

Description of sources and methods

General

This Appendix gives detailed information on the specific procedures followed for each country in the construction of the data. This supplements Section 3 in the paper, which contains a description of the general principles. The basic data for each country consist of the relevant STAN file (or the National Accounts for the Netherlands, Ireland and Switzerland). Sometimes STAN is also supplemented with more recent National Accounts data (for Sweden and the UK). Table B1 shows for which industries additional data was used, the source of this data, how many years were available and the variables available from this source. In the following, I&S refers to the OECD *Structural Statistics for Industry and Services*, SerNA for the OECD *Service Statistics on Value Added and Employment* and PPI for weights from the producer price index. The abbreviations Cur, Con and Emp refer to respectively value added in current prices, value added in constant prices and persons employed. As mentioned in Section 3, for all industries under ISIC 30-33 (Computers, electrical and electronic machinery and instruments) the deflators from the U.S. were used. Numbers in brackets refer to the ISIC industry code, which can be found in Table B1.

Austria

For industries in 31-33, the years that were not available were extrapolated using the change in shares over that period and 1996 was interpolated. For the industries in 50-52 and 74, the shares were assumed to have remained constant before 1997 and after 1998. For these industries, the deflator for the more aggregated industry from STAN was used (for 50-52 and 74 respectively).

Canada

In STAN, misc. manufacturing includes instruments, so these were split up using I&S. Repairs, securities trade and professional services could not be distinguished separately. Real estate only consists of owner-occupied dwellings so no corresponding employment figures are available. This industry has therefore been omitted from the database and the total economy figures have been adjusted accordingly. At present, value added in current prices is available only up to 1996 (the year of the most recent I/O table). Value added in constant prices has been extrapolated by the national statistical office, StatCan. To derive estimates of value added at current prices, we use PPIs for manufacturing industries and data on value added in current prices for broad sectors directly obtained from StatCan. For employment, only information for broad sectors are available, directly obtained from StatCan. Shares at the

lower levels of aggregation were extrapolated. For I&S data, shares were assumed to have remained constant before 1994 and after 1995. Shares from SerNA were extrapolated.

Denmark

Employment shares were used in 31-33 for value added in current prices as well. For 31-33, missing years in I&S were extrapolated using the trend in the shares for the available years

Finland

For 31-33, missing years in I&S were extrapolated using the trend in the shares for the available years

France

In STAN, mining (10-14) is partly included in petroleum and coal products (23) and partly in non-metallic mineral products (26). We use detailed National Accounts data to break out this industry. For 1990-1991, we use the shares from I&S to extrapolate. Similarly, private households (95) is included in personal & social services (90-93). This industry is also broken out with detailed National Accounts data and extrapolated using SerNA. Finally, data on value added in constant prices were extrapolated for 1990 for a number of detailed industries using the average deflator change over the rest of the decade.

Germany

For 31-33, missing years in I&S were extrapolated using the trend in the shares for the available years. To split up business services (74) we (arbitrarily) assumed professional services (741-743) makes up half of the total.

Ireland

We used separate National Accounts data for this country, since there is no data in STAN yet. The metal industry (27-28) and transport equipment (34-35) were split up using I&S. Missing years from I&S were extrapolated using the trend in the shares for the available years. The deflators from the more aggregated industries were used for each of the parts.

Italy

For 31-33, missing years in I&S were extrapolated using the trend in the shares for the available years. Detailed industries in other transport equipment (35) are not available after 1995 in STAN, so these were extrapolated using shares from I&S from then on. The I&S data

for 1995 were interpolated. For employment in other transport equipment, only the number of full-time equivalents (FTEs) was available until 1995 instead of the number of persons employed. The share in FTEs was used for 1990 to 1995. Value added in constant prices and employment for 1990 and 1991 in textiles and wearing apparel (17-18), paper and publishing (21-22), the metal industries (27-28) and financial intermediation (65-67) were extrapolated using the data for the later years. This was also done for financial intermediation (65-67) for value added in current prices. Furthermore, real estate (70) includes rental of machinery (71) and computer services (72) includes research and development (73). These were split up using the distribution from Germany. To split up business services (74) we (arbitrarily) assumed professional services (741-743) makes up half of the total.

Japan

For 31-33, missing years in I&S were extrapolated using the trend in the shares for the available years. In addition, the industries in other transport equipment (35) as well as the division between education (80) and health (85) was extrapolated for 1998 and 1996-1998 respectively. Repair activities (50) are included with the individual manufacturing industries so could not be separately distinguished. Hotels and restaurants (55) are included in social and personal services (90-93) and could not be separately distinguished. Similarly, financial intermediation (65-67) could not be split up further. Other business activities (71-74) were (arbitrarily) split up according to the following Table:

	Value added	Employment ^{a)}
71, Renting of machinery	10% of 71-74	5% of BUS
72, Computer services	20% of 71-74	15% of BUS
73, R&D	20% of 71-74	20% of BUS
741-3, Professional services	30% of 71-74	60% of BUS
749, Other business activities	20% of 71-74	(71-74) – BUS

a) BUS is from the Labour Force Survey and calculated as finance, real estate and business services – real estate – finance.

Netherlands

For the Netherlands, we obtained newly revised data directly from the National Accounts and the accompanying Input/Output tables, which are fully consistent with the National Accounts. These I/O tables were used for a considerable number of manufacturing industries, but are not separately shown in Table B1 due to the consistency with the National Accounts. To split up the industries in radio, TV and communication equipment (32), we had only one observation

from the PPI weights, which we used for the whole decade. The I/O tables did not include the number persons employed, so here we used the Census.

Norway

For 31-33, missing years in I&S were extrapolated using the trend in the shares for the available years. The same goes for trade and repairs (50-52) and other business activities (71-74) based on SerNA. In addition to these two sources, the Structure Statistics from Statistics Norway for 1998 and 1999 were used. For other years, shares were assumed to have remained constant. Furthermore, for most manufacturing industries, data on value added in current prices and employment for 2000 were extrapolated based on I&S (exceptions are food, wood, paper and publishing, basic metals and shipbuilding). For transport and communication (60-64) and real estate (70), data on value added in current prices and employment for 1990 was extrapolated based on SerNA. For value added in constant prices, additional extrapolations had to be made for chemical industries (23-26) based on the aggregate directly from the National Accounts. Textiles (17) and wearing apparel (18) were split up to obtain value added in constant prices by using their share in value added in current prices. Data on value added in constant prices for fabricated metal products (28) were calculated as a residual after subtracting basic metal (27) from the total of the two industries. For the industries in trade and repair (50-52) the deflator for the more aggregated industry was used. Finally, employment in community social and personal services (75-99) was extrapolated for 1998-2000 using trends from STAN for the earlier years.

Spain

For 31-33, missing years in I&S were extrapolated using the trend in the shares for the available years. The same goes for 50-52 based on SerNA. Business services (74) could not be split up any further. Industries in financial intermediation (65-67) and other business activities (71-74) were extrapolated for 1990-1994 and 1999 based on shares from STAN for the other years. The same had to be done for transport and communication (60-64) for 1999. Value added in constant prices for all manufacturing industries except food (15-16) and non-metallic mineral products (26) also had to be extrapolated for these years based on the deflators of more aggregated industries.

Sweden

The STAN data for Sweden currently run to 1998. We extended this to 2000 using detailed National Accounts tables from Statistics Sweden. For 31-33, missing years in I&S were

extrapolated using the trend in the shares for the available years. For 50-52, shares were assumed to have remained constant for years before 1997 and after 1998. Financial intermediation (65-67) and community, social and personal services (75-99) could not be split up further. For aggregating to the EU level, the average shares of the detailed industries for all other EU countries were applied. Research and development (73), professional services (741-743) and other business services (749) were split up using their composition in Denmark. Employment alone had to be split up for textiles and wearing apparel (17-18) and other transport equipment (35) using I&S. To obtain value added in constant prices for 1990-1992 for all manufacturing industries, shares were extrapolated using data for later years. For most services industries, the deflator for a more aggregated industry was used.

Switzerland

For value added in current prices and employment the weight in the PPI was used to distinguish fiber optics (313) from the rest of electrical machinery (31ex313) and split up radio, TV and communication equipment (32). In instruments and watches (33), only watches (335) could be distinguished separately, so instruments (331) includes everything but watches. Business services (74) could not be split up.

United Kingdom

At present, the data from STAN only run up to 1999. Data for 2000 were obtained directly from the National Accounts in the ONS Blue Book (2001). For 1999 and 2000, Table B1 shows that the Annual Business Inquiry (ABI) was used for extrapolation in a number of industries. For value added in constant prices, deflators for more aggregated industries were used. The number of self-employed is only available for broad sectors, so the share of self-employed in the total number of persons employed is applied to all underlying industries.

United States

Data on value added in current prices and persons employed for some manufacturing industries are based on the Annual Survey of Manufacturers (ASM). For additional industries, the ASM was used in extrapolating the year 2000. Some detailed industries also had to be reclassified.

A number of other adjustments had to be made. First, value added and employment for wholesale trade, retail trade and repairs had to be separated. While these are separate industries in the BEA "GDP by Industry" data set, they are combined in STAN. According to ISIC, retail trade (52) does not include eating and drinking places, but in the U.S. SIC this industry (SIC 58) is included in retail trade (SIC 52-

59). We used the BEA “Gross Output by Detailed Industry” data to relocate eating and drinking places to Hotels and restaurants (ISIC 55). Since gross output from this source is not consistent with the GDP by Industry figures, we scaled the figures down to equal the GDP by Industry totals.¹ We next used value added from the BLS I/O tables to calculate value added in current prices. Here, too, we had to make an adjustment so that value added in current prices for these industries combined would sum to the total from the national accounts. Employment figures were obtained from the BLS. These are employees figures instead of persons employed figures, and not completely consistent with the figures the BEA figures reported in the GDP by Industry data. We used employee shares to scale these up to the number of persons employed. It is important to stress that these adjustments for retail trade and restaurants do matter in an important way. It diminishes value added (in current prices) in retail trade by around 25%, while quadrupling value added in hotels and restaurants.

The calculation of value added (in current and constant prices) and employment for business services follows a similar procedure. In STAN, other business activities (ISIC 71-74) is equal to the industries business services (SIC 73), legal services (SIC 81) and other services (SIC 84, 87, 89). While this is roughly correct, there are some important exceptions, like automobile renting (part of ISIC 71 but included in automobile repair in the U.S.). ISIC 71-74 in STAN also includes Museums, botanical, zoological gardens (SIC 84), which we relocated to ISIC 90-93 (Personal, Social and Community Services). Finally, post and telecommunications should not include radio and TV broadcasting (SIC 483) so we relocate this industry to ISIC 90-93 as well. The industries in other business activities (71-74) can now also be separately distinguished.

The next problem was that no separate price deflators are available for the machinery and electrical machinery industries (29-33), the other transport equipment industries (35) or for the industries in which we reclassified detailed industries. We therefore developed our own deflators for these industries. From the BEA data sets on “Gross Output by Detailed Industry” and “Shipments of Manufacturing Industries” we used value of shipments deflators for manufacturing industries and gross output

¹ The Gross Output by Detailed Industry data are based on the benchmark I/O tables (last one for 1992) and are extrapolated for other years.

deflators for non-manufacturing industries. We use a Törnqvist index to obtain gross output (value of shipments) deflators for each of the industries.

We then use the Input/Output (I/O) tables from the Bureau of Labor Statistics (BLS)² for 1990-2000 to calculate an intermediate input deflator for each ISIC industry. For each of the 190 I/O industries distinguished we calculated a gross output deflator series.³ We use these deflators to calculate an intermediate input price index for each industry. For industry i this is done in the following way:

$$\Delta \ln P_i^M = \sum_j \bar{s}_{i,j}^M \Delta \ln P_{i,j}^M \quad (\text{B1})$$

In equation (B1) $P_{i,j}^M$ is the price of the j^{th} intermediate input used in industry i . The price change for this input is weighted by the average share of input j in total intermediate inputs in current prices of the industry over the two periods:

$$\bar{s}_{i,j}^M = \frac{1}{2} \left(\frac{P_{i,j}^{M,t} M_{i,j}^t}{\sum_j P_{i,j}^{M,t} M_{i,j}^t} + \frac{P_{i,j}^{M,t-1} M_{i,j}^{t-1}}{\sum_j P_{i,j}^{M,t-1} M_{i,j}^{t-1}} \right). \quad (\text{B2})$$

Using the deflators for gross output and intermediate inputs, we calculate gross output and intermediate inputs at constant prices. These are combined to calculate value added in constant prices:

$$\Delta \ln V_i = \frac{1}{\bar{s}_i^V} (\Delta \ln Q_i - \bar{s}_i^M \Delta \ln M_i) \quad (\text{B3})$$

Here, V_i , Q_i and M_i are the quantity indices of value added, gross output and intermediate inputs respectively. Furthermore:

$$s_i^V = 1 - s_i^M = \frac{P_i^t Q_i^t - P_i^{M,t} Q_i^{M,t}}{P_i^t Q_i^t} \quad (\text{B4})$$

In other words, s_i^V is the share of current value added in current gross output. The average over the two periods is taken and used in equation (B3). While this procedure does not exactly replicate the BEA procedure, it serves as a good approximation since

² Specifically from the Office of Occupational Statistics and Employment Projections (www.bls.gov/emp). We use these tables since they are available for each year in our sample and because the industry detail is much greater (190 versus 96 industries).

³ If there is a many-to-one correspondence, we use a Törnqvist index to aggregate to the level of aggregation of the I/O table.

the aggregate deflators are close to the value added deflator from the national accounts.⁴ Given these deflators, value added in constant prices all industries could be calculated.

⁴ Differences exist for a number of reasons: the BEA uses the detailed source material of the I/O tables, which is even more disaggregated than the 532-industry detail benchmark table. Furthermore we use a single deflator for all inputs from a certain commodity category, while the BEA distinguishes between domestically produced and imported goods. Also, our price deflators correspond to the value of shipments of an *industry* not of the *commodities* that are used as inputs.

Table B1, Description of additional data used in the construction of the ICT database

Industry	ISIC rev3	Austria		Canada		Denmark		Finland	
Agriculture	01-05								
Mining	10-14								
Food & beverages	15-16								
Textiles	17			I&S (94-95)	Cur, Emp				
Apparel	18			I&S (94-95)	Cur, Emp				
Leather	19			I&S (94-95)	Cur, Emp				
Wood	20								
Paper	21			I&S (94-95)	Cur, Emp				
Printing & Publishing	22			I&S (94-95)	Cur, Emp				
Petroleum & coal	23								
Chemicals	24								
Rubber & plastics	25								
Stone, clay & glass	26								
Basic metals	27								
Fabricated metals	28								
Machinery	29								
Office and Comp. Eq.	30								
Fiber optics	31.3	I&S (91-98ex96)	Cur, Emp	I&S (94-95)	Cur, Emp	I&S (93-98)	Emp	I&S (95-98)	Cur, Emp
Electrical machinery	31-31.3	I&S (91-98ex96)	Cur, Emp	I&S (94-95)	Cur, Emp	I&S (93-98)	Emp	I&S (95-98)	Cur, Emp
Semiconductors	32.1	I&S (91-98ex96)	Cur, Emp	I&S (94-95)	Cur, Emp	I&S (93-98)	Emp	I&S (95-98)	Cur, Emp
Communication eq.	32.2	I&S (91-98ex96)	Cur, Emp	I&S (94-95)	Cur, Emp	I&S (93-98)	Emp	I&S (95-98)	Cur, Emp
Radio and TV eq.	32.3	I&S (91-98ex96)	Cur, Emp	I&S (94-95)	Cur, Emp	I&S (93-98)	Emp	I&S (95-98)	Cur, Emp
Instruments	33.1	I&S (91-98ex96)	Cur, Emp	I&S (94-95)	Cur, Emp	I&S (93-98)	Emp	I&S (95-98)	Cur, Emp
Watches & instruments	33-33.1	I&S (91-98ex96)	Cur, Emp	I&S (94-95)	Cur, Emp	I&S (93-98)	Emp	I&S (95-98)	Cur, Emp
Motor vehicles	34								
Ships	351								
Aircraft	353								
Railroad and other	352+359								
Misc. manufacturing	36-37			I&S (94-95)	Cur, Emp				
Utilities	40-41								
Construction	45								
Repairs	50	I&S (97-98)	Cur, Emp			SerNA (90-99)	Cur, Con, Emp	SerNA (90-99)	Cur, Con, Emp
Wholesale trade	51	I&S (97-98)	Cur, Emp	SerNA (90-99)	Cur, Con, Emp	SerNA (90-99)	Cur, Con, Emp	SerNA (90-99)	Cur, Con, Emp
Retail trade	52	I&S (97-98)	Cur, Emp	SerNA (90-99)	Cur, Con, Emp	SerNA (90-99)	Cur, Con, Emp	SerNA (90-99)	Cur, Con, Emp
Hotels & restaurants	55								
Transport	60-63								
Telecommunications	64								
Banks	65			SerNA (90-99)	Cur, Con, Emp				
Insurance	66			SerNA (90-99)	Cur, Con, Emp				
Securities trade	67								
Real estate	70								
Renting of machinery	71								
Computer services	72			SerNA (90-99)	Cur, Con, Emp				
R&D	73			Residual					
Professional services	74.1-74.3	I&S (97-98)	Cur, Emp	SerNA (90-99) ^{a)}	Cur, Con, Emp	SerNA (90-97)	Cur, Con, Emp	SerNA (90-99)	Cur, Con, Emp
Other business services	74.9	I&S (97-98)	Cur, Emp			SerNA (90-97)	Cur, Con, Emp	SerNA (90-99)	Cur, Con, Emp
Government	75								
Education	80								
Health	85								
Personal & social serv.	90-93								
Private households	95								

a) All of 74

b) Arbitrarily assumed to have equal shares

c) 70 includes 71, 72 includes 73. Split up based on composition in Germany

d) See text for details on subdivision

e) Split up using shares for Denmark

f) All of 33, except watches is included under 331

g) See text for details on data used for these industries

h) For these industries new deflators are calculated

Table B1, Continued

Industry	ISIC rev3	France		Germany		Ireland		Italy	
Agriculture	01-05								
Mining	10-14	NA (92-99)	Cur, Con, Emp						
Food & beverages	15-16								
Textiles	17								
Apparel	18								
Leather	19								
Wood	20								
Paper	21								
Printing & Publishing	22								
Petroleum & coal	23	NA (92-99)	Cur, Con, Emp						
Chemicals	24								
Rubber & plastics	25								
Stone, clay & glass	26	NA (92-99)	Cur, Con, Emp						
Basic metals	27					I&S (91-97)	Cur, Emp		
Fabricated metals	28					I&S (91-97)	Cur, Emp		
Machinery	29								
Office and Comp. Eq.	30								
Fiber optics	31.3	I&S (90-98)	Cur, Emp	I&S (95-99)	Cur, Emp	I&S (91-97)	Cur, Emp	I&S(92-97ex95)	Cur, Emp
Electrical machinery	31-31.3	I&S (90-98)	Cur, Emp	I&S (95-99)	Cur, Emp	I&S (91-97)	Cur, Emp	I&S(92-97ex95)	Cur, Emp
Semiconductors	32.1	I&S (90-98)	Cur, Emp	I&S (95-99)	Cur, Emp	I&S (91-97)	Cur, Emp	I&S(92-97ex95)	Cur, Emp
Communication eq.	32.2	I&S (90-98)	Cur, Emp	I&S (95-99)	Cur, Emp	I&S (91-97)	Cur, Emp	I&S(92-97ex95)	Cur, Emp
Radio and TV eq.	32.3	I&S (90-98)	Cur, Emp	I&S (95-99)	Cur, Emp	I&S (91-97)	Cur, Emp	I&S(92-97ex95)	Cur, Emp
Instruments	33.1	I&S (90-98)	Cur, Emp	I&S (95-99)	Cur, Emp	I&S (91-97)	Cur, Emp	I&S(92-97ex95)	Cur, Emp
Watches & instruments	33-33.1	I&S (90-98)	Cur, Emp	I&S (95-99)	Cur, Emp	I&S (91-97)	Cur, Emp	I&S(92-97ex95)	Cur, Emp
Motor vehicles	34					I&S (91-97)	Cur, Emp		
Ships	351					I&S (91-97)	Cur, Emp	I&S(92-97ex95)	Cur, Emp
Aircraft	353							I&S(92-97ex95)	Cur, Emp
Railroad and other	352+359					I&S (91-97)	Cur, Emp	I&S(92-97ex95)	Cur, Emp
Misc. manufacturing	36-37								
Utilities	40-41								
Construction	45								
Repairs	50	SerNA (90-99)	Cur, Con, Emp	SerNA (91-98)	Cur, Con, Emp			SerNA (92-99)	Cur, Con, Emp
Wholesale trade	51	SerNA (90-99)	Cur, Con, Emp	SerNA (91-98)	Cur, Con, Emp			SerNA (92-99)	Cur, Con, Emp
Retail trade	52	SerNA (90-99)	Cur, Con, Emp	SerNA (91-98)	Cur, Con, Emp			SerNA (92-99)	Cur, Con, Emp
Hotels & restaurants	55								
Transport	60-63								
Telecommunications	64								
Banks	65								
Insurance	66								
Securities trade	67								
Real estate	70								c)
Renting of machinery	71								c)
Computer services	72								c)
R&D	73								c)
Professional services	74.1-74.3	SerNA (90-99)	Cur, Con, Emp	b)		a)			b)
Other business services	74.9	SerNA (90-99)	Cur, Con, Emp	b)					b)
Government	75								
Education	80								
Health	85								
Personal & social serv.	90-93	NA (92-99)	Cur, Con, Emp						
Private households	95	NA (92-99)	Cur, Con, Emp						

a) All of 74

b) Arbitrarily assumed to have equal shares

c) 70 includes 71, 72 includes 73. Split up based on composition in Germany

d) See text for details on subdivision

e) Split up using shares for Denmark

f) All of 33, except watches is included under 331

g) See text for details on data used for these industries

h) For these industries new deflators are calculated

Industry	ISIC rev3	Japan		Netherlands		Norway		Spain	
Agriculture	01-05								
Mining	10-14								
Food & beverages	15-16								
Textiles	17			Census(93-99)	Emp				
Apparel	18			Census(93-99)	Emp				
Leather	19			Census(93-99)	Emp				
Wood	20			Census(93-99)	Emp				
Paper	21								
Printing & Publishing	22								
Petroleum & coal	23								
Chemicals	24								
Rubber & plastics	25								
Stone, clay & glass	26			Census(93-99)	Emp				
Basic metals	27								
Fabricated metals	28								
Machinery	29								
Office and Comp. Eq.	30			Census(93-99)	Emp				
Fiber optics	31.3	I&S(94-98)	Cur, Emp	I&S(92-98)	Cur, Emp	I&S(91-99)	Cur, Emp	I&S(93-98)	Cur, Emp
Electrical machinery	31-31.3	I&S(94-98)	Cur, Emp	I&S(92-98)	Cur, Emp	I&S(91-99)	Cur, Emp	I&S(93-98)	Cur, Emp
Semiconductors	32.1	I&S(94-98)	Cur, Emp	PPI(95)		I&S(91-99)	Cur, Emp	I&S(93-98)	Cur, Emp
Communication eq.	32.2	I&S(94-98)	Cur, Emp	PPI(95)		I&S(91-99)	Cur, Emp	I&S(93-98)	Cur, Emp
Radio and TV eq.	32.3	I&S(94-98)	Cur, Emp	PPI(95)		I&S(91-99)	Cur, Emp	I&S(93-98)	Cur, Emp
Instruments	33.1	I&S(94-98)	Cur, Emp	I&S(92-98)	Cur, Emp	I&S(91-99)	Cur, Emp	I&S(93-98)	Cur, Emp
Watches & instruments	33-33.1	I&S(94-98)	Cur, Emp	I&S(92-98)	Cur, Emp	I&S(91-99)	Cur, Emp	I&S(93-98)	Cur, Emp
Motor vehicles	34			Census(93-99)	Emp				
Ships	351			Census(93-99)	Emp				
Aircraft	353			Census(93-99)	Emp				
Railroad and other	352+359			Census(93-99)	Emp				
Misc. manufacturing	36-37			Census(93-99)	Emp				
Utilities	40-41								
Construction	45								
Repairs	50					Struc(98-99)	Cur, Emp	SerNA(95-97)	Cur, Con, Emp
Wholesale trade	51	SerNA(90-98)	Cur, Con, Emp			Struc(98-99)	Cur, Emp	SerNA(95-97)	Cur, Con, Emp
Retail trade	52	SerNA(90-98)	Cur, Con, Emp			Struc(98-99)	Cur, Emp	SerNA(95-97)	Cur, Con, Emp
Hotels & restaurants	55								
Transport	60-63								
Telecommunications	64								
Banks	65					SerNA(90-97)	Cur, Con, Emp		
Insurance	66					SerNA(90-97)	Cur, Con, Emp		
Securities trade	67					SerNA(90-97)	Cur, Con, Emp		
Real estate	70	d)							
Renting of machinery	71	d)				SerNA(90-97)	Cur, Con, Emp		
Computer services	72	d)				SerNA(90-97)	Cur, Con, Emp		
R&D	73	d)				Struc(98-99)	Cur, Emp		
Professional services	74.1-74.3	d)				Struc(98-99)	Cur, Emp	a)	
Other business services	74.9	d)				Struc(98-99)	Cur, Emp		
Government	75								
Education	80								
Health	85								
Personal & social serv.	90-93								
Private households	95								

a) All of 74

b) Arbitrarily assumed to have equal shares

c) 70 includes 71, 72 includes 73. Split up based on composition in Germany

d) See text for details on subdivision

e) Split up using shares for Denmark

f) All of 33, except watches is included under 331

g) See text for details on data used for these industries

h) For these industries new deflators are calculated

Industry	ISIC rev3	Sweden	Switzerland	UK	US
Agriculture	01-05				
Mining	10-14				
Food & beverages	15-16				
Textiles	17	I&S(91-98) Emp		I&S(93-98), ABI(99-00) Cur, Emp	ASM(00) Cur, Emp
Apparel	18	I&S(91-98) Emp		I&S(93-98), ABI(99-00) Cur, Emp	ASM(00) Cur, Emp
Leather	19			I&S(93-98), ABI(99-00) Cur, Emp	
Wood	20				
Paper	21			I&S(93-98), ABI(99-00) Cur, Emp	
Printing & Publishing	22			I&S(93-98), ABI(99-00) Cur, Emp	
Petroleum & coal	23				
Chemicals	24				
Rubber & plastics	25				
Stone, clay & glass	26				
Basic metals	27			ABI(99-00) Cur, Emp	
Fabricated metals	28			ABI(99-00) Cur, Emp	
Machinery	29				
Office and Comp. Eq.	30			ABI(99-00) Cur, Emp	ASM(00) Cur, Emp h)
Fiber optics	31.3	I&S(91-98) Cur, Emp	PPI(93)	I&S(93-98), ABI(99-00) Cur, Emp	ASM(90-00) Cur, Emp h)
Electrical machinery	31-31.3	I&S(91-98) Cur, Emp	PPI(93)	I&S(93-98), ABI(99-00) Cur, Emp	ASM(90-00) Cur, Emp h)
Semiconductors	32.1	I&S(91-98) Cur, Emp	PPI(93)	I&S(93-98), ABI(99-00) Cur, Emp	ASM(90-00) Cur, Emp h)
Communication eq.	32.2	I&S(91-98) Cur, Emp	PPI(93)	I&S(93-98), ABI(99-00) Cur, Emp	ASM(90-00) Cur, Emp h)
Radio and TV eq.	32.3	I&S(91-98) Cur, Emp	PPI(93)	I&S(93-98), ABI(99-00) Cur, Emp	ASM(90-00) Cur, Emp h)
Instruments	33.1	I&S(91-98) Cur, Emp	f)	I&S(93-98), ABI(99-00) Cur, Emp	ASM(90-00) Cur, Emp h)
Watches & instruments	33-33.1	I&S(91-98) Cur, Emp	f)	I&S(93-98), ABI(99-00) Cur, Emp	ASM(90-00) Cur, Emp h)
Motor vehicles	34			ABI(99-00) Cur, Emp	
Ships	351	I&S(91-98) Emp		ABI(99-00) Cur, Emp	ASM(00) Cur, Emp h)
Aircraft	353	I&S(91-98) Emp		ABI(99-00) Cur, Emp	ASM(00) Cur, Emp h)
Railroad and other	352+359	I&S(91-98) Emp		ABI(99-00) Cur, Emp	ASM(00) Cur, Emp h)
Misc. manufacturing	36-37				
Utilities	40-41				
Construction	45				
Repairs	50	I&S(97-98) Cur, Emp		SerNA(92-98), ABI(99-00) Cur, Con, Emp	g) h)
Wholesale trade	51	I&S(97-98) Cur, Emp		SerNA(92-98), ABI(99-00) Cur, Con, Emp	g) h)
Retail trade	52	I&S(97-98) Cur, Emp		SerNA(92-98), ABI(99-00) Cur, Con, Emp	g) h)
Hotels & restaurants	55				g) h)
Transport	60-63				
Telecommunications	64				g) h)
Banks	65				
Insurance	66				
Securities trade	67				
Real estate	70				
Renting of machinery	71			ABI(99-00) Cur, Emp	g) h)
Computer services	72			ABI(99-00) Cur, Emp	g) h)
R&D	73	e)		ABI(99-00) Cur, Emp	g) h)
Professional services	74.1-74.3	e)	a)	SerNA(92-98), ABI(99-00) Cur, Emp	g) h)
Other business services	74.9	e)		SerNA(92-98), ABI(99-00) Cur, Emp	g) h)
Government	75				
Education	80				
Health	85				
Personal & social serv.	90-93				g) h)
Private households	95				

a) All of 74

b) Arbitrarily assumed to have equal shares

c) 70 includes 71, 72 includes 73. Split up based on composition in Germany

d) See text for details on subdivision

e) Split up using shares for Denmark

f) All of 33, except watches is included under 331

g) See text for details on data used for these industries

h) For these industries new deflators are calculated