

# THE DISTRIBUTION OF INCOME BETWEEN SOCIO-ECONOMIC GROUPS IN THE NETHERLANDS

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This paper reports on a study designed to improve the information on income flows and income distribution in the Netherlands national accounts by building a bridge between the national accounts and income tax statistics. The methods used are described in some detail, and the significance of the results obtained is discussed. The figures show rather substantial fluctuations in the share of proprietors relative to that of wage earners. This result is not unexpected, since the share of proprietors is much more sensitive to the level of economic activity, but it does limit the usefulness of the figures for short-run economic policy determination. In the longer run, however, they do show what the development of the average incomes of the various social groups has been, and to what extent government action has contributed to that development.

## 1. INTRODUCTION

The Netherlands' national accounts are constructed by means of the "commodity-flow method," more specifically via yearly input-output tables. The advantage of this method is that various indicators regarding national totals built up from transactions in goods and services can be used in the construction of the national accounts and that conversely such indicators are constructed with information—such as weighting co-efficients—from the national accounts. The use of input-output tables in planning needs no further discussion here.

A decided disadvantage of the method is that it gives very little information on income: apart from the income of wage-earners (subdivided into wages and salaries, contributions to social security and premiums for pension funds) there is just one residual item for each branch of industry: "income from capital and entrepreneurship".

The Netherlands' economic policy makes full use of the quantitative information that can be found in the national accounts and in other statistics and also of the forecasts of the Central Planning Bureau. Since 1945 the available statistical information has been constantly enlarged and improved, while the Planning Bureau has extended its work to more detailed forecasts, to planning for periods several years ahead and (quite recently) to regional planning.

In this development, however, the distribution of income has hardly been considered.

## 2. PURPOSES OF THE STUDY

The present study had two purposes:

a. To improve the information on income flows and income distribution in the national accounts by building a bridge between the national accounts and income tax statistics.

b. To replace a series of co-efficients called "the share of employees in the national income," sometimes used in judging the result of economic policy for the income distribution.

### 3. ACCURACY

The reader of this report may get the impression that we are somewhat overanxious as far as accuracy is concerned.

When national accounting started it was an exercise in which it was usually acceptable to produce the best possible figures. The situation is different now. Political use requires accuracy and we are now working hard on the improvement of several of our existing series.

Newly developed figures with possible uses in economic policy or discussions cannot start as rough estimates and be worked up towards greater accuracy, they must be accurate from the start. This rule explains the fact that our laborious and exhaustive study produced results that only partly meet the need for information in this field.

### 4. NATIONAL INCOME AND INCOME FROM TAX STATISTICS

The comparison of income figures from both sources mentioned will be described briefly, since in the end it was not possible to relate them in a satisfactory manner.

The tax statistics are based on the files of the tax authorities.

These include all taxpayers and a number of persons with incomes just under the taxable income from whom the tax authorities require reports.

Recipients of incomes over 30,000 dfls. are all included; those with lower incomes are divided into two groups from which a 4 per cent and an 8 per cent sample respectively were taken. We started our calculations from the income as reported in these statistics and made such corrections as were necessary for adapting it as near as conceptually possible to the income of households as reported in the national accounts.

Table 1 gives the results of this manipulation for the year 1962.

Similar calculations were made for each of the years for which the tax statistics were available. The results of this part of the computations were rather disappointing, for there were obvious differences between the trends of the two series:

Three clear breaks are found in the series of percentages, two of which can be explained.

In 1957 all people of 65 or older received for the first time an old-age pension, as a result of which many of them with income from other sources passed the taxable minimum income and were included in the tax statistics. In 1959 a similar measure was taken for widows under 65, with the same results. In 1962 the method of sampling used for the tax statistics was changed.

In addition to these rather obvious "breaks" in the series there is the factor that, as the minimum taxable income is raised, the tax authorities tend to exclude from their files those persons who are not expected to come within the taxable zone again.

**TABLE 1**  
**RECONCILIATION BETWEEN INCOME FIGURES FROM THE NATIONAL ACCOUNTS AND**  
**FROM TAX STATISTICS, 1962**

	(mlns of guilders)
Income as given in the base tax statistics	32,888
Additions for incompleteness:	
Income of military personnel	+ 206
Income from sources other than labour, untaxed.	+ 267
Deductions for items not included in the national income:	
Capital gains	- 432
Income transfers from the government to households	- 525
Income transfers from social security to households	-2,685
Benefits from pension-funds	- 738
Benefits from life insurance	- 161
Additions for items not included in the tax statistics:	
Imputed interest	+1,328
Premiums for social security and pensions	+4,877
Premiums for certain types of life insurance	+ 148
Deductions for certain investments	+ 201
Extra depreciation allowances	+ 10
Difference in valuation of depreciation allowances, for unincorporated enterprises only	+ 375
Interest paid	+ 33
Other	+ 173
Factor income, receivable by or imputed to households (calculated on the basis of tax-statistics)	35,965
Same value as found in the national accounts	36,004

**TABLE 2**  
**INCOME OF HOUSEHOLDS, CALCULATED FROM TWO**  
**SOURCES**

	From the National Accounts	From Tax Statistics	(2) As a Percentage of (1)
	(1)	(2)	(3)
1952	15,835	14,511	91.6
1953	17,053	15,621	91.6
1954	19,356	17,886	92.4
1955	21,844	20,014	91.6
1957	26,110	25,073	96.0
1958	26,962	25,799	95.7
1959	28,104	27,449	97.7
1960	31,419	30,685	97.7
1962	36,004	35,965	99.9
1963	39,757	39,557	99.5
1964	46,987	46,480	98.9

The problem with these explanations is that, despite serious and prolonged efforts, it was not possible to express them into reliable figures. As a result—as far as time-series are concerned—the attempts towards reconciliation of the totals and subtotals of the tax figures with the national accounts had to be abandoned.

## 5. THE "SHARE OF EMPLOYEES IN THE NATIONAL INCOME"

One "measure" that is sometimes used in assessing the influence of economic policy on the income distribution is the so-called "share of employees in the national income."

This is a percentage, calculated every year on the basis of this formula:

$$\frac{\text{wage-sum per employee in enterprises}}{\text{national income per person working}}$$

The shortcomings of this percentage as a measure of the share of employees in the national income are rather obvious. It deals with factor income and therefore ignores the results of taxation and social policy; it also ignores income from property that accrues to wage-earners: if all enterprises were corporations and the capital in the hands of employees, the above formula would still give a percentage below 100.

The distribution of income, statistics or no statistics, is subject to controversy: the efforts of some parties to enlarge their share in the national income and of others to hold on to theirs, for want of any clear objective or precise criteria, result in pressures that contribute to inflation and, more important probably, create a sphere of discontent and unrest. The inadequacy of existing information was recognised some years ago; a committee was set up with the task of investigating the possibilities of better measures. This committee based its discussion on several papers of the Central Bureau of Statistics which in their turn were based on the experience described in the first part of this report.

## 6. METHOD

### 6.1. *General*

For the calculations made we started from the assumption that the differences in development between the national accounts totals and the income from tax statistics are not to be found in the higher income brackets. This means that the information on income from capital and entrepreneurship flowing to wage-earners and to persons in other status (relatively small items anyhow) as given in the tax statistics can be used without the risk of significant error.

Therefore the following calculations are based on this scheme: the information about the functional distribution of income is taken from the national accounts, and the corrections necessary to convert the functional income into personal and disposable income per socio-economic group are taken from the tax statistics.

### 6.2. *The Income Recipient*

The new S.N.A. stresses the need for development of a system of statistics of income distribution, based on the national accounts. The S.N.A. itself already includes a table in which the household sector is broken down into four groups, namely households headed by:

Proprietors of unincorporated enterprises: agriculture  
Proprietors of unincorporated enterprises: non-agricultural  
Employees  
Persons in other status.

It should be noted that this table uses the household as its accounting unit. This matter was discussed in various international meetings and the household was the choice of a majority of the participants.

In our opinion the individual is the relevant unit for studies on the distribution of income, while for studies on spending the household seems more appropriate.

The main reason for this is to be found in the direction that we think future work will take. We believe that in the near future the income distribution will become an even more important political problem than it is now and that it is necessary to develop statistics that will further the formulation of criteria for this distribution. In order to be valid these criteria must include characteristics of the income recipient.

Another reason is that the factors that lead to the formation of households and that therefore influence the income distribution of households are irrelevant to the kind of income policy for which the figures given are intended.

### 6.3. *The Income*

The "income originating" as found in the national accounts must be the starting point of any calculation. It provides the link with the cost of labour, capital and entrepreneurship.

On the other hand social policy and taxation have made it into a figure that means little or nothing to the recipient: he is interested in disposable income. The idea of presenting the picture of income formation from "income originating" to "disposable income" is not new. In this report it is given for three socio-economic groups. We think that each of these three groups should be further subdivided and that for each subgroup the same complete picture should be given eventually.

As will be shown later, the available statistics offer no further possibilities than those presented here.

### 6.4 *The Three Groups*

The following three groups are used:

Proprietors of unincorporated enterprises.  
Employees.  
Persons in other status.

The first and second groups are adequately described by the terms used.

Persons with income from both entrepreneurship and wages or pensions are classified in the group that corresponds with the largest part of their income. In this classification the income from capital is not taken into account.

Conscripts are not included in any of the three groups. The group "persons in other status" covers pensioners in so far as pensions are their only source of

income or lower than their income from entrepreneurship or from wages, and a few very rich people who do not work and receive income from capital.

The third group (apart from the few very rich people) is one which in the period after 1945 has been subject to several measures of social policy. It is no exaggeration to say that an increasing share of the national income has been made available for this group without any objections from the two other ones.

The politically important measurements concern the distribution between the other two groups.

## 7. MEASUREMENTS AND RESULTS

### 7.1. *Distribution between Sectors*

The national accounts give yearly figures on the income distribution, ending with disposable income, between sectors.

This distribution itself shows an interesting development: the percentage distribution for some of the years of the period 1952–1967 is given in Table 3.

TABLE 3  
PERCENTAGE DISTRIBUTION OF DISPOSABLE NATIONAL INCOME  
BETWEEN SECTORS

	Enterprises	Government	Households	Total
1952	5.5	23.6	70.9	100
1955	6.8	20.2	73.0	100
1959	6.2	21.4	72.4	100
1963	4.4	21.4	74.2	100
1967	4.0	23.4	72.6	100

At this stage, households seem to receive a rather constant share of the disposable income; the share of enterprises—savings of corporations—goes down, the government absorbing the difference.

### 7.2. *Distribution between Socio-economic Groups*

The method of calculation of income and disposable income for the three socio-economic groups mentioned above is given for one year in Table 4.

The calculation starts with factor incomes: the compensation of employees is provisionally assigned to employees, the income from capital and entrepreneurship to proprietors of unincorporated enterprises.

Next, corrections are made on the basis of the tax statistics described in para. 4, in which the income sources of income recipients are given in great detail.

The first correction concerns income from capital and entrepreneurship going to employees and persons in other status: these two flows are offset by a negative correction for the proprietors of unincorporated enterprises.

A similar correction is made for the wages received by owners of unincorporated enterprises as a secondary source of income.

Part of the income of households is not assigned to any one of the social groups:

- a. Income from capital received by or imputed to financial institutions.
- b. Income from capital received by private non-profit institutions.
- c. Income of conscripts.

The reasons for these exclusions are diverse: item a is excluded because in any further study it would be practically impossible to impute these incomes to groups of persons or households; group b because these incomes do not go directly to households and group c because changes in the pay of conscripts have little or nothing to do with economic policy.

This compilation results in the sum of factor incomes received by each subsector.

One minor problem must be mentioned here. The tax statistics concerning married couples of which both husband and wife receive an income regard them as one income recipient. In the classification by social groups this one recipient, like all the others, is classified on the basis of the rules given above according to the total income. This is no problem when husband and wife belong to the same social group. If that is not the case, a problem arises. However, the number of such cases is very limited: in 1962 out of 5,100,000 tax forms only 41,000 (0.8 per cent) referred to couples of which husband and wife belonged to different groups. For the purposes of this study the influence of this small group can be ignored.

The next step in the calculation is the registration of current redistributive income transfers. Social security benefits originate from ten different systems. For each of these the allocation among subsectors has been done separately. Some of them are for employees only; for the others estimates of the distribution were made on the basis of information from the social security agencies concerning the relation between persons working or not working among those over 65 and in one case on figures from the tax statistics mentioned above.

Similar methods were used for allocating social security premiums to the three sectors. Table 4 shows clearly that the disposable income of entrepreneurs and self-employed, who are covered by only a few of the systems, is hardly influenced by these payments and benefits; the main redistribution through social security takes place between employees and persons in another status.

The main part of direct taxes is formed by taxes on income, wages and dividends. Those on wages and dividends are withheld at the moment of payment, and later deducted from the income tax due.

The income tax statistics—complete as far as taxable incomes are concerned—provide the basis for the distribution of the income tax over the three social groups. The small (5 per cent of the total) amount of other direct taxes could also be divided over the social groups with the aid of tax statistics. The item: other current transfers between households and government is taken from the national accounts, where it is the balance of a large number of items. Usually the allocation of these transfers to one of the subsectors could be made on the basis of the type of benefits paid or payments received by the government; in a few cases figures or estimates provided by the agencies concerned helped in the distribution over the three subsectors.

A rather large part of the transfers from the government to the household sector flows to private non-profit institutions, in addition to the receipts from capital. These transfers have been left undistributed.

TABLE 4  
DISTRIBUTION OF INCOME AMONG SOCIAL GROUPS, 1967

	Total, household Sector	Distributed			Undis- tributed
		Proprietors of Unin- corporated Enterprises	Employees	Persons in Other Status	
		Millions of Guilders			
Distribution of factor income:					
1. Factor income, receivable by the household sector of which:	61,920				
Provisionally assigned to proprietors of unincorporated enterprises		15,210			
Provisionally assigned to employees			44,030		
Undistributed (imputed interest)					2,680
2. Corrections:					
Share of employees and persons in other status in income from capital and entrepreneurship		- 2,350	1,050	1,300	
Share of proprietors of unincorporated enterprises in wages, etc.		325	- 325		
Share of private non-profit institutions in income from capital		- 90			90
Wages of conscripts			- 249		249
Factor income, distributed	- 61,920	13,095	44,506	1,300	3,019
Redistribution:					
3. Influenced by the government:					
Social security benefits	10,310	651	4,892	4,767	
Premiums for social security	- 10,370	- 830	- 9,240	- 300	
Direct taxes (payable, receivable)	- 9,291	- 2,957	- 5,545	- 789	
Other current transfers between households and government (net)	1,810	- 49	264	774	821
4. Not influenced by the government:					
Current transfers between households and other countries	30	- 29	- 98	157	
Disposable income	54,409	9,881	34,779	5,909	3,840

### 7.3. The share of "Persons in Other Status"

The share of "persons in other status" in the national income so far has not been a matter of political debate. The sums paid to the aged, the infirm and others in need are based on a mixture of general rules and the consideration of personal circumstances. The results of this policy can be judged from the following table.

TABLE 5  
INCOME OF "PERSONS IN OTHER STATUS" AS A PERCENTAGE OF THE  
INCOME OF PERSONS WORKING<sup>a</sup>

	Factor Income	Disposable Income	Disposable Income plus Pensions minus Pension Premiums
1952	16	45	74
1956	13	38	63
1960	13	45	69
1963	12	48	75
1967	9	56	86

<sup>a</sup>Income per person.

#### 7.4. *Income of Wage-earners versus the Income of Proprietors of Unincorporated Enterprises*

In the period under review, the number of proprietors of unincorporated enterprises went down considerably, while the number of employees rose.

The comparison of the share of the two groups in the national income therefore was based on the average income, viz. the income per income recipient. Table 6 gives the figures.

TABLE 6  
FACTOR INCOME AND DISPOSABLE INCOME PER INCOME RECIPIENT

	Factor income <sup>a</sup>			Disposable income <sup>a</sup>		
	Proprietors of Unincorporated Enterprises	Employees (excluding Unemployed)	% <sup>b</sup>	Proprietors of Unincorporated Enterprises	Employees (including Unemployed)	% <sup>b</sup>
1952	4,920	3,660	74.4	4,010	3,080	76.8
1953	5,450	3,810	69.9	4,505	3,240	71.9
1954	6,320	4,160	65.8	5,340	3,590	67.2
1955	7,370	4,530	61.5	6,270	3,960	63.2
1956	7,850	4,920	62.7	6,680	4,290	64.2
1957	8,190	5,460	66.7	6,770	4,490	66.3
1958	8,480	5,690	67.1	6,920	4,660	67.3
1959	8,880	5,840	65.8	7,110	4,800	67.5
1960	10,130	6,320	62.4	8,070	5,200	64.4
1961	10,260	6,780	66.1	8,000	5,540	69.3
1962	10,510	7,240	68.9	8,220	5,960	72.5
1963	11,530	7,890	68.4	9,120	6,450	70.7
1964	13,760	9,130	66.4	10,730	7,370	68.7
1965	14,880	10,170	68.3	11,330	8,035	70.9
1966	14,480	11,290	78.0	11,140	8,760	78.6
1967	16,270	12,230	75.2	12,280	9,340	76.1

<sup>a</sup>Per income recipient.

<sup>b</sup>Income of employees as a percentage of the income of proprietors of unincorporated enterprises.

The average yearly percentage increases of the four series given in Table 6 are as follows:

Factor income per income recipient:	
Proprietors of unincorporated enterprises	7.6%
Employees	8.2%
Disposable income:	
Proprietors of unincorporated enterprises	6.9%
Employees	7.5%

A slight “advantage” therefore exists for the employees: apparently social security payments and taxation have no significant influence on the income distribution between proprietors of unincorporated enterprises and employees.

### 7.5. Conclusions

Two opinions are currently expressed in the Netherlands on the purposes of an income policy: in one opinion the average income of proprietors of unincorporated enterprises and the average income of employees in the course of time should increase with the same percentage; in the other there should be a planned movement towards greater equality between the two.

Whatever the outcome of the debate on this matter, the execution of a resulting policy may require the use of the figures in the last column of table 6.

For this purpose the series has two obvious disadvantages:

- a. the two groups for which the incomes are compared are heterogeneous;
- b. the percentage shows rather violent ups and downs.

For the moment, the second problem seems most important. The first might undoubtedly be overcome—if necessary—by the compilation of better income statistics, but these would still have the second disadvantage.

The ups and downs of the percentage by themselves are not surprising, although the difference between the highest and lowest figures came as a surprise to us. In the period studied wages increased steadily and the income of proprietors of unincorporated enterprises rose by leaps and bounds. As a result the percentage showing their relationship rises sharply in a recession and goes down as soon as the economy recovers.

The use of the percentage for the purpose given therefore depends on the possibility of explaining its fluctuations in terms of other phenomena. Whether it will be possible to do so with a satisfactory degree of accuracy remains to be seen.

Without such a direct use the figures at least show what *in the long run* the development of the average incomes of the two—or three—social groups has been and to what extent government action has contributed to that development.