

2. The revisions policy and the timetable for revising and finalising the estimates

2.0 The revisions policy

2.0.1 Current revisions

Final national accounts data are calculated three years after the reference year (year $t+3$). Several versions of preliminary accounts are calculated before that. The first version is available as the sum of quarters two months after the end of the reference year, and the last preliminary version is published at the end of year $t+2$ (see table 2.3).

The reliability of preliminary national accounts figures are measured and published along with the publication of the national accounts. The difference between the real growth rate in the preliminary accounts and the final accounts is used for two measures: average deviation and bias. The average deviation shows the size of the revisions whereas the bias shows whether the revisions are systematic. A negative bias shows that the growth rate is generally underestimated in the first estimate while a positive bias shows a systematic overestimation in the first estimate.

One major explanation for the difference in growth rates is the methodology. In the preliminary accounts the calculation methods are more crude and at a more aggregated level because a short production time is important. Another explanation for differences in growth rates between preliminary and final accounts are due to revisions of primary data and the availability of more detailed data sources in the final accounts. In addition some estimates are based on assumptions or indicators in the preliminary accounts.

Table 2.1 shows main results of the revision analysis of annual growth rates for the period 1980-2002. Revisions are shown for the publication 3-4 months after the end of the year as well as for the publication 12 months after the end of the year.

In order to understand the information in table 2.1 an example for illustration can be of use: Assume that the final estimate of growth in GDP is 3,0 percent in two following years, t and $t+1$. Assume also that the preliminary estimates of growth in year t is 3,5 percent and 2,3 percent in year $t+1$. Revisions are 0,5 and -0,7 percentage points respectively in the two years. The average deviation (ignoring the sign) is 0,6 percentage points. The bias (respecting the sign) is -0,1 percentage points.

Table 2.1: Revisions of annual real growth rates 1980-2003

	First publication	Publication 12 months after the end of the year
	-----percentage-points -----	
Average deviation	0,57	0,62
Bias	-0,12	0,01
The 23 years revisions distributed according to the numerical value of the revision:	-----number of years -----	
0,0 – 0,5 pct. point	14	9
above 0,5 – 1,0 pct. point	4	10
above 1,0 – 1,5 pct. point	6	5

2.0.2 Benchmark revisions

The history of national accounts in Denmark began in the 1930'ies. The first publication took place in 1945 covering the years 1930-1944. The publication included input-output tables, and the use of input-output tables has been and still is the foundation of the compilation of GDP. Further development of the national accounts took place in the following years, and in 1947 a coverage and level of detailed was reached which was kept until the mid 1970'ies. In 1962 the results of a comprehensive revision of the years 1947- was published.

In 1968 work on the development of a new national accounts system was initiated. This included the introduction to new classifications and SNA68. A detailed supply-use system formed the core of the system. In 1973 a first result in the form of a supply-use table for 1966 was published. The regular publication started in 1978. In the coming years further developments took place beginning with preliminary accounts then institutional sector accounts and finally quarterly accounts. By the beginning of the 1990'ies a complete set of national accounts (apart from financial accounts) was available and published annually.

In 1993 a major revision of the national accounts was started. The major revision is a combination of the introduction to ESA95, revision of sources and methods, new classifications and change to 1990 as a reference year for constant price estimates. The results from the major revision was published in 1997. In 2001 the national accounts were extended by financial accounts and estimates of fixed capital (capital stock estimates).

In 2005 Statistics Denmark published the results of a benchmark revision called the "datarevision". This benchmark revision was minor in the sense that no new classifications and definitions were introduced and that ESA95 is still followed. The larger exceptions, affecting the compilation of GDP, are:

- The distribution of FISIM to users
- Foreign trade of services are now recorded gross for im- and export. Before they were recorded as net-import or net-export.
- New COFOG classifications

As the national accounts has gradually introduced new accounting statistics, the existing compilation systems were - for the larger part - unchanged. New systems were developed for the compilation of dwellings, bank services, public non-market services and the gross-recording of foreign trade in services. In other areas the revisions follow a revaluation of the compilations fx in areas of growing importance in the economy.

Table 2.2 shows the effect of the datarevision published in 2005. Table 2.2 shows the effect for the year 2000 which was the latest final year before the datarevision. The effect is split into changes due to the allocation of FISIM and other changes. As the table shows, the by far largest effect on GDP and GNI is due to the allocation of FISIM. The effect of and the methodology used for the allocation of FISIM is described in chapter 9.

Table 2.2: Effect of the datarevision in 2005 on main aggregates of supply and demand, GDP and GNI, 2000

	Previous value	New value	Change (2 - 1)	New value without FISIM revision	Change without FISIM revision (4 - 1)	FISIM revision (3 - 5)
	(1)	(2)	(3)	(4)	(5)	(6)
----- current prices, mill. kr. -----						
Imports of goods	364 409	364 390	-19	364 390	-19	...
Imports of services	122 828	159 863	37 034	157 675	34 847	2 188
Total supply	1 766 193	1 818 216	52 023	1 800 593	34 400	17 624
Private consumption	610 469	616 682	6 213	602 074	- 8 395	14 608
Government consumption	323 349	325 099	1 750	324 669	1 320	430
Gross fixed capital formation	258 085	262 879	4 794	262 879	4 794	...
Machinery and equipment	102 075	101 437	-638	101 437	-638	...
Transport equipment	32 695	32 715	20	32 715	20	...
Construction	123 315	128 727	5 412	128 727	5 412	...
Changes in inventories	10 856	11 204	349	11 204	348	...
Exports of goods	405 263	405 549	286	405 549	286	...
Exports of services	158 171	196 802	38 631	194 216	36 045	2 586
Total use	1 766 192	1 818 216	52 023	1 800 592	34 400	17 624
GDP	1 278 956	1 293 964	15 008	1 278 528	-428	15 436
Compensation of employees from the row	5 394	5 394	0	5 394	0	0
Compensation of employees to the row	5 335	5 335	0	5 335	0	0
Subsidies from the row	8 681	8 681	0	8 681	0	0
Taxes paid to the row	2 700	2 700	0	2 700	0	0
Property income from the row	90 658	90 099	-559	91 184	526	-1 085
Property income to the row	123 530	123 497	-33	124 980	1 450	-1 483
GNI	1 252 125	1 266 606	14 481	1 250 773	-1 352	15 834

Note: GNI in table 2.2 is the national published value and according to ESA95 definitions.

As a result of the revision, GDP is adjusted upwards by 15 bill. DKK and GNI by almost 16 bill. DKK in 2000. This is mainly the result of the allocation of FISIM.

The rather large increases in imports and exports are mainly related to the introduction of gross-recording of foreign trade in services. Revisions to net-exports are considerably smaller. In addition to the gross-recording of services, FISIM is now also part of foreign trade in services.

The total effect on private consumption is 6 bill. DKK in 2000. However, this reflects revisions in two opposite directions: The allocation of FISIM increases private consumption by 14,6 bill. DKK and other revisions decrease private consumption by -8,4 bill. DKK.

Government final consumption expenditure increases by 1,8 bill. DKK in 2000. Without the allocation of FISIM, government final consumption expenditure would have increased by 1,3 bill. DKK. The rather small effect at the aggregate level is covering substantial revisions at the detailed level.

Gross fixed capital formation is increased by 4,8 bill. DKK. The allocation of FISIM has no effect on gross fixed capital formation.

Property income from and to the rest of the world is affected by the allocation of FISIM because the interest concept is now exclusive the value of FISIM. It must be noted, that the net-effect of the allocation of FISIM on property income equals net-export of FISIM but with upposite sign.

2.1 Timetable for revising and finalising the accounts

Table 2.3 illustrates the revision policy (apart from benchmark revisions) for the Danish national accounts followed by Statistics Denmark from November 2001. The revision policy is announced to the users so that they always know how many periods will be revised.

Table 2.3: Revision policy of the Danish NA, from 2001

Year	Month of publishing	Year T, Q1	Year T, Q2	Year T, Q3	Year T, Q4	Year T
T	End May	P				
	Begin. July	R				
	End August	-	P			
	Begin October	R	R			
	End November	-	-	P		
T+1	Begin. January	R	R	R		
	End February	-	-	-	P	P (SQ)
	Begin. April	R	R	R	R	R (SQ)
	Begin. July	R	R	R	R	R (SQ)
	Begin. October	-	-	-	-	-
	End December					R (AP1)
T+2	Begin. January	R	R	R	R	-
	Begin. April	-	-	-	-	-
	Begin. October	-	-	-	-	-
	End December					R (AP2)
T+3	Begin. January	R	R	R	R	-
	Begin. April	-	-	-	-	-
	Begin. October	-	-	-	-	-
	End December					F
T+4	Begin January	F	F	F	F	

P: First published

SQ: Sum of quarters

R: Revised

AP1: First preliminary annual calculation

F: Final

AP2: Second preliminary annual calculation

-: Figures are published unchanged compared to the earlier published figures.

The revisions of the quarterly figures in January T+2, T+3 and T+4 are made in order to make the quarterly figures consistent with the annual figures.

