

# Combined physical and monetary presentations

Sjoerd Schenau



Statistics  
Netherlands

# Content

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# Integration within SEEA-CF

**Strength of SEEA:** consistent application of accounting rules, principles and boundaries in organisation of physical and monetary information.

1. Link between measures of flows of goods and services in physical and monetary terms as reflected in monetary and physical supply and use tables.
2. Link between changes in the stock of environmental assets over an accounting period and the use of extracted natural resources as an input to economic production, consumption and accumulation.
3. Connection between the measures of production, consumption and accumulation in monetary terms and measures of flows of income Integrating and presenting the accounts between different sectors.
4. Functional accounts

# Integration of supply and use tables in physical and monetary terms

Supply table in monetary terms								
	Production (including household production on own account) Industries—classified by ISIC				Flows from the rest of the world	Total		
Products	Output				Imports			
Total								
Use table in monetary terms								
	Intermediate consumption Industries—classified by ISIC		Final consumption Households      Government		Accumulation	Flows to the rest of the world	Total	
Products	Intermediate consumption		Household final consumption expenditure	Government final consumption expenditure	Gross capital formation	Exports		
Total								
Supply table in physical terms								
	Production; Generation of residuals			Accumulation	Flows from the rest of the world	Flows from the Environment	Total	
	Industries (including household production on own account)—classified by ISIC	Generation of residuals by households						
Natural inputs						Flows from the environment		
Products	Output				Imports			
Residuals	Residuals generated by industry	Residuals generated by household final consumption		Residuals from scrapping and demolition of produced assets Emissions from controlled landfill sites	Residuals received from rest of the world	Residuals recovered from the environment		
Total								
Use table in physical terms								
	Intermediate consumption; use of natural inputs; collection of residuals Industries—classified by ISIC		Final consumption		Accumulation	Flows to the rest of the world	Flows to the environment	Total
Natural inputs	Extraction of natural inputs							
Products	Intermediate consumption		Household final consumption		Gross capital formation	Exports		
Residuals	Collection and treatment of residuals				Accumulation of waste in controlled landfill sites	Residuals sent to the rest of the world	Residual flows to the environment	
Total								

Note: Dark grey cells are null by definition.

# Integration of asset accounts and supply and use tables

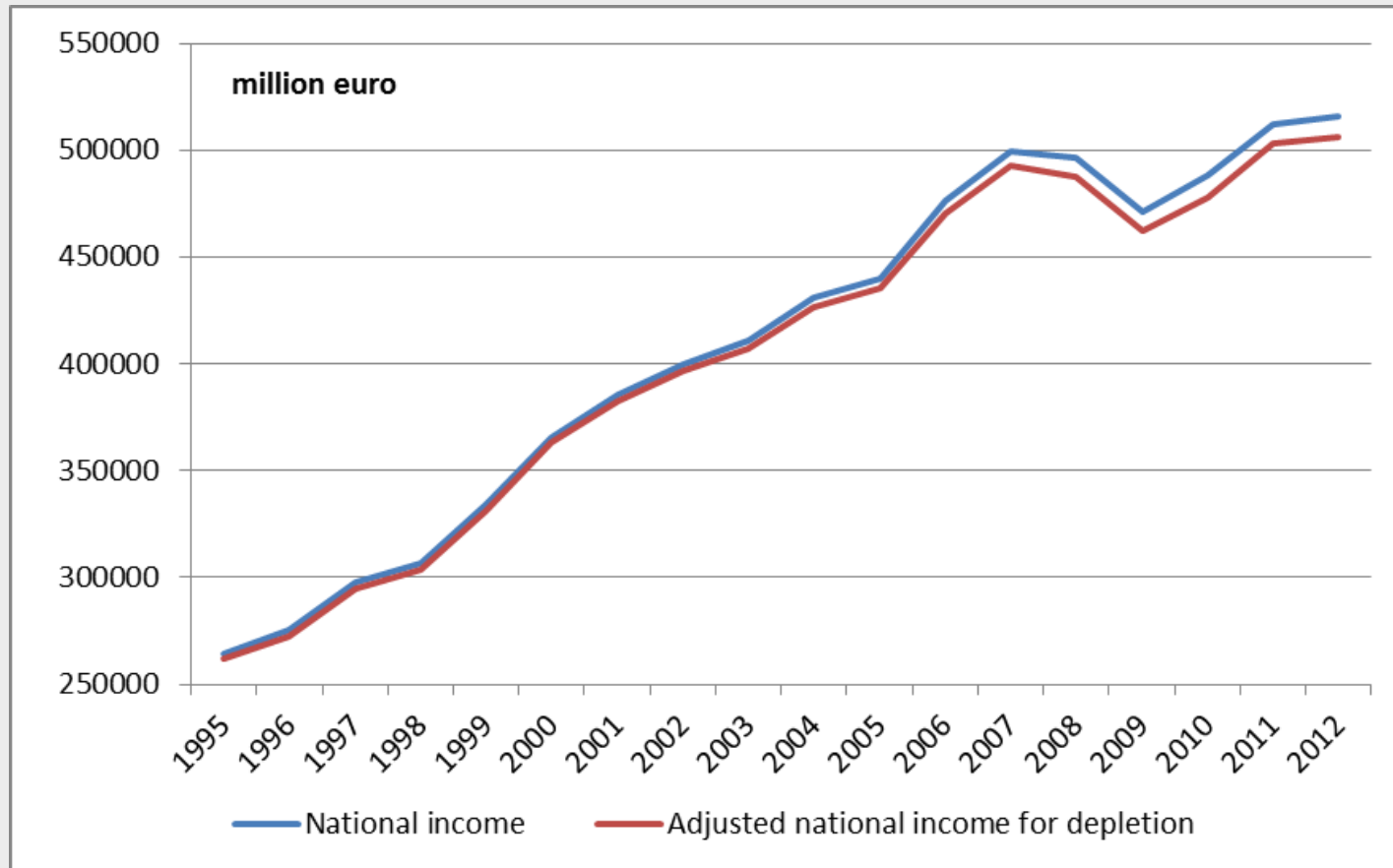
						Asset accounts		
						(Physical and monetary terms)		
						Produced assets	Environmental assets	
						Opening stock		
Monetary supply and use table	Product-supply	Output			Imports			
	Product-use	Intermediate consumption	Household final consumption expenditures	Government final consumption expenditures	Exports	Gross capital		
Physical supply and use table	Natural inputs-supply						Extracted natural resources	
	Natural inputs-use	Inputs of natural resources						
	Product-supply	Output					Imports	
	Product-use	Intermediate consumption	Household final consumption					Exports
	Residuals-supply	Residuals generated by industry	Residuals generated by household final consumption					Residuals received from the rest of the world
	Residuals-use	Collection and treatment of waste and other residuals					Residuals sent to the rest of the world	Residuals from scrapping and demolition of produced assets; emissions from controlled landfills
						Accumulation of waste in controlled landfills	Residuals flowing to the environment <sup>a</sup>	
						Other changes in volume of assets (e.g., natural growth, discoveries, catastrophic losses)		
						Revaluations		
						Closing stock		

# The sequence of economic accounts

- SNA: sequence of economic accounts
- Derivation of balancing items (GDP, GNI etc.)
- Balancing items can be defined so as to take into account the *depletion of natural resources*

→ *Depletion adjusted net value added, depletion adjusted net operating surplus, etc*

# Adjusted National income for depletion



# Possible structure for combined presentations

	Industries (by ISIC divisions)	Households	Government	Accumulation	Flows with the rest of the world	Total
<b>Monetary supply and use: flows</b> (currency units)						
Supply of products						
Intermediate consumption and final use of products						
Gross value added						
Depletion-adjusted value added						
Environmental taxes, subsidies and similar transfers						
<b>Physical supply and use: flows</b> (physical units)						
Supply of:						
Natural inputs						
Products						
Residuals						
Use of:						
Natural inputs						
Products						
Residuals						
<b>Asset stocks and flows</b>						
Closing stocks of environmental assets (currency units and physical units)						
Depletion (currency units and physical units)						
Closing stocks of fixed assets (currency units)						
Gross fixed capital formation (currency units)						
<b>Related socio-demographic data</b>						
Employment						
Population						



# Questions ?



# Exercise

- Environmental accountants should not only compile the accounts, they should also be able to explain the data to the users.
- Please assess the two core tables for water for 2005 and 2010. Evaluate the main changes that occurred between these two years.
- Work in a group. Discuss the results. What are the 5 most important messages you deduce from this data?
- Prepare a short presentation where you present the 5 most important messages and also explain why you think this is important.



# Water core table for 2005

	Industries (by ISIC categories)						Rest of the world	Taxes less subsidies on products, trade and transport margins	Actual final consumption			Total
	ISIC 1-3	ISIC 5-33, 41-43	ISIC 35	ISIC 36	ISIC 37	ISIC 38,39, 45-99			Total industry	Households	Government	
<b>1. Supply of water products</b> (Currency units)												
Natural water		13	1	8 570	14	7	8 605	1	- 2			8 604
Sewerage services					5 022		5 022	2	14			5 038
<b>2. Total supply of products</b>	170 737	267 143	19 769	8 570	5 036	6 478 288	6 949 543					
<b>3. Intermediate consumption and final use</b> (Currency units)												
Natural water	596	643	58		40	1 029	2 366	4		6 174	60	8 604
Sewerage services	3	229	1	13	1	1 406	1 653	3		3 316	66	5 038
Other products	145 597	125 181	12 683	2 360	1 718	5 842 990	6 130 529			605 817	50 096	
<b>4. Gross value added</b> (Currency units)	24 541	141 090	7 027	6 197	3 277	632 863	814 995					814 995
<b>5. Employment (1000 fte)</b>	371	2 211	61	41	43	8 204	10 931					10 931
<b>6. Supply of water</b> (Millions m3)												
Supply of water to other economic units				381			381					381
Supply of waste water for treatment	27	88	4	9		48	176			236		411
Total returns	64	29	400	47	417	1	958			5		963
<b>7. Use of water</b> (Millions m3)												
Total Abstraction	208	115	404	465	10	2	1 204			11		1 215
Use of water received from other economic units	39	45	4		3	51	141			240		381
Use of waste water for treatment					411		411					411
<b>8. Water consumption</b> (Millions m3)	156	42	4	28	7	5	242			10		252
<b>9. Gross fixed capital formation</b> (Currency units)												
For water supply	582	16	819	2 872			4 289					4 289
For water sanitation					2 874		2 874					2 874
<b>10. Closing Stocks of fixed assets for water supply</b> (Currency units)	6 112	84	9 871	25 347		17	41 431					41 431
<b>11. Closing Stocks of fixed assets for water sanitation</b> (Currency units)					37 457		37 457					37 457



# Water core table for 2010

	Industries (by ISIC categories)							Rest of the world	Taxes less subsidies on products, trade and transport margins	Actual final consumption			Total
	ISIC 1-3	ISIC 5-33, 41-43	ISIC 35	ISIC 36	ISIC 37	ISIC 38,39, 45-99	Total industry			Households	Government	Capital Formation	
<b>1. Supply of water products</b> (Currency units)													
Natural water		27	2	8 444	16	7	8 496	1	- 4				8 493
Sewerage services					4 939		4 939	5	16				4 960
<b>2. Total supply of products</b>	205 274	271 086	17 420	8 444	4 955	7 237 420	7 744 598						
<b>3. Intermediate consumption and final use</b> (Currency units)													
Natural water	322	693	75		42	1 222	2 354	3		6 074	62		8 493
Sewerage services	4	245	1	12	1	1 506	1 769	4		3 116	71		4 960
Other products	170 421	128 663	11 781	2 302	2 062	6 418 280	6 733 507			655 817	61 096		
<b>4. Gross value added</b> (Currency units)	34 527	141 485	5 563	6 131	2 850	816 412	1 006 968						1 006 968
In prices of year 2005	29 260	127 464	4 598	5 677	2 639	722 488	892 126						
<b>5. Employment (1000 fte)</b>	335	2 018	59	45	49	8 673	11 179						11 179
<b>6. Supply of water</b> (Millions m3)													
Supply of water to other economic units				350			350						350
Sup	31	112	3	49		51	246			203			449
Total returns	57	23	360	47	452	1	940			5			945
<b>7. Use of water</b> (Millions m3)													
Total Abstraction	211	144	362	465	9	3	1 194			5			1 199
Use of water received from other economic units	23	53	5		3	54	138			212			350
Use					449		449						449
<b>8. Water consumption</b> (Millions m3)	146	62	4	19	8	5	245			9			254
<b>9. Gross fixed capital formation</b> (Currency units)													
For water supply	723	28	612	3 742			5 105						5 105
For water sanitation					1 837		1 837						1 837
<b>10. Closing Stocks of fixed assets for water supply</b> (Currency units)	7 182	78	9 287	28 465		15	45 027						45 027
<b>11. Closing Stocks of fixed assets for water sanitation</b> (Currency units)					22 285		22 285						22 285

