

# INVENTORIES OF SOURCES AND METHODS FOR PRICE AND VOLUME MEASURES IN NATIONAL ACCOUNTS

<b>CHAPTER 3 METHODOLOGIES BY PRODUCT ACCORDING TO CPA</b>	<b>2</b>
<b>3.1 Introduction</b>	<b>2</b>
<b>3.2 Output</b>	<b>3</b>
3.2.1 Section A, Products of agriculture, hunting and forestry	3
3.2.2 Section B, Fish and other fishing products; services incidental to fishing	5
3.2.3 Section C, Products from mining and quarrying	5
3.2.4 Section D, Manufactured products	5
3.2.5 Section E, Electrical energy, gas, steam and hot water	10
3.2.6 Section F, Construction work	10
3.2.7 Section G, Wholesale and retail trade services; repair services of motor vehicles, motorcycles and personal and household goods	11
3.2.8 Section H, Hotel and restaurant services	11
3.2.9 Section I, Transport, storage and communication services	12
3.2.10 Section J, Financial intermediation	13
3.2.11 Section K, Real estate, Renting and Business activities	13
3.2.12 Section L, Public Administration and Defence, Compulsory Social Security	14
3.2.13 Section M, Education	15
3.2.14 Section N, Health and Social Work	15
3.2.15 Section O, Other community, social and personal service activities	16
3.2.16 Section P, Private households with employed persons	16
<b>3.3 Intermediate consumption</b>	<b>16</b>
<b>3.4 Household final expenditure</b>	<b>17</b>
3.4.1 Deflators for consumption by Swedes abroad and by foreign visitors in Sweden	17
<b>3.5 Government final consumption expenditure</b>	<b>18</b>
3.5.1 Constant-price calculation by purpose and year	18
<b>3.6 NPISH final consumption expenditure</b>	<b>20</b>
<b>3.7 Gross fixed capital formation</b>	<b>21</b>
3.7.1 Gross fixed capital formation at constant prices	21
<b>3.8 Changes in stocks</b>	<b>23</b>
<b>3.9 Acquisitions less disposals of valuables</b>	<b>24</b>
3.9.1 Investment in entertainment, literary and artistic originals and valuables	24
3.9.2 Acquisitions less disposals of valuables	24
<b>3.10 Exports and imports of goods and services</b>	<b>24</b>

## Chapter 3 Methodologies by product according to CPA<sup>1</sup>

### 3.1 Introduction

In Sweden's national accounts, various methods are used for calculations at constant prices. There are relevant price indices for many areas, which are used for deflating the value in current prices. For some areas, volume indicators are used for calculations at constant prices. People often complain of the lack of a price index for the output of services. For many services activities, there are no price indices available and alternative solutions have to be sought for the national accounts. In these cases, often wage indices are used for deflating without adjustment for any assumed change in productivity. Using a wage index implies an assumption that prices for services develop in line with wages in the branch. Hence it is (implicitly) assumed that there is no change in productivity or operating surplus. It is thought that any such adjustment would be too arbitrary: it is difficult to argue whether the adjustment should be one or two percent up or down. Examples of such branches include business and legal consultancy, IT consultancy, data-processing services, and security and financial services.

Work is, however, under way on developing relevant price indices for the majority of the service branches. These should be in production by 2006. In the vast majority of cases, if the output is used as intermediate consumption in other branches this does not affect the GDP or growth in GDP recorded. In the case of producer services for final use however, such as gross capital formation or export, the deflation error directly affects the change in GDP. This is the case with software (at least if it is purchased) and certain architects' and building-consultancy services included under fixed capital formation, as well as a large proportion of export services.

The methods used for the various areas are described below.

For each product group (PG), the value of output in current prices for 2000, the index used, and the type (quality) of the method used are shown. The methods are classified as "A", "B" or "C" in accordance with Eurostat's guidelines for deflators and volume indicators<sup>2</sup>.

A = Best method

B = Acceptable method

C = Unacceptable method

*A-method*: A price index that relates to the product(s) for which constant-price calculations are to be made, is valued at basic prices and takes account of changes in quality - e.g. the service price index for premises rentals, known as the "*LHU* index" [*Lokal- and hyreshusundersökningen* - rented accommodation inquiry].

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<sup>1</sup> Statistical Classification of Products by Activity, Eurostat

<sup>2</sup> Handbook on Price and Volume Measures in National Accounts

*B-method:* A producer price index that does not exactly relate to the items for which constant-price calculations are to be made or take account of changes in quality. Alternatively, a volume index that takes account of changes in quality or a CPI that relates to most of the current product or product group and otherwise meets the requirements of an A-method. For example, the output of hairdressing can be deflated by means of the CPI for hairdressing, adjusted for any changes in taxes, subsidies or margins.

*C-method:* Input methods or price indices that are not relevant to the products in question - e.g. wage index, total CPI or a PPI relating to input in the product group to be deflated. An example of a C-method is the use of the factor-price index for goods-transport services. This is a cost-price index and does not measure price changes in output.

Wherever CPIs are used for deflating output, they are adjusted for changes in taxes and/or subsidies so that the price index reflects changes in the basic price.

## **3.2 Output**

### **3.2.1 Section A, Products of agriculture, hunting and forestry**

Agricultural output is calculated in accordance with the guidelines set out in the EAA<sup>3</sup> handbook using output price indices (O) and in some cases means-of-production price indices (MP). These are A-methods for deflating. Closely related indices are used for a number of product groups. This is a B-method. The groups in question are 0113E wild berries, 0121202 calves, 01252 animals reared for furs, and 01254 pets.

For forestry output, product groups 014A-0202, the forestry organisations collect and calculate data on quantities and values in current prices. The data are calculated for detailed product groups and in some cases also for different regions. The methods used are classified as A-methods.

The product groups within CPA 01-02 included in the system of national accounts are shown below. In many cases these are amalgamations of product groups that have been calculated at a lower level, which means that it is not so easy to say which deflation method was used for the respective product group at NA level.

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<sup>3</sup> Economic Accounts for Agriculture, Eurostat

<b>Product Group</b>	<b>Description</b>	<b>Current Price 2000</b>
01111A	Wheat	2623
01111B	Rye	197
01111C	Barley	1461
01111D	Oats	1246
01111E	Mixed grain	187
01111F	Other cereals	3
01111G	Energy crops	86
01111H	Planting seed	1088
0111300	Potatoes	967
011130A	Potatoes for home consumption	161
0111401	Sugar beet and sugar cane	1064
01119A	Legumes for feed	14
01119B	Oil plants	381
01119D	Planting seed (excl. cereals and potatoes)	37
01119E	Other agricultural plants	0
0111A	Feed crops	1261
0112A	Vegetables	1289
0112B	Flowers/plants	1590
0113A	Fruit	311
0113E	Wild berries	271
0121201	Cattle	4128
0121202	Calves	66
0122801	Horses including breeding horses	692
0122A	Sheep and goats	152
0123	Pigs	3335
0124100	Eggs	772
012410A	Eggs for home consumption	29
0124A	Poultry	867
0125100	Reindeer	179
01252	Animals reared for furs	361
01254	Pets	351
01259	Game	532
012A	Milk	9961
012B	Meat for home consumption	56
012C	Invest. livestock for breeding and dairy cattle	-325
012D	Other animal products	92
012E	Milk for home consumption	31
014A	Services to agriculture	1237
0201101	Variations in quantity of timber cut	6340
0201105	Firewood	774
0201106	Other unprocessed wood	36
02011A	Pulpwood	5454
02011B	Saw timber	13288
02012A	Forest drainage	1491
0201A	Forest management and logging	36
0201B	Forest regen. mat. and other forestry prod.	216
0202	Services to forestry	2

**3.2.2 Section B, Fish and other fishing products; services incidental to fishing**

PG	Description	CrtP	Index	Method
050A	Fish, crustaceans etc.	1069	Unit value index	A

Data on values in current prices and quantities can be found for various fish products broken down by salt- and freshwater fish, and aquaculture. The price index is calculated at a detailed level on the basis of value and quantity data. The method used is an A-method.

**3.2.3 Section C, Products from mining and quarrying**

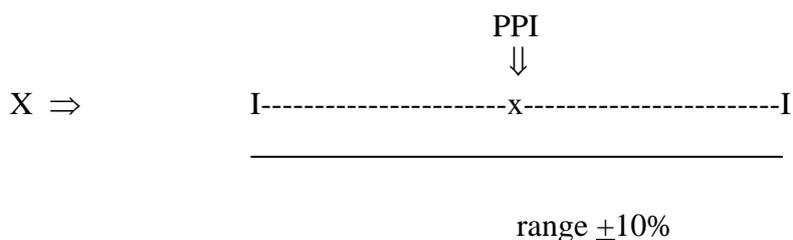
The price index for products from the extraction of energy-producing materials, ores and minerals is obtained from the compilation of the producer price index. The method used is an A-method.

PG	Description	CrtP	Index	Method
1030	Peat	1141	PPI	A
1310000	Iron ore	4776	PPI	A
13200	Non-ferrous metal ores except uranium and thorium ores	2564	PPI	A
141	Stone	598	PPI	A
142	Sand, gravel, rock and clay	4701	PPI	A

**3.2.4 Section D, Manufactured products**

*Constant-price calculations for manufactured products*

In most cases constant-price calculations for manufactured products are based on PPIs. The unit value index is used for about 15%–20% of the total. The 200 or so largest and smallest values are dealt with separately. If the products are not comparable, PPIs are used instead. Price indices calculated from the unit value index are checked separately. An observation in the study entitled "*Industrins varuproduktion*" [Production of Goods by Industry], calculated as a unit value index, is checked as follows:



If the observation (X) lies outside the range of  $\pm 10\%$  around the PPI, it is moved to the extreme of the range - i.e. the PPI takes over from the unit value index. Special comparisons with foreign-trade statistics are also made for certain branches/businesses.

Other industrial output is dealt with as follows:

- *Repair and assembly*: for these industrial services the wage index is used as the deflator. It is reduced by 1% in order to increase productivity.
- *Hire processing, i.e. remuneration received for processing and compensation for own materials if used*: PPIs are used for the corresponding SNI<sup>4</sup> items.
- *Other processing, i.e. bleaching, dyeing, grinding, gilding, etching, lacquering, printing, etc.*: The wage index is used for deflating, except in SNI 22222 (printing of books and other printed articles), for which PPIs are used.

#### *Large equipment goods*

This group includes large articles that are often produced only as single items or as one series. It is also common that new materials and production techniques are used when similar articles are subsequently produced. It is very difficult, therefore, to calculate relevant price indices for these goods, examples of which include ships and boats, aircraft and large machinery - for the paper-pulp industry, for example. For these goods, PPIs for higher-level aggregates are used (see Section 3.7). The method used is a C-method.

#### *Computers*

The PPI for the relevant CN<sup>5</sup> number is used. Larger-scale production is found only in the case of computer components, for which PPIs are calculated in the conventional manner. This is a B-method.

Deflation of the output of manufacturing is done mainly by means A-methods using, for example, PPIs and the unit value index at detailed level. The product groups covered by the system national accounts are shown below. In many cases they are amalgamations of CN numbers and product groups for which calculations have been made at a more detailed level, and it is therefore not possible to indicate a single deflation method for each group.

<b>PG</b>	<b>Description</b>	<b>CurrentPrice</b>
15111	Beef and veal; whole, half or quarter carcasses	5241
15112	Beef and veal; small cuts	7878
15120	Poultry meat, fresh and preserved	1751
15130	Meat products	11419
15200	Fish and fishery products, processed and preserved	3122
15310	Potatoes, processed and preserved	1469
1532000	Fruit and berry juices and vegetable juices	1248
15330	Miscellaneous fruit, berries and vegetables, processed/preserved	2687

<sup>4</sup> Standard för svensk näringsgrensindelning, equivalent to NACE Rev.1 on 4-digit level

<sup>5</sup> CN= Combined Nomenclature

15410	Raw vegetable and animal oils and fats	326
15420	Refined vegetable and animal oils and fats	784
1543000	Margarines and similar preparations	2433
1551100	Cheese and curds	4530
1551201	Milk and cream <6% fat	4973
1551202	Milk and cream >6% fat	2243
1551206	Yoghurt	2821
15512A	Other dairy products	3365
1552000	Ice-cream	1794
15611	Flour	1676
15612	Breakfast cereals, mixes and other grain-mill products	1656
15620	Starches and starch products	1632
15710	Prepared feeds, meal and pellets of alfalfa	4033
1572000	Petfoods	348
15810	Bread and fresh bakery products	9480
1582	Crispbread, biscuits and preserved bakery products	2257
15830	Sugar	1981
1584	Cocoa, chocolate and confectionery	5148
15850	Pasta products	391
15860A	Coffee	3003
15860B	Tea	5
15870	Mustard, ketchup, spices and other condiments	2392
158A	Other foods, including homogenised preparations	2829
1591000	Distilled alcoholic beverages	3972
15920	Ethyl alcohol (crude spirit)	176
15960	Beer	3437
1597000	Malt	335
15980	Mineral water and soft drinks	4809
159A	Wine, cider and other non-distilled fermented beverages	922
16000	Tobacco products	2413
171	Yarn	100
172	Woven fabrics of textile and glass fibre	1170
17300	Bleaching, dyeing, textile printing plants and other textile processing plants	519
174	Sewn textile products except wearing apparel	1842
175	Other textiles	4333
17600	Elastic webbing	687
177	Knitted goods	329
1810000	Leather garments	107
182	Other clothing and accessories	2000
18300	Furs; fur products	116
19100	Leather	642
19200	Luggage, handbags, saddle goods	407
19300	Footwear	414
20101	Wood, sawn	28034
20102	Wood, planed	6093
20103	Unprocessed wood; impregnated or otherwise treated	698
20201	Veneer, plywood and laminated board	897
2020200	Particle board	1970
20203	Fibre board	651
2030100	Prefabricated timber houses	6005
20302	Building joinery and interior fittings	11801

20400	Wooden containers	2495
20510	Other wood products	1941
20520	Articles of cork, straw, plaiting materials and the like	48
2111100	Mechanical or semi-chemical wood pulp	1631
21112	Sulphate pulp	21175
2111300	Sulphite pulp	1105
2112100	Newsprint	11137
21122	Other printing paper	10206
21123	Kraft paper and kraft liner board	13994
21129	Other paper and board	28231
2121100	Corrugated board and corrugated board packaging	4628
21219	Paper and board packaging except corrugated board	2430
21220	Household and sanitary goods of paper	5599
21230	Writing paper, envelopes and the like	2553
21240	Wallpaper	317
21250	Miscellaneous paper or board products	2751
221	Products from publishing activity	38933
222	Printing products	27675
223	Reproduction of recorded media	274
2310001	Coke	66
2310002	Mineral tars	39
2320007	Heavy fuel oil	8407
2320008	Luricants	3016
2320009	Propane and butane	671
2320010	Ethylene, propylene, butylene etc.	169
23200A	Motor gasoline	13213
23200B	Light oils, kerosene (excluding aviation), other medium oils	1181
23200C	Aviation and jet gasoline, aviation kerosene	683
23200D	Diesel oil, motor kerosene	14230
23200E	Domestic fuel oil	5271
23200F	Petroleum coke, petroleum bitumen etc.	1843
23300	Nuclear fuel	786
24110	Industrial gases	1414
24120	Dyes and pigments	266
24130	Other inorganic basic chemicals	5385
2414A	Tall oil, charcoal, liquors from the manufacture of wood pulp	599
2414B	Other organic basic chemicals	9679
24150	Fertilisers and nitrogen products	973
24160	Basic plastics	10146
2417000	Synthetic basic rubber	399
24200	Pesticides and other agricultural chemicals	126
24300	Paints, varnishes, printing inks etc.	7013
24410	Basic pharmaceuticals	2429
24420	Medicines	39506
24510	Soaps, detergents and polishing preparations	2348
24520	Perfumes and toilet preparations	837
246	Other chemical products	6020
24700	Man-made fibres	461
25130	Other rubber products	5775
251A	New and retreaded tyres and tubes	2031
252	Plastic products	26454

26110	Flat glass	603
26120	Shaped and processed flat glass	1647
26131	Bottles and glass containers	459
26132	Household and ornamental glass	930
26140	Glass fibre	1254
26150	Other glass products including technical glassware	458
262	Ceramic products except non-fire-resistant for construction purposes	2013
2630000	Ceramic floor and wall tiles	62
26400	Bricks, tiles and other construction products, in baked clay	133
265	Cement, lime and plaster	2307
266	Concrete, cement and plaster products	6588
2670	Stone goods	950
268	Other non-metal mineral products	3657
27100	Iron and steel and ferroalloys	39026
27100X	Scrap iron	1207
272	Iron and steel tubes	5369
273	Other primary products of iron and steel and ferroalloys	13787
274	Non-ferrous metals	19013
274X	Non-ferrous metal scrap	611
275	Iron and non-ferrous metal castings	932
281	Structural metal products	16252
28210	Cisterns, tanks, reservoirs and other containers of metal	897
28220	Central heating radiators and boilers	974
28300	Steam generators except central heating boilers	538
28400	Forging, pressing, stamping and roll forming of metal; not for the purpose of manufacture	2674
285	Coating and plating of metal, contract metal work	25753
286	Cutlery, tools and other hardware products	14974
287	Other metal products	23700
291	Machinery for the production and use of mechanical power, except aircraft/vehicles	23842
292	Other general purpose machinery	37893
293	Agricultural and forestry machinery	6590
2940	Machine-tools	15839
29510	Machinery for metallurgy	1392
29520	Machinery for mining, quarrying and construction	12566
29530	Machinery for food, beverage and tobacco processing	3474
29540	Machinery for textile, apparel and leather production	1769
29550	Machinery for pulp, paper and paperboard production	5798
29561	Plastic and rubber processing machinery	255
29569	Miscellaneous other special machinery	13458
29600	Weapons and ammunition	5314
29711	Refrigerators and freezers, washing machines and other white goods	3439
29719	Other domestic electric appliances	4450
29720	Non-electric domestic appliances	537
30010	Office machinery and parts for such machinery	2138
30020	Computers and other data processing equipment	3854
31100	Electric motors, generators and transformers	7906
31200	Electricity distribution and control apparatus	11101
31300	Insulated wire and cable	7837
31400	Batteries and accumulators	2146
3150	Lighting equipment, electric lamps and lighting tubes	3719

316	Other electrical equipment	5929
32100	Electronic components	9116
32200	Television and radio transmitters, apparatus for line telephony and line telegraphy	106017
32300	Television and radio receivers, sound or video recording apparatus	24265
33101	Medical equipment	9976
3310200	Dentures	2171
33200	Instruments and appliances for measuring, checking, testing	14001
3330000	Instruments for industrial process control	4673
33400	Optical instruments and photographic equipment	2192
33500	Watches and clocks	161
34100	Motor vehicles	99351
34200	Bodies for motor vehicles; trailers, semi-trailers	11822
34300	Parts and accessories for motor vehicles and engines	50128
35110	Ships and boats	4154
35120	Pleasure boats	2937
35200	Railway locomotives and rolling stock	7290
35300	Aircraft and spacecraft	13043
35410	Motorcycles	261
35420	Bicycles	496
35430	Invalid carriages	1198
3550000	Other transport equipment	232
361	Furniture	25727
362	Jewellery, gold and silver articles	720
36300	Musical instruments	125
36400	Sports goods	1003
36500	Games and toys	556
366	Miscellaneous goods	2149
3710000	Recycling of metal waste and scrap	2134
3720000	Recycling of non-metal waste and scrap	1084

### 3.2.5 Section E, Electrical energy, gas, steam and hot water

PG	Description	CrtP	Index	Method
40100A	Electricity and distribution of electricity	42494	Unit value+CPI	B
40200	Manuf. gas and distribution of gaseous fuels through mains	2103	Unit value ind.	B
4030000	Steam and hot water supply, incl cold water/ice for cooling	16878	Weight. PPI + CPI	B
41000	Supply of water including sewerage	10750	CPI Water	B

### 3.2.6 Section F, Construction work

PG	Description	CrtP	Index	Method
45	Construction	158699	Weighted index fixed cap. form. and rep.	C

Construction work is calculated from the uses side as the sum of fixed capital formation and repairs. Deflation is carried out using price indices for fixed capital formation and repairs adjusted for VAT (see Section 3.7).

### 3.2.7 Section G, Wholesale and retail trade services;

#### repair services of motor vehicles, motorcycles and personal and household goods

PG Description	CrtP Index	Method
5AA Commissions	6086 IMPI total	C
5AB Merchandising	24077 IMPI tot/IMPI motorveh	C
5C Margins	303599 Implicit S/U	B
50A Repair of motor vehicles incl. motorcycles	23224 CPI mv.rep	B
527 Rep housh/pers art	4629 CPI rep hh.goods	A

Calculations of trade margins for the product accounts are carried out in the Supply- and Use-tables. There is a percentage margin for each product group. The margins are totalled in the system. Trade margins generated in branches other than SNI G are subtracted from the total and the remainder is the output value for trade margins within the SNI G.

The percentage for the base year is used for extrapolating the value in constant prices for each product group. This means that the trade margin for each product is extrapolated in line with the purchasers' price. Assuming the same trade margin implies that the quality of the goods or related services has not changed from one year to another.

If checks on the Supply- and Use tables reveal substantial discrepancies between the current and constant prices, this may indicate that something has changed from one year to another. The discrepancy may result from an increase or reduction in the trade margin because of competition or a change in the service offered. If there has been a change in the service offered there will be a change in the margin in constant prices too.

The method described - which is based on the principle that volume changes for trade margins follow the same pattern as volume changes for trade and is applied within the Supply- and Use system - is a B-method.

### 3.2.8 Section H, Hotel and restaurant services

PG	Description	CrtP	Index	Method
551	Hotel serv.	11747	SPI hotel serv.	A
552	Camping and other accomm. services	1295	CPI camping	A
555	Canteen, catering and central kitchen services	1768	CPI restaurant	B
55A	Restaurant and bar services	56446	CPI restaurant	B

In the hotel services group, SPIs (Services Price Indices) are used for accommodation services provided by hotels. This is an A-method. CPIs only are used for measuring restaurant services. If the change in price is different for private and corporate customers, this is a B-method. Allowance has been made for undeclared work and this is deflated using the same price indices as for other work.

### 3.2.9 Section I, Transport, storage and communication services

PG	Description	CrtP	Index	Method
60100A	Passenger transport by railway	4672	CPI railway	B
60100B	Passenger transport by railway: contract	708	CPI/own	B
60100C	Goods/ore transport by railway	4539	FPI transport	C
6021A	Passenger transport (public transport)	29827	CPI pub.trans.	B
6021B	Goods transport (public transport)	130	FPI transport	C
60220	Taxi transport	14804	CPI taxi	B
60230	Passenger transport, bus	2197	CPI bus trips	B
60240	Road transport, goods	60125	FPI transport	C
61A	Passenger transport, boat/ship	1631	CPI boat trips	B
61B	Goods transport, boat/ship	24479	FPI transport	C
61C	Hire of ships and boats	4270	Charter rate	B
62A	Passenger transport, air	19041	SPI air	A
62B	Goods transport, air	606	SPI air	A
62C	Hire of aircraft	670	SPI air	A
63110	Cargo handling	3589	FPI transport	C
63120	Storage and warehousing	2489	FPI transport	C
63210A	Parking services	2679	CPI parking	B
63210B	Toll road and bridge services	288	Unit value	B
63210C	Other supporting land transport activities	721	FPI transport	C
63220A	Port services	1441	FPI transport	C
63220B	Pilotage and other navigation services	1241	revenue/pilotage	B
63220C	Other supporting sea transport activities	728	FPI transport	C
63230	Other supporting air transport activities	5813	LFV index	A
63301	Package tours by air and bus, domestic and foreign	27414	CPI package tours	B
6330A	Other travel organising and tourist assistance activities	4165	Weight CPI/PPI	B
63400	Other transport agency services	20320	FPI transport	C
641	Post and courier activities	20083	Price ind. large op.	B
64201A	Telecommunications services excluding mobile telephony	48842	SPI telecom	A
64201B	Mobile telephony	15831	SPI mobil	A
64202	Broadcasting services, television and radio transmission	1527	Price ind. large op.	B
64203	Cable services, television and radio services	1920	CPI cableTV	B
63210PEA	Supporting land transport activities	24487	cost calculation	C
6330PEA	Travel agencies	390	cost calculation	C

For 61C, hire of ships and boats, the price index for the charter rate is used, as calculated by the German Statistical Office. The price index for 63210B, which covers the Öresund bridge, is calculated on the basis of data on tolls and traffic volume for various types of vehicles. Public transport (6021A) includes subsidies from local authorities. These are extrapolated for volume on the basis of the volume change for consumption of public transport by households since it is private individuals that mainly benefit from these subsidies. Factor price indices are extensively used for goods transport. This is a C-method. Development work is under way, however - for sea transport, for example. Development work is also under way for ancillary activities in the form of forwarding and goods handling. Postal services are dominated by one large operator and the price index used is an

output price index based on the activities of that operator. This is a B-method. Telecommunications are largely deflated using the service price index [*tjänsteprisindex - TPI*]. LFV index is an index derived from the Swedish Civil Aviation Administration. "OPEA" stands for "public production for own final consumption" [*offentlig produktion för egen användning*].

### 3.2.10 Section J, Financial intermediation

PG	Description	CrtP	Index	Method
65A	FISIM	44930	In acc. with EU instructions	B
65B	Banking services & other financial intermediation	41322	Weighted index, fund assets/wages SNI65	A/C
6601	Life insurance	6233	Wage index SNI65	C
66020	Pension fund services	4381	Wage index SNI66	C
66030A	Non-life insurance	15443	Weighted index, non-life ins. and OV	B
66030B	Reinsurance	2200	Weighted index, non-life ins. and OV	B
67	Activities auxiliary to financial intermediation	9875	Wage index SNI67	C

For FISIM<sup>6</sup> deflation is carried out in accordance with Eurostat's recommendations<sup>7</sup>.

Banking services and other financial intermediation consist mainly of fees for the management of investment funds and commissions on sales of securities. These fees and commissions are usually ad valorem charges. The value of the underlying assets and the percentage charged are used when constructing the price index (this is the A method part). A wage index for NACE 65 is used for the rest of various banking services.

Non-life insurance and reinsurance. Sweden is using the number of policies, by product (motor vehicles, households, etc) as a volume indicator for non-life insurance. The indicator is weighted by the output value (OV) of each insurance product. This method is considered a B-method according to paragraph 4.9.2 of the Handbook on price and volume measures.

### 3.2.11 Section K, Real estate, Renting and Business activities

PG	Description	CrtP	Index	Method
70201A	Imputed rentals for owner-occupiers	132016	CPI dwelling	A
70201B	Imputed rentals for secondary residences	10863	Weighted CPI	C
70201C	Actual rentals paid by tenants	95004	CPI dwelling	A
7020A	Other real estate letting	91442	SPI Premises Rentals index	A
70A	Real estate management etc.	18802	Wage index SNI74	C
71100	Motor vehicle hire (cars and vans)	4837	SPI vehicle hire	A
71100A	Car benefits	8473	Own, tax authority	B
71210	Hire of other land transport equipment without driver	1995	ITPI	B
71220	Hire of ships and boats without master	233	ITPI	B

<sup>6</sup> Financial Intermediate Services Indirectly Measured

<sup>7</sup> Council Regulation (EC) 98/448/EF, Official Journal of the EU

71230	Hire of aircraft without crew	1678	ITPI	B
713	Hire of machinery and equipment	17464	ITPI	B
7140	Hire h.hold articles/goods for personal use	3166	KPI hire hh. articles	A
7220	Computer system and software consultancy	49352	SPI 7220	A
7220EG	Computer systems/software produced on own account	12471	SPI 7220EG	A
72500	Maintenance and repair of office and accounting machinery	3895	SPI72500	A
72A	Other data processing services	50975	SPI72A	A
73	Research and development	20442	Wage index SNI73	C
741	Legal and business consultancy	104574	Wage index SNI741	C
741A	Licence, patent and royalty services	13092	EXPI goods	C
742	Architectural and technical consultancy	72907	Wage index SNI742+3	C
742A	Construction services abroad	6235	Weight index invest./rep.	C
743	Technical testing and analysis	5622	Wage index SNI742+3	C
744	Advertising services	45633	Wage index SNI744	C
745	Labour recruitment and provision of personnel	646	Wage index SNI745-8	C
746	Investigation and security activities	7650	Wage index SNI745-8	C
747	Cleaning and chimney-sweeping	19240	Wage index SNI745-8	C
748	Other business services	34779	Wage index SNI745-8	C
730PEAR&D		13514	cost calculation	B

Data on car benefits are obtained from the National Tax Board [*Riksskatteverket - RSV*]. There is a model calculation for how car benefits should be taxed, and this can also be used for constant-price calculations. Product group 730PEA covers research in the public sector, which is often basic research in the fields of education/training and health care. This is a public service and the deflation of input can be classified as a B-method.

### 3.2.12 Section L, Public Administration and Defence, Compulsory Social Security

PG	Description	CrtP
75A	General public service activities	2 516
75B	Other public administration	10 259
75C	Defence, law enforcement and fire protection	1 497
750PEA	Public administration	157 510

Product groups 75A, 75B and 75C include chargeable non-market output. These are deflated by means of various partial indices from the CPI. 750PEA is public production for own final consumption. This group includes public services such as administration, defence, police and social security. These services are not sold on a market, hence there are no price measurements. The calculations are made from the costs side for the various components - i.e. wages, intermediate consumption, consumption of fixed capital and sales - and deflated as described in Section 3.5. These are essentially public services, so everyone can, in principle, consume the

same amount. Since it is difficult to define what constitutes the output, the use of input methods is classified as a B-method.

### 3.2.13 Section M, Education

PG	Description	CrtP	Index	Method
801	Primary education	1356	Wage index SNI80C	
802	Secondary education	234	Wage index SNI80C	
803	Higher education	268	Wage index SNI80C	
804	Adult and other education	15764	Wage index SNI80C	
80OPEA	Education	126 503	Cost calculation	C

These services are consumed individually. Authorised methods for deflating are volume and price measurements for various components. Work is currently under way on developing calculation methods for deflation. Output from private companies within this branch is deflated using wage indices and public production (OPEA) by means of various indices relating to wages, intermediate consumption, consumption of fixed capital and sales. These methods are classified as C-methods.

### 3.2.14 Section N, Health and Social Work

PG	Description	CrtP	Index	Method
85130	Dental practice activities	7766	Index various measures	B
85140	Other human health activities	3960	Wage index SNI851	C
851A	Hospital activities	9061	Wage index SNI851	C
851B	Medical practice activities	9188	Wage index SNI851	C
85200	Veterinary activities	979	Wage index SNI852	C
853A	Child care	3735	Wage index SNI853	C
853B	Care of the elderly and disabled	7198	Wage index SNI853	C
853C	Pers. assistant	1057	Hourly rate	B
853D	Individual and family welfare	2788	Wage index SNI853	C
851OPEA	Health care	99 608	Cost calculation	C
853OPEA	Welfare	93334	Cost calculation	C

Health-care and medical services are consumed individually. Within the context of the CPIs, price measurements are made of the charges paid by households. These charges cover, however, only a small part of the output value, most of which is financed out of tax revenue. Deflation using CPI is therefore not possible without recourse to other methods such as volume and price measurements for various components of the services in question. Work is under way on developing indices in this area. Output from private companies within this branch is deflated using wage indices and public production (OPEA) by means of various indices relating to wages, intermediate consumption, consumption of fixed capital and sales. These methods are classified as C-methods.

### 3.2.15 Section O, Other community, social and personal service activities

PG	Description	CrtP	Index	Method
90	Sewage and refuse disp.	14023	FPI/L-indSNI90	C
911	Business, employers' and professional org.	7173	Wage index SNI91C	
92B	Originals	1904	Wage index SNI92C	
921	Motion picture and video activities	9633	Wage index SNI92C	
922	Radio and television activities	12098	Wage index SNI92C	
9231	Artistic and literary creation and interpretation	3073	Wage index SNI92C	
923A	Theatre, entertain.	5126	Wage index SNI92C	
924	News agency activities	2055	Wage index SNI92C	
925	Library, archive and museum activities	466	Wage index SNI92C	
926	Sporting activities	2991	CPI sport	B
9271	Gambling and betting activities	8933	CPI gaming	B
9272	Other recreational activities	240	Wage index SNI92C	
9301	Laundering and dry-cleaning activities	3769	Wage index SNI93C	
9302	Hairdressing and other beauty treatment	6999	Wage index SNI93C	
9303	Funeral and related activities	1654	KPI funer.	A
9304	Physical well-being activities	1296	Wage index SNI93C	
9305	Other service activities	141	Wage index SNI93C	
91OPEA	Business, employers' and professional org.	33	Cost calculation	C
92OPEA	Culture	16 182	Cost calculation	C

These activities include a wide range of services. Price and volume indicators are largely lacking, but development work is under way.

Deflation is by means of wage indices for output from private companies within this area and by means of various indices relating to wages, intermediate consumption, consumption of fixed capital and sales for public production of these individual services. These constitute C-methods.

### 3.2.16 Section P, Private households with employed persons

PG	Description	CrtP	Index	Method
9500000	Private households with employed persons	271	Hourly rate	B

## 3.3 Intermediate consumption

The outputs of agriculture and manufacturing are covered respectively by rolling annual and three-yearly specific detailed information on intermediate consumption. Intermediate consumption of, for example, energy products under SNI 40 is studied on an annual basis at a detailed level. Detailed information is more sporadic for other output. The trend in intermediate consumption is then extrapolated for each year of calculation on the principle that intermediate consumption in constant prices remains constant relative to output value. The figures are then aligned with the values in the statistical sources for total intermediate consumption per branch.

In most cases the figures in the sources are the same as those in the Structural Business Statistics SBS. Adjustments can then be made when checking the balances in the supply- and use tables.

Deflation is by means of the price indices calculated on the basis of the figures in the use tables, i.e. the domestic supply [*inhemsk tillgång - IHT*] price indices as described in Section 2.10. For the product groups dealt with in the system as known values, data are calculated in both current and constant prices and deflation is by means of relevant price indices.

### 3.4 Household final expenditure

Deflation of final expenditure by households is carried out primarily on the basis of various partial indices from the CPI and the HICP<sup>8</sup>. This is an A-method. Deflation is by product group (258) and purpose (140). The various indices used in the CPI are shown in a separate annex. Volume indices are used for some sub-items such as petrol and domestic heating. The combined (implicit) index tends to be fairly close to the total CPI. The price change often differs by only a few tenths of a percent.

There are many reasons for the difference. One of them is that the weights used in the national accounts may differ from those used for the CPI. Another reason is that housing is treated differently in the national accounts and the CPI, and the coverage of consumption by households also differs somewhat. Consumption by Swedish households abroad, for example, is included in the national accounts, but consumption by foreign visitors in Sweden is not.

#### 3.4.1 Deflators for consumption by Swedes abroad and by foreign visitors in Sweden

The data on subsistence costs abroad are deflated using a specially constructed price index based on data on the total CPI for a number of countries that are important destinations for Swedish tourists, and changes in the exchange rates and the relative importance of the destinations, obtained from occasional surveys.

A survey of "travellers' foreign exchange" [*resevaluta*] is carried out occasionally in order to obtain data on expenditure by Swedes abroad. Between these surveys, information on the relative proportion of purchases of foreign currency by Swedes accounted for by various currencies is used. Now that a number of important destination countries in the EU have introduced the Euro, we are in principle using the former distribution until further notice.

The IMF's monthly publication "Financial International Statistics" gives CPI data for the Member States. Sweden's central bank [*Sveriges Riksbank*] compiles

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<sup>8</sup> Harmonized Consumer Price Index

monthly exchange-rate data. The distribution of travellers' foreign exchange is also obtained from the *Riksbank*.

Data on expenditure in Sweden by foreign visitors are deflated using the total CPI for Sweden.

### **3.5 Government final consumption expenditure**

Final consumption expenditure comprises the output value of the activities of general government - classified as other non-market producers - minus revenue from sales plus purchases from market producers of goods and services supplied direct to households without further processing as social transfers in kind (direct consumption). For the calculations, the figures are split into compensation of employees, consumption of fixed capital, other taxes on production, other subsidies on production, sales, other assets produced for own account and direct consumption. Data in current prices are obtained from the various sources.

For individually consumed public services the handbook on constant-price calculations states that constant-price calculation should be made for the services produced within each sector. Individual services are those that are consumed individually - e.g. medical care, education and cultural activities. Suitable measurements of output therefore include pupil hours and various medical treatments. In Sweden no calculations are at present made on the basis of output within the sector; constant-price calculation are made for all public services using input methods. Development work is under way, however. In view of the difficulties involved in producing definitions, collecting data and calculating output and price indices, the handbook also permits of deflation input variables at a detailed level.

#### **3.5.1 Constant-price calculation by purpose and year**

##### **3.5.2 Primary municipalities**

*Compensation of employees and other taxes on production, excluding special income tax on pensions, broken down by function (COFOG) are extrapolated in terms of volume on the basis of the change in the number of hours worked per function. Hours are calculated on the basis of a calculated hourly rate per function and the total wages paid per function. The hourly rate is obtained from the Association of Local Authorities [*Kommunförbundet*]. The total hours per function are aligned with the total hours worked in the primary municipalities in accordance with the national accounts employment calculations for hours worked. If the sum of the hours worked per function does not correspond to the total figure, all hourly rates per function are adjusted proportionally in order to bring the figures into line. Wages etc. are then calculated in constant prices for each of the purposes as follows:*

purpose xx

Wages in year t in prices for year t-1 = Wages in current prices year t-1\*(number of hours worked in year t/number of hours worked in year t-1)

*The special income tax on pensions and other subsidies on production* are deflated on the basis of the agreements between the employer (primary municipalities) and the trade unions, i.e. changes in hourly rates.

### **3.5.3 County Councils [landsting]**

*Compensation of employees and other taxes on production*, excluding special income tax on pensions, broken down by function are extrapolated in terms of volume on the basis of the change in the number of hours worked per function, for which figures are obtained from the Association of County Councils [Landstingsförbundet]. The sum of volume changes per function is aligned with the total hours worked in county councils in accordance with the national accounts employment calculations for hours worked. As from 2001 these calculations have been carried out in the same way as those for the primary municipalities.

*The special income tax on pensions and other subsidies on production* are deflated on the basis of the agreements between the employer (county councils) and the trade unions, i.e. changes in hourly rates.

### **3.5.4 Agencies and departments of central government**

*Compensation of employees and other taxes on production* broken down by function are extrapolated in terms of volume on the basis of the change in the number of hours worked per function. The number of hours worked per function are estimated on the basis of the national accounts employment calculations for hours worked and the total number of persons employed by central government. The Structural Wage Statistics show the total wage bill per employee and function. By dividing the total wages per function in the national accounts by the total wages per employee in the Structural Wage Statistics, the number of employees per function can be obtained. The total number of employees per function is aligned with the total number of employees.

The number of hours worked per function is calculated on the basis of the annual wage sum per full-time employee from the Structural Wage Statistics [*lönesumma per helårsperson*] by comparing the wage sum per full-time employee and function with the total wage sum per full-time employee. The resulting proportions have subsequently been applied to the national accounts data on total hourly wages for the central government sector. Hours per function were then obtained by dividing the national accounts wage sum per function by the hourly rate.

*Other subsidies on production* are deflated using the change in the hourly rate. *Special income tax on pensions* is extrapolated in terms of volume on the basis of the change in the number of hours worked in agencies and departments of central government.

### **3.5.5 Primary municipalities, county councils and agencies and departments of central government alike**

For *consumption of fixed capital* the same price indices are used as for deflating fixed capital formation.

*Intermediate consumption* in current prices is based the data collected and constant-price calculations are carried out in accordance with the principles described in Section 3.3. Deflation is by means of IHT indices for the product groups that are not dealt with as known values.

*Sales* within the public sector are deflated by means of relevant partial SPI, PPI and CPI indices and to a certain extent by means of the wage indices for certain services.

For the calculation of direct consumption (*social benefits in kind*) in constant prices, various unit prices, volume extrapolations and CPI are used, and, in the case of subsidies for medicinal products, which make up the biggest single item with SEK 15 billion, the sale price index of the state pharmaceuticals monopoly, "Apoteket", [*Apotekets utförsäljningsprisindex*] for the subsidised amount.

In a few years, the Member States of the EU should change over from using input-related measurements to output in constant prices, at least for individual services such as education, medical care, welfare and culture. National accounts development work is under way in these areas, both in Sweden and in other countries. In the case of collective services such as defence and the judiciary, however, it may be a long time before it is possible to find usable measurements of volume. It is difficult to define output: for example, is output greater if more houses burn down or the army conducts more exercises? Since there are no market prices or accepted measurements of output the handbook classifies the use of input methods as a B-method for collective services.

### **3.6 NPISH final consumption expenditure**

As in the case of agencies and departments of central government, consumption by non-profit institutions serving households, NPISH, is calculated from the costs side as output value minus sales. Sales comprise the fees charged by non-profit institutions serving households for their services. The output value comprises compensation of employees and other taxes on production minus other subsidies on production and consumption of fixed capital and intermediate consumption. Value added is calculated as output value minus intermediate consumption.

Wages and wage-related costs are deflated by means of the wage indices for activities in which non-profit institutions serving households are engaged. Intermediate consumption, broken down over nine activities (purposes), is

calculated as fixed proportions of value added at constant prices. Conversion to current prices is by means of the implicit price indices for the product groups in question, which are produced as part of the coordination work for the supply- and use tables.

### 3.7 Gross fixed capital formation

#### 3.7.1 Gross fixed capital formation at constant prices

Fixed capital formation involves the acquisition - i.e. purchase or production on own account - of new durable market products. It also includes imported used capital goods, while exported used capital goods are excluded. Conversions of and extensions to buildings and plant that increase their efficiency or life are also included as fixed capital formation. In the definitive annual accounts, constant-price calculations are made for gross fixed capital formation in the system using supply- and use tables broken down into the following products.

PG	Description	CrtP	Index	Method
K 122801	Trotting horses	629	Aprice/quant	A
K 012C	Dairy cattle	-225	Aprice/quant	A
K 02012A	Forest drainage	1 058	unit value	B
281	Structural metal products	3 039	IHT	A
28210	Cisterns	1 432	IHT	A
28220	Radiators	828	IHT	A
28300	Steam generators	1 536	IHT	A
286	Tools	1 140	IHT	A
287	Other metal products	5 497	IHT	A
291	Mech. power machinery	7 449	IHT	A
292	Other machinery	17 233	IHT	A
293	Agricultural/forestry mach.	4 837	IHT	A
2940	Machine-tools	4 624	IHT	A
29510	Machinery for metallurgy	183	IHT	A
29520	Mining/construction	5 467	IHT	A
29530	Food, beverages	1 091	IHT	A
29540	Textiles etc.	244	IHT	A
29550	Pulp, paper	1 136	IHT	A
29561	Plastic, rubber	13	IHT	A
29569	Other special machinery	4 870	IHT	A
29711	Refrig., washing mach.	2 514	IHT	A
29719	Domestic el. app.	937	IHT	A
29720	Non-el. dom. non-el. app	590	IHT	A
30010	Office machinery.	3 647	IHT	A
30020	Computers	28 560	IHT	A
31100	Electric motors	3 676	IHT	A
31200	El. dist. measurements.	3 626	IHT	A
31300	El. Wire	401	IHT	A
3150	Lamps	1 188	IHT	A
316	Other el. apparatus.	1 199	IHT	A

32200	Radio/TV transmitters.	15 883	IHT	A
32300	Radio/TV recorders.	1 147	IHT	A
33101	Medical. Equipment	3 085	IHT	A
33200	Instr. for measurement	4 520	IHT	A
3330000	Instruments for control	3 831	IHT	A
33400	Instruments for optics.	1 684	IHT	A
33500	Watches and clocks	254	IHT	A
K 34100	Motor vehicles	31 103	CPI	A
K 34100X	Used cars	35	EXPI/IMPI	A
34200	Bodies	437	IHT	A
K 35110	Ships and boats	1 305	EXPI/IMPI	B/C
K 35110X	Second-hand ships and boats	16	IMPI	C
K 35200	Railway vehicles	3 593	ITPI	C
K 35300	Aircraft	7 496	ITPI	C
3550000	Other transport equipment	297	IHT	A
361	Furniture	7 368	IHT	A
36300	Musical instruments	196	IHT	A
366	Miscellaneous goods	197	IHT	A
K 45	Construction	107 044	various	B/C
K 70A	Real estate services	5 487	Wage indices SNI70C	
K 7220	Softw. purchases	43 503	SPI 7220	A
K 7220EG	Softw. prod. own account.	12 471	SPI 7220EG	A
K 742	Arch./Techn. services	28 041	Implicit all constr.	B
K 92B	Originals	1 904	Wage index SNI92	C

Certain fixed-capital-formation groups are regarded in the system as known values (K). Known values are not affected by the balance adjustments. For these, separate constant-price calculations are made. IHT indices are used for the others.

*Machinery and means of transport.* For "known" machinery and means of transport the relevant domestic supply price index [*Prisindex för Inhemsk Tillgång - ITPI*] is used. For cars CPI is used since VAT is not deductible for investment in cars in most branches. In, for example, the taxi branch - where the VAT is deductible - the CPI is corrected if the VAT rate changes. For other gross fixed capital formation in machinery and means of transport the IHT index for the current product is used. A-methods are used for these products.

Certain complex products (e.g. aircraft and ships) constitute exceptions in that C-methods are used. A hedonic import price index is used for PCs. Domestic supply is for the most part made up of imports. See Section 2.3.10, quality assessment for PCs, for a description of the method. This is an A-method.

### **Construction, product group 45.**

*Housing:* Construction price index, A-method.

*Holiday/weekend homes:* Purchase price in accordance with trade association, adjusted for quality, B-method.

*Agricultural buildings:* Factor price index from the Board of Agriculture, C-method.

*Other housing incl. conversion:* development of construction price index for housing checked against factor price index, B-method.

*Conversion of housing:* Factor price index excluding wage drift, adjusted for changes in productivity etc., B-method.

*Roads:* deflated by means of the factor price index obtained from the National Road Administration [*Vägverket*], C-method.

*Railways:* deflated by means of the factor price index, C-method.

### 3.8 Changes in stocks

The values of stocks is equal to the value of goods entering stocks minus the value of goods withdrawn from stocks during the calculation period.

Change in stocks is calculated as the difference between the stocks at the beginning and end of the period in question. Stocks must be valued in both instances at the same price level. The value should be given in terms of the average purchase and sale price, respectively, for the period.

Quarterly and annual deflation of stocks. Data are collected on a quarterly basis for all types of stocks except those coming under "Other service branches", which are based on annual statistics.

Type of stocks	Index	Method
<i>Agricultural stocks</i>		
Growing crops and animals for slaughter	unit price and quantity	A
<i>Forestry stocks</i>		
Standing and felled timber	unit price and quantity	A
Intermediate consumption inventories of mines and manufacturing industry	ITPI	A
Work in progress and finished products of mines and manufacturing industry	PPI at branch level	A
Goods for sale of mines and manufacturing industry	PPI at branch level	A
Energy	unit price and quantity	A
Construction industry stocks	PPI at branch level	B

<i>Trade inventories</i>		
Motor and retail trade	CPI	A
Wholesale trade	PPI	A
Other service branches	Wage index for branch	C

### **3.9 Acquisitions less disposals of valuables**

#### **3.9.1 Investment in entertainment, literary and artistic originals and valuables**

This is calculated by means of a cost assessment based on current payments under copyright and other payments, such as royalties, that are mainly found in the fields of literature and music. Swedish film rights are defined somewhat differently on account of the type of data available. Revenue on a Swedish cinema film comprises the annual receipts - i.e. not copyright payments. Deflation is by means of the wage index for the branch. This is a C-method.

#### **3.9.2 Acquisitions less disposals of valuables**

"Valuables" are antiques and works of art such as paintings, stamps and various collector items. The Swedish method is based on a supply calculation with data on new Swedish production, export, import and trade margins. The item was introduced into the Swedish national accounts in December 2002. Deflation is by means of total CPI. This is a C-method.

### **3.10 Exports and imports of goods and services**

Data on exports and imports of goods are spread over around 240 product groups in each case. Constant-price calculations are mainly carried out using export and import price indices. These are A-methods. Data from foreign-trade statistics are deflated at detailed CN level. The supplements to cover non-cross-border trade with the rest of the world are deflated at the level of the product group. The partial estimation of the CIF component concerns goods imported by sea and the deflator used is the same price index as used for deflating imports and exports by marine freight.

Data on exports and imports of services are spread over around 50 product groups in each case. The methods used for constant-price calculations are largely C-methods and in some cases B-methods. Price-index deflation is used in most cases, but volume extrapolation is also applied.

For the majority of services constant-price calculations of data on exports and imports for a given product group are carried out using the same price index as for domestic output in that group.

For example, data on exports and imports of consultancy services (product group 742) are deflated using the same wage-cost index as used for deflating data on the output of the consultancy branch. The reason for this is that little price-index information on service transactions with the rest of the world is available.

For a number of services, however, the constant-price calculations are carried out in a different way.

One example is data on travellers' foreign exchange (see Section 3.4.1).

Another is commissions on merchanting. Data on export commissions are deflated using the total import price index, on the assumption that price changes for goods imports will affect the commissions. Similarly, and for the same reason, import commissions are deflated using the total export price index.

Data on merchanting are deflated by means of import price indices for certain known product groups and by means of the total import price index for the remainder.

The Tables show the amounts for 2000 in current prices for the various services and the deflators used.

#### Export of services by product group and deflators used

PG	Description	Crtp	Index	Method
5AA	Commissions	4 835	IMPI total	C
5AB	Merchanting	24 076	IMPI <sub>tot.</sub> +IMPI <sub>pg</sub>	C
60100A	Passenger transport by railway	208	CPI person, rail	C
60100C	Goods transport by railway	303	CPI transport	C
60230	Passenger transport by bus	67	CPI, 6021A	C
60240	Goods transport by road	6 686	CPI, transport	C
61A	Passenger tr. ship/boat	683	CPI <sub>ship/boat</sub> journeys	C
61B	Goods transport ship/boat	22 509	CPI, transport	C
61C	Hire of ships and boats	3 683	Charter rates	B
62A	Passenger transport, air	1 483	CPI internat. flight	B
62B	Goods transp., air	55	CPI internat. flight	C
62C	Hire of aircraft	253	C <sub>pinternat.</sub> flight	C
63220A	Port services	802	FPI, transport	C
63220B	Pilotage and other navigation services	814	Revenue, pilotage	B
63220C	Other supporting sea transport activities	225	FPI, transport	C
63230	Other supporting air transport activities	1513	CPI total	C
63400	Other transport agency services	2 271	FPI, transport	C
641	Post and courier activities	801	Price ind., large op.	C
64201A	Telecomm. serv. excl. mob.	5 125	SPI <sub>telecom</sub>	C
65B	Bank serv., other fin.int.	6 430	Weig. index fundassets/wagesSNI65	C
6601	Life insurance	11	Wage index SNI66	C
66030A	Non-life insurance	2174	Weighted index other ins. + OV	C
66030B	Reinsurance	2 200	Weighted index other ins. + OV	C
67	Activities auxiliary to fin. intermediation	356	Wage index SNI67	C
71210	Hire of land transport equipment, ex. cars	978	Wage index SNI71	C
71230	Hire of aircraft without crew	978	Wage index SNI71	C
713	Hire of machinery and equipment	489	Wage index SNI71	C
7220	Computer system/ software consultancy	9 148	SPI 7220	B
72A	Other data processing services	2 907	SPI 72A	B
73	R&D	5 803	Wage index SNI73	C

741	Legal and business consultancy	5 976	Wage index SNI741	C
741A	Licence, patent	17 615	EXPI total	C
742	Architect., tech. consultancy	14 291	Wage index SNI742+3	C
742A	Construction services abroad	6 235	weighted index invest + rep	C
743	Technical testing and analysis	3 038	Wage index SNI742+3	C
744	Advertising	3 945	Wage index SNI744	C
748	Other business services	11 305	Wage index SNI745-8	C
75A	Gen. public serv. and foreign affairs	1033	CPI total	C
75C	Defence	355	Wage index SNI745-8	C
90	Sewage and refuse disposal, etc.	156	Wage index SNI90	C
921	Motion picture and video activities	424	Wage index SNI92	C
922	Radio and television activities	413	Wage index SNI92	C
9231	Artistic,literary creation and interpretation	507	Wage index SNI92	C
924	News agency activities	351	Wage index SNI92	C
99902	Foreign consumption in Sweden	38 534	CPI relevant products	A
XXXX	CIF Component	-2 306	See pg 61B	C

#### Import of services by product group and deflators used

PG	Description	Crtp	Index	Method
55A	Restaur/bar services	67	CPI	C
5B	Commissions	4 750	EXPI total	C
60100A	Passenger transp., rail	153	CPI pass. tr., rail	C
60100C	Goods transp. Rail	282	FPT transport	C
60230	Passenger transp. bus	90	CPI 6021A	C
60240	Goods transp., road	753	FPI transport	C
61A	Passenger, ship/boat	168	CPIhip/boat journeys	C
61B	Goods transport ship/boat	821	FPI transport	C
61C	Hire of ships/boats	5 237	Charter rate	B
62A	Pass. transp air	7 758	CPI internat. flight	B
62B	Goods transp air	58	CPI internat. flight	C
62C	Hire of aircraft	205	CPI internat. flight	C
63110	Cargo handling	2 252	FPI transport	C
63120	Storage and warehousing	321	FPI transport	C
63220A	Port services	1 067	FPI transport	C
63220B	Pilotage and other navigation services	106	Revenue/pilotage	B
63220C	Other supporting sea transport activit.	58	FPI transport	C
63230	Other supporting air transport activities	318	CPI total	C
6330A	Other travel org. / tourist ass.	218	CPIpackage tours	C
63400	Other transport agency services	3 134	FPI transport	C
641	Post and courier activities	904	Price ind. large op.	C
64201A	Telecomm. serv. excl. mob.	6 484	SPItelecom.	C
65B	Bank serv., other fin.int.	5 645	Weig. index fundassets/wagesSNI65	C
6601	Life insurance	179	Wage index SNI66	C
66030A	Non-life insurance	469	Weighted index, other ins. and OV	C
66030B	Reinsurance	1 873	Weighted index, other ins. and OV	C
67	Activities auxiliary to fin. intermediation	333	Wage index SNI67	C
71210	Hire of land transport equipment	493	Wage index SNI71	C
71230	Hire of aircraft without crew	493	Wage index SNI71	C

713	Hire of machinery and equipment	248	Wage index SNI71	C
7220	Computer system/ software consultancy	7 917	SPI 7220	B
72A	Other data processing services	3 215	SPI 72A	B
73	R&D	7 714	Wage index SNI73	C
741	Legal and business consultancy	7 796	Wage index SNI741	C
741A	Licence, patent	8 386	EXPI total	C
742	Architect., tech. consultancy	23 914	Wage index SNI742+3	C
742A	Construction services abroad	2 953	Weighted index invest and rep	C
743	Technical testing and analysis	46	Wage index SNI742+3	C
744	Advertising	10 652	Wage index SNI744	C
746	Labour recruitment, provis. of personnel	79	Wage index SNI745-8	C
747	Investigation and security activities	94	Wage index SNI745-8	C
748	Cleaning and chimney-sweeping	15 872	Wage index SNI745-8	C
75A	Gen. public serv. and foreign affairs	38	CPI total	C
90	Sewage and refuse disposal etc.	180	Wage index SNI90	C
921	Motion picture and video activities	319	Wage index SNI92	C
922	Radio and television activities	312	Wage index SNI92	C
9231	Artistic, literary creation/ interpretation	578	Wage index SNI92	C
924	News agency activities	734	Wage index SNI92	C
99901	Consumption by Swedes abroad	74 479	CPI,exchange rate, weighted	B
XXXX	CIF component	6 915	See 61B	C