# Satellite (extended) Accounts in Norway

ANN LISBET BRATHAUG



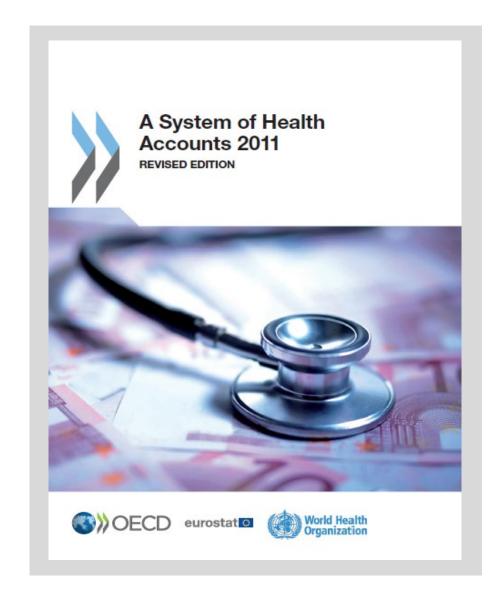
#### The different satellite accounts.....

- System of Health Accounts
  - established in 2005 and with time series back to 1997
- Satellite Accounts for Education and Training
  - established in 2018 starting with data from 2015
- Satellite Accounts for Non -profit institutions
  - established in 2010 and with 2006 as the starting year
- Unpaid household work
  - Compiled every 10 years, covering 1970, 1980, 1990, 2000 and 2010
- Satellite Accounts for tourism
  - established 1997 and with time series back to 1988
- System of economic and environmental accounts
  - Established in 2002. The Division for National Accounts compile the link between the economic data, energy use and emission (to air), and present the growth in energy and emission intensity (e.g. emissions per produced unit and/or produced value added by industry)



## System of Health Accounts (SHA)

- Tri-axial system, defining
  - Consumption of health care services by health care functions (HF)
  - Providers of health care services by industry (HP)
  - Financing of health care (sources of funding)
- In Norway, the SHA is closely linked to the SUT-system – mapping of NA-products directly to HF etc
- The system is efficient to run (and give positive feedbacks to the NA)
- Establishing of the SHA financed by the Ministry of Health

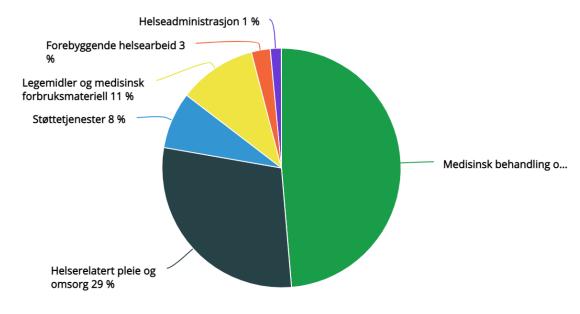




#### Why is the health accounts interesting?

Health Expenditure . Key Figures	2015	2016	2017	2018	2019*	2020*
Current health expenditure	315207	328134	339948	356241	375453	386690
Current health expenditure per capita	60735	62667	64421	67065	70206	71883
Health expenditure in constant 2015 prices	315207	320329	323113	325524	331290	332402
Current expenditure on health at constant NOK in 2015. Percentage change in volume from the previous year	3,4	1,6	0,9	0,7	1,8	0,3
Expenditure on health at constant NOK in 2015 per capita. Percentage change in volume from the previous year	2,3	0,7	0,1	0,1	1,1	-0,3
Share of health expenditure financed by public sources. Per cent	85,5	85,4	85,1	85,7	85,8	86,0
Share of health expenditure financed by private sources. Per cent	14,5	14,6	14,9	14,3	14,2	14,0
Public share of health spending in per cent of general government total expenditure	17,9	17,8	17,7	17,9	17,8	17,0
Current health expenditure. Per cent of GDP	10,1	10,6	10,3	10,0	10,5	11,3
Current health expenditure. Per cent of GDP Mainland Norway	12,1	12,2	12,2	12,1	12,2	12,7

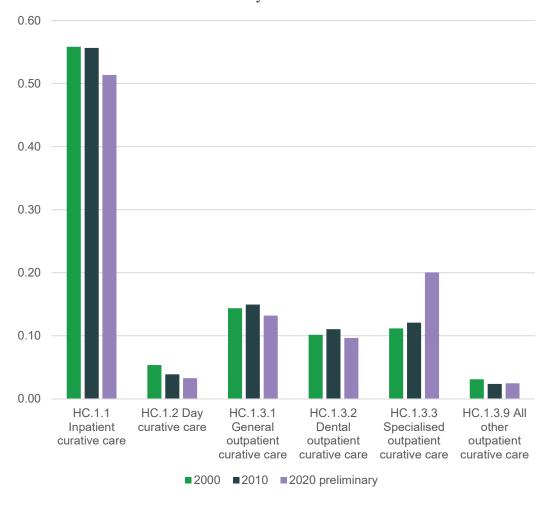
Figur 2. Fordeling av helseutgifter på de ulike tjenesteområdene i 2019



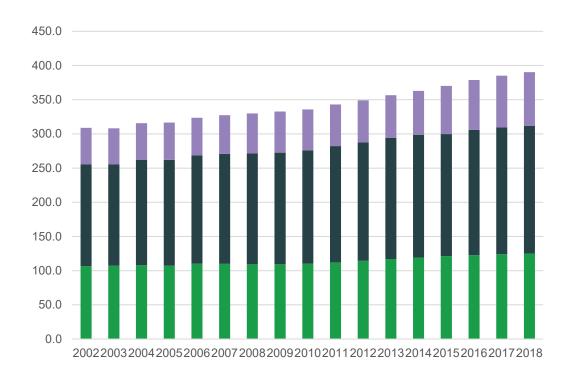
Kilde: Helseregnskap, Statistisk sentralbyrå.



#### Curative care distributet by functions. Selected years



#### Employed persons (1000). 2002 -2018

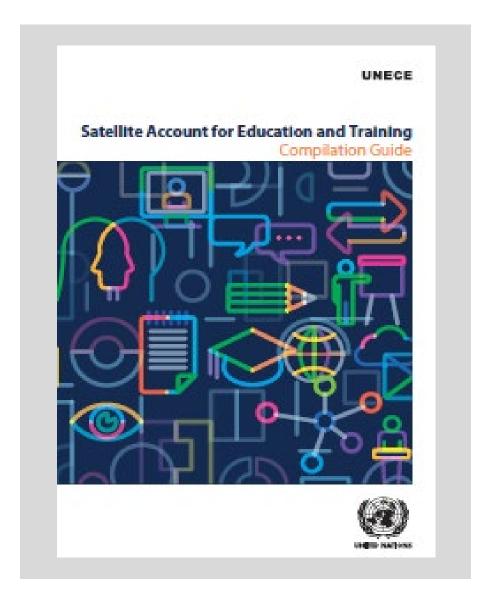






### Satellite account for Education and Training

- Expenditure on education and training (purpose) by provider - by purchaser and by financing sector
- Can be supplemented with non -monetary data; population, enrolled students, teachers, employed persons ++++
- Extends the production boundaries of SNA by estimating in -house training (do not change GDP)
- Starting point for estimating Human Capital from the expenditure side





#### Some highlights from our satellite

Education expenditure. Key indicators	1						
	2016	2017	2018	Change last			
Key variables	2010	2017	2010	yeai			
·							
Current education expenditure . NOK million	197779	204696	213183	8487			
Capital formation in education. NOK million	36165	37377	42442	5065			
Current education expenditure per capita	37772	38790	40133	1343			
Current education expenditure. Per cent of GDP	6,4	6,2	6,0	-0,2			
Current education expenditure. Per cent of GDP Mainland Norway	7,3	7,3	7,3	0,0			
Share of total expenditure (percentage)							
Primary education	39,2	39,5	39,7	,			
Secondary education	18,1	17,9	17,6				
Higher education	23,2	23,1	23,6				
Adult education	4,0	4,1	4,1	,			
Other education	4,1	4,1	4,1	-,-			
In-house training	10,7	10,4	10,0	-0,4			
Associated goods and services	0,8	0,8	0,8	0,1			
<sup>1</sup> Current education expenditure does not include capital formation.							
Source: Statistics Norway							

Expenditure on education per pupil / student. NOK million							
	2016	2017		Per cent change from last year			
Expenditure on education per pupil, primary school	123309	127871	133108	4,1			
Expenditure on education per pupil, secondary school	177880	184127	188159	2,2			
Expenditure on education per student, higher education	168080	170402	180948	6,2			
Source: Statistic	s Norway			,			



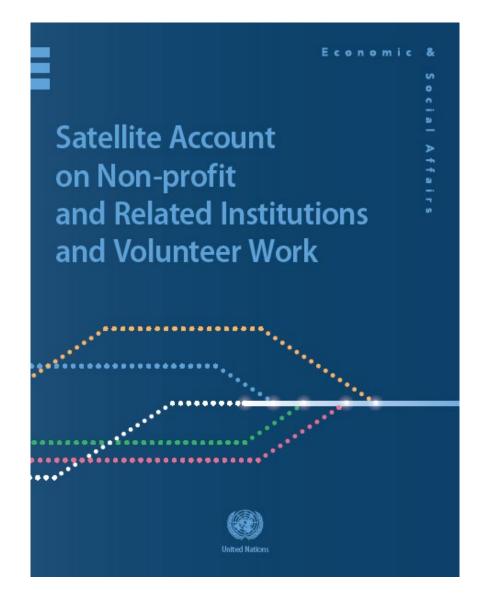
Education expenditure, by education and producer	type of						
	Education expenditure million)	e (NOK					
	2018						
	Sum all	_	Local govern - ment	Market producers in education industry	Non - profit instit . serving house - holds	Other market producers	Rest of the world
All functions of education	213183	51536	118667	11193	9619	20467	1703
Primary education	84703	929	80004	_	3771	_	_
Secondary education	37519	780	29314	531	3832	3062	0
Higher education	50364	43170	619	2661	1301	910	1703
Adult education	8730	-	8730	-	-	-	-
Other education	8716	_	_	8001	715	-	_
In-house training of enterprises	21342	6657	-		_	14685	-
Associated goods and services	1810				_	1810	_
Research and Development in education	20420	19827	110	113	370		_
Capial formation of education provider (Excl. R&D)	_		_	_	_	_	_

Education expended of education and		type					
	Education expenditur million)	e (NOK					
	2018						
		9	Local government	Households		Rest of the	Intermediate consumption market producers
All functions of education	213185	49577	118484	14846	8341	1068	20869
Primary education Secondary education	84705 37519				3542 3045		3062
Higher education	50364	40676	619	4248	1259	1068	2494
Adult education	8730	-	8730	-	-	-	
Other education	8716	535	279	6779	495		628
In-house training of enterprises	21342	6657	-	-	-	-	14685
Associated goods and services	1810	-	-	1810	-	_	
Research and Development in education	19180	18704	-	-	370	-	106
Memo: Capial formation of education provider (Excl. R&D)	24922	5384	18363	_	968	_	207



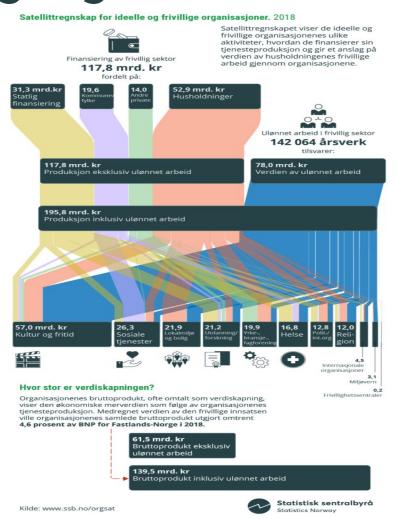
### Satellite Accounts for non-profit institutions

- Establishing of the accounts was proposed in a white paper from the Ministry of Culture the Parliament ( "Voluntariness for everybody") in 2007
- Strong pressure from professional industrial and voluntary organisations
- Need for more insight into non -profit institutions as
  - their activities cover a wide area and
  - through service production and voluntary efforts they contribute to fulfilling important objectives of wellbeing





#### Highlights form the satellite accounts for NPI



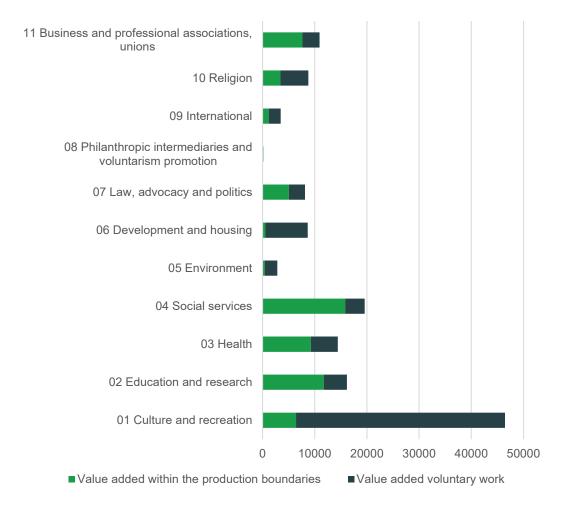
Key results - Non -profit institutions (e	xcluded volu	untary work	( )
	2016	2017	2018
Output. NOK million	110874	115443	117844
Value added. NOK million	56974	60588	61526
Full-time equivalent persons (paid employees)	90893	91561	89161
Value added as share of GDP. Per cent	1,8	1,8	1,7
Value added as share of GDP Mainland Norway. Per cent	2,1	2,2	2,1
Full-time equivalent persons (paid employees) as share of total full -time equivalent persons in Norway.  Percentage	3,9	3,9	3,7
Sources of income for non -profit institutions			
Central government 's share of total funding. Percentage	27,4	28,1	26,6
Local/municipal governments 'share of total funding. Per cent	16	15,8	16,7
Households ' share of total funding. Per cent	43,8	43,8	44,9
Other sources of funding. Share of total funding. Per cent	12,8	12,4	11,9
Source: Statistics Norway			



### Characteristics when including voluntary work

- Included voluntary work value added more than doubles
- Very high inclusion of voluntary work in culture and recreation (includes sports)
  - 9 volunteer man year behind each employee (man year)

#### Value added in non profit institutions. Million NOK. 2018





#### Conclusion

- The extended accounts (satellites) should be consistent with the core national accounts, but with possibilities to go beyond
- Give insight in areas which are too aggregated in NA to be analysed properly
- There are a lot of possibilities to combine the extended accounts with relevant non -monetary data
- For the future, aim to distribute also by "type" of households



### Thanks!

