Structural and Demographic Business Statistics

Statistiques structurelles et démographiques des entreprises

Extract from 2006 Edition/Extrait de l'édition 2006



ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT ORGANISATION DE COOPÉRATION ET DE DÉVELOPPEMENT ÉCONOMIQUES

FOREWORD

The Structural and Demographic Business Statistics (SDBS), 2006, publication marks a significant change from the last publication in this area (Structural Statistics for Industry and Services, 2003) in a number of ways. The most important of these is the incorporation, for the first time, of structural business statistics by size class; an important development reflecting the increased policy and analytical focus on entrepreneurship and the role of small and medium enterprises within economies. Also included for the first time is information on birth, death and survival rates for a number of OECD countries; information which the OECD intends to collect using more harmonised collection methods in forthcoming years. The publication presents therefore three databases: the Structural Statistics for Industry and Services (SSIS) database; the Business Statistics by Size Class (BSC) database; and the Business Demography (BD) database. The first two present information on key economic variables such as value-added, turnover and number of employees, broken down by detailed industrial classification, and for the BSC database, by employment size. The third provides information on birth, death and survival rates.

This publication also includes a guide describing the benefits and uses of the database and sections that illustrate some of these uses by providing composite indicators based on the datasets. The *Structural and Demographic Business Statistics* database is complementary to other OECD datasets, especially STAN: OECD Structural Analysis Statistics.

The improved coverage, comparability and quality of statistics presented in this publication, and in the SDBS database, respond to the Istanbul Ministerial Meeting's Special Workshop on Small and Medium Enterprise (SME) Statistics (3-5 June 2004) call for the OECD to address the issue of the quality of business and, especially, SME statistics.

The database which contains longer time series and a more detailed industry classification is also available online via www.sourceoecd.org and CD-ROM.

If you require additional information on the data presented in this publication, or if you wish to make comments or suggestions to improve the contents and presentation, you are welcome to contact the OECD Statistics Directorate by e-mail (stat.contact@oecd.org).

AVANT-PROPOS

Cette édition sur les *Statistiques structurelles et démographiques des entreprises (SDBS)*, 2006 présente de substantielles modifications par rapport à la dernière publication en ce domaine (*Statistiques des structures de l'industrie et des services*, 2003). La plus importante concerne l'ajout, pour la première fois, des statistiques d'entreprises par classe de taille, un développement d'importance qui reflète l'intérêt croissant des politiques et analyses économiques à l'égard de l'entreprenariat ainsi que du rôle des petites et moyennes entreprises dans l'économie. De même pour la première fois sont présentées des informations sur le taux de création, de défaillance et de survie des entreprises pour certains pays de l'OCDE; données qui dans les prochaines années, seront collectées de façon plus harmonisée. Ainsi, la publication regroupe trois bases de données : la base de données des Statistiques des structures de l'industrie et des services (SSIS); la base de données des Statistiques d'entreprises par classe de taille (BSC); et la base de données sur la Démographie des entreprises (BD). Les deux premières présentent des variables économiques clés telles que la valeur ajoutée, le chiffre d'affaires et le nombre d'employés détaillées par secteur d'activités, et pour la base de données BSC, ventilées par classe d'emploi. La troisième fournit des données sur les taux de création, de défaillance et de survie des entreprises.

Cette publication inclut également un guide exposant les possibilités d'utilisation de la base de données ainsi qu'une illustration de cet usage au travers d'indicateurs composites. La base de données des *Statistiques Structurelles et Démographiques des Entreprises* est complémentaire des autres ensembles de données fournis par l'OCDE, notamment STAN: OCDE Analyse Structurelle de l'Industrie.

L'amélioration de la couverture, de la comparabilité et de la qualité des statistiques présentées dans cette publication ainsi que dans la base de données SDBS répond à la demande exprimée lors de la Conférence Ministérielle d'Istanbul (3-5 juin 2004) sur la promotion des petites et moyennes entreprises, chargeant l'OCDE d'aborder la question de la qualité des données d'entreprises et particulièrement des statistiques des PME.

La base de données SDBS, qui contient des séries de données plus longues avec des secteurs d'activités plus détaillés, est également disponible en ligne via www.sourceoecd.org ainsi que sur CD-ROM.

Si vous désirez plus d'informations sur les données présentées dans cette publication, ou si vous voulez apporter des commentaires ou suggestions pour améliorer le contenu et la présentation, vous êtes invités à contacter la Direction des Statistiques de l'OCDE par courriel (stat.contact@oecd.org).

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INTRODUCTION

OECD statistics on businesses

The OECD Secretariat collects a wide range of statistics on businesses and business activity. This publication features the data collection of the Statistics Directorate relating to a number of key variables, such as value-added, operating surplus, employment, and the number of business units, for example, broken down by 4-digit International Standard of Industrial Classification (ISIC Revision 3) industry groups (including the service sector), referred to as the Structural Statistics on Industry and Services (SSIS) database, and, for the first time, by size class; referred to as the Business Statistics by Size Class (BSC) database, formerly known as Statistics on Enterprises by Size Class (SEC) database. Also new to this publication is the inclusion of data on business demography statistics, such as estimates of business births and deaths, referred to as the Business Demography (BD) database. Collectively these three data sets form the Structural and Demographic Business Statistics (SDBS) database.

Other OECD Directorates also collect important information relating to business activities. The Science Technology and Industry Directorate, for example, collect information on business research and development expenditure and innovation broken down by industrial sector and size class within its Analytical Business Enterprise Research and Development database (ANBERD) and which forms one part of the Directorate's Structural Analysis Database (STAN); which additionally provides 2-digit industry breakdowns of economic activity and input-output tables. It also collects information on multinational corporations and their foreign affiliates and considerable information relating to patents. Information on all of these outputs can be found in the latest edition of the OECD Science, Technology and Industry Scoreboard. The OECD's Directorate for Employment, Labour and Social Affairs maintains a large database of labour force statistics, which, although not based on business survey, register or census information, does provide information on employment in different industrial sectors as well as information on the numbers of self employed; and the OECD's International Energy Agency collects information on carbon dioxide emissions and energy consumption by industrial sector for example. This is by no means an exhaustive list though; many other Directorates collect information related to businesses, such as financing and taxation.

Process of Data Collection

The United Nations Statistical Commission, at its twenty-seventh session, recommended that the OECD, in collaboration with the United Nations Industrial Development Organisation (UNIDO), take responsibility for the collection and dissemination of world-wide industrial statistics, and the collection of these statistics for non European Union countries has been organised through a joint OECD/UNIDO questionnaire. Information on European Union countries, including Norway, is sourced directly from Eurostat, the Statistical Office of the European Communities, as part of an agreement between the OECD and Eurostat designed to reduce the response burdens of EU member countries.

The data on business demography statistics presented in this publication has not been compiled using conventional collection techniques (questionnaires). Instead the data has been gathered from a variety of publicly available sources (usually the website of the relevant statistical office). In forthcoming years the OECD Statistics Directorate intends to collect this information directly from



countries using dedicated and harmonised questionnaires such that the coverage and coherence of the data set is improved. Given the way that the information on business demography statistics on births, deaths and survival rates have been obtained at this early stage of development, information on this database is treated separately to the SSIS and BSC databases and is shown separately in Part IV- Business Demography Statistics.

Methodological Notes for the SSIS and BSC databases

Industry Coverage

This publication provides data on industries according to the International Standard Industrial Classification (ISIC), Revision 3. A full description of this classification, together with descriptions of concordance relationships between ISIC Rev 3 and national and other international classification systems can be found at the United Nations Statistics Division's website¹. Annex B provides a description of the 2, 3 and 4-digit industries for which the OECD requests information.

Data previously transmitted to the OECD Statistics Directorate by countries on the ISIC Revision 2 basis are not included in this publication nor maintained on the database but are still available on electronic format at the OECD.

At its thirty-seventh session, held in New York, in March 2006, the United Nations Statistical Commission approved the revised International Standard Industrial Classification of All Economic Activities (ISIC), Revision 4 as the new international standards for activity. Details of this classification system can also be found at the UN website referred to above. The SDBS database will be updated to this new system in parallel with moves made by OECD member countries in years to come.

Size Classes of Industries Covered

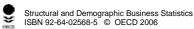
The OECD Statistics Directorate requests breakdowns of industries into the following employment size classes, where the figures reflect in theory, although not always in practice, the numbers of persons engaged:

1-9, 10-19, 20-49, 50-99, 100-199, 200-249, 250-499, 500-999, 1000+

Unfortunately it is not always possible for countries to provide information on this basis and, instead, countries provide data using the breakdowns relevant to the data sources available in their country. Data development in individual countries tends to follow policy requirements and the availability of information by size classes often reflects the needs of small and medium enterprise (SME) policy makers. No international definition of SMEs exists, as one might expect given the differences in sizes of countries and their business populations, and, so, the result is a wide variety of size class breakdowns that is difficult for users to compare. Therefore, to improve the usability of the database and to improve harmonisation and encourage country comparisons, this publication and the BSC database focuses on 5 size classes where the data across countries and variables can e most closely aligned. These are as follows:

Not all country information fits perfectly into this system however, for the United States for example it implies a size class breakdown of 1-9, 10-19 and 20+, and, so, for some countries, there is necessarily some divergence from these target size classes. As such the database refers to 5 size classes that are country specific. To reinforce the point that there may be differences in the coverage

¹ http://unstats.un.org/unsd/cr/registry/regct.asp?Lg=1.



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of businesses within size classes across countries, these 5 size classes are referred to as NSC1, NSC2, NSC3, NSC4 and NSC5; where the NSC refers to national size class. The table below shows, for each country, variable and period, the actual size class of businesses within each of NSC 1 to NSC 5. As can be seen in most cases they align quite close to the 5 target size classes mentioned above, but not always. In fact a strict comparison across countries is only possible if the focus is on businesses with less than 20 persons engaged and businesses with 20 or more persons engaged; and even here the comparisons are restricted by the exclusion of some small businesses at the lower end of the less than 20 threshold; the extent of which varies across countries. 1996 to 1998 data for Germany for example exclude nearly all businesses with less than 20 persons engaged, and the US data refers only to businesses with employees.

Relationship between OECD BSC size classes and number of persons engaged: Table 1. By country, period, industrial sector and variable

Country	Period	ISIC Sector	Variables		OECD B	SC Size C		
				NSC 1	NSC 2	NSC 3	NSC 4	NSC 5
Australia	1997-2000	All	All	0-9	10-19	20-49	50-199	200+
	2001-2002	All	All	1-19			20-199	200+
Austria	1995, 97-2003	All	All	1-9	10-19	20-49	50-249	250+
Belgium	1995-2001	All	All	1-9	10-19	20-49	50-249	250+
Canada	1994-1998	All	All	1-4	5-19	20-49	50-99	100+
Czech Republic	1995-2003	All	All	1-9	10-19	20-49	50-249	250+
Denmark	1995-2003	All	All	1-9	10-19	20-49	50-249	250+
Finland	1995-2003	All	All	1-9	10-19	20-49	50-249	250+
France	1995-2003	All	All	1-9	10-19	20-49	50-249	250+
Greece	1997-2000	All	All	N/A	10-19	20-49	50-249	250+
Germany	1996-2003	40-41	All	1-9	10-19	20-49	50-249	250+
-	1996-1998	Other	All			20-49	50-259	250+
	1999-2003	Other	FCF			20-49	50-259	250+
			Other	1-9	10-19	20-49	50-249	250+
Hungary	1998-2000	All	All	5-9	10-19	20-49	50-249	250+
	2001-2003	All	All	1-9	10-19	20-49	50-249	250+
Iceland	1998-2003	All	All	1-9	10-19	20-49	50-249	250+
Ireland	1995-2003	45	All			20-49	50-249	250+
		10-41	All	3-9	10-19	20-49	50-249	250+
		Other	All	1-9	10-19	20-49	50-249	250+
Italy	1995-2003	All	All	1-9	10-19	20-49	50-249	250+
Japan	1990,2,4,5,7,8,9	All	GITG			30-49	50-199	200+
			Other	4-9	10-19	20-49	50-199	200+
	2001	All	GITG, WASE			30-49	50-199	200+
			Other	4-9	10-19	20-49	50-199	200+
	2003	All	EMPE, EMPN, WASN,ESTB	1-9	10-19	20-49	50-249	250+
			WASE, FCF, INEN, CSGS			30-49	50-249	250+
			Other	4-9	10-19	20-49	50-249	250+
Korea	1990-2003	10-41	All	1-9	10-19	20-49	50-199	200+
		60-63	All	1-9	10-19	20-49	50+	
		Other	All	1-9	10-19	20+		
Luxembourg	1995, 1998	All	All	1-9	10-19	20-49	50-249	250+
Mexico	1998, 2003	All	All	0-10	11-20	21-50	51-250	251+
Netherlands	1995-2003	All	All	1-9	10-19	20-49	50-249	250+

Country	Period	ISIC Sector	Variables	I	OECD B number of	SC Size C persons		
				NSC 1	NSC 2	NSC 3	NSC 4	NSC 5
New Zealand	1996,7,8 2000-2004	All	All	0-9	10-19	20-49	50-99	100+
Norway	1996-2000 2002-2003	All	All	1-9	10-19	20-49	50-249	250+
Poland	1996-2002	All	All	1-9	10-19	20-49	50-249	250+
Portugal	1996-1999	All	EHOU, GITG		10-19	20-49	50-249	250+
			Other	1-9	10-19	20-49	50-249	250+
	2000	All	EHOU		10-19	20-49	50-249	250+
			Other	1-9	10-19	20-49	50-249	250+
	2001-2003	All	All	1-9	10-19	20-49	50-249	250+
Spain	1995-2003	All	All	1-9	10-19	20-49	50-249	250+
Slovak	1995-1999	All	All			20-49	50-249	250+
Republic	2000-2003	All	All	1-9	10-19	20-49	50-249	250+
Sweden	1996-2002	All	All	1-9	10-19	20-49	50-249	250+
Switzerland	1995,98,2001	All	All	1-9	10-19	20-49	50-249	250+
Turkey	1994-2001	15-37	All		10-19	20-49	50-199	200+
		Other	All	1-9	10-19	20-49	50-199	200+
United Kingdom	1996-2002	All	All	1-9	10-19	20-49	50-249	250+
United States	1990-2002	All	All	1-9	10-19	20-99	100- 499	500+

Notes: The actual coverage of enterprises across countries is not always the same even if the stated size class is the same, because administrative data sources and business registers often exclude businesses below a certain size threshold. E.g. US data reflect only businesses with employees, UK data reflect only VAT registered businesses and/or those with employees, and German data for services reflect businesses above certain turnover thresholds that vary by sector. See the country notes for more information on each country.

EHOU - hours worked; CSGS - changes in inventories; INEN - purchases of energy; FCF- all investment variables; GITG - gross investment in tangible goods; WASE - wages and salaries, employees; EMPE - number of employees; EMPN - number of persons engaged; WASN - wages and salaries, number of persons engaged; ESTB - number of establishments (see also below).

Variables Covered

The table below provides a full description of the variables requested by the OECD in its SDBS database collection, together with the reference codes used for each variable in the electronic database. Data is limited to what member countries are able to provide. The paper version of the database shown at the end of this publication is restricted by size and so only a few key economic variables broken by 2-digit sector and size class are shown for illustration. The electronic version of the database is more detailed.

Variable description
Turnover or gross premiums written
Production at producers' prices
Production at factor costs
Value added at basic prices
Value added at factor costs
Gross operating surplus
Total purchases of goods and services
Change in stocks of goods and services
Purchases of energy products (in value)
Gross Investment in tangible Goods
Investment in land

Variable code Variable description

GFBS Investment in existing buildings and structures **GFEQ** Investment in machinery and equipment **SFCF** Sales of tangible investment goods Net investment in tangible goods NITG

EMPN Employment, number of persons engaged Employment, number of employees **EMPE**

EMPU Employment, number of unpaid persons employed Employment, number of females employees **EMPF**

FTEE Employment, number of employees in full time equivalent units

EHOU Hours worked by employees

Compensation of labour, all persons engaged **REMN**

REME Compensation of labour, employees Wages and salaries, all persons engaged WASN

WASE Wages and salaries, employees

ESUP Other employers' social contributions, employees

ENTR Number of enterprises Number of establishments **ESTB**

PART I

READER'S GUIDE

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I.1. READER'S GUIDE - OVERVIEW

Three datasets combine to form the Structural and Demographic Business Statistics Database. The first provides information on a number of economic variables broken down by 4-digit International Standard of Industrial Classification Revision 3 (ISIC Rev. 3) industries and is referred to as the Structural Statistics on Industry and Services database (SSIS). The second provides the same industry level of information as the SSIS database but this is also broken down by size classes of businesses, and is referred to as the Business Statistics by Size Class database (BSC) database. In theory these two datasets are consistent and complementary. In practice however the datasets are considered separately because: the time series for SSIS data are typically longer; the coverage of variables in the SSIS database is more comprehensive than the BSC database; and, for some countries, the two datasets are not entirely consistent, reflecting partly different information sources and allocation methods and partly the different times when the datasets were compiled. Moreover, as described in the country notes and in the examples that follow, for some countries it has been possible to make adjustments to the SSIS dataset to improve its internal consistency that cannot be replicated in the BSC database.

The third dataset within the SDBS database contains information of business birth, death and survival rates for many OECD countries and is referred to as the Business Demography database. This dataset is at its early stages of development and has not been compiled using the conventional system of questionnaires, such as those used in collecting SSIS and BSC information, and, so, considerable incomparability problems currently exist in this dataset. The dataset has however been included in the SDBS dataset at this early stage a) because there is considerable policy interest in this type of information and b) because it signals the intention of the OECD Statistics Directorate to collect information in this important policy area using more conventional methods with harmonised definitions for variables. As such, the discussion that follows concentrates primarily on the use of the SSIS and BSC databases. A discussion of the BD database is provided as a separate section towards the end of this publication.

The SSIS and BSC databases provide, uniquely, comparable information on the following economic variables broken down by 4-digit ISIC Rev. 3 (where the coverage varies by country and database) and employment size classes in the case of the BSC database (1-9, 10-19, 20-49, 50-249, and 250+), for all OECD countries:

- Turnover or gross premiums written.
- Production at producers' prices and/or factor costs.
- Value added at basic prices and/or factor costs.
- Gross operating surplus.
- Total purchases of goods and services.
- Change in stocks of goods and services.
- Purchases of energy products.
- Gross investment in tangible goods.
- Gross investment in land.
- Gross investment in existing buildings and structures.
- Gross investment in machinery and equipment.
- Sales of tangible investment goods.
- Employment, number of persons engaged and number of employees.
- Employment, number of females' employees.
- Employment, number of employees in full time equivalent units.
- Hours worked by employees.
- Compensation of labour, all persons engaged and employees.
- Wages and salaries, all persons engaged and employees.
- Other employers' social contributions, employees.
- Number of enterprises and/or establishments.

As such, the primary advantage of these databases compared to other datasets is that they provide detailed information on a wide range of economic variables at a very detailed industry level. The database therefore provides an ideal tool for users interested in (OECD country) international comparisons of the economic performance of industries at this detailed level. This is especially true where comparisons of business size classes are needed. For example the database provides the ability to compare the average size of enterprises and the distribution of activity by size class across countries. Other examples include: allowing users to test the extent of homogeneity of 4-digit industries within their 2-digit parents, an assumption often used in economic analyses that use higher level aggregations of industries, such as 2-digit groups; and providing the tool to accurately compare groupings of industries, such as the Information and Communications Technology (ICT) sector, whose internationally recognised definition² includes parts (4-digit industries) of 2-digit industries.

However, users should also be aware of some of the phenomena that need to be fully understood when using these datasets. Key amongst these concerns comparisons over time. The scope and coverage of source information used in the SSIS and BSC databases can vary over time, meaning that breaks in series often occur. Moreover, enterprises and establishments may change their industrial classification over time. Sometimes this will reflect the fact that the enterprise or establishment has changed activity completely but it may also reflect small year-on-year changes. To illustrate, an enterprise classified to ISIC 2811 in 2002 because 51% of it production was related to ISIC 2811 and only 49% to ISIC 2812 might find itself classified to ISIC 2812 in 2003 if the relative proportions of production shifted from 51:49 to 49:51. That is not to say that the classification change is incorrect, far from it, the change reflects the new economic reality. The point however is that these changes can occur and users need to recognise these possibilities in their analyses.

This primary aim of this section therefore is to provide a description of some of the issues that can affect analytical applications of the database, such as comparability and changes in concepts. Detailed descriptions of the sources and methods used in each country are provided at the end of the tables shown for each country in Part III. Detailed definitions of variable concepts are provided in Annex A.

Comparability of concepts and coverage across countries

Of particular importance in the context of analytical applications is international comparability. Every effort has been made to ensure that the variables presented are comparable across countries but on occasions this is not possible. Three areas, worthy of particular mention, where some issues of incomparability arise are:

• Value-added: The definition of value-added used in this publication is consistent with that used in the 1993 System of National Accounts (for a given price basis, factor costs or basic prices). However not all countries are able to provide estimates on this basis. Typically, for these countries, the estimates are based on production minus the intermediate consumption of goods and industrial services only. This differs from the SNA definition which excludes the intermediate consumption of all services.

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The OECD definition of the ICT sector can be found at http://www.oecd.org/dataoecd/34/37/2771153.pdf. It includes a number of distinct 4-digit industries and includes: 3130: Insulated wire cable; 3312: Instruments and appliances for measuring, checking, testing, navigating and other purposes except industrial process equipment; 3313: Industrial process equipment; 5150: Wholesale of machinery, equipment and supplies (part only, where possible); 6420: Telecommunications; 7123: Renting of office machinery and equipment; as well as the following 2-digit industries: 30: Office, accounting and computing machinery; 32 Manufacture of radio, television and communication equipment and apparatus; and 72: Computer and related activities.

- The coverage of businesses: For most countries the main sources of information used in the compilation of structural business statistics are economic censuses, business surveys and business registers. These typically cover establishments and/or enterprises above a certain size limit (usually based on employees or turnover above a certain level) but these thresholds vary across countries. This is of particular relevance in the context of business statistics by size class.
- The statistical unit used for businesses: Many measures are available for the statistical unit used to define businesses and these vary across countries. Two key measures prevail in this publication. The first is based on the *enterprise* and the second the *establishment*.

Comparability over time

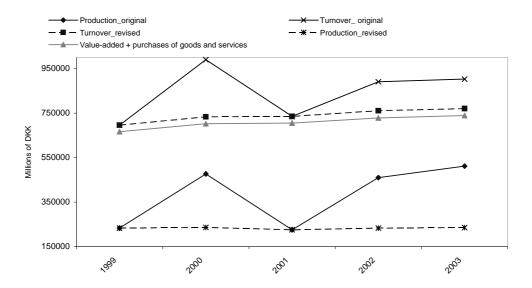
Comparability of country data over time is also an important issue. For some countries the source data used to estimate the variables in this publication are not consistent over time and neither are the concepts nor the coverage of businesses.

For example, data may be based on survey information in one year and exhaustive census information in another, or the coverage of the same data source itself may change over time, for example a census or survey may include all establishments with more than 20 employees in one year and then all employing establishments thereafter. Where breaks in series do occur they are highlighted using a horizontal line and supplementary notes. One notable example of such a break concerns the data for ISIC sectors 60 to 74 in Germany for data from 2000 onwards. The data provided by Germany for 2000 and onwards is based on businesses with turnover above a certain level and is not consistent with the data in earlier years or with other industrial sectors, where all registered enterprises are covered. In earlier years the data on monetary variables, such as production and value added, is based on national accounts sources and so include all registered and estimates of unregistered (those operating in the underground economy) enterprises. These estimates include imputations made by national accountants such as those for dwelling services provided to owner occupiers. The country notes for Germany provide more detailed information on these issues.

Changes in concepts can also complicate the comparability of data over time. It is not always obvious however where concepts change but, on occasions, especially for sectors, such as the distribution sector (wholesale and retail) where turnover and production can be especially affected by valuation changes in estimates of changes in stocks, for example, it is possible to identify these occurrences; especially when relationships with other variables are used as diagnostics. Wherever possible the OECD has tried to correct for inconsistencies related to changes in concepts using supplementary information but this is not always possible. In all cases the OECD estimates are highlighted in italics in this publication and the database.

For illustration, one such example is given below reflecting the 'before' and 'after' estimates of production and turnover for the sale, maintenance and repair of motor vehicles, retail sales of fuel and wholesale sectors (ISIC Rev 3, 50 and 51) in Denmark. The original estimates of production and turnover showed considerable volatility, not consistent with movements in other variables such as value-added, purchases of goods and services or employment variables. The relationship between turnover and value added plus purchases of goods and services is key in this respect. A priori one would expect these aggregates to be closely related in this industry, as is the case in other countries, where typically the ratio of turnover to value-added plus purchases of goods and services is close to 1. This was the case for Denmark in 1999 and 2001 but in other years the ratio moved significantly away from unity, as can be deduced from the chart below. This might occur if turnover estimates in these years inadvertently included VAT for example. The estimates in the OECD's database correct for this movement by applying the average ratio observed in 1999 and 2001 at the 4-digit level to other years; based on the observation that in other 4-digit sectors in Denmark and other countries

the ratios are generally stable and nearly always close to 1. Production estimates have been similarly adjusted using relationships between turnover and production. These changes produce estimates that are much more consistent over time and closer to those observed in the national accounts, as shown later in this publication, which is consistent with the position seen for other variables such as employment and value-added.



ISIC Rev. 3, Sectors 50+51: Production and Turnover in Denmark 1999-2003

However it is not always possible to correct for inconsistent time series, whether the changes reflect changes in coverage or concept, and, so, in some cases, to avoid confusion and to improve coherence, it has been decided to suppress the original country data, in affected years. For example estimates of value-added, purchases of goods and services and gross operating surplus in 2001 for Poland have all been suppressed because the estimates of value-added and gross operating surplus were significantly higher and purchases of goods and services significantly lower, in nearly all sectors, than in 2000 and 2002, and because in all years, except 2001, estimates of value-added were very close to their national accounts based equivalents at the industry sector level; as shown later in this publication. Other examples were data have been suppressed by the OECD are described in the country notes shown in Part III.

Users should also note that changes may occur for specific sectors only, reflecting the different data sources often used by statistical offices to measure activity in sectors as diverse as manufacturing, services and construction for example. This means that in some cases breaks in series occur in certain sectors only.

Time series analyses - Classification changes and consolidation

The points raised above also relate to time series applications but, fundamentally, users need to be aware that the database provides snapshots of enterprises or establishments at points in time. Both enterprises and establishments can change their industrial classification over time. For example, if enterprises in two different industrial sectors merge, the new entity may reappear in one single industrial sector only, even if the overall activities of the new entity are unchanged. Similar issues arise if establishments in different sectors merge or when other demographic events occur such as take-overs or break-ups for example.

Another related issue concerns intra-industry demographic events. Gross measures of activity such as turnover, production and intermediate consumption of goods and services within an

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enterprise may be recorded net of the enterprise's intra-transactions or gross; depending on the country or enterprise's practice or available accounting information. If, therefore, an enterprise breaks-up into two new enterprises but both new entities remain in the same industrial sector, gross production, turnover and intermediate consumption may rise, although, all other things equal, no changes will be seen in net measures such as value-added, operating surplus or labour and investment related variables. The same can occur where industries such as transport, telecommunications, electricity and gas distribution for example, become deregulated, particularly when an incumbent monopoly provider is compelled to allow other providers to use its infrastructure network to deliver services.

Analyses of time-series data related to business size classes are also of considerable policy interest and similar issues of time series consistency can arise when businesses move from one size class to another as they grow or contract.

Confidentialised data

Sometimes data are 'confidentialised' by statistical offices at a relatively aggregated (ISIC Rev 3, 2-digit) level. This can occur, for example, because a statistical office might desire to show all but one of the 4-digit groups within a 2-digit sector leading to the secondary suppression of the 2-digit figure to preserve anonymity in the confidentialised 4-digit entry (otherwise the confidentialised 4 digit cell can be determined). Additionally, because statistical offices will typically confidentialise industries according to the classification systems used in their countries and then use this information as the building blocks to arrive at ISIC estimates, it is often the case that the numbers of industries that are confidentialised are proportionally higher when shown in ISIC than when shown on a national basis. This reflects cautionary prudence on the parts of statistical institutions. The process of ensuring that data are not disclosive when shown in a national classification system can be burdensome, particularly when legal penalties arise for accidental disclosure; as is the case in some countries. Repeating the same process for ISIC based classifications does not merely double the burden however, since a comparison needs to be made between national classification systems and ISIC to ensure that disclosure cannot be obtained by unpicking the relationships between the two classification systems.

This is a non-trivial point but can be simplified by way of example. In country A's classification system, the 2-digit industry A54 contains three 4-digit sub sectors: A5410, A5420 and A5430. Only one business exists in A5430 and, so, a decision is made to additionally suppress A5420 so that the two digit total for A54 can be shown. In ISIC, industry A5430 exists in sector ISIC 32, together with industries A5310, A5320 and A5330; none of which require suppression when presented in the national classification system. But, to preserve confidentiality of A5430, when presented in ISIC, one of A5310, A5320 and A5330 will need to be suppressed within the data presented using the national classification system or, more typically, the 2-digit ISIC sector is suppressed.

Users have however expressed some unhappiness about the unavailability of 2-digit information; particularly, where, as is often the case, the confidentialised entry is generally thought to amount to an insignificant proportion (often less than 1%) of the 2-digit total. In recognition of this, the OECD Statistics Directorate has attempted to estimate 'confidentialised' data at the 2-digit level, wherever possible, using supplementary information such as national accounts indicators and information on other related variables within the structural business database. The main reason for doing this is to improve the functionality of the database, providing users with the means to use 2-digit data that can be added to totals. However, although every effort has been made to estimate these missing data, they, and the previously confidentialised 3 or 4-digit estimates, should be used cautiously. On many occasions, for example, data are confidentialised precisely because enterprises switch sectors and, so, where this occurs, volatility should be reflected but national accounts data

based on establishments for example, and often used to estimate confidentialised cells, will not usually reflect this volatility.

A good example of the attempt to estimate data confidentialised at the 2-digit level concerns the size class data for the United States. Data for 2002 provided by the US Census Bureau contained a number of cells that were confidentialised at the ISIC 2-digit industry level. However, using detailed information (based on the North American Industrial Classification system) on industries made publicly available on the Census Bureau's website, it could be established that the possible ranges for most ISIC 2-digit industries (broken down by size class) were not significant, since, often, the cause of confidentialisation was a 6-digit NAICS industry. As such these (small) 6 industries have been estimated by the OECD using statistical optimisation techniques subject to the constraints of 5, or often 4, digit NAICS parent industries. However, to avoid imbuing equal reliability on these estimates of 6-digit activity as to disclosive estimates, most 4 or 3-digit ISIC information based on them is not shown and remain confidentialised; if they were also confidentialised in the original data provided to the OECD. Indeed, for 2-digit industries, only those where a significant degree of confidence could be established are shown.

Coherence of Sources

Statistical offices use a variety of sources to produce business statistics data and this variety can often cause comparability problems. In many countries, for example, different sources of information are used to estimate activity in different sectors. For example, manufacturing may be based on a survey of businesses with one or more employees whereas service sectors may be based on administrative data for businesses above some turnover threshold say. But the different sources can also relate to variables. Investment information for example may be sourced from dedicated investment surveys that may not have the same coverage, sample size or stratification as used for other variables. Another important example relates to information on employment, which, for some countries is based on labour force and not business surveys, which can compromise labour productivity calculations. Differences in sources are highlighted in the country notes.

Comparisons of BSC and SSIS Statistics

The data requested for the BSC and SSIS databases are the same but differences exist in the coverage of variables and years. Typically, less information is available on the BSC database reflecting the greater data requirements involved in providing information at this level. Other differences exist however. For some countries the estimates of 4-digit totals for the same variable differ, reflecting the often different data sources used in the compilation of the BSC and SSIS datasets and also the coverage of these data sources. Timing is also a factor. For some countries, the returns were provided at different times and so more up-to-date estimates may be reflected in one dataset than another.

Comparisons with other data sets

As described in the introduction to this publication, the OECD produces many other statistics related to businesses and their activities. This information can be used to supplement the SDBS database but some care is needed in bringing these different datasets together. Although every effort is made using international standards, such as the International Standard Industrial Classification (ISIC Rev. 3), to harmonise the various datasets, users should note that some differences will arise. On occasions this will be because different concordance relationships are, necessarily, used for different indicators to bridge the gap between national classification systems and ISIC Rev. 3. Sometimes it may reflect differences in the way business units are defined or sampled and on others it may reflect differences in the way similar concepts are measured. One important dataset in the context of business statistics is national accounts data, where significant differences in concepts can occur as described more fully in the following section.



I.2. COMPARING SDBS AND NATIONAL ACCOUNTS DATA

Economic Indicators provided by the structural and demographic business statistics database typically provide, more detailed information on industrial sectors than those provided by national accounts based statistics. This occurs because adjustments are made for the national accounts which, typically, can only be made at the more aggregated industry level. Four types of adjustments are commonly made.

- The first is driven by the need to achieve 'exhaustiveness' in the coverage of economic activity such that estimates of gross domestic product (GDP) cover all market and non-market activity. Examples of this activity are: imputed-rent for owner-occupied dwellings and the production of agricultural products used and consumed by households.
- The second reflects the coverage of structural business statistics. Typically these are sourced from census data, surveys or business registers. But the sources are not always exhaustive in their coverage of businesses, as they often only collect information on businesses above a certain size threshold (which are often based on turnover or employment criteria), and, so, micro and small enterprises or establishments are not always covered in structural business statistics. Additionally, structural business statistics generally only provide information that is based on business returns. In countries with large informal economies, businesses often under-declare their real turnover, profits and employment say, or may evade registration on administrative sources altogether. National accounts estimates try to adjust for this. Finally, some countries do not include all state owned, public corporations or non profit institutions, in their structural business statistics data.
- The third reflects conceptual adjustments made by national accountants, for example 'tips' paid to waitresses and waiters in a restaurant say are recorded as income received by the employing enterprise in the national accounts. Larger adjustments are made to correct estimates that do not conform to SNA definitions. For example, some countries do not include intermediate expenditures on services in their structural business statistics estimates of total intermediate consumption of goods and services which are, in these cases, instead included in value-added. Another source of difference in industry estimates of value-added reflects adjustments made for financial intermediation services indirectly measured (FISIM).³
- The fourth reflects more general adjustments that embody, in practice, all of the three above and are driven by the need to achieve coherence between business statistics and other sources of information that can be used in the compilation of GDP, such as household budget and labour force surveys.

National Accounts based estimates, therefore, provide for more comprehensive coverage of economic activities and should be used where the focus is on total GDP say, or the contribution of aggregated industries to economic activity, irrespective of the size of any particular establishment or enterprise. The SSIS and BSC databases should be used where the focus is on: a specific industrial sector or sectors; information on the sizes of businesses is important; and/or where the focus is on market activities.

³ FISIM reflects the value of services provided by financial intermediaries for which no explicit charges are made. For example, interest is payable by borrowers and by lenders to financial intermediaries, and so, put simply, FISIM captures the value of the property income receivable by financial intermediaries less the interest payable by them.



These are not the only areas where differences between SDBS and national accounts based statistics occur however. Another important difference arises when the business units used to measure activity differ. Typically, in most OECD countries, estimates of activity by industry sector are based on the most homogeneous production unit available. The unit used varies across countries depending on the available data sources but most countries will try to measure activity for the national accounts using a local kind of activity unit, (used in many European countries), or the closely related establishment unit, which is used in many non-EU OECD countries. Enterprise data, which are how most European countries present SDBS data, reflect a combination of one or more sub-enterprise units such as establishments or local kind of activity units, and, so, data presented by industries on this basis may be different (higher or lower) than comparable national accounts data because different groupings of sub-enterprise units will be used across industries. Indeed, even if the same groupings of sub-enterprise units exist in a given sector, differences can arise in gross measures, such as production and intermediate consumption, reflecting the differing degrees of consolidation that exist within these sub-enterprise groups.

The remainder of this section provides examples of significant differences between national accounts variables, sourced from the Structural Analysis (STAN) database and SDBS data. Annex C provides a comprehensive comparison of value-added, employment and production, for all countries, broken down by main industrial sector headings. Some further care is needed in interpretation however because: *i)* for EU countries, SDBS statistics use value-added at factor costs, whereas STAN data are based on value-added at basic prices, although, for most industries, this is not expected to make a significant difference; *ii)* the concordance relationships used to transform national industrial classification systems into ISIC Rev 3 for SDBS and national accounts statistics may differ for some countries; although at the aggregated industrial sector levels presented here these differences are reduced; and (iii) the statistical unit used for businesses is often different, for example manufacturing enterprises might include service sector subsidiaries. That all said, the differences between the two datasets mainly provide an indication of the overall impact of the first four points raised above: exhaustiveness, coverage, concepts and coherence in each of the industrial sectors presented.

One good example of this concerns the comparison of variables in the totality of sectors 60 to 74 (excluding 65-67). These typically show similar estimates of employment in the SDBS database and the national accounts but lower SDBS estimates of production and value-added than national accounts data. This, in large, part reflects imputed rent, (owner occupied dwellings services), which typically lies between 5 and 10% of total gross value-added in most OECD economies.

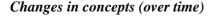
The main purpose of these comparisons therefore is to present not only an indication of the comparability of SDBS statistics with national accounts concepts and data but also the consistency of SDBS statistics over time. But, as always, some care is needed in interpretation. For example, SDBS statistics on employees that converge upwards to national accounts totals may imply that the coverage of SDBS business units has increased but it may also indicate, for example, an increase in registered employees consistent with corresponding decreases in the numbers of unregistered workers and businesses over time. Finally, users should note, that for some industries, SDBS information was not provided by countries even though equivalent information is available in their national accounts based statistics. In some cases therefore SDBS estimates have been based on their national accounts counterparts, which means that the two datasets will, by design, be comparable. Unless otherwise stated all SDBS statistics described in the charts below reflect the data as available on the SDBS database.

Examples of differences:

Differences in concepts

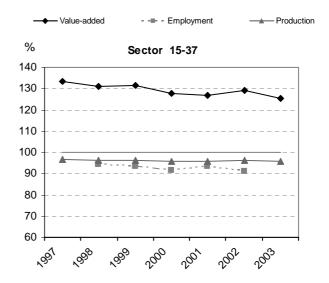
The chart on the right compares SDBS and STAN estimates of value-added, employment and production for manufacturing in the United States, showing, in each case, the former (SDBS) as a percentage of the latter (STAN).

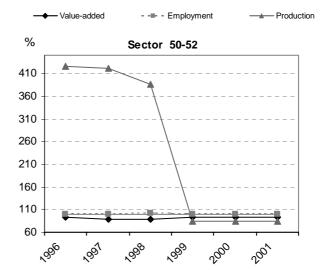
It shows that the estimates of SDBS employment and production are close to but always lower than the STAN estimates largely reflecting the fact that the source data for SDBS statistics is a survey/census of businesses with employees only, whereas the national accounts includes estimates of activity by business without employees. The key point however concerns the comparisons of value-added. The SDBS estimates of value-added for the United States include purchases of non industrial services, whereas the national accounts based estimates remove these items of expenditure from value-added. Other countries, such as Canada, are similarly affected. Readers should also note that, for EU countries, value-added is presented at factor costs in the most recent years whereas STAN data are presented, typically, at basic prices.



The chart on the right compares SDBS and STAN estimates of value-added, employment and production in the wholesale and retail trade, repair of motor vehicles, motorcycles and personal and household goods sector (ISIC 50-52) in Belgium.

SDBS estimates of employment, value-added and production are close to STAN from 1999 onwards but, in earlier years, estimates of production are considerably higher. This does not appear to reflect subsequent consolidation of industry sales. The nominal SDBS statistics for production show a significant fall in production that is not mirrored by a fall in turnover. In fact the data indicate that a change in valuation concept has occurred, with production estimates for years before 1999 using a valuation concept closer to turnover and for 1999 onwards a measure closer to the national accounts concept (which is the same as the measure recommended for SDBS statistics).



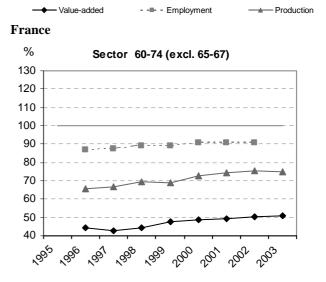


Differences in coverage and concepts

The first chart on the right compares SDBS and STAN estimates of value-added, employment and production in business services sectors 60-74, excluding 65-67 for France; although any country, except Germany, could have been chosen to illustrate this example of national accounts and SDBS differences.

It shows that the estimates of SDBS employment are close to the STAN estimates but lower; again reflecting the coverage of businesses and, possibly adjustments for informal non-registered businesses. However, large differences arise where production and value-added are concerned. This largely reflects the imputation for services of owner occupied dwellings (imputed rent). In nearly all countries the relative ratios of SDBS to STAN are higher for production than for value-added because the ratio of value-added to production for imputed rent is typically much higher than in most other industries.

Germany however is an exception. As described earlier in this publication the original data for 1999 were based on national accounts estimates, which included an imputation for owner occupied dwelling services. This is reflected in the chart on the right which shows that estimates of value-added and production are almost identical to national accounts estimates in 1999, but significantly less in more recent years, reflecting the fact that the data exclude exhaustiveness adjustments made for the national accounts and the size thresholds used by Germany in 2000 onwards that exclude businesses below a certain turnover (see country notes Part III). Indeed the effect of these thresholds can be seen in the German data for the number of enterprises in Part III which show roughly half as many enterprises in 2000 compared to 1999 and by comparing the German ratios on the right with those in other countries (Annex C), since this comparison shows that Germany is at the lower end of the scale for OECD countries.



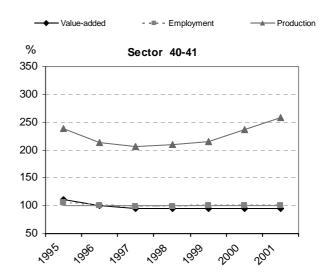
Sector 60-74 (excl. 65-67) 120 110 100 90 80 70 60 50 40



Differences in consolidation

The chart on the right compares SDBS and STAN estimates of value-added, employment and production in the electricity gas and water supply sector (ISIC 40-41) in Belgium and provides an interesting example of how differences in consolidation between SDBS and STAN statistics affect comparability.

In this case estimates of SDBS employment and value-added are almost identical to the STAN estimates but estimates of production are consistently higher. This is likely to reflect the netting out of intra-industry or intra enterprise flows for national accounts purposes.

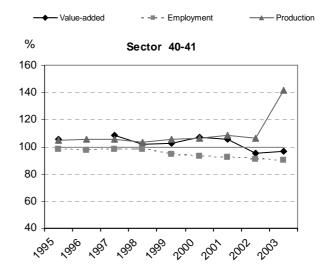


Differences through deregulation

The chart on the right compares SDBS and STAN estimates of value-added, employment and production in the electricity gas and water supply sector (ISIC 40-41) in Austria.

It shows that the estimates of SDBS employment and value-added are close to the STAN estimates in all years but estimates of production show a spike in 2003. On first sight this might look implausible, however, this is a good example of the 'gross' nature of production. The peak, in fact, coincides with the time of deregulation in the Austrian electricity sector which opened up the market to third party providers.

Third party suppliers often purchase their supplies from other generators before selling them on to final consumers; meaning that total industry gross turnover and production can rise significantly, although employment and value-added are only marginally affected.



The STAN data, on the other hand, appear to remove these intra-industry sales; which, it should be said, is not a pre-requisite for the national accounts, as the measure of production used in the national accounts is also gross.

Changes in the coverage of SDBS statistics over time

The chart on the right compares SDBS and STAN estimates of value-added, employment and production in the construction sector (ISIC 45) for Hungary; although any sector could have been taken to illustrate the point that follows.

In this case estimates of SDBS employment, production and value-added are consistently lower but jump significantly in 2001. This jump reflects a change in the coverage of enterprises used for SDBS statistics. Prior to 2001 only enterprises with 5 or more persons employed are included in Hungarian statistics. From 2001 onwards all enterprises, irrespective of size, are included. Given the comprehensive coverage from 2001 onwards the continuing difference between SDBS and STAN statistics may reflect, at least partially, informal (underground) production and enterprises.

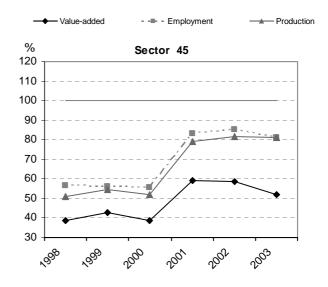


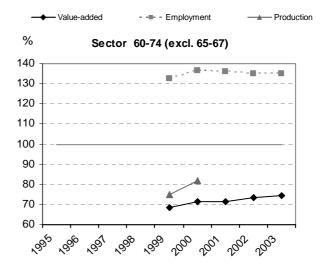
The chart on the right compares SDBS and STAN estimates of value-added, employment and production in business services sectors 60-74, excluding 65-67 in Spain.

It shows significantly lower estimates of value-added and production as one would expect given the inclusion of imputed rent in STAN based data. However it also shows significantly higher estimates of employment.

On its own this is not completely implausible, since such differences can be explained via differences in measures based on enterprises (SDBS) and establishments (STAN). For example, the enterprises in this sector might also include many subsidiary establishments in other sectors. This line of reasoning would suggest that the SDBS estimates of employment in other sectors would correspondingly lower than those shown in STAN. It is difficult to be categorical about this because the SDBS database does not include data for all sectors of the economy. But, it is revealing that SDBS employment in 2003 is about 1.4 million higher than the corresponding STAN data for sectors 10-64 and 70-74; which reflects about 10% of employment.

Because the structural business statistics data compiled by Spain are based on unified surveys that collect information on all variables it is likely that the differences between STAN and SDBS data





reflect different sources for employment and monetary variables in the STAN database; which is not unusual as many countries source employment data from labour force surveys that target households rather than businesses - whereas SDBS data are usually sourced from businesses, via surveys, censuses and business registers, meaning that the internal consistency of variables is likely to be higher. Obviously this can present some problems where productivity analysis is concerned for example. This is not a new phenomenon however, see for example: Nadim Ahmad, François Lequiller, Pascal Marianna, Dirk Pilat, Paul Schreyer & Anita Wölfl, 2003, "Comparing Labour Productivity Growth in the OECD".

PART II EXAMPLES OF SDBS INDICATORS

II.1. SDBS GENERAL INDICATORS

Point in time Comparisons

A strength of the SDBS database is its ability to provide a detailed description of the industrial structures of economies at a very detailed level, at fixed points in time, facilitating cross country comparisons of economic structures of businesses by their industrial classification and by their size. The database therefore lends itself to answering questions such as: What proportion of total employment is provided by small businesses? What is the contribution of a particular 4-digit industry to total value-added and how does this compare across countries? What were the unit labour costs by 4-digit industry and size class of OECD countries in 2003? Are small firms more or less profitable than large firms (where profit can be measured using gross operating surplus as a per cent of turnover)? How does the decomposition of value-added into its labour and capital components (gross operating surplus) vary by industry size? Are workers in small firms better paid than in large firms in some industries?

The database also provides information that can serve as useful inputs into the development of other economic databases however. For example the OECD's input-output database contains information on intra industry transactions at a relatively aggregated industry level⁴ but it is possible to incorporate SSIS and BSC data into the input-output framework using relatively simple assumptions and without distorting the overall input, labour and value-added structures of these SSIS and BSC industries, such that the inter dependencies between detailed industries and business sizes can be investigated. For example they would be able to provide information relating to the dependencies of large businesses on small and vice-versa or, say, the total direct and indirect dependencies of small businesses on export markets.

Another potential application lies with the investment data. Very little information currently exists on investment by industries, particularly by size class. Incorporating this information into KLEMS type productivity analyses or capital flow matrices that could be used together with input-output tables to measure the diffusion of technology⁵, say, warrant investigation.

Changes over time

An area of considerable interest to policy makers and analysts alike, concerns changes in business activity such as production, value-added and employment gains and losses over time. The SDBS database can provide an assessment of these changes but generally the comparisons should be performed over relatively short periods to avoid issues of incomparability over time arising. The previous section describes the types of events that can lead to incomparability and users will need to keep these events in mind when drawing conclusions.

Breaks in series, reflecting changes in the coverage of source information present the biggest barrier to comparability and users should familiarise themselves with the country notes to ensure that their analyses are not affected by such breaks. Other events however can also present problems in interpreting results when comparing data over time. Key amongst these are demographic events that result in reclassifications of businesses, or parts of businesses, from one sector to another. These events can include mergers, take-overs and break-ups for example but also increased output in a previously secondary activity. The SDBS database accurately reflects these changes and so users need to adopt caution in interpreting observed changes over time.

⁵ See George Papaconstantinou, Norihisa Sakurai and Andrew Wyckoff: "Embodied Technology Diffusion: An Empirical Analysis for 10 OECD Countries", STI Working Papers 1996/1.



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⁴ http://www.oecd.org/document/1/0,2340,en_2649_34445_34062721_1_1_1_1,00.html

Another area of analysis for which the SDBS database can be used and for which some care in interpreting results is required, concerns the study of business size over time, especially the contribution of different size classes to economic growth. Of particular relevance in the context of the BSC database is that recent start-ups and dynamic and innovative firms are typically small. In this sense what the database cannot show, because it is not longitudinal in the sense that it tracks individual firms over time, is the contribution small businesses make, particularly through Schumpeterian creative destruction, to economic and employment growth over time as they move from the start-up phase to some optimal size. Many studies however, (for example David Birch's seminal 1979 work "The Job Generation Process"), using longitudinal data sets have been able to establish their important contribution measured on this basis. In this context the OECD is currently exploring a number of possibilities within which a database at the individual business level or a set of indicators based on business level data could be maintained at the OECD.

The following sections provide two explicit examples of the potential of the SDBS database assist policy makers and analysts in ways that capitalise and exploit its detailed nature.

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The OECD has recently embarked on a study to assess the feasibility of various options which could see a firm level facility, or indicators based on firm level data, further developed by the OECD. This project was first presented at the OECD's Committee on Industry and Business Environment's November 2005 Working Party On Statistics meeting.

II.2. INDICATORS OF CONCENTRATION

Data on the size distribution of businesses (with enterprises preferred to establishments) can be used to give some indication of the concentration and so competitiveness of industrial sectors. Such measures of concentration are typically used to assess the market structure of an industry and assess how far an industry is from perfect competition or a monopoly situation. The most popular indicator of concentration is the Hirschman-Herfindhahl Index (*HHI*), which is widely used by competition authorities around the world.

For an industry with N businesses the HHI can be defined as:

$$HHI = \sum_{i=1}^{N} \left[\frac{100 * X_{i}}{\sum_{j=1}^{N} X_{j}} \right]^{2}$$

• Where X_i is an appropriate measure of business size, such as turnover, in business i. A figure close to zero therefore reflects extremely high competition and a figure of 10,000 reflects a monopoly position.

Unfortunately this indicator requires information for every individual business, which is not available in the OECD's SBS database. However it is possible to approximate the *HHI* using data on the size distribution of firms; although the quality of these indicators is significantly dependent on the disaggregation of business data, which varies by country, and so the approximations need to be seen in this light. Further one needs to factor in the issue of the business unit. Enterprise and Establishment definitions are not necessarily perfect measures in this context since a number of establishments could form part of an enterprise and enterprises can often be part of a larger enterprise group. If these enterprises operate in the same industrial sector the *HHI* may give an unrealistically low estimate of the level of concentration. Ideally, calculations should be made using enterprise group, or their combined entities, that operate in the same sector⁷.

Notwithstanding the points relating to enterprise groups, a number of variant methods and indices lend themselves to tackling the absence of firm-level data. The first can be defined as:

$$MIN_HHI = \sum_{i=1}^{M} n_i * \left[\frac{100 * (S_i / n_i)}{\sum_{1}^{N} X_j} \right]^2$$

• Where M is the number of size classes, n_i is the number of businesses in size class i, and S_i is the total turnover for all businesses in size class i.

⁷ See Rainer Feuerstack: "Investigating Ways of Identifying and Recording Multi-National and National Enterprise Groups" German Monopolies Commission paper, presented at the OECD Structural Business Statistics Expert meeting, November 2005.

This index gives a lower bound of the *HHI*, and so is referred to as the *MIN_HHI*. It assumes that the turnover of every businesses within a given size class is the same and is equal to the average turnover per businesses in the size class.

An estimate of the upper bound for the *HHI* can be calculated as:

$$MAX _ HHI = \sum_{i=1}^{M} \left[\frac{100 * (S_i - (n_i - 1) * S_i / E_i * EM_i)}{\sum_{i=1}^{N} X_j} \right]^2 + \sum_{i=1}^{M} (n_i - 1) * \left[\frac{100 * S_i / E_i * EM_i}{\sum_{i=1}^{N} X_j} \right]^2$$

• Where E_i is the total number of employed persons in size class i, and EM_i is the lower employment threshold of size class i.

MAX_HHI therefore assumes that all businesses, bar one, employ the minimum number of employed persons in their size class, with turnover equal to the average turnover per person employed in the size class multiplied by the lower employment threshold for entry into the size class. All other turnover and persons employed are allocated to one business in each size class. This is not a pure maximum but it serves as a meaningful proxy.

Schmalensee⁸ suggested another variant that assumes that the size of each business varies linearly within each size class, which provides a better estimate of the actual *HHI*. The index below, and used in this section, is based on this approach. It assumes that the turnover of the smallest business in any size class has turnover equal to the average turnover per person employed in the size class multiplied by the lower employment threshold for entry into the size class, and that all other businesses in the same size class have linearly increasing turnover. Where only one enterprise exists in a given size class however the calculation uses the formula for the *MAX_HHI* (which in this case is also equal to the *MIN_HHI*).

$$AVE_HHI = \sum_{i=1}^{M} \sum_{j=0}^{n_m} \left[100 * \frac{\left(S_i / E_i * EM_i + \frac{2 * j * (S_i - n_i * (S_i / E_i * EM_i))}{n_i * (n_i - 1)} \right)}{\sum_{1}^{N} X_k} \right]^2$$

Some care is needed in interpretation however when using the BSC data to compile *HHI* indices. For example derived estimates using the variant approaches described above can only provide an indication of concentration since they are not based on firm-level data and because they will be based necessarily on enterprise, but also, occasionally, establishment data. Moreover, some sectors in some countries may not include state controlled entities, and, so, particular care is needed when analysing sectors such as telecommunications, post and utilities, such as electricity generation. Readers should take particular care in deriving indices for countries where businesses below a certain threshold are excluded, as is the case for Japan, presented below.

The tables presented below present the three indices MIN_HHI, AVE_HHI, and MAX_HHI for 6 large OECD countries to give some indication of the degree of industry concentration at the 2-digit ISIC level.

Where data on totals for one or more of the necessary variables are confidentialised it has often not been possible to calculate one or more of the indices. Where this has occurred an "X" is shown.

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⁸ See, Schmalensee (1977), "Using the H-index of concentration with published data", Review of Economics and Statistics, Vol. LIX, No.2, May, pp. 186-193.

If totals are available, but data on at least one variable are confidentialised in two or more size classes, the missing size classes are combined as a single size class, calculated, for each variable, as the residual of the total and all other available size classes, whose employment size class is equal to the threshold in the smallest missing size class. Because the size classes that are confidentialised can vary over time, the comparability of the indicators over time can also be affected. Typically, where this occurs the *AVE_HHI* will be lower and the *MAX_HHI* higher than if all size class information was available.

"X"s are also shown in a few rare cases where the average number of persons engaged per business in a particular size class is below the minimum threshold for that size class; which might occur if the number of persons engaged is measured at a different point in time or concept to the estimate used to allocate businesses to size classes. A good example of how confidentialisation can affect the estimates is the estimates for the tobacco sector in France. A great deal of data was confidentialised in 2002 but not 2003, meaning that the estimates of the AVE_HHI and MIN_HHI were significantly lower than the estimates in 2003 but MAX_HHI was higher.

The tables show that concentration rates are typically lower in the United States and Japan than in France, Germany, Italy and the United Kingdom. For the United States this is perhaps not surprising, reflecting, in part, the larger size of the economy. The same is also partly true for Japan but is more likely linked to the fact that establishment and not enterprise data, which are not available, was used. For Japan it is also important to note that only establishments with 5 or more persons engaged are covered in the size class data but that said the omission of small firms is not likely to make a significant difference as their turnover is also typically small.

That all said some general common trends emerge. In all countries the tobacco industry shows relatively high rates of concentration, particularly France. The same is true for the petroleum refining industry. Looking at the sectors in a ranking system, the following sectors nearly always appear in the top ten for all countries: mining and quarrying – particularly coal, petroleum and natural gas extraction (ISIC 10, 11); tobacco (ISIC 16); petroleum refining (ISIC 23); office, accounting and computer machinery (ISIC 30); electricity supply (ISIC 40); water supply (ISIC 41) water transport (ISIC 61); and air transport (ISIC 62). Other non transport services typically display very low levels of concentration, in other words, high degrees of competition.

The tables also reveal specific country specialisations, for example the concentration indices for the leather and textiles industry in Italy are significantly lower than in other countries.

IC Revision 3	F	RANCE		GI	ERMAN	Υ		ITALY		JAPAN			UNITE	D KING	DOM	UNITED STATES		
	Min	AV	Max	Min	AV	Max	Min	AV	Max	Min	AV Ma	ЭX	Min	AV	Max	Min	AV	Ma
10_14 Mining and Quarrying	74	89	875	186	246	3,880	87	105	2,657				76	88	2,275			
10 Mining of coal and lignite; extraction of peat	Х	Х	Х	80	107	9,972	Х	Х	Χ				261	343	4,518			
11 Crude petroleum & natural gas; service activities	965	Х	Х	833	1,122	8,886	Х	Х	Χ				97	124	4,684			
13 Mining of metal ores	1,237	Х	Х	Х	Χ	Х	Х	Х	Χ				588	Χ	Х			
14 Other mining and quarrying	52	58	494	13	15	2,678	Х	Х	Χ				140	160	1,579			
15 Food products and beverages	8	9	1,204	3	3	3,731	2	2	1,384				0	Х	Χ			
16 Tobacco products	Х	Х	Х	555	732	8,672	1,259	1,796	8,514				0	Χ	Х			
17 Textiles	13	14	655	20	21	926	6	7	471				15	16	736			
18 Wearing apparel and fur	19	21	486	43	47	1,092	11	12	424				20	22	712			
19 Leather and articles of leather; footwear	76	83	953	112	121	929	4	4	746				39	47	4,619			
20 Wood & products of wood & cork, exc. furniture	12	12	428	18	20	681	4	4	548				18	20	655			
21 Paper and paper products	40	43	1,175	38	43	2,137	49	56	934				39	42	1,126			
22 Printing, publishing and recorded media	13	14	606	9	10	1,097	27	30	692				11	12	1,032			
23 Coke and petroleum products; nuclear fuel	342	411	5,287	510	618	5,758	600	744	5,888				154	202	8,995			
24 Chemicals and chemical products	21	24	2,546	25	30	4,928	27	32	1,874				25	29	2,548			
25 Rubber and plastic products	22	26	1,746	12	14	1,609	12	13	632				12	13	902			
26 Other non-metallic mineral products	34	39	1,614	13	14	1,165	13	15	640				30	34	1,412			
27 Basic metals	62	73	3,281	35	42	3,749	42	49	1,767				12	15	6,682			
28 Fabricated metal products, exc. machinery	6	6	577	4	5	809	2	2	435				1	1	2,442			
29 Machinery and equipment, nec	15	17	1,400	6	6	2,122	6	7	837				11	12	1,106			
30 Office, accounting & computing machinery	430	548	6,154	55	70	8,022	49	57	1,425				193	229	4,228			
31 Electrical machinery & apparatus, nec	46	54	3,004	20	24	3,974	22	25	1,012				20	22	1,179			
32 Radio, TV, communication equipment	99	123	5.362	19	25	8.433	127	154	3,539				70	83	3.938			
33 Medical, precision & optical instrum.; watch & clocks	38	44	1,405	20	23	1,562	14	17	2,149				30	33	1,201			
34 Motor vehicles, trailers and semi-trailers	72	90	6,752	39	50	7,946	84	103	4,965				47	56	4,307			
35 Other transport equipment	123	153	5,654	116	144	5,812	153	189	4,103				76	94	5,261			
36 Furniture; manufacturing, nec	20	22	767	7	8	3.543	3	4	839				5	6	1.845			
37 Recycling	27	28	407	88	98	1.507	22	24	662				72	82	1.302			
40 Electricity, gas, steam and hot water supply	347	Х	Х	15	19	6,557	55	72	7,879				54	72	9,679			
41 Collection, purification and distribution of water	402	509	5,014	25	30	2,202	76	91	2,945				191	257	9,902			
45 Construction	2	2	598	1	1	589	1	1	763				3	3	1.016			
50 Sale, maint.,repair vehic/cycle, person., h/hold gd.	8	9	585	2	3	475	13	13	624				8	10	1.031			
51 W/sale. trade & commission exc motor veh. & cycle	2	2	449	3	3	781	2	2	399				3	4	952			
52 Retail trade exc. motor veh. & cyc.; repair h/hold gds.	5	6	1,417	5	6	2,356	3	4	780				9	11	4,372			
55 Hotels and restaurants	4	5	913	2	3	1.017	2	2					7	8	1,994			
60 Land transport, transport via pipelines	12	15	1.502	14	18	1.364	5	6	744				13	17	1.882			
61 Water transport	105	137	3,917	200	212	928	10	12	4.673				61	72	1.825			
62 Air transport	250	X	χ.	984	1,344	7,888	61	80	6,529				97	129	7.828			
63 Support. & aux. transport act., travel agencies activ.	15	18	1,494	15	18	1.567	8	9	659				17	20	1.844			
64 Post and telecommunications	238	318	8.450	127	168	8.462	443	600	8.979				86	112	6.629			
70 Real estate activities	3	3	1,301	3	3	379	3	3	603				4	5	1.135			
71 Renting of mach. without operator; rent. of pers. gds.	5	X	1,301 X	41	49	622	48	55	874				26	31	1,135			
72 Computer and related activities	11	13	907	18	47 X	022 X	9	9	583				9	11	988			
73 Research and development	17	20	1.279	81	X	X	51	61	1.084				79	92	2.544			
74 Other business activities	2	20 X	1,279 X	1	1	748	1	1	519				19	1	938			
74 Outer publicas activities	2	X	Α.		- 1	748		- 1	319				- 1	1	736			

Notes

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C Revision 3	FI	RANCE		GI	ERMAN	Υ		ITALY		J	APAN		UNITED KINGDOM			UNITED STATES		
	Min	AV	Max	Min	AV	Max	Min	AV	Max	Min	AV	Max	Min	AV	Max	Min	AV	Max
0_14 Mining and Quarrying	74	87	830	194	254	3,723	68	80	2,275				80	93	2,386			
10 Mining of coal and lignite; extraction of peat	Х	Х	Х	84	112	9,964	3,333	5,540	9,952				753	960	4,169			
11 Crude petroleum & natural gas; service activities	87	113	8,937	294	397	9,854	219	294	9,677				152	172	1,866			
13 Mining of metal ores	744	Х	Х	Х	Х	Х	2,500	3,853	9,805				625	Х	Х			
14 Other mining and quarrying	16	18	2,532	14	16	2,556	4	4	1,787				245	298	2,731			
15 Food products and beverages	Х	Х	Х	2	2	5,675	4	5	2,005				13	15	2,884			
16 Tobacco products	Х	Х	Х	294	398	9,949	898	1,210	8,698				526	720	9,924			
17 Textiles	14	15	635	20	21	882	6	7	493				15	16	759			
18 Wearing apparel and fur	21	22	479	46	50	1,087	15	17	584				28	32	714			
19 Leather and articles of leather; footwear	82	89	975	119	130	984	4	5	823				170	183	879			
20 Wood & products of wood & cork, exc. furniture	11	12	454	19	21	713	4	5	484				20	22	529			
21 Paper and paper products	44	48	1,278	35	40	2.010	49	56	879				41	46	1,156			
22 Printing, publishing and recorded media	13	14	591	9	10	999	27	31	688				11	13	1.057			
23 Coke and petroleum products; nuclear fuel	348	417	5,406	463	559	5,684	236	303	7,723				481	606	5,428			
24 Chemicals and chemical products	22	25	2.664	24	30	4.798	27	31	1,848				27	31	2,671			
25 Rubber and plastic products	21	24		13	Х	χΧ	10	11	588				14	15	900			
26 Other non-metallic mineral products	35	40	1,653	15	16	1,231	12	14	637				31	35	1.298			
27 Basic metals	60	70	3.255	34	40	3.746	42	50	1.809				46	52	1,542			
28 Fabricated metal products, exc. machinery	5	6	572	4	5	813	2	2	439				6	6	533			
29 Machinery and equipment, nec	14	16	1.362	6	7		6	7	836				11	13	1.030			
30 Office, accounting & computing machinery	531	686		15			446			**			96		2.044			
	46	54	6,660 3.019	20	21 24	9,723 4.048		536 23	1,749 873					113 27	1,195			
31 Electrical machinery & apparatus, nec							20						24			**		
32 Radio, TV, communication equipment	87	107	5,012	71	85	4,735	75	89	2,258				67	78	2,942			
33 Medical, precision & optical instrum.; watch & clocks	42	49	1,494	19	22		35	40	850				27	31	1,119			
34 Motor vehicles, trailers and semi-trailers	69	86	6,759	39	Х	Х	75	91	4,694				47	56	4,061			
35 Other transport equipment	119	148	5,697	112	140	5,827	132	163	3,700				79	97	5,155			
36 Furniture; manufacturing, nec	22	25	845	7	8	3,414	4	4	937				10	11	640			
37 Recycling	28	29	395	68	76	1,429	39	43	645				220	258	760			
40 Electricity, gas, steam and hot water supply	408	Х	Х	15	19	6,425	141	178	5,411				38	51	8,118			
41 Collection, purification and distribution of water	378	477	4,930	26	30	2,097	259	299	1,664				144	190	7,829			
45 Construction	2	2	562	1	1	509	2	2	752				3	4	951			
50 Sale, maint.,repair vehic/cycle, person., h/hold gd.	8	9	578	3	3	501	8	9	646				9	11	1,089			
51 W/sale. trade & commission exc motor veh. & cycle	2	2	445	3	4	842	2	3	440				3	4	896			
52 Retail trade exc. motor veh. & cyc.; repair h/hold gds.	5	6	1,462	5	7		3	4	859				9	12	4,405			
55 Hotels and restaurants	4	4	870	3	3	1,084	3	3	1,252				6	8	2,002			
60 Land transport, transport via pipelines	10	13	1,404	11	13	1,174	6	7	770				14	18	2,041			
61 Water transport	127	163	4,320	109	117	828	110	134	4,649				180	200	1,247			
62 Air transport	301	Х	Х	1,038	1,437	7,555	349	463	7,213				194	248	5,469			
63 Support. & aux. transport act., travel agencies activ.	15	18	1,609	14	17	1,839	10	11	935				18	21	1,978			
64 Post and telecommunications	235	314	8,562	89	116	7,919	299	399	8,494				81	106	6,614			
70 Real estate activities	3	3		2	2	374	1	1	722				4	5	1,055			
71 Renting of mach, without operator; rent, of pers, gds.	3	3	1,442	40	Х	Х	74	87	1,434				27	32	1.145			
72 Computer and related activities	10	12	967	19	22		4	5	1,633				9	11	933			
73 Research and development	6	7		74	90	1,467	35	42	808				65	78	2,447			
74 Other business activities	2	2	829	1	1	746	1	2	536				1	1	935			
7 T Outer publicas activities			027			740			330				'		733			

Notes

C Revision 3	F	RANCE		GI	RMAN	Υ		ITALY		J	APAN		UNITE	D KING	UNITED STATES			
	Min	AV	Max	Min	AV	Max	Min	AV	Max	Min	AV	Max	Min	AV	Max	Min	AV	Ν
10_14 Mining and Quarrying	58	68	671	181	236	3,586	2,031	2,998	7,258				98	116	2,766	17	19	2
10 Mining of coal and lignite; extraction of peat	0	Χ	Х	93	125	9,966	Х	Х	Х				950	1,249	4,215	123	149	
11 Crude petroleum & natural gas; service activities	119	140	5,708	345	467	9,893	Х	Х	Х				179	206	2,462	37	42	
13 Mining of metal ores	1,034	Х	Х	Х	Х	Х	Х	Х	Х				Х	Х	Х	Х	Х	
14 Other mining and quarrying	29	34	1,196	53	62	5,584	Х	Χ	Х				Х	Х	Х	30	31	
15 Food products and beverages	0	0	7,355	1	1	4,642	10	12	808				2	2	5,984	10	12	
16 Tobacco products	556	761	9,919	343	465	8,773	3,240	4,958	8,393				499	681	9,909	634	799	
17 Textiles	14	15	635	22	23	943	8	8	520				16	17	742	14	17	
18 Wearing apparel and fur	24	26	504	46	50	1,019	11	12	424				25	28	558	16	18	
19 Leather and articles of leather; footwear	88	96	970	106	115	920	10	11	405				210	224	855	82	91	
20 Wood & products of wood & cork, exc. furniture	10	11	459	18	20	642	5	5	492				21	23	478	7	8	
21 Paper and paper products	45	49	1,298	35	40	1,950	55	62	970				48	53	1,239	19	23	
22 Printing, publishing and recorded media	13	14	612	8	9	933	26	29	671				11	13	1,071	6	7	
23 Coke and petroleum products; nuclear fuel	371	451	5,671	208	275	9,216	601	707	3,884				587	752	6,151	101	116	
24 Chemicals and chemical products	22	25	2,712	23	28	4,611	25	29	1.767				30	35	3.019	7	8	
25 Rubber and plastic products	21	24	1,717	13	15	1,617	12	13	624				13	14	854	5	5	
26 Other non-metallic mineral products	35	41	1,647	14	15		13	14	646				38	43	1,460	10	12	
27 Basic metals	55	64	2,895	34	40	3.774	41	49	1.753				56	64	1,747	16	19	
28 Fabricated metal products, exc. machinery	6	6	588	4	5	810	2	2	490				6	6	514			
29 Machinery and equipment, nec	15	18	1,419	6	7		6	7	874				12	14	1.060			
30 Office, accounting & computing machinery	659	864	6,404	84	109	6.826	357	415	1.385				185	219	2.775	61	73	
31 Electrical machinery & apparatus, nec	45	53	2,913	20	24	.,	19	22	808				20	22	986			
32 Radio, TV, communication equipment	88	108	4,838	26	34	.,	75	90	2,275				80	93	2,676			
33 Medical, precision & optical instrum.; watch & clocks	48	55	1,729	19	21	1,413	35	40	882				33	37	1.175			
34 Motor vehicles, trailers and semi-trailers	37	47		37	48	7,890	73	88	4,637				47	56	4,021	15	18	
35 Other transport equipment	48	57	1,978	108	134	5,553	136	169	3,557				61	73	4,344	30	37	
36 Furniture; manufacturing, nec	24	27	870	15	16	1.003	3	4	901				10	11	717	X	X	
37 Recycling	32	33	473	222	266	720	34	36	641				344	424	976			
40 Electricity, gas, steam and hot water supply	386	X	4/3 X	16	200	6.727	108	135	4,041				200	259	5.690	32		
41 Collection, purification and distribution of water	371		4.846	25	29	1.994	229						415		6.418	32 78	41 81	
		468	.,			,		262	1,597					530	., .			
45 Construction	1	2	583	1 3	2	542 X	1 8	1 9	899 629				3 11	4	999	0	0	
50 Sale, maint.,repair vehic/cycle, person., h/hold gd.	X	X	X		X									13	1,223			
51 W/sale. trade & commission exc motor veh. & cycle	Х	Х	Х	3	X	Х	2	2	428				3	3	866	1	1	
52 Retail trade exc. motor veh. & cyc.; repair h/hold gds.	Х	Х	Х	5	7	2,487	3	4	881				10	12		2	2	
55 Hotels and restaurants	4	4	924	3	3		3	3					7	8		1	1	
60 Land transport, transport via pipelines	10	12		10	13	1,205	6	7	770				14	18	1,875	4	5	
61 Water transport	454	551	2,905	116	127	854	161	181	1,277				187	Х	Х	64	71	
62 Air transport	593	Х	Х	797	1,077	7,798	586	749	5,168				209	270	5,342	59	76	
63 Support. & aux. transport act., travel agencies activ.	15	18	1,649	13	16	1,765	9	11	925				18	22	2,175	4	5	
64 Post and telecommunications	208	278	8,356	62	80	7,611	310	416	7,958				79	103	6,172	17	21	
70 Real estate activities	3	3	963	2	2	383	1	2	840				4	Х	Х	1	1	
71 Renting of mach. without operator; rent. of pers. gds.	25	Х	Х	34	Х	Х	45	50	884				33	40	1,260	11	13	
72 Computer and related activities	10	12	937	15	17		13	15	890				9	11	855	3	4	
73 Research and development	131	149	1,249	40	48	1,219	29	33	727				83	100	3,137	9	10	
74 Other business activities	2	Χ	Х	1	Х	Х	1	1	518				1	1	882	1	1	

Notes

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SIC Revision 3	F	RANCE		GI	ERMAN	ΙY		ITALY		J	APAN		UNITE	D KING	DOM	UNITED STATES			
	Min	AV	Max	Min	AV	Max	Min	AV	Max	Min	AV	Max	Min	AV	Max	Min	AV	Max	
10_14 Mining and Quarrying	142	88	776	350	216	3,623	2,159	154	5,382									-	
10 Mining of coal and lignite; extraction of peat	2,976	5,331	5,349	78	104	9,956	Х	Х	Х										
11 Crude petroleum & natural gas; service activities	1,750	Χ	Χ	500	662	8,836	Х	Χ	Х										
13 Mining of metal ores	3,722	Х	Х	Х	Х	Х	Х	Х	Х										
14 Other mining and quarrying	49	53	415	39	43	5,825	Х	Χ	Х										
15 Food products and beverages	8	9	1,260	1	1	4,804	Х	Х	Х	1	1	775							
16 Tobacco products	9,759	42	9,759	451	615	8,891	Х	Х	Х	357	422	5,264							
17 Textiles	16	18	616	22	24	915	7	8	497	3	3	536							
18 Wearing apparel and fur	29	31	487	55	61	1,086	16	17	440	4	5	476							
19 Leather and articles of leather; footwear	98	108	974	44	53	5,220	10	11	401	18	20	513							
20 Wood & products of wood & cork, exc. furniture	11	12	436	19	21	651	6	6	476	5	5	506							
21 Paper and paper products	47	51	1,304	34	38	1,811	56	63	1,003	16	17	543							
22 Printing, publishing and recorded media	14	16	610	9	10	1,008	26	29	649	8	9	522							
23 Coke and petroleum products; nuclear fuel	384	468	5,699	169	228	9,946	458	532	3,228	118	143	5,673							
24 Chemicals and chemical products	21	24	2.554	23	28	4.536	25	29	1.725	11	12	1.038							
25 Rubber and plastic products	21	24	1,719	13		1,642	11	12	616	5	6	536							
26 Other non-metallic mineral products	35	41	1.617	15	17	1.186	12	14	601	7	7	374							
27 Basic metals	62	72		37	43	3,890	44	52	1.858	23	26	1.490			**				
28 Fabricated metal products, exc. machinery	6	6	578	4	5	785	2	2	452	4	4	466							
29 Machinery and equipment, nec	16	18	1.413	6	7		7	8	918	5	5	882							
30 Office, accounting & computing machinery	696	908	6,602	89	116	6,848	255	305	952	57	65	2,608							
31 Electrical machinery & apparatus, nec	47	56	2.913	21	26		19	22	803	13	14	1,201							
32 Radio, TV, communication equipment	98	120	4.774	27	35	6.961	71	83	1.987	12	13	2.525							
33 Medical, precision & optical instrum.; watch & clocks	51	59	1.666	18	20		40	47	927	21	23	941							
34 Motor vehicles, trailers and semi-trailers	38	48	3.756	36	47	7.826	74	90	4.582	15	18	4.035							
35 Other transport equipment	55	67	2,566	101	125	5,369	122	151	3,073	76	87	2,420							
36 Furniture; manufacturing, nec	23	26	799	15	17	980	2		1,962	13	14	504							
37 Recycling	31	33	407	251	298	826	25	27	1.043	26	27	352							
40 Electricity, gas, steam and hot water supply	359	X	407 X	Z31	270 X	020 X	93	115	3,430										
41 Collection, purification and distribution of water																			
• •	422 1	539 2	5,101 524	X 1	X 2	X 546	96 1	115 1	4,045										
45 Construction 50 Sale, maint.,repair vehic/cycle, person., h/hold qd.	-								821										
50 Sale, maint.,repair venic/cycle, person., n/noid gd. 51 W/sale. trade & commission exc motor veh. & cycle	6	7	583	X	X	X	8	8	586 411							**			
		2	456	X	Х	X	2	3											
52 Retail trade exc. motor veh. & cyc.; repair h/hold gds.	5	7	-,	X	Х	X	3	4	927	**						**			
55 Hotels and restaurants	3	4	861	Х	Х	Х	3	3											
60 Land transport, transport via pipelines	10	12		9	11		6	8	783										
61 Water transport	540	663	3,301	61	68	952	151	171	1,176										
62 Air transport	683	925	8,147	587	Х	Х	415	533	3,735										
63 Support. & aux. transport act., travel agencies activ.	15	17		9	10	1,247	10	12	988										
64 Post and telecommunications	251	Х	Х	46	59	7,015	327	439	8,384										
70 Real estate activities	2	3	806	2	3	398	3	3	734										
71 Renting of mach. without operator; rent. of pers. gds.	22	Х	Х	35	41	892	111	129	819										
72 Computer and related activities	11	13	999	22	27	1,848	15	17	944										
73 Research and development	143	162	,	58	70	1,511	68	77	424										
74 Other business activities	1	Х	Х	1	1	741	1	1	493										

Notes

II.3. INDICATORS OF LABOUR PRODUCTIVITY

Many examples of productivity analyses focus on relatively aggregated industries. The focus is typically on productivity growth and, so, these analyses generally assume that homogeneity exists within pre-defined industry groups. In other words: that the productivity growth observed at the aggregate level is representative of the growth at the business level. Where this assumption does not hold, it is possible that changes in 2-digit labour productivity, say, could be attributed to labour merely because of changes in the share of activities of the 2-digit industry's 4-digit components or because of variances in the contributions made by different sizes of firms (as well as changes that might be driven by entries and exits into the population).

The SDBS database provides the means to reduce the dependency on this assumption by allowing users to conduct their analysis at a more detailed industry and size class level; although information on prices and price change are also needed when the focus is on productivity growth. However, the database is able to provide, on its own, a diagnostic assessment of the robustness of the homogeneity assumption by industry and additionally by size class.

The tables that follow provide an example of this.

The first set of tables show labour productivity in 2003 for each 4-digit industry as a percentage of the average labour productivity in their parent 2-digit industry, where labour productivity is calculated as the ratio of value-added to employment. Additionally the tables provide a measure of the variance of these percentages by taking the standard deviation normalised by their un-weighted mean. Because the tables are used for illustration, estimates for G7 countries only are shown but the analysis could be extended to most OECD countries.

The assessment is only diagnostic because it does not provide information on productivity growth which requires detailed information on prices. Clearly, however, where there is a large variance of labour productivity in 4-digit industries within a 2-digit group, the scope for changes in 2-digit productivity levels (and productivity growth) that are driven by changes in the relative contribution of 4-digit industries to value-added and not actual changes in labour productivity are higher.

Typically, and not surprisingly, the tables illustrate higher normalised standard deviations (NSDs) the greater the numbers of 4-digit industries. But some interesting points emerge. For example, the very low NSD for ISIC 29 (machinery and equipment) in Germany. Cross country comparisons of NSDs are also of interest, for example the surprisingly low relative labour productivity figures for the United States and Italy in ISIC 3320 (television and radio receivers, sound or video recording or reproducing apparatus etc), and, so, high NSDs relative to other countries in ISIC 32 (radio, televisions and communications equipment); although given the price falls in these goods (3320) in recent years it may be more surprising that the relative figures in other countries are comparable to the sector as a whole. The sectors with relatively high NSDs are ISIC 15 (food products and beverages) and ISIC 26 (non metallic mineral products).

The second set of tables illustrates the same type of heterogeneity in labour productivity but this time by size class, again for all of the G7 but excluding Canada. The tables illustrate that there is considerable heterogeneity in labour productivity figures across countries. Typically, but not always, labour productivity increases the larger the business, as might be expected given economies



of scale, but in some sectors for example ISIC 62 (air transport) the smallest size class has consistently higher labour productivity figures than the industry average.

That all said, readers should be aware of some of the limitations in this analysis. Ideally the estimates would have been produced using full-time-equivalent measures or number of hours worked but this has not been possible and instead, for France, Germany, Italy, Japan and the United Kingdom the number of persons engaged were used as the denominator for labour productivity, and for the United States number of employees were used. Because small businesses will typically have a higher percentage of persons engaged, and not on the pay-roll, than larger businesses it is probable that the estimates of relative labour productivity for small businesses in the United States are biased upwards. This bias is possibly reinforced by the fact that the numerator for the United States uses turnover and not value-added, which is used for other countries (census value-added for Japan and value-added at factor costs in the EU countries).

NORMALISED LABOUR PRODUCTIVITY - MANUFACTURING

Figures in italics show normalised standard deviation

	ISIC code and description	CANADA	FRANCE	GERMANY	TALY	JAPAN	UNITED KINGDOM	UNITED STATES
15	Manufacture of food products and beverages	0.58	0.41	0.41	0.16	0.69	0.36	0.55
	Production, processing and preserving of meat and meat products	68	76	74	109	80	70	57
	Processing and preserving of fish and fish products	34	93	102	115	67	56	50
	Processing and preserving of fruit and vegetables Manufacture of vegetable and animal ails and fate	103 329	107 204	126 274		62 298	91 186	116 167
	Manufacture of vegetable and animal oils and fats Manufacture of dairy products	134	112	168	134	182	100	112
	Manufacture of grain mill products	145	133	130	104	167	107	112
	Manufacture of starches and starch products	225	217	300		221		
	Manufacture of prepared animal feeds	143	141	189	158	169	119	154
	Manufacture of bakery products	62	66	59		74	64	65
	Manufacture of sugar	160	171	257	450	178	405	440
	Manufacture of cocoa, chocolate and sugar confectionery	133		128	153	142	165	118
	Manufacture of macaroni, noodles, couscous and similar farinaceous products Manufacture of other food products n.e.c.	66 111		132 165		75 81	129	126
	Mandatate of other root products need. Distilling, rectifying and blending of spirits; ethyl alcohol production from fermented materials	276	242	157		454	161	305
1552	Manufacture of wines		221				174	139
	Manufacture of malt liquors and malt	309	263	208			182	288
1554	Manufacture of soft drinks; production of mineral waters	136	224	161		389	144	150
17	Manufacture of textiles	0.26	0.07	0.11	0.13	0.23	0.18	0.32
	Preparation and spinning of textile fibres; weaving of textiles	124	96	101		107	103	85
	Finishing of textiles	92	94	85		117	137	102
	Manufacture of made-up textile articles, except apparel	92	92	91	07	89	98	86
	Manufacture of carpets and rugs	159	108 98	101 86	97	134 88	108 110	165 84
	Manufacture of cordage, rope, twine and netting Manufacture of other textiles n.e.c.	124	111	117		143	103	145
-	Manufacture of knitted and crocheted fabrics and articles	79	104	99	80	76	75	81
18	Manufacture of wearing apparel; dressing and dyeing of fur	0.12	0.00	0.21		0.44	0.12	
	Manufacture of wearing apparel, except fur apparel	101	100	101		100	100	
	Dressing and dyeing of fur; manufacture of articles of fur	84	100	75		190	84	
19	Tanning and dressing of leather; manufacture of luggage, handbags,							
	saddlery, harness and footwear		0.20	0.26		0.21	0.26	0.26
	Tanning and dressing of leather		96	123		134	125	138
	Manufacture of luggage, handbags and the like, saddlery and harness		120	72		102	74	97
	Manufacture of footwear		81	111		90	109	85
20	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	0.57	0.09	0.17	0.18	0.25	0.24	0.21
2010	Sawmilling and planning of wood	90	95	103	124	96	107	105
	Manufacture of veneer sheets; manufacture of plywood, laminboard, particle	30	33	103	124	30	107	103
	board and other panels and boards	192	103	137	138	127	132	128
2022	Manufacture of builders' carpentry and joinery	79	109	92	88	110	105	95
2023	Manufacture of wooden containers	64	100	98	121	77	81	70
2029	Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials	58	85	96	99	68	71	99
21	Manufacture of paper and paper products	0.20	0.12	0.24	0.14	0.56	0.29	0.41
2101	Manufacture of pulp, paper and paperboard	114	115	129	117	179	143	142
2102	Manufacture of corrugated paper and paperboard and of containers of paper and							
0400	paperboard	80	90	82	89	68	82	62
2109	Manufacture of other articles of paper and paperboard Publishing, printing and reproduction of recorded media	82	99	93	99	81	98	90
	· · · · · ·	0.23	0.29	0.31	0.39	0.87	0.48	0.14
	Publishing of books, brochures, musical books and other publications		135 129	146 98	160 170		129 127	
	Publishing of newspapers, journals and periodicals Publishing of recorded media		129	90	67		221	
	Other publishing		99	65	99		50	
	Printing	94	80	96	83	100	81	100
	Service activities related to printing	69	72	80	66	80	77	87
	Reproduction of recorded media	110	73	136	116	360	116	116
23	Manufacture of coke, refined petroleum products and nuclear fuel				0.14	0.34	0.53	
	Manufacture of coke oven products				82	81	43	
	Manufacture of refined petroleum products				100	132	131	
	Processing of nuclear fuel						79	
24	Manufacture of chemicals and chemical products	0.32	0.34	0.20	0.21	0.45	0.38	0.50
	Manufacture of basic chemicals, except fertilizers and nitrogen compounds Manufacture of fertilizers and nitrogen compounds	161	91 45	110	78 86	99	114 107	85 58
	Manufacture of plastics in primary forms and of synthetic rubber	109 128	45 73	80 115	86 78	41 97	93	58 79
	Manufacture of pesticides and other agro-chemical products	120	73	135	97	59	131	190
	Manufacture of paints, varnishes and similar coatings, printing ink and mastics	74	69	86	89	55	74	65
	Manufacture of pharmaceuticals, medicinal chemicals and botanical products	95	129	105	124	150	121	144
	Manufacture of soap and detergents, cleaning and polishing preparations,							
2424	manufacture of soup and actorgents, cleaning and polishing preparations,							
	perfumes and toilet preparations	72		81	104	95	76	105
2429		72 81	80	81 82 81	104 89 57	95 59 49	76 78 208	105 62 47

Notes

Normalised labour productivity estimates for each 4-digit sector show the ratio to labour productivity in their 2-digit parent sector, as a percent.



NORMALISED LABOUR PRODUCTIVITY - MANUFACTURING

Figures in italics show normalised standard deviation

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	ISIC code and description			ج			يَخِ	state
		Canada	France	Germany	Italy	Japan	United Kingdom	United States
25	Manufacture of rubber and plastics products	0.05	0.07	0.15	0.09	0.57	0.57	0.16
2511	Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres		107	121	112	228	240	125
	Manufacture of other rubber products	101 94	07	98	93 100	89 96	101 93	93 99
2520 26	Manufacture of plastics products Manufacture of other non-metallic mineral products	0.79	97 0.41	0.22	0.58	0.55	0.57	0.44
	Manufacture of glass and glass products	83	97	104	91	141	96	95
	Manufacture of non-structural non-refractory ceramic ware	51	404	84	59	65	63	65
	Manufacture of refractory ceramic products Manufacture of structural non-refractory clay and ceramic products	120	101	111 106	107 123	72 72	73 95	93 81
	Manufacture of cement, lime and plaster	256		112	265	245	245	199
	Manufacture of articles of concrete, cement and plaster	84	105	100	106	93	129	87
	Cutting, shaping and finishing of stone Manufacture of other non motallic mineral products n.e.c.	0 106	64 28	60 138	62 91	87 103	54 94	62 142
2099	Manufacture of other non-metallic mineral products n.e.c. Manufacture of basic metals	0.40	0.28	0.13	0.14	0.51	0.29	0.27
	Manufacture of basic iron and steel	87	115	105	105	127	83	121
	Manufacture of basic precious and non-ferrous metals	136	109	106	107	76	148	109
	Casting of iron and steel Casting of non-ferrous metals	54 73	61 76	81 89	92 78	51 41	99 84	76 68
2132 28	Manufacture of fabricated metal products, except machinery and	0.24	0.10	0.15	0.16	0.53	0.25	0.09
	Manufacture of structural metal products	96	103	84	86	109	116	93
	Manufacture of tanks, reservoirs and containers of metal	82	120	118	123	75	116	103
	Manufacture of steam generators, except central heating hot water boilers	157	93	124	138	250	122	119
	Forging, pressing, stamping and roll-forming of metal; powder metallurgy Treatment and coating of metals; general mechanical engineering on a fee or	100	95	114	125	98	53	102
	contract basis	88	97	84	99	84	92	91
	Manufacture of cutlery, hand tools and general hardware	127	100	114	116	91	127	110
	Manufacture of other fabricated metal products n.e.c.	110	113	112	103	97	102	108
29	Manufacture of machinery and equipment n.e.c. Manufacture of engines and turbines, except aircraft, vehicle and cycle engines	0.13 76	0.18 146	0.06 111	0.17 158	0.20 128	0.28 101	0.31 201
	Manufacture of pumps, compressors, taps and valves	113	100	111	117	108	99	99
	Manufacture of bearings, gears, gearing and driving elements	121	101	103	103	97	90	98
	Manufacture of ovens, furnaces and furnace burners		109	97	105	78	102	73
	Manufacture of lifting and handling equipment Manufacture of other general purpose machinery	95 91	106 96	96 98	91 99	102 93	101 95	77 90
	Manufacture of agricultural and forestry machinery	98	76	93	87	89	120	109
	Manufacture of machine-tools	97	93	96	92	82	82	89
	Manufacture of machinery for metallurgy		102	100	106	119	192	94
	Manufacture of machinery for mining, quarrying and construction		115 93	102 100	101 107	134 89	156 99	99 88
	Manufacture of machinery for food, beverage and tobacco processing Manufacture of machinery for textile, apparel and leather production		109	97	89	78	78	67
	Manufacture of weapons and ammunition		148	112	118	142	116	122
	Manufacture of other special purpose machinery	98	96	96	101	95	84	90
	Manufacture of domestic appliances n.e.c.	98 0.26	0.10	0.10	93 0.12	129 0.17	93 0.10	0.09
31 3110	Manufacture of electrical machinery and apparatus n.e.c. Manufacture of electric motors, generators and transformers	112	95	90	104	88	104	83
	Manufacture of electricity distribution and control apparatus	108	108	104	124	99	107	100
	Manufacture of insulated wire and cable	133	82	82	100	117	103	95
	Manufacture of accumulators, primary cells and primary batteries Manufacture of electric lamps and lighting equipment	59 81	92 88	110 95	95 106	135 122	84 87	105 97
	Manufacture of other electrical equipment n.e.c.	99	102	99	88	90	98	109
32	Manufacture of radio, television and communication equipment and							
	apparatus	0.08	0.02	0.08	0.31	0.13	0.09	0.23
	Manufacture of electronic valves and tubes and other electronic components	105	100	107	113	104	99	102
3220	Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy	95	101	93	97	119	109	102
3230	Manufacture of television and radio receivers, sound or video recording or	00	101	00		110	100	102
	reproducing apparatus, and associated goods	89	97	94	59	92	90	66
33	Manufacture of medical, precision and optical instruments, watches and							
2211	clocks Manufacture of medical and surgical equipment and orthopaedic appliances	0.23 81	0.20 94	0.14 89	0.17 79	0.34 139	90	0.14 106
	Manufacture of instruments and appliances for measuring, checking, testing,	UI	J 4	UB	13	100	30	100
· · · · -	navigating and other purposes, except industrial process control equipment	113	119	113	122	99		99
	Manufacture of industrial process control equipment		82	115	124	84		74
	Manufacture of optical instruments and photographic equipment		86	110	99	73 57		84
3330 34	Manufacture of watches and clocks Manufacture of motor vehicles, trailers and semi-trailers	0.91	70 0.29	86 0.27	0.20	57 0.66	0.17	86 0.69
	Manufacture of motor vehicles, trailers and semi-trailers Manufacture of motor vehicles	202	112	111	80	206	115	153
	Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers							
	and semi-trailers	37	61	64	89	76	86	37
3430 Notes	Manufacture of parts and accessories for motor vehicles and their engines	58	89	86	116	70	88	70

Normalised labour productivity estimates for each 4-digit sector show the ratio to labour productivity in their 2-digit parent sector, as a percent.



NORMALISED LABOUR PRODUCTIVITY - MANUFACTURING

Figures in italics show normalised standard deviation of 4-digit labour productivity figures in each 2-digit sector

	ISIC code and description	c_{anada}	France	Germany	Italy	Japan	United Kingdom	United States
35	Manufacture of other transport equipment	0.39	0.33	0.22	0.21	0.18	0.45	0.30
3511	Building and repairing of ships	59	65	72	93	116	58	67
3512	Building and repairing of pleasure and sporting boats		62	94	80		47	54
3520	Manufacture of railway and tramway locomotives and rolling stock		75	104	97	88	102	78
3530	Manufacture of aircraft and spacecraft	104	124	111	124	94	117	115
3591	Manufacture of motorcycles			70	99			102
3592	Manufacture of bicycles and invalid carriages		66	67	72	70	47	
3599	Manufacture of other transport equipment n.e.c.		59	68	70	90		
36	Manufacture of furniture; manufacturing n.e.c.	0.19	0.14	0.15	0.18	0.20	0.32	0.17
3610	Manufacture of furniture	98	93	100	98	91	98	96
3691	Manufacture of jewellery and related articles	135	104	72	87	108	157	100
3692	Manufacture of musical instruments		106	101	100	62		102
3693	Manufacture of sports goods	97	137	104	137	112		137
3694	Manufacture of games and toys	139	104	118	129	95		134
3699	Other manufacturing n.e.c.	99	119	105	119	112	91	97

Notes

Normalised labour productivity estimates for each 4-digit sector show the ratio to labour productivity in their 2-digit parent sector, as a percent.

by size class, as a percentage of 2-digit average

Figures in italics (NSD) show normalised standard deviation labour productivity by size class, in each 2-digit sector

ISIC D	evision 3 and code description			Size	class		
ISIC R	evision 3 and code description	1-9	10-19	20-49	50-249	250+	NSD
10-14	Mining and Quarrying	71	68	90	120	115	0.26
10	Mining of coal and lignite; extraction of peat	-349	-432	-324			-0.15
11	Crude petroleum & natural gas; service activities	1228	16	88	124	83	1.68
13	Mining of metal ores	24	26	34	69	236	1.16
14	Other mining and quarrying	29	97	113	117	112	0.39
15	Food products and beverages	64	74	93	104	133	0.29
16	Tobacco products	-37		512	39	101	1.60
17	Textiles	84	104	100	93	115	0.12
18	Wearing apparel and fur	76	96	104	85	144	0.26
19	Leather and articles of leather; footwear	79	85	81	76	145	0.31
20	Wood & products of wood & cork, exc. furniture	104	97	99	102	95	0.04
21	Paper and paper products	94	75	76	85	115	0.19
22	Printing, publishing and recorded media	79	81	93	96	132	0.22
23	Coke and petroleum products; nuclear fuel	-192	61	261	92	97	2.55
24	Chemicals and chemical products	70	70	81	82	108	0.19
25	Rubber and plastic products	91	88	91	94	107	0.08
26	Other non-metallic mineral products	12	71	84	94	129	0.55
27	Basic metals	128	75	74	79	107	0.26
28	Fabricated metal products, exc. machinery	98	96	95	98	111	0.06
29	Machinery and equipment, nec	82	86	90	94	113	0.13
30	Office, accounting & computing machinery	44	48	64	59	108	0.40
31	Electrical machinery & apparatus, nec	76	80	83	85	109	0.15
32	Radio, TV, communication equipment	80	78	76	75	110	0.17
33	Medical, precision & optical instrum.; watch & clocks	82	79	83	91	125	0.21
34	Motor vehicles, trailers and semi-trailers	316	62	69	64	102	0.89
35	Other transport equipment	63	56	-100	60	115	2.10
36	Furniture; manufacturing, nec	81	94	96	98	121	0.15
37	Recycling	92	105	101	101	106	0.06
40-41	Electricity, gas and water supply	326	69	68	71	100	0.88
40	Electricity, gas, steam and hot water supply	382	74	77	86	99	0.93
41	Collection, purification and distribution of water	81	77	89	100	101	0.12
45	Construction	90	98	105	108	122	0.11
50	Sale, maint.,repair vehic/cycle, person., h/hold gd.	89	98	109	109	110	0.09
51	W/sale. trade & commission exc motor veh. & cycle	99	98	99	97	106	0.04
52	Retail trade exc. motor veh. & cyc.; repair h/hold gds.	95	100	93	96	109	0.06
55	Hotels and restaurants	93	105	105	109	108	0.06
60	Land transport, transport via pipelines	79	87	89	89	118	0.16
61	Water transport	85	66	93	72	113	0.22
62	Air transport	102	70	74	90	101	0.17
63	Support. & aux. transport act., travel agencies activ.	118	85	73	71	114	0.24
64	Post and telecommunications	46	55	121	110	100	0.39
65	Financial intermediation, except insurance and pension funding						
66	Insurance and pension funding, except compulsory social security						
67	Activities auxiliary to financial intermediation						
70	Real estate activities	98	62	 78	122	118	0.27
71	Renting of mach. without operator; rent. of pers. gds.	212	65	66	79	66	0.66
72	Computer and related activities	80	87	92	100	112	0.13
73	Research and development	82	51	59	102	121	0.35
74	Other business activities	123	117	118	102	85	0.14

by size class, as a percentage of 2-digit average

ICIC D	evision 3 and code description			Size	class		
ISIC K	evision 3 and code description	1-9	10-19	20-49	50-249	250+	NSD
10-14	Mining and Quarrying	107	83	87	83	105	0.13
10	Mining of coal and lignite; extraction of peat						
11	Crude petroleum & natural gas; service activities						
13	Mining of metal ores						
14	Other mining and quarrying			**		121	
15	Food products and beverages				105		
16	Tobacco products				31		
17	Textiles	53	59	81	106	121	0.34
18	Wearing apparel and fur	87	37	77	108	115	0.36
19	Leather and articles of leather; footwear	46	60				0.18
20	Wood & products of wood & cork, exc. furniture	60	86	106	114	147	0.31
21	Paper and paper products	54	62	69	86	115	0.31
22	Printing, publishing and recorded media	70	74	99	115	106	0.21
23	Coke and petroleum products; nuclear fuel						
24	Chemicals and chemical products	52	57	73	82	106	0.29
25	Rubber and plastic products	75	51	84	92	114	0.28
26	Other non-metallic mineral products	72	81	91	95	115	0.18
27	Basic metals	42	55	75	79	109	0.36
28	Fabricated metal products, exc. machinery	63	79	93	103	127	0.36
29	Machinery and equipment, nec	63	79	81	91	112	0.23
30	Office, accounting & computing machinery	44	50		59		0.23
	Electrical machinery & apparatus, nec			 70			
31		53	58		86	110	0.31
32	Radio, TV, communication equipment	54	69		74		0.15
33	Medical, precision & optical instrum.; watch & clocks	65	60	82	104	137	0.35
34	Motor vehicles, trailers and semi-trailers	41	70	57	67	103	0.34
35	Other transport equipment	56	63	61	73	106	0.28
36	Furniture; manufacturing, nec	56	90	97	107	118	0.25
37	Recycling	70	149	91	89	131	0.31
40-41	Electricity, gas and water supply						
40	Electricity, gas, steam and hot water supply						
41	Collection, purification and distribution of water						
45	Construction	76	94	109	121	157	0.28
50	Sale, maint.,repair vehic/cycle, person., h/hold gd.						
51	W/sale. trade & commission exc motor veh. & cycle						
52	Retail trade exc. motor veh. & cyc.; repair h/hold gds.			**		••	
55	Hotels and restaurants						
60	Land transport, transport via pipelines	84	87	89	102	124	0.17
61	Water transport	188	65	80	73	95	0.50
62	Air transport	811	732	1203	2149	14	0.80
63	Support. & aux. transport act., travel agencies activ.	88	81	86	89	115	0.14
64	Post and telecommunications	57	58	70	27	109	0.46
65	Financial intermediation, except insurance and pension funding						
66	Insurance and pension funding, except compulsory social security						
67	Activities auxiliary to financial intermediation						
70	Real estate activities	96	85	110	120	102	0.13
71	Renting of mach. without operator; rent. of pers. gds.	112	94	48	116	98	0.29
72	Computer and related activities	61	71	78	89	143	0.29
73	Research and development	98	93	89	79	112	0.30
74	Other business activities	124	126	119	91	76	0.13

by size class, as a percentage of 2-digit average

Figures in italics (NSD) show normalised standard deviation labour productivity by size class, in each 2-digit sector

וכור ח	evision 3 and code description			Size	class		
SIC R	evision 3 and code description	1-9	10-19	20-49	50-249	250+	NSD
10-14	Mining and Quarrying	26	36	40			0.22
10	Mining of coal and lignite; extraction of peat						
11	Crude petroleum & natural gas; service activities						
13	Mining of metal ores						
14	Other mining and quarrying					**	
15	Food products and beverages						
16	Tobacco products						
17	Textiles	67	84	108	116	124	0.24
18	Wearing apparel and fur	65	71	101	140	236	0.57
19	Leather and articles of leather; footwear	71	83	104	125	174	0.36
20	Wood & products of wood & cork, exc. furniture	71	110	137	157	176	0.32
21	Paper and paper products	59	75	79	107	135	0.33
22	Printing, publishing and recorded media	58	78	90	113	214	0.55
23	Coke and petroleum products; nuclear fuel	66	46	68	75	122	0.38
24	Chemicals and chemical products	52	77	83	102	110	0.27
25	Rubber and plastic products	71	80	92	117	118	0.23
26	Other non-metallic mineral products	48	81	93	123	157	0.41
27	Basic metals	62	77	94	104	106	0.21
28	Fabricated metal products, exc. machinery	75	95	108	130	136	0.23
29	Machinery and equipment, nec	69	83	99	110	114	0.20
30	Office, accounting & computing machinery	69	126	148	135	60	0.37
31	Electrical machinery & apparatus, nec	59	76	97	122	127	0.30
32	Radio, TV, communication equipment	41	84	87	104	123	0.35
33	Medical, precision & optical instrum.; watch & clocks	50	108	109	136	132	0.32
34	Motor vehicles, trailers and semi-trailers	65	89	105	108	99	0.19
35	Other transport equipment	47	77	89	102	115	0.30
36	Furniture; manufacturing, nec	64	97				0.28
37	Recycling	70	107				0.30
40-41	Electricity, gas and water supply	90	98	126	100	99	0.13
40	Electricity, gas, steam and hot water supply	105	103	143	119	96	0.16
41	Collection, purification and distribution of water	66	118	103			0.28
45	Construction	83	107	122	168	205	0.36
50	Sale, maint.,repair vehic/cycle, person., h/hold gd.	78	125	162	171	170	0.28
51	W/sale. trade & commission exc motor veh. & cycle	81	110	133	148	148	0.23
52	Retail trade exc. motor veh. & cyc.; repair h/hold qds.	83	133	152	150	136	0.23
55	Hotels and restaurants	81	119	143	158	128	0.21
60	Land transport, transport via pipelines	71	106	113	99	133	0.23
61	Water transport	25	197	137	98	101	0.22
	Air transport	169	140	245	228	75	
62	•				228 79	75 129	0.40
63	Support. & aux. transport act., travel agencies activ. Post and telecommunications	78	95	89			0.22
64		23	38	47	76	102	0.55
65	Financial intermediation, except insurance and pension funding			••			
66	Insurance and pension funding, except compulsory social security						
67	Activities auxiliary to financial intermediation						
70	Real estate activities	84	137	383	603	356	0.67
71	Renting of mach. without operator; rent. of pers. gds.	40	74	181	423	171	0.85
72	Computer and related activities	72	79	86	114	165	0.37
73	Research and development	63	104	129	152	155	0.32
74	Other business activities	98	133	116	102	90	0.16

by size class, as a percentage of 2-digit average

וכור ה	tevision 3 and code description			Size	class		
ISIC R	<u>'</u>	1-9	10-19	20-49	50-249	250+	NSD
10-14	Mining and Quarrying						
10	Mining of coal and lignite; extraction of peat						
11	Crude petroleum & natural gas; service activities						
13	Mining of metal ores						
14	Other mining and quarrying						
15	Food products and beverages	40	63	85	127	119	0.42
16	Tobacco products						
17	Textiles	56	99	110	145	155	0.35
18	Wearing apparel and fur	75	96	108	111	166	0.30
19	Leather and articles of leather; footwear	64	110	121	135	151	0.28
20	Wood & products of wood & cork, exc. furniture	62	102	126	180	211	0.44
21	Paper and paper products	35	56	72	110	218	0.74
22	Printing, publishing and recorded media	53	82	96	122	181	0.45
23	Coke and petroleum products; nuclear fuel	87	89	76			
24	Chemicals and chemical products	30	43	56	91	131	0.58
25	Rubber and plastic products	47	65	78	111	166	0.51
26	Other non-metallic mineral products	53	87	88	120	167	0.41
27	Basic metals	31	46	55	72	157	0.69
28	Fabricated metal products, exc. machinery	56	81	96	121	177	0.43
29	Machinery and equipment, nec	53	70	77	102	153	0.43
30	Office, accounting & computing machinery	50	50	59	81	124	0.43
31	Electrical machinery & apparatus, nec	49	60	67	91	139	0.44
32	Radio, TV, communication equipment	28	35	35	61	136	0.76
33	Medical, precision & optical instrum.; watch & clocks	45	61	73	98	147	0.70
34	Motor vehicles, trailers and semi-trailers	29	41	48	59	128	0.64
35	Other transport equipment	36	49	56	89	132	0.53
36	Furniture; manufacturing, nec	56	84	107	151	157	0.39
37	Recycling	85	118	107	86		0.39
	Electricity, gas and water supply	65					
40-41	3.3						••
40	Electricity, gas, steam and hot water supply						
41	Collection, purification and distribution of water						••
45	Construction						
50	Sale, maint.,repair vehic/cycle, person., h/hold gd.						••
51	W/sale. trade & commission exc motor veh. & cycle						
52	Retail trade exc. motor veh. & cyc.; repair h/hold gds.						••
55	Hotels and restaurants						
60	Land transport, transport via pipelines						
61	Water transport						
62	Air transport						
63	Support. & aux. transport act., travel agencies activ.						
64	Post and telecommunications						
65	Financial intermediation, except insurance and pension funding						
66	Insurance and pension funding, except compulsory social security						
67	Activities auxiliary to financial intermediation						
70	Real estate activities						
71	Renting of mach. without operator; rent. of pers. gds.						
72	Computer and related activities						
73	Research and development						
74	Other business activities						l

by size class, as a percentage of 2-digit average

ISIC P	evision 3 and code description			Size	class		
ISIC R	evision 3 and code description	1-9	10-19	20-49	50-249	250+	NSD
10-14	Mining and Quarrying	106	32	31	149	98	0.61
10	Mining of coal and lignite; extraction of peat	224	275	206	120	86	0.42
11	Crude petroleum & natural gas; service activities	267	77	58	190	83	0.67
13	Mining of metal ores						
14	Other mining and quarrying						
15	Food products and beverages		56		77		0.22
16	Tobacco products		22				
17	Textiles	98	88	94	108	97	0.07
18	Wearing apparel and fur	117	90	92	101	96	0.11
19	Leather and articles of leather; footwear	88	67	73	94	134	0.29
20	Wood & products of wood & cork, exc. furniture	80	97	101	119	112	0.15
21	Paper and paper products	78	95	61	82	142	0.34
22	Printing, publishing and recorded media	75	78	96	99	123	0.20
23	Coke and petroleum products; nuclear fuel	45	56	93	57	106	0.37
24	Chemicals and chemical products	62	55	60	76	114	0.33
25	Rubber and plastic products	77	82	90	95	118	0.17
26	Other non-metallic mineral products	71	81	76	88	123	0.23
27	Basic metals	89	93	110	123	85	0.16
28	Fabricated metal products, exc. machinery	90	90	94	96	147	0.24
29	Machinery and equipment, nec	91	88	95	95	111	0.09
30	Office, accounting & computing machinery	56	52	53	80	124	0.42
31	Electrical machinery & apparatus, nec	87	94	97	99	105	0.07
32	Radio, TV, communication equipment	67	82	77	116	100	0.07
33	Medical, precision & optical instrum.; watch & clocks	75	66	73	83	134	0.32
34	Motor vehicles, trailers and semi-trailers	76	88	87	100	102	0.32
35	Other transport equipment	52	72	69	74	102	0.12
		96	92	94	106	104	0.27
36 37	Furniture; manufacturing, nec Recycling	83	78	96	94	158	0.00
		424	36	188	291	90	0.32
10-41	Electricity, gas and water supply						
40	Electricity, gas, steam and hot water supply					88	
41	Collection, purification and distribution of water					96	
45	Construction	85	94	107	113	114	0.12
50	Sale, maint.,repair vehic/cycle, person., h/hold gd.	65	67	80	107	171	0.45
51	W/sale. trade & commission exc motor veh. & cycle	87	94	105	109	104	0.09
52	Retail trade exc. motor veh. & cyc.; repair h/hold gds.	87	113	111	105	101	0.10
55	Hotels and restaurants	92	76	98	114	108	0.15
60	Land transport, transport via pipelines	133	94	100	99	93	0.16
61	Water transport	75	98	143	138	83	0.29
62	Air transport	315	579	108	145	89	0.83
63	Support. & aux. transport act., travel agencies activ.	125	101	115	102	93	0.12
64	Post and telecommunications	107	86	64	53	103	0.29
65	Financial intermediation, except insurance and pension funding						
66	Insurance and pension funding, except compulsory social security						
67	Activities auxiliary to financial intermediation						
70	Real estate activities	139	83	129	133	52	0.35
71	Renting of mach. without operator; rent. of pers. gds.	98	99	94	113	97	0.07
72	Computer and related activities	85	105	95	109	112	0.11
73	Research and development	54	117	50	109	105	0.37
74	Other business activities	132	124	108	95	82	0.19

by size class, as a percentage of 2-digit average

ISIC D	evision 3 and code description			Size	class		
ISIC K	evision 5 and code description	1-9	10-19	20-49	50-249	250+	NSD
10-14	Mining and Quarrying	45	36	41	61	140	0.67
10	Mining of coal and lignite; extraction of peat	88	53	78	94	108	0.25
11	Crude petroleum & natural gas; service activities	35	28	33	56	152	0.85
13	Mining of metal ores	94	100	110	97	100	0.06
14	Other mining and quarrying	72	68	75	86	124	0.27
15	Food products and beverages	60	47	63	80	115	0.36
16	Tobacco products	34	25	21	28	108	0.84
17	Textiles	113	76	74	80	115	0.23
18	Wearing apparel and fur	89	61	69	104	148	0.37
19	Leather and articles of leather; footwear	78	72	79	94	119	0.22
20	Wood & products of wood & cork, exc. furniture	87	75	81	99	122	0.20
21	Paper and paper products	89	59	58	72	113	0.30
22	Printing, publishing and recorded media	65	62	72	87	127	0.32
23	Coke and petroleum products; nuclear fuel	24	15	37	39	111	0.85
24	Chemicals and chemical products	70	45	48	61	117	0.43
25	Rubber and plastic products	98	75	77	85	114	0.18
26	Other non-metallic mineral products	74	71	76	84	120	0.24
27	Basic metals	116	51	62	72	115	0.37
28	Fabricated metal products, exc. machinery						
29	Machinery and equipment, nec						
30	Office, accounting & computing machinery	52	46	52	59	113	0.43
31	Electrical machinery & apparatus, nec	02				110	
32	Radio, TV, communication equipment						
33	Medical, precision & optical instrum.; watch & clocks						
34	Motor vehicles, trailers and semi-trailers	 51	35	35	41	116	0.62
35	Other transport equipment	62	49	52	55	111	0.39
36	Furniture; manufacturing, nec	02				111	
37	Recycling						
40-41	Electricity, gas and water supply	 45	 111	104	 89	102	0.29
40-41	Electricity, gas, steam and hot water supply	165	199	104	91	99	0.29
41	Collection, purification and distribution of water	56	79	84	115	149	0.37
	Construction	97	78	92	106	137	0.37
45	Sale, maint.,repair vehic/cycle, person., h/hold gd.	49	44	83	101	195	0.22
50	W/sale. trade & commission exc motor veh. & cycle						l l
51		84 93	66 82	66 89	78 101	146 105	0.38
52	Retail trade exc. motor veh. & cyc.; repair h/hold gds.						
55	Hotels and restaurants	148	87	81	89	111	0.27
60	Land transport, transport via pipelines	104	83	79	78	121	0.20
61	Water transport	69	58	62	75	130	0.38
62	Air transport	185	106	104	120	98	0.29
63	Support. & aux. transport act., travel agencies activ.	116	99	97	94	99	0.09
64	Post and telecommunications	83	65	71	86	104	0.19
65	Financial intermediation, except insurance and pension funding	80	68	59	73	114	0.27
66	Insurance and pension funding, except compulsory social security	46	47	82	106	101	0.37
67	Activities auxiliary to financial intermediation	59	62	77	132	123	0.38
70	Real estate activities	120	97	79	71	116	0.22
71	Renting of mach. without operator; rent. of pers. gds.	85	72	84	104	110	0.17
72	Computer and related activities	80	71	76	84	119	0.22
73	Research and development	116	100	98	101	99	0.07
74	Other business activities						

PART III

STRUCTURAL STATISTICS FOR INDUSTRY AND SERVICES

AND

BUSINESS STATISTICS BY SIZE CLASS

DATA AND COUNTRY NOTES

III. DATA AND COUNTRY NOTES

The tables that follow provide an illustration of the data available in the SDBS database. For ease of illustration, data are only presented at the 2-digit industry level and only for the following industry groupings: ISIC 10-64 - mining and quarrying, manufacturing, electricity, gas and water, wholesale, retail and hotels and ISIC 70-74 - real estate, rentals, software, R&D and other business services. Information on other industrial sectors is also available but the coverage is more limited across countries. Readers should note that for any 2 digit industry where data are not available, because it has been confidentailised, many of the3 or 4 digit sub sectors of this industry may be available

Country notes at the end of the tables for each country provide information on the sources and coverage of data in each country, including a detailed description of where breaks in series occur.

- Breaks in series over time are shown as a vertical line between the affected years and the affected sectors.
- Differences in the coverage of businesses across sectors are shown as dashed horizontal lines.
- Data that are unavailable or confidential is shown as "..".
- OECD estimates are shown in italics.

Output from the computerised statistical databases is available in computer-readable form on the CD-ROM sold separately to this publication (in user-friendly software Beyond 20/20TM for WindowsTM), on the internet at: www.sourceoecd.org, on the OECD's On-line Information System (OLIS) and on OECD.Stat at: http://stats.oecd.org/WBOS/default.aspx.

AUSTRALIA – AUSTRALIE



AUSTRALIA Value added at basic prices

				Stru	ctural Sta			y and Sei	rvices	
ICI	C Revisi	on ?	1996	1997	1998	1999	s of AUD 2000	2001	2002	2003
ISI			1990	1997	1990	1999	2000	2001	134 704	146 286
С	10_14	Mining and Quarrying							37 941	40 369
Ŭ	10_14	Mining and quarrying of energy producing materials							26 798	27 090
	10_12	Mining and quarrying of energy producing materials Mining of coal and lignite; extraction of peat							9 518	9 425
	11	Crude petroleum & natural gas; service activities							17 280	17 664
	13 14	Mining and quarrying exc. energy producing materials							11 143	13 279
	13	Mining and quarrying exc. energy producing materials Mining of metal ores							9 362	10 952
	14	Other mining and quarrying							1 781	2 327
D	15 37	Total manufacturing							81 477	88 759
	15_57	Food products, beverages and tobacco							1 17 072	17 837
	15_15	Food products and beverages							16 599	16 997
	16	Tobacco products	599	646	686	676	662		1 473	840
	17 18	Textiles and textile products	4 076	4 287	4 234	4 318	3 854		2 553	2 702
	17_10	Textiles	2 130	2 206	2 416	2 422	2 267		1 460	1 491
	18	Wearing apparel and fur	1 946	2 081	1 817	1 896	1 587		1 1 093	1 211
	19	Leather and articles of leather; footwear					1 307		380	423
	20	Wood & products of wood & cork, exc. furniture							3 123	3 713
	21_22	Paper, paper products, printing and publishing							10 925	11 894
	21	Paper and paper products							1 2 862	3 291
	22	Printing, publishing and recorded media					•		l 8 063	8 604
	23	Coke and petroleum products; nuclear fuel							734	1 668
	24	Chemicals and chemical products							6 121	6 354
	25	Rubber and plastic products	3 833	 3 717	3 890	4 079	4 241		3 033	3 316
	26	Other non-metallic mineral products							3 033 3 861	4 592
	27_28	Basic metals and fabricated metal products							15 595	16 627
	27_26	Basic metals Basic metals			••				19 199	9 239
	28									
	29	Fabricated metal products, exc. machinery Machinery and equipment, nec							6 396	7 389 4 798
	30 33	Electrical and optical equipment							4 295 3 772	4 798
	30_33									308
	31	Office, accounting & computing machinery Electrical machinery & apparatus, nec	381	369	292	283	238		137 1 409	1 547
		Radio, TV, communication equipment		•	••	••	••			
	32 33	Medical, precision & optical instrum.; watch & clocks							983	1 341 1 251
	34 35	Transport equipment							1 242	6 877
	34_33	Motor vehicles, trailers and semi-trailers	5 134	6 256	6 627	6 405	5 565			4 528
	35	Other transport equipment							4 719	
	36 37								1 968	2 349
	_	Manufacturing nec; recycling			••					2.500
	36	Furniture; manufacturing, nec							3 323	3 509
E	37 40 41	Recycling								
_									15 286	17 158
	40	Electricity, gas, steam and hot water supply							11 927	13 173
F	41 45	Collection, purification and distribution of water							3 359	3 985
G		Construction Wholesale & rotail trade; repairs; etc.							34 001	38 391
G		Wholesale & retail trade; repairs; etc.							80 584 24 947	84 485 25 364
	50 51	Sale, maint.,repair vehic/cycle, person., h/hold gd. W/sale. trade & commission exc motor veh. & cycle							24 947	25 364 22 663
Н	52 55	Retail trade exc. motor veh. & cyc.; repair h/hold gds. Hotels and restaurants							34 299 15 730	36 458 16 025
I	60_64								46 859	39 111
	60 61	Land transport, transport via pipelines							11 536	10 716
		Water transport							811	819
	62	Air transport							4 315	4 605
	63	Support. & aux. transport act., travel agencies activ.							7 352	8 642
V	64	Post and telecommunications							22 845	14 329
ĸ	70_74	Real estate, renting and business activities							86 635	84 046
	70	Real estate activities							26 175	29 094
	71	Renting of mach. without operator; rent. of pers. gds.								
	72	Computer and related activities								
	73	Research and development								
	74	Other business activities							60 460	54 952
	10_74	I Otal							398 513	408 343

							%			
Pe	rcentage	e of the Total	1996	1997	1998	1999	2000	2001	2002	2003
	10_41	Total Industry, except construction							33.8	35.8
С	10_14	Mining and Quarrying							9.5	9.9
D	15_37	Total manufacturing							20.4	21.7
Е	40_41	Electricity, gas and water supply							3.8	4.2
F	45	Construction							8.5	9.4
G	50_52	Wholesale & retail trade; repairs; etc.							20.2	20.7
Н	55	Hotels and restaurants							3.9	3.9
- 1	60_64	Transport, storage and communications							11.8	9.6
K	70_74	Real estate, renting and business activities							21.7	20.6

AUSTRALIE Valeur ajoutée au prix de base

				Size class	2000 by		
CITI Révisi		Millions of AUD Total	200+	50-200	% 20-49	10-19	0-9
CITI REVISI	Tatalia deskia and anatomica						
C 10	Total industrie, sauf construction	110 106	61.1	14.0	8.1	5.0	11.7
	Activités extractives	23 859	59.3	11.9	7.1	3.3	18.3
10	Extraction de produits énergétiques	4.004					
	Extraction de charbon, de lignite et de tourbe	4 961	56.6	2.4			37.7
	Pétrole brut et gaz naturel ; activités annexes	8 806					
ies 13	Extraction de produits non énergétiques						
	Extraction de minerais métalliques						••
	Autres activités extractives	2 225					
D 15	Total activités manufacturieres	71 310	57.1	16.5	9.5	5.9	11.1
oac 15	Produits alimentaires, boissons et tabac	14 374	78.3	12.5	5.3	2.3	1.5
	Produits alimentaires et boissons						
	Produits à base de tabac						
17	Textiles et produits textiles						
	Textiles						
	Articles d'habillement et fourrure						
19	Cuir et articles en cuir ; chaussures						
20	Bois, articles en bois, sauf meubles	5 231	60.9	13.3	10.9	5.5	9.5
mprimerie 21	Papier, articles en papier, édition et imprimerie						
•	Papier, articles en papier et carton						
	Édition, imprimerie et reproduction	7 517	56.9	16.2	13.8	4.5	8.7
éaires 23	Coke. et prod. pétroliers ; comb. nucléaires	9 819	61.0	21.5	8.7	3.9	5.0
24	Produits chimiques			21.0		0.0	
	Art. en caoutchouc et matières plastiques					•	
4400	Autres produits minéraux non métalliques	4 085	63.4	21.3	 7.1	2.9	5.4
	Prod. métallurgiques de base et ouvrages en mét	11 851	34.0	14.2	8.9	11.6	31.3
ages en metaux 27		11001					
-	Produits métallurgiques de base						
	Ouvrages en métaux, sauf machines						
29	Machines et matériels, nca	13 094	60.9	16.0	9.7	5.3	8.2
30	Matériels électriques et optiques						
	Mach. de bureau, comptables, information						
	Machines et appareils électriques, nca						
	Equipements et appareils de radio, TV, etc.						
	Instr. médicaux, de précision ; optique ; horlog.						
	Véhicules et équipements de transport						
etc.	Véhicules automobiles; remorques, etc.						
	Autres matériels de transport						
tion 36	Activités de fabrication nca, récupération						
ca	Meubles ; activités de fabrication, nca	2 355	10.4	19.6	25.2	17.7	27.2
	Récupération						
E 40	Electricité, gaz et eau	14 937	83.1	5.4	3.4	3.8	4.3
ur d'eau chaude	Prod. et dist. d'électricité gaz, vapeur d'eau cha	11 374					
'eau	Captage, épuration et distribution d'eau	3 564					
F 45	Construction	21 808	26.5	8.3	13.5	12.0	39.7
etc. G 50	Com. de gros, de detail ; réparation etc.	62 291	34.2	16.3	10.7	12.5	26.3
	Com., entr., répar. d'auto. et moto ; carburants	7 440	9.4	18.6	12.5	13.8	45.7
	Com. de gros et act. inter., sauf auto. et moto	31 659	29.5	22.5	13.0	16.0	18.9
	Com. détail, sauf auto, moto; répar. art. pers., d	23 192	48.6	6.9	7.0	7.3	30.3
. ur t. pers., uom. Н 55	Hôtels et restaurants	13 443	20.6	27.8	13.7	16.5	21.4
	Transport, entreposage, communications	42 349	20.0	21.0			21.4
				•			••
ii conduites	Transports terrestres; transports par conduites						
	Transports par eau						••
doe on de vou	Transports aériens	4.004	40.0				1.4.4
ues ag. de voy.	Act. annex. et aux. des transp.; act. des ag. de	4 921	46.3	20.7	11.1	7.8	14.1
	Postes et télécommunications	18 617					
entreprises K 70	Immobilier, locations, services aux entreprises						
	Activités immobilières	8 170	16.0	11.2	14.2	11.9	46.7
	Locat. mach., équip. sans opér., biens pers. et o						
attachées	Activités informatiques et activités rattachées						
	Recherche-développement						
	Autres activités de services aux entreprises	43 474	34.2	11.6	13.9	9.2	31.0
10	Total (1)	207 648	46.8	15.0	9.8	8.8	19.7

			%					
1-9	10-19	20-49	50-249	250+	Total		Pourcentage	du Total
6.2	2.7	4.3	7.4	32.4	53.0	Total industrie, sauf construction		10_41
2.1	0.4	0.8	1.4	6.8	11.5	Activités extractives	С	10_14
3.8	2.0	3.3	5.7	19.6	34.3	Produits alimentaires et boissons	D	15_37
0.3	0.3	0.2	0.4	6.0	7.2	Captage, épuration et distribution d'eau	E	40_41
4.2	1.3	1.4	0.9	2.8	10.5	Construction	F	45
7.9	3.7	3.2	4.9	10.3	30.0	Com. de gros, de detail ; réparation etc.	G	50_52
1.4	1.1	0.9	1.8	1.3	6.5	Hôtels et restaurants	Н	55
						Transport, entreposage, communications	ı	60_64
	**					Immobilier, locations, services aux entreprises	K	70_74

Notes
(1) - Excludes Sectors Categories I and K.



Notes

COUNTRY NOTES

AUSTRALIA

Statistical Institute Source

Data are provided by the Australian Bureau of Statistics.

National Classification

National data are collected using the 1993 ANZIC (1993) Industrial Classification, converted into ISIC Revision 3.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for Australia, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Economic Activity Survey	2002-2003	
Production at producers' prices	Census/Economic Activity Survey	1993,1995-2000	(1)
Production at factor costs	Census/Economic Activity Survey	2001	
Value added at basic prices	Census/Economic Activity Survey	1993,1995-2000	(1)
Value added at factor costs	Census/Economic Activity Survey	2001	
Gross operating surplus	Economic Activity Survey	2002-2003	
Total purchases of goods and services	Economic Activity Survey	2002-2003	
Change in stocks of goods and services	Economic Activity Survey	2002-2003	
Purchases of energy products	N/A		
Gross investment in tangible goods	Census/Economic Activity Survey	1995-2003	(1)
Gross investment in land	Economic Activity Survey	2002-2003	
Gross investment in existing buildings & structures	Economic Activity Survey	2002-2003	
Gross investment in machinery & equipment	Economic Activity Survey	2002-2003	
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Labour Force Survey	1993-2004	(2)
Employment: number of employees	Labour Force Survey	1995-2004	(2)
Employment: number of females employees	Labour Force Survey	1995-2004	(2)
Employment: number of employees (FTE units)	N/A		
Hours worked by employees	Labour Force Survey	1995-2004	
Compensation of labour, all persons engaged	Economic Activity Survey	2002-2003	
Compensation of labour, employees	N/A		
Wages and salaries, all persons engaged	Census/Economic Activity Survey	1993-1996	(1)
Wages and salaries, employees	Census/Economic Activity Survey	1993-2001	
Other employers' social contributions, employees	Economic Activity Survey	2002-2003	
Number of enterprises	Register	1993-2000	
Number of establishments	Register	2001	

Notes

BSC

The table below provides a description of the coverage of the BSC database for Australia, together with a description, where available, of the underlying data sources. Data for 2000 and earlier include businesses with employees only. Thereafter, the data include businesses without employees (such as unincorporated self-employed businesses and partnerships without employees).

⁽¹⁾ For 2001 data onwards the statistical unit for businesses is based on the Australian Business Number (legal unit) and 'type of activity unit', for more complex businesses. Non-employing businesses are also included in 2001 data onwards. Between 1995 and 2000 the unit was based on a different notion of the 'management unit', which surveyed enterprises and establishments. 1993 data are based on a raised sample survey.

⁽²⁾ It is important to note that these variables are based on labour force (household and not business) surveys and, therefore great care should be applied in using these variables in combination with other variables based on business surveys.

The coherence between the SSIS and BSC datasets is not sufficiently significant to allow for a straightforward cross-over between the two datasets, and readers are not advised to do so. A number of factors cause these differences to occur including-

- (i) Timing The BSC dataset was received by the OECD later than the SSIS and so may reflect more up-to-date revised estimates;
- (ii) Sources For example the variable for the number of persons engaged in the BSC dataset is not based on labour force statistics, as is the case for SSIS;
- (iii) Concordances In some cases the BSC statistics reflected aggregations of other ISIC sectors, ISIC 23 includes ISIC 24 and 25: ISIC 29 includes ISIC 30-35; ISIC 20 includes ISIC 21 and ISIC 74 includes ISIC 71-73; and
- (iv) Concepts The valuation of concepts is not always on the same basis Investment variables in the SSIS database are measured net of disposals of fixed assets.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Census/Economic Activity Survey	1997-2002	(1)
Production at producers' prices	Census/Economic Activity Survey	2001-2002	
Production at factor costs	N/A		
Value added at basic prices	Census/Economic Activity Survey	1997-2002	(1)
Value added at factor costs	N/A		
Gross operating surplus	Census/Economic Activity Survey	2001-2002	
Total purchases of goods and services	Census/Economic Activity Survey	2001-2002	
Change in stocks of goods and services	Census/Economic Activity Survey	2001-2002	
Purchases of energy products	N/A		
Gross investment in tangible goods	Census/Economic Activity Survey	1997-2002	(1)
Gross investment in land	Census/Economic Activity Survey	2001-2002	
Gross investment in existing buildings &	Census/Economic Activity Survey	2001-2002	
Gross investment in machinery & equipment	Census/Economic Activity Survey	2001-2002	
Sales of tangible investment goods	Census/Economic Activity Survey	2001-2002	
Net investment in tangible goods	Census/Economic Activity Survey	2001-2002	
Employment: number of persons engaged	Derived from Economic Activity Survey	1997-2000	
Employment: number of employees	N/A		
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	N/A		
Compensation of labour, all persons engaged	Census/Economic Activity Survey	2001-2002	
Compensation of labour, employees	N/A		
Wages and salaries, all persons engaged	Census/Economic Activity Survey	2001-2002	
Wages and salaries, employees	Census/Economic Activity Survey	1997-2000	
Other employers' social contributions, employees	Census/Economic Activity Survey	2001-2002	
Number of enterprises	Register	2001-2002	
Number of establishments	Register	1997-2000	

Notes

Methodological Breaks

In general, data for 2001 onwards are not consistent with data in earlier years. Data on employment in the SSIS database are based on labour force statistics and should be used with great care if combined with monetary variables, which are based on business surveys. Finally readers should not assume that a straightforward complementarity exists between the SSIS and BSC datasets, and should restrict common analysis to using the BSC dataset to provide the relative (proportional) contribution made by business size classes within a particular sector. The BSC dataset for 2001 and 2002 has been produced using information available on an ANZIC basis following only a broad concordance with ISIC Revision 3. In most cases this makes little difference, however readers should note the concordance relationships used in the following sectors for all BSC variables in 2001 and 2002:

⁽¹⁾ For 2001 data onwards the statistical unit for businesses is based on the Australian Business Number (legal unit) and 'type of activity unit', for more complex businesses. Non-employing businesses are also included in 2001 data onwards. Between 1995 and 2000 the unit is the 'management unit'. 1993 data are based on a raised sample survey.

- ISIC 40-41 includes sewerage and drainage services, part of ISIC 90-93
- ISIC 51 includes part of ISIC 50
- ISIC 52 includes part of ISIC 50
- *ISIC 90-93* excludes sewerage and drainage services and includes police, corrective and fire brigade services, which should be in ISIC 75.

Variable Notes

Investment variables in SSIS are measured net of disposals of fixed assets. SSIS and BSC Employment variables are point-in-time estimates; reflecting a 30 June position.

COUNTRY NOTES

AUSTRIA

Statistical Institute Source

Data are provided by Statistics Austria via Eurostat.

National data are currently collected via annual structural censuses using the ÖNACE system; an adoption of the European NACE Revision 1, converted to ISIC Revision 3 by the OECD. 1995 data were based on the Non-Agricultural census, meaning that some care is needed in comparing 1995 data with more recent years. No census was conducted in 1996. The NACE compatible classification system has been in use since 1996, reinforcing the point of care when comparing 1995 data with more recent years.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for Austria, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Census	1995-2003	(1)
Production at producers' prices	Census	1995-2003	(1)
Production at factor costs	N/A		
Value added at basic prices	Census	1995- 1996	(1)
Value added at factor costs	Census	1995, 1997-2003	
Gross operating surplus	Census	1995, 1997-2003	
Total purchases of goods and services	Census	1995, 1997-2003	
Change in stocks of goods and services	Census	1995, 1997-2003	
Purchases of energy products	Census	1995, 1997-2003	
Gross investment in tangible goods	Census	1995, 1997-2003	
Gross investment in land	Census	1995, 1997-2003	
Gross investment in existing buildings & structures	Census	1995, 1997-2003	
Gross investment in machinery & equipment	Census	1995, 1997-2003	
Sales of tangible investment goods	Census	1995, 1997-2003	
Net investment in tangible goods	Census	1995, 1997-2003	
Employment: number of persons engaged	Census	1995-2003	(1)
Employment: number of employees	Census	1995-2003	(1)
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	Census	1995, 1997-2003	
Hours worked by employees	Census	1995, 1997-2003	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Census	1995, 1997-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Census	1995, 1997-2003	
Other employers' social contributions, employees	Census	1995, 1997-2003	
Number of enterprises	Census	1995-2003	
Number of establishments	N/A		

Notes

(1) 2-digit data only for 1996.

BSC

The table below provides a description of the coverage of the BSC database for Austria, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Census	1995, 1997-2003	
Production at producers' prices	Census	1995, 1997-2003	
Production at factor costs	N/A		
Value added at basic prices	Census	1995	
Value added at factor costs	Census	1995, 1997-2003	
Gross operating surplus	Census	1995, 1997-2003	
Total purchases of goods and services	Census	1995, 1997-2003	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	Census	1997-2003	
Gross investment in land	N/A		
Gross investment in existing buildings &	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Census	1995, 1997-2003	
Employment: number of employees	Census	1995, 1997-2003	
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	Census	1995, 1997-2003	
Hours worked by employees	Census	1995, 1997-2003	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Census	1995, 1997-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Census	1995, 1997-2003	
Other employers' social contributions, employees	Census	1995, 1997-2003	
Number of enterprises	Census	1995, 1997-2003	
Number of establishments	N/A		

Methodological Breaks

Estimates in 1995 are based on a different census and classification system to those used in more recent years therefore some care is needed when comparing 1995 estimates with more recent years. The BSC and SSIS databases are fully aligned although in some cases small differences may arise.

COUNTRY NOTES

BELGIUM

Statistical Institute Source

Data are provided by the Belgium National Institute of Statistics via Eurostat.

National data are currently collected via an annual survey on the structure of companies (excluding those in the financial sector), using the NACE-BEL system, an adaptation of the European NACE Revision 1, converted to ISIC Revision 3 by the OECD. Businesses are defined in this context as legal entities with VAT and/or social security registrations. All businesses with 20 or more employees and/or turnover of more than EUR 8 million are surveyed every year with smaller businesses selected via a sample and grossed up to the entire population.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for Belgium together with a description, where available, of the underlying data sources. The statistical unit used to estimate SSIS variables is typically a legal unit.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Annual Survey	1995-2001	
Production at producers' prices	Annual Survey	1995-2001	(1)
Production at factor costs	Annual Survey		
Value added at basic prices	Annual Survey	1999-2000	
Value added at factor costs	Annual Survey	1995-2001	
Gross operating surplus	Annual Survey	1995-2001	
Total purchases of goods and services	Annual Survey	1995-2001	
Change in stocks of goods and services	Annual Survey	1995-2001	
Purchases of energy products	Annual Survey	1995-2001	
Gross investment in tangible goods	Annual Survey	1999-2001	
Gross investment in land	Annual Survey	1999-2001	
Gross investment in existing buildings & structures	Annual Survey	1999-2001	
Gross investment in machinery & equipment	Annual Survey	1999-2001	
Sales of tangible investment goods	Annual Survey	1999-2001	
Net investment in tangible goods	Annual Survey	1999-2001	
Employment: number of persons engaged	Annual Survey	1995-2001	
Employment: number of employees	Annual Survey	1995-2001	
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	Annual Survey	2001	
Hours worked by employees	Annual Survey	1999-2001	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Annual Survey	1995-2001	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Annual Survey	1995-2001	
Other employers' social contributions, employees	Annual Survey	1995-2001	
Number of enterprises	Register	1995-2001	
Number of establishments	N/A		

Notes

(1) Data in 1995-1998 do not fully align with the producer price concept.

BSC

The table below provides a description of the coverage of the BSC database for Belgium, together with a description, where available, of the underlying data sources. The statistical unit used to estimate BSC variables is typically a legal unit. Businesses are allocated to a size class on the basis of information obtained

from social security records supplied and so may not always correspond to the actual numbers of persons engaged.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Annual Survey	1995-2001	
Production at producers' prices	Annual Survey	1995-2001	(1)
Production at factor costs	Annual Survey		
Value added at basic prices	Annual Survey	1999-2000	
Value added at factor costs	Annual Survey	1995-2001	
Gross operating surplus	Annual Survey	1995-2001	
Total purchases of goods and services	Annual Survey	1995-2001	
Change in stocks of goods and services	Annual Survey	1995-2001	
Purchases of energy products	Annual Survey	1995-2001	
Gross investment in tangible goods	Annual Survey	1999-2001	
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	Annual Survey	1999-2001	
Employment: number of persons engaged	Annual Survey	1995-2001	
Employment: number of employees	Annual Survey	1995-2001	
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	Annual Survey	2001	
Hours worked by employees	Annual Survey	1999-2001	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Annual Survey	1995-2001	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Annual Survey	1995-2001	
Other employers' social contributions, employees	Annual Survey	1995-2001	
Number of enterprises	Register	1995-2001	
Number of establishments	N/A		

Notes

(1) Data in 1995-1998 do not fully align with the producer price concept.

Methodological Breaks

Estimates of production in the 1995 to 1998 period are affected by the treatment of sales of goods for resale and so are not consistent with those in later periods, which are consistent with the concepts defined in this publication. The BSC and SSIS databases are fully aligned although in some cases small differences arise, for example due to certain aggregations made in SSIS.

Variable Notes

SSIS and BSC

Production at producers' prices – Data in the period 1995-1998 do not fully align to this concept, which affects, in particular, the trade sector (ISIC 50-52).

For SSIS the following sectors, and, by association, any sectors of which they are a sub-sector, include parts or all of other sectors:

- *ISIC 1551* includes ISIC 1552
- *ISIC 1729* includes ISIC 1723
- *ISIC 1910* includes ISIC 1920
- *ISIC 2320* includes ISIC 2310
- ISIC 2429 includes ISIC 2421 and 2430
- ISIC 251 includes ISIC 2519
- *ISIC* 2929 includes ISIC 2923, 2924, 2925

- *ISIC 3511* includes ISIC 3512
- *ISIC 3530* includes ISIC 352 and 359
- *ISIC 4020* includes ISIC 4030
- *ISIC 6210* includes ISIC 6220
- *ISIC 7010* includes ISIC 7020
- *ISIC 7310* includes ISIC 7320

COUNTRY NOTES

CANADA

Statistical Institute Source

Data are provided by Statistics Canada.

National Classification

National data are collected using the 1980 SIC System for 1997 and earlier data, and NAICS for 1998 data onwards, both converted into ISIC Revision 3.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for Canada, together with a description, where available, of the underlying data sources. The coverage reflects incorporated businesses with or without employees, unincorporated businesses with employees, and unincorporated businesses with no employees but with revenue of greater than or equal to CAD 30,000 in 2000 and after but only incorporated businesses with employees and sales of greater than or equal to CAD 30,000 in earlier years (see also the notes in methodological changes). The statistical unit used for data collection is the establishment. Only data on manufacturing establishments are included.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	N/A		
Production at producers' prices	Annual Survey of Manufactures	1990-2003	(1)
Production at factor costs	N/A		
Value added at basic prices	Annual Survey of Manufactures	1990-2003	(2)
Value added at factor costs	N/A		
Gross operating surplus	Annual Survey of Manufactures	1990-2003	
Total purchases of goods and services	N/A		
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	N/A		
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	N/A		
Employment: number of employees	Annual Survey of Manufactures	1990-2003	(3)
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	N/A		
Hours worked by employees	N/A		
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	N/A		
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Annual Survey of Manufactures	1990-2003	(4)
Other employers' social contributions, employees	N/A		
Number of enterprises	Register	2000-2003	
Number of establishments	Register	1990-2003	

Notes

- (1) Production for the wholesale/retail sector reflects total sales and other revenue.
- (2) Value-added reflects the difference between production and intermediate consumption of goods plus the net change in inventories over the year but does not include an adjustment for inventory revaluations from book value to current prices.
- (3) Reflects the average number of employees during the year.
- (4) Does not include other income in kind such as tips and commissions.

BSC

The table below provides a description of the coverage of the BSC database for Canada, together with a description, where available, of the underlying data sources. The database covers all businesses with employees.

The source of the BSC data is the Statistics Canada Employment Dynamics Database, which has been discontinued since 1999. This database used information from labour force surveys and the Longitudinal Employment Analysis Program (LEAP), which is based on payroll records in businesses with employees. The statistical unit used to estimate BSC variable is the enterprise and not the establishment, which is the unit used in the SSIS dataset.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	N/A		
Production at producers' prices	N/A		
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	N/A		
Gross operating surplus	N/A		
Total purchases of goods and services	N/A		
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	N/A		
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	N/A		
Employment: number of employees	Employment Dynamics	1998	
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	N/A		
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	N/A		
Wages and salaries, all persons engaged	Employment Dynamics	1994-1998	
Wages and salaries, employees	N/A		
Other employers' social contributions, employees	N/A		
Number of enterprises	Employment Dynamics	1994-1998	
Number of establishments	N/A		

Methodological Breaks

The switch from 1998 SIC to NAICS means that some care is needed in comparing figures before and after 1998 (the break occurring between 1997 and 1998). In addition readers should be aware of a series break in 2000, when a number of major conceptual and methodological changes were made to the Annual Survey of Manufacturers, which increased the coverage of establishments. For 1999 and earlier data, only incorporated businesses with sales of greater than or equal to CAD 30,000 were in scope. For 2000 onwards the coverage was increased to include all incorporated businesses, unincorporated businesses with employees and unincorporated businesses with sales greater than or equal to CAD 30,000. At the same time manufacturing data for 2000 onwards exclude activity related to head offices. In 1999, head office activity accounted for about 3% of the employees of Canadian manufacturers and about 7% of the total value of shipments and other revenue.

Variable Notes

All variables exclude ISIC sector 22.1.

Production at producers' prices: - Production for the wholesale/retail sector reflects total sales and other revenue.

Value-added at basic prices - reflects the difference between production and intermediate consumption of goods, so, includes intermediate consumption of some services.

COUNTRY NOTES

CZECH REPUBLIC

Statistical Institute Source

Data are provided by the Czech Statistical Office via Eurostat.

National data are currently collected via separate annual surveys of incorporated and unincorporated enterprises using the CZ-NACE System; an adoption of the European NACE Revision 1, converted to ISIC Revision 3 by the OECD. All businesses with 100 or more employees, joint stock companies and/or financial companies are surveyed yearly with other businesses selected via a sample and grossed up to the entire population.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for the Czech Republic, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Annual Surveys	1995-2003	
Production at producers' prices	Annual Surveys	1995-2003	
Production at factor costs	N/A		
Value added at basic prices	Annual Surveys	1995-1999	
Value added at factor costs	Annual Surveys	2000-2003	
Gross operating surplus	Annual Surveys	1997-2003	(1)
Total purchases of goods and services	Annual Surveys	1997-2003	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	Annual Surveys	1997-1999, 2000-2003	
Gross investment in land	Annual Surveys	1997-2000, 2002-2003	
Gross investment in existing buildings & structures	Annual Surveys	2002-2003	
Gross investment in machinery & equipment	Annual Surveys	2002-2003	
Sales of tangible investment goods	Annual Surveys	2002-2003	
Net investment in tangible goods	Annual Surveys	2002-2003	
Employment: number of persons engaged	Annual Surveys	1995-2003	
Employment: number of employees	Annual Surveys	1995-2003	
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	Annual Surveys	1997-2003	
Hours worked by employees	Annual Surveys	2002-2003	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Annual Surveys	1997-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Annual Surveys	1995-2003	
Other employers' social contributions, employees	Annual Surveys	1997-2003	
Number of enterprises	Annual Surveys	1995-2003	
Number of establishments	N/A		

Notes

(1) Includes other taxes and subsidies on production in 1997-1999.

BSC

The table below provides a description of the coverage of the BSC database for the Czech Republic, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Annual Surveys	1995-2003	
Production at producers' prices	Annual Surveys	1997-2003	
Production at factor costs	N/A		
Value added at basic prices	Annual Surveys	1995-1999	
Value added at factor costs	Annual Surveys	2000-2003	
Gross operating surplus	Annual Surveys	2001-2003	(1)
Total purchases of goods and services	Annual Surveys	1997-2003	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	Annual Surveys	1997-1999, 2000-2003	
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Annual Surveys	1995-2003	
Employment: number of employees	Annual Surveys	1995-2003	
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	Annual Surveys	1997-2003	
Hours worked by employees	Annual Surveys	2002-2003	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Annual Surveys	2001-2003	(2)
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Annual Surveys	1995-2003	
Other employers' social contributions, employees	Annual Surveys	1997-2003	
Number of enterprises	Annual Surveys	1995-2003	
Number of establishments	N/A		
Notos	<u> </u>		

Notes

Methodological Breaks

The BSC and SSIS databases are fully aligned although in some cases small differences arise, for example due to certain aggregations made in SSIS.

Variable Notes

SSIS and BSC

Gross operating surplus – Includes other taxes and subsidies on production in 1997-1999. For SSIS the following sectors, and, by association, any sectors of which they are a sub-sector, include parts or all of other sectors:

- *ISIC* 2429 includes ISIC 2421, 2422 and 2430
- *ISIC 2511* includes ISIC 2519
- *ISIC* 2929 includes ISIC 2923, 2924, 2925

⁽¹⁾ Figures of gross operating surplus consistent with those used in SSIS can be derived in earlier years by taking value added at factor costs (in 2000) or basic prices (1995-1999) minus compensation of labour, employees, see note (2).

⁽²⁾ Compensation of labour employees in earlier years can be derived as sum of wages and salaries, employees and other employers' contributions.

COUNTRY NOTES

DENMARK

Statistical Institute Source

Data are provided by Statistics Denmark via Eurostat.

National data are currently collected via three sources: an annual survey of enterprises, information from balance sheets provided to the tax authorities and the business register using a NACE equivalent system (DB03) converted to ISIC Revision 3 by the OECD. DB03 replaced DB93 in January 2003. For enterprises with less than 5 employees data SBS are based on the tax-register and estimation methods.

SSIS

The table below provides a description of the coverage of the SSIS database for Denmark, together with a description, where available, of the underlying data sources. The statistical unit used to estimate SSIS variables is typically a legal unit.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Business Register	1995-2003	
Production at producers' prices	Survey/Tax Register	1995-2003	
Production at factor costs	N/A		
Value added at basic prices	Survey/Tax Register	1998-2001	
Value added at factor costs	Survey/Tax Register	1995-2003	
Gross operating surplus	Survey/Tax Register	1995-2003	
Total purchases of goods and services	Survey/Tax Register	1995-2003	
Change in stocks of goods and services	Survey/Tax Register	1995-1996 1998-2003	
Purchases of energy products	Survey/Tax Register	1995-2003	
Gross investment in tangible goods	Survey/Tax Register	1995-2003	
Gross investment in land	N/A		
Gross investment in existing buildings & structures	Survey/Tax Register	1995-2003	
Gross investment in machinery & equipment	Survey/Tax Register	1995-2003	
Sales of tangible investment goods	Survey/Tax Register	1995-2003	
Net investment in tangible goods	Survey/Tax Register	1995-2003	
Employment: number of persons engaged	Survey/Tax Register	1995-2003	
Employment: number of employees	Survey/Tax Register	1995-2003	
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	Survey/Tax Register	1995-2003	
Hours worked by employees	Survey/Tax Register	1995-2003	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Survey/Tax Register	1995-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Survey/Tax Register	1995-2003	
Other employers' social contributions, employees	Survey/Tax Register	1995-2003	
Number of enterprises	Business Register	1995-2003	
Number of establishments	N/A		

BSC

The table below provides a description of the coverage of the BSC database for Denmark, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Business Register	1995-2003	
Production at producers' prices	Survey/Tax Register	1995-2003	
Production at factor costs	N/A		
Value added at basic prices	Survey/Tax Register	1998-2001	
Value added at factor costs	Survey/Tax Register	1995-2003	
Gross operating surplus	Survey/Tax Register	1995-2003	
Total purchases of goods and services	Survey/Tax Register	1995-2003	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	Survey/Tax Register	1995-2003	(1)
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Survey/Tax Register	1995-2003	
Employment: number of employees	Survey/Tax Register	1995-1996 1998-2003	
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	Survey/Tax Register	1995-2003	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Survey/Tax Register	1995-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Survey/Tax Register	1995-2003	
Other employers' social contributions, employees	Survey/Tax Register	1995-2003	
Number of enterprises	Business Register	1995-2003	
Number of establishments	N/A		

Notes

Methodological Breaks

The BSC and SSIS databases are typically fully aligned although in two notable cases differences arise. These cases concern the employment variables – *number of persons engaged* and *number of employees*. The BSC data for 1995 and 1996 for these two variables are significantly lower than their SSIS equivalents. This means that some caution is needed when using these variables in these years as their coverage is not exhaustive and is not necessarily consistent with other information in these years, for example number of enterprises and wages and salaries.

Variable Notes

SSIS and BSC

Readers will notice that in some sectors, particularly ISIC 2320, the Secretariat has made estimates that illustrate a significant spike in activity between 1999 and 2000. The original data points in these estimated series were confidentialised and, so, the estimates have been produced using a combination of national accounts data constrained to the available totals for manufacturing. In most of the 2000 to 2003 period the constraints implied that the residual of the total and the sum of other sectors could be allocated to sector ISIC 2320 or ISIC 19. The Secretariat has allocated most of this residual to ISIC 2320 in line with information from the national accounts which shows that production increased by close to 10 billion DKK between 1999 and 2000 with little overall change to value-added, suggesting a change in the inter-industry consolidation between these two years. These estimates have been provided primarily to improve the usability of the database and readers should not use them as the basis of any analysis that relates to the affected sectors.

⁽¹⁾ Estimates for manufacturing are not broken down by size-class. Original manufacturing data were higher than their SSIS equivalents in 2001. In all other years the data fully aligned. As such the original data in 2001 have been replaced with their SSIS equivalents.

The Secretariat has also made estimates of turnover in sectors ISIC 50 and 51 in 2000, 2002 and 2003. More information on the reasons for these changes is provided in the main body of this publication, but, in the main, these estimates replace the original estimates because the original estimates were conceptually different to estimates of turnover made in other years. For SSIS the following sectors, and, by association, any sectors of which they are a sub-sector, include parts or all of other sectors:

- *ISIC 1549* includes ISIC 1542, 1544
- *ISIC 3710* includes ISIC 3720
- *ISIC 6210* includes ISIC 6220
- *ISIC 7010* includes ISIC 7020
- *ISIC* 7220 includes ISIC 7210, 7230, 7240, 7250, 7290

FINLAND

Statistical Institute Source

Data are provided by Statistics Finland via Eurostat.

National data are currently collected via three data sources: Business Registers, surveys and administrative data. The survey is used for large enterprises and administrative financial data from the tax authorities is used for all other enterprises. The Business Register provides information on the principal activity and employment in enterprises not surveyed. For ISIC sectors 10-45 all enterprises with 20 or more persons employed are surveyed. In other sectors the following thresholds are used-

10 persons:

- NACE 61
- NACE 50.3 50.5, 51.1 51.4, 51.6, 51.7, 52.2, 52.7, 63.3, 74.4
- NACE 60.24, 63.11, 63.401, 64.201, 74.11, 74.13

20 persons:

- NACE 55
- NACE 72
- NACE 50.1, 50.2, 51.5, 52.1, 74.2, 74.3, 74.6, 74.7, 90.0
- NACE 60.21, 60.23, 74.12, 74.14, 93.01

In all other activities the size threshold is 50 persons engaged.

Data are provided using a NACE Revision 1 equivalent Classification System (SIC95), converted to ISIC Revision 3 by the OECD.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for Finland, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Survey/Administrative Source	1995-2003	
Production at producers' prices	Survey/Administrative Source	1995-2003	
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	Survey/Administrative Source	1995-2003	
Gross operating surplus	Survey/Administrative Source	1995-2003	
Total purchases of goods and services	Survey/Administrative Source	1995-2003	
Change in stocks of goods and services	Survey/Administrative Source	1995-2003	
Purchases of energy products	Survey/Administrative Source	1995-2003	
Gross investment in tangible goods	Survey/Administrative Source	1995-2003	
Gross investment in land	Survey/Administrative Source	1995-2003	
Gross investment in existing buildings & structures	Survey/Administrative Source	1995-2003	
Gross investment in machinery & equipment	Survey/Administrative Source	1995-2003	
Sales of tangible investment goods	Survey/Administrative Source	1995-2003	
Net investment in tangible goods	Survey/Administrative Source	1995-2003	
Employment: number of persons engaged	Survey/Administrative Source/Register	1995-2003	
Employment: number of employees	Survey/Administrative Source /Register	1995-2003	
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	Survey/Administrative Source /Register	1999-2003	
Hours worked by employees	Survey/Administrative Source	1995-2003	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Survey/Administrative Source	1995-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Survey/Administrative Source	1995-2003	
Other employers' social contributions, employees	Survey/Administrative Source	1995-2003	
Number of enterprises	Register	1995-2003	
Number of establishments	N/A		

BSC

The table below provides a description of the coverage of the BSC database for Finland, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Survey/Administrative Source	1995-2003	
Production at producers' prices	Survey/Administrative Source	1995-2003	
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	Survey/Administrative Source	1995-2003	
Gross operating surplus	Survey/Administrative Source	1995-2003	
Total purchases of goods and services	Survey/Administrative Source	1995-2003	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	N/A		
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Survey/Administrative Source/Register	1995-2003	
Employment: number of employees	Survey/Administrative Source /Register	1995-2003	
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	Survey/Administrative Source	1995-2003	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Survey/Administrative Source	1995-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Survey/Administrative Source	1995-2003	
Other employers' social contributions, employees	Survey/Administrative Source	1995-2003	
Number of enterprises	Register	1995-2003	
Number of establishments	N/A		

Methodological Breaks

The BSC and SSIS databases are fully aligned for 1997 data onwards although in some cases small differences arise, for example due to certain aggregations made in SSIS. In earlier years the SSIS data are typically marginally higher than the BSC data.

Variable Notes

SSIS and BSC

For SSIS the following sectors, and, by association, any sectors of which they are a sub-sector, include parts or all of other sectors:

- ISIC 3592 includes ISIC 3591
- *ISIC 7010* includes ISIC 7020
- *ISIC 7310* includes ISIC 7320

FRANCE

Statistical Institute Source

Data are provided by the National Institute of Statistics and Economic Studies (INSEE) via Eurostat.

National data are currently collected via various annual surveys conducted by different government departments, including INSEE. These include annual surveys on manufacturing, mining, utilities, agriculture, trade and other services, validated with administrative tax based sources, using a NACE equivalent System (NAF) are converted to ISIC Revision 3 by the OECD. Typically the surveys are exhaustive for enterprises with 20 or more persons engaged, with sample surveys used for smaller businesses. Enterprises with turnover below a certain threshold (EUR 76,200 for 1999 data) are excluded.

SSIS

The table below provides a description of the coverage of the SSIS database for France, together with a description, where available, of the underlying data sources.

		NOTES
Survey	1995-2003	
Survey	1995-2003	
N/A		
N/A		
Survey	1995-2003	
Survey	1995-2003	
Survey	1995-2003	
Survey	1996-2000	
Survey	1997-1999 2001-2003	
Survey	1995-2003	
Survey	1999-2003	(1)
Survey	1999-2003	
Survey	1999-2003	(2)
Survey	1996-2003	
Survey	1999-2003	(3)
Survey	1995-2003	
Survey	1995-2003	
N/A		
Survey	1999-2003	
Survey	1999-2003	
N/A		
Survey	1995-2003	
N/A		
Survey	1996-2003	
Survey	1996-2003	
Business Register	1995-2003	
N/A		
	Survey N/A N/A Survey N/A Survey Survey N/A Survey Survey N/A Survey Survey Survey Survey Survey Survey Survey Survey Survey	Survey 1995-2003 N/A N/A Survey 1995-2003 Survey 1995-2003 Survey 1995-2003 Survey 1996-2000 Survey 1997-1999 2001-2003 Survey 1999-2003 Survey 1999-2003 Survey 1999-2003 Survey 1999-2003 Survey 1999-2003 Survey 1995-2003 Survey 1995-2003 Survey 1995-2003 N/A 1999-2003 Survey 1999-2003 N/A 1999-2003 N/A 1995-2003 N/A 1995-2003 N/A 1996-2003 Survey 1996-2003

Notes

- (1) Estimates in 1999 are not consistent with those in later years and do not represent exhaustive coverage
- (2) In most years entries are shown as zero but in these cases zeros can alternately mean zero or, more likely, unavailable.
- (3) Estimates for 1997 and 1998 can be calculated as gross investment in tangible goods minus sales of tangible investment goods.

BSC

The table below provides a description of the coverage of the BSC database for France, together with a description, where available, of the underlying data sources.

SOURCE	YEARS	NOTES
Survey	1995-2003	
Survey	1995-2003	
N/A		
N/A		
Survey	1995-2003	
Survey	1995-2003	(1)
Survey	1996-2003	
N/A		
N/A		
Survey	1998-2003	
N/A		
Survey	1995-2003	
Survey	1996-2003	
N/A		
N/A		
Survey	1999-2003	
N/A		
Survey	1995-2003	
N/A		
Survey	1996-2003	
Survey	1996-2003	
Business Register	1996-2003	
	Survey Survey N/A N/A N/A Survey Survey Survey N/A	Survey 1995-2003 Survey 1995-2003 N/A 1995-2003 Survey 1995-2003 Survey 1996-2003 N/A 1996-2003 N/A 1998-2003 N/A 1998-2003 N/A 1998-2003 N/A 1998-2003 N/A 1995-2003 Survey 1996-2003 N/A 1999-2003 N/A 1999-2003 N/A 1995-2003 N/A 1995-2003 N/A 1996-2003 Survey 1996-2003 Survey 1996-2003 Survey 1996-2003 Survey 1996-2003

Methodological Breaks

The BSC and SSIS databases are typically fully aligned in all years with only some small differences reflecting timing and rounding in some sectors and years. Estimates of gross investment in land in 1999 are not consistent with estimates in more recent years. Estimates of gross operating surplus in 2002 for ISIC sector 45 and its sub-components reflect total value added at factor costs.

Variable Notes

SSIS

For SSIS the following sectors, and, by association, any sectors of which they are a sub-sector, include parts or all of other sectors:

- ISIC 2212 includes ISIC 2213
- ISIC 2320 includes ISIC 2310, 2320
- ISIC 2511 includes ISIC 2519
- ISIC 6020 includes ISIC 6010, 6030
- ISIC 6210 includes ISIC 6220
- ISIC 7010 includes ISIC 7020
- ISIC 7220 includes ISIC 7210, 7230, 7240, 7250, 7290
- ISIC 7310 includes ISIC 7320

⁽¹⁾ Estimates of gross operating surplus in 2002 for sector ISIC 45 and its sub-components reflect total value added at factor

GERMANY

Statistical Institute Source

Data are provided by the Federal Statistical Office via Eurostat.

National data are currently collected via various annual surveys of manufacturing, electricity, gas and water supply, wholesale and retail trade, and other services, using a NACE equivalent classification system, converted to ISIC Revision 3 by the OECD. The coverage of these surveys varies significantly over time, described in more detail below.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for Germany, together with a description, where available, of the underlying data sources. The coverage of activities varies considerably across sectors and over time, as described below.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Annual Surveys	1995-2003	
Production at producers' prices	Annual Surveys	1998-2003	
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	Annual Surveys	1998-2003	
Gross operating surplus	Annual Surveys	1998-2003	
Total purchases of goods and services	Annual Surveys	1998-2003	
Change in stocks of goods and services	Annual Surveys	1995-2002	(1)
Purchases of energy products	Annual Surveys	1999-2003	
Gross investment in tangible goods	Annual Surveys	1995-2003	(2)
Gross investment in land	Annual Surveys	1995-2003	(2)
Gross investment in existing buildings & structures	Annual Surveys	1995-2003	(2)
Gross investment in machinery & equipment	Annual Surveys	1995-2003	(2)
Sales of tangible investment goods	Annual Surveys	1995-2003	(2)
Net investment in tangible goods	Annual Surveys	1995-2003	(2)
Employment: number of persons engaged	Annual Surveys	1995-2003	
Employment: number of employees	Annual Surveys	1995-2003	
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	N/A		
Hours worked by employees	Annual Surveys	1999-2003	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Annual Surveys	1998-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Annual Surveys	1995-2003	
Other employers' social contributions, employees	Annual Surveys	1998-2003	
Number of enterprises	Annual Surveys	1995-2003	
Number of establishments	N/A		

Notes

- (1) Trade sector (ISIC 50-52) only.
- (2) Enterprises with 20 or more persons engaged

BSC

The table below provides a description of the coverage of the BSC database for Germany, together with a description, where available, of the underlying data sources. For the period 1996 to 1998 the coverage reflects enterprises with 20 or more persons engaged only, except ISIC sector 40-41 where there is full coverage throughout.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Annual Surveys	1996-2003	
Production at producers' prices	Annual Surveys	1996-2003	
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	Annual Surveys	1996-2003	
Gross operating surplus	Annual Surveys	1996-2003	
Total purchases of goods and services	Annual Surveys	1996-2003	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	N/A		
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Annual Surveys	1996-2003	
Employment: number of employees	Annual Surveys	1996-2003	
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	Annual Surveys	1999-2003	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Annual Surveys	1996-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Annual Surveys	1996-2003	
Other employers' social contributions, employees	Annual Surveys	1996-2003	
Number of enterprises	Annual Surveys	1996-2003	
Number of establishments	N/A		

Methodological Breaks

Data on mining, manufacturing and construction sectors (ISIC 10-37 and 45) for the period 1996 to 1998 reflect only enterprises with 20 or more persons engaged. Thereafter, for all variables except investment related variables, the population is all enterprises with 1 or more persons engaged. Data on the trade, hotels and restaurant sector (ISIC 50_55) are based on enterprises with turnover of EUR 12,500 or more.

Data on other services (ISIC 60-74) are based on enterprises with turnover of EUR 16,620 or more and that appear on the enterprise register in the period 2000-2003. In earlier years the data are based on a combination of administrative data and estimates derived from the national accounts – which, for the national accounts based estimates, implies full economic coverage; that is, the activity of all enterprises irrespective of their size, including those operating in the underground economy are included, as is the underground activity of any enterprises that <u>partly</u> operate in the underground economy. Estimates of the number of enterprises however, reflect only the number of registered enterprises. As such, the periods 1999-and-before and 2000-and-after are not consistent. Equally, for the period 1999-and-before, the different sources dictate that some care is needed when combining variables.

The BSC and SSIS databases are fully aligned although, in some cases, small differences arise, for example due to certain aggregations made in SSIS. Estimates for the manufacturing sector by size class in 1999 have been suppressed.

Variable Notes

SSIS

The following sectors and, by association, any sectors of which they are a sub-sector, include parts or all of other sectors:

- *ISIC 1010* includes ISIC 1020
- *ISIC 2320* includes ISIC 2310, 2330

GREECE

Statistical Institute Source

Data are provided by the National Statistical Service via Eurostat.

National data are collected via annual business inquires using a NACE Revision 1 equivalent classification system converted to ISIC Revision 3 by the OECD. Data reflect only enterprises with 10 or more persons engaged and are made available on the BSC database only.

Coverage and Data Sources

BSC

The table below provides a description of the coverage of the BSC database for Greece, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Survey	1997-2000	
Production at producers' prices	Survey	1997-2000	
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	Survey	1997-2000	
Gross operating surplus	Survey	1997,1998,2000	
Total purchases of goods and services	N/A		
Change in stocks of goods and services	N/A		
Purchases of energy products	Survey	1997-2000	
Gross investment in tangible goods	N/A		
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	N/A		
Employment: number of employees	Survey	1997-2000	
Employment: number of females employees	Survey	1997-2000	
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	Survey	1997-2000	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Survey	1997,1998,2000	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Survey	1997-2000	
Other employers' social contributions, employees	Survey	1997-2000	
Number of enterprises	Survey	1997-2000	
Number of establishments	N/A		

HUNGARY

Statistical Institute Source

Data are provided by the Central Statistical Office via Eurostat.

National data are currently collected via annual structural business statistics surveys using a NACE Revision 1 equivalent classification system converted to ISIC Revision 3 by the OECD. For 2000 data and earlier, enterprises with less than 5 employees are not included in the SBS and BSC databases. Thereafter, data reflect all enterprises with 1 or more persons engaged.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for Hungary, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Survey	1996-2002	
Production at producers' prices	Survey	1996-2002	
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	Survey	1996-2002	
Gross operating surplus	Survey	1996-2002	
Total purchases of goods and services	Survey	1996-2002	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	Survey	1997-2002	
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Survey	1996-1998,2002	(1)
Employment: number of employees	Survey	1998-2003	(1)
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	Survey	1998-2003	(1)
Hours worked by employees	Survey	1998-2003	(1)
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Survey	1998-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Survey	1998-2003	
Other employers' social contributions, employees	Survey	1998-2003	
Number of enterprises	Register	1998-2003	
Number of establishments	N/A		

Notes

(1) Up to and including 2000, data on employment were collected via a separate survey to those used for monetary variables.

BSC

The table below provides a description of the coverage of the BSC database for Hungary, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Survey	1998-2003	
Production at producers' prices	Survey	1998-2003	
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	Survey	1998-2003	
Gross operating surplus	Survey	2000-2003	
Total purchases of goods and services	Survey	1998-2003	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	Survey	2000-2003	
Gross investment in land	N/A		
Gross investment in existing buildings &	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Survey	1998-2003	(1)
Employment: number of employees	Survey	1998-2003	(1)
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	Survey	1998-2003	(1)
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Survey	2000-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Survey	1998-2003	
Other employers' social contributions, employees	Survey	1998-2003	
Number of enterprises	Register	1998-2003	
Number of establishments	N/A		

Notes

(1) Up to and including 2000, data on employment were collected via a separate survey to those used for monetary variables.

Methodological Breaks

Data prior to and including 2000 reflect only enterprises with 5 or more employees. Thereafter the data reflect all enterprises with 1 or more persons engaged. Employment-based data up to and including 2000 were based on a separate survey to that used for monetary variables, therefore care should be taken when comparing monetary and employment variables in this period, particularly at the 4-digit level. For 2001 data onwards, a unified survey has been used and so this problem does not arise. The BSC and SSIS databases are fully aligned. Estimates of activity at the 1-9 size class level in the period 1998-1999 reflect only enterprises with between 5 and 9 employees – these estimates were not provided directly but have been derived as the residual of the total and all other size classes (10+) and so some care is needed in using the 1-9 size class data in 1998 and 1999.

Variable Notes

For SSIS the following sectors, and, by association, any sectors of which they are a sub-sector, include parts or all of other sectors:

- *ISIC 6120* includes ISIC 6110
- *ISIC 6210* includes ISIC 6220

ICELAND

Statistical Institute Source

Data for the period 1992-1997 were provided by the *National Economic Institute*, now defunct, part of whose responsibilities were transferred to *Statistics Iceland* in 2002.

National data are currently collected using the NACE Revision 1 System which replaced the ISIC Revision 2 System in 1997. All data have been converted onto an ISIC Revision 3 basis. Data for the period 1998-2005 have been taken directly from *Statistic Iceland*'s website.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for Iceland, together with a description, where available, of the underlying data sources. For the 1992-1997 period, the statistical unit used to estimate SSIS variables is the establishment or kind of activity unit, with data sourced via a sample of administrative income tax records, grossed to the entire population. For the more recent period, 1998-2005, *Statistics Iceland* produces data from the enterprise register, which is maintained by the *Internal Revenue Directorate*. This is combined with information from the income tax register in order to obtain information on 'wage payers' (businesses with employees) including self-employed individuals. Estimates of turnover are based on enterprises' VAT returns and, so, only include enterprises with turnover above the VAT threshold.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Internal Revenue Register	1998-2005	
Production at producers' prices	Internal Revenue Register	1992-1997	(1)
Production at factor costs	N/A		
Value added at basic prices	Internal Revenue Register	1992-1997	
Value added at factor costs	N/A		
Gross operating surplus	N/A		
Total purchases of goods and services	N/A		
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	N/A		
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Internal Revenue Register	1992-1997	
Employment: number of employees	Internal Revenue Register	1992-1997	
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	N/A		
Hours worked by employees	N/A		
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Internal Revenue Register	1992-1997	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	N/A		
Other employers' social contributions, employees	N/A		
Number of enterprises	Internal Revenue Register	1992-1997, 1999-2005	
Number of establishments	Internal Revenue Register	1992-1996	

Notes

(1) At basic prices.

BSC

The table below provides a description of the coverage of the BSC database for Iceland, together with a description, where available, of the underlying data sources. The statistical unit used to estimate BSC variables is wage paying units based on PAYE records, in other words, businesses with employees. The numbers of these units are shown under enterprises; although for some industries they may correspond more closely to a kind of activity unit.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	N/A		
Production at producers' prices	N/A		
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	N/A		
Gross operating surplus	N/A		
Total purchases of goods and services	N/A		
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	N/A		
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	N/A		
Employment: number of employees	N/A		
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	N/A		
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	N/A		
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	N/A		
Other employers' social contributions, employees	N/A		
Number of enterprises	Internal Revenue Register	1998-2003	(1)
Number of establishments	N/A		

Notes

(1) Numbers of businesses with employees.

Methodological Breaks

The change in classification systems as well as administrative responsibility means that the data for the period 1992-1997 should be treated separately from the 1998-2005 dataset. For the most recent period (1998-2005) readers should note that the coverage of turnover and number of enterprise statistics in the SSIS dataset differ, since the former is based on VAT registered businesses whereas the latter is based on income tax (PAYE) and self-employed statistics. Finally, readers should note that the comparability between the SSIS and BSC datasets is also limited by the fact that different populations of businesses are captured in the enterprise variables – in BSC the statistical unit actually refers to 'wage payers', in other words businesses with employees.

Variable Notes

SSIS

Production at producers' prices – is valued at basic prices.

BSC

Number of enterprises - reflects 'wage payers' (businesses with employees).

IRELAND

Statistical Institute Source

Data are provided by the Central Statistical Office via Eurostat.

National data are currently collected via an annual services inquiry and censuses of industry and construction using NACE Revision 1.1 converted to ISIC Revision 3 by the OECD. Estimates for ISIC Sectors 10-41 are drawn from the industrial census (sample survey) but with information provided only for enterprises with 3 or more persons engaged. The census of construction provides information for enterprises with 20 or more persons engaged.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for Ireland, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Census/Survey	1995-2002	
Production at producers' prices	Census/Survey	1995-2002	
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	Census/Survey	1995-2002	
Gross operating surplus	Census/Survey	1995-2002	
Total purchases of goods and services	Census/Survey	1995-2002	
Change in stocks of goods and services	N/A		
Purchases of energy products	Census/Survey	1995-2002	
Gross investment in tangible goods	Census/Survey	1995-2002	
Gross investment in land	Census/Survey	1995-2002	
Gross investment in existing buildings &	Census/Survey	1995-2002	
Gross investment in machinery & equipment	Census/Survey	1995-2002	
Sales of tangible investment goods	Census/Survey	1995-2002	
Net investment in tangible goods	Census/Survey	1995-2002	
Employment: number of persons engaged	Census/Survey	1995-2002	
Employment: number of employees	Census/Survey	1995-2002	
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	Census/Survey	1996-2002	
Hours worked by employees	Census/Survey	1996-2002	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Census/Survey	1995-2002	(1)
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Census/Survey	1995-2002	
Other employers' social contributions, employees	Census/Survey	1995-2002	
Number of enterprises	Register	1995-2002	
Number of establishments	N/A		

Notes

(1) See 'Methodological Breaks' below.

BSC

The table below provides a description of the coverage of the BSC database for Ireland, together with a

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Census/Survey	1995-2002	
Production at producers' prices	Census/Survey	1995-2002	
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	Census/Survey	1995-2002	
Gross operating surplus	Census/Survey	1995-2002	
Total purchases of goods and services	Census/Survey	1995-2002	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	Census/Survey	1999-2003	
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Census/Survey	1995-2002	
Employment: number of employees	Census/Survey	1995-2002	
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	Census/Survey	1996-2002	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Census/Survey	1995-2002	(1)
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Census/Survey	1995-2002	
Other employers' social contributions, employees	Census/Survey	1995-2002	
Number of enterprises	Register	1995-2002	
Number of establishments	N/A		

Notes

(1) See 'Methodological Breaks' below.

Methodological Breaks

Data in ISIC sectors 10-41 reflect enterprises with 3 or more persons engaged. Data for ISIC sector 45 reflect enterprises with 20 or more persons engaged. The BSC and SSIS databases are fully aligned, with only some minor differences reflecting rounding and timing. There is a break in the series, *number of enterprises*, between 1998 and 1999. Before 1999 this variable includes non-active units. From 1999 onwards non-active units are removed. *Compensation of labour* estimates in ISIC sectors 55-64 and 70-74 reflect *wages and salaries* for the years 1998-2000. From 2001 onwards they correctly reflect *compensation of labour*.

Variable Notes

For SSIS the following sectors, and, by association, any sectors of which they are a sub-sector, include parts or all of other sectors:

- *ISIC 1410* includes ISIC 1420
- *ISIC 1810* includes ISIC 1820
- ISIC 2212 includes ISIC 2213, 2219
- ISIC 2429 includes ISIC 243
- *ISIC 2812* includes ISIC 2813
- *ISIC 3320* includes ISIC 3330

ITALY

Statistical Institute Source

Data are provided by the National Institute of Statistics (ISTAT) via Eurostat.

National data are currently collected via two enterprise surveys. The first is a sample survey of small and medium enterprises and the second is an exhaustive survey of large enterprises. Up to and including 1997 enterprises with less than 20 persons engaged were captured via the sample survey and all other enterprises were surveyed exhaustively. Since 1998 the threshold has changed to less than 100 persons engaged. In addition, since 1999, administrative data on balance sheets and the number of employees have also been used. Data are collected using a NACE equivalent classification system converted to ISIC Revision 3 by the OECD.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for Italy, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Annual Survey	1995-2003	
Production at producers' prices	Annual Survey	1995-2003	
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	Annual Survey	1995-2003	
Gross operating surplus	Annual Survey	1995-2003	
Total purchases of goods and services	Annual Survey	1995-2003	
Change in stocks of goods and services	Annual Survey	1995-2003	
Purchases of energy products	Annual Survey	1995-2003	
Gross investment in tangible goods	Annual Survey	1999-2003	
Gross investment in land	Annual Survey	1999-2003	
Gross investment in existing buildings & structures	Annual Survey	1999-2003	
Gross investment in machinery & equipment	Annual Survey	1999-2003	
Sales of tangible investment goods	Annual Survey	1999-2003	
Net investment in tangible goods	Annual Survey	1999-2003	
Employment: number of persons engaged	Annual Survey	1995-2003	
Employment: number of employees	Annual Survey	1995-2003	
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	Annual Survey	1995, 1998-2001	
Hours worked by employees	Annual Survey	1996-2003	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Annual Survey	1995-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Annual Survey	1995-2003	
Other employers' social contributions, employees	Annual Survey	1995-2003	
Number of enterprises	Register	1995-2003	
Number of establishments	N/A		

BSC

The table below provides a description of the coverage of the BSC database for Italy, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Annual Survey	1995-2003	
Production at producers' prices	Annual Survey	1996-2003	
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	Annual Survey	1995-2003	
Gross operating surplus	Annual Survey	1996-2003	
Total purchases of goods and services	Annual Survey	1996-2003	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	Annual Survey	1995, 1997-2003	
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Annual Survey	1995-2003	
Employment: number of employees	Annual Survey	1996-2003	
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	N/A		
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Annual Survey	1996-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Annual Survey	1996-2003	
Other employers' social contributions, employees	Annual Survey	1996-2003	
Number of enterprises	Register	1996-2003	
Number of establishments	N/A		

Methodological Breaks

Data are consistent over time, although readers should note that the sampling techniques of the surveys changed between 1997 and 1998. Prior to 1998 all enterprises with 20 or more persons engaged were surveyed, with a sample survey used for smaller enterprises. Since 1998 all enterprises with 100 or more persons have been surveyed with a sample survey used for smaller enterprises. In addition, from 1999, administrative data on balance sheets and the number of employees have also been used. The BSC and SSIS databases are fully aligned although in some cases small differences arise, for example due to certain aggregations made in SSIS.

Variable Notes

SSIS and BSC

For SSIS the following sectors, and, by association, any sectors of which they are a sub-sector, include parts or all of other sectors:

- *ISIC 2320* includes ISIC 2310
- *ISIC 7010* includes ISIC 7020
- *ISIC 7310* includes ISIC 7320

JAPAN

Statistical Institute Source

Data are provided by the Japanese Ministry of Economy, Trade and Industry.

National data are currently collected using the JSIC Revision 11 System which replaced the JSIC Revision 10 System in March 2002.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for Japan, together with a description, where available, of the underlying data sources. The source information varies depending on the industrial sector covered. Three annual sources are used: a mining census, a manufacturing survey/census and a services survey - and a five-yearly source, that is, a commerce census.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	N/A		
Production at producers' prices	Mining, Manuf., Services, Commerce	1994-2003	(1) & (4)
Production at factor costs	N/A		
Value added at basic prices	Manuf., Services Census/Survey	1994-2003	(1)
Value added at factor costs	N/A		
Gross operating surplus	N/A		
Total purchases of goods and services	Manuf. Census/Survey	1994-2003	(1)
Change in stocks of goods and services	Manuf. Census/Survey	1994-2003	(1)
Purchases of energy products	Manuf. Census/Survey	1994-2003	(2)
Gross investment in tangible goods	Manuf. Census/Survey	1994-2003	(2)
Gross investment in land	Manuf. Census/Survey	1994-2003	(2)
Gross investment in existing buildings & structures	Manuf. Census/Survey	1994-2003	(2)
Gross investment in machinery & equipment	Manuf. Census/Survey	1994-2003	(2)
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Mining, Manuf., Services, Commerce	1994-2003	(1)
Employment: number of employees	Mining, Manuf., Services, Commerce	1994-2003	(1)
Employment: number of female employees	Mining, Manuf., Services, Commerce	1994-2003	(1)
Employment: number of employees (FTE units)	Services Census/Survey	2000	(1) & (3)
Hours worked by employees	N/A		
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Commerce Census/Survey	1994, 1999	(1) & (3)
Wages and salaries, all persons engaged	Mining, Manufacturing, Services	1994-2003	(1)
Wages and salaries, employees	Mining, Manuf. Census/Survey	1994-2003	(1)
Other employers' social contributions, employees	N/A		
Number of enterprises	N/A		
Number of establishments	Register	1994-2003	(1)

Notes

- (1) The coverage of activity for each variable varies depending on the sector covered, as described in more detail in the sections that follow below- for example all manufacturing estimates reflect activity in establishments with 4 or more persons engaged whereas in other sectors all establishments are in scope, (2) Investment data are compiled for manufacturing only (except for ISIC 1010) and reflects establishments with 10 or more persons engaged in 2001 and earlier and 30 or more persons engaged in 2002 onwards.
- (3) Wholesale and Retail sectors only (ISIC 50_52).
- (4) Production data for the wholesale/retail sector more accurately reflect turnover at market prices.

BSC

The table below provides a description of the coverage of the BSC database for Japan, together with a description, where available, of the underlying data sources. The statistical unit used to estimate BSC variables is the establishment.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	N/A		
Production at producers' prices	Manuf. Commerce	1990,2,4,5,7,8,9, 2001,2003	
Production at factor costs	N/A		
Value added at basic prices	Manuf.	1990,2,4,5,7,8,9, 2001,2003	
Value added at factor costs	N/A		
Gross operating surplus	N/A		
Total purchases of goods and services	N/A		
Change in stocks of goods and services	Manuf. Census	2003	
Purchases of energy products	Manuf. Census	2003	
Gross investment in tangible goods	Manuf. Census/Survey	1994,7,8,9,2001,2003	
Gross investment in land	Manuf. Census	2003	
Gross investment in existing buildings & structures	Manuf. Census	2003	
Gross investment in machinery & equipment	Manuf. Census	2003	
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Manuf. Commerce	1990,2,4,5,7,2001,2003	
Employment: number of employees	Manuf. Census/Survey	1995,7,8,9,2001,2003	
Employment: number of female employees	Manuf.	1998,9,2001,2003	
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	N/A		
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	N/A		
Wages and salaries, all persons engaged	Manuf.	1990,2,4,5,7,2001,2003	
Wages and salaries, employees	Manuf.	1998,9,2001,2003	
Other employers' social contributions, employees	N/A		
Number of enterprises	N/A		
Number of establishments	Register	1990,2,4,5,7,8,9,2001	

Methodological Breaks

There are a number of methodological breaks in both the SSIS and BSC datasets, principally reflecting changes in the coverage of establishments over time, sector and variable; as listed below. Readers should also note that although the BSC and SSIS datasets align reasonably well, some differences occur because the concordance relationships used in moving from JSIC to ISIC are not exactly the same at the 4-digit level (and sometimes higher), which is partly the consequence of the move from JSIC 10 to JSIC 11 and the different timing of BSC and SSIS data deliveries. This, in the main, affects the comparability of BSC and SSIS databases, although not significantly.

Variable Notes

SSIS and BSC

Mining and Quarrying Sectors

Value added at basic prices – is net of depreciation.

Employment: number of persons engaged – includes the number of employees as defined below and temporary employees employed by the day or with contracts of less than one month's duration.

Employment: number of employees - includes all employees with contracts of more than one month and temporary employees provided by employment agencies.

Manufacturing

From 2002 onwards, ISIC 22.1 is excluded from the total for ISIC 22 and the totals for manufacturing, ISIC 15 37.

Variables are compiled on the basis of establishment data but the coverage varies by variable. In census years (those ending with a 0, 3, 5, or 8) all establishments are surveyed and, in other years, only establishments with 4 or more persons engaged are surveyed. Despite the exhaustive census coverage however, unless otherwise specified, all variables reflect establishments with 4 or more persons engaged. Readers interested in information for establishments with fewer than 4 employees should contact METI directly who estimate the contribution of these establishments for the following variables: number of establishments, number of employees, wages and salaries, production and total purchases of goods and services.

Production - Production for establishments with between 4 and 29 persons engaged is equal to the value of shipments with no adjustments made for changes in inventories. Capital assets produced on own-account for own-use are not included in production and no adjustment is made for goods bought and sold without further processing in the same year irrespective of the establishment size.

Value-added at basic prices – For establishments with 30 or more persons engaged, value-added is calculated as production minus purchases of goods, subcontracting services and depreciation, where production is defined as above. For establishments with between 10 and 29 persons engaged, value-added is calculated on the same basis as 30+ establishments except in 2001 onwards it is calculated gross of depreciation. Establishments with between 4 and 9 persons are calculated as above but all estimates are calculated gross of depreciation.

Change in stocks of goods and services, Purchases of energy products – For BSC both of these variables refer to establishments with 30 or more persons engaged.

Gross investment in tangible goods, Gross investment in land, Gross investment in existing buildings & structures, and Gross investment in machinery & equipment – For SSIS data all investment variables reflect establishments with 30 or more persons engaged in 2002 and 2003 and 10 or more persons engaged in earlier years. For BSC data all investment data relate to establishments with 30 or more persons engaged.

Employment: number of persons engaged – includes the number of employees as defined below, temporary employees employed by the day or with contracts of less than one month's duration, the self-employed and unpaid family workers. All data refer to establishments with 4 or more persons engaged except 2003 BSC data, which refer to establishments with one or more persons engaged.

Employment: number of employees - includes all employees with contracts of more than one month and temporary employees provided by employment agencies and employees working 18 days or more in two consecutive months. All data refer to establishments with 4 or more persons engaged except 2003 BSC data, which refer to establishments with one or more persons engaged.

Wages and salaries, number of persons engaged – For SSIS, data reflect wages and salaries of persons engaged in establishments with 4 or more persons engaged. For BSC, data up to and including 2001 also refer to establishments with 4 or more persons engaged. 2003 BSC data, however, reflect establishments with 1 or more persons engaged.

Wages and salaries, employees – For SSIS, data reflect wages and salaries of employees in establishments with 30 or more persons engaged. For BSC, before 2001 all data refer to establishments with 4 or more persons engaged. For 2001 onwards BSC data reflect establishments with 30 or more persons engaged.

Wholesale/Retail Sectors (ISIC 50-52)

Estimates for the wholesale/retail sector correspond to all establishments irrespective of the number of persons engaged.

Production at producers' prices – is actually measured at market prices, since it includes consumption taxes, and more accurately reflects **turnover** at market prices.

Employment: number of persons engaged – includes the number of employees (as defined below) temporary employees employed by the day or with contracts of less than one month's duration, the self-employed and unpaid family workers.

Employment: number of employees - includes all employees with contracts of more than one month and temporary employees provided by employment agencies and employees working 18 days or more in two consecutive months.

Non Retail/Wholesale Services

The statistical unit used for this sector is the establishment except for ISIC 742 and 9211 which are compiled on an enterprise basis. Estimates for this sector correspond to all establishments irrespective of the number of persons engaged.

Production at producers' prices – is actually measured at market prices, since it includes consumption taxes.

Employment: number of persons engaged – includes the number of employees (as defined below) temporary employees employed by the day or with contracts of less than one month's duration, the self-employed and unpaid family workers.

Employment: number of employees - includes all employees with contracts of more than one month and temporary employees provided by employment agencies and employees working 18 days or more in two consecutive months.

KOREA

Statistical Institute Source

Data are provided by the *National Statistical Office*. National data are currently collected via a number of annual sources: censuses of mining, manufacturing and utilities (ISIC 10_41) in years ending in 3 or 8, with surveys in intervening years and for all other sectors, using a SIC classification that is consistent with ISIC Revision 3 up to the 4-digit level. The census covers all establishments whereas the surveys for ISIC sectors 10_41 cover only establishments with 5 or more persons engaged. For establishments with less than 5 persons engaged (in ISIC sectors 10_41) a less detailed questionnaire is used. As such and also for consistency across time, for ISIC sectors 10_41, only data for establishments with 5 or more persons engaged are presented in the BSC and SSIS datasets. All other surveys (covering ISIC sectors 50_93) capture establishments with 1 or more persons engaged and the BSC and SSIS data concord with this.

SSIS

The table below provides a description of the coverage of the SSIS database for Korea together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Census/Survey	1995-2003	
Production at producers' prices	Census/Survey	1990-2003	(1)
Production at factor costs	N/A		
Value added at basic prices	Census/Survey	1990-2003	(2)
Value added at factor costs	N/A		
Gross operating surplus	Census/Survey	1990-1997, 2000-2003	(2)
Total purchases of goods and services	Census/Survey	2000-2003	
Change in stocks of goods and services	Census/Survey	2000-2003	
Purchases of energy products	Census/Survey	2000-2003	
Gross investment in tangible goods	Census/Survey	1990-2003	
Gross investment in land	Census/Survey	2000-2003	
Gross investment in existing buildings & structures	Census/Survey	2000-2003	
Gross investment in machinery & equipment	Census/Survey	1990-2003	
Sales of tangible investment goods	Census/Survey	1995-2003	
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Census/Survey	1990-2003	(3)
Employment: number of employees	Census/Survey	1990-2003	(3)
Employment: number of females employees	Census/Survey	1990-2003	(3)
Employment: number of employees (FTE units)	Census/Survey	2002-2003	(3)
Hours worked by employees	Census/Survey	1995-2003	
Compensation of labour, all persons engaged	Census/Survey	2000-2003	
Compensation of labour, employees	Census/Survey	1990-1997, 2000-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Census/Survey	1990-2003	
Other employers' social contributions, employees	Census/Survey	1990-1997, 2000-2003	
Number of enterprises	N/A		
Number of establishments	Census/Survey	1995-2003	

Notes

- (1) Production estimates in ISIC sectors 10_41 are not adjusted for goods purchased and sold in the same condition during the year. Works in progress are not included.
- (2) Value added does not exclude intermediate consumption of services. Gross operating surplus, calculated as value added minus compensation of employees, is correspondingly affected.
- (3) Estimates are based on average employment during the year.

BSC

The table below provides a description of the coverage of the BSC database for Korea, together with a description, where available, of the underlying data sources. Estimates for ISIC sectors 10_41 show data only

for establishments with 5 or more persons engaged. Data for all other sectors (ISIC 50_93) reflect establishments with 1 or more persons engaged. Data for ISIC sectors 60_63 in BSC size class, NSC 4, and shown in this publication as the 50-199, reflect all establishments with 50 or more persons engaged. For ISIC sectors 50_55 and 70_93, data in size class 20-49 (NSC 3) reflect all establishments with 20 or more persons engaged.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Census/Survey	1997-2003	
Production at producers' prices	Census/Survey	1990-1997, 1999-2003	(1)
Production at factor costs	N/A		. ,
Value added at basic prices	Census/Survey	1990-2003	(2)
Value added at factor costs	N/A		
Gross operating surplus	Census/Survey	1999-2003	(2)
Total purchases of goods and services	Census/Survey	1999-2003	
Change in stocks of goods and services	Census/Survey	1999-2003	
Purchases of energy products	Census/Survey	1999-2003	
Gross investment in tangible goods	Census/Survey	1999-2003	
Gross investment in land	Census/Survey	1999-2003	
Gross investment in existing buildings & structures	Census/Survey	1999-2003	
Gross investment in machinery & equipment	Census/Survey	1999-2003	
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Census/Survey	1990-2003	(3)
Employment: number of employees	Census/Survey	1995-2003	(3)
Employment: number of females employees	Census/Survey	1997-2003	(3)
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	N/A		
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Census/Survey	1997-2003	(4)
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Census/Survey	1995-2003	
Other employers' social contributions, employees	Census/Survey	1999-2003	
Number of enterprises	N/A		
Number of establishments	Census/Survey	1990-2003	

Notes

- (1) Production estimates in ISIC sectors 10_41 are not adjusted for goods purchased and sold in the same condition during the year. Works in progress are not included.
- (2) Value added does not exclude intermediate consumption of services. Gross operating surplus, calculated as value added minus compensation of employees, is correspondingly affected.
- (3) Estimates are based on average employment during the year.
- (4) For ISIC sectors 50_93, this corresponds to compensation of labour, all persons engaged.

Methodological Breaks

The BSC and SSIS databases are typically aligned although some differences arise partly reflecting timing and partly reflecting slightly different concordance relationships used for detailed sectors in some years, notably in 1990 data. Although both the BSC and SSIS data are consistent over time, readers should note the different coverage of sectors within years. ISIC sectors 10_41 cover only establishments with 5 or more persons engaged. All other sectors cover establishments with 1 or more persons engaged.

Variable Notes

SSIS and BSC

Production at producers' prices – does not include works in progress, own-account capital production, and, for ISIC sectors 10_41, does not include adjustments for goods where no further processing has been undertaken and bought and sold within the year.

Value added at basic prices, Gross operating surplus – these measures follow the census concept and so do not exclude intermediate consumption of non-industrial services.

Compensation of labour, employees - Estimates for ISIC sectors 50_93 reflect all persons engaged.

LUXEMBOURG

Statistical Institute Source

Data are provided by the Central Service for Statistics and Economic Studies via Eurostat.

National data are currently collected via annual sample surveys, administrative sources and company accounts. Surveys are exhaustive for enterprises with 50 or more employees or with turnover of more than approximately EUR 7 billion. Data are collected using a NACE Revision 1 equivalent classification system, converted to ISIC Revision 3 by the OECD.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for Luxembourg, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Survey/Admin/Company accounts	1995-2002	
Production at producers' prices	Survey/Admin/Company accounts	1995-2002	
Production at factor costs	N/A		
Value added at basic prices	Survey/Admin/Company accounts	1995-2001	
Value added at factor costs	Survey/Admin/Company accounts	1995-2002	
Gross operating surplus	Survey/Admin/Company accounts	1995-2002	
Total purchases of goods and services	Survey/Admin/Company accounts	1995-2002	
Change in stocks of goods and services	N/A		
Purchases of energy products	Survey/Admin/Company accounts	1995-1998	
Gross investment in tangible goods	Survey/Admin/Company accounts	1995-1998	
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	Survey/Admin/Company accounts	1995-1998	
Sales of tangible investment goods	Survey/Admin/Company accounts	1995-1998	
Net investment in tangible goods	Survey/Admin/Company accounts	1995-1998	
Employment: number of persons engaged	Survey/Admin/Company accounts	1995-2002	
Employment: number of employees	Survey/Admin/Company accounts	1995-2002	
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	N/A		
Hours worked by employees	Survey/Admin/Company accounts	1995,1998	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Survey/Admin/Company accounts	1995-2002	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Survey/Admin/Company accounts	1995-2002	
Other employers' social contributions, employees	Survey/Admin/Company accounts	1995-2002	
Number of enterprises	Register	1995-2002	
Number of establishments	N/A		

BSC

The table below provides a description of the coverage of the BSC database for Luxembourg, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Survey/Admin/Company accounts	1995,1998	
Production at producers' prices	Survey/Admin/Company accounts	1995,1998	
Production at factor costs	N/A		
Value added at basic prices	Survey/Admin/Company accounts	1998	
Value added at factor costs	Survey/Admin/Company accounts	1995,1998	
Gross operating surplus	Survey/Admin/Company accounts	1995,1998	
Total purchases of goods and services	Survey/Admin/Company accounts	1995,1998	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	N/A		
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Survey/Admin/Company accounts	1995,1998	
Employment: number of employees	Survey/Admin/Company accounts	1995,1998	
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	Survey/Admin/Company accounts	1995,1998	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Survey/Admin/Company accounts	1995,1998	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Survey/Admin/Company accounts	1995,1998	
Other employers' social contributions, employees	Survey/Admin/Company accounts	1995,1998	
Number of enterprises	Register	1995,1998	
Number of establishments	N/A		

Methodological Breaks

The BSC and SSIS databases are fully aligned, with minor differences reflecting rounding, timing, and for some sectors differences in aggregation (see below).

Variable Notes

For SSIS the following sectors, and, by association, any sectors of which they are a sub-sector, include parts or all of other sectors:

- *ISIC 1722* includes ISIC 1729
- *ISIC 1810* includes ISIC 1820
- *ISIC 2021* includes ISIC 2022-2029
- ISIC 2429 includes all ISIC 24
- *ISIC 2511* includes ISIC 2519
- ISIC 2694 includes all ISIC 26
- *ISIC 281* excludes ISIC 2812, 2813
- *ISIC* 2892 includes ISIC 2891, 2893, 2899, 2812, 2813
- ISIC 2922 includes all ISIC 29
- *ISIC 3190* includes all ISIC 31 ex 3130
- ISIC 3230 includes all ISIC 30, 3210, 3220
- ISIC 3420 includes all ISIC 34, 3530

- ISIC 3694 includes all ISIC 369
- *ISIC 3720* includes all ISIC 3710
- ISIC 4010 includes all ISIC 40
- *ISIC 4550* includes all ISIC 4510
- *ISIC 6210* includes all ISIC 6220

MEXICO

Statistical Institute Source

Data for the period 1994-2000 are provided by the *National Institute of Statistics, Geography and Informatics* (INEGI). Data for 2003, based on the 2004 Economic Census, have been drawn directly from INEGI's website.

National data are currently collected using the NAICS 2002 System, which replaced the NAICS 1997 System. This, in turn, replaced the CMAP System in 1999, which was related to ISIC Revision 2 but the estimates provided in the SDBS database have been converted into an ISIC Revision 3 basis.

Coverage and Data Sources

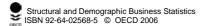
SSIS

The table below provides a description of the coverage of the SSIS database for Mexico, together with a description, where available, of the underlying data sources. The statistical unit used to estimate SSIS variables is the establishment, or more usually the legal unit, for manufacturing, trade and services industries but the enterprise is typically used in other sectors. Not all businesses are covered by the SSIS database in the 1994-2000 period, only enterprises or establishments that are classified as large (those with more than MXN 1.6 million and/or more than 50 persons engaged) are covered. In 1998 this coverage reflected about 11% of the country's total labour force. The 2003 data are based on the 2004 economic census and, so, therefore include, in theory, all establishments.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	N/A		
Production at producers' prices	Annual/Monthly Industrial Survey & Economic Census	1994-2000, 2003	
Production at factor costs	N/A		
Value added at basic prices	As above	1994-2000, 2003	(1)
Value added at factor costs	N/A		
Gross operating surplus	N/A		
Total purchases of goods and services	Economic Census	2003	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	Annual/Monthly Industrial Survey & Economic Census	1994-2000	
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	As above	1994-2000	
Sales of tangible investment goods	N/A		
Net investment in tangible goods	Economic Census	2003	
Employment: number of persons engaged	Annual/Monthly Industrial Survey & Economic census	1994-2000, 2003	
Employment: number of employees	N/A		
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	N/A		
Hours worked by employees	As above	1994-2000	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	As above	1994-2000, 2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	N/A		
Other employers' social contributions, employees	As above	1994-2000	
Number of enterprises	N/A		
Number of establishments	As above	1994-2000, 2003	

Notes

(1) At producers' prices.



BSC

The table below provides a description of the coverage of the BSC database for Mexico together with a description, where available, of the underlying data sources. The statistical unit used to estimate BSC variables is the establishment, or more usually the legal unit for manufacturing, trade and services industries but the enterprise is typically used in other sectors. All establishments are in scope of the census.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	N/A		
Production at producers' prices	Economic Census	2003	
Production at factor costs	N/A		
Value added at basic prices	Economic Census	2003	(1)
Value added at factor costs	N/A		
Gross operating surplus	N/A		
Total purchases of goods and services	Economic Census	2003	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	N/A		
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	Economic Census	2003	
Employment: number of persons engaged	Economic Census	1998, 2003	
Employment: number of employees	N/A		
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	N/A		
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Economic Census	2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	N/A		
Other employers' social contributions, employees	N/A		
Number of enterprises	Economic Census	1998	
Number of establishments	Economic Census	1998, 2003	

Notes

(1) At producers' prices.

Methodological Breaks

The change from the CMAP classification system to NAICS 97 in 1999 may affect comparisons of data before and after 1998. 2003 data are only partially comparable with earlier data since the concordance relationships used to derive ISIC Revision 3 equivalents from NAICS 2002 data were conducted at a relatively aggregated level. Comparisons of the BSC and SSIS databases are complicated by differences in coverage in 1998. For 1998 data, better convergence between the two datasets can be achieved by comparing BSC data for establishments/enterprises with 50 more or more persons engaged and the SSIS data but some differences will still exist, reflecting in part the fact that the coverage of SSIS data also includes businesses with more than MXN 1.6 million in revenue as well as differences in classification systems and in timing between the BSC and SSIS datasets. SSIS and BSC data in 2003 are fully consistent.

Readers should note the concordance relationships used in the following sectors for all BSC and SSIS variables in 2003:

- ISIC 15_37, total manufacturing includes all of NAICS 51, meaning that ISIC 15_37 includes part of ISIC 74 and all of ISIC 72.21, 921.-3 and 64.2.
- ISIC 50 52 excludes maintenance and repair activities that are instead included in ISIC 90 93.
- ISIC 70_74 See above for 15_37.
- ISIC 90_93 includes maintenance and repair activities that should be part of ISIC 50 and 52 and excludes all of ISIC 92.1.

Variable Notes

SSIS and BSC

Value added at basic prices – is valued at producers prices.

NETHERLANDS

Statistical Institute Source

Data are provided by the Central Bureau of Statistics via Eurostat.

National data are currently collected via annual surveys, where the sample varies by industrial sector and size class, and administrative (VAT) data, using a classification system compatible with NACE Revision 1, converted to ISIC Revision 3 by the OECD.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for the Netherlands, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Annual Survey/Admin. data	1995-2003	
Production at producers' prices	Annual Survey/Admin. data	1995-2003	
Production at factor costs	N/A		
Value added at basic prices	Annual Survey/Admin. data	1995-1997	
Value added at factor costs	Annual Survey/Admin. data	1995-2003	
Gross operating surplus	Annual Survey/Admin. data	1995-2003	
Total purchases of goods and services	Annual Survey/Admin. data	1995-2003	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	Annual Survey/Admin. data	1995-2003	
Gross investment in land	Annual Survey/Admin. data	1995-2003	
Gross investment in existing buildings & structures	Annual Survey/Admin. data	1995-2003	
Gross investment in machinery & equipment	Annual Survey/Admin. data	1995-2003	
Sales of tangible investment goods	Annual Survey/Admin. data	1995-2003	
Net investment in tangible goods	Annual Survey/Admin. data	1995-2003	
Employment: number of persons engaged	Annual Survey/Admin. data	1995-2003	
Employment: number of employees	Annual Survey/Admin. data	1995-2003	
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	Annual Survey/Admin. data	1995-2003	
Hours worked by employees	Annual Survey/Admin. data	1995-2003	(1)
Compensation of labour, all persons engaged	N/A		, ,
Compensation of labour, employees	Annual Survey/Admin. data	1995-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Annual Survey/Admin. data	1995-2003	
Other employers' social contributions, employees	Annual Survey/Admin. data	1995-2003	
Number of enterprises	Register	1995-2003	
Number of establishments	N/A		

Notes

(1) Data for ISIC sector 1531 in 2001 reflect data transmitted to the OECD. However a transmission error appears to have occurred that could not be rectified at the time of writing. Readers are advised to use the equivalent BSC figures and adjust the totals for 153, 15 and 15_37 accordingly.

BSC

The table below provides a description of the coverage of the BSC database for the Netherlands, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Annual Survey/Admin. data	1995-2003	
Production at producers' prices	Annual Survey/Admin. data	1995-2003	
Production at factor costs	N/A		
Value added at basic prices	Annual Survey/Admin. data	1995-1997	
Value added at factor costs	Annual Survey/Admin. data	1995-2003	
Gross operating surplus	Annual Survey/Admin. data	1995-2001,2003	(1)
Total purchases of goods and services	Annual Survey/Admin. data	1995-2003	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	Annual Survey/Admin. data	1998-1999	(2)
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Annual Survey/Admin. data	1999-2003	
Employment: number of employees	Annual Survey/Admin. data	1999-2003	(3)
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	Annual Survey/Admin. data	1999-2003	(3)
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Annual Survey/Admin. data	1995-98, 2000-01-03	(4)
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Annual Survey/Admin. data	1995-2003	
Other employers' social contributions, employees	Annual Survey/Admin. data	1995-2003	
Number of enterprises	Register	1995-2003	
Number of establishments	N/A		

Notes

- (1) Estimates of gross operating surplus in 1999 reflect value-added at factor costs. Figures of gross operating surplus consistent with those used in SSIS can be derived in 1999 and 2002 by taking value added at factor costs minus compensation of labour, employees, see note (4) Data for ISIC 40_41 in 2002 reflect original data transmitted to the OECD. They are not consistent with value-added at factor costs minus compensation of employees nor with SSIS data. Readers are advised to use estimates of value-added minus compensation of employees instead. The totals transmitted for ISIC 10_14 in 1999 have been replaced by their SSIS equivalents.
- (2) 1999 data in ISIC 50_55 are not consistent with 1998 nor SSIS.
- (3) Original data transmitted to the OECD for ISIC 45 reflected only the population of enterprises with less than 250 persons engaged. Totals have been re-estimated using SSIS data with 250+ enterprises calculated as a residual.
- (4) Compensation of labour employees in 1999 and 2002 can be derived as sum of wages and salaries, employees and other employers' contributions.

Methodological Breaks

The BSC and SSIS databases are broadly aligned although in some cases differences arise, for example due to certain aggregations made in SSIS, timing and rounding differences. Specific areas of difference are described in the notes above and below. Fundamental changes were made to the statistical processing system, affecting BSC and SSIS data from 2000 onwards. These changes may have affected the comparability of data before and after 2000.

Variable Notes

SSIS

Hours worked by employees- Data for ISIC sector 1531 in 2001 reflect the data transmitted to the OECD. However a transmission error appears to have occurred that could not be rectified at the time of writing. Readers are advised to use the equivalent BSC figures and adjust the totals for 153, 15 and 15_37 accordingly.

Number of enterprises – Numbers of enterprises are rounded to the nearest 5. This affects also the BSC data.

BSC

Gross operating surplus - 1999 data reflect value-added at factor costs. Figures of gross operating surplus consistent with those used in SSIS can be derived in 1999 and 2002, which is missing, by taking value added at factor costs minus compensation of labour, employees. Data for ISIC 40_41 in 2002 reflect original data transmitted to the OECD and is not consistent with value-added at factor costs minus compensation of employees nor with SSIS data. Readers are advised to use estimates of value-added minus compensation of employees instead. The totals transmitted for ISIC sectors 10_14 in 1999 have been replaced by their SSIS equivalents.

Gross investment in tangible goods - 1999 data in ISIC sectors 50_55 are not consistent with 1998 nor with SSIS.

Compensation of labour employees - 1999 and 2002 data can be derived as sum of wages and salaries, employees and other employers' contributions.

NEW ZEALAND

Statistical Institute Source

Data are provided by Statistics New Zealand.

National data are currently collected using the ANZSIC system. This was used in the annual enterprise survey (AES) for the first time in 1998 and the annual business frame (register) in 1997. Prior to these dates the AES and annual business frames were collected on an NZSIC basis. The business frame is maintained using information from Inland Revenue, such as Goods and Services Tax (GST) registrations and Employee Monthly Schedule (EMS) returns, as well as *Statistics New Zealand* survey information.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for New Zealand, together with a description, where available, of the underlying data sources. The statistical unit used to estimate SSIS variables is the local activity unit.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Annual Enterprise Survey	2002-2004	
Production at producers' prices	Annual Enterprise Survey	1996-2004	
Production at factor costs	N/A		
Value added at basic prices	Annual Enterprise Survey	1996-2004	(1)
Value added at factor costs	N/A		
Gross operating surplus	Annual Enterprise Survey	2002-2004	
Total purchases of goods and services	Annual Enterprise Survey	2002-2004	
Change in stocks of goods and services	Annual Enterprise Survey	2002-2004	
Purchases of energy products	N/A		
Gross investment in tangible goods	Annual Enterprise Survey	1996-2004	
Gross investment in land	Annual Enterprise Survey	2002-2004	
Gross investment in existing buildings & structures	Annual Enterprise Survey	2002-2004	
Gross investment in machinery & equipment	Annual Enterprise Survey	1996-2004	
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Annual Business Frame	1991-2002	(2)
Employment: number of employees	Annual Business Frame	1991-2005	(2)
Employment: number of females employees	Quarterly Employment Survey	1991-2002	
Employment: number of employees (FTE units)	N/A		
Hours worked by employees	Quarterly Employment Survey	1991-2004	
Compensation of labour, all persons engaged	Annual Enterprise Survey	1996-2004	
Compensation of labour, employees	Annual Enterprise Survey	2002-2004	
Wages and salaries, all persons engaged	Annual Enterprise Survey	2002-2004	
Wages and salaries, employees	Annual Enterprise Survey	2002-2004	
Other employers' social contributions, employees	Annual Enterprise Survey	2002-2004	•
Number of enterprises	Annual Business Frame	1992-2005	(2)
Number of establishments	Annual Business Frame	1991-2005	(2)

Notes

- (1) At producers' prices.
- (2) Reflects the position in February of each year.

BSC

The table below provides a description of the coverage of the BSC database for New Zealand, together with a description, where available, of the underlying data sources. The statistical unit used to estimate BSC variables is the local activity unit.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Annual Enterprise Survey	2003	
Production at producers' prices	Annual Enterprise Survey	2003	
Production at factor costs	N/A		
Value added at basic prices	Annual Enterprise Survey	2003	(1)
Value added at factor costs	N/A		
Gross operating surplus	N/A		
Total purchases of goods and services	N/A		
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	Annual Enterprise Survey	2003	
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Annual Business Frame	1996-1998	(2)
Employment: number of employees	Annual Business Frame	1996, 1997, 2000-04	(2)
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	N/A		
Compensation of labour, all persons engaged	Annual Enterprise Survey	2003	
Compensation of labour, employees	N/A		
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Annual Enterprise Survey	2003	
Other employers' social contributions, employees	N/A		
Number of enterprises	Annual Business Frame	1996, 1997, 2000-04	(2)
Number of establishments	Annual Business Frame	2000-04	(2)

- (1) At producers' prices.
- (2) Reflects the position in February of each year.

Methodological Breaks

All variables measured by the annual enterprise survey reflect economically significant enterprises. These are defined as enterprises that meet at least one of the following criteria:

- Greater than NZD 30, 000 annual GST expenses or sales.
- Rolling mean employee count of greater than three.
- Is in a GST exempt industry (ex residential property leasing and rental).
- Is part of a group of enterprises.
- Is registered for GST and involved in agriculture or forestry.

The coverage of variables collected using the Annual Enterprise Survey (AES) has been subject to change over time. In 1998 the AES included private sector participants in the sewerage and drainage services and water supply industries, horticulture and fruit growing, livestock and cropping farming, dairy cattle farming, other farming and commercial property operators and developers. In 1999 the following industries were included: superannuation, creative arts, sports and services to sports, and interest groups not elsewhere classified.

The same is true of Annual Business Frame Survey based data. In 2003 there was a significant change in the strategy used to maintain the business frame which involved a greater use of administrative data to maintain the business frame. A summary of the changes that have resulted from this change and that affect data comparability include:

- change in the employment measure on the business frame from the full-time equivalent employee measure to the employee count. This change affects in the main the comparability of BSC statistics. However in an attempt to preserve continuity, estimates of establishments, enterprises, and employees have been recalculated on the same basis back to 2000;
- increasing the coverage of the business frame to include all employing businesses, and reactivating previously ceased businesses that show GST activity; and
- improving coverage of GST-exempt industries by making greater use of tax data (sourced from the Employer Monthly Schedule and Inland Revenue tax returns).

In addition, readers should note that the coverage of the annual business frame has changed over time, a point that largely affects industry aggregations such as total economy, total services, etc. but generally has little effect on ISIC 2, 3 or 4-digit comparability. 2004 data include all industrial activity; 1999–2003, excludes agriculture production (ANZSIC subdivision A01); 1998 includes all industrial activity; 1997 excludes agriculture production (ANZSIC subdivision A01); 1996 excludes agriculture production (NZSIC major group 111), residential property leasing and rental (NZSIC subgroup 83121), religious organisations (NZSIC subgroup 93910), social and related community services (NZSIC 93990) and sporting and recreational clubs (NZSIC subgroup 94402); and 1995, excludes agriculture production (NZSIC major group 111), residential property leasing and rental (NZSIC subgroup 83121), commercial property leasing and rental (NZSIC subgroup 93402), other welfare institutions (NZSIC subgroup 93403), business, professional and labour associations (NZSIC subgroup 93500), religious organisations (NZSIC subgroup 93910), social and related community services (NZSIC 93990) and sporting and recreational clubs (NZSIC subgroup 94402). 1994 and earlier years include agriculture.

Finally readers should note that information provided by the annual enterprise survey is based on financial year reporting, which differs by sector as shown below. No adjustment is made to convert financial year data into calendar years.

Predominant Balance Dates by ANZSIC division

INDUSTRY

A- Agriculture, forestry and fishing	March
B- Mining	December
C- Manufacturing	March
D- Electricity Generation and Supply, Gas and Water Supply	June
E-Construction	March
F-Wholesale Trade	March
G -Retail Trade	March
H-Accommodation, Cafés and Restaurants	March
I & J- Transport, Storage and communication	June
K- Finance and Insurance	June
L- Property and Business Services	March
M-Government Administration and Defence	June
N- Education	December
O- Health and Community Services	June
P- cultural and Recreational Services	March
Q- Personal and other Community Services	March

Source: Statistics New Zealand.

Variable Notes

SSIS and BSC

Hours worked by employees- refers to average hours worked in a reference week.

NORWAY

Statistical Institute Source

Data are provided by Statistics Norway via Eurostat.

National data are currently collected via annual numerous sources including: annual inquires; the statistical register; annual company accounts and the VAT register. Data are collected on a NACE Revision 1 equivalent classification system converted to ISIC Revision 3 by the OECD. The population of enterprises covered varies by sector – for the manufacturing and mining sectors, sole proprietors with no employees and local kind-of-activity-units with employment of less than half a man-year are not included. Recent estimates (for 2004) by Statistics Norway put the number of local kind-of-activity-units at 11,164, employing 10,483 persons, with a gross value of production of NOK 6,598 billion and a value added of NOK 2,653 billion. In other sectors all enterprises are covered irrespective of their size.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for Norway, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Survey/Registers/Accounts	1996-2002	
Production at producers' prices	Survey/Registers/Accounts	1996-2002	
Production at factor costs	N/A		
Value added at basic prices	Survey/Registers/Accounts	1999-2002	
Value added at factor costs	Survey/Registers/Accounts	1996-2002	
Gross operating surplus	Survey/Registers/Accounts	1996-2002	
Total purchases of goods and services	Survey/Registers/Accounts	1996-2002	
Change in stocks of goods and services	Survey/Registers/Accounts	1995-2003	
Purchases of energy products	Survey/Registers/Accounts	1996-2002	
Gross investment in tangible goods	Survey/Registers/Accounts	1996-2002	
Gross investment in land	Survey/Registers/Accounts	1996-2002	
Gross investment in existing buildings & structures	Survey/Registers/Accounts	1996-2002	
Gross investment in machinery & equipment	Survey/Registers/Accounts	1996-2002	
Sales of tangible investment goods	Survey/Registers/Accounts	1996-2002	
Net investment in tangible goods	Survey/Registers/Accounts	1996-2002	
Employment: number of persons engaged	Survey/Registers/Accounts	1996-2002	
Employment: number of employees	Survey/Registers/Accounts	1996-2002	
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	Survey/Registers/Accounts	1996-2002	
Hours worked by employees	Survey/Registers/Accounts	1996-2002	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Survey/Registers/Accounts	1996-2002	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Survey/Registers/Accounts	1996-2002	
Other employers' social contributions, employees	Survey/Registers/Accounts	1996-2002	
Number of enterprises	Register	1996-2002	
Number of establishments	N/A		

BSC

The table below provides a description of the coverage of the BSC database for Norway together with a description, where available, of the underlying data sources.

Turnover or gross premiums written	Survey/Registers/Accounts	1996-2000,2002	
		1000 2000,2002	
Production at producers' prices	Survey/Registers/Accounts	1996-2000,2002	
Production at factor costs	N/A		
Value added at basic prices	Survey/Registers/Accounts	1999-2000,2002	
Value added at factor costs	Survey/Registers/Accounts	1996-2000,2002	
Gross operating surplus	Survey/Registers/Accounts	1996-2000,2002	(1)
Total purchases of goods and services	Survey/Registers/Accounts	1996-2000,2002	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	Survey/Registers/Accounts	1997,1999-2003	(2)
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Survey/Registers/Accounts	1996-2000,2002	
Employment: number of employees	Survey/Registers/Accounts	1996-2000,2002	
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	Survey/Registers/Accounts	1996-2000,2002	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Survey/Registers/Accounts	1996-2000,2002	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Survey/Registers/Accounts	1996-2000,2002	
Other employers' social contributions, employees	Survey/Registers/Accounts	1996-2000,2002	
Number of enterprises	Register	1996-2000,2002	
Number of establishments	N/A		

- (1) 1999 data reflect value added. Correct estimates of gross operating surplus can be derived as value added at factor costs minus compensation of employees.
- (2) Gross investment data in 1999 reflect the data provided to the OECD but should be used with caution.
- (3) All data in ISIC sectors 50_52 in 1998 have been suppressed by the OECD.

Methodological Breaks

The key point concerns the comparability across sectors. The population of enterprises covered varies by sector – for the manufacturing and mining sectors, enterprises with individual proprietorship, where the owner works alone and local kind-of-activity-units with employment of less than half a man-year are not included. For other sectors all enterprises are captured. The BSC and SSIS databases are fully aligned with only a few exceptions:

- (1) ISIC Sector 603 is shown as zero in 2000 in the BSC database for all variables, but activity is recorded in the SSIS database. ISIC Sector 60 is similarly affected. These zero values should be reflected as "..", as should the totals for ISIC Sector 60. This means that there is a break in the series in the BSC database for these series between 1999 and 2000.
- (2) 1999 data for gross operating surplus reflect value-added at factor costs. Estimates of gross operating surplus in 1999 should instead be derived as the difference between *value-added at factor costs* and *compensation of employees*.
- (3) BSC gross investment data in 1999 reflect the data provided to the OECD but should be used with caution.

POLAND

Statistical Institute Source

Data are provided by the Central Statistical Office via Eurostat.

National data are currently collected via various annual surveys, including separate surveys for employment and labour related variables. Data are collected using a NACE Revision 1 equivalent classification system converted to ISIC Revision 3 by the OECD.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for Poland together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Survey	1996-2002	
Production at producers' prices	Survey	1996-2002	
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	Survey	1996-2000, 2002	(1)
Gross operating surplus	Survey	1996-2000	(1) & (3)
Total purchases of goods and services	Survey	1996-2000, 2002	(1)
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	Survey	1997-2002	
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Survey	1996-1998,2002	(2)
Employment: number of employees	Survey	1996-2002	(2)
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	N/A		
Hours worked by employees	N/A		
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Survey	1996-2001	(2) & (3)
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	N/A		
Other employers' social contributions, employees	N/A		
Number of enterprises	Register	1996-2002	
Number of establishments	N/A		

Notes

- (1) 2001 data suppressed by the OECD.
- (2) Data on employment and labour related variables have been collected via separate surveys to those used for other monetary variables.
- (3) 2002 data suppressed by the OECD.

BSC

The table below provides a description of the coverage of the BSC database for Poland, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Survey	1996-2002	
Production at producers' prices	Survey	1999	
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	Survey	1996-2002	
Gross operating surplus	Survey	1999	
Total purchases of goods and services	Survey	1999	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	Survey	1996-2002	
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Survey	1996-1998,2002	(1)
Employment: number of employees	Survey	1999,2001	(1)
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	N/A		
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	N/A		
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	N/A		
Other employers' social contributions, employees	N/A		
Number of enterprises	Register	1996-2002	
Number of establishments	N/A		
Notes			

(1) Data on employment and labour related variables have been collected via separate surveys to those used for other monetary variables.

Methodological Breaks

The BSC and SSIS databases are broadly aligned. Significant differences exist between the two databases for the *number of employees* in 2001; BSC estimates being higher. BSC data for the construction sector (ISIC 45) are often reflected as zero in some years for some variables. Where this occurs SSIS data provide the correct control totals. SSIS data for *value-added*, *gross operating surplus* and *purchases of goods and services* in 2001 have been suppressed by the OECD. However, the same has not been done for BSC data therefore users should not compare 2001 BSC data for these variables with other years or SSIS data. 2002 SSIS data for *compensation of employees*, *wages and salaries*, *gross operating surplus* and other *employers' social security contributions* have been suppressed by the OECD. Estimates of *production* in ISIC sectors 50_52 in 2001 onwards are based on a different valuation concept, and so are not consistent with, data in earlier years.

Variable Notes

SSIS

Production at producers' prices – For ISIC sectors 50_52 there is a change in valuation concept in data for 2001 and 2002 compared to earlier years.

PORTUGAL

Statistical Institute Source

Data are provided by the National Institute of Statistics via Eurostat.

National data are currently collected via annual surveys with all enterprises with more than 100 persons engaged surveyed exhaustively and smaller enterprises surveyed via a sample. Since 2000, administrative VAT data have also been used. Information is provided using a classification system compatible with the NACE Revision 1, converted to ISIC Revision 3 by the OECD.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for the Portugal, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Annual Surveys/Administrative data	1995-2003	
Production at producers' prices	Annual Surveys/Administrative data	1995-2003	
Production at factor costs	N/A		
Value added at basic prices	Annual Surveys/Administrative data	1996-2001	
Value added at factor costs	Annual Surveys/Administrative data	1996-2003	
Gross operating surplus	Annual Surveys/Administrative data	1995-2003	
Total purchases of goods and services	Annual Surveys/Administrative data	1995-2003	
Change in stocks of goods and services	Annual Surveys/Administrative data	1999-2003	
Purchases of energy products	Annual Surveys/Administrative data	1995-2003	
Gross investment in tangible goods	Annual Surveys/Administrative data	1995-2003	
Gross investment in land	Annual Surveys/Administrative data	1999-2003	
Gross investment in existing buildings & structures	Annual Surveys/Administrative data	1999-2003	
Gross investment in machinery & equipment	Annual Surveys/Administrative data	1999-2003	
Sales of tangible investment goods	Annual Surveys/Administrative data	1999-2003	(1)
Net investment in tangible goods	Annual Surveys/Administrative data	1999-2003	
Employment: number of persons engaged	Annual Surveys/Administrative data	1995-2003	
Employment: number of employees	Annual Surveys/Administrative data	1995-2003	
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	Annual Surveys/Administrative data	2000-2003	
Hours worked by employees	Annual Surveys/Administrative data	1999-2003	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Annual Surveys/Administrative data	1995-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Annual Surveys/Administrative data	1996-2003	
Other employers' social contributions, employees	Annual Surveys/Administrative data	1996-2003	
Number of enterprises	Annual Surveys/Administrative data	1995-2003	
Number of establishments	N/A		

Notes

(1) Shown as negatives.

BSC

The table below provides a description of the coverage of the BSC database for Portugal, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Annual Surveys/Administrative data	1996-2003	
Production at producers' prices	Annual Surveys/Administrative data	1996-2003	
Production at factor costs	N/A		
Value added at basic prices	Annual Surveys/Administrative data	1996-2001	
Value added at factor costs	Annual Surveys/Administrative data	1996-2003	
Gross operating surplus	Annual Surveys/Administrative data	1996-2003	
Total purchases of goods and services	Annual Surveys/Administrative data	1996-2003	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	Annual Surveys/Administrative data	1996-2003	(1)
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Annual Surveys/Administrative data	1996-2003	
Employment: number of employees	Annual Surveys/Administrative data	1996-2003	
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	Annual Surveys/Administrative data	1996-2000,2002-2003	(2)
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Annual Surveys/Administrative data	1996-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Annual Surveys/Administrative data	1996-2003	
Other employers' social contributions, employees	Annual Surveys/Administrative data	1996-2003	
Number of enterprises	Register	1996-2003	
Number of establishments	N/A		

- (1) Up to and including 1999 data reflect only enterprises with 10 or more persons engaged.
- (2) Up to and including 2000 data reflect only enterprises with 10 or more persons engaged. Data for 2001 have been suppressed by the OECD.

Methodological Breaks

The BSC and SSIS databases are fully aligned although in some cases differences arise, for example due to certain aggregations made in SSIS, timing and rounding differences. Specific areas of difference concern ISIC sectors 50-55 in 1996 in the BSC database, where data are marginally lower than SSIS data for all variables; reflecting lower coverage. Other differences between the databases and across time occur in the hours worked and investment variables – in the BSC database the coverage of these two variables reflects only enterprises with 10 or more persons engaged up to and including 2000 and 1999 respectively. All 1995 data are not consistent with data for 1996 onwards.

Variable Notes

SSIS

The following sectors, and, by association, any sectors of which they are a sub-sector, include parts or all of other sectors:

• *ISIC 2411* – includes ISIC 2413

BSC

Hours worked by employees- Data up to and including 2000 reflect enterprises with 10 or more persons engaged.

Gross investment in tangible goods - Data up to and including 1999 reflect enterprises with 10 or more persons engaged.

SLOVAK REPUBLIC

Statistical Institute Source

Data are provided by the Statistical Office via Eurostat.

Since 2000, national data have been collected via three business surveys: for businesses with 20 or more employees; for businesses with less than 20 employees; and for entrepreneurs not registered in the Register of companies. Data are collected using the OKEC classification system, equivalent to NACE Revision 1, and has been converted to ISIC Revision 3 by the OECD. Prior to 2000 data were collected via surveys that were sector specific but only for enterprises with 20 or more employees.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for Slovak Republic, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Survey	1995-2003	
Production at producers' prices	Survey	1995-2003	
Production at factor costs	N/A		
Value added at basic prices	Survey	1995-2001	
Value added at factor costs	Survey	1995-2003	
Gross operating surplus	Survey	1995-2003	
Total purchases of goods and services	Survey	1995-2003	
Change in stocks of goods and services	Survey	1995-2003	
Purchases of energy products	Survey	1995-2000,2003	
Gross investment in tangible goods	Survey	1995-2003	
Gross investment in land	Survey	1995-2003	
Gross investment in existing buildings & structures	Survey	2002-2003	
Gross investment in machinery & equipment	Survey	1996-2003	
Sales of tangible investment goods	Survey	1995-2003	
Net investment in tangible goods	Survey	2000-2003	
Employment: number of persons engaged	Survey	2000-2003	
Employment: number of employees	Survey	1995-2003	
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	Survey	1995-2003	
Hours worked by employees	Survey	2000-2003	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Survey	1995-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Survey	1995-2003	
Other employers' social contributions, employees	Survey	1995-2003	
Number of enterprises	Register	1995-2003	
Number of establishments	N/A		

BSC

The table below provides a description of the coverage of the BSC database for Slovak Republic, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Survey	1995-2003	
Production at producers' prices	Survey	1995-2003	
Production at factor costs	N/A		
Value added at basic prices	Survey	1995-2002	
Value added at factor costs	Survey	1995-2003	
Gross operating surplus	Survey	2000-2003	(1)
Total purchases of goods and services	Survey	1995-2003	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	Survey	1995-2002	
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Survey	2000-2003	
Employment: number of employees	Survey	1995-2003	
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	Survey	2000-2003	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Survey	2000-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Survey	1995-2003	
Other employers' social contributions, employees	Survey	1995-2003	
Number of enterprises	Register	1995-2003	
Number of establishments	N/A		

(1) 2003 data reflect value-added at factor costs. Estimates of gross operating surplus, consistent with earlier years and the SSIS database can be derived by subtracting compensation of employees from value-added at factor costs.

Methodological Breaks

Data prior to and including 1999 reflect enterprises with 20 or more employees. Thereafter the data reflect all enterprises with 1 or more persons engaged. Up to and including 1999 the size classes in the BSC database refer to employees. For 2000 onwards they refer to persons engaged. The BSC and SSIS databases are fully aligned, with minor differences reflecting rounding and timing. *Gross operating surplus* in the BSC database in 2003 reflects *value-added at factor costs*. Estimates of *gross operating surplus*, consistent with earlier years and the SSIS database can be derived by subtracting *compensation of employees* from *value-added at factor costs*.

Variable Notes

For SSIS the following sectors, and, by association, any sectors of which they are a sub-sector, include parts or all of other sectors:

- *ISIC 2411* includes ISIC 2412, 2413
- *ISIC 2710* includes ISIC 273
- *ISIC 3410* includes ISIC 3420
- *ISIC 4020* includes ISIC 4030
- *ISIC 4510* includes ISIC 4550
- *ISIC 6010* includes ISIC 6030
- *ISIC 7010* includes ISIC 7020
- *ISIC 7310* includes ISIC 7320

SPAIN

Statistical Institute Source

Data are provided by the National Institute of Statistics via Eurostat.

National data are currently collected via the Annual Business Industrial Survey using a NACE equivalent system (CNAE93) converted to ISIC Revision 3 by the OECD. For manufacturing and some service sectors all businesses with more than 20 persons engaged are fully enumerated; for other services the threshold is 50. All other businesses are surveyed by sample.

SSIS

The table below provides a description of the coverage of the SSIS database for Spain, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Survey	1995-2003	
Production at producers' prices	Survey	1995-2003	
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	Survey	1995-2003	
Gross operating surplus	Survey	1995-2003	(1)
Total purchases of goods and services	Survey	1995-2003	
Change in stocks of goods and services	Survey	1997-2003	
Purchases of energy products	Survey	1995-1997 1999-2003	
Gross investment in tangible goods	Survey	1995-2003	
Gross investment in land	Survey	1995-2003	
Gross investment in existing buildings & structures	Survey	1997-2003	
Gross investment in machinery & equipment	Survey	1995-2003	
Sales of tangible investment goods	Survey	1995-2003	
Net investment in tangible goods	Survey	1996-2003	
Employment: number of persons engaged	Survey	1995-2003	
Employment: number of employees	Survey	1995-2003	
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	Survey	1999-2003	
Hours worked by employees	Survey	1995-2003	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Survey	1995-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Survey	1995-2003	
Other employers' social contributions, employees	Survey	1995-2003	
Number of enterprises	Business Register	1995-2003	
Number of establishments	N/A		

Notes

(1) Gross operating surplus for the period 1995-1998 is not equal to value added at factor costs minus compensation of employees but is in later years.

BSC

The table below provides a description of the coverage of the BSC database for Spain together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Survey	1995-2003	
Production at producers' prices	Survey	1995-2003	
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	Survey	1995-2003	
Gross operating surplus	Survey	1995-2003	
Total purchases of goods and services	Survey	1995-2003	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	Survey	1998-2003	
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Survey	1995-2003	
Employment: number of employees	Survey	1995-2003	
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	Survey	1995-2003	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Survey	1995-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Survey	1995-2003	
Other employers' social contributions, employees	Survey	1995-2003	
Number of enterprises	Business Register	1995-2003	

Methodological Breaks

The BSC and SSIS databases are typically fully aligned in all years although in two notable cases differences arise. These cases concern 1999 data, where a number of BSC variables are systematically, albeit marginally, lower than their SSIS equivalents and *gross operating surplus* up to and including 1999. BSC estimates of *gross operating surplus* are fully consistent with *value-added at factor costs* minus *compensation of employees* but SSIS estimates differ slightly in these years. SSIS estimates also differ in 1999 but they are consistent with SSIS estimates of *value-added at factor costs* minus *compensation of employees*.

Variable Notes

SSIS

Gross operating surplus – data for 1995 to 1998 are conceptually different to data in more recent years, which are consistent with estimates of value-added at factor costs minus compensation of employees.

SWEDEN

Statistical Institute Source

Data are provided by Statistics Sweden via Eurostat.

From 1997 onwards, all enterprises with 50 or more employees or large balance sheets (enterprises with more than SEK 500 million, except real estate enterprises, where the threshold is SEK 200 million) are surveyed. Administrative data based on annual company reports provided to the tax authorities are used for all registered enterprises below these thresholds. 1995 and 1996 data are not as exhaustive in their coverage and typically include only establishments with 5 or more employees. Information is collected using SE-SIC 92 (equivalent to NACE Revision 1) converted to ISIC Revision 3 by the OECD.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for Sweden, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Annual Survey/Admin. Sources	1995-2003	
Production at producers' prices	See above	1995-2003	
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	Annual Survey/Admin. Sources	1995-2003	
Gross operating surplus	See above	1995-2003	
Total purchases of goods and services	See above	1995-2003	
Change in stocks of goods and services	See above	1995-2002	
Purchases of energy products	See above	1995-2002	
Gross investment in tangible goods	See above	1995-2003	
Gross investment in land	See above	1997-2002	
Gross investment in existing buildings & structures	See above	1997-2002	
Gross investment in machinery & equipment	See above	1995,1997-2002	
Sales of tangible investment goods	See above	1995-2002	
Net investment in tangible goods	See above	1995-2002	
Employment: number of persons engaged	See above	1995-2003	(1)
Employment: number of employees	See above	1995-2003	(1)
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	Annual Survey/Admin. Sources	1997-2002	
Hours worked by employees	See above	1999-2002	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Annual Survey/Admin. Sources	1995-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Annual Survey/Admin. Sources	1995-2003	
Other employers' social contributions, employees	See above	1995-2003	
Number of enterprises	See above	1995-2003	
Number of establishments	N/A		

Notes

(1) For 1996 and earlier years, number of employees equals number of persons engaged.

BSC

The table below provides a description of the coverage of the BSC database for Sweden, together with a description, where available, of the underlying data sources. The coverage of variables in 1996 differs from that in later years, as described above.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Annual Survey/Admin. Sources	1996-2002	
Production at producers' prices	See above	1996-2002	
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	Annual Survey/Admin. Sources	1996-2002	
Gross operating surplus	See above	1996-2002	
Total purchases of goods and services	See above	1996-2002	
Change in stocks of goods and services	See above	1996-2002	
Purchases of energy products	N/A		
Gross investment in tangible goods	N/A		
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Annual Survey/Admin. Sources	1996-2002	(1)
Employment: number of employees	See above	1996-2002	(1)
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	Annual Survey/Admin. Sources	2000-2002	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Annual Survey/Admin. Sources	1996-2002	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Annual Survey/Admin. Sources	1997-2002	
Other employers' social contributions, employees	See above	1997-2002	
Number of enterprises	See above	1996-2002	
Number of establishments	N/A		

(1) For 1996 data, number of employees equals number of persons engaged.

Methodological Breaks

In both the SSIS and BSC databases a break exists between 1996-and-earlier and 1997-and-later data, reflecting a more comprehensive coverage of enterprises and activity in the most recent period. The BSC and SSIS databases are fully aligned, although, in some cases, small differences arise, for example due to certain aggregations made in SSIS. Estimates in 2003 have been suppressed, as have estimates of hours worked in 1999.

Variable Notes

SSIS

The following sectors, and, by association, any sectors of which they are a sub-sector, include parts or all of other sectors:

- *ISIC 1410* includes ISIC 1420
- ISIC 2320 includes ISIC 2310, 2330
- ISIC 2412 includes ISIC 2411, 2412
- *ISIC 2429* includes ISIC 2421, 2430
- *ISIC* 2694 includes ISIC 2691, 2692, 2693
- ISIC 3693 includes ISIC 3692, 3694
- ISIC 6020 includes ISIC 6010, 6030

SWITZERLAND

Statistical Institute Source

Data are provided by the Swiss Federal Statistics Office.

National data are collected using the NGAE System for data before 1995 and NOGA for 1998 data onwards, both converted into ISIC Revision 3.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for Switzerland, together with a description, where available, of the underlying data sources. Except for the data in the number of enterprises, the coverage reflects all businesses with two or more persons employed. Enterprise data contain data for all enterprises irrespective of their employment size. The statistical unit used for data collection is the enterprise (with more than two persons employed).

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Annual Survey of Production & Value-Added	1997-2003	
Production at producers' prices	As above	1997-2003	
Production at factor costs	N/A		
Value added at basic prices	As above	1997-2003	
Value added at factor costs	As above	1997-2003	
Gross operating surplus	As above	1997-2003	
Total purchases of goods and services	As above	1997-2003	
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	N/A		
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	As above	1997-2003	
Employment: number of employees	N/A		
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	As above	1997-2003	
Hours worked by employees	N/A		
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	N/A		
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	As above	1997-2003	
Other employers' social contributions, employees	As above	1997-2003	
Number of enterprises	Register	1997-2003	
Number of establishments	N/A		

BSC

The table below provides a description of the coverage of the BSC database for Switzerland, together with a description, where available, of the underlying data sources. The statistical unit used to estimate BSC variables is the establishment but surveys are sent to establishments via their parent enterprise. Only establishments where activity occurs for more than twenty hours per week are included.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	N/A		
Production at producers' prices	N/A		
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	N/A		
Gross operating surplus	N/A		
Total purchases of goods and services	N/A		
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	N/A		
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Census of Enterprises	1995, 1998, 2001	
Employment: number of employees	N/A		
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	N/A		
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	N/A		
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	N/A		
Other employers' social contributions, employees	N/A		
Number of enterprises	Census of Enterprises	1995, 1998, 2001	
Number of establishments	N/A		

Methodological Breaks

The change in the Industrial Classification System from NGAE to NOGA may affect the comparability of 1995 BSC data and 1998 onwards. Readers should also note that although the BSC and SSIS datasets align well the former is based on establishment data that cover establishments with activity of more than 20 hours per week on average whereas the SSIS database records enterprises with more than two persons employed. Typically this means that the figures for variables, excluding the number of enterprises, in the BSC database are higher than in the SSIS database, although there are some exceptions. Additionally, readers should note that timing may play a role, reflecting the different compilation dates for the two datasets.

Variable Notes

All variables in the SSIS database are for enterprises with two or more persons engaged.

Employment: number of persons engaged in the BSC database reflects all persons engaged that work more than 6 hours per week and that work in establishments where activity occurs, on average, more than twenty hours per week.

TURKEY

Statistical Institute Source

Data are provided by the State Institute of Statistics.

National data are currently collected via a number of annual sources including: a general census of industry and business establishments, conducted every ten years (years ending in a three); annual manufacturing surveys – for all manufacturing establishments with 10 or more persons engaged; and annual surveys in all other sectors covering all establishments irrespective of size. Data are collected using an ISIC Revision 3 compatible system.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for Turkey, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Survey	1997-2001	
Production at producers' prices	Survey	1992-2001	
Production at factor costs	N/A		
Value added at basic prices	Survey	1992-2001	
Value added at factor costs	N/A		
Gross operating surplus	Survey	1992-2001	
Total purchases of goods and services	Survey	1996-2001	
Change in stocks of goods and services	Survey	1996-2001	
Purchases of energy products	N/A		
Gross investment in tangible goods	Survey	1992-2001	
Gross investment in land	Survey	1996-2001	
Gross investment in existing buildings & structures	Survey	1996-2001	
Gross investment in machinery & equipment	Survey	1992-2001	
Sales of tangible investment goods	Survey	1996-2001	
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Survey	1992-2001	
Employment: number of employees	Survey	1992-2001	
Employment: number of females employees	Survey	1992-2001	
Employment: number of employees (FTE units)	N/A		
Hours worked by employees	N/A		
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Survey	1992-2001	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Survey	1992-2001	
Other employers' social contributions, employees	Survey	1992-2001	(1)
Number of enterprises	N/A		
Number of establishments	Survey	1992-2001	

Notes

(1) Data for ISIC sectors 10_14 and 70_74 in all years and all sectors from 2000 onwards are not equal to compensation of employees minus wages and salaries of employees.

BSC

The table below provides a description of the coverage of the BSC database for Turkey, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Survey	1994 -2001	
Production at producers' prices	Survey	1994-2001	
Production at factor costs	N/A		
Value added at basic prices	Survey	1994-2001	
Value added at factor costs	N/A		
Gross operating surplus	N/A		
Total purchases of goods and services	N/A		
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	Survey	1994-2001	
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	Survey	1994-2001	
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Survey	1994-2001	
Employment: number of employees	Survey	1994-2001	
Employment: number of females employees	Survey	1994-2001	
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	N/A		
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Survey	1994-2001	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Survey	1994-2001	
Other employers' social contributions, employees	Survey	1994-2001	(1)
Number of enterprises	N/A		
Number of establishments	Survey	1994-2001	
Notes			•

Methodological Breaks

The BSC and SSIS databases are broadly comparable across years and sectors, with some exceptions, notably *other employers' social security contributions*. 1999-2001 data for *production* and *value-added* in the BSC database were allocated using a different approach to that used in earlier years and so some care should be taken in comparing BSC estimates before and after 1999. Manufacturing data reflect establishments with 10 or more persons engaged. Other sectors include all establishments with 1 or more persons engaged.

⁽¹⁾ Data for ISIC sectors 10_14 and 50_74 are not equal to compensation of employees minus wages and salaries of employees.

UNITED KINGDOM

Statistical Institute Source

Data are provided by the Office for National Statistics via Eurostat.

National data are currently collected via the annual business inquiry which covers all businesses registered for VAT and/or Pay as You Earn (PAYE), meaning that businesses without employees and below the VAT threshold (GBP 61,000 in 2006) are not included. Businesses with 250 or more persons engaged are (almost) exhaustively surveyed. Smaller businesses are sampled. Data are collected using SIC 92, equivalent to NACE Revision 1, which is converted to ISIC Revision 3 by the OECD.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for United Kingdom, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Survey	1996-2003	
Production at producers' prices	Survey	1996-2003	
Production at factor costs	N/A		
Value added at basic prices	Survey	1996,1998-2002	
Value added at factor costs	Survey	1996-2003	
Gross operating surplus	Survey	1996-2003	
Total purchases of goods and services	Survey	1996-2003	
Change in stocks of goods and services	N/A		
Purchases of energy products	Survey	1999-2003	
Gross investment in tangible goods	Survey	1996-2002	
Gross investment in land	Survey	2000-2003	
Gross investment in existing buildings & structures	Survey	1996-2003	
Gross investment in machinery & equipment	Survey	1996-2003	
Sales of tangible investment goods	Survey	1996-2003	
Net investment in tangible goods	Survey	1996-2002	
Employment: number of persons engaged	Survey	1996-2003	
Employment: number of employees	Survey	1996-2003	
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	Survey	1998-2003	
Hours worked by employees	Survey	2001-2003	
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Survey	1996-2003	
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Survey	1996-2003	
Other employers' social contributions, employees	Survey	1996-2003	
Number of enterprises	Register	1996-2003	
Number of establishments	N/A		

BSC

The table below provides a description of the coverage of the BSC database for United Kingdom, together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Survey	1996-2002	
Production at producers' prices	Survey	1996-2002	
Production at factor costs	N/A		

Value added at basic prices	Survey	1996-2002
Value added at factor costs	Survey	1995-2002
Gross operating surplus	Survey	1995-2002
Total purchases of goods and services	Survey	1996-2002
Change in stocks of goods and services	N/A	
Purchases of energy products	N/A	
Gross investment in tangible goods	Survey	1995,1998-2002
Gross investment in land	N/A	
Gross investment in existing buildings & structures	N/A	
Gross investment in machinery & equipment	N/A	
Sales of tangible investment goods	N/A	
Net investment in tangible goods	N/A	
Employment: number of persons engaged	Survey	1995-2002
Employment: number of employees	Survey	1995-2002
Employment: number of females employees	N/A	
Employment: number of employees in (FTE units)	N/A	
Hours worked by employees	Survey	2001-2002
Compensation of labour, all persons engaged	N/A	
Compensation of labour, employees	Survey	1996-2003
Wages and salaries, all persons engaged	N/A	
Wages and salaries, employees	Survey	1996-2002
Other employers' social contributions, employees	Survey	1996-2002
Number of enterprises	Register	1995-2002
Number of establishments	N/A	

Methodological Breaks

The BSC and SSIS databases are fully aligned, although minor differences arise due typically to differences in timing or rounding. The method used to estimate numbers of persons engaged for ISIC sectors 55-74 in the 1-9 employment size class differs in 2002 compared to earlier years, and so 2002 estimates of *number of persons engaged* for these sectors are not consistent with earlier years. Readers are advised to use these estimates cautiously and not to combine them with other variables. Estimates of *gross operating surplus* in the BSC database for the construction sector in 2002 reflect *value-added at factor costs* (consistent estimates over time can be created by subtracting *compensation of employees* from *value-added*).

Variable Notes

SSIS

For SSIS the following sectors, and, by association, any sectors of which they are a sub-sector, include parts or all of other sectors:

- *ISIC 6210* includes ISIC 6220
- *ISIC 7010* includes ISIC 7020
- ISIC 7220 includes all ISIC 72
- *ISIC 7310* includes ISIC 7320

BSC

Gross operating surplus - in the construction Sector in 2002 reflects *value-added at factor costs* (consistent estimates over time can be created by subtracting compensation of employees from value-added).

Number of persons engaged – For ISIC Sectors 60_74, 2002 data for size-class 1-9 are not consistent with earlier years. Totals are similarly affected.

UNITED STATES

Statistical Institute Source

Data are provided by the Bureau of the Census, US Department of Commerce.

National Classification

National data are collected using the US SIC system for 1996 and earlier data and NAICS 1997 for 1997 data onwards, both converted into ISIC Revision 3.

Coverage and Data Sources

SSIS

The table below provides a description of the coverage of the SSIS database for the United States together with a description, where available, of the underlying data sources.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	N/A		
Production at producers' prices	Census, Annual Survey of Manufacturers and Services	1997-2003	(1)
Production at factor costs	N/A		
Value added at basic prices	Census, Annual Survey of Manufacturers and Services	1997-2003	(2)
Value added at factor costs	N/A		
Gross operating surplus	N/A		
Total purchases of goods and services	N/A		
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	Census, Annual Survey of Manufacturers and Services	1997-2003	(3)
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	Census, Annual Survey of Manufacturers and Services	1998-2002	(4)
Employment: number of employees	Census, Annual Survey of Manufacturers and Services	1997-2003	(3) & (5)
Employment: number of females employees	N/A		
Employment: number of employees (FTE units)	N/A		
Hours worked by employees	N/A		
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	N/A		
Wages and salaries, all persons engaged	Census, Annual Survey of Manufacturers and Services	1998-2002	(4)
Wages and salaries, employees	Census, Annual Survey of Manufacturers and Services	1997-2003	(3) & (5)
Other employers' social contributions, employees	N/A		
Number of enterprises	Register		(6)
Number of establishments	Register		(6)

Notes

- (1) Production data are based on shipping values with no adjustments for changes in inventories during the year. Capital assets manufactured for own-use are not included in production.
- (2) Value-added reflects the difference between production and intermediate consumption of goods and contract work plus the net change in inventories over the year.
- (3) Manufacturing only.
- (4) Figures reflect only employees in businesses on 12 March each year.

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- (5) Figures reflect the annualised average number of employees and salaries on 12 March, May, August and November for production workers plus other employees on 12 March.
- (6) Data are only for enterprises/establishments with employees. For any given industry the number of enterprises provided is the number with at least one establishment operating in the specified industry. Because multi-establishment enterprises may have establishments operating in more than one industry, the same enterprise can be counted in a number of industries. Therefore, the sum of the number of enterprises in the detailed industries may be higher than the number of enterprises reported for the associated aggregate industry. Data within an industry exclude enterprises where the establishments are identified as auxiliaries to parent companies and those that could not be classified.

BSC

The table below provides a description of the coverage of the BSC database for the United States, together with a description, where available, of the underlying data sources. Data include only businesses with employees.

The SSIS and BSC datasets are largely coherent, particularly for 2001 and 2002 data where the two data sets are identical, with a few notable exceptions:

- (i) BSC ISIC Sector 12 includes ISIC 13;
- (ii) Total manufacturing for BSC in 2002 excludes figures for NAICS 97 industry 811310 commercial and industrial machinery and equipment, excluding auto and electrical, repair and maintenance. This sector is included in manufacturing totals in earlier years in BSC and SSIS but is not included in SSIS variables for the number of persons engaged nor wages and salaries, all persons engaged.

VARIABLE	SOURCE	YEARS	NOTES
Turnover or gross premiums written	Census, Annual Survey of	1991-1997, 2002	
- '	Manufacturers and Services		
Production at producers' prices	N/A		
Production at factor costs	N/A		
Value added at basic prices	N/A		
Value added at factor costs	N/A		
Gross operating surplus	N/A		
Total purchases of goods and services	N/A		
Change in stocks of goods and services	N/A		
Purchases of energy products	N/A		
Gross investment in tangible goods	N/A		
Gross investment in land	N/A		
Gross investment in existing buildings & structures	N/A		
Gross investment in machinery & equipment	N/A		
Sales of tangible investment goods	N/A		
Net investment in tangible goods	N/A		
Employment: number of persons engaged	N/A		
Employment: number of employees	Census, Annual Survey of	1990-1999, 2001-02	(1)
	Manufacturers and Services		
Employment: number of females employees	N/A		
Employment: number of employees in (FTE units)	N/A		
Hours worked by employees	N/A		
Compensation of labour, all persons engaged	N/A		
Compensation of labour, employees	Census, Annual Survey of	1990-1997	
	Manufacturers and Services		
Wages and salaries, all persons engaged	N/A		
Wages and salaries, employees	Census, Annual Survey of	1999, 2001-2002	(1)
	Manufacturers and Services		
Other employers' social contributions, employees	N/A		
Number of enterprises	Register	1990-1999, 2001-02	
Number of establishments	Register	1990-1999, 2001-02	

Notes

(1) These variables are consistent with SSIS variables - employment: number of persons engaged and wages and salaries, all persons engaged, respectively, since both of these SSIS variables reflect employees only.

Methodological Breaks

Within the SSIS database, all variables, except the *number of enterprises, number of establishments, numbers of persons engaged* and *wages and salaries, all persons engaged* exclude ISIC sector 22.1, and, so, the totals for ISIC Sector 22 and manufacturing (ISIC 15-37) also exclude this sector. The switch from US SIC to NAICS 97 means that some care is needed in comparing figures before and after 1997. In the BSC database, ISIC Sector 12 includes ISIC Sector 13 in 2002.

Variable Notes

All variables reflect businesses with employees only.

Production at producers prices in SSIS does not include adjustments for changes in inventories nor does it include capital assets manufactured for own use.

Value-added at basic prices reflects the difference between production and intermediate consumption of goods and contract work and, so, includes intermediate consumption of some services.

Employment: number of persons engaged, reflects employees only, based on employee numbers on 12 March each year. The data exclude about 3.5 million employees in establishments identified as auxiliaries to parent companies and those that could not be classified to an ISIC Sector, such as NAICS 97 industry 811310 – commercial and industrial machinery and equipment, excluding auto and electrical, repair and maintenance.

Wages and salaries, all persons engaged, reflects the wages and salaries of employees only.

PART IV BUSINESS DEMOGRAPHY STATISTICS

IV. BUSINESS DEMOGRAPHY STATISTICS

Introduction

The creation of new businesses and the decline of unproductive ones are often regarded key to business dynamism in OECD economies. Understanding business behaviour and (Schumpeterian) creative destruction, and identifying successful and failing businesses, as well as fostering entrepreneurship and innovation have become increasingly important objectives for policy makers in many OECD economies in recent years. Business churn (*i.e.* entry plus exit rates) is commonly viewed as a measure of the ability of economies to expand the boundaries of economic activity, to shift resources towards growing areas and away from declining areas, and to adjust the structure of production to meet consumers' changing needs. Moreover, higher rates of business creation and churning are generally held to benefit economic growth, job creation and poverty alleviation via increased productivity and innovation.

The growing interest in these issues, and entrepreneurship more generally, has also influenced statistical development in this area. Many national statistical offices now provide official statistics on the exit, entry and turnover of businesses. The Statistical Office of the European Union, Eurostat, has recently developed an enterprise demography database typically using data sourced from business registers or administrative tax sources. This initiative has greatly improved the comparability of business demography data from European countries but comparisons of these statistics across non-EU countries are more complex, as demonstrated in a recent OECD report investigating the comparability of start-up rates across countries⁹. This largely reflects the fact that national definitions and concepts of business demography statistics usually reflect domestic data availability and the fact that internationally recognised definitions and concepts, with the notable exception of Eurostat, are largely non-existent. The OECD has also conducted one-off collections and studies of business demography statistics on a harmonised basis in the past ¹⁰ for the purposes of productivity and economic growth analysis, but these datasets also contained data that were not strictly harmonised for all countries.

To address these issues the OECD Statistics Directorate has launched a number of recent initiatives. The first is an investigation into the current comparability of national estimates of start-up rates, referred to above. The second is the development of a framework for business demography statistics¹¹ that provides definitions for a number of key indicators, such as business births, deaths and high-growth businesses that should improve international comparability. The framework has been circulated for feedback from statistical offices with the expectation that it will form the basis of formal data collection from OECD countries. Over the coming years therefore the OECD plans to expand the coverage of its structural and demographic business statistics database to include, official estimates of business demography indicators in a formal way, using dedicated questionnaires. The third initiative is the Entrepreneurship Indicators Project¹², which, although not focusing exclusively on business statistics, is investigating a number of options, such as dedicated

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⁹ Steven Vale, "International Comparison of Start-Up Rates", 2006.

Bartelsman Eric, Scarpetta Stefano and Schivardi Fabiano (2003), "Comparative Analysis of Firm Demographics and Survival: Micro-Level Evidence for the OECD Countries"

¹¹ Nadim Ahmad, "A Proposed Framework for Business Demography Statistics", 2006.

¹² Tim Davis., "International Entrepreneurship Statistics Programme: Report on the OECD Entrepreneurship Indicators Project and Proposed Action Plan", CFE/SME (2006)7, OECD, Paris.

surveys that should improve the collective knowledge of entrepreneurial businesses, including their factors of success and failure.

This section introduces the OECD's business demography statistics database by presenting information that is readily available from national and international statistics institutes. The data are not strictly comparable but the OECD has taken the opportunity to present the information here because it is felt that they can be of use in policy and economic analysis as long as the comparability caveats are well understood.

Comparability of Current National Statistics on Business Demography

The main motivation for the development of the OECD business demography framework is the perception that current national official estimates of statistics related to business demographics, such as start-up (births), exit (deaths) and survival rates, numbers of high growth businesses, contributions to employment growth, and definitions for small and medium businesses, say, are not currently comparable internationally. In practice most national statistics offices derive estimates of entries and exits using statistical business registers. But it is clear that even amongst countries that produce business demography statistics using business registers, significant methodological differences exist. There are a number of reasons why these differences exist. A typology of reasons is provided below but more information in this can be found in the two OECD papers referred to above. These can stem from very basic differences, such as the way in which businesses are defined, to more complex differences such as the way in which entries are identified and defined; which are affected by many factors, for example, the coverage of data sources used to measure entries, and the treatment of demographic events, such as mergers and take-overs, to name but two. Other important differences relate to the way that business registers are maintained. The existence of thresholds in business registers is perhaps the most important factor that can cause differences in business demography statistics. Although they attempt to be as exhaustive as possible, business registers will, in practice, use one threshold or another that excludes some businesses. Commonly the thresholds are based on monetary values, using turnover as the indicator for example, or they are based on employment levels. However the thresholds may be based on other criteria reflecting the institutional make-up of businesses, for example they may exclude some industrial sectors, like agriculture, or all unincorporated firms say. Finally the registers, in all countries, will exclude firms operating exclusively in the 'black' or underground economy¹³. Although the economic importance of missing firms is generally not significant, when set against total economic activity, their importance in the context of entrepreneurship, and in particular with regards to Small and Medium Enterprise (SME) policy, is greater, and such shortcomings in business register information need to be recognised in the context of business demography statistics.

The bottom line however is that the methodology used by national statistics institutions is driven primarily by national considerations rather than a desire for international comparability. Understanding the differences between national datasets is therefore a vital pre-condition to any meaningful analyses of them.

To provide a simple picture of the current degree of incomparability it is instructive to look at one of the most important business demography indicators commonly produced by national statistics offices, start-up rates, since the way in which start-up rates are calculated reveals much about the comparability of other business demography indicators, such as death rates, say and related concepts, such as the statistical units used to define businesses.

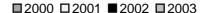
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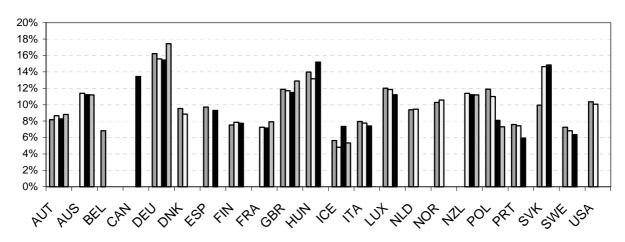
¹³ Additionally, it is important to recognise that registers with information on firm employment and turnover may also be affected by underground production.

Start-Up Rates

The chart below compares start-up rates across a number of OECD countries. It shows significant variation across countries but, as shown below, at least part of this variation reflects conceptual differences and some care is needed in interpretation. For example the rise in start-up rates in Slovakia in 2001 reflects changes to the coverage of source information, in this case business registers, which included unincorporated enterprises with no employees for the first time in 2001. Additionally in some countries, for example, the United States, the estimates exclude businesses without employees from the scope of start-ups, whereas the Eurostat methodology includes these businesses. Moreover, although the harmonised framework developed by Eurostat, stipulates the rules that should be used in defining births and the population from which they are sourced (via European regulations governing business registers) practical differences in the way concepts are constructed do exist between EU economies. This is partly because different approaches are used in measuring enterprises, the statistical business unit adopted by Eurostat, but also because the development of business registers in some countries continues, and, as such, the coverage of activities is not identical across EU economies.

Business start-up rates in selected OECD countries





Sources: National statistical offices and Eurostat.

Typology of Factors Affecting Comparability

Nine main factors have been identified as affecting the conceptual comparability of business demography statistics.

- Units what is the statistical unit used to measure businesses?
- Source are the data taken from a register, a census or a survey? How reliable is the source?
- Coverage to what extent are certain types of business included or excluded based on specific attributes (e.g. economic activity or legal form)?
- Thresholds what explicit or implicit size thresholds apply to the source?
- Purity to what extent can real births (and deaths) of businesses be distinguished from
 other demographic events, (such as mergers, take-overs, reactivations etc), that create new
 entries (and exits) but not births (or deaths); where births (deaths) reflect the creation
 (destruction) of combinations of new production factors, such as location, assets and
 employees, organisational structures etc.

- Timing at what point are entries, exits, births and deaths identified?
- Periodicity over what period are births and deaths measured, and how does this affect the measurement of very short-lived businesses?
- Type of Population are businesses or people used in constructing the denominator for entry and exit rates?
- Temporal basis is the population measured at a specific point in time, or does it consist of all units that were present at any time during a given period?

Inventory of Country Practices

The table that follows provides a summary of business demography indicators currently produced by national statistics institutes in a number of OECD countries. It demonstrates considerable differences exist in the purity, coverage, temporal basis and business units used across countries. It also provides information related to the Eurostat business demography framework, which many countries contribute to and who are developing information systems and indicators to meet the Eurostat guidelines. After the inventory table, tables of birth, death and survival rates are presented for the period 2000 to 2003 by country and aggregated industry grouping

	Temporal	Point-in-Time	Point-in-Time	Point-in-Time	Live-During- Period				Half-Yearly Point-in-Time
	Periodicity	Annual	Annual	Annual	Annual	Annual	Annual .	Annual .	Half-Yearly F
	Timing	ive businesses, agal form, and and identified Entries and Exits on the Register	Entries and Exits on the Register	Entries and Exits on the Register	Entries and Exits on the Register	Entries and exits on the LEAP database		Entries and Exits on the register	
	Purity	# ¥ I	New registrations are adjusted to remove re-registrations, dormant units, and multiple registrations for the same enterprise. Adjustments are Entries and Exits also made for registration lags. on the Register	None		:	Excludes self employed reactivations and take-overs	none	·
Business Demography Statistics and their Sources	Threshold	Excludes inactive businesses, 50,000 Australian Dollars (approx, changes in legal form, and €31,000), with some exceptions, reactivations, and identified and some voluntary registrations take-overs.		No VAT registration threshold.	One or more employees	VAT registered and employers only		ublic and Covers businesses with a turnover of at least €16,620 per year.	·
Comparing Business Demograph	Coverage	Excludes non-market enterprises		Some specific legal, medical, financial, social and personal services are exempt from value-added tax. Public sector entities are included if they are registered for VAT		Excludes foundations, housing companies, voluntary associations, public authorities and religious communities. The data cover stateowned enterprises, but not those owned by municipalities.		Excludes certain health, public administration, insurance and agricultural activities	Includes all businesses with active registration and a tax number in the register, including most government bodies. There is no registration threshold so part-time businesses are included.
	Source	Register	Register	Register	Register	Register of	Register	Register	Register
	Units	Legal	Enterprise.	Legal	Legal	Enterprise	Enterprises	Local unit	Entreprise
	Agency	ABS	Unternehmensne ugründungen in Österreich 1993- 2004	Statistical Office	Statistical Office	Statistical Office	Statistical Office	Statistical Office Local unit	Statistical Office
	Country	Australia	Austria	Belgium	Canada	Finland	France	Germany	Hungary

				Comparing Business Demography Statistics and their Sources	hy Statistics and their Sources		1		
Country	Agency	Units	Source	Coverage	Threshold	Purity	Timing	Periodicity	Temporal
		= = = = = = = = = = = = = = = = = = = =		Excludes sole-proprietor businesses in agriculture, forestry and fishing activities, or any businesses classified to domestic services, foreign			New Establishments (based on location Five-checks between yearly,	Five- yearly,	
Netherlands	Opportunition Office Enterorises	Enterprises	Redister	governments of international agentices; Excludes NACE categories (Sections At least one person works in the Tracks of A, B, E, L, M and N, and divisions 70, enterprise for at least 15 hours almost 73, 91 and 92). Neek.	At least one person works in the enterprise for at least 15 hours a week.	ontinuity, so excludes take-overs,	. (2027)	Annual	
New Zealand	Statistical Office	legal unit	Register	exclude ZSIC subdiv Ide business	Greater than \$30,000 (approx agriculture £17,500) annual taxable expenses ision A01), or sales and/or rolling mean es of "little employee count of greater than three		Exits and Entries on the Register	Annual	
Norway	Statistical Office	Enterprises	Register	Enterprises classified to public administration, agriculture, forestry and fishing are excluded, as are central and local government units	:	Excludes take-overs.	·	Annual	
Spain	Statistical Office	Enterprises	Register			Excludes Reactivations			
Sweden	Statistical Office	Legal unit	Kegister				:		
United Kingdom	Statistical Office	Legal unit	Register	The data cover all economic activities and legal forms, though coverage is limited for certain activities that are exempt from VAT, particularly in the VAT education and health sectors.	VAT registered and employing enterprises		Exits and Entries on the Register.	Annual	
United States	Census Bureau - Iongitudinal database	Establishment	Census	Excludes non-market sector and some Businesses without employees are public corporations.		Adjusted for reactivations	:	Annual	point in time
Eurostat: Belgium, Czec Denmark, Finla Italy, Netherlands, Nor Slovakia, Spai United Kingdom	Eurostat: Belgium, Czech Republic, Denmark, Finland, Hungary, Italy, Luxembourg, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, United Kingdom	Enterprise	Register	Recommends NACE C to O, excluding L but practice varies by country	Recommends all active firms but practice varies by country	Excludes all continuing firms		Annual	

BUSINESS DEMOGRAPHY STATISTICS

Business Birth Rates

ISIC Revision 3	AU	STRALI	A	A	JSTRIA	l .	С	ANADA		CZECH	REPU	BLIC	DE	NMARI	(FI	NLAND	
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
C 10_14 Mining and Quarrying	10.1	10.1	10.4			- 1				9.1		- 1	9.9			3.0	2.5	
D 15_37 Total manufacturing	9.5	8.3	8.0							10.5			6.0			5.2	4.8	
E 40_41 Electricity, gas and water supply	11.6	28.1	25.3							6.8			0.4			4.9	3.3	
F 45 Construction	11.3	11.1	11.1									į	9.0		į	8.3	8.3	
G 50_52 Wholesale & retail trade; repairs; etc.	12.9	12.2	12.1							13.3			8.7			6.7	7.7	
H 55 Hotels and restaurants	14.5	15.8	16.1									į	8.1			6.9	7.0	
I 60_64 Transport, storage and communications	12.8	12.1	12.1			- 1				10.3			8.3			4.3	4.3	
J 65_67 Financial Intermediation	8.9	7.7	8.9							8.0		į	7.9			12.4	11.0	
K 70_74 Real estate, renting and business activities	13.8	11.5	11.6							14.9			11.7			8.8	8.7	
M 80 Education	12.4	13.3	12.5										8.0			11.1	10.7	
N 85 Health and social work	9.7	10.1	9.9			- 1							6.6			12.6	10.4	
O 90-93 Other community, social and personal services	12.3	17.5	15.4							12.2		į	6.4		į	10.3	9.7	
Total	11.4	11.2	11.2	8.7	8.3	8.8		13.4		12.3			8.9			7.8	7.7	

ISIC Revision 3		RANCE		CI	RMAN'	· ·		INGAR\	,	10	FI AND			ITALY		HIVE	MBOU	DC
ISIC REVISION 3	Fr	KANCE		GE	KIVIAIN	Y	HU	JIVGAR	ſ	IC	ELAND			HALY		LUXI	INIBOU	RG
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
C 10_14 Mining and Quarrying			- 1			•	12.5	10.1	:	4.6	4.6	4.4	3.0	4.5	•	25.0		
D 15_37 Total manufacturing							8.0	10.7		5.6	7.1	6.8	5.3	5.0		6.6	6.8	
E 40_41 Electricity, gas and water supply							8.8	7.0		0.9	7.4	3.1	3.8	9.3		6.4	6.0	
F 45 Construction										11.3	16.6	11.1	9.0	9.6		8.9	9.8	
G 50_52 Wholesale & retail trade; repairs; etc.							10.1	11.6		7.3	10.5	8.7	6.4	6.2		9.5	9.3	
H 55 Hotels and restaurants										10.6	16.7	12.5	6.9	6.6		11.0	9.4	
I 60_64 Transport, storage and communications						i	9.4	20.4	į	9.2	14.2	9.7	6.7	6.6	i	11.5	8.8	
J 65_67 Financial Intermediation							24.6	23.0		7.1	9.0	4.3	9.1	8.0		18.7	18.6	
K 70_74 Real estate, renting and business activities							16.6	15.0		4.3	6.7	5.8	10.7	9.4		15.7	13.7	
M 80 Education										2.7	3.6	3.8	11.2	10.5		5.5	16.6	
N 85 Health and social work										4.2	8.2	2.9	8.6	8.1		5.4	3.5	
O 90-93 Other community, social and personal services							16.8	25.8		1.3	1.7	1.4	0.0	0.0		9.9	10.7	
Total	7.2	7.1	7.9	15.6	15.4	17.4	13.2	15.2		4.8	7.4	5.3	7.8	7.4		11.9	11.2	

ISIC Revision 3	NETH	IERLAN	IDS	N	ORWAY	,	NEW	ZEALA	ND	Р	OLAND		PO	RTUGA	ιL	SLOVA	K REPL	JBLIC
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
C 10_14 Mining and Quarrying	7.8			8.4					1				6.5	6.5		13.6	7.9	_
D 15_37 Total manufacturing	6.3		ĺ	5.0		ĺ				7.8	5.8	5.1	5.6	5.8		12.0	13.2	
E 40_41 Electricity, gas and water supply	10.6			6.9					1	10.3	7.1	6.3	5.9	5.4		13.4	2.8	
F 45 Construction	11.7		į	9.5						8.1	5.7	5.1	10.0	7.3				
G 50_52 Wholesale & retail trade; repairs; etc.	6.5			8.6		- 1				9.5	7.9	7.4	6.7	5.3		16.0	14.4	
H 55 Hotels and restaurants	7.0		į	7.6						12.5	10.4	10.7	5.5	4.1				
I 60_64 Transport, storage and communications	9.0			6.7						8.4	5.2	5.1	8.4	9.2		9.5	10.7	
J 65_67 Financial Intermediation	15.6			6.2									5.2	4.4		15.7	15.2	
K 70_74 Real estate, renting and business activities	13.1			14.5								- 1	10.4	6.6		19.4	19.4	
M 80 Education	8.3			15.1									9.8	5.9				
N 85 Health and social work	6.3			9.8					- 1				8.4	5.1				
O 90-93 Other community, social and personal services	9.9			15.0									5.7	5.5		15.1	18.2	
Total	9.5			10.6			17.3	18.0	18.3	11.0	8.1	7.3	7.4	5.9		14.7	14.9	

ISIC Revision 3		SPAIN		SI	WEDEN		UNITE	D KING	DOM	UNITI	ED STA	TES
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
C 10_14 Mining and Quarrying		5.9		2.7	2.1					8.8		
D 15_37 Total manufacturing		6.3		4.8	4.5	8.3	7.8	8.4		7.7		
E 40_41 Electricity, gas and water supply		8.1		3.6	3.4				į	6.6		
F 45 Construction		12.6		6.3	6.0	11.3	11.2	12.9		11.4		
G 50_52 Wholesale & retail trade; repairs; etc.		8.0		5.6	5.5	9.0	8.9	9.9	i	9.1		
H 55 Hotels and restaurants		10.0		7.3	7.3	16.7	17.1	16.9		12.2		
I 60_64 Transport, storage and communications		5.8		4.9	4.3	12.5	11.7	12.7	i	12.2		
J 65_67 Financial Intermediation		10.6		5.3	4.4	9.7	9.8	10.2		11.0		
K 70_74 Real estate, renting and business activities		11.5		8.0	7.2	14.0	13.7	16.1		10.9		
M 80 Education	10.9	11.1		9.9	9.2	14.5	13.8	15.4		10.4		
N 85 Health and social work	8.0	8.0		7.1	6.2	7.1	6.9	8.3	1	8.6		
O 90-93 Other community, social and personal services		9.7		8.0	7.8	11.6	11.1	11.1		8.4		
Total		9.3		6.8	6.4	11.7	11.5	12.9		10.1		

BUSINESS DEMOGRAPHY STATISTICS

Business Death Rates

ISIC Revision 3	AU:	STRALI	A	CZECI	I REPU	BLIC	F	INLAND)	GE	'RMAN	Y	HL	JNGAR'	/	ľ	TALY	
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
C 10_14 Mining and Quarrying	11.9	3.5	3.0	5.8		- 1	4.4		i			- 1	10.3		- 1	5.8		
D 15_37 Total manufacturing	11.0	4.5	4.0	8.6			5.7						8.8			6.2		
E 40_41 Electricity, gas and water supply	7.9	4.3	4.9	4.8		- 1	1.9						4.1			5.1		
F 45 Construction	8.4	3.7	3.6				6.7									8.9		
G 50_52 Wholesale & retail trade; repairs; etc.	11.2	6.3	5.9	13.7			7.7		i				10.7			7.3		
H 55 Hotels and restaurants	11.7	7.9	7.9				7.1									6.6		
I 60_64 Transport, storage and communications	8.5	4.6	5.0	9.2			4.0						9.8			8.0		
J 65_67 Financial Intermediation	10.3	1.7	1.5	12.9			8.3						22.0			11.3		
K 70_74 Real estate, renting and business activities	11.8	4.2	3.8	11.3		- 1	7.3						10.4			6.7		
M 80 Education	14.3	4.7	4.1				7.5		į							9.1		
N 85 Health and social work	8.5	3.2	2.5				7.5									8.6		
O 90-93 Other community, social and personal services	17.9	5.6	5.2	9.6			7.1						10.3					
Total	11.4	4.3	4.1	11.0			6.8			13.2	13.3	15.0	10.4			7.4		

ISIC Revision 3	LUX	EMBOU	RG	NEW	ZEALA	ND	Р	OLAND		PO	RTUGA	L	SLOVA	K REPL	JBLIC		SPAIN	
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
C 10_14 Mining and Quarrying										4.7			14.2					
D 15_37 Total manufacturing	5.8						4.9	3.8	4.0	4.5			12.0					
E 40_41 Electricity, gas and water supply	2.1		i			- 1	4.8	3.4	4.0	3.0			13.0					
F 45 Construction	7.1						5.4	4.3	4.1	4.4								
G 50_52 Wholesale & retail trade; repairs; etc.	11.3						5.7	4.3	4.6	5.2			16.1					
H 55 Hotels and restaurants	9.7						6.3	5.3	5.5	4.7								
I 60_64 Transport, storage and communications	9.8						4.3	3.3	3.9	3.4			12.8					
J 65_67 Financial Intermediation	9.1									5.8			16.9					
K 70_74 Real estate, renting and business activities	9.5					- 1				4.7			17.0					
M 80 Education	4.4									3.5						8.4		
N 85 Health and social work	2.6									2.0						5.9		
O 90-93 Other community, social and personal services	6.3									2.5			13.8					
Total	8.7			17.6	15.3	13.7	5.0	4.1	4.2	4.5			14.4					

ISIC Revision 3	SWI	ΓZERLA	ND	S	WEDEN		UNITE	D KING	DOM	UNITI	ED STA	TES
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
C 10_14 Mining and Quarrying			:	3.5	3.3				:	9.3		
D 15_37 Total manufacturing				4.8	4.5	•	9.1	9.2	9.8	10.2		
E 40_41 Electricity, gas and water supply				2.5	2.7					6.1		
F 45 Construction				4.7	4.6		9.8	9.3	9.7	11.8		
G 50_52 Wholesale & retail trade; repairs; etc.				6.8	6.3		9.8	9.6	10.6	10.1		
H 55 Hotels and restaurants				8.0	7.5		13.6	13.3	15.0	11.0		
I 60_64 Transport, storage and communications				5.3	4.9		10.6	10.7	11.4	13.4		
J 65_67 Financial Intermediation			į	5.2	4.3	ĺ	13.5	13.9	10.6	9.4		
K 70_74 Real estate, renting and business activities				5.0	4.8	ĺ	11.0	11.0	11.7	11.1		
M 80 Education					5.2		7.6	6.8	7.5	8.1		
N 85 Health and social work			i		3.3		5.8	5.9	6.1	6.6		
O 90-93 Other community, social and personal services				4.5	4.2		8.5	8.6	9.4	8.0		
Total	2.8			5.4	5.0		10.2	10.1	10.8	10.4		

Business 2-year Survival Rates

ISIC Revision 3	FI	NLAND			ITALY		LUXI	EMBOU	IRG		SPAIN		SI	WEDEN		UNITE	D KING	DOM
	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000
C 10_14 Mining and Quarrying	71.9	77.5	73.5	60.7	74.1	76.7			100.0	80.6	78.8	83.4	100.0	100.0	100.0			—
D 15_37 Total manufacturing	73.2	75.5	75.2	72.7	79.8	78.7	86.3	83.1	75.0	76.3	77.1	76.9	87.5	90.2	90.4	74.9	80.6	83.4
E 40_41 Electricity, gas and water supply	87.5	89.9	80.3	51.8	69.8	88.88	57.1	100.0	100.0	89.0	86.9	87.2		95.7	92.7			
F 45 Construction	70.7	74.4	74.9	73.8	79.2	78.0	79.5	85.4	78.1	68.7	70.0	68.9	89.6	91.6	90.2	78.2	80.5	82.0
G 50_52 Wholesale & retail trade; repairs; etc.	61.5	64.2	66.0	70.4	75.7	76.8	73.8	71.1	70.8	70.1	70.6	70.5	82.0	85.7	83.1	75.5	77.9	81.6
H 55 Hotels and restaurants	66.6	66.1	67.7	73.2	79.0	79.8	72.3	72.6	73.3	64.7	66.2	66.0	73.8	78.3	79.0	69.2	73.6	76.8
I 60_64 Transport, storage and communications	84.2	87.1	86.7	71.1	76.7	79.0	81.0	81.9	74.2	77.8	78.0	78.7	92.3	92.2	92.4	74.8	76.4	79.2
J 65_67 Financial Intermediation	69.0	67.6	62.2	65.0	68.0	69.7	76.2	78.3	74.1	67.9	67.4	66.4	91.3	89.0	78.2	74.1	79.3	77.7
K 70_74 Real estate, renting and business activities	70.4	69.3	71.5	70.8	75.0	78.5	78.9	78.7	79.6	66.8	67.5	73.0	89.8	91.4	90.2	84.5	82.8	83.6
M 80 Education	71.0	68.2	69.8	60.4	73.9	72.1	75.0	77.4	44.8	61.5	61.0	62.8	91.9	92.0	90.8	83.9	86.5	86.6
N 85 Health and social work	72.1	69.1	67.5	73.1	71.1	72.4	84.8	93.3	89.6	68.7	71.0	70.8	92.6	94.5	93.2	81.9	87.6	87.3
O 90-93 Other community, social and personal services	71.9	71.9	71.0				75.8	76.9	54.9	66.9	68.3	72.7	89.6	91.6	90.7	81.8	83.6	82.2
Total	69.5	70.5	71.3			- 1	77.1	77.4	74.5	69.0	69.8	71.1		89.9	88.6	79.1	80.4	82.0

ANNEX A

VARIABLE DEFINITIONS

VARIABLE DEFINITIONS

The Structural Statistics for Industry and Services (SSIS) database and Business statistics by Size Class (BSC) database contain information by ISIC 4-digit group, wherever possible, on the following variables. The harmonised definitions used are described for each variable in turn below.

Variable code	Variable description
TUTT	Turnover or gross premiums written
PROD	Production at producers' prices
PRFV	Production at factor costs
VALU	Value added at basic prices
VAFC	Value added at factor costs
GOPS	Gross operating surplus
INGS	Total purchases of goods and services
CSGS	Change in stocks of goods and services
INEN	Purchases of energy products
GITG	Gross investment in tangible goods
GFLA	Gross investment in land
GFBS	Gross investment in existing buildings and structures
GFEQ	Gross investment in machinery and equipment
SFCF	Sales of tangible investment goods
NITG	Net investment in tangible goods
EMPN	Employment, number of persons engaged
EMPE	Employment, number of employees
EMPF	Employment, number of females employees
FTEE	Employment, number of employees in full time equivalent units
EHOU	Hours worked by employees
REMN	Compensation of labour, all persons engaged
REME	Compensation of labour, employees
WASN	Wages and salaries, all persons engaged
WASE	Wages and salaries, employees
ESUP	Other employers' social contributions, employees
ENTR	Number of enterprises
ESTB	Number of establishments

1. Turnover

Turnover equals the total value of invoices by the observation unit during the reference period corresponding to market sales of goods or services supplied to third parties. Turnover includes all duties and taxes on the goods or services invoiced by the unit with the exception of the VAT invoiced by the unit vis-à-vis its customer and other similar deductible taxes directly linked to turnover. It also includes all other charges (transport, packaging, etc.) passed on to the customer, even if these charges are listed separately in the invoice. Reduction in prices, rebates and discounts as well as the value of returned packing must be deducted. Income classified as other operating

income, financial income and extra-ordinary income in company accounts is excluded. Operating subsidies received from public authorities, or supranational authorities are also excluded.

2. Production

The value of production corresponds to the sum of the value of all finished products (including intermediary products sold in the same condition as received), of the net change of the value of work in progress and stocks of goods to be shipped in the same condition as received, of the variation of stocks of finished products and of those in progress, of the value of goods or services rendered to others, of the value of goods shipped in the same condition as received less the amount paid for these goods and of the value of fixed assets produced by the unit for its own use.

The valuation of production data can be made according to any of the following four valuations: factor costs, basic prices, market prices and producers' prices, according to the treatment applied to indirect taxes and subsidies, the OECD database typically provides values of production in producers' prices, which, in order to maintain consistency with Eurostat, is the OECD's preferred valuation concept. The formulation described below describes how production (shown at producer prices) can be derived from estimates of turnover.

PRODUCTION

TURNOVER

+

Net change in stocks of finished products and work in progress produced by the unit

Net change in stocks of goods and services purchased for resale

Purchases of goods and services purchased for resale

Capitalised (own-account production)

3. Value Added

In very simple terms value added corresponds to the difference between production and any intermediate consumption; where total intermediate consumption should always be valued at purchasers' prices. Alternatively value added can be described as the sum of the gross operating surplus and compensation of employees. Like production, the valuation of value added can be made according to any of the following four valuations: factor costs, basic prices, market prices and producers' prices, according to the treatment applied to indirect taxes and subsidies. The definition for value added is consistent with that described in the 1993 *System of National Accounts* (paragraphs 6.4-5).

The formulation for value added shown below, reflects value added at factor costs. Value added at basic prices can be easily derived from this by not subtracting the final item (taxes and subsidies on production).

VALUE ADDED

TURNOVER

Capitalised (own-account) Production

Net change in stocks

- Purchases of goods and services (the value of all goods and services purchased during the accounting period for resale or (intermediate) consumption in the production process. These values should reflect the actual price paid after deducting for deductible items such as VAT

Taxes and subsidies linked to production

4. Gross Operating Surplus

Gross operating surplus is the surplus generated by operating activities after deducting labour costs (compensation of employees), and, depending on the valuation used for value added, taxes minus subsidies on production from value added.

It reflects the balance available to the unit which allows it to recompense the providers of own funds and debt, to pay taxes and eventually to finance all or a part of its investment, and so measures the surplus or deficit accruing from production before taking account of any interest, rent or similar charges payable on financial or tangible non-produced assets borrowed or rented by the unit, or any interest, rent or similar receipts receivable on financial or tangible non-produced assets owned by the unit.

For unincorporated enterprises owned by households in which the owner(s) or members of the same household may contribute unpaid labour inputs of a similar kind to those that could be provided by paid employees, the surplus should strictly be referred to as 'mixed income' because it implicitly contains an element of remuneration for work done by the owner, or other members of the household, that cannot be separately identified from the return to the owner. In practice however these surpluses are also described as gross operating surplus. Gross operating surplus (including mixed income) can therefore be derived as:

GROSS OPERATING SURPLUS

VALUE ADDED (at factor costs)

COMPENSATION OF EMPLOYEES

Some countries have been able to provide estimates total remuneration of all persons employed, meaning that gross operating surplus excludes the employment component of mixed income. Gross operating surplus is measured gross of consumption of fixed capital (depreciation).

VALUATION AT FACTOR COSTS, BASIC PRICES, PRODUCERS' PRICES AND MARKET PRICES

The following table illustrates the concepts of factor costs, basic prices, producers' prices and market prices and illustrates the relationships between these valuations, for value added and production.

	Value at Factor costs
	0, 1, 1
+	Other taxes on production ¹
-	Other subsidies on production ¹
=	Value at Basic prices
+	Taxes on products ² (not including imports and VAT)
-	Subsidies on products ²
=	Value at Producers' prices
+	Taxes on imports
-	Subsidies on imports
+	Trade and transport costs
+	Non-deductible VAT
=	Value at Market prices ³

1. Other taxes *on production* consist mainly of taxes on the ownership or use of land, buildings or other assets used in production, or on the labour employed or compensation of employees paid.

Other Subsidies on production consist of subsidies, except subsidies on products, which resident enterprises may receive as a consequence of engaging in production (e.g., subsidies on payroll or workforce, or subsidies to reduce pollution).

2. Taxes *on products*, exclusive of VAT, import and export taxes, consist of taxes on goods and services that become payable as a result of the production, sale, transfer, leasing or delivery of those goods or services, or as a result of their use for own consumption or own capital formation.

Subsidies on products correspond to subsidies payable per unit of a good or service produced, either as a specific amount of money per unit of quantity of a good or service, or as a specified percentage of the price per unit; it may also be calculated as the difference between a specified target price and the market price actually paid by a buyer.

3. Market prices, often referred to as purchasers' prices, are those which purchasers pay for the goods and services they acquire or use, excluding deductible VAT.

5. Total purchases of goods and services

Purchases of goods and services include the value of all goods and services purchased during the accounting period for resale or (intermediate) consumption in the production process, excluding purchases of capital goods to be used in the production process, which are registered separately as gross fixed capital formation. The goods and services concerned may be either resold with or without further transformation, completely used up in the production process or, recorded as increases to stocks/inventories.

Services paid for during the reference period are also included regardless of whether they are industrial or non-industrial; including payments for all work carried out by third parties on behalf of the unit including current repairs and maintenance, installation work and technical studies. Expenses related to the installation of capital goods and capitalised goods are excluded.

Non-industrial payments include legal and accountancy fees, patents and licence fees (where they are not capitalised), insurance premiums, costs of meetings of shareholders and governing bodies, contributions to business and professional associations, postal, telephone, electronic communication, telegraph and fax charges, transport services for goods and personnel, advertising costs, commissions (where they are not included in wages and salaries), rents, bank charges (excluding interest payments) and all other business services provided by third parties. Services which are transformed and capitalised by the unit as capitalised production are excluded.

Expenditure classified as financial expenditure or extraordinary expenditure in company accounts is excluded from the total purchases of goods and services.

Purchases of goods and services are valued at purchasers' prices excluding deductible VAT and other deductible taxes linked directly to turnover. No other adjustments for other taxes and duties on products or production are necessary.

6. Change in stocks (inventories) of goods and services

Change in stocks is the difference between the value of the stocks at the end and the beginning of the reference period. Change in stocks may be measured by the value of entries into stocks less the value of withdrawals and the value of any recurrent losses of goods held in stocks. Stocks are recorded at purchaser's prices exclusive of VAT if they are purchased from another unit, otherwise at production costs.

Stocks (inventories) are composed of the following-

- Stocks of finished goods.
- Stocks of work in progress.
- stocks of goods and services purchased for resale in the same condition as received; and
- stocks of raw materials and consumables.

Stocks (inventories) are composed of the following: Included are the stocks of goods and services bought for the sole purpose of reselling them in the same condition. Excluded are stocks of goods and services which are provided to third parties on a commission basis. Products purchased for resale and stocked by services enterprises can include goods (industrial equipment in the case of "turnkey" engineering contracts, or buildings in the case of property development, etc.) as well as services (rights to use advertising space, transport, accommodation, etc.).

7. Purchases of energy products

Purchases of all energy products include all purchases of energy products during the reference period that are intended to be used in production as fuel during the reference period. Energy products purchased as a raw material or for resale without transformation should be recorded as changes in stocks (inventories).

8. Gross investment in tangible goods: land, existing buildings and structures, plant machinery and equipment and new buildings and structures

Investment in tangible goods includes gross investment in land, and gross fixed capital formation in existing and new buildings and structures and machinery and equipment. It refers to the value of these assets purchased, or constructed on the unit's own account for its own use, during the reference year and that are expected to have a productive life of one year or more after the purchase date. Major additions, alterations and improvements to existing assets which extend their normal economic life or raise their productivity are also included. (The definition of gross fixed capital formation follows that provided in Chapter X of SNA 1993).

Tangible assets include land, buildings, other construction and land improvements, transport equipment, machinery and other equipment. Transactions in intangible assets include investment in non-financial produced fixed assets such as mineral exploration, computer software and entertainment, literary or artistic originals intended to be used for more than one year.

Gross investment in land includes purchases of land, underground deposits, forests and inland waters. Where land is purchased with existing buildings and the value of the two components is not separable, the total is recorded under this heading if it is estimated that the value of the land exceeds the value of the existing buildings. If the existing buildings are estimated to be of greater value than the land, the total is recorded under gross investment in existing buildings and structures. Also included here is land merely improved by levelling, the laying of pipes or by the provision of paths or roads. Land acquired through (business) demographic events such as mergers, take-overs, breakups, split-off is excluded.

Gross investment in existing buildings and structures excludes purchases of buildings that have never been used, and also excludes acquisitions via mergers, take-overs, break-ups or split-offs of the business units. Investment in new dwellings and structures should be included in the total figure for gross investment in tangible goods.

The value of *investment in machinery and equipment* corresponds to the value of transport equipment, industrial machinery and equipment, office machinery, equipment and furniture, professional instruments and equipment, acquired new or second hand or manufactured by the unit on its own account and for its own use, and having a life expectancy of more than one year. It also includes the cost of major repairs that are carried out by the unit itself (extensions, alterations, improvements and other repairs which prolong the life or increase the productivity of existing fixed assets. Small tools purchases are also excluded, see *SNA 1993*, paragraph 10.63.

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. Assets produced on own-account should be valued at basic prices. Although, frequently these valuations are based on production costs, including labour. Sales of assets should be valued at the actual amounts realised rather than at book values.

9. Sales of tangible investment goods

Sales of tangible investment goods include the value of existing tangible capital goods, sold to third parties. Sales of tangible capital goods are valued at the price actually received (excluding VAT), and not at book value, after deducting any costs of ownership transfer incurred by the seller. Value adjustments and disposals other than by sale are excluded.

10. Employment – numbers of persons engaged and number of employees

The *total number of persons engaged* is defined as the total number of persons who worked in or for the concerned unit during the reference year. Total employment excludes: directors of incorporated enterprises and members of shareholders' committees who are paid solely for their attendance at meetings; labour made available to the concerned unit by other units and charged for; persons carrying out repair and maintenance work in the unit on the behalf of other units; homeworkers; and persons on indefinite leave, military leave or in retirement.

The *number of employees* includes all persons, workers and employees, covered by a contractual arrangement and working in the unit who receive compensation for their work, whether full-time or part-time. In particular, the following are considered as employees: salaried managers; students who have a formal commitment to contribute to the unit's activities in return for remuneration and/or education services; and employees engaged under a contract specifically designed to encourage the recruitment of unemployed persons. Also included are persons on sick leave, paid leave or vacation. It excludes: working proprietors; active business partners; unpaid family workers; and home-workers, irrespective of whether or not they are on the payroll. The employee definitions apply equally to *numbers of female employees*.

11. Employment – numbers of employees in full time equivalents

This corresponds to the number of employees converted into full time equivalents. Persons working less than the standard working time of a full-year full-time worker should be converted into full time equivalents, with regard to the working time of a full-time full-year employee in the unit. Included in this category are people working less than: a standard working day; the standard number of working days in the week; and less than the standard number of weeks/months in the year The conversion should be carried out on the basis of the number of hours, days, weeks or months worked.

12. Hours worked by employees

Hours worked by employees are defined as the total number of hours actually spent by all employees, during the year. They include:

- Hours actually worked during normal periods of work.
- Time worked in addition to hours worked during normal periods of work (overtime), where overtime hours are calculated in terms of actual hours spent at work and not in terms of time paid for.
- Time spent at the place of work on work such as the preparation of the workplace, repairs and maintenance, preparation and cleaning of tools.
- Time spent at the place of work waiting or standing by for such reasons as lack of supply of work, breakdown of machinery, or accidents.
- Time corresponding to short rest periods at the workplace, including tea and coffee breaks.

They exclude:

- Hours paid but not worked, such as paid annual leave, paid public holidays, paid sick leave;
- Meal breaks, welfare and union activities;
- Time spent on travel from home to work and vice versa.

13. Compensation of labour: all persons engaged and employees

The definition for *compensation of employees* is consistent with the definition set out in paragraph 7.21 of SNA 1993. It includes the total remuneration, in cash or in kind, payable to an employee in return for work done by the latter during the reference period. No compensation of employees is payable in respect of unpaid work undertaken voluntarily, including the work done by members of a household within an unincorporated enterprise owned by the same household. Compensation of employees does not include any taxes payable by the employer on the wage and salary.

It includes therefore wages and salaries of employees and other employers' social contributions.

Compensation of labour for all persons engaged is equivalent to the sum of wages and salaries of all persons engaged and other employers' social contributions for employees

14. Wages and salaries: all persons engaged and employees

Total wages and salaries for all persons engaged includes all payments in cash or in kind payable to all persons counted on the payroll by way of remuneration for work done during the reference period. They exclude social security, pension, retirement and other contributions payable by the employer but include social contributions, income taxes etc made by the employee even if they are actually withheld and paid on their behalf by their employer. Payments for agency workers are not included in the wages and salaries of the unit using the workers but are instead recorded with the agency.

Wages and salaries for employees is a subset of total wages and salaries applying to employees only.

15. Other employers' social security contributions, employees

Social contributions payable by employers include the actual social contributions payable by employers to social security schemes or to private funded social insurance schemes to secure social benefits for their employees; or imputed social contributions by employers providing unfunded social benefits.

16. Enterprises

An enterprise is a legal entity possessing the right to conduct business on its own; for example to enter into contracts, own property, incur liabilities for debts, and establish bank accounts. It may consist of one or more local units or establishments corresponding to production units situated in a geographically separate place and in which one or more persons work for the enterprise to which they belong.

17. Establishments

An establishment is a unit that engages, under a single ownership or control, or predominantly one, kind of activity at a single location; for example a workshop or factory.

ANNEX B

INTERNATIONAL STANDARD INDUSTRIAL **CLASSIFICATION, REVISION 3** (1)

INDUSTRIES COVERED BY THIS PUBLICATION

 14 In English only. The French version is available online at http://UNSTATS.UN.ORG/UNSD/CR/REGISTRY/REGCST.ASP?CL=2&LG=2



ISIC Revision 3 industries covered by this publication

Section/Division	Group	Class	Description
Section C			Mining and quarrying
Division 10			Mining of coal and lignite; extraction of peat
	101	1010	Mining and agglomeration of hard coal
	102	1020	Mining and agglomeration of lignite
	103	1030	Extraction and agglomeration of peat
Division 11	111	1110	Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction excluding surveying Extraction of crude petroleum and natural gas
	112	1120	Service activities incidental to oil and gas extraction excluding surveying
Division 12			Mining of uranium and thorium ores
DIVIDION 12	120	1200	Mining of uranium and thorium ores
	120	1200	Willing of dramam and thoriam ords
Division 13			Mining of metal ores
	131	1310	Mining of iron ores
	132	1320	Mining of non-ferrous metal ores, except uranium and thorium ores
Division 14			Other mining and quarrying
	141	1410	Quarrying of stone, sand and clay
	142	1420	Mining and quarrying n.e.c.
Section D			Manufacturing
Division 15			Manufacture of food products and beverages
	151		Production, processing and preservation of meat, fish, fruit, vegetables, oils and fats
		1511	Production, processing and preserving of meat and meat products
		1512	Processing and preserving of fish and fish products
		1513	Processing and preserving of fruit and vegetables
		1514	Manufacture of vegetable and animal oils and fats
	152	1520	Manufacture of dairy products
	153	1531	Manufacture of grain mill products, starches and starch products, and prepared animal feeds Manufacture of grain mill products
		1532	Manufacture of starches and starch products
		1533	Manufacture of prepared animal feeds
	154		Manufacture of other food products
		1541	Manufacture of bakery products
		1542	Manufacture of sugar
		1543	Manufacture of cocoa, chocolate and sugar confectionery
		1544	Manufacture of macaroni, noodles, couscous and similar farinaceous products
		1549	Manufacture of other food products n.e.c.
	155		Manufacture of beverages
		1551 1552	Distilling, rectifying and blending of spirits; ethyl alcohol production from fermented materials Manufacture of wines
		1552	Manufacture of wines Manufacture of malt liquors and malt
		1554	Manufacture of mail liquors and mail Manufacture of soft drinks; production of mineral waters
		1554	manulacture of soft utilins, production of milleral waters

Division 16			Manufacture of tobacco products
	160	1600	Manufacture of tobacco products
Division 17			Manufacture of textiles
	171		Spinning, weaving and finishing of textiles
		1711	Preparation and spinning of textile fibres; weaving of textiles
		1712	Finishing of textiles
	172		Manufacture of other textiles
		1721	Manufacture of made-up textile articles, except apparel
		1722	Manufacture of carpets and rugs
		1723	Manufacture of cordage, rope, twine and netting
		1729	Manufacture of other textiles n.e.c.
	173	1730	Manufacture of knitted and crocheted fabrics and articles
Division 18			Manufacture of wearing apparel; dressing and dyeing of fur
	181	1810	Manufacture of wearing apparel, except fur apparel
	182	1820	Dressing and dyeing of fur; manufacture of articles of fur
Division 19			Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear
	191		Tanning and dressing of leather; manufacture of luggage, handbags, saddlery and harness
		1911	Tanning and dressing of leather
		1912	Manufacture of luggage, handbags and the like, saddlery and harness
	192	1920	Manufacture of footwear
Division 20			Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
	201	2010	Sawmilling and planning of wood
	202		Manufacture of products of wood, cork, straw and plaiting materials
		2021	Manufacture of veneer sheets; manufacture of plywood, laminboard, particle board and other panels and boards
		2022	Manufacture of builders' carpentry and joinery
		2023	Manufacture of wooden containers
		2029	Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials
Division 21			Manufacture of paper and paper products
	210		Manufacture of paper and paper products
		2101	Manufacture of pulp, paper and paperboard
		2102	Manufacture of corrugated paper and paperboard and of containers of paper and
		2109	paperboard Manufacture of other articles of paper and paperboard
Division 22			Publishing, printing and reproduction of recorded media
	221		Publishing
		2211	Publishing of books, brochures, musical books and other publications
		2212	Publishing of newspapers, journals and periodicals
		2213	Publishing of recorded media
		2219	Other publishing
	222		Printing and service activities related to printing
		2221	Printing
		2222	Service activities related to printing
	223	2230	Reproduction of recorded media
Division 23			Manufacture of coke, refined petroleum products and nuclear fuel

	231	2310	Manufacture of coke oven products
	232	2320	Manufacture of refined petroleum products
	233	2330	
	233	2330	Processing of nuclear fuel
Division 24			Manufacture of chemicals and chemical products
	241		Manufacture of basic chemicals
		2411	Manufacture of basic chemicals, except fertilizers and nitrogen compounds
		2412	Manufacture of fertilizers and nitrogen compounds
		2413	Manufacture of plastics in primary forms and of synthetic rubber
	242		Manufacture of other chemical products
		2421	Manufacture of pesticides and other agro-chemical products
		2422	Manufacture of paints, varnishes and similar coatings, printing ink and mastics
		2423	Manufacture of pharmaceuticals, medicinal chemicals and botanical products
		2424	Manufacture of soap and detergents, cleaning and polishing preparations, perfumes
		2429	and toilet preparations Manufacture of other chemical products n.e.c.
	243	2430	Manufacture of man-made fibres
Division 25			Manufacture of rubber and plastics products
	251		Manufacture of rubber products
		2511	Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres
		2519	Manufacture of other rubber products
	252	2520	Manufacture of plastics products
	202	2020	Manadadio di piadio producto
Division 26			Manufacture of other non-metallic mineral products
	261	2610	Manufacture of glass and glass products
	269		Manufacture of non-metallic mineral products n.e.c.
		2691	Manufacture of non-structural non-refractory ceramic ware
		2692	Manufacture of refractory ceramic products
		2693	Manufacture of structural non-refractory clay and ceramic products
		2694	Manufacture of cement, lime and plaster
		2695	Manufacture of articles of concrete, cement and plaster
		2696	Cutting, shaping and finishing of stone
		2699	Manufacture of other non-metallic mineral products n.e.c.
Division 27			Manufacture of basic metals
	271	2710	Manufacture of basic iron and steel
	272	2720	Manufacture of basic precious and non-ferrous metals
	273		Casting of metals
		2731	Casting of iron and steel
		2732	Casting of non-ferrous metals
Division 28			Manufacture of fabricated metal products, except machinery and equipment
	281		Manufacture of structural metal products, tanks, reservoirs and steam generators
		2811	Manufacture of structural metal products
		2812	Manufacture of tanks, reservoirs and containers of metal
		2813	Manufacture of steam generators, except central heating hot water boilers
	289		Manufacture of other fabricated metal products; metal working service activities
		2891	Forging, pressing, stamping and roll-forming of metal; powder metallurgy
		2892	Treatment and coating of metals; general mechanical engineering on a fee or contract basis
		2893	Manufacture of cutlery, hand tools and general hardware
		2899	Manufacture of other fabricated metal products n.e.c.
			•

Division 29			Manufacture of machinery and equipment n.e.c.
	291		Manufacture of general purpose machinery
		2911	Manufacture of engines and turbines, except aircraft, vehicle and cycle engines
		2912	Manufacture of pumps, compressors, taps and valves
		2913	Manufacture of bearings, gears, gearing and driving elements
		2914	Manufacture of ovens, furnaces and furnace burners
		2915	Manufacture of lifting and handling equipment
		2919	Manufacture of other general purpose machinery
	292		Manufacture of special purpose machinery
		2921	Manufacture of agricultural and forestry machinery
		2922	Manufacture of machine-tools
		2923	Manufacture of machinery for metallurgy
		2924	Manufacture of machinery for mining, quarrying and construction
		2925	Manufacture of machinery for food, beverage and tobacco processing
		2926	Manufacture of machinery for textile, apparel and leather production
		2927	Manufacture of weapons and ammunition
		2929	Manufacture of other special purpose machinery
	293	2930	Manufacture of domestic appliances n.e.c.
Division 30			Manufacture of office, accounting and computing machinery
	300	3000	Manufacture of office, accounting and computing machinery
Division 31			Manufacture of electrical machinery and apparatus n.e.c.
	311	3110	Manufacture of electric motors, generators and transformers
	312	3120	Manufacture of electricity distribution and control apparatus
	313	3130	Manufacture of insulated wire and cable
	314	3140	Manufacture of accumulators, primary cells and primary batteries
	315	3150	Manufacture of electric lamps and lighting equipment
	319	3190	Manufacture of other electrical equipment n.e.c.
Division 32			Manufacture of radio, television and communication equipment and apparatus
	321	3210	Manufacture of electronic valves and tubes and other electronic components
	322	3220	Manufacture of television and radio transmitters and apparatus for line telephony and
	323	3230	line telegraphy Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods
Division 33			Manufacture of medical, precision and optical instruments, watches and clocks
	331	3311	Manufacture of medical appliances and instruments and appliances for measuring, checking, testing, navigating and other purposes, except optical instruments Manufacture of medical and surgical equipment and orthopaedic appliances
		3312	Manufacture of instruments and appliances for measuring, checking, testing,
		3313	navigating and other purposes, except industrial process control equipment Manufacture of industrial process control equipment
	332	3320	Manufacture of optical instruments and photographic equipment
	333	3330	Manufacture of watches and clocks
.	333	3330	
Division 34	0.44	0.440	Manufacture of motor vehicles, trailers and semi-trailers
	341	3410	Manufacture of motor vehicles
	342 343	3420 3430	Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers Manufacture of parts and accessories for motor vehicles and their engines
Division 35			Manufacture of other transport equipment
2111313111 00	351		Building and repairing of ships and boats
		3511	Building and repairing of ships
		0011	Structural and Demographic Business Statistics

		3512	Building and repairing of pleasure and sporting boats
	352	3520	Manufacture of railway and tramway locomotives and rolling stock
	353	3530	Manufacture of aircraft and spacecraft
	359		Manufacture of transport equipment n.e.c.
		3591	Manufacture of motorcycles
		3592	Manufacture of bicycles and invalid carriages
		3599	Manufacture of other transport equipment n.e.c.
Division 36			Manufacture of furniture; manufacturing n.e.c.
	361	3610	Manufacture of furniture
	369		Manufacturing n.e.c.
		3691	Manufacture of jewellery and related articles
		3692	Manufacture of musical instruments
		3693	Manufacture of sports goods
		3694	Manufacture of games and toys
		3699	Other manufacturing n.e.c.
Division 37			Recycling
	371	3710	Recycling of metal waste and scrap
	372	3720	Recycling of non-metal waste and scrap
Section E	372	3720	Recycling of non-metal waste and scrap Electricity, gas and water supply
Section E Division 40	372	3720	
	372 401	3720 4010	Electricity, gas and water supply
			Electricity, gas and water supply Electricity, gas, steam and hot water supply
	401	4010	Electricity, gas and water supply Electricity, gas, steam and hot water supply Production, collection and distribution of electricity
	401 402	4010 4020	Electricity, gas and water supply Electricity, gas, steam and hot water supply Production, collection and distribution of electricity Manufacture of gas; distribution of gaseous fuels through mains
Division 40	401 402	4010 4020	Electricity, gas and water supply Electricity, gas, steam and hot water supply Production, collection and distribution of electricity Manufacture of gas; distribution of gaseous fuels through mains Steam and hot water supply
Division 40	401 402 403	4010 4020 4030	Electricity, gas and water supply Electricity, gas, steam and hot water supply Production, collection and distribution of electricity Manufacture of gas; distribution of gaseous fuels through mains Steam and hot water supply Collection, purification and distribution of water
Division 40 Division 41	401 402 403	4010 4020 4030	Electricity, gas, steam and hot water supply Production, collection and distribution of electricity Manufacture of gas; distribution of gaseous fuels through mains Steam and hot water supply Collection, purification and distribution of water Collection, purification and distribution of water
Division 40 Division 41 Section F	401 402 403	4010 4020 4030	Electricity, gas, steam and hot water supply Production, collection and distribution of electricity Manufacture of gas; distribution of gaseous fuels through mains Steam and hot water supply Collection, purification and distribution of water Collection, purification and distribution of water Construction
Division 40 Division 41 Section F	401 402 403 410	4010 4020 4030 4100	Electricity, gas, steam and hot water supply Production, collection and distribution of electricity Manufacture of gas; distribution of gaseous fuels through mains Steam and hot water supply Collection, purification and distribution of water Collection, purification and distribution of water Construction Construction
Division 40 Division 41 Section F	401 402 403 410	4010 4020 4030 4100	Electricity, gas, steam and hot water supply Production, collection and distribution of electricity Manufacture of gas; distribution of gaseous fuels through mains Steam and hot water supply Collection, purification and distribution of water Collection, purification and distribution of water Construction Construction Site preparation
Division 40 Division 41 Section F	401 402 403 410 451 452	4010 4020 4030 4100 4510 4520	Electricity, gas and water supply Electricity, gas, steam and hot water supply Production, collection and distribution of electricity Manufacture of gas; distribution of gaseous fuels through mains Steam and hot water supply Collection, purification and distribution of water Collection, purification and distribution of water Construction Construction Site preparation Building of complete constructions or parts thereof; civil engineering

Section G			Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods
Division 50			Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel
	501	5010	Sale of motor vehicles
	502	5020	Maintenance and repair of motor vehicles
	503	5030	Sale of motor vehicle parts and accessories
	504	5040	Sale, maintenance and repair of motorcycles and related parts and accessories
	505	5050	Retail sale of automotive fuel
Division 51			Wholesale trade and commission trade, except of motor vehicles and motorcycles
	511	5110	Wholesale on a fee or contract basis
	512	5120	Wholesale of agricultural raw materials, live animals, food, beverages and tobacco
	513	5130	Wholesale of household goods
	514	5140	Wholesale of non-agricultural intermediate products, waste and scrap
	515	5150	Wholesale of machinery, equipment and supplies
	519	5190	Other wholesale
Division 52	521	5210	Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods Non-specialized retail trade in stores
	522	5220	Retail sale of food, beverages and tobacco in specialized stores
	523	5230	Other retail trade of new goods in specialized stores
	524	5240	Retail sale of second-hand goods in stores
	525	5240	Retail trade not in stores
	526	5260	Repair of personal and household goods
	320	3200	Repair of personal and nouseriold goods
Section H			Hotels and restaurants
Division 55			Hotels and restaurants
	551	5510	Hotels; camping sites and other provision of short-stay accommodation
	552	5520	Restaurants, bars and canteens
Section I			Transport, storage and communications
Division 60			
			Land transport; transport via pipelines
	601	6010	Land transport; transport via pipelines Transport via railways
	601 602	6010 6020	
			Transport via railways
Division 61	602 603	6020	Transport via railways Other land transport
Division 61	602	6020	Transport via railways Other land transport Transport via pipelines
Division 61	602 603	6020 6030	Transport via railways Other land transport Transport via pipelines Water transport
Division 61 Division 62	602 603 611	6020 6030 6110	Transport via railways Other land transport Transport via pipelines Water transport Sea and coastal water transport
	602 603 611	6020 6030 6110	Transport via railways Other land transport Transport via pipelines Water transport Sea and coastal water transport Inland water transport
	602 603 611 612	6020 6030 6110 6120	Transport via railways Other land transport Transport via pipelines Water transport Sea and coastal water transport Inland water transport Air transport
Division 62	602 603 611 612	6020 6030 6110 6120	Transport via railways Other land transport Transport via pipelines Water transport Sea and coastal water transport Inland water transport Air transport Scheduled air transport Non-scheduled air transport
	602 603 611 612 621 622	6020 6030 6110 6120 6210 6220	Transport via railways Other land transport Transport via pipelines Water transport Sea and coastal water transport Inland water transport Air transport Scheduled air transport Non-scheduled air transport Supporting and auxiliary transport activities; activities of travel agencies
Division 62	602 603 611 612	6020 6030 6110 6120	Transport via railways Other land transport Transport via pipelines Water transport Sea and coastal water transport Inland water transport Air transport Scheduled air transport Non-scheduled air transport
Division 62	602 603 611 612 621 622	6020 6030 6110 6120 6210 6220	Transport via railways Other land transport Transport via pipelines Water transport Sea and coastal water transport Inland water transport Air transport Scheduled air transport Non-scheduled air transport Supporting and auxiliary transport activities; activities of travel agencies
Division 62 Division 63	602 603 611 612 621 622	6020 6030 6110 6120 6210 6220	Transport via railways Other land transport Transport via pipelines Water transport Sea and coastal water transport Inland water transport Air transport Scheduled air transport Non-scheduled air transport Supporting and auxiliary transport activities; activities of travel agencies Supporting and auxiliary transport activities; activities of travel agencies

Section J			Financial intermediation
Division 65			Financial intermediation, except insurance and pension funding
	651	6510	Monetary intermediation
	659	6590	Other financial intermediation
Division 66			Insurance and pension funding, except compulsory social security
	660	6600	Insurance and pension funding, except compulsory social security
Division 67			Activities auxiliary to financial intermediation
	671	6710	Activities auxiliary to financial intermediation, except insurance and pension funding
	672	6720	Activities auxiliary to insurance and pension funding
Section K			,
Section K			Real estate, renting and business activities
Division 70			Real estate activities
	701	7010	Real estate activities with own or leased property
	702	7020	Real estate activities on a fee or contract basis
Division 71			Renting of machinery and equipment without operator and of personal and household goods
	711	7110	Renting of transport equipment
	712	7120	Renting of other machinery and equipment
		7123	Renting of office machinery and equipment (including computers)
	713	7130	Renting of personal and household goods n.e.c.
Division 72			Computer and related activities
	721	7210	Hardware consultancy
	722	7220	Software consultancy and supply
	723	7230	Data processing
	724	7240	Data base activities and distribution of electronic content
	725	7250	Maintenance and repair of office, accounting and computing machinery
	729	7290	Other computer related activities
Division 73			Research and development
	731	7310	Research and experimental development on natural sciences and engineering (NSE)
	732	7320	Research and experimental development on social sciences and humanities (SSH)
Division 74			Other business activities
	741	7410	Legal, accounting, book-keeping and auditing activities; tax consultancy; market research and public opinion polling; business and management consultancy
	742	7420	Architectural, engineering and other technical activities
	743	7430	Advertising
	749	7490	Business activities n.e.c.
Section M			Education
Division 80			Education
	801	8010	Primary education
	802	8020	Secondary education
	803	8030	Higher education
	809	8090	Other education
Section N			Health and social work
Division 85			Health and social work
	851	8510	Human health activities

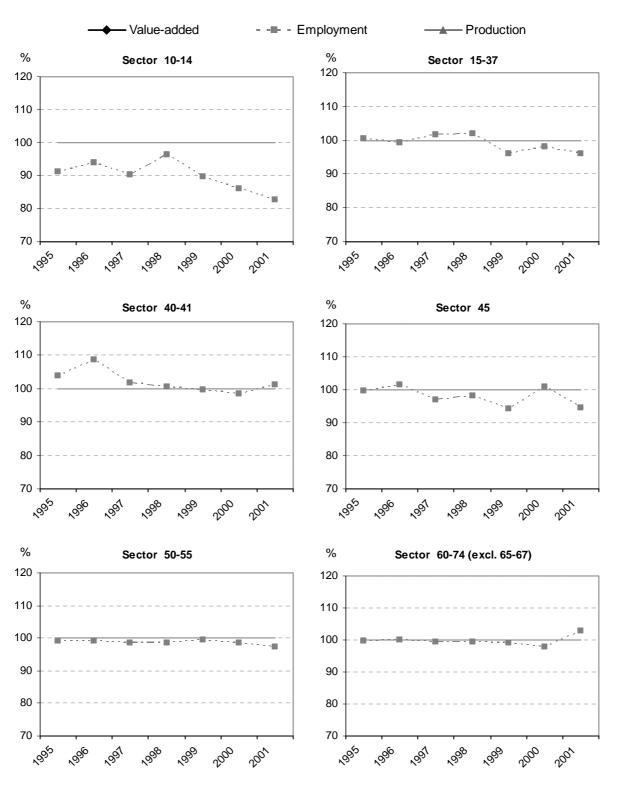
	852	8520	Veterinary activities
	853	8530	Social work activities
Section O			Other community, social and personal service activities
Division 90			Sewage and refuse disposal, sanitation and similar activities
	900	9000	Sewage and refuse disposal, sanitation and similar activities
Division 91			Activities of membership organizations n.e.c.
	911		Activities of business, employers and professional organizations
	912	9120	Activities of trade unions
	919		Activities of other membership organizations
		9191	Activities of religious organizations
		9192	Activities of political organizations
		9199	Activities of other membership organizations n.e.c.
Division 92			Recreational, cultural and sporting activities
	921		Motion picture, radio, television and other entertainment activities
		9211+921 2	Motion picture and video production and distribution and projection
		9213	Radio and television activities
		9214+921 9	Dramatic arts, music and other arts activities and other entertainment activities ${\sf n.e.c.}$
	922	9220	News agency activities
	923	9230	Library, archives, museums and other cultural activities
	924	9240	Sporting and other recreational activities
Division 93			Other service activities
	930		Other service activities

ANNEX C

CHARTS – COMPARING SDBS AND NATIONAL ACCOUNTS INDICATORS

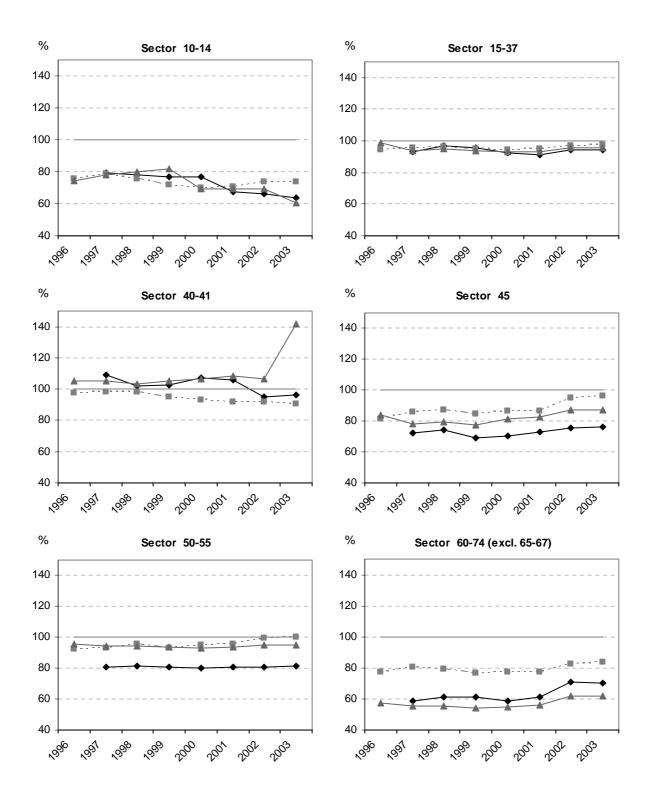
The charts that follow compare SDBS and national accounts indicators of value-added, production and employment by showing SDBS data as a percentage of their national accounts equivalents.

AUSTRALIA

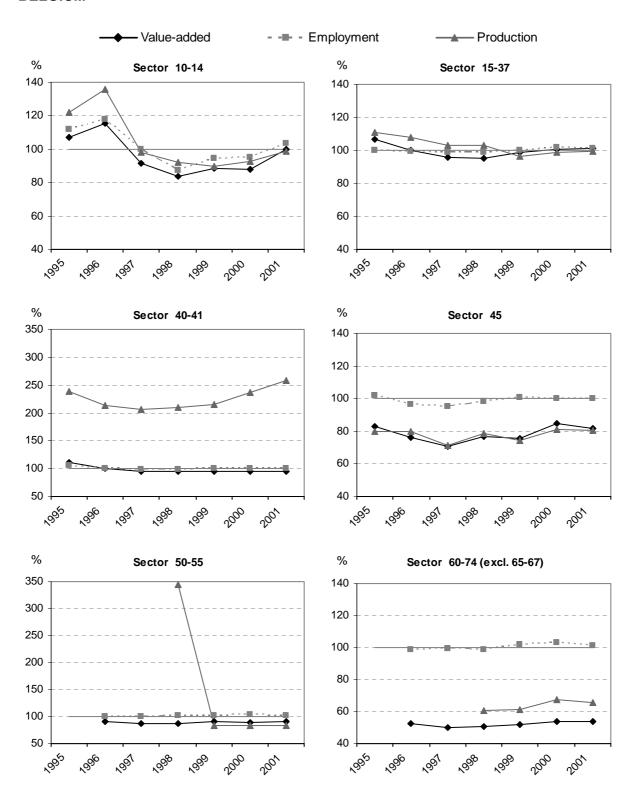


AUSTRIA

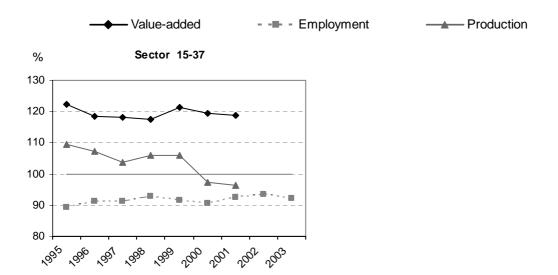
→ Value-added - - - Employment — Production



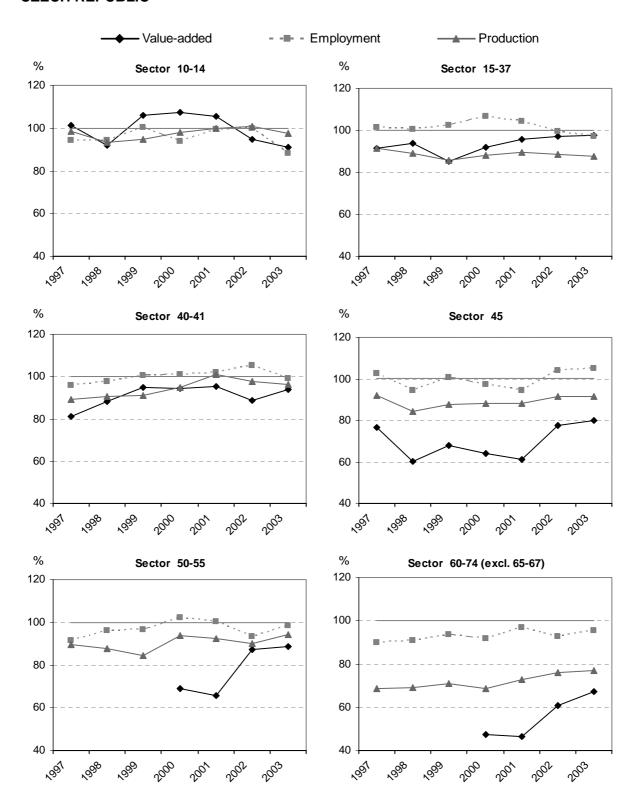
BELGIUM



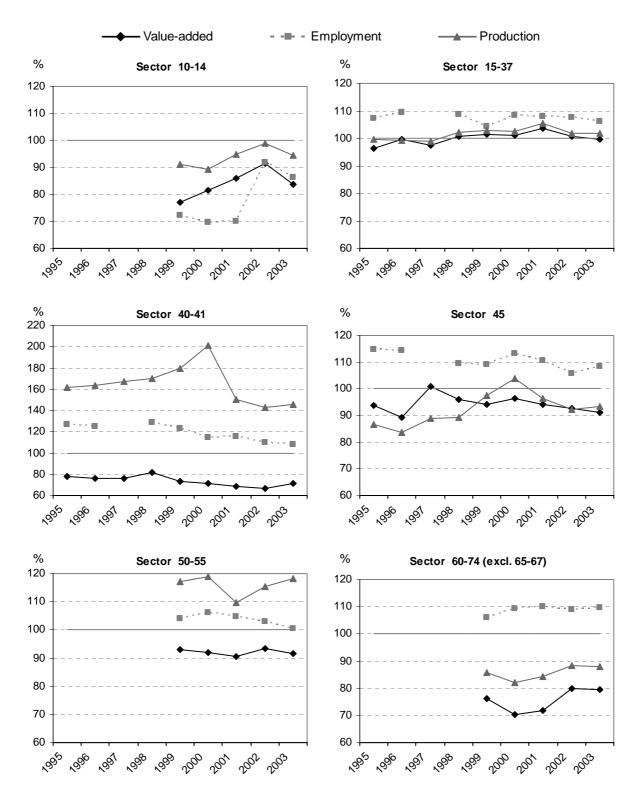
CANADA



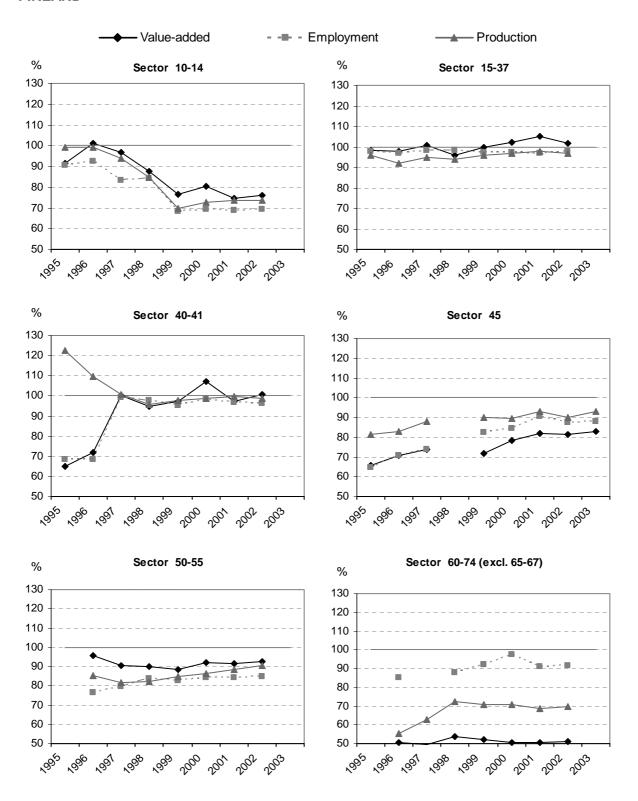
CZECH REPUBLIC



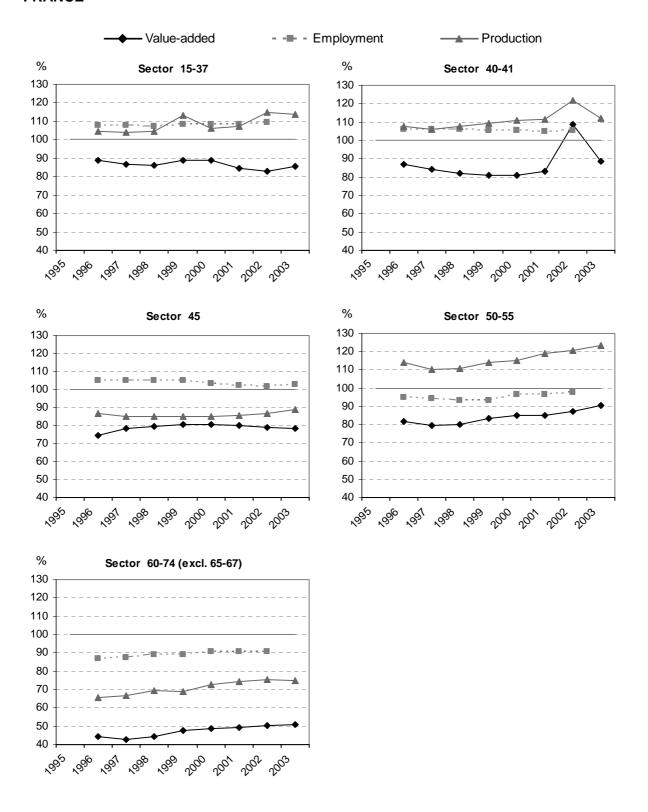
DENMARK



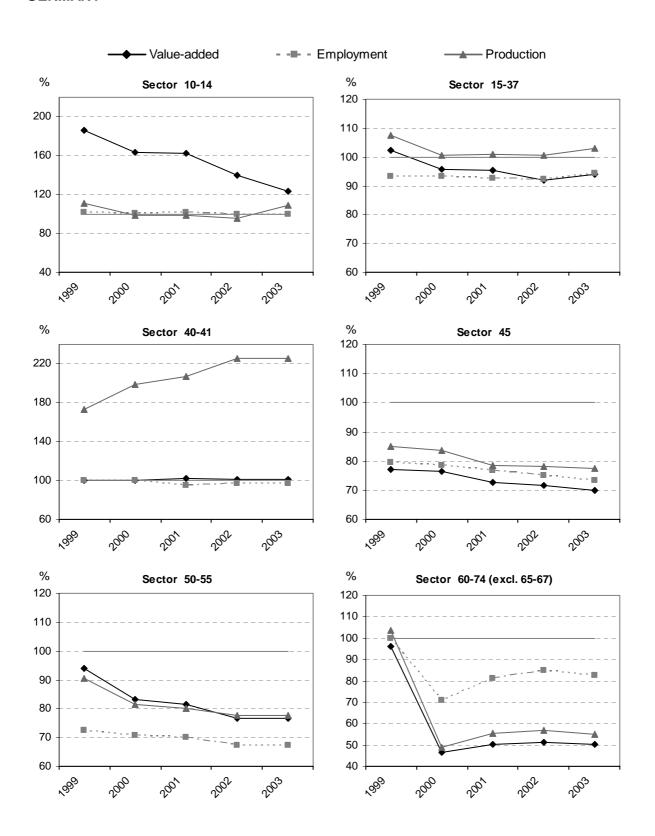
FINLAND



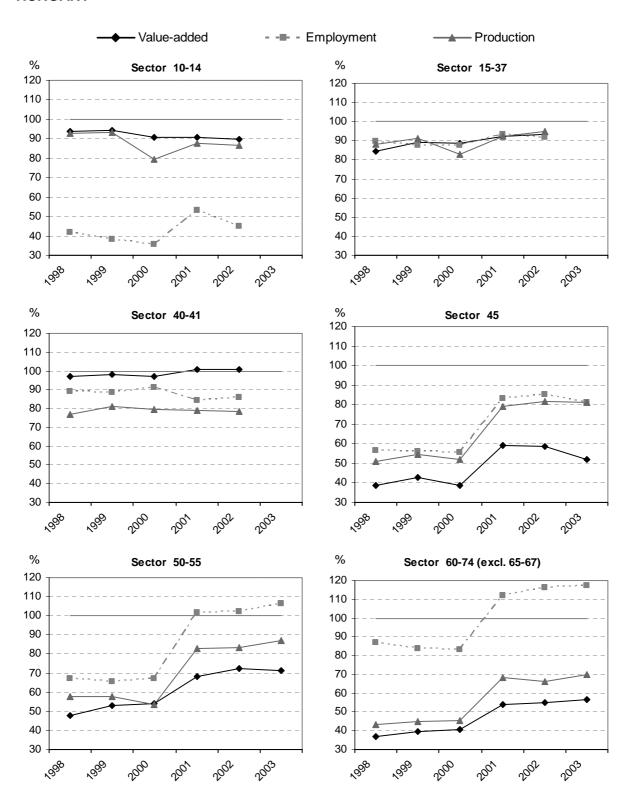
FRANCE



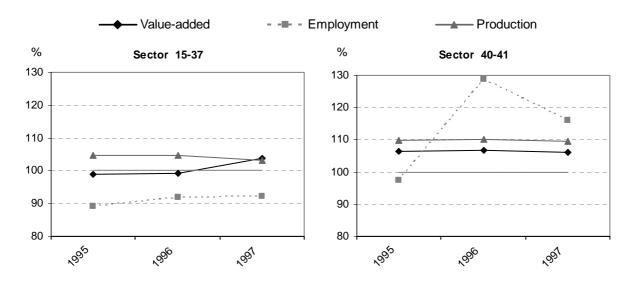
GERMANY

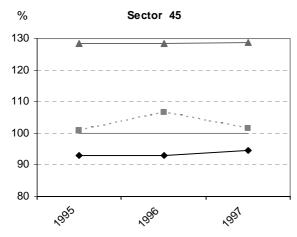


HUNGARY

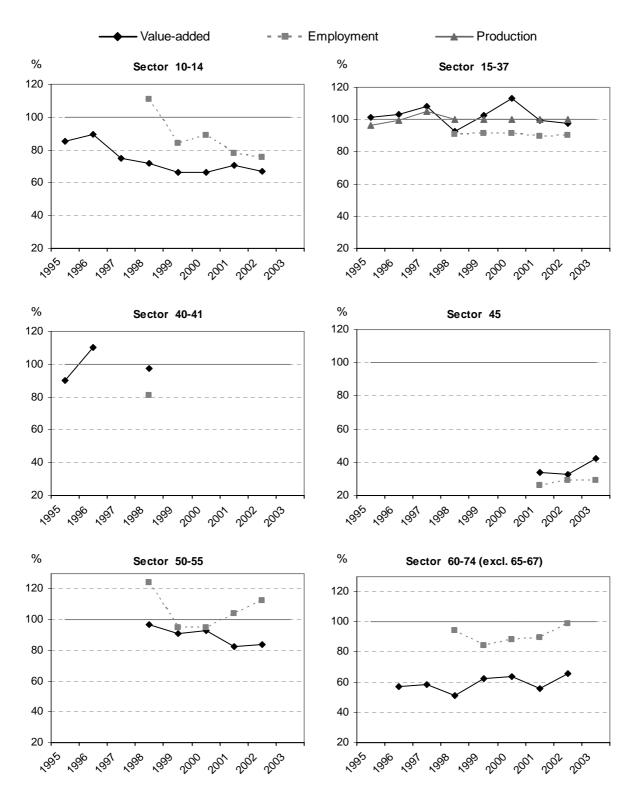


ICELAND

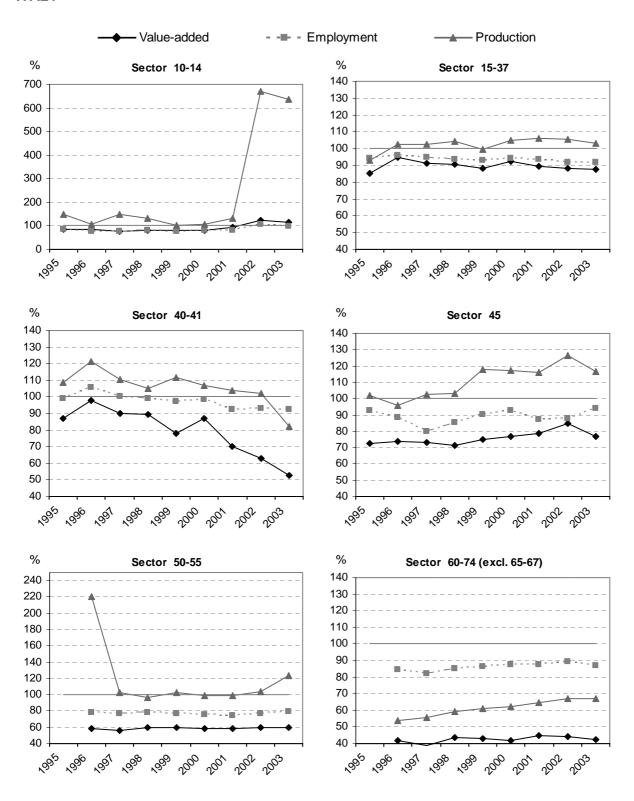




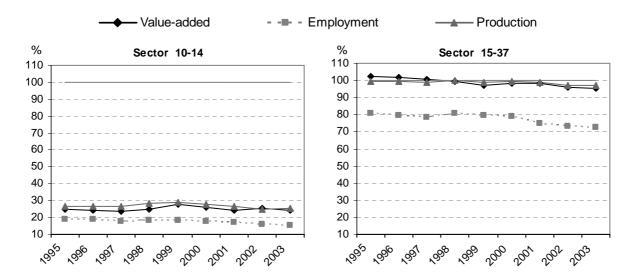
IRELAND



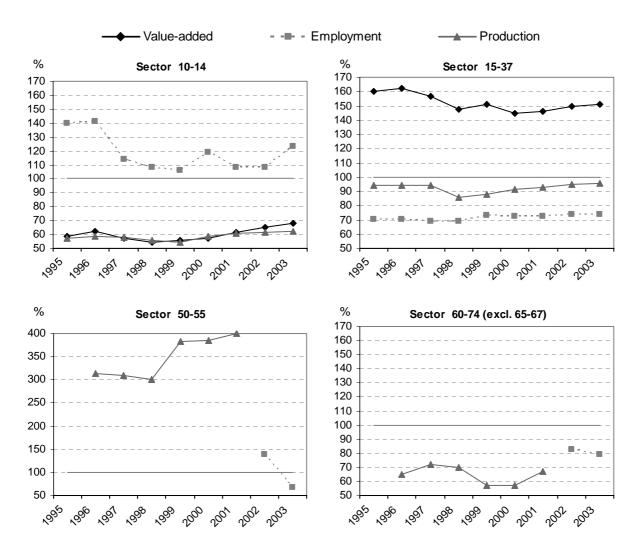
ITALY



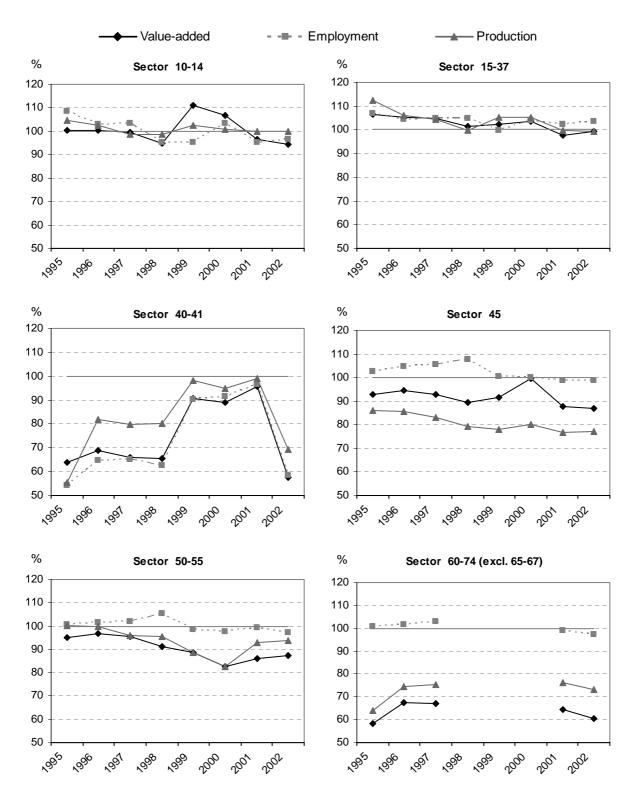
JAPAN



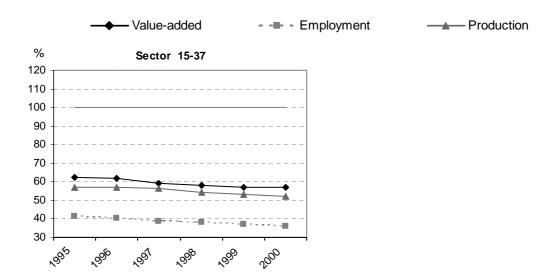
KOREA



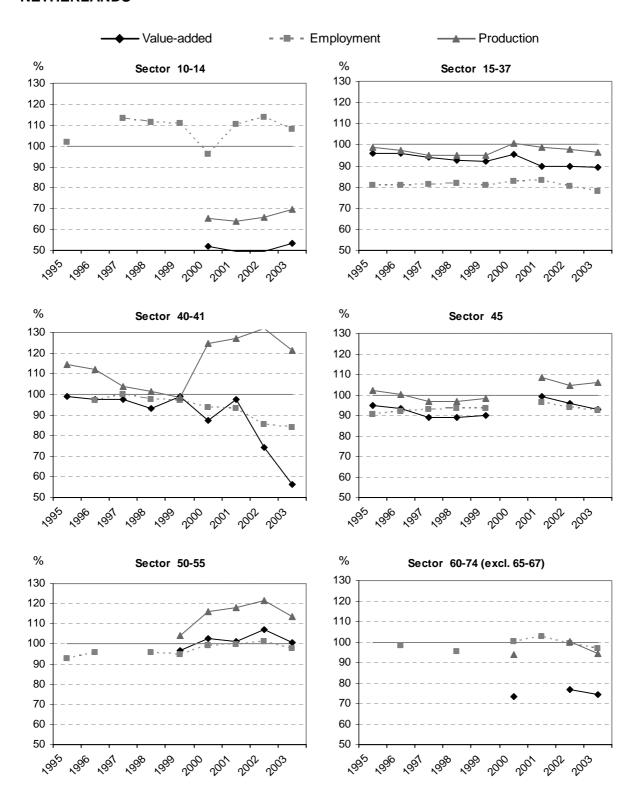
LUXEMBOURG



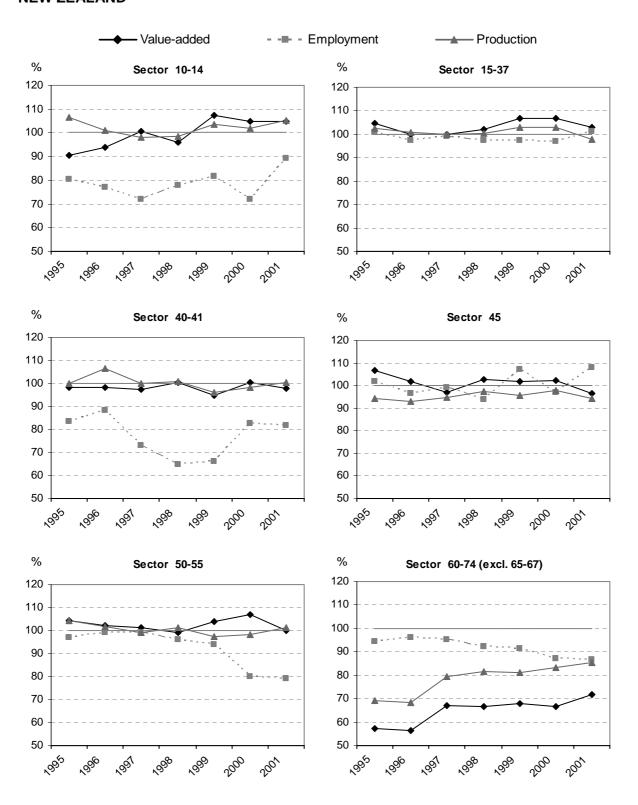
MEXICO



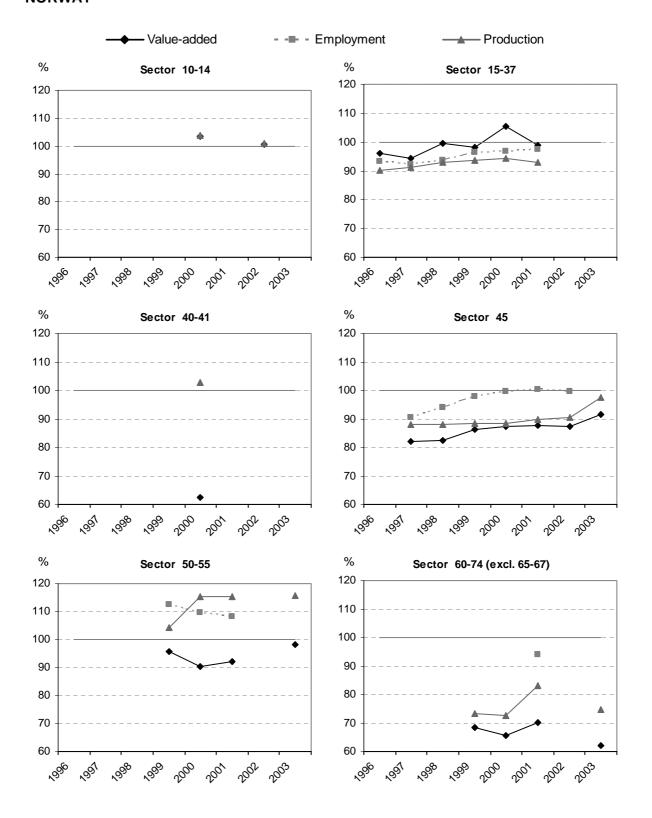
NETHERLANDS



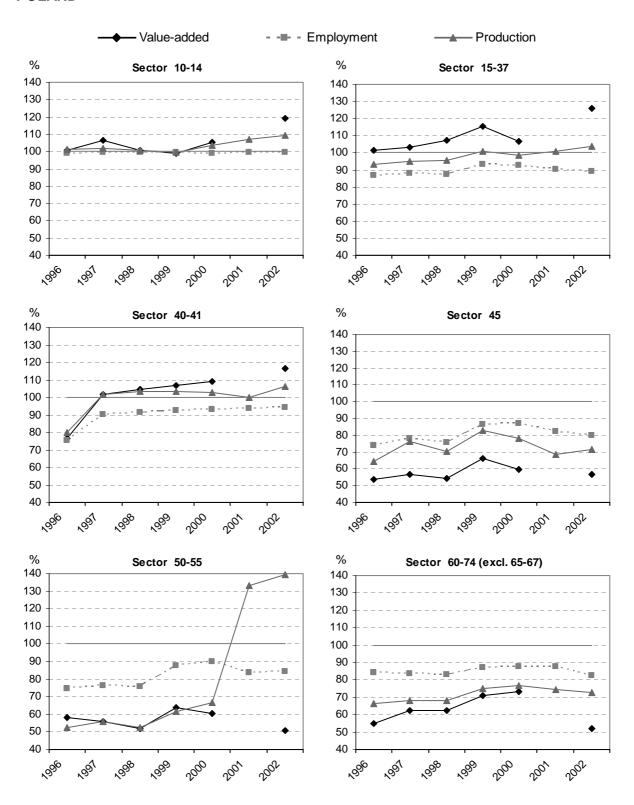
NEW ZEALAND



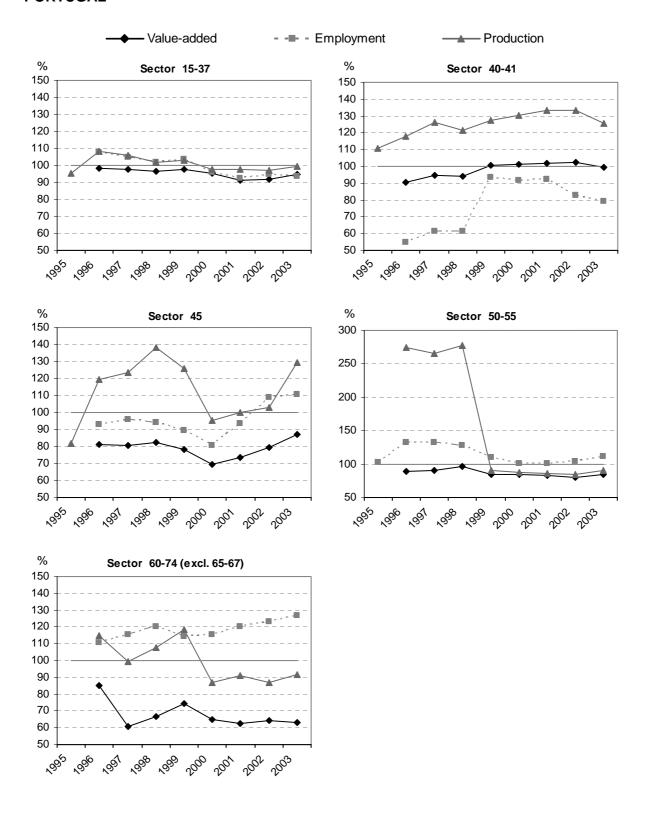
NORWAY



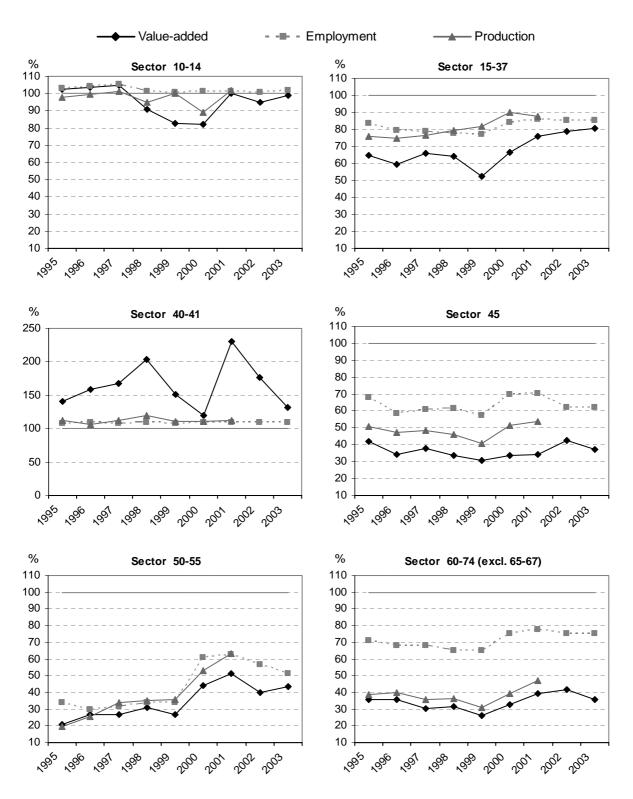
POLAND



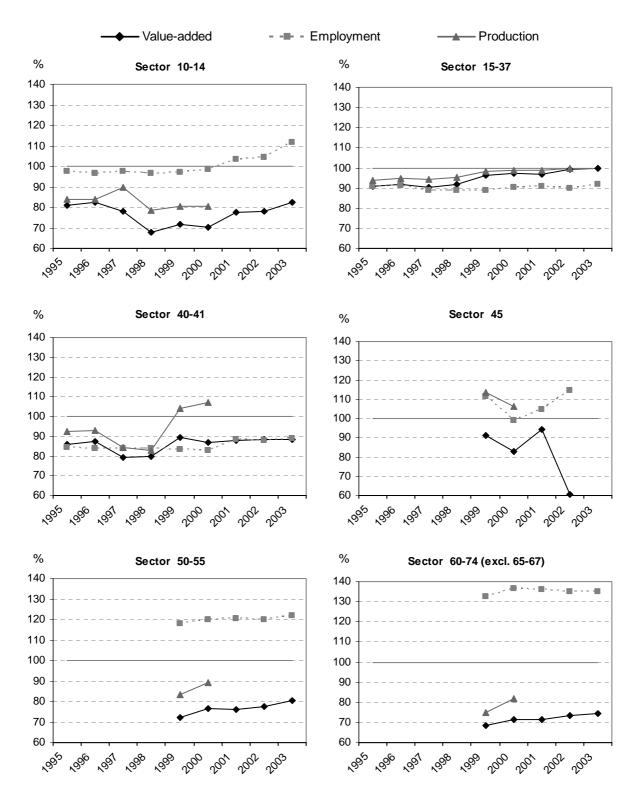
PORTUGAL



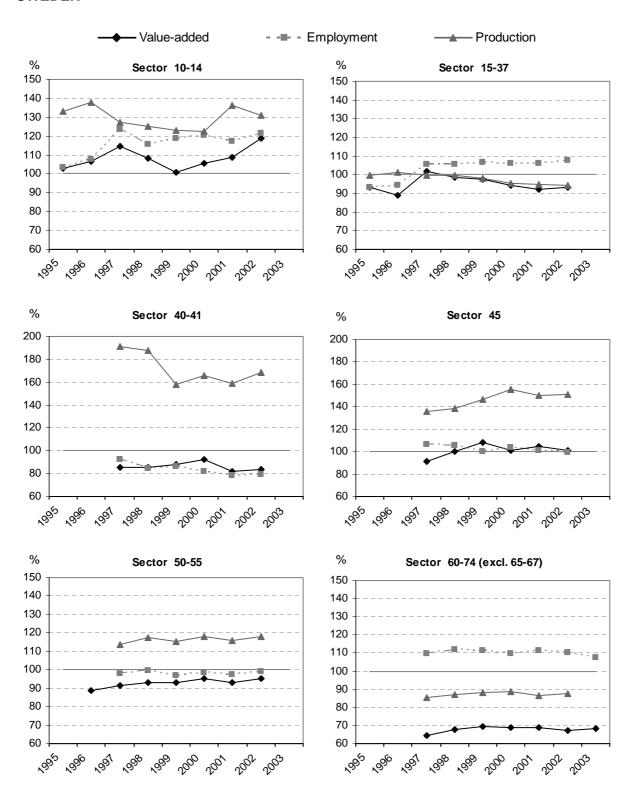
SLOVAK REPUBLIC



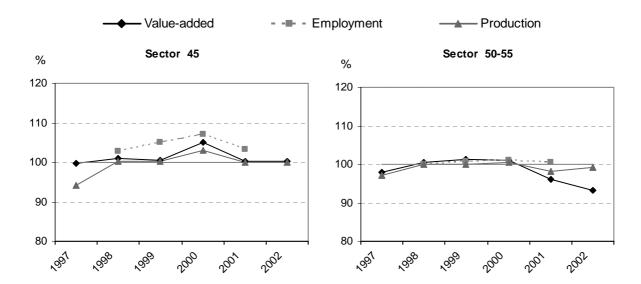
SPAIN



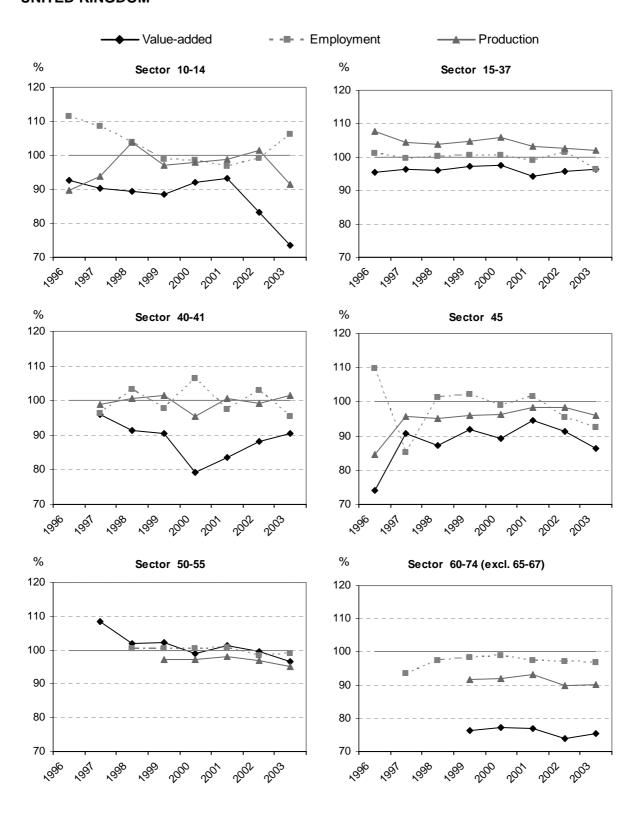
SWEDEN



SWITZERLAND



UNITED KINGDOM



UNITED STATES

