

## Chapter 9. Transition from GDP to GNP (ESA 79 definition)

Under the Commission Decision (97/178/EC, Euratom) on the definition of a methodology for the transition between the European System of National and Regional Accounts in the Community (ESA 95) and the European System of Integrated Economic Accounts (ESA second edition) and certain decisions on the excessive deficit procedure, it was agreed that the transition from one system of national accounts to the other had to do with the following changes of concept which have an impact on GNP:

- (1) Residence criteria
- (3) Insurance
- (4) Direct investment earnings
- (5) Interest income
- (6) Cultivated natural growth of plants
- (7) Computer software and large databases
- (8) Military equipment and vehicles, other than weapons
- (9) Work in progress on services
- (10) Mineral exploration expenditures
- (11) Consumption of fixed capital on roads, bridges, etc.
- (12) Government licences and fees
- (13) Valuation of output for own final use and output from voluntary activity
- (14) Value threshold for capital goods
- (15) Market/non-market criteria
- (16) Subsidies
- (17) Entertainment, literary and artistic originals
- (18) Services associated with the licence to use entertainment, literary and artistic originals
- (19) Garages
- (20) Car registration taxes paid by households
- (21) Wages and salaries in kind
- (22) Licences for the use of intangible non-produced assets  
Commission Decision 98/501 (excessive deficit procedure):
- (23) Stamp taxes
- (24) Financial leasing
- (25) Pension funds  
Eurostat Decision (excessive deficit procedure):
- (26) Changes in the due dates for payment of taxes etc.  
Approval by the GNP Committee
- (27) Minor repairs and maintenance in owner-occupied housing

Table 139 shows how each of the definitional differences affects the estimate of GDP and its components from each of the three points of view. According to the GNP Committee Decision, all countries have to compile this table for 1995. The table complies with the layout and analysis in Commission Decision 97/178. First of all, the sources and methods for each of the above points which is relevant in Denmark's case are discussed. The numbering corresponds to the numbering in the Commission Decision. Only one point in this Decision, namely FISIM, has since proved to be irrelevant, since financial intermediation services paid for indirectly are not at present divided up by user industry or sector.

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(1) Residence criteria

No difference in Denmark's case. In both systems, all building on building sites in the ROW is counted as activity in quasi-corporations (notional resident units) in the ROW.

(3) Insurance

For both non-life and life insurance, property income transferred to policyholders is estimated as described in Section 3.16. A corresponding estimate is made in line with ESA 79 definitions, which broadly speaking excludes property income transferred to policyholders in the case of non-life insurance. The difference is then calculated. For 1992, there was a breakdown at the most detailed level for industries and types of insurance. For all years after 1992, this calculation of the definitional difference is projected for individual cells in the supply and use matrices on the basis of changes in the total for the definitional difference relating to property income transferred to policyholders.

(4) Direct investment earnings

The sources and methods were described in Section 8.6.

(5) Interest income

The definitional difference relates to the treatment of losses on the issue prices of bonds issued at rates other than par and the index premium on index-linked bonds. The sources and methods were described in Section 8.5.

(6) Cultivated natural growth of plants

At present, this is not relevant to the annual national accounts, since felling is currently considered to be a reasonable approximation of the growth in the volume of wood in the forests. The exception is years affected by serious storm damage. Hurricane-type storms occurred in 1967, 1981 and 1999. Corrections have been made for years affected by such storms, but 1995 was not such a year. Once the results of the latest forestry census are available and can be compared with the figures for ten years previously, consideration will be given to switching over to a direct estimate of growth in the volume of wood.

(7) Software and large databases

The sources and methods for the estimate of capital formation were discussed in Section 5.11.3. For the calculation of the consumption of fixed capital in government non-market activity, an average lifetime of three years is assumed. In connection with a revision of the capital stock estimates published in 2001, software lifetimes have now been revised to three years for purchased and six years for own-developed software. These lifetimes will from now on also be used for general government estimates.

## (8) Military equipment and vehicles, other than weapons

Capital formation is estimated from information on purchases for military uses in central government accounts, in a breakdown by type. A lifetime of 25 years is used for the calculation of fixed capital consumption.

## (9) Work in progress on services

At present, this is not considered to be relevant in Denmark's case. When the questionnaire-based accounting statistics are extended to include consulting engineers and architects and other consultancy firms, this point will be reviewed.

## (10) Mineral exploration expenditures

The sources and methods were described in Section 5.11.2.

## (11) Consumption of fixed capital on roads, bridges, etc.

The sources and methods were described in Section 4.12.

## (12) Government licences and fees

For the transition from ESA 79 to ESA 95, the following government fees and taxes connected with control and supervision, which were previously considered to be taxes or other unrequited transfers, were reclassified as sales of services from general government.

Type	DKK mill.
<b>Fees paid by households</b>	
Passport, visa and driving licence fees	270
Hunting test fee	2
Fees paid for exchange of driving licence	2
Fees paid for change of name	2
<b>Fines etc.</b>	
Court fees	348
Municipal fees on distresses	.
Fees paid for divorce decrees	8
<b>Confiscations</b>	
Confiscations	17
<b>Other taxes on production</b>	
<b>Fees connected with control and supervision</b>	
Exports of meat etc.	303
Imports and exports of livestock	5
State control of dairy products	8
Committee on quality control of grain	4
Central government plant control agency..	17
Central government feedingstuffs control	27
"En route" fees	332
Heavy Current Act	31
Commercial and savings banks	47
Life and non-life insurance corporations	39
Central government control of precious metals	
Central government supervision of ships and mustering	8
Supervision of weapons etc.	
Film censor	1
Type approval for motor vehicles	3
Fees from producers etc. of insecticides, herbicides, etc.	31
Meat and foodstuffs control	49

Registration of pharmaceutical products and pharmaceutical enterprises	77
Fees for testing steam boilers, tanks, lifts, etc.	24
Milk testing	1
Other control duties	55
Fees relating to foundations etc.	
Approval of TIR motor vehicles	
<b>Duties connected with licences, authorisations, etc.</b>	
<i>Industritilsyn</i> [Ministry of Fisheries Inspection Service]	15
Medical personnel	3
Accident insurance fee	156
Vehicle logbooks	15
Trading licences	2
Fees for publicans' licences etc.	84
Royal approval, admission to the Bar, etc.	
Fee for cinema authorisation	
<i>Danmarks Gasmateriel Prøvning</i> [testing of gas equipment]	10
<i>A/S De Danske Spritfabrikker</i> [Danish distilleries]	
<i>Teknologistyrelsen</i> [Government Technology Agency]	1
Road use	289
<b>Other compulsory fees</b>	
<i>Patent- og Varemærkevæsenet</i> [Patents and Trademarks Directorate]	124
<i>Justervæsenet</i> [Standards Department]	
Government icebreaker service	19
<b>Total fees</b>	<b>2 428</b>

Fees for passports, visas, driving licences, hunting tests, replacement driving licences, changes of name, divorce decrees and confiscations are considered to be sales of services for household consumption. For 1992, court fees are divided into intermediate consumption and final uses pro rata with the breakdown of lawyers' services. For subsequent years, the 1992 breakdown is used for the split into intermediate consumption and final uses. All the "other taxes on production", which, according to the ESA 95, should be considered to be sales of government services, are counted as intermediate consumption.

### (13) Valuation of output for own final use and output from voluntary activity

According to the ESA 95, output of capital goods for own use should be recorded at basic prices including net operating surplus. A costs-based estimate is acceptable only as a last resort. For 1992, an allowance was added to total wages and salaries and materials for own-account construction and civil engineering work, corresponding to the share of the consumption of fixed capital and net operating surplus in construction and civil engineering firms. The value calculated for 1992 was projected for following years on the basis of changes in the output of construction activity.

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(14) Value threshold for capital goods

By far the largest share of the value of the definitional difference comes from general government. For 1992, a value was calculated for the difference in the treatment of consumables using the threshold values in the ESA 79 and the ESA 95 respectively for both market activities and general government. For following years, levels are estimated for general government. Changes in the definitional difference for consumables for general government are used to project the definitional difference for market activities. The effect on the consumption of fixed capital in general government is calculated from the series compiled for deductions in government capital formation. The effect on GDP and its individual components was calculated as a level for 1992. For subsequent years, the 1992 values are projected on the basis of changes in the difference in the consumption of fixed capital in general government. In Denmark's case, most of the effect of the definitional difference for consumables arises in general government, and thus the projection is not very different from an annual estimate of levels.

(15) Market/non-market criteria

For 1995, there is no difference, since the units reclassified in accordance with the 50% criterion in the ESA 95 have no net operating surplus.

(16) Subsidies

No effect in Denmark's case.

(17) Entertainment, literary and artistic originals

The sources and methods were described in Section 5.11.4.

(18) Services associated with the licence to use entertainment, literary and artistic originals

The sources are the same as for (17). The whole of domestic output is assigned to intermediate consumption and therefore has no impact on GDP. External trade in these services is lumped together with royalties under (22) and is treated as described under that point.

(19) Garages

The sources and methods were described in Section 3.17.

(20) Car registration taxes paid by households

The total revenue from the registration tax on passenger cars comes from tax statistics on an accruals basis. In the supply and use tables, the supply and use of passenger cars are balanced in the light of figures from the Register of Motor Vehicles and vehicles statistics figures for registrations for private consumers on the one hand and for businesses on the other. The definitional difference refers to the cells for taxes on products with the exception of VAT on passenger cars for private consumption in households. The values are taken from the balanced supply and use matrices.

(21) Wages and salaries in kind

Not relevant in Denmark's case.

- (22) Licences for the use of intangible non-produced assets  
Commission Decision 98/501 (excessive deficit procedure)

The source is settlements statistics information on royalty payments to and from Denmark and Danmarks Statistik's business register. Danish enterprises which, according to *Nationalbank's* settlements statistics, have royalty payments to or from Denmark, are grouped together by industry via linkage with the business register. Royalties in the IT industries are considered as imports and exports of software and transferred to point (7). The remainder are considered as imports and exports of royalties on patents and payments for services relating to the use of artistic originals. These two groups of services are processed together under point (22), since it is not possible to separate out accurately the payments for use of artistic originals. The domestic transactions in the services in question are assumed to be between market producers and thus to have no effect on GDP. The GDP impact of ROW transactions is offset by the opposite correction in primary income to and from the ROW, so that all in all the change in definition has no effect on GNP.

- (23) Stamp taxes

Under the GNP Committee Decision, there is no definitional difference between the ESA 79 and the ESA 95 as regards stamp taxes of the type occurring in Denmark. This is in fact a change from Commission Decision 97/178, which has not, however, led to an update of this legislation.

- (24) Financial leasing

The effect on GNP comes solely from the effect on the consumption of fixed capital in general government. Expenditure on financial leasing is estimated from various itemisations in government accounts. For the calculation of the effect on the consumption of fixed capital of general government, the average lifetime of capital goods leased under financial leasing arrangements is put at 25 years.

- (25) Pension funds  
Eurostat Decision (Excessive deficit procedure)

Not relevant in Denmark's case.

- (26) Changes in due dates for taxes etc.  
Approval by the GNP Committee

Not relevant in Denmark's case.

- (27) Minor repairs and maintenance in owner-occupied housing

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For the balancing of supplies and uses of repairs and maintenance of dwellings, all minor repair and maintenance work on dwellings is assigned to the final consumption expenditure of households under consumption group 4300, Repair and maintenance of dwellings. This is expenditure which, in the case of rented dwellings, is normally defrayed by the tenant. Such expenditure is allocated to final uses as household consumption. According to the ESA 95, the same applies to the corresponding type of expenditure in owner-occupied housing, whereas according to the ESA 79 the latter should be counted as intermediate consumption. The correction for the definitional difference is calculated by multiplying the value of repairs and maintenance in consumption group 4300 by the share of actual plus imputed rentals accounted for by imputed rentals in owner-occupied housing.

Table 139

## CONVERSION ESA 95 TO ESA 79: IMPACT ON THE MAIN COMPONENTS

DENMARK  Reference year: 1995	code ESA 95	value ESA 95 (million DKK)	Changes from ESA 95 to ESA 79 affecting GDP or GNP				
			residence criteria  (1)	insurance  (3)	direct investment earnings  (4)	interest income  (5)	cultivated natural growth of plants  (6)
<b>PRODUCTION APPROACH</b>							
Output of goods and services	P1	1663164		-1808			
Intermediate consumption	P2	791822		-441			
Gross value added	B1G	871342		-1367			
Taxes on products	D21	157254					
Subsidies on products	D31	18840					
<b>EXPENDITURE APPROACH</b>							
Total final consumption expenditure	P3	769851		-1367			
Household final consumption expenditure	P3	501365		-1367			
HPISH final consumption expenditure	P3	8187					
General government final consumption expenditure	P3	260299					
Gross capital formation	P5	198596					
Gross fixed capital formation	P51	187858					
Changes in inventories	P52	9298					
Acquisitions less disposals of valuables	P53	1440					
Exports of goods and services	P6	357454					
Imports of goods and services	P7	316144					
<b>INCOME APPROACH</b>							
Compensation of employees	D1	534094					
Gross operating surplus and mixed income	B2G+B3G	338010		-1367			
Taxes on production and imports	D2	173270					
Subsidies	D3	35617					
<b>Gross domestic product at market prices</b>	<b>B1*G</b>	<b>1009756</b>		<b>-1367</b>			
Compensation of employees received from the rest of the world	D1	6847					
Compensation of employees paid to the rest of the world	D1	1982					
Property income received from the rest of the world	D4	108456			-4627		
Property income paid to the rest of the world	D4	134271			-5118	-757	
<b>Gross national product at market prices</b>		<b>988806</b>		<b>-1367</b>	<b>491</b>	<b>757</b>	

Table 139 (continued)

## CONVERSION ESA 95 TO ESA 79: IMPACT ON THE MAIN COMPONENTS

DENMARK  Reference year: 1995	code ESA 95	Changes from ESA 95 to ESA 79 affecting GDP or GNP					
		computer software + large databases (7)	military equipment + vehicles (no weapons) (8)	work in progress on services (9)	mineral exploitation expenditures (10)	consumption fixed capital on roads, bridges, etc. (11)	government licences and fees (12)
<b>PRODUCTION APPROACH</b>							
Output of goods and services	P1	-5846	-11			-7447	
Intermediate consumption	P2	8688	577		271		-1980
Gross value added	B1G	-14534	-588		-271	-7447	1980
Taxes on products	D21						
Subsidies on products	D31						
<b>EXPENDITURE APPROACH</b>							
Total final consumption expenditure	P3	444	-11			-7447	1980
Household final consumption expenditure	P3						-447
HPISH final consumption expenditure	P3						
General government final consumption expenditure	P3	444	-11			-7447	2427
Gross capital formation	P5	-14978	-577		-271		
Gross fixed capital formation	P51	-14978	-577		-271		
Changes in inventories	P52						
Acquisitions less disposals of valuables	P53						
Exports of goods and services	P6						
Imports of goods and services	P7						
<b>INCOME APPROACH</b>							
Compensation of employees	D1						
Gross operating surplus and mixed income	B2G+B3G	-14534	-588		-271	-7447	1980
Taxes on production and imports	D2						
Subsidies	D3						
<b>Gross domestic product at market prices</b>	<b>B1*G</b>	<b>-14534</b>	<b>-588</b>		<b>-271</b>	<b>-7447</b>	<b>1980</b>
Compensation of employees received from the rest of the world	D1						
Compensation of employees paid to the rest of the world	D1						
Property income received from the rest of the world	D4						
Property income paid to the rest of the world	D4						
<b>Gross national product at market prices</b>		<b>-14534</b>	<b>-588</b>		<b>-271</b>	<b>-7447</b>	<b>1980</b>

Table 139 (continued)

## CONVERSION ESA 95 TO ESA 79: IMPACT ON THE MAIN COMPONENTS

DENMARK  Reference year: 1995	code ESA 95	Changes from ESA 95 to ESA 79 affecting GDP or GNP					
		valuation output for own final use volunt. activ. (13)	value threshold for capital goods (14)	market/non market criteria (15)	subsidies (16)	entertain- ment, literary and artistic originals (17)	services associated with licence to use entert. etc. (18)
<b>PRODUCTION APPROACH</b>							
Output of goods and services	P1	-337	-1158			-1193	
Intermediate consumption	P2		-2924				
Gross value added	B1G	-337	1766			-1193	
Taxes on products	D21						
Subsidies on products	D31						
<b>EXPENDITURE APPROACH</b>							
Total final consumption expenditure	P3		-1158				
Household final consumption expenditure	P3						
HPISH final consumption expenditure	P3						
General government final consumption expenditure	P3		-1158				
Gross capital formation	P5	-337	2924			-1193	
Gross fixed capital formation	P51	-337	2924			-1193	
Changes in inventories	P52						
Acquisitions less disposals of valuables	P53						
Exports of goods and services	P6						
Imports of goods and services	P7						
<b>INCOME APPROACH</b>							
Compensation of employees	D1						
Gross operating surplus and mixed income	B2G+B3G	-337	1766			-1193	
Taxes on production and imports	D2						
Subsidies	D3						
<b>Gross domestic product at market prices</b>	<b>B1*G</b>	<b>-337</b>	<b>1766</b>			<b>-1193</b>	
Compensation of employees received from the rest of the world	D1						
Compensation of employees paid to the rest of the world	D1						
Property income received from the rest of the world	D4						
Property income paid to the rest of the world	D4						
<b>Gross national product at market prices</b>		<b>-337</b>	<b>1766</b>			<b>-1193</b>	

Table 139 (continued)

## CONVERSION ESA 95 TO ESA 79: IMPACT ON THE MAIN COMPONENTS

DENMARK  Reference year: 1995	code ESA 95	Changes from ESA 95 to ESA 79 affecting GDP or GNP					
		garages (19)	car registra- tion taxes paid by households (20)	wages and salaries in kind (21)	licences for the use of intangible non- prod. assets (22)	stamp taxes (23)	financial leasing (24)
<b>PRODUCTION APPROACH</b>							
Output of goods and services	P1	-2713			-3721		
Intermediate consumption	P2				-3553		101
Gross value added	B1G	-2713			-168		-101
Taxes on products	D21		-10340				
Subsidies on products	D31						
<b>EXPENDITURE APPROACH</b>							
Total final consumption expenditure	P3	-2713	-10340				0
Household final consumption expenditure	P3	-2713	-10340				
HPISH final consumption expenditure	P3						
General government final consumption expenditure	P3						0
Gross capital formation	P5						-101
Gross fixed capital formation	P51						-101
Changes in inventories	P52						
Acquisitions less disposals of valuables	P53						
Exports of goods and services	P6				-3721		
Imports of goods and services	P7				-3553		
<b>INCOME APPROACH</b>							
Compensation of employees	D1						
Gross operating surplus and mixed income	B2G+B3G	-2713			-168		-101
Taxes on production and imports	D2		-10340				
Subsidies	D3						
<b>Gross domestic product at market prices</b>	<b>B1*G</b>	<b>-2713</b>	<b>-10340</b>		<b>-168</b>		<b>-101</b>
Compensation of employees received from the rest of the world	D1						
Compensation of employees paid to the rest of the world	D1						
Property income received from the rest of the world	D4				3721		
Property income paid to the rest of the world	D4				3553		
<b>Gross national product at market prices</b>		<b>-2713</b>	<b>-10340</b>		<b>0</b>		<b>-101</b>

Table 139 (continued)

## CONVERSION ESA 95 TO ESA 79: IMPACT ON THE MAIN COMPONENTS

DENMARK  Reference year: 1995	code ESA 95	Changes from ESA 95 to ESA 79 affecting GDP or GNP				value ESA 79 (million DKK)
		pension funds (25)	changes in due payment dates for taxes, etc. (26)	minor repairs by owner- occupiers (27)	total	
<b>PRODUCTION APPROACH</b>						
Output of goods and services	P1				-24234	1638930
Intermediate consumption	P2			4075	4814	796636
Gross value added	B1G			-4075	-29048	842294
Taxes on products	D21				-10340	146914
Subsidies on products	D31					18840
<b>EXPENDITURE APPROACH</b>						
Total final consumption expenditure	P3			-4075	-24687	745164
Household final consumption expenditure	P3			-4075	-18942	482423
HPISH final consumption expenditure	P3					8187
General government final consumption expenditure	P3				-5745	254554
Gross capital formation	P5				-14533	184063
Gross fixed capital formation	P51				-14533	173325
Changes in inventories	P52					9298
Acquisitions less disposals of valuables	P53					1440
Exports of goods and services	P6				-3721	353733
Imports of goods and services	P7				-3553	312591
<b>INCOME APPROACH</b>						
Compensation of employees	D1					534094
Gross operating surplus and mixed income	B2G+B3G			-4075	-29048	308962
Taxes on production and imports	D2				-10340	162930
Subsidies	D3					35617
<b>Gross domestic product at market prices</b>	<b>B1*G</b>			<b>-4075</b>	<b>-39388</b>	<b>970368</b>
Compensation of employees received from the rest of the world	D1					6847
Compensation of employees paid to the rest of the world	D1					1982
Property income received from the rest of the world	D4				-906	107550
Property income paid to the rest of the world	D4				-2322	131949
<b>Gross national product at market prices</b>				<b>-4075</b>	<b>-37972</b>	<b>950834</b>

NB: The numbers of the transition items (1) to (23) correspond to the numbers used in the Commission Decision 97/178. Number (2) relating to FISIM is dropped as long as the final decision on the allocation of FISIM is not yet taken.