumption, unless otherwise stated. The valuation may be in factor costs or in producers' prices, depending on the treatment of indirect taxes and subsidies.

(5) Gross fixed capital formation

Estimates refer to the value of purchases and ownaccount construction of fixed assets during the reference year less the value of corresponding sales. The fixed assets covered are those (whether new or used) with a productive life of one year or more. These assets, which are intended for the use of the establishment, include fixed assets made by the establishment's own labour force for its own use. Major additions, alterations and improvements to existing assets that extend their normal economic life or raise their productivity are also included.

New fixed assets include all those that have not been previously used in the country. Thus, newly imported fixed assets are considered new whether or not used before they were imported. Used fixed assets include all those that have been previously used within the country. Transactions in fixed assets include: (a) land; (b) buildings, other construction and land improvements; (c) transport equipment; and (d) machinery and other equipment.

Assets acquired from others are valued at purchasers' prices, which cover all costs directly connected with the acquisition and installation of the items for use. In principle, assets produced on own account are also valued in this manner. However, it may frequently be necessary to value such own-account production at explicit cost, including any imputations that may be required in respect of the employed own-account labour.

Assets produced by one establishment of a multiestablishment enterprise for the use of another establishment of the same enterprise should be valued by the receiving establishment as though purchased from outside the enterprise. Sales of assets should be valued at the actual amounts realized rather than at book values.

(6) Index numbers of industrial production

The indexes in the tables are compiled from national indexes that are calculated by use of the Laspeyres formula. The comparison base year is 1995. However, if different base years are used in any countries, the national indexes are converted to the comparison base year.