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MAIN NATIONAL ACCOUNTING SERIES, 1900-1986

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MAIN NATIONAL ACCOUNTING SERIES 1900-1986

Summary

The main national accounting series for the Netherlands, 1900-1986, are provided, along with a brief explanation.

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1. Introduction

The annual national accounts publication of the Netherlands Central Bureau of Statistics (CBS) has been considerably altered as of the reporting year 1986, in order to improve its accessibility and accommodate presentation of more detailed data. One of the changes concerns the historical national accounting series back to 1900. The number of historical data has been increased substantially and revised data for 1921-1939 have been included. The purpose of the present paper is to make the historical series accessible to non-Dutch readers. Section 2 briefly discusses the main problems associated with the compilation of long-term series from the available data and the solutions adopted. Section 3 describes the way the data for the various periods have been compiled, and indicates some of the differences between the data for the various periods. The data are presented in section 4.

2. Problems in compiling long time series of Dutch national accounting data

The Netherlands CBS first compiled data on variables that are now part of the national accounts in the 1930's. Some series were compiled retrospectively for the years back to 1900; hence 'official' national accounting series start at that year. In the course of time, national accounts were revised repeatedly. Among the reasons for these revisions are availability of new basic data, improved estimation methods and changes in concepts. Initially, a revision concerns a 'revision year'. For that year, data are compiled both according to the original methods and according to the revised ones. Usually, a revision is followed by a recomputation for a number of years prior to the revision year; thus consistent time series of a moderate length are obtained (for more details on the revision strategy of the CBS, cf. van Bochove, 1987, page 42). However, it was not possible to carry out these revisions for the whole period from 1900 onward. Consequently, the data consist of series for a number of separate subperiods, each having their own definitions, methods and level of detail.

In order to show the impact of this and in order to allow users to make linkages, the data for the borderline years are given twice: both according to the methods and concepts of the period before the revision and according to those of the subsequent period. This is done for current price data. In case of volume and price data, the problem of intertemporal consistency is sidestepped by providing percentage annual changes instead of constant price values or indices based on a fixed reference year. The latter are affected far more by changes in definitions and concepts than annual changes. Nevertheless, many users of data are interested in long-period comparisons. To facilitate these, the annual changes of prices and volumes have been chained in order to obtain chain indices (1938=100) for a limited number of years.

Of course these procedures are no real solution of the problem of the absence of long consistent time series. The only way to achieve the latter is to revise the data for historical periods. The CBS has now begun to do so. These historical revisions cannot be done in such great detail as the 'short-period revisions', nor as quickly: this would require too many resources. Therefore, only the most important inconsistencies are removed and each period is tackled separately, the results being published whenever they become available. The first results have been obtained recently: revised and more detailed macro-data for 1921-1939.

3. Differences between periods

In the course of time, several alternative methods have been employed to compute Dutch national income. The first of them is the income method. In this method income data, mainly derived from tax records, for individual economic units are aggregated to national totals. The second approach is the net-production method. In this approach, each industry's total production and intermediate use are determined separately, mainly from source data obtained by surveying producers. The difference between production and use is value added; the sum of the value added of all industries is, after correction for transactions with the rest of the world, national income. The third approach is the commodity-flow or input-output method. This method is also based on calculation of production and use.

However, in this case this calculation is, for each industry, made by groups of products and services. Total production of each group of products by all industries together, plus imports and change in stocks, must equal total use by all industries plus final consumption, investments and exports. Hence, detailed balancing at the commodity level of the supply and disposition of commodities is possible. Consequently, production, intermediate use and value added of each industry can be determined in such a way that the results are consistent with those for other industries. Therefore, the commodity-flow method is the most reliable of the three methods mentioned.

For 1900-1920 only the income method has been employed. No complete national accounts have been calculated: the data are limited to some national income and domestic product series. Volume data have been obtained by deflating the value data with a fixed base index of the cost of living of blue-collar households. Some of the concepts employed differ from current concepts; examples are the treatment of a number of income transactions with the rest of the world and of consumption of fixed capital. Detailed data are provided in CBS (1941).

For 1921-1939 the net-production method has been employed. Final expenditure and some other variables have been estimated independently; changes in stocks were calculated as a balancing item. Deflators are based on detailed price series and the current year weights from the national accounts. Volume changes are based on previous year weights and prices. All concepts are in harmony with current ones. Detailed data and methods are given by Den Bakker, Huitker and Van Eochove (1987).

The method of compilation and concepts for 1940-1945 are identical to those for 1900-1920. Detailed data have been published in CBS (1950a). Only one current price series is available: net national income at factor cost. For 1946 and 1947 the commodity-flow method has been employed. Concepts differ somewhat from current concepts; thus national income includes the value of banking services implicit in the interest margin, as far as these services were thought to have been delivered to final expenditure; some transactions with the rest of the world were treated differently than today.

Moreover, subsequent statistical revisions were not extended backward to 1946-1947; hence there is a considerable discontinuity between 1947 and 1948. Detailed 1946 and 1947 data are provided in CBS (1950 b). The long period indices of prices and volumes jump over the 1939-1947 period: this period is not bridged by means of chaining of annual changes, but by direct 1938-1948 price comparisons.

For 1948-1968 and for data from 1969 on, the commodity-flow method has been employed. Original data have been published in CBS (1958) and the subsequent annual national accounts publications. An English explanation is provided in CBS (1961). Current price data, for 1958 onwards, in the present paper and the 1986 annual national accounts publication satisfy the macro concepts of the 1968 UN system of national accounts (SNA). The same applies to price and volume data for the period from 1960 onward. For 1960-1979 prices and volumes are based on a fixed base year; from 1981 onwards price changes are based on current year weights, volume changes on weights and prices of the preceding year. Price and volume data for 1948-1959 satisfy the 1953 SNA; they are based on fixed weights.

A major discontinuity between the 1948-1968 data and those for 1969 and subsequent years, is caused by a revision that originally pertained to 1977 and was subsequently extended backwards to 1969. Though macro concepts were not altered, the basic data sources and statistical methods were; this raised the national income substantially.

4. The tables

The data are presented in five tables. These are identical to those in the 1986 annual national accounts publication; thus in the future the reader may supplement the tables in the present paper from new annual national accounts publications. The data for 1986 are 'provisional', for 1985 'revised provisional', for 1984 and earlier years 'final' (for these terms, cf. van Bochove, 1987, page 42).

The first of the historical tables contains current price data on the components of GDP and on total population (the average of the January 1 and December 31 figures).

Table H2 contains current price data linking GDP to the various national income data. In addition, the volume changes of the national product are provided. In case of 1940-1947 these refer to national product at factor cost.

Table H3 shows the volume changes of GDP, imports and the categories of final expenditure. Table H4 shows the corresponding price changes.

The current price values of final expenditure are shown in table H5. Tables H6 en H7 show chain indices of volumes and prices for selected years, 1938=100.

TABLE H 1

Components of gross domestic product

	Wages and salaries	Social charges	Operating surplus, net	Net dom product at factor cost	Indirect taxes less subsidies	Net dom product at market prices	Consumption of fixed capital	Gross dom product at market prices	Average population
	1	2	3	4=1+2+3	5	6=4+5	7	8=6+7	9
	mln guilders								*1000
1900				1561	97	1658			5142
1901				1623	102	1725			5221
1902				1661	104	1765			5305
1903				1686	107	1793			5389
1904				1735	109	1844			5470
1905				1799	110	1909			5551
1906				1859	115	1974			5632
1907				1916	115	2031			5710
1908				1967	115	2082			5786
1909				2029	120	2149			5842
1910				2095	125	2220			5902
1911				2182	127	2309			5984
1912				2332	132	2464			6068
1913				2398	137	2535			6163
1914				2370	135	2505			6276
1915				2881	134	3015			6395
1916				3286	142	3428			6516
1917				3332	73	3405			6654
1918					-21				6752
1919					77				6805
1920					279				6848
1921				4928	300	5228			6921
1921	2631	69	2304	5004	267	5271	408	5679	6921
1922	2510	86	2210	4806	269	5075	344	5419	7032
1923	2377	87	2139	4603	273	4876	340	5216	7150
1924	2367	87	2400	4854	303	5157	334	5491	7264
1925	2393	81	2508	4982	330	5312	332	5644	7366
1926	2453	93	2542	5088	347	5435	331	5766	7471
1927	2517	94	2639	5250	362	5612	337	5949	7576
1928	2634	99	2794	5527	379	5906	357	6263	7678
1929	2774	104	2836	5714	388	6102	380	6482	7781

TABLE H 1 (continued)

Components of gross domestic product

	Wages and salaries	Social charges	Operating surplus, net	Net dom product at factor cost	Indirect taxes less subsidies	Net dom product at market prices	Consumption of fixed capital	Gross dom product at market prices	Average population
	1	2	3	4=1+2+3	5	6=4+5	7	8=6+7	9
	mln guilders								*1000
1930	2849	132	2485	5466	377	5843	405	6248	7894
1931	2727	140	2070	4955	350	5313	404	5717	7999
1932	2416	120	1944	4480	353	4833	361	5194	8122
1933	2324	121	1873	4318	359	4677	331	5008	8237
1934	2264	119	1833	4216	379	4595	325	4920	8341
1935	2164	115	1869	4148	393	4541	308	4849	8433
1936	2136	108	1955	4199	410	4609	304	4913	8516
1937	2235	123	2171	4529	469	4998	358	5356	8598
1938	2324	129	2121	4574	468	5042	404	5446	8684
1939	2405	140	2484	5029	518	5547	438	5985	8781
1938	2461		2041	4502	491	4993	478	5471	8684
1940									8869
1941									8960
1942									9051
1943									9096
1944									9177
1945									9246
1946	5455		3646	9101	602	9703	974	10677	9411
1947	6341		4692	11033	815	11848	1279	13127	9632
1948	7100		5540	12640	1330	13970	1470	15440	9795
1948	6297	868	4671	11836	1382	13218	1612	14830	9795
1949	6601	950	5554	13105	1819	14924	1706	16630	9949
1950	7238	1038	6334	14610	2140	16750	1851	18601	10109
1951	8118	1183	7201	16502	2553	19055	2189	21244	10264
1952	8351	1294	7496	17141	2607	19748	2403	22151	10380
1953	8900	1395	8186	18481	2696	21177	2400	23577	10490
1954	10134	1578	9196	20908	2952	23860	2484	26344	10611
1955	11408	1763	10538	23709	3016	26725	2748	29473	10749
1956	12719	1959	11193	25871	3110	28981	2981	31962	10888
1957	14269	2236	11906	28411	3010	31421	3324	34745	11022
1958	14797	2332	11558	28687	2855	31542	3523	35065	11185
1959	15403	2440	12553	30396	3295	33691	3708	37399	11347

TABLE H 1 (end)

Components of gross domestic product

	Wages and salaries	Social charges	Operating surplus, net	Net dom product at factor cost	Indirect taxes less subsidies	Net dom product at market prices	Consumption of fixed capital	Gross dom product at market prices	Average population
	1	2	3	4=1+2+3	5	6=4+5	7	8=6+7	9
	mln guilders								*1000
1960	17186	2711	14359	34256	3675	37931	3909	41840	11483
1961	18761	3086	14088	35935	4032	39967	4206	44173	11637
1962	20748	3258	14626	38632	4377	43009	4545	47554	11801
1963	22784	3995	15100	41879	4773	46652	4940	51592	11964
1964	27074	4884	17695	49653	5596	55249	5459	60708	12125
1965	30682	5525	19215	55422	6370	61792	6010	67802	12293
1966	33900	6834	19321	60055	7179	67234	6595	73829	12455
1967	36639	7818	21386	65843	7988	73831	7166	80997	12597
1968	39812	9215	23700	72727	9335	82062	7749	89811	12726
1969	45917	10884	26662	83463	9684	93147	8568	101715	12873
1969	47280	11130	30990	89400	9680	99080	8910	107990	12873
1970	53910	12850	32610	99370	11550	110920	10260	121180	13032
1971	61340	15220	34320	110880	13790	124670	11860	136530	13194
1972	68300	17360	39580	125240	15770	141010	13250	154260	13330
1973	77620	21450	45220	144290	17020	161310	14730	176040	13438
1974	89800	25490	49270	164560	17960	182520	17260	199780	13543
1975	101270	28800	49670	179740	20210	199950	20010	219960	13660
1976	112290	32390	62040	206720	22770	229490	22440	251930	13773
1977	123320	34850	65790	223960	26730	250690	24240	274930	13856
1978	133770	37490	69780	241040	29300	270340	26670	297010	13939
1979	143260	41170	72440	256870	29800	286670	29290	315960	14034
1980	151960	44080	76190	272230	32020	304250	32490	336740	14148
1981	154970	44920	84440	284330	32900	317230	35620	352850	14247
1982	160110	45390	92800	298300	32700	331000	37860	368860	14312
1983	159680	48010	100220	307910	33920	341830	39190	381020	14368
1984	160400	49600	113680	323680	35380	359060	41190	400250	14423
1985	165550	50570	120780	336900	36930	373830	42760	416590	14488
1986	172540	51310	121810	345660	40190	385850	43720	429570	14567

TABLE H 2
National income

	Comp. empl. and prop./ entrepr. inc. from the rest of the world	National income = product			Other current transfers from the rest of the world, net	Disposable national income gross, market prices	Surplus of the nation on current transact.	National product	
	net, fact cost	net, market prices	gross, market prices		gross, market prices		net, market prices	gross, marke prices	
	1	2	3	4	5	6=4+5	7	8	9
	mln guilders						% volume changes		
1900	138	1699	1796						
1901	138	1761	1863					-2.2	
1902	136	1797	1901					5.0	
1903	159	1845	1952					2.7	
1904	149	1884	1993					-0.8	
1905	149	1948	2058					3.3	
1906	182	2041	2156					4.8	
1907	164	2080	2195					0.4	
1908	173	2140	2255					-0.1	
1909	173	2202	2322					4.4	
1910	188	2283	2408					0.9	
1911	202	2384	2511					2.9	
1912	224	2556	2688					5.6	
1913	272	2670	2807					3.1	
1914	225	2595	2730					-2.7	
1915	212	3093	3227					3.4	
1916	264	3550	3692					2.7	
1917	261	3593	3666					-6.4	
1918		4121	4100					-6.2	
1919		5453	5530					23.9	
1920		6006	6285					3.0	
1921	552	5480	5780					6.2	
1921	506	5510	5777	6185	2	6187	-130		
1922	374	5180	5449	5793	3	5796	-172	5.6	5.4
1923	398	5001	5274	5614	3	5617	-32	2.2	2.5
1924	442	5296	5599	5933	3	5936	24	7.5	7.3
1925	494	5476	5806	6138	3	6141	110	4.0	4.2
1926	564	5652	5999	6330	3	6333	149	8.4	8.0
1927	553	5803	6165	6502	3	6505	203	4.3	4.2
1928	608	6135	6514	6871	3	6874	210	5.2	5.3
1929	513	6227	6615	6995	3	6998	51	0.5	0.8

TABLE H 2 (continued)
National income

	Comp. empl. and prop./ entrepr. inc. from the rest of the world	National income = product			Other current transfers from the rest of the world, net	Disposable national income gross, market prices	Surplus of the nation on current transact.	National product	
		net, fact cost	net, market prices	gross, market prices				net, market prices	gross, marke prices
	1	2	3	4	5	6=4+5	7	8	9
	mln guilders							% volume changes	
1930	519	5985	6362	6767	2	6769	48	-0.6	-0.2
1931	324	5279	5637	6041	2	6043	-73	-6.9	-6.1
1932	226	4706	5059	5420	2	5422	-107	-1.8	-1.4
1933	182	4500	4859	5190	2	5192	-204	-0.2	-0.2
1934	142	4358	4737	5062	2	5064	-88	-1.9	-1.8
1935	182	4330	4723	5031	2	5033	20	3.9	3.7
1936	252	4451	4861	5165	2	5167	106	6.6	6.3
1937	325	4854	5323	5681	2	5683	159	5.9	5.7
1938	357	4931	5399	5803	2	5805	208	-2.7	-2.4
1939	342	5371	5889	6327	1	6328	66	7.1	6.8
1938	402	4904	5395	5873					
1940		5264						-11.9	
1941		5724						-5.3	
1942		5592						-8.6	
1943		5635						-2.4	
1944		3930						-32.9	
1945		4170						2.3	
1946	225	9326	9928	10902				68.9	
1947	218	11251	12066	13345				15.7	
1948	270	12910	14240	15710				10.7	
1948	88	11924	13306	14918	82	15000	-1447		
1949	257	13362	15181	16887	95	16982	-312	8.8	8.2
1950	150	14760	16900	18751	96	18847	-1131	3.6	3.8
1951	224	16726	19279	21468	36	21504	-269	2.1	2.1
1952	344	17485	20092	22495	39	22534	1755	2.4	2.0
1953	422	18903	21599	23999	25	24024	1359	9.4	8.7
1954	420	21328	24280	26764	13	26777	234	7.2	6.8
1955	550	24259	27275	30023	3	30026	781	7.4	7.4
1956	321	26192	29302	32283	-40	32243	-750	3.8	3.7
1957	277	28688	31698	35022	-56	34966	-594	2.7	2.8
1958	528	29215	32070	35593	-28	35565	1533	-0.8	-0.3
1959	669	31065	34360	38068	-56	38012	1783	4.8	4.9

TABLE H 2 (end)

National income

	Comp. empl. and prop./ entrepr. inc.	National income = product			Other current transfers from the rest of the world, net	Disposable national income gross, market prices	Surplus of the nation on current transact.	National product	
	from the rest of the world	net, cost	net, prices	gross, market prices	of the world, net	gross, market prices	current transact.	net, prices	gross, marke prices
	1	2	3	4	5	6=4+5	7	8	9
	mln guilders							% volume-mutaties	
1960	465	34721	38396	42305	-28	42277	1244	8.7	8.4
1961	649	36584	40616	44822	-69	44753	633	3.1	3.2
1962	449	39081	43458	48003	-138	47865	497	3.5	4.0
1963	665	42544	47317	52257	79	52336	362	3.7	3.7
1964	767	50420	56016	61475	-87	61388	-644	8.9	8.6
1965	755	56177	62547	68557	-205	68352	71	5.1	5.2
1966	601	60656	67835	74430	-222	74208	-711	2.3	2.6
1967	849	66692	74680	81846	-336	81510	-253	5.4	5.6
1968	593	73320	82655	90404	-307	90097	270	6.2	6.3
1969	766	84299	93913	102481	-291	102190	263	6.9	6.8
1969	780	90190	99870	108780	-290	108490	260		
1970	560	99930	111480	121740	-150	121590	-1700	5.3	5.4
1971	390	111270	125060	136920	-420	136500	-440	3.9	4.1
1972	700	125940	141710	154960	-620	154340	4330	3.3	3.5
1973	1300	145590	162610	177340	-230	177110	6720	5.0	5.0
1974	1670	166230	184190	201450	-920	200530	6220	4.1	4.1
1975	-20	179720	199930	219940	-1870	218070	5490	-1.4	-0.9
1976	120	206840	229610	252050	-1250	250800	7410	5.3	5.2
1977	490	224450	251180	275420	-1690	273730	2140	2.4	2.4
1978	-680	240360	269660	296330	-2130	294200	-2700	1.7	2.0
1979	-730	256140	285940	315230	-1510	313720	-3870	2.3	2.5
1980	-620	271610	303630	336120	-2470	333650	-4900	0.7	1.0
1981	-960	283370	316270	351890	-3660	348230	7760	-1.1	-0.8
1982	-380	297920	330620	368480	-3750	364730	11640	-1.9	-1.5
1983	560	308470	342390	381580	-3260	378320	11860	1.7	1.7
1984	-500	323180	358560	399750	-3680	396070	16630	2.9	2.9
1985	1430	338330	375260	418020	-3990	414030	17950	2.9	2.9
1986	-380	345280	385470	429190	-4790	424400	12170	1.7	1.8

TABLE H 3

Supply and disposition of goods and services: annual volume changes

	Disposable for final expenditure		Final expenditure				Increase in stocks	Exports
	Gross domestic product at market prices	Imports	Consumption expenditure	Government	Gross fixed capital formation	Enterprises		
	1	2	3	4	5	6	7	8
x								
1921							-6.7	
1922	6.5	10.2	10.3	2.7	-4.5	-6.1	-6.8	13.8
1923	2.1	-1.5	0.0	-5.3	-9.9	-13.6	-4.6	5.9
1924	7.2	10.0	1.8	-0.2	-3.3	8.5	-0.8	14.4
1925	3.7	3.9	-0.7	4.0	4.6	11.5	1.1	5.3
1926	6.7	6.3	5.7	1.2	10.2	10.7	2.0	5.1
1927	4.6	4.8	4.3	0.2	22.3	3.4	0.5	8.8
1928	4.8	4.2	3.9	-4.1	9.0	10.1	1.2	3.4
1929	2.4	4.8	2.8	5.2	17.4	4.1	1.9	0.4
1930	-1.1	-4.9	5.2	4.6	9.8	11.1	-4.4	-8.0
1931	-4.6	-5.0	1.7	6.4	13.4	-14.1	-8.1	-7.8
1932	-0.9	-14.0	1.5	5.1	-9.4	-23.4	-6.4	-16.5
1933	0.4	5.4	0.7	1.7	-11.1	-2.8	-3.6	-3.6
1934	-1.1	-4.1	-2.1	-1.8	-1.6	5.2	-5.4	5.1
1935	2.7	-3.3	0.6	-3.4	-5.6	-3.4	-4.0	4.6
1936	5.4	2.0	3.7	2.2	-7.1	-5.1	-1.6	3.3
1937	5.7	8.2	0.8	-0.7	4.5	2.8	1.2	19.1
1938	-3.2	-0.9	0.5	6.2	17.9	21.9	-4.1	-4.9
1939	7.7	4.9	5.9	-3.2	6.1	-1.2	1.7	-4.6
1949	7.2	7.8	2.9	-1.0	12.2	6.4	1.5	32.6
1950	4.2	32.1	1.6	-2.8	-2.7	7.1	6.1	40.0
1951	2.4	-5.3	-2.0	0.7	2.1	-4.4	5.1	10.6
1952	1.7	-7.8	0.6	9.8	-10.0	-7.4	-1.4	10.2
1953	8.4	19.1	5.4	10.1	62.2	15.5	-0.9	13.1
1954	6.9	23.7	6.6	7.0	-16.4	15.9	3.8	11.3
1955	7.1	8.0	6.7	4.8	5.8	16.0	2.3	9.4
1956	4.5	13.6	7.5	4.1	7.5	12.1	2.2	4.2
1957	3.0	3.3	0.3	-0.5	10.2	3.8	2.5	7.3
1958	-1.0	-4.5	0.3	-2.9	-8.1	-12.9	0.1	6.1
1959	4.7	12.6	4.4	-1.3	13.8	11.0	0.5	10.0

TABLE H 3 (end)

Supply and disposition of goods and services: annual volume changes

	Disposable for final expenditure		Final expenditure					Exports
	Gross domestic product (at market prices)	Imports	Consumption expenditure Households	Government	Gross fixed capital formation Government	Enterprises	Increase in stocks	
	1	2	3	4	5	6	7	8
	%							
1960	9.0	16.6	6.1	5.4	7.2	12.4	3.3	14.0
1961	2.9	6.3	5.4	3.4	9.3	6.0	2.7	2.1
1962	4.3	6.7	6.1	4.4	7.6	3.6	1.5	6.5
1963	3.3	9.5	7.1	6.8	8.8	0.3	1.1	5.6
1964	8.6	14.8	5.9	1.7	12.3	20.7	3.0	11.2
1965	5.3	6.1	7.5	1.5	2.2	5.9	1.9	7.6
1966	2.8	7.0	3.2	1.7	3.8	9.3	1.3	5.3
1967	5.3	6.3	5.4	2.4	10.1	7.6	0.9	6.7
1968	6.7	12.9	6.6	2.2	15.0	10.2	0.6	12.9
1969	6.8	14.0	7.7	4.5	-3.8	-1.7	2.4	15.0
1970	5.7	14.7	7.4	6.0	2.1	9.0	2.0	11.9
1971	4.2	6.1	3.3	4.4	5.5	0.5	1.1	10.7
1972	3.3	4.8	3.5	0.8	-9.3	-0.4	0.5	10.0
1973	4.7	11.0	4.0	0.8	-8.8	7.4	1.4	12.1
1974	4.0	-0.8	3.7	2.2	-3.5	-4.1	2.3	2.6
1975	-0.1	-4.1	3.3	4.1	7.5	-6.9	-0.4	-3.1
1976	5.1	10.1	5.3	4.1	-0.1	-2.7	1.2	9.9
1977	2.3	2.9	4.6	3.4	-9.6	14.6	0.6	-1.8
1978	2.5	6.3	4.3	3.9	-4.1	3.8	0.6	3.3
1979	2.4	6.0	3.0	2.8	-6.0	-0.9	0.5	7.4
1980	0.9	-0.4	0.0	0.6	3.1	-1.6	0.5	1.5
1981	-0.7	-5.9	-2.5	2.0	-4.7	-11.5	-0.9	1.5
1982	-1.4	1.0	-1.2	0.6	-7.1	-3.5	-0.3	-0.1
1983	1.4	3.9	0.8	1.1	-4.7	3.3	0.1	3.5
1984	3.1	5.0	0.9	-0.7	7.4	4.9	0.5	7.3
1985	2.4	6.0	1.9	1.3	-7.8	7.5	0.6	5.4
1986	2.5	3.2	3.1	1.9	-8.8	9.6	1.1	0.7

1 As percentage of current GDP

TABLE H 4

Deflators of supply and disposition of goods and services: annual changes

	Disposable for		Final expenditure					
	final expenditure		Consumption expenditure		Gross fixed capital formation			Exports
	Gross domestic product at market prices	Imports	Households	Government	Government	Enterprises		
1	2	3	4	5	6	7		
%								
1921								
1922	-10.4	-18.3	-10.2	-3.4	-18.0	-16.6	-19.8	
1923	-5.7	0.5	-4.3	-0.6	-10.0	-7.6	-1.2	
1924	-1.8	3.8	0.1	-3.4	-5.0	-5.9	2.9	
1925	-0.8	0.3	0.5	-5.3	-3.4	-7.2	1.0	
1926	-4.3	-6.5	-4.8	-3.6	-2.7	-1.4	-6.7	
1927	-1.4	-1.3	-1.2	-0.3	-0.7	-0.7	-2.0	
1928	0.4	0.5	0.5	2.2	1.2	0.4	0.1	
1929	1.1	-2.9	-0.5	2.9	2.0	0.2	-0.7	
1930	-2.5	-9.3	-4.7	-0.7	-1.0	1.4	-9.0	
1931	-4.1	-18.9	-6.7	-1.9	-5.7	-6.6	-18.1	
1932	-8.4	-19.8	-8.6	-6.2	-10.9	-14.1	-21.4	
1933	-3.9	-10.7	-3.9	-6.1	-8.7	-8.9	-8.9	
1934	-0.6	-6.5	-1.6	-0.5	-1.5	-0.6	-3.8	
1935	-4.1	-2.7	-3.4	-0.6	-4.4	-6.3	-5.0	
1936	-3.8	5.0	-4.0	-3.7	-4.0	-1.6	6.4	
1937	3.1	34.7	4.5	3.2	6.0	16.1	26.1	
1938	5.0	-6.6	1.9	-0.4	5.7	10.8	-2.3	
1939	2.0	0.3	0.7	0.6	3.4	5.7	2.4	
1949	4.7	-1.4	6.4	1.4	1.8	1.2	-1.4	
1950	7.3	9.8	8.7	15.4	5.7	3.9	-1.7	
1951	11.5	25.6	10.6	19.5	14.4	11.4	20.5	
1952	2.5	-1.0	0.1	0.1	7.7	10.0	-1.0	
1953	-1.8	-10.2	-0.6	-0.8	-2.0	-2.7	-9.8	
1954	4.5	-2.6	4.1	6.8	8.6	1.7	-1.9	
1955	4.4	1.6	2.1	8.0	4.0	4.4	3.5	
1956	3.8	3.4	2.6	8.4	6.7	8.4	3.9	
1957	5.5	4.7	5.3	8.5	10.0	5.9	2.6	
1958	1.9	-5.4	1.6	0.6	1.0	1.6	-5.1	
1959	1.9	-3.1	1.2	1.0	0.3	-0.5	-0.7	

TABLE H 4 (end)

Deflators of supply and disposition of goods and services: annual changes

	Disposable for final expenditure		Final expenditure				Exports
	Gross domestic product at market prices	Imports	Consumption expenditure		Gross fixed capital formation		
			Households	Government	Government	Enterprises	
	1	2	3	4	5	6	7
	Σ						
1960	2.6	-0.4	2.4	6.4	3.1	0.6	-0.6
1961	2.6	-1.8	2.2	6.1	1.7	2.0	-1.4
1962	3.2	-1.1	2.6	7.4	4.3	1.3	-0.4
1963	5.0	1.6	3.7	7.3	5.5	3.0	3.0
1964	8.4	2.5	6.8	17.0	7.6	5.6	2.5
1965	6.1	0.5	4.0	9.6	5.7	4.4	2.3
1966	5.9	0.8	5.4	9.7	6.3	4.7	0.6
1967	4.1	-0.8	3.0	9.7	2.7	1.8	-0.1
1968	3.9	-2.8	2.6	6.0	3.7	1.3	-0.6
1969	6.1	3.4	6.3	9.1	9.3	4.9	2.1
1970	6.2	6.6	4.4	8.5	8.9	9.9	5.8
1971	8.1	4.3	7.9	12.2	11.4	8.4	3.2
1972	9.4	-0.4	8.3	10.9	10.0	6.7	1.8
1973	9.0	7.5	8.5	11.3	11.0	6.2	7.2
1974	9.2	32.7	9.5	15.8	12.6	12.3	26.0
1975	10.2	4.3	10.1	13.2	10.0	10.7	5.1
1976	9.0	6.4	9.0	9.2	9.6	7.8	6.6
1977	6.7	3.2	6.1	6.5	8.5	7.3	3.6
1978	5.4	-1.5	4.5	5.8	8.3	6.3	-1.3
1979	3.9	10.9	4.3	5.7	8.2	6.6	8.3
1980	5.7	14.5	7.0	4.8	8.6	7.3	12.4
1981	5.5	14.3	6.3	2.1	6.2	6.6	14.0
1982	6.1	1.3	5.3	3.1	3.0	3.8	4.0
1983	1.9	0.4	2.8	1.1	0.7	1.5	-0.1
1984	1.8	5.7	2.1	0.4	2.3	1.6	5.4
1985	1.7	1.7	2.5	0.4	1.9	0.8	1.6
1986	0.6	-15.4	0.1	-0.9	-0.6	-0.5	-13.3

TABLE H 5
Supply and disposition of goods and services

	Disposable for final expenditure		Final expenditure				Increase in stocks	Exports
	Gross domestic product at market prices	Imports	Consumption expenditure		Gross fixed capital formation			
	1	2	Households	Government	Government	Enterprises	7	8
mln guilders								
1921	5679	2787	4813	476	335	1071	-378	2149
1922	5419	2509	4766	472	262	839	-371	1960
1923	5216	2484	4563	444	212	670	-240	2051
1924	5491	2836	4651	428	195	684	-46	2415
1925	5644	2956	4642	421	197	708	63	2569
1926	5766	2939	4672	411	211	773	117	2521
1927	5949	3040	4815	411	256	793	27	2687
1928	6263	3183	5026	403	282	876	77	2782
1929	6482	3240	5139	436	338	914	120	2775
1930	6248	2795	5150	453	367	1029	-278	2322
1931	5717	2154	4889	473	392	826	-464	1755
1932	5194	1486	4537	466	316	544	-334	1151
1933	5008	1399	4391	445	257	482	-179	1011
1934	4920	1255	4230	435	249	504	-266	1023
1935	4849	1181	4109	417	225	455	-193	1017
1936	4913	1266	4091	410	201	425	-66	1118
1937	5356	1846	4310	420	223	507	64	1678
1938	5446	1709	4412	444	278	685	-222	1558
1939	5985	1799	4705	433	305	716	103	1522
1938	5471	1715	4400	699		520	49	1518
1946	10677	2744	8050	2199		1384	421	1367
1947	13127	4837	10093	2173		2040	690	2968
1948	15440	5880	11110	2330		2760	650	4470
1948	14830	5924	10536	2006	493	2720	692	4307
1949	16630	6296	11535	2013	563	2930	253	5632
1950	18601	9131	12741	2259	579	3261	1138	7754
1951	21244	10862	13811	2720	676	3475	1091	10333
1952	22151	9904	13911	2989	655	3541	-317	11276
1953	23577	10590	14582	3266	1041	3978	-202	11502
1954	26344	12762	16172	3734	945	4689	1003	12563

TABLE H 5 (continued)

Supply and disposition of goods and services

	Disposable for final expenditure		Final expenditure				Increase in stocks	Exports
	Gross domestic product at market prices	Imports	Consumption expenditure	Gross fixed capital formation				
			Households	Government	Government	Enterprises		
	1	2	3	4	5	6	7	8
mln guilders								
1955	29473	13997	17617	4227	1039	5675	687	14225
1956	31962	16440	19434	4770	1192	6893	704	15409
1957	34745	17785	20510	5148	1444	7576	882	16970
1958	35065	16057	20908	5029	1341	6702	52	17090
1959	37399	17504	22091	5012	1532	7400	194	18674
1960	41840	20340	23981	5622	1692	8364	1374	21147
1961	44173	21229	25836	6172	1880	9040	1192	21282
1962	47554	22398	28134	6914	2109	9482	729	22584
1963	51592	24932	31250	7824	2421	9798	581	24550
1964	60708	29320	35336	9431	2927	12497	1841	27996
1965	67802	31281	39491	10498	3162	13822	1308	30802
1966	73829	33722	42957	11709	3490	15809	954	32632
1967	80997	35549	46640	13157	3945	17314	707	34783
1968	89811	39032	50985	14255	4707	19325	555	39016
1969	101715	46038	58343	16256	4947	19941	2440	45826
1969	107990	46140	63180	16220	5100	21440	2290	45900
1970	121180	56410	70820	18660	5670	25690	2450	54300
1971	136530	62430	78940	21850	6660	27980	1510	62020
1972	154260	65150	88450	24430	6650	29750	730	69400
1973	176040	77760	99830	27420	6730	33930	2480	83410
1974	199780	102310	113390	32450	7310	36540	4620	107780
1975	219960	102340	128950	38250	8640	37680	-940	109720
1976	251930	119930	147990	43470	9460	39510	2960	128470
1977	274930	127400	164310	47850	9280	48610	1540	130740
1978	297010	133230	179170	52610	9640	53660	1820	133340
1979	315960	156690	192430	57170	9800	56690	1500	155060

TABLE H 5 (end)

Supply and disposition of goods and services

	Disposable for final expenditure		Final expenditure					Exports
	Gross domestic product at market prices	Imports	Consumption expenditure	Gross fixed capital formation		Increase in stocks		
	1	2	Households	Government	Government	Enterprises	7	8
mln guilders								
1980	336740	178620	205780	60260	10970	59820	1720	176810
1981	352850	192240	213230	62750	11100	56480	-3090	204620
1982	368860	196830	221830	65120	10620	56540	-1020	212600
1983	381020	205210	229860	66580	10190	59270	560	219770
1984	400250	227750	236750	66390	11190	63120	1990	248560
1985	416590	245690	247230	67550	10520	68430	2350	266200
1986	429570	214650	255210	68240	9550	74620	4610	231990

TABLE H 6
Supply and disposition of goods and services: volume index numbers

	1900	1913	1921	1929	1948	1960	1969	1979	1986
1938=100									
1 Gross domestic product, at market prices			67	97	124	220	340	480	520
2 Imports			80	120	84	240	540	930	1050
3 Disposable for final expenditure, gross			70	103	115	230	410	610	670
4 Consumption expenditure									
government			80	82	200	280	360	500	540
households			67	88	117	170	290	450	460
5 Gross fixed capital formation									
enterprises			91	117	128	250	450	550	590
government			63	94	64	120	230	170	130
6 Increase in stocks									
7 National final expenditure, gross			71	98	127	200	320	440	460
8 Exports			66	114	69	320	640	1160	1410
9 Total final expenditure, gross			70	103	115	230	410	610	670
10 National product, net, at market prices	42	56	69	99	120	210	330	450	490
11 Per capita national product, net, at market prices	70	79	86	110	106	160	220	280	290

TABLE H 7
Supply and disposition of goods and services: deflators

	1900	1913	1921	1929	1948	1960	1969	1979	1986
1938=100									
1 Gross domestic product, at market prices			155	123	215	340	540	1120	1410
2 Imports			205	157	413	490	500	980	1190
3 Disposable for expenditure, gross			170	132	248	370	500	1030	1270
4 Consumption expenditure									
government			134	119	228	470	1010	2600	2900
households	83	97	162	132	205	320	450	910	1170
5 Gross fixed capital formation									
enterprises			174	115	307	480	630	1390	1710
government			193	130	307	550	870	2220	2750
6 Increase in stocks									
7 National final expenditure, gross			159	126	226	360	550	1180	1470
8 Exports			209	157	405	430	460	860	1070
9 Total final expenditure, gross			170	132	248	370	500	1030	1270
0 National product, net, at market prices			157	125	209	340	530	1120	1390

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Available National Accounts Occasional Papers

- NA/01 *Flexibility in the system of National Accounts*, Eck, R. van, C.N. Gorter and H.K. van Tuinen (1983)
This paper sets out some of the main ideas of what gradually developed into the Dutch view on the fourth revision of the SNA. In particular it focuses on the validity and even desirability of the inclusion of a number of carefully chosen alternative definitions the "Blue Book", and the organization of a flexible system starting from a core that is easier to understand than the 1968 SNA.
- NA/02 *The unobserved economy and the National Accounts in the Netherlands, a sensitivity analysis*, Broesterhuizen, G.A.A.M. (1983)
This paper studies the influence of fraud on macro-economic statistics, especially GDP. The term "fraud" is used as meaning unreporting or underreporting income (e.g. to the tax authorities). The conclusion of the analysis of growth figures is that a bias in the growth of GDP of more than 0.5% is very unlikely.
- NA/03 *Secondary activities and the National Accounts: Aspects of the Dutch measurement practice and its effects on the unofficial economy*, Eck, R. van (1985)
In the process of estimating national product and other variables in the National Accounts a number of methods is used to obtain initial estimates for each economic activity. These methods are described and for each method various possibilities for distortion are considered.
- NA/04 *Comparability of input-output tables in time*, Al, P.G. and G.A.A.M. Broesterhuizen (1985)
In this paper it is argued that the comparability in time of statistics, and input-output tables in particular, can be filled in in various ways. The way in which it is filled depends on the structure and object of the statistics concerned. In this respect it is important to differentiate between coordinated input-output tables, in which groups of units (industries) are divided into rows and columns, and analytical input-output tables, in which the rows and columns refer to homogeneous activities.
- NA/05 *The use of chain indices for deflating the National Accounts*, Al, P.G., B.M. Balk, S. de Boer and G.P. den Dekker (1985)
This paper is devoted to the problem of deflating National Accounts and input-output tables. This problem is approached from the theoretical as well as from the practical side. Although the theoretical argument favors the use of chained Vartia-1 indices, the current practice of compiling National Accounts restricts to using chained Paasche and Laspeyres indices. Various possible objections to the use of chained indices are discussed and rejected.
- NA/06 *Revision of the system of National Accounts: the case for flexibility*, Bochove, C.A. van and H.K. van Tuinen (1985)
This paper examines the purposes of the SNA and concludes that they frequently conflict with one another. Consequently, the structure of the SNA should be made more flexible. This can be achieved by means of a system of a general purpose core supplemented with special modules. This core is a full-fledged, detailed system of National Accounts with a greater institutional content than the present SNA and a more elaborate description of the economy at the meso-level. The modules are more analytic and reflect special purposes and specific theoretical views. It is argued that future revisions will concentrate on the modules and that the core is more durable than systems like present SNA.
- NA/07 *Integration of input-output tables and sector accounts; a possible solution*, Bos, C. v.d. (1985)
In this paper, the establishment-enterprise or company problem is tackled by taking the institutional sectors to which the establishments belong into account during the construction of input-output tables. The extra burden on the construction of input-output tables resulting from this approach is examined for the Dutch situation. An adapted sectoring of institutional units is proposed for the construction of input-output tables. The proposed approach contains perspectives on further specification of the institutional sectors,

households and non-financial enterprises and quasi-corporate enterprises.

- NA/08 *A note on Dutch National Accounting data 1900-1984*, Bochove, C.A. van (1985)
This note provides a brief survey of Dutch national accounting data for 1900-1984, concentrating on national income. It indicates where these data can be found and what the major discontinuities are. The note concludes that estimates of the level of national income may contain inaccuracies; that its growth rate is measured accurately for the period since 1948; and that the real income growth rate series for 1900-1984 may contain a systematic bias.
- NA/09 *The structure of the next SNA: review of the basic options*, Bochove, C.A. van and A.M. Bloem (1985)
There are two basic issues with respect to the structure of the next version the UN System of National Accounts. The first is its 'size': reviewing this issue, it can be concluded that the next SNA must be 'large' in the sense of containing an integrated meso-economic statistical system. It is essential that the next SNA contains an institutional system without the imputations and attributions that pollute present SNA. This can be achieved by distinguishing, in the central system of the next SNA, a core (the institutional system), a standard module for non-market production and a standard module describing attributed income and consumption of the household sector.
- NA/10 *Dual sectoring in National Accounts*, Al, P.G. (1985)
The economic process consists of various sub-processes, each requiring its own characteristic classification when described from a statistical point of view. In doing this, the interfaces linking the sub-systems describing the individual processes must be charted in order to reflect the relations existing within the overall process. In this paper, this issue is examined with the special reference to dual sectoring in systems of National Accounts. Following a conceptual explanation of dual sectoring, an outline is given of a statistical system with complete dual sectoring in which the linkages are also defined and worked out. It is shown that the SNA 1968 is incomplete and obscure with respect to the links between the two sub-processes.
- NA/11 *Backward and forward linkages with an application to the Dutch agro-industrial complex*, Harthoorn, R. (1985)
Some industries induce production in other industries. An elegant method is developed for calculating forward and backward linkages avoiding double counting. For 1981 these methods have been applied to determine the influence of Dutch agriculture in the Dutch economy in terms of value added and labour force.
- NA/12 *Production chains*, Harthoorn, R. (1986)
This paper introduces the notion of production chains as a measure of the hierarchy of industries in the production process. Production chains are sequences of transformation of products by successive industries. It is possible to calculate forward transformations as well as backward ones.
- NA/13 *The simultaneous compilation of current price and deflated input-output tables*, Boer, S. de and G.A.A.M. Broesterhuizen (1986)
This paper discusses a number of aspects of the procedure according to which input-output tables are compiled in the Netherlands. A few years ago this method underwent an essential revision. The most significant improvement means that during the entire statistical process, from the processing and analysis of the basic data up to and including the phase of balancing the tables, data in current prices and deflated data are obtained simultaneously and in consistency with each other. Data in current prices first used to be compiled and data in constant prices and changes in volume and prices used to be estimated only afterwards. With the new method the opportunity for the analysis of the interrelations between various kinds of data, and thus better estimates is used.
- NA/14 *A proposal for the synoptic structure of the next SNA*, Al, P.G. and C.A. van Bochove (1986)

- NA/15 *Features of the hidden economy in the Netherlands*, Eck, R. van and B. Kazemier (1986)
This paper presents survey results on the size and structure of the hidden labour market in the Netherlands.
- NA/16 *Uncovering hidden income distributions: the Dutch approach*, Bochove, C.A. van (1987)
- NA/17 *Main national accounting series 1900-1986*, Bochove, C.A. van and T.A. Huitker (1987)
The main national accounting series for the Netherlands, 1900-1986, are provided, along with a brief explanation.
- NA/18 *The Dutch economy, 1921-1939 and 1969-1985. A comparison based on revised macro-economic data for the interwar period*, Bakker, G.P. den, T.A. Huitker and C.A. van Bochove (1987)
- NA/19 *Constant wealth national income: accounting for war damage with an application to the Netherlands, 1940-1945*, Bochove, C.A. van and W. van Sorge (1987)
- NA/20 *The micro-meso-macro linkage for business in an SNA-compatible system of economic statistics*, Bochove, C.A. van (1987)
- NA/21 *Micro-macro link for government*, Bloem, A.M. (1987)
This paper describes the way the link between the statistics on government finance and national accounts is provided for in the Dutch government finance statistics.
- NA/22 *Some extensions of the static open Leontief model*, Harthoorn, R. (1987)
The results of input-output analysis are invariant for a transformation of the system of units. Such transformation can be used to derive the Leontief price model, for forecasting input-output tables and for the calculation of cumulative factor costs. Finally the series expansion of the Leontief inverse is used to describe how certain economic processes are spread out over time.
- NA/23 *Compilation of household sector accounts in the Netherlands National Accounts*, Laan, P. van der (1987)
This paper provides a concise description of the way in which household sector accounts are compiled within the Netherlands National Accounts. Special attention is paid to differences with the recommendations in the United Nations System of National Accounts (SNA).
- NA/24 *On the adjustment of tables with Lagrange multipliers*, Harthoorn, R. and J. van Dalen (1987)
An efficient variant of the Lagrange method is given, which uses no more computer time and central memory than the widely used RAS method. Also some special cases are discussed: the adjustment of row sums and column sums, additional restraints, mutual connections between tables and three dimensional tables.

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