

EcoMod2006 - International Conference on Policy Modeling

Hong Kong, China, June 28-30, 2006

Constructing a database for economic modelling from the System of National Accounts: a Social Accounting Matrix for Portugal.

Susana Santos

Technical University of Lisbon

Institute of Economics and Business Administration (ISEG – Instituto Superior de Economia e Gestão)

Department of Economics

Research Unit on Complexity and Economics

Rua Miguel Lupi, 20, 1200-781 Lisboa, Portugal,

Tel. 351 21 392 59 53

Fax: 351 21 392 28 08

E-mail: ssantos@iseg.utl.pt.

Abstract

Based on the country's National Accounts, an aggregate Social Accounting Matrix (SAM) will be constructed for the Portuguese economy. The full consonance between the two will be demonstrated by identifying both the items and balances of the various internal accounts of the System of National Accounts in the constructed SAM. The balance of the government budget and the balance of payments will also be identified.

Blocks of sub-matrices with common characteristics will be identified and described in terms of the national accounting transactions that are included in each of them.

The SAM will be shown as a complete account of the circular flow in the economy and possible disaggregations will be explored in order to construct a database for economic modelling. From the Pilot-SAM for Portugal, the focus on households and employment will be specified in order to construct a database for a SAM-based CGE model with the aim of studying income distribution in Portugal.

Key words: Social Accounting Matrix; National Accounts; Economic Modelling

JEL classification: C82; E61; C68

(May 2006)

CONTENTS

1. Introduction	1
2. The SAM as a complete account of the circular flow in the economy	2
3. Identifying the items and balances of the various internal accounts of the SNA in the aggregate SAM	6
4. Possible disaggregations	17
5. Identifying the main items of the Balance of Payments and the Government Budget	20
6. The SAM's blocks of sub-matrices	21
6.1. Compensation of factors of production	23
6.2. Production	23
6.3. Intermediate Consumption	24
6.4. Gross Capital Formation	24
6.5. Net indirect taxes or net taxes on production and imports	25
6.6. Final Consumption	26
6.7. External Trade	27
6.8. Trade and Transport Margins	27
6.9. Current Transfers	28
6.10. Gross Saving	29
6.11. Capital Transfers	29
6.12. Net borrowing/lending	29
6.13. Financial Transactions	30
7. From a Macro SAM to a disaggregated SAM for the study of income distribution	31
8. Concluding remarks	37
References	38
Appendixes	
A. Portuguese National Accounts for 1995 (SNA Tables)	41
B. Portuguese Pilot – National Accounting Matrix for 1995	66

List of Tables

Table 1. Portuguese Basic SAM (Social Accounting Matrix) for 1995 (in millions of euros)	3
Table 2. Portuguese Basic NAM (National Accounting Matrix) for 1995 (in millions of euros)..	16
Table 3. Portuguese Macro SAM (Social Accounting Matrix) for 1995 (in millions of euros)...	18
Table 4. The Balance of Payments in the Portuguese SAM for 1995 (in millions of euros)	20
Table 5. The Government Budget in the Portuguese SAM for 1995 (in millions of euros)	20
Table 6. Basic SAM by blocks	22
Table 7. Portuguese Disaggregated SAM (Social Accounting Matrix) for 1995 for the study of income distribution (in millions of euros)	34
Appendix A. Portuguese National Accounts for 1995 (SNA Tables)	
Table A.1a. Integrated Economic Accounts (in millions of euros) - Uses	41
Table A.1b. Integrated Economic Accounts (in millions of euros) - Resources	42
Table A.2.1a. Institutional Sector Accounts (in millions of euros) - (I) Production and (II.1.1.) Generation of Income Accounts (in millions of euros) – Uses	43
Table A.2.1b. Institutional Sector Accounts (in millions of euros) - (I) Production and (II.1.1.) Generation of Income Accounts (in millions of euros) – Resources	44
Table A.2.2a. Institutional Sector Accounts (in millions of euros) - (II.1.2.) Allocation of Primary Income and (II.2.) Secondary Distribution of Income Accounts (in millions of euros) – Uses	45
Table A.2.2b. Institutional Sector Accounts (in millions of euros) - (II.1.2.) Allocation of Primary Income and (II.2.) Secondary Distribution of Income Accounts (in millions of euros) – Resources	46
Table A.2.3a. Institutional Sector Accounts (in millions of euros) - (II.3.) Distribution of Income in Kind, (II.4.1.) Use of Disposable Income and (II.4.2.) Use of Adjusted Income Accounts (in millions of euros) – Uses	47
Table A.2.3b. Institutional Sector Accounts (in millions of euros) - (II.3.) Distribution of Income in Kind, (II.4.1.) Use of Disposable Income and (II.4.2.) Use of Adjusted Income Accounts (in millions of euros) – Resources	48
Table A.2.4a. Institutional Sector Accounts (in millions of euros) - (III) Accumulation Accounts (in millions of euros) – Changes in Assets	49
Table A.2.4b. Institutional Sector Accounts (in millions of euros) - (III) Accumulation Accounts (in millions of euros) – Changes in Liabilities and Net Worth	50
Table A.3a. Rest of the World Accounts (in millions of euros) – External Accounts (VI) of Goods and Services and (VII) of Primary Income and Current Transfers	51

Table A.3b. Rest of the World Accounts (in millions of euros) – External Accumulation Accounts (VIII)	52
Table A.4a. Supply of products at basic prices (current prices in millions of euros) – Output of goods and services by activities 01-24	53
Table A.4b. Supply of products at basic prices (current prices in millions of euros) – Output of goods and services by activities 25-51	54
Table A.4c. Supply of products at basic prices (current prices in millions of euros) – Output of goods and services by activities 52 - 85	55
Table A.4d. Supply of products at basic prices (current prices in millions of euros) – Output of goods and services by activities 90-95 and Total Output; Imports of goods and services; Total supply at basic prices; Trade and transport margins; Taxes and subsidies on products; Total supply at purchasers’ prices	56
Table A.5a. Use of Products at purchasers’ prices (current prices in millions of euros) – Intermediate consumption by activities 01-26	57
Table A.5b. Use of Products at purchasers’ prices (current prices in millions of euros) – Intermediate consumption by activities 27-61	58
Table A.5c. Use of Products at purchasers’ prices (current prices in millions of euros) – Intermediate consumption by activities 62-100	59
Table A.5d. Use of Products at purchasers’ prices (current prices in millions of euros) – Total intermediate consumption by activities; Final consumption; Gross Capital Formation; Exports of goods and services; Total uses at purchasers’ prices	60
Table A.6. “From whom to whom” matrices (in millions of euros)	61
Table A.7a. Description of codes and grouping of Products – Codes	62
Table A.7b. Description of codes and grouping of Products – Groups	63
Table A.8a. Description of codes and grouping of Activities – Codes	64
Table A.8b. Description of codes and grouping of Activities – Groups	65
Appendix B. Portuguese Pilot - National Accounting Matrix (NAM) for 1995	
Table B.1. Aggregate Pilot – NAM (in millions of euros)	66
Table B.2.1. Disaggregated Pilot-NAM cells (in millions of euros) - Cell (1,6) Final Consumption	67
Table B.2.2. Disaggregated Pilot-NAM cells (in millions of euros) - Cell (4,3) Generated Income	68

Table B.2.3. Disaggregated Pilot-NAM cells (in millions of euros) – Cell (4,4) Property Income; Cell (5,4) Net National Income	69
Table B.2.4. Disaggregated Pilot-NAM cells (in millions of euros) – Cell (5,5) Current Transfers among Residents; Cell (6,5) Net Disposable Income	70
Table B.2.5. Disaggregated Pilot-NAM cells (in millions of euros) – Cell (7,6) Net Saving	71
Table B.3. Description of grouping of labour – male and female	71
Table B.4. Description of codes and grouping of households	71

1. Introduction

This paper is an improved version of the one entitled “Social Accounting Matrix and the System of National Accounts: An Application” (Santos, 2005), presented at the training session of the *15th International Input-Output Conference*, held in Beijing (China P.R.) a year ago. Some of the improvements resulted from comments and suggestions made by Professor Jeffery Round, whom we should like to thank most profoundly for his help.

A Social Accounting Matrix (SAM) is a square matrix in which each transaction is recorded only once in a cell of its own. As is conventionally agreed, the entries made in rows represent resources, incomes, receipts or changes in assets, whilst, the entries made in columns represent uses, outlays, expenditures or changes in liabilities and net worth. So, for each row there is a corresponding column, with the totals of each of these being equal. These figures will include both production and institutional accounts, which are subdivided into yet other accounts, defined in accordance with the goal of the study and the available information. Thus, as will be seen in section 2, the SAM consists of a data set of interrelated subsystems that, on the one hand, provide an analytical picture of the circular flow or the general equilibrium interactions of the market economy studied in a particular accounting period and, on the other hand, serve as an instrument for assessing the effects of changes on the particular nominal flows represented by the matrix (injections and leakages in the system), which might be the result of policy measures.

“A dictum usually attributed to Lord Keynes posits that every economic model has a corresponding accounting framework. For macroeconomic models, this accounting framework must be complete in the sense that every receipt must be offset by a corresponding expenditure. One consequence is that all the transactions in a model can be expressed within a SAM framework. The values assumed by all the different types of transactions can therefore be set out as the elements of a SAM” (Drud et al., 1986). Section 3 shows that the accounting framework underlying the SAM may be the System of National Accounts (SNA), with it also being possible to identify from the SAM all the macro aggregates, as well as the main items of the balance of payments and the government budget, as is done in section 5.

Therefore, the SAM provides a comprehensive and consistent accounting framework for developing (more or less disaggregated) databases, which can be used for applied general equilibrium analysis. Section 4 refers to the possible disaggregations within the SNA, and Section 7 illustrates the particular case of a disaggregated SAM, constructed from sources other than the SNA for the study of income distribution in Portugal. This objective obliged us to work with data that were more than a decade out of date, since 1995 was the only year for which there existed workable data. However,

the work that we intend to carry out and of which this paper is one part (the other is a SAM-based Computable General Equilibrium model) is seen as an experiment that has never previously been undertaken for Portugal, and we hope to be able to demonstrate the importance and potentialities of this activity.

Section 6 identifies and characterises in some detail those blocks of sub-matrices of the SAM that have common characteristics, which will be very useful when the numeric SAM is converted, in a modelling stage, into algebraic terms (not undertaken in this paper).

Section 8 ends the paper with some concluding remarks designed to emphasise the adequacy of the SAM framework as a basis for economic modelling in general and for CGE models in particular, backed by quotations from highly regarded specialists working in the area.

2. The SAM as a complete account of the circular flow in the economy

The taxonomy used in a SAM depends on the available data and the purposes of the study underlying its construction. It is, however, fundamental for the success of any analysis, that there should be a definition of an appropriate classification and a characterisation of the production and institutional subsectors.

While being constantly concerned with adopting a mutually exclusive and, in a certain way, exhaustive classification, the adopted disaggregation should respect, on the one hand, the functional criterion, describing the production processes and pointing out the existing technical-economic relationships between the various productive units and, on the other hand, it should respect the institutional criterion, describing distribution, accumulation and financing activities, and showing the relationships in economic behaviour. We therefore have "Production" divided into factors of production, activities and products, and "Institutions" divided into current, capital and financial accounts, as well as the "rest of the world" account.

In a general way, the order of the accounts does not obey any specific rule; it simply obeys the criterion of the person who works with them. Our criterion for ordering the accounts was the one that lies behind the Basic SAM represented in Table 1.

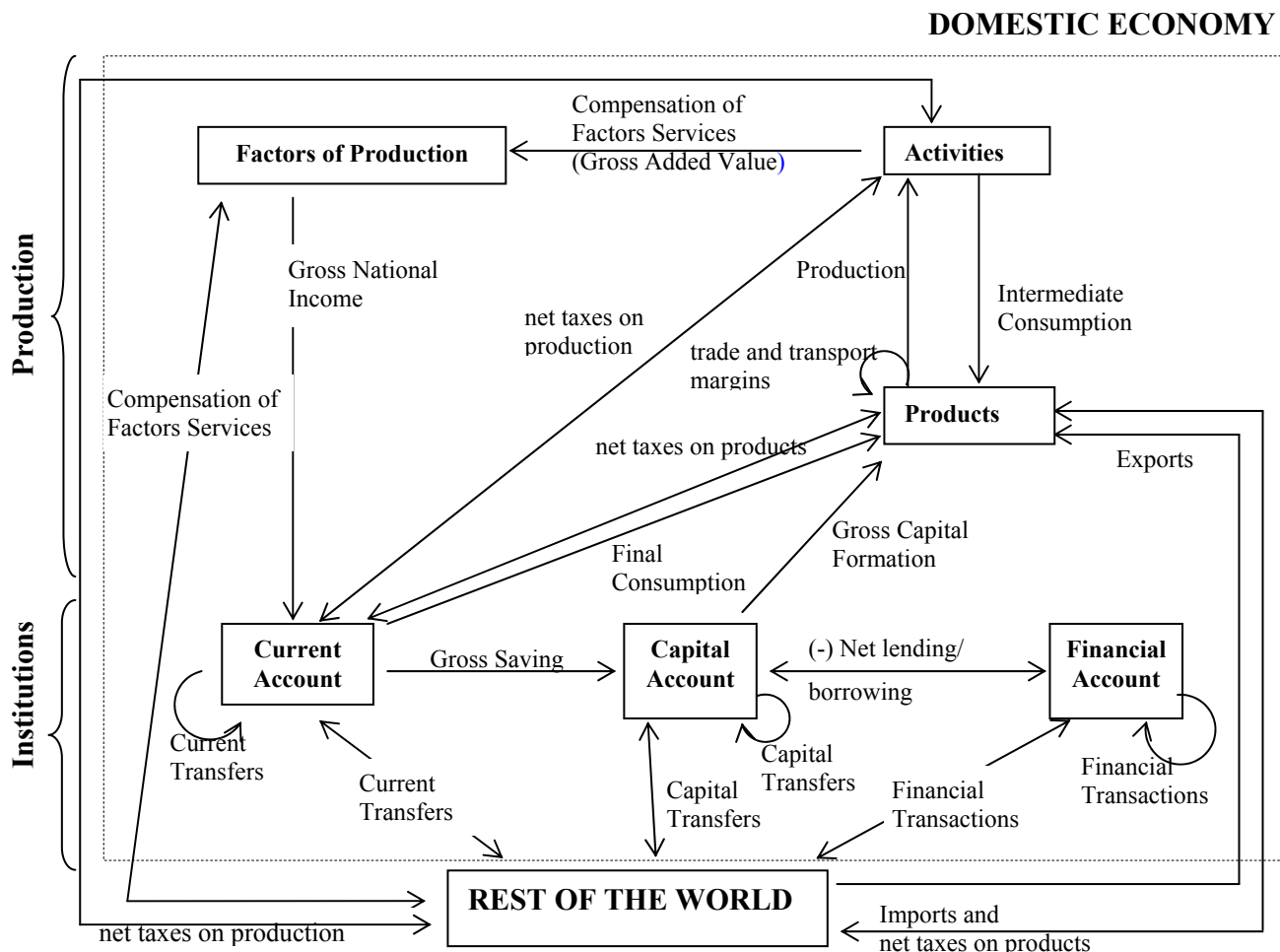
Table 1. Portuguese Basic SAM (Social Accounting Matrix) for 1995 (in millions of euros)

		Outlays (expenditures)	Production			Institutions			Rest of the World (RW) (7)	TOTAL
		Incomes (receipts)	Factors (1)	Activities (2)	Products (3)	Current A. (4)	Capital A. (5)	Financial A. (6)		
Production	Factors (1)	0	Gross Added Value, at factor cost (70 725)	0	0	0	0	0	Compensation of Factors from the RW (3 243)	Aggregate Factors income (73 968)
	Activities (2)	0	0	Production (154 394)	0	0	0	0	0	Production Value (154 394)
	Products (3)	0	Intermediate Consumption (84 102)	Trade and Transport Margins (0)	Final Consumption (64 898)	Gross Capital Formation (19 623)	0	0	Exports (24 433)	Aggregate Demand (193 056)
Institutions	Current A. (4)	Gross National Income, at factor cost (70 542)	Net taxes on production (-346)	Net taxes on products (10 283)	Current Transfers (42 145)	0	0	0	Current Transfers from the RW (3 960)	Aggregate Income (126 583)
	Capital A. (5)	0	0	0	Gross Saving (17 291)	Capital Transfers (4930)	- Net borrowing (40)	0	Capital Transfers from the RW (2 320)	Investment Funds (24 582)
	Financial A.(6)	0	0	0	0	0	0	Financial Transactions (35 030)	Financial Transactions from the RW (9 257)	Total financial transactions (44 287)
Rest of the World (RW) (7)		Compensation of Factors to the RW (3 426)	Net taxes on production (-87)	Imports + net taxes on products (28 127 + 252)	Current Transfers to the RW (2 249)	Capital Transfers to the RW (29)	Financial Transactions to the RW (9 217)			Transactions Value to the RW (43 213)
TOTAL		Aggregate Factors income (73 968)	Total Costs (154 394)	Aggregate Supply (193 056)	Aggregate Income (126 583)	Aggregate Investment (24 582)	Total financial transactions (44 287)	Transactions Value from the RW (43 213)		

Source: Portuguese National Accounts (Appendix A)

As far as the flows of money are concerned, the following outline shows us the connections that can be established between the various accounts of the Basic SAM.

Outline 1: Flows of money between the Basic Portuguese SAM accounts



This outline “provides a schematic portrayal of the circular flow of income in the economy” (Devarajan et al., 1991), representing all the transactions recorded by the SAM, within the (domestic) economy and between it and the rest of the world. The latter transactions are represented by the "rest of the world" account (7th column/row), whilst the former are represented by the production and institutions accounts, as described below.

On the one hand, production activities buy "inputs" (intermediate consumption) and factors of production services in order to produce, thereby generating added value. Beyond the subsidies on production (from the government's current account and the rest of the world, i.e. European Union institutions), which are deducted from taxes (net taxes on production), the only receipts of the activities come from the sales of their production, which are then spent in intermediate consumption, the compensation of factors and the payment of taxes (to the government's current

account). Therefore, there is the value of production to balance the total costs of the economy (see the "activities" account, 2nd column/row).

On the other hand, the factors of production will sell services to the (domestic and foreign) production activities receiving compensation from these. Since the services of the factors are supplied by (domestic and foreign) institutions, outlays can be made to the domestic institutions (current account) through gross national income, as well as to the rest of the world (1st column/row).

Beyond gross national income, i.e. the compensation of the factors of production, the other income sources of the institutions are (net indirect) taxes (on products and production) and current transfers, as can be seen from its "current account", which also shows how the income is either spent in final consumption and current transfers or is saved (4th column/row).

Through the "products" accounts, we also have the possibility to study both supply and demand. As sources of demand, there is intermediate consumption, final consumption, gross capital formation and exports. On the supply side, we have production and imports, to which are added the (net) taxes on products and the trade and transport margins (3rd column/row). The products accounts can be seen as the accounts of those that perform intermediation activities and place products on the market, in other words, those that acquire or import products, organise processing (transport and storage), add the corresponding margins to the price, pay indirect taxes to the government and sell the products to producers, households, government and the rest of the world.

In the "capital account", we can see, on the one hand, investment through gross capital formation and capital transfers, and, on the other hand, the funds available for such investments, resulting from gross saving and capital transfers, as well as from a balance corresponding either to financing requirements or capacity, depending on the respective sign (5th column/row).

The "financial account" reveals the financial transactions in the other accounts (6th column/row).

We can therefore conclude that the SAM is a snapshot of the economy, amounting to a numerical representation of the cycle: production - income - expenditure. It "shows how sectoral value added accrues to production factors and their institutional owners; how these incomes, corrected for net current transfers, are spent; and how expenditures on commodities lead to sectoral production and value added" (Keuning and Ruijter, 1988) – or, to use the words of Thorbecke (2001), "it can readily be seen that it incorporates all major transactions within a socio-economic system".

Thus, the SAM accounts for every transaction between the actors in the economic system while providing a statistical representation of its circular flow. Since "a Computable General Equilibrium (CGE) model describes the whole circular flow of a market economy, while maintaining accounting

consistency both at the macro level and at the level of individual actors... CGE models are specially appropriate for operating within a SAM framework" (Abbink et al., 1995).

3. Identifying the items and balances of the various internal accounts of the SNA in the aggregate SAM

Considering the SNA as the basic source of information for the construction of the SAM, almost all the flows that are part of the former are integrated into the latter.

The SNA adopted in Portugal since 1995 has been the European System of National and Regional Accounts in the European Community of 1995 - ESA 95 (Eurostat, 1996), which is based on the 1993 version of the International United Nations System of National Accounts - SNA 93, prepared by the Inter-Secretariat Working Group and published by the United Nations Statistical Office (ISWG, 1993). For the latter body, "a SAM is defined as the presentation of SNA accounts in a matrix which elaborates the linkages between a supply and use table and institutional sector accounts" (ISWG 93, Prg. 20.4).

Next, the items and balances of the several (T) accounts of the Portuguese SNA for 1995 (Tables A in the Appendix), represented in the matrix format by the NAM (National Accounting Matrix – Table 2) will be identified in the SAM (Tables 1, 3 or 7), each of them referring to an aspect of the economic circuit (see Outline 1). The cells of the basic SAM (Table 1) and the basic NAM (Table 2) will be referred when the SAM and the NAM accounts, respectively, are to be analyzed. As uses (outlays, expenditures or changes in assets) and resources (incomes, receipts or changes in liabilities and net worth), which are always recorded in millions of euros, we will use the designations that we used for the various accounts of the SAM. We will add a " ' " to the SAM balances.

We will deal with gross balances and will not therefore take into account the consumption of fixed capital.

Besides the external transactions of the rest of the world account, we will also work upon the goods and services account, at current prices, the current accounts and the accumulation accounts (with the exception of SNA account III.3 - other changes in assets account), which are the accounts made available by the Portuguese National Accounts.

Goods and Services Account (SNA account 0) - balanced by definition:

Resources

Trade and transport margins (total) (1,1)	0
Output of goods and services (2,1)	154 394
Imports of goods and services (8,1)	29 454

Net taxes on products (2,1)	10 535
- paid to Portuguese institutions	10 283
- paid to European Union institutions	252
Total	194 383

Uses

Trade and transport margins (total) (1,1)	0
Intermediate consumption (1,2)	84 102
Final consumption expenditure (1,5)	66 225
Gross capital formation (1,6)	19 623
Exports of goods and services (1,8)	24 433
Total	194 383

This account can be associated with the SAM's "products" account, belonging to the group of "production" accounts.

Thus:

Resources

Intermediate consumption (3,2)	84 102
Trade and transport margins (total) (3,3)	0
Final consumption expenditure of the national institutions in the economy (3,4)	64 898
Gross capital formation (3,5)	19 623
Exports of goods and services (3,7)	24 433
Aggregate demand	193 056

Uses

Output of goods and services (2,3)	154 394
Trade and transport margins (total) (3,3)	0
Net taxes on products paid to Portuguese institutions (4,3)	10 283
Imports of goods and services plus net taxes on products paid to European Union institutions (7,3)	28 379
- imports of goods and services	28 127
- net taxes on products paid to European Union institutions	252
Aggregate supply	193 056

The difference between these two accounts is in the "direct purchases abroad by residents" (1 327), considered in the SAM as a "current transfer to the rest of the world", since it does not represent an expenditure in the economy and should not therefore be considered in the final consumption sub-matrix (see Outline 1).

Production Account (SNA account I) - which describes the transactions that constitute the appropriately named production process:

Resources

Output of goods and services (2,1)	154 394
--	---------

Net taxes on products (2,1)	10 535
- paid to Portuguese institutions	10 283
- paid to European Union institutions	252
Total	164 929

Uses

Intermediate Consumption (1,2)	84 102
(B1g) Gross added value/gross domestic product (3,2)	80 827
Total	164 929

We associated this account with the SAM's "activities" account:

Resources

Production (output of goods and services) (2,3)	154 394
---	---------

Uses

Intermediate consumption (3,2)	84 102
Net taxes on production	- 433
- paid to Portuguese institutions (4,2)	- 346
- paid to European Union institutions (7,2)	- 87
(B1g') Gross added value/gross domestic product, at factor cost (1,2)	70 725
Total costs	154 394

We therefore have:

Gross added value/gross domestic product, at factor cost (B1g') = Gross domestic product (at market prices, B1g) - net indirect taxes or net taxes on products and imports (70 725 = 80 827 - (10 535- 433)).

In the SAM, the GDP (gross domestic product) at market prices can be calculated by adding to the GDP at factor cost the net indirect taxes paid to the Portuguese government and to the European Union institutions: $70\,725 + (-346-87) + (10283+252) = 80\,827$.

Primary Distribution of Income Accounts (SNA account II.1) – which show how primary incomes, i.e. incomes that accrue as a result of involvement in processes of production or the ownership of assets that may be needed for production purposes, are distributed among institutions and activities:

- Generation of income account (SNA account II.1.1)

Resources

(B1g) Gross added value/gross domestic product	80 827
--	--------

Uses

Compensation of employees paid by Portuguese institutions.....	38 563
- to Portuguese institutions	38 500
- to the rest of the world	64
Net taxes on production and imports paid by Portuguese institutions	10 102

- to Portuguese institutions	9 937
- to the rest of the world	165
(B2g + B3g) Gross operating surplus + Gross mixed income	32 161
Total	80 827

- Allocation of primary income account (SNA account II.1.2)

Resources

(B2g + B3g) Gross operating surplus + Gross mixed income	32 161
Compensation of employees received by Portuguese institutions.....	38 620
- from Portuguese institutions	38 500
- from the rest of the world	120
Net taxes on production and imports	
received/paid by Portuguese institutions	9 937
Property income received by Portuguese institutions.....	27 952
- from Portuguese institutions	24 829
- from the rest of the world	3 363
Total	108 670

Uses

Property income paid by Portuguese institutions.....	28 191
- to Portuguese institutions	24 829
- to the rest of the world	3 363
(B5g) Gross national income	80 479
Total	108 670

- (Summary) Primary distribution of income account (generation and allocation - SNA account II.1)

Resources

(B1g) Gross added value/gross domestic product (3,1).....	80 827
Property income received by Portuguese institutions from Portuguese	
institutions (3,3)	24 828
Primary income from the rest of the world (3,8).....	3 243
- compensation of employees	120
- property income	3 123
Total	108 898

Uses

Property income paid by Portuguese institutions to Portuguese	
institutions (3,3)	24 828
Primary income to the rest of the world (8,3).....	3 591
- compensation of employees	64
- property income	3 363
- net taxes on production and imports	165
(B5g) Gross national income (4,3)	80 479
Total	108 898

We can associate these accounts with the SAM's "factors of production" account, which has the following composition:

Resources

(B1g') Gross added value /gross domestic product, at factor cost (1,2)	70 725
- Labour (compensation of employees paid by Portuguese institutions)	38 563
- Others ((B2g' + B3g') Gross operating surplus + Gross mixed income)	32 161
Compensation of factors from the rest of the world (1,7)	3 243
- Labour (compensation of employees)	120
- Others (property income) ..	3 123
Aggregate Income of Factors.....	73 968

Uses

(B5g') Gross national income, at factor cost (4,1)	70 542
- Labour (compensation of employees received by Portuguese institutions)	38 620
- Other compensation of factors	31 922
Compensation of factors to the rest of the world (7,1)	3 426
- Labour (wages and salaries)	64
- Other (property income) ..	3 363
Aggregate Income of Factors.....	73 968

In establishing the connection between those accounts, we have:

Gross national income, at factor cost (B5g') = Gross national income (at market prices, B5g) – net indirect taxes or net taxes on production and imports received/paid by Portuguese institutions (70 542 = 80 479 – 9 937).

Secondary Distribution of Income, Redistribution of Income in Kind and Use of Income Accounts.

The first two accounts show how the balance of primary incomes (national income) is transformed into disposable income through the receipt and payment of current transfers; the third account shows how gross disposable income is distributed between final consumption and saving.

- Secondary distribution of income and redistribution of income in kind accounts (SNA accounts II.2 and 3)

Resources

(B5g) Gross national income (4,3)	80 479
Current transfers within Portuguese institutions ¹ (4,4)	51 569
Current transfers from the rest of the world ¹ (4,8)	3 960
Total	136 008

¹ Total Current transfers (resources) = 51 569 + 3960 = 55 529:

Current taxes on income, wealth, etc. received by Portuguese institutions	7 161
Social contributions and benefits received by Portuguese institutions	33 523
Other current transfers received by Portuguese institutions	14 845

Uses

Current transfers within Portuguese institutions ² (4,4).....	51 569
Current transfers to the rest of the world ² (8,4)	922
(B6/7g) Gross disposable income (5,4)	83 517
Total	136 008

- Use of income account (SNA account II.4)

Resources

(B6/7g) Gross disposable income (5,4)	83 517
Adjustment for the change in the net equity of households in pension fund reserves (5,5)	752
Total	84 269

Uses

Final consumption (1,5)	66 225
Adjustment for the change in the net equity of households in pension fund reserves (5,5)	752
(B8g) Gross saving (6,5).....	17 291
Total	84 269

Here is the SAM's "current" account of the Institutions:

Resources

(B5g') Gross national income, at factor cost (4,1)	70 542
- Compensation of employees	38 620
- other compensations of factors	31 922
Other net taxes on production paid to Portuguese institutions (4,2)	- 346
Net taxes on products paid to Portuguese institutions (4,3)	10 283
Current transfers within Portuguese institutions ³ (4,4).....	42 145
Current transfers from the rest of the world (4,7)	3960
Aggregate income	126 583

Uses

Final consumption in the economy (3,4)	64 898
Current transfers within Portuguese institutions ³ (4,4).....	42 145
Current transfers to the rest of the world (7,4).....	2 249
- current transfers to the rest of the world	922
- direct purchases abroad by residents	1 327
(B8g') Gross saving (5,4)	17 291
Aggregate income	126 583

² Total current transfers (uses) = 51 569 + 922 = 52 491:

Current taxes on income, wealth, etc. paid by Portuguese institutions	7 161
Social contributions and benefits paid by Portuguese institutions	33 524
Other current transfers paid by Portuguese institutions	11 807

³ Includes "Adjustment for the change in the net equity of households in pension fund reserves".

We thus have the total of the SAM's current account, which we have called aggregate income, corresponding to the sum of the items:

Gross national income (B5g) + current transfers within Portuguese institutions + current transfers from the rest of the world (126 583 = 80 479 + 42 145 + 3 960)

or

Gross disposable income (B6/7g) + current transfers within Portuguese institutions + current transfers to the rest of the world (126 583 = 83 517 + 42 145 + 922).

Capital Account (SNA account III.1) – which records non-financial investment transactions and capital transfers, considered as the partition of property transactions:

Changes in liabilities and net worth (resources)

(B8g) Gross saving (6,5)	17 291
Capital transfers within Portuguese institutions (6,6)	4 930
Capital transfers from the rest of the world (6,8)	2 320
Total	24 541

Changes in assets (uses)

Gross capital formation (1,6)	19 623
Capital transfers within Portuguese institutions (6,6)	4 930
Capital transfers to the rest of the world (8,6)	29
- Acquisitions less disposals of non-produced non-financial assets	0
(B9) Net borrowing/lending (7,6)	- 40
Total	24 541

We have the following SAM's "capital" account:

Changes in liabilities and net worth (resources)

(B8g') Gross saving (5,4)	17 291
Capital transfers within Portuguese institutions (5,5)	4 930
Capital transfers from the rest of the world (5,7)	2 320
(B9') - Net borrowing/lending (5,6)	40
Investment Funds	24 582

Changes in assets (uses)

Gross Capital Formation (3,5)	19 623
Capital transfers within Portuguese institutions (5,5)	4 930
Capital transfers to the rest of the world (7,5)	29
- Acquisitions less disposals of non-produced non-financial assets	0
Aggregate Investment	24 582

The only difference between these two accounts is in the way in which net borrowing/lending is considered. In the SAM's capital account, it is considered as a component of investment funds, required/not required to cover the aggregate investment, in other words, it is the financing

requirement/capacity of the economy that will be covered/absorbed by financial transactions (from/to the rest of the world, since the national funds are not enough/in excess).

Financial Account (SNA account III.2) – records the transactions in financial assets and liabilities between institutional units, and between these and the rest of the world:

<i>Changes in liabilities and net worth (resources)</i>	
Financial transactions within Portuguese institutions (7,7)	35 030
Financial transactions from the rest of the world (7,8)	9 257
(B9F) Net borrowing/lending (7,6)	- 40
Total	44 247
 <i>Changes in assets (uses)</i>	
Financial transactions within Portuguese institutions (7,7)	35 030
Financial transactions to the rest of the world (8,7)	9 217
Total	44 247

We have the following SAM's "financial" account:

<i>Changes in liabilities and net worth (resources)</i>	
Financial transactions within Portuguese institutions (6,6)	35 030
Financial transactions from the rest of the world (6,7)	9 257
Total	44 287
 <i>Changes in assets (uses)</i>	
Financial transactions within Portuguese institutions (6,6)	35 030
Financial transactions to the rest of the world (7,6).....	9 217
(B9'F) - Net borrowing/lending (5,6)	40
Total	44 287

The explanation for the difference between these accounts is, once again, in the way in which net borrowing/lending is considered. In the SAM's financial account, it is considered as a use because it is used to cover/absorb the financing requirement/capacity of the economy, with financial transactions from/to the rest of the world (an amount that represents a liability with the rest of the world, in the case of the financing requirement).

Rest of the World Account (SNA account V) – records transactions between resident and non-resident units.

<i>Resources / changes in liabilities and net worth</i>	
Imports of goods and services (8,1)	29 454
- goods and services	28 127
- direct purchases abroad by residents	1 327
Primary income to the rest of the world (8,3)	3 591

- compensation of employees	64
- property income	3 363
- net taxes on production and imports	165
Current transfers to the rest of the world (8,4)	922
- social benefits other than social transfers in kind	30
- others	892
Capital transfers to the rest of the world (8,6)	29
- Acquisitions less disposals of non-produced non-financial assets	0
Financial transactions to the rest of the world (8,7)	9 217
Total	43 213

Uses / changes in assets

Exports of goods and services (1,8)	24 433
Primary income from the rest of the world (3,8)	3 243
- compensation of employees	120
- property income	3 123
Current transfers from the rest of the world (4,8)	3960
- social benefits other than social transfers in kind	29
- others	3931
Capital transfers from the rest of the world (6,8).....	2 320
Financial transactions from the rest of the world (7,8)	9 257
- Net lending	- 40
Total	43 213

In the SAM's "rest of the world" account:

Resources / changes in liabilities and net worth

Compensation of factors to the rest of the world (7,1)	3 426
- Labour (wages and salaries)	64
- Others (property income) ..	3 363
Net taxes on production paid to European Union institutions (7,2)	- 87
Imports of goods and services plus net taxes on products paid to European Union institutions (7,3)	28 379
- imports of goods and services	28 127
- net taxes on products paid to European Union institutions	252
Current transfers to the rest of the world (7,4)	2 249
- current transfers to the rest of the world	922
- direct purchases abroad by residents	1 327
Capital transfers to the rest of the world (7,5)	29
- Acquisitions less disposals of non-produced non-financial assets	0
Financial transactions to the rest of the world (7,6).....	9 217
Total	43 213

Uses / changes in assets

Compensation of factors from the rest of the world (1,7)	3 243
- Labour (wages and salaries)	120
- Others (property income) ..	3 123
Exports of goods and services (3,7)	24 433
Current transfers from the rest of the world (4,7)	3 960
Capital transfers from the rest of the world (5,7)	2 320

Financial transactions from the rest of the world (6,7)	9 257
- Net lending	40
Total	43 213

There is a close relationship between both accounts.

Therefore, generally speaking, if it were not for indirect taxation, the association of SAM accounts with national (T) accounts would be perfect – with the aggregate SAM being calculated from these accounts. The latter could also be calculated from the former, which may not be true if some disaggregation is undertaken. “SAMs are an extension of the core national accounts as presented in the European System of Accounts (ESA95) and the System of National Accounts (SNA 93)” (LEG, 2003)

One of the many advantages of the SAM approach could be referred to here, using the words of Pyatt (1991):

“by sticking to essentials, the relationship between economic concepts and principles, on the one hand, and on the other, the accounting structure they give rise to, can be kept clearly in the open”.

Table 2 summarises what was seen for the Portuguese national accounts in 1995.

Table 2. Portuguese Basic NAM (National Accounting Matrix) for 1995 (in millions of euros)

SNA Account		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
0. Goods and services	(1)	Trade and transport margins (0)	Intermediate consumption (84 102)			Final consumption (66 225)	Gross capital formation (19 623)		Exports of goods and services (24 433)
I. Production	(2)	Output of goods and services + Net taxes on products (154 394 + 10 535)							
II.1. Primary distribution of income	(3)		Gross added value (80 827)	Property income (24 828)					Primary income from the RW (3 243)
II.2, II.3. Secondary distribution of income and redistribution of income in kind	(4)			Gross national income (89 479)	Current Transfers (51 569)				Current transfers from the RW (3 960)
II.4. Use of income	(5)				Gross disposable income (83 517)	Adjustment for the change in the net equity of households in the pension fund reserve (752)			
III.1. Capital	(6)					Gross saving (17 291)	Capital Transfers (4 930)		Capital transfers from the RW (2 320)
III.2. Financial	(7)						Net borrowing (- 40)	Financial transactions (35 030)	Financial transactions from the RW (9 257)
V. Rest of the world	(8)	Imports of goods and services (29 454)		Primary income to the RW (3 591)	Current transfers to the RW (922)		Capital transfers to the RW (29)	Financial transactions to the RW (9 217)	
Total		194 383	164 929	108 898	136 008	84 269	24 541	44 247	43 213

Source: Round (2003); ESA (1995); Portuguese National Accounts (Appendix A).

Row totals match column totals.

4. Possible disaggregations

By either top-down or bottom-up methods, it is possible to break down or aggregate each account into categories, using on occasions sources of information other than the SNA, without losing the consistency of the whole system, that is to say, "a crucial feature is the wide range of possibilities for expanding or condensing such a matrix in accordance with specific circumstances and needs" (ISWG, 1993, Prg. 20.6) - section 7 is an illustration of this statement.

Nowadays, the SNA (referred to at the beginning of section 3) in general and the Portuguese National Accounts in particular provide several (mutually exclusive) possibilities for the disaggregation of products and activities, a few possibilities for the institutions' accounts and even fewer for the factors of production. Therefore, production accounts, which are drawn from supply and use tables (see Tables A.4 and A.5), can be broken down into 60 activities and products, which in the case of some transactions can have yet more disaggregation levels.

Furthermore, in the case of production accounts, the factors of production may only be broken down into labour (employees) and others. This includes compensation of own-account employees, interests, profits, rents.... – which is why the classification of “other” was preferred to the term “capital”, which is used normally.

In turn, the institutions' accounts can be disaggregated into five institutional sectors, each with a similar economic behaviour: households, non-financial corporations, financial corporations, general government, and non-profit institutions serving households (NPISHs).

General government can be further disaggregated into central government, local government and social security funds, whilst financial corporations can be disaggregated into central bank, other monetary financial institutions, other financial intermediaries, except insurance corporations and pension funds, financial auxiliaries and insurance corporations and pension funds (see Table A.2). The rest of the world can also be broken down into the European Union (member states and institutions) and non-member countries and international organisations (see Table A.3).

Table 3 shows the part of the Portuguese SAM that it was possible to construct from the SNA, with the aim described in section 1 and which will be broken down even further in section 7, albeit using other sources of information.

As can be seen from its totals, Table 3, which represents the so-called Macro SAM, is a possible disaggregation of Table 1, which represents the so-called Basic SAM (the Macro SAM completely aggregated). All its sources, as well as the corresponding description of its items, can be consulted in Appendix A (the disaggregation presented of the transactions and other flow stocks is the one used in the constructed SAM, although it could be taken further).

It is therefore easy to conclude that "a SAM applies the properties of a matrix format to incorporate specific details on various economic flows" (ISWG, 1993, Prg. 20.26).

Constructing a database for economic modelling from the SNA: a SAM for Portugal. S. Santos

Table 3. Portuguese Macro SAM (Social Accounting Matrix) for 1995 (in millions of euros)

		Outlays (expenditures)			PRODUCTION													
		FACTORS			ACTIVITIES							PRODUCTS						
		Labour	Other	Total	Agriculture, hunting and forestry ...	Industry, including energy	Construction	Wholesale and retail trade ...	Financial, real-estate, renting ...	Other service activities	Total	Products of agriculture, hunting, forestry ...	Products from mining and quarrying ...	Construction work	Wholesale and retail trade services...	Financial intermediation services, real estate...	Other services	Total
1	2		3	4	5	6	7	8		9	10	11	12	13	14			
Incomes (receipts)																		
PRODUCTION	FACTORS	Labour	1	0	0	0	652	9 258	2 589	8 222	4 212	13 630	38 563	0	0	0	0	0
		Other	2	0	0	0	3 327	8 054	2 303	9 478	5 583	3 417	32 161	0	0	0	0	0
		Total		0	0	0	3 979	17 313	4 892	17 700	9 794	17 047	70 725	0	0	0	0	0
	ACTIVITIES	Agriculture, hunting and forestry...	3	0	0	0	0	0	0	0	0	0	6 060	379	2	0	19	0
		Industry, including energy	4	0	0	0	0	0	0	0	0	0	0	55 321	69	2	413	48
		Construction	5	0	0	0	0	0	0	0	0	0	0	12	14 191	0	0	
		Wholesale and retail trade...	6	0	0	0	0	0	0	0	0	0	0	25	13	31 749	683	
		Financial, real-estate, renting ...	7	0	0	0	0	0	0	0	0	0	0	5	14	0	20 967	
		Other service activities	8	0	0	0	0	0	0	0	0	0	0	3	81	28	78	852
	Total		0	0	0	0	0	0	0	0	0	0	6 064	55 823	14 317	31 829	22 934	
	PRODUCTS	Products of agriculture ...	9	0	0	0	606	4 640	0	369	0	78	5 693	0	0	0	0	0
		Products from mining and ...	10	0	0	0	1 756	29 158	5 096	6 608	1 559	3 346	47 524	0	0	0	0	0
		Construction work	11	0	0	0	30	250	3 394	280	525	128	4 606	0	0	0	0	0
		Wholesale and retail trade...	12	0	0	0	121	1 198	247	4 193	897	896	7 552	1 236	13 886	0	- 15 122	0
Financial intermediation...		13	0	0	0	112	3 019	563	3 092	7 514	2 365	16 666	0	0	0	0	0	
Other services		14	0	0	0	26	315	38	347	713	623	2 062	0	0	0	0	0	
Total			0	0	0	2 651	38 579	9 337	14 889	11 209	7 437	84 102	1 236	13 886	0	- 15 122	0	
INSTITUTIONS	CURRENT ACCOUNT	Households	15	38 620	20 994	59 614	0	0	0	0	0	0	0	0	0	0	0	0
		Enterprises (nonfinancial corporations)	16	0	11 561	11 561	0	0	0	0	0	0	0	0	0	0	0	0
		Financial corporations	17	0	1 787	1 787	0	0	0	0	0	0	0	0	0	0	0	0
		Government	18	0	- 2 558	- 2 558	- 135	- 31	- 20	- 96	- 13	- 50	- 346	- 1	7 108	405	1 046	1 347
		NonProfitInstitutionsServing Households(NPISH)	19	0	137	137	0	0	0	0	0	0	0	0	0	0	0	0
		Total		38 620	31 922	70 542	- 135	- 31	- 20	- 96	- 13	- 50	- 346	- 1	7 108	405	1 046	1 347
	CAPITAL ACCOUNT	Households	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Enterprises (nonfinancial corporations)	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Financial corporations	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Government	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		NonProfitInstitutionsServing Households(NPISH)	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	FINANCIAL ACCOUNT	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	REST OF THE WORLD	26	64	3 363	3 426	- 34	- 8	- 5	- 24	- 3	- 13	- 87	1 481	24 689	32	840	1 181	
	TOTAL		38 683	35 285	73 968	6 460	55 852	14 204	32 469	20 987	24 421	154 394	8 781	101 506	14 754	18 592	25 462	

Source: Portuguese National Accounts (Appendix A)

Table 3. Portuguese Macro SAM (Social Accounting Matrix) for 1995 (in millions of euros) (continued)

		Outlays (expenditures)		INSTITUTIONS													REST OF THE WORLD	TOTAL
				CURRENT ACCOUNT						CAPITAL ACCOUNT						FINANCIAL ACCOUNT		
				Households	Enterprises (nonfinancial corporations)	Financial corporations	Government	NonProfitInstitutionsServing Households (NPISH)	Total	Households	Enterprises (nonfinancial corporations)	Financial corporations	Government	NonProfitInstitutionsServing Households (NPISH)	Total			
15	16	17	18	19		20	21	22	23	24		25	26					
Incomes (receipts)																		
PRODUCTION	FACTORS	Labour	1	0	0	0	0	0	0	0	0	0	0	0	0	0	120	38 683
		Other	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3 123	35 285
		Total		0	0	0	0	0	0	0	0	0	0	0	0	0	3 243	73 968
	ACTIVITIES	Agriculture, hunting and forestry...	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6 460
		Industry, including energy	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55 852
		Construction	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14 204
		Wholesale and retail trade...	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32 469
		Financial, real-estate, renting ..	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20 987
		Other service activities	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	24 421
		Total		0	0	0	0	0	0	0	0	0	0	0	0	0	0	154 394
	PRODUCTS	Products of agriculture ...	9	2 546	0	0	18	0	2 564	185	130	0	3	0	318	0	205	8 781
		Products from mining and ...	10	27 967	0	0	628	0	28 595	768	5 282	347	452	246	7 095	0	18 292	101 506
		Construction work	11	74	0	0	0	0	74	4 148	2 816	437	2 552	120	10 072	0	1	14 754
		Wholesale and retail trade...	12	5 467	0	0	37	0	5 504	91	194	19	1	0	305	0	5 231	18 592
Financial intermediation...		13	6 388	0	0	77	43	6 508	505	1 049	110	8	0	1 671	0	617	25 462	
Other services		14	6 136	0	0	14 272	1 245	21 653	58	91	10	1	1	160	0	87	23 961	
Total			48 578	0	0	15 032	1 288	64 898	5 755	9 562	922	3 018	366	19 623	0	24 433	193 056	
INSTITUTIONS	CURRENT ACCOUNT	Households	15	470	1 349	2 051	9 623	13	13 506	0	0	0	0	0	0	0	3 293	76 413
		Enterprises (nonfinancial corporations)	16	1 339	58	363	0	0	1 759	0	0	0	0	0	0	0	23	13 344
		Financial corporations	17	2 125	329	29	4	14	2 501	0	0	0	0	0	0	0	35	4 323
		Government	18	13 883	2 108	229	6 866	7	23 092	0	0	0	0	0	0	0	609	31 081
		NonProfitInstitutionsServing Households(NPISH)	19	323	50	34	878	0	1 286	0	0	0	0	0	0	0	0	1 423
		Total		18 141	3 894	2 705	17 371	35	42 145	0	0	0	0	0	0	0	3 960	126 583
	CAPITAL ACCOUNT	Households	20	7 952	0	0	0	0	7 952	0	0	812	206	0	1 018	- 4 023	147	5 095
		Enterprises (nonfinancial corporations)	21	0	9 342	0	0	0	9 342	0	0	0	707	0	707	- 49	896	10 896
		Financial corporations	22	0	0	1 558	0	0	1 558	0	484	328	2	0	814	- 287	0	2 085
		Government	23	0	0	0	- 1 661	0	- 1 661	63	161	3	1 870	4	2 100	4 423	1 275	6 136
		NonProfitInstitutionsServing Households(NPISH)	24	0	0	0	0	100	100	0	0	0	291	0	291	- 23	1	370
		Total		7 952	9 342	1 558	- 1 661	100	17 291	63	645	1 143	3 075	4	4 930	40	2 320	24 582
	FINANCIAL ACCOUNT		25	0	0	0	0	0	0	0	0	0	0	0	35 030	9 257	44 287	
	REST OF THE WORLD		26	1 743	108	60	339	0	2 249	- 723	689	20	43	0	29	9 217	X	43 213
TOTAL			76 413	13 344	4 323	31 081	1 423	126 583	5 095	10 896	2 085	6 136	370	24 581	44 287	43 213	X	

Source: Portuguese National Accounts (Appendix A)

5. Identifying the main items of the Balance of Payments and the Government Budget

From the rest of the world (RW) SAM account one can calculate the main items of the balance of payments, as shown above.

Table 4. The Balance of Payments in the Portuguese SAM for 1995 (in millions of euros)

	Resources (row)		Uses (column)		Balance
1. Current Account		31 636		33 967	- 2331
- Goods & Services	Exports	24 433	Imports	28 379	- 3 946
- Income	Compensation of factors from the RW	3 243	Compensation of factors to the RW	3 426	- 183
- Current Transfers	Current transfers from the RW	3 960	Current transfers to the RW (2249) + net taxes on production to the RW (-87)	2 162	1 798
2. Capital Account	Capital transfers from the RW	2 320	Capital transfers to the RW	29	2 291
3 = 1 + 2 (Balance = Net borrowing)		33 956		33 996	- 40
4. Financial Account	Financial transfers from the RW	9 257	Financial transfers to the RW	9 217	40
5 = 3 + 4 = Total		43 213		43 213	0

Source: Portuguese SAM for 1995 (Tables 1 or 3, Rest of the World rows/columns)

These are approximate values, since the Portuguese balance of payments is calculated from the National Accounts and other sources of information and is published by the Portuguese Central Bank (Banco de Portugal) and not by the Portuguese Institute of Statistics (Instituto Nacional de Estatística), with the two values being relatively different.

In accordance with the previous section, these values, taken from the National Accounts, could also be disaggregated into the European Union (member states and institutions) and non-member countries and international organisations – as Santos (2003) does for 1997.

On the other hand, as is shown by Table 5, from the government's current and capital accounts one can calculate/identify the main items of the government budget.

Table 5. The Government Budget in the Portuguese SAM for 1995 (in millions of euros)

	Resources or Receipts (row)		Uses or Expenditure (column)		Balance
1. Current Account		31 081		32 742	- 1661 (b)
	Gross National Income at factor cost (a)	- 2558	Final Consumption	15 032	
	Net taxes on production	- 346	Current transfers to Portuguese institutions	17 371	

	Resources or Receipts (row)		Uses or Expenditure (column)		Balance
	Net taxes on products	10 283	Current transfers to the RW	339	
	Current transfers from Portuguese institutions	23 092			
	Current transfers from the RW	609			
2. Capital Account		3 375		6 136	- 2 761
	Capital transfers from Portuguese institutions	2 100	Gross Capital Formation	3 018	
	Capital transfers from the RW	1 275	Capital transfers to Portuguese institutions	3 075	
			Capital transfers to the RW	43	
3 = 1 + 2 (Balance = Net borrowing)		34 456		38 878	- 4 423

Source: Portuguese SAM for 1995 (Table 3 rows/columns 19 and 23)

(a) Government's Gross National Income at factor cost (see Table A.1, column S13) = [output of goods and services + other subsidies on production (received) + property income (received)] – [intermediate consumption + compensation of employees (paid) + property income (paid)] = (15 389 + 56 + 1056) + (3 003 + 10 990 + 5 066)

(b) Government's Gross Saving [cell (23,18) of Table 3]

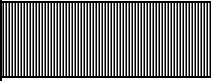
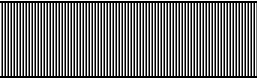
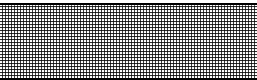
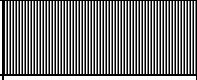


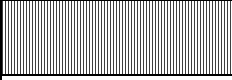
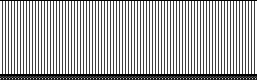
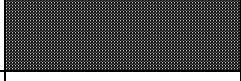
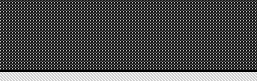


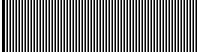
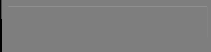

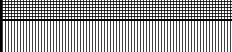


Similarly, in this case, the (general) government could have been disaggregated into central government, local government and social security funds, giving a more complete picture of the structure and composition of the government budget – as Santos (2003a and 2004) does for 1998 and 1999.

The same thing that was done with the government could also be done with other institutions - why not develop policies centred on the budgets of households or enterprises, for instance?







6. The SAM's blocks of sub-matrices

The SAM's blocks, identified in Table 6, are sub-matrices or sets of sub-matrices (as seen in the Basic SAM - Table 1) with common characteristics. The specification of these blocks involves the identification of the transactions of the National Accounts, the (National Accounts) tables, which are the sources of information used to construct the SAMs, and the method of calculation used (only for those sub-matrices that are not calculated either directly from the sources or whenever there are details that justify a reference to them).

Table 6. Basic SAM by blocks

		Outlays (expenditures) (j)	Production			Institutions			Rest of the World (RW)
			Factors	Activities	Products	Current A.	Capital A.	Financial A.	
Incomes (receipts) (i)									
Production	Factors	0		0	0	0	0		
	Activities	0	0	Production	0	0	0	0	
	Products	0	Intermediate Consumption	Trade and Transport Margins	Final Consumption	Gross Capital Formation	0		
Institutions	Current A.					0	0		
	Capital A.	0	0	0	Gross Saving		(-) Net lending/ borrowing		
	Financial A.	0	0	0	0	0			
Rest of the World								X	

Blocks with more than one sub-matrix:

	Compensation of the factors of production		Capital Transfers
	Net Indirect Taxes		Financial Transactions
	External Trade		
	Current Transfers		

6.1. Compensation of factors of production

Income of the institutional sectors from the compensation of the services provided through their real and financial assets to the activities of production and to the rest of the world, namely:

- Compensation of employees (transaction D1 of the National Accounts), which is the total remuneration, in cash or in kind, payable by an employer to an employee in return for work done by the latter during the accounting period. Compensation of employees is broken down into: wages and salaries (in cash or in kind) and employers' social contributions (actual and imputed social contributions) (ISWG 93, Prg. 7.21-7.47; ESA 95, Prg. 4.02-4.13).
- All the above-mentioned income which is not derived from the compensation of employees, including property income (transaction D4 of the National Accounts), which is the income receivable by the owner of a financial asset or a tangible non-produced asset in return for providing funds to, or putting the tangible non-produced asset at the disposal of, another institutional unit. Property income is composed of interest, the distributed income of corporations, dividends, withdrawals from the income of quasi-corporations, reinvested earnings on direct foreign investment, property income attributed to insurance policy holders and rents (ISWG 93, Prg. 7.87-7.133; ESA 95, Prg. 4.41-4.76).

Sources

Generation of income and allocation of primary income accounts of the institutions (II.1.1 and II.1.2, in integrated economic accounts or in institutional sector accounts – Tables A.1., A.2.1. and A.2.2.); external account of primary income and current transfers (V.II, in rest of the world accounts – Table A.3.); use of products at purchasers' prices (current prices) (Table A.5.).

Methodology

The other compensations of factors, in the gross national income sub-matrix, is the sum of the gross operating surplus and the balance of the income from property. The gross operating surplus is the gross added value (production minus intermediate consumption) minus the taxes paid on production plus the subsidies received on production minus the paid compensation of employees.

6.2. Production

Output of goods and services (transaction P1 of the National Accounts), which consists of the products created during the accounting period and is subdivided into market output, output produced for own final use, other non-market output (ISWG 93, Prg. 6.38-6.51; ESA 95, Prg. 3.14-3.68).

Sources

Production account of institutions (I, in integrated economic accounts or in institutional sector accounts – Tables A.1., A.2.1.); supply of products at basic prices (current prices) (Table A.4.); goods and services account (see related columns of integrated economic accounts – Table A.1.).

6.3. Intermediate Consumption

Intermediate consumption (transaction P2 of the National Accounts), which consists of the value of the goods and services consumed as inputs by a process of production, excluding those fixed assets whose consumption is recorded as consumption of fixed capital. The goods and services may be either transformed or used up by the production process (ISWG 93, Prg. 6.147-6.178; ESA 95, Prg. 3.69-3.73).

Sources

Production account of institutions (I, in integrated economic accounts or in institutional sector accounts – Tables A.1. and A.2.1.); use of products at purchasers' prices (current prices) (Table A.5.); goods and services account (see related columns of integrated economic accounts – Table A.1.).

6.4. Gross Capital Formation

Gross capital formation (transaction P5 of the National Accounts), which consists of gross fixed capital formation, changes in inventories, acquisitions less disposals of valuables (ISWG 93, Prg. 10.32-10.130; ESA 95, Prg. 3.100-3.127).

Sources

Capital account of the institutions (III.1, in integrated economic accounts or in institutional sector accounts – Tables A.1 and A.2.4.); use of products at purchasers' prices (current prices) (Table A.5.); goods and services account (see related columns of integrated economic accounts – Table A.1.); gross fixed capital formation by products and institutions (supplementary table of Portuguese National Accounts).

Methodology

The total gross capital formation by product(s) was calculated from the use of the products table.

The total gross capital formation by institution(s) was calculated from the capital account of the institutions table.

The gross fixed capital formation by product(s) and institution(s) was calculated from the supplementary table of Portuguese National Accounts with the same name.

The changes in inventories and the acquisitions less disposals of valuables by product(s) and institution(s) were calculated by applying the share of the product(s) in the total to the total value of the institution(s).

6.5. Net Indirect Taxes or Net Taxes on Production and Imports

6.5.1. Net Taxes on Production

(Other) Taxes on production (transaction D29 of the National Accounts) minus the (other) subsidies on production (transaction D39 of the National Accounts). The former consist of all taxes that enterprises incur as a result of engaging in production, regardless of the quantity or value of the goods and services produced or sold (ISWG 93, Prg. 7.70; ESA 95, Prg. 4.22-4.24), and that are paid to the government. The latter consist of subsidies, except those subsidies on products which resident producer units may receive as a consequence of engaging in production (ISWG 93, Prg.7.79; ESA 95, Prg. 4.36-4.40), received from the government and the rest of the world (European Union Institutions).

Sources

Primary distribution of income accounts of the institutions (II.1., in integrated economic accounts or in institutional sector accounts – Tables A.1 and A.2.1. and A.2.2.); external account of primary income and current transfers account (V.II, in rest of the world accounts – Table A.3.); use of products at purchasers' prices (current prices) (Table A.3.).

Methodology

The totals by activity/ies are calculated from the use of the products table.

The totals for the government and for the rest of the world are calculated from the table showing the allocation of the primary income account of the institutions (the totals for the rest of the world may also be calculated from the external account of the primary income and current transfers account, and this must be the case if some disaggregation is needed).

The values by activity/ies for the rest of the world are calculated by applying the share of the activity/ies in the total to the total value of the rest of the world. The values (by activity/ies) for the government are calculated by the difference between the total value (by activity/ies) and the rest of the world's value.

6.5.2. Net Taxes on Products

Taxes on products (transaction D21 of the National Accounts) minus the subsidies on products (transaction D31 of the National Accounts). The former consist of taxes that are payable per unit of a good or service produced or transacted (ISWG 93, Prg. 7.62-7.69; ESA 95, Prg. 4.16-4.21), these being paid to the government and the rest of the world. The latter consist of subsidies payable per unit of a good or service produced or imported (ISWG 93, Prg. 7.73-7.78; ESA 95, Prg. 4.33-4.35), received from the government and the rest of the world (European Union Institutions).

Sources

Production account and primary distribution of income accounts of institutions (I and II.1, in integrated economic accounts or in institutional sector accounts – Tables A.1., A.2.1., A.2.2.); external account of the primary income and current transfers account (V.II, in the rest of the world accounts – Table A.3.); supply of products at basic prices (current prices) (Table A.4.); goods and services account (see related columns of integrated economic accounts – Table A.1.).

Methodology

The totals by product(s) are calculated from the supply of products table.

The totals for the government and for the rest of the world are calculated from the table showing the allocation of the primary income account of the institutions (the totals for the rest of the world may also be calculated from the external account of the primary income and current transfers account, and this must always be the case if some disaggregation is needed).

The values by product(s) for the rest of the world, which will be added to imports (the external trade block), are calculated by applying the share of the product(s) in the total to the total value of the rest of the world. The values (by product(s)) for the government are calculated by the difference between the total value (by product(s)) and the rest of the world's value.

6.6. Final Consumption

Final consumption (transaction P3 of the National Accounts) consists of expenditure incurred by resident institutional units on goods or services that are used for the direct satisfaction of individual needs or wants or the collective needs of members of the community. Final consumption expenditure may take place within the domestic territory or abroad. (ISWG 93, Prg. 9.45-9.71; ESA 95, Prg. 3.75-3.80).

Direct purchases abroad by residents are considered in current transfers to the rest of the world (the current transfers block).

Direct purchases by non-residents in the domestic market are considered as exports (the external trade block).

Sources

Use of products at purchasers' prices (current prices) (Table A.5.); use of disposable income (II.4, in integrated economic accounts or in institutional sector accounts – Tables A.1. and A.2.3.).

6.7. External Trade

Transactions in goods and services (purchases, barter, gifts or grants) from non-residents to residents, or imports (transaction P7 of the National Accounts), and from residents to non-residents, or exports (transaction P6 of the National Accounts) (ESA 95, Prg. 3.128-3.146⁴).

Although the National Accounts consider direct purchases abroad by residents as an import, here they are considered as a current transfer from households to the rest of the world.

Sources

Supply of products at basic prices (current prices) (Table A.4.), for imports; use of products at purchasers' prices (current prices) (Table A.5.), for exports; external account of goods and services (V.I, in the rest of the world accounts – Table A.3a.); goods and services account (see related columns of the integrated economic accounts – Table A.1.).

6.8. Trade and Transport Margins

Trade and transport margins, realised on the goods purchased for resale, are a part of the production of the wholesale trade services, retail trade services and repair services of motor vehicles, motorcycles and personal and household goods. They are recorded as part of the product trade and are therefore included in the various components of aggregate demand. They total zero, since they are negative in relation to the three above-mentioned activities (because the corresponding value has already been recorded in the production sub-matrix), but are positive and have the same amount in relation to all the other ones (ISWG 93, Prg. 6.110-6.114, 15.40-15.44; ESA 95, Prg. 3.60, 9.38-9.41).

Sources

Supply of products at basic prices (current prices) (Table A.4.).

⁴ ISWG 93 doesn't deal directly these transactions, which are dealt with in all the other transactions with the rest of the world in its section XIV – The Rest of the World Account (external transactions account).

6.9. Current Transfers

Current taxes on income, wealth, etc. (transaction D5 of the National Accounts), which cover all compulsory, unrequited payments, in cash or in kind, levied periodically by general government and by the rest of the world on the income and wealth of institutional units, as well as some periodic taxes which are levied on neither income nor wealth (ISWG 93, Prg. 8.43-8.54; ESA 95, Prg. 4.77-4.82).

Social benefits and contributions (transaction D6 of the National Accounts). Social benefits are transfers to households, in cash or in kind, intended to relieve them of the financial burden of a number of risks or needs, made either through collectively organised schemes or outside such schemes by government units and non-profit institutions serving households; they include payments from general government to producers which individually benefit households and which are made in the context of social risks or needs. Social contributions include (employers' and employees') actual social contributions transferred to general government (ISWG 93, Prg. 8.67-8.83 and 8.99-8.106; ESA 95, Prg. 4.83-4.108). Because the amount of the social transfers in kind represents a final consumption expenditure of the government and the non-profit institutions serving households, it is not considered here but in the final consumption block.

Other current transfers (transaction D7 of the National Accounts), which consist of net non-life insurance premiums, non-life insurance claims, current transfers within general government, current international co-operation and miscellaneous current transfers (ISWG 93, Prg. 8.84-8.98; ESA 95, Prg. 4.109-4.140).

Adjustment made for the change in the net equity of households in pension fund reserves (transaction D8 of the National Accounts), which represents the adjustment needed in order to cause to appear in the saving of households the change in the actuarial reserves on which households have a definite claim and which are fed by premiums and contributions recorded in the secondary distribution of income account as social contributions (ISWG 93, Prg. 9.14-9.20; ESA 95, Prg. 4.141-4.144).

As already mentioned above, direct purchases abroad by residents are considered as a current transfer from households to the rest of the world.

Sources

Secondary distribution of income and use of disposable income accounts of the institutions (II.2 and II.4, in integrated economic accounts or in institutional sector accounts – Tables A.1., A.2.2. and A.2.3.); external account of primary income and current transfers account (V.II, in rest of the world

accounts – Table A.3); "from whom to whom" matrices, made available particularly by the Portuguese Institute of Statistics, for the inter-institutional flows (Table A.6.).

6.10. Gross Saving

Gross saving measures the portion of the aggregate income that is not used for final consumption expenditure and current transfers to Portuguese institutions or to the rest of the world (saving: ISWG 93, Prg. 9.17-9.20; ESA 95, Prg. 8.96).

Sources

Use of disposable income account of the institutions (II.4, in integrated economic accounts or in institutional sector accounts – Tables A.1. and A.2.3.).

6.11. Capital Transfers

Capital transfers⁵ (transaction D9 of the National Accounts), which cover capital taxes, investment grants and other capital transfers (ISWG 93, Prg. 10.131-10.141; ESA 95, Prg. 4.146-4.167).

Acquisitions less disposals of non-financial non-produced assets (transaction K2 of the National Accounts) - non-financial non-produced assets consist of land and other tangible non-produced assets that may be used in the production of goods and services, as well as intangible non-produced assets (ISWG 93, Prg. 10.120-10.130; ESA 95, Prg. 6.06-6.13).

Sources

Capital accounts of the institutions (III.1, in integrated economic accounts or in institutional sector accounts – Tables A.1. and A.2.4.); capital accounts, in the external accumulation accounts (V.III.1, in the rest of the world accounts – Table A.3.); "from whom to whom" matrices, made available particularly by the Portuguese Institute of Statistics, for the inter-institutional flows (Table A.6.).

6.12. Net borrowing/lending

The net lending (+) or borrowing (-) of the total economy is the sum of the net lending or borrowing of the institutional sectors. It represents the net resources that the total economy makes available to the rest of the world (if it is positive) or receives from the rest of the world (if it is negative). The

⁵ Capital transfers are different from current transfers because they involve the acquisition or disposal of an asset, or assets, by at least one of the parties to the transaction. Whether made in cash or in kind, such transfers should result in a commensurate change in the financial, or non-financial, assets shown in the balance sheets of one or both parties to the transaction (ESA 95, Prg. 4.145).

net lending (+) or borrowing (-) of the total economy is equal, but with an opposite mathematical sign, to the net borrowing (-) or lending (+) of the rest of the world (ESA 95, Prg. 8.98).

Here, these amounts that fall short of (+) or exceed (-) the investment funds used to cover aggregate investment are registered in the capital and financial accounts, since they are financial transactions from (in the case of net borrowing) or to (in the case of net lending) the rest of the world – this is why the mathematical signs defined in the first paragraph of this item (ESA 95, Prg. 8.98) were exchanged.

Sources

Capital account of the institutions (III.1, in integrated economic accounts or in institutional sector accounts – Tables A.1. and A.2.4.); external accumulation accounts (V.III, in the rest of the world accounts – Table A.3.).

Methodology

These values can be taken directly from the sources or calculated as the balance between the totals of the components of investment funds and aggregate investment or as the difference between the financial transactions from and to the rest of the world.

6.13. Financial Transactions

Financial transactions (F1-7 of the National Accounts) are transactions in financial assets and liabilities between institutional units, and between these and the rest of the world. They are classified as monetary gold and special drawing rights; currency and deposits; securities other than shares; loans; shares and other equity; insurance technical reserves; and other accounts receivable/payable.

The outlays (expenditures) side of the (financial) account records changes in the assets, i.e. acquisitions minus disposals of financial assets. The incomes (receipts) side of the same account records changes in liabilities and net worth, i.e. the incurrence of liabilities minus their repayment. The balancing item of the financial account, i.e. the net acquisition of financial assets minus the net incurrence of liabilities, is net lending (+)/net borrowing (-) (ISWG 93, Prg. 11.1-11.111; ESA 95, Prg. 5.01-5.151).

Sources

Financial account of the institutions (III.2, in integrated economic accounts – Table A.1.).

7. From a Macro SAM to a disaggregated SAM for the study of income distribution

If we look at the world around us, it is easy to agree with the statement that “the determinants of the distribution of income and the mechanisms by which it changes represent one of the most difficult theoretical and empirical problems facing the science of economics” (Dervis et al., 1982). If it was an easy task, then certainly the world today would be fairer.

Working on the empirical side, we don't have any doubts that “SAMs provide an invaluable statistical framework for the analysis of the mapping between the different kinds of distributions one may want to consider” (Dervis et al., 1982).

Perhaps in a rather simplistic way, but at least to begin with, we accept that the study of the income distribution in a society involves the study of how the national pie is divided up and how it can be sliced. The first aspect can be analysed from one or more snapshots of the economy, given by a suitably disaggregated SAM, and the second from the modelling of that SAM. Therefore, the way in which the primary and secondary distribution as well as the use made of income is dealt with is of crucial importance. As can be seen from section 3, the factors of production account and the current account of the institutions are the accounts that cover such issues.

“In the SAM, the institution entitled ‘households’ really represents all the people in society” (Dervis et al. 1982). Its disaggregation therefore needs to be performed. On the other hand, the distribution of the (primary) incomes that accrue as a result of the involvement in processes of production or, as seen above, the ownership of assets among institutions (and activities) is covered by the factors of production account, so that its disaggregation must also be performed.

The question thus arises “how should these disaggregations be performed?” This will not, however, be discussed here, because our dependence on the available data is total⁶, although, as can be seen above, despite the fact that the information is not up-to-date, it is sufficient for us to be able to study the distribution of income.

As outlined in the introduction, the workable data available for studying and modelling income distribution in Portugal consisted of an incomplete disaggregated National Accounting Matrix (NAM) (see Tables B.1 and B.2) and a previous (provisional) version for 1995, constructed as a result of the collaboration of the Portuguese Statistical Institute (Instituto Nacional de Estatística) in the work undertaken by the Leadership Group on social accounting matrices, under the coordination of Statistics Netherlands (LEG, 2003), and made available to us.

⁶ Dervis et al. (1982), for instance, discuss this aspect (see Chapter 12, modelling distributional mechanisms).

In that NAM, labour⁷ was broken down into six types, according to the gender and education level of workers (see Table B.3), and households were broken down into four types, according to the main source of income (see Table B.4). Such disaggregation was performed using specific data sources, such as household budget surveys, the labour force survey and administrative data (employment records, income tax and social security files, etc.)⁸.

Once again, one of the many advantages of the SAM approach could be referred to here, to use the words of Pyatt (1991): by “reducing the social accounts to the essential”, the SAM approach “provides a useful starting point for understanding the assumptions and manipulations that have been built into the secondary source material which is typically employed by the majority of analysts”.

Because the totals of that incomplete NAM were different from the ones calculated by us from the definitive national accounts (Tables 1 and 4), in keeping with the methodology described above, discrepancies and missing data were handled in different ways. The advice of R. Stone (1981) was therefore closely heeded: firstly, all the known discrepancies and gaps were identified; secondly, within each block in which something had been identified by this first step, a detailed analysis was carried out reviewing its contents and methodological specifications (see section 6), all the information provided about the disaggregated values (LEG, 2003), and its interdependence with the other blocks and totals; thirdly, in an attempt to preserve those estimates that were thought to be reliable, the discrepancies were adjusted and the gaps filled in, either using the RAS procedure or doing it “by hand” (to use Stone’s words), in our case, by applying the structure of the disaggregated data (sometimes provisional) to the totals of the macro SAM.

Therefore, in the parts relating to labour types and/or household types, the discrepancies were adjusted, on the one hand, by using the RAS procedure⁹ in the sub-matrices of final consumption, gross national income and added value and, on the other hand, “by hand”, using row or column

⁷ Although employees and employers (including own-account employees) were separated in the disaggregated NAM, it wasn’t possible to work with the latter independently of the other factors of production because the available data were insufficient to separate them from the other compensation of factors. See also sub-section 7.1 and the use of purchasers’ prices (current prices) Table (A.5).

⁸ The document resulting from that work (LEG, 2003) highlights the limitations and the methodological details of such a valuable exercise.

⁹ The row and column totals in the Macro SAM were the constraints of the disaggregated NAM.

“To obtain a coherent table, every element of row i is multiplied by the ratio (constraint row i) / (total row i). The row totals are equal to the row constraints, but the column totals differ from the column constraints. As in the first step, now every element of column j is multiplied by the ratio (constraint column j) / (total column j). To obtain the final table, this has to be repeated several times until the ratios become equal or very close to 1.” (p. 104 LEG, 2003; see also Round, 2003)

coefficients in the remaining instances. Gaps were identified in the vectors of the compensation of labour from and to the rest of the world and the current transfers of households from and to the rest of the world. Firstly, the balances were deducted from the difference between the (detailed) value added or domestic product and the generated income or national product, in the first case, and from the difference between the (detailed) national and disposable incomes, in the second case. From the structure of these values, the gaps were filled in by working with the totals (for labour and households) of the Macro SAM. Direct purchases abroad by households, considered together with the current transfers to the rest of the world, were deducted from the difference between the final consumption of the original NAM and our estimates of final consumption.

The results are shown in Table 7.

This top-down approach made it possible to compile a consistent database, which could be even more realistic if our relationships with the Portuguese Institute of Statistics had been taken more seriously by the latter.

As has already been said, our aim is to construct a Computable General Equilibrium (CGE) model to study income distribution; therefore, some demographic values were also collected relating to each type of household and labour, as well as the supply and use tables at both the current and the previous year's prices. This latter information was collected in order to calculate the price indexes to be worked with in the modelling of the activities and products accounts. The Macro SAM for Portugal from 1986 to 2000, constructed by us, will also be used to calculate the parameters of some of the equations to be considered.

However, other kinds of modelling could be carried out based on this SAM. Most notably accounting and fixed price multipliers could be constructed and decomposed (our previous experiments in the SAM field made use of this kind of modelling – Santos, 1999, 2001, 2003, 2003a, 2004, 2004a and 2005a – based essentially on the works of Pyatt, 1988, Pyatt and Roe, 1977 and Pyatt and Round, 1985).

Table 7. Portuguese Disaggregated SAM (Social Accounting Matrix) for 1995 for the study of income distribution (in millions of euros) (continued)

Outlays (expenditures)					PRODUCTION							INSTITUTIONS													
					PRODUCTS							CURRENT ACCOUNT													
					Products of agriculture ...	Products from mining and ...	Construction work	Wholesale and retail trade ...	Financial intermediation services...	Other services	Total	Households					Enterprises (nonfinancial corporations)	Financial corporations	Government	NonProfitInstitutionsServingHouseholds	Total				
Incomes (receipts)					14	15	16	17	18	19		employees	employers	recipients of pensions	other	Total	24	25	26	27					
PRODUCTION	FACTORS	Labour	Male	Lower	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
				Medium	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
				Higher	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			Female	Lower	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				Medium	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
				Higher	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			Total		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Other		7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		Total		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	ACTIVITIES					8	6 060	379	2	0	19	0	6 460	0	0	0	0	0	0	0	0	0	0		
						9	0	55 321	69	2	413	48	55 852	0	0	0	0	0	0	0	0	0	0		
						10	0	12	14 191	0	0	0	14 204	0	0	0	0	0	0	0	0	0	0		
						11	0	25	13	31 749	683	0	32 469	0	0	0	0	0	0	0	0	0	0		
						12	0	5	14	0	20 967	0	20 987	0	0	0	0	0	0	0	0	0	0		
						13	3	81	28	78	852	23 379	24 421	0	0	0	0	0	0	0	0	0	0		
						Total	6 064	55 823	14 317	31 829	22 934	23 427	154 394	0	0	0	0	0	0	0	0	0	0	0	
	PRODUCTS					14	0	0	0	0	0	0	1 459	488	527	73	2 546	0	0	18	0	2 564			
						15	0	0	0	0	0	0	17 408	5 553	4 088	918	27 967	0	0	628	0	28 595			
						16	0	0	0	0	0	0	40	10	21	3	74	0	0	0	0	74			
					17	1 236	13 886	0	- 15 122	0	0	3 659	1 062	574	172	5 467	0	0	37	0	5 504				
					18	0	0	0	0	0	0	3 752	1 588	864	185	6 388	0	0	77	43	6 508				
					19	0	0	0	0	0	0	4 020	1 087	874	155	6 136	0	0	14 272	1 245	21 653				
					Total	1 236	13 886	0	- 15 122	0	0	30 337	9 787	6 949	1 505	48 578	0	0	15 032	1 288	64 898				
INSTITUTIONS	CURRENT ACCOUNT	Households	employees	20	0	0	0	0	0	0	0	124	49	17	15	206	312	667	2 238	3	3 426				
			employers (including own-account workers)	21	0	0	0	0	0	0	0	52	20	7	6	86	124	145	885	1	1 242				
			recipients of pensions	22	0	0	0	0	0	0	0	38	15	5	5	62	881	778	6 245	9	7 975				
			other	23	0	0	0	0	0	0	0	70	28	10	9	116	33	460	254	0	864				
			Total		0	0	0	0	0	0	0	285	112	39	35	470	1 349	2 051	9 623	13	13 506				
					24	0	0	0	0	0	0	307	122	880	30	1 339	58	363	0	0	1 759				
					25	0	0	0	0	0	0	1 715	223	144	43	2 125	329	29	4	14	2 501				
					26	- 1	7 108	405	1 046	1 347	378	10 283	11 825	1 061	828	169	13 883	2 108	229	6 866	7	23 092			
					27	0	0	0	0	0	0	215	65	17	27	323	50	34	878	0	1 286				
					Total	- 1	7 108	405	1 046	1 347	378	10 283	14 346	1 582	1 908	304	18 141	3 894	2 705	17 371	35	42 145			
	CAPITAL ACCOUNT	Households		28	0	0	0	0	0	0	0	0	615	6 385	1 071	- 119	7 952	0	0	0	0	7 952			
				29	0	0	0	0	0	0	0	0	0	0	0	0	0	9 342	0	0	0	9 342			
				30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 558	0	0	0	1 558		
				31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	- 1 661	0	0	- 1 661		
				32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	100		
				Total	0	0	0	0	0	0	615	6 385	1 071	- 119	7 952	9 342	1 558	- 1 661	100	100	17 291				
				FINANCIAL ACCOUNT	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
				REST OF THE WORLD	34	1 481	24 689	32	840	1 181	156	28 379	1 126	363	205	49	1 743	108	60	339	0	2 249			
				TOTAL		8 781	101 506	14 754	18 592	25 462	23 961	193 056	46 424	18 117	10 133	1 740	76 413	13 344	4 323	31 081	1 423	126 583			

Sources: Portuguese National Accounts and Portuguese Pilot SAM (Appendixes A and B)

See Tables B.3 and B.4 for the description of codes and grouping of labour and households

Table 7. Portuguese Disaggregated SAM (Social Accounting Matrix) for 1995 for the study of income distribution (in millions of euros) (continued)

Outlays (expenditures)					INSTITUTIONS							REST OF THE WORLD	TOTAL		
					CAPITAL ACCOUNT						FINANCIAL ACCOUNT				
Incomes (receipts)					Households	Enterprises (nonfinancial corporations)	Financial corporations	Government	NonProfitInstitutionsServingHouseholds	Total		33	34		
					28	29	30	31	32	33					
PRODUCTION	FACTORS	Labour	Male	Lower	1	0	0	0	0	0	0	0	15 604		
				Medium	2	0	0	0	0	0	0	0	4	7 456	
				Higher	3	0	0	0	0	0	0	0	32	4 195	
			Female	Lower	4	0	0	0	0	0	0	0	0	79	3 103
				Medium	5	0	0	0	0	0	0	0	0	2	5 288
				Higher	6	0	0	0	0	0	0	0	0	4	3 037
			Total		0	0	0	0	0	0	0	0	120	38 683	
		Other	7	0	0	0	0	0	0	0	0	3 123	35 285		
		Total		0	0	0	0	0	0	0	0	3 243	73 968		
	ACTIVITIES	Agriculture, hunting and forestry ...				8	0	0	0	0	0	0	0	6 460	
		Industry, including energy				9	0	0	0	0	0	0	0	55 852	
		Construction				10	0	0	0	0	0	0	0	14 204	
		Wholesale and retail trade ...				11	0	0	0	0	0	0	0	32 469	
		Financial, real-estate, renting ...				12	0	0	0	0	0	0	0	20 987	
		Other service activities				13	0	0	0	0	0	0	0	24 421	
			Total		0	0	0	0	0	0	0	0	0	154 394	
	PRODUCTS	Products of agriculture ...				14	185	130	0	3	318	0	205	8 781	
		Products from mining and ...				15	768	5 282	347	452	246	7 095	0	18 292	101 506
		Construction work				16	4 148	2 816	437	2 552	120	10 072	0	1	14 754
Wholesale and retail trade ...				17	91	194	19	1	0	305	0	5 231	18 592		
Financial intermediation services..				18	505	1 049	110	8	0	1 671	0	617	25 462		
Other services				19	58	91	10	1	1	160	0	87	23 961		
		Total		5 755	9 562	922	3 018	366	19 623	0	24 433	193 056			
INSTITUTIONS	CURRENT ACCOUNT	Households	employees	20	0	0	0	0	0	0	0	0	748	46 424	
			employers (including own-account workers)	21	0	0	0	0	0	0	0	0	1 655	18 117	
			recipients of pensions	22	0	0	0	0	0	0	0	0	799	10 133	
			other	23	0	0	0	0	0	0	0	0	90	1 740	
			Total		0	0	0	0	0	0	0	0	3 293	76 413	
		Enterprises (nonfinancial corp.)	24	0	0	0	0	0	0	0	0	23	13 344		
		Financial corporations	25	0	0	0	0	0	0	0	0	35	4 323		
		Government	26	0	0	0	0	0	0	0	0	609	31 081		
		NonProfitInstitutionsServingHou.	27	0	0	0	0	0	0	0	0	0	1 423		
		Total		0	0	0	0	0	0	0	0	3 960	126 583		
	CAPITAL ACCOUNT	Households				28	0	0	812	206	0	1 018	- 4 023	147	5 095
		Enterprises (nonfinancial corp.)				29	0	0	0	707	0	707	- 49	896	10 896
		Financial corporations				30	0	484	328	2	0	814	- 287	0	2 085
		Government				31	63	161	3	1 870	4	2 100	4 423	1 275	6 136
		NonProfitInstitutionsServingHou.				32	0	0	0	291	0	291	- 23	1	370
		Total		63	645	1 143	3 075	4	4 930	40	2 320	24 582			
FINANCIAL ACCOUNT				33	0	0	0	0	0	35 030	9 257	44 287			
REST OF THE WORLD				34	- 723	689	20	43	0	29	9 217	X	43 213		
TOTAL					5 095	10 896	2 085	6 136	370	24 581	44 287	43 213			

Sources: Portuguese National Accounts and Portuguese Pilot SAM (Appendixes A and B)
See Tables B.3 and B.4 for the description of codes and grouping of labour and households

8. Concluding Remarks

The consistency of the SAM with the National Accounts was demonstrated, as well as the way in which the former was able to integrate all the fundamental tables (integrated economic accounts, institutional sector accounts, supply and use of products, rest of the world accounts) of the latter. Its ability to support a complete and complex analysis of an economy, through the possibility of the breakdown of its accounts and the links/relationships underlying its structure, was also demonstrated. This can confirm the idea that “a consistent and convenient means of compiling a benchmark equilibrium dataset is the SAM” (Reinert and Roland-Holst, 1997).

We hope that this work has highlighted, both directly and indirectly, some of the advantages of the SAM approach – the words of Pyatt (1991) must be quoted again:

“... a SAM is a framework both for models of how the economy works as well as for data which monitor its workings. Recognition of this duality is of basic importance for quantitative analysis. It implies, *inter alia*, that the accounting identities which are captured by a SAM are not to be regarded simply as consistency requirements which must be imposed on a model, but rather they should be seen as a logical consequence of the paradigms which economists have adopted for analyzing society”.

We also hope to have highlighted the need for the implementation and forecasting of the System of Economic and Social Accounting Matrices and Extensions (SESAME), in which the basic principles of national accounts are extended to a wider range of statistics, notably social and environmental ones (see, for instance, Keuning, 1996). This would mean that, on the one hand, a wider range of problems could be made the object of applied models and that specific versions could be created through the aggregation or disaggregation of the databases within consistent frameworks, providing controls over the totals for each block and, at the same time, improving the quality of the information available to work with, since:

“An accurate SAM reflecting well the structure of the system being studied is a necessary but not a sufficient condition for a sound CGE.” (Thorbecke, 2000).

“The quality of a model depends on the quality of the information used to calibrate¹⁰ it.” (Thorbecke, 2003).

¹⁰ “...the term ‘calibration’ refers to the process of calculating intercept and share parameters of a CGE model’s mathematical functions (given exogenously specified behavioural elasticities) so that the model will replicate the base year SAM as an equilibrium solution” (Reinert and Roland-Holst, 1997).

We believe that the implementation of inappropriate policies result, at least in part, from a deficient knowledge of their (direct and indirect) effects and this means that more research must be carried out, most notably in economic modelling. Macroeconomic models need to be improved, since:

“...policy analysis is a political as well as an economic exercise. In analysing the impact of a particular choice of policy, one must be aware of its distributional impact and of the political forces it is likely to set in motion. Planning models can provide a useful tool for such policy analysis if they can be extended to trace out the impact of different policy regimes on socioeconomic groups that reflect important political divisions in society” (Dervis et al., 1982)

References:

- Abbink, G.; Braber, M. and Cohen, S. (1995). A SAM-CGE demonstration model for Indonesia: static and dynamic specifications and experiments. *International Economic Journal*, 9(3), 15-33.
- Dervis, K.; De Melo, J. and Robinson, S. (1982). *General Equilibrium Models for Development Policy*. Cambridge, Cambridge University Press, 526 pp.
- Devarajan, S.; Lewis, J.D. and Robinson, S. (1991). *From Stylized to Applied Models: Building Multisector CGE Models for Policy Analysis*. Dept. of Agricultural and Resource Economics, Working Paper No. 616, Univ. of California at Berkeley.
- Drud, A.; Grais, W.; and Pyatt, G. (1986). Macroeconomic Modelling Based on Social-Accounting Principles. *Journal of Policy Modeling*, 8, 111-145.
- Eurostat (1996). *European System of Accounts (ESA 95)*. Eurostat, Luxembourg.
- IWSG - Inter-Secretariat Working Group (1993). *System of National Accounts*. Commission of the European Communities – Eurostat, Brussels/Luxembourg; International Monetary Fund, Washington, DC; Organization for Economic Co-operation and Development, Paris; United Nations, Statistical Office, New York; World Bank, Washington DC.
- Keuning, S.J. (1996). *Accounting for Economic Development and Social Change*. IOS Press, Amsterdam, 233 pp.
- Keuning, S.J. and Ruijter, W.A. (1988). Guidelines to the construction of a Social Accounting Matrix. *Review of Income and Wealth*, 34, 71-100.

- King, B. (1981). *What is a SAM? A Layman's Guide to Social Accounting Matrices*. World Bank Staff Working Paper No. 463. The World Bank, USA.
- LEG - Leadership Group on SAM (2003). *Handbook on Social Accounting Matrices and Labour Accounts*. Eurostat Working Papers, Theme – Population and Social Conditions 3/2003/E/N 23, Luxembourg.
- Pyatt, G. (1988). A SAM Approach to Modeling. *Journal of Policy Modeling*, 10, 327-352.
- Pyatt, G. (1991). Fundamentals of Social Accounting. *Economic Systems Research*, 3, 315-341.
- Pyatt, G. and Roe, A. (1977). *Social Accounting for Development Planning with special reference to Sri Lanka*. Cambridge University Press, Cambridge.
- Pyatt, G. and Round, J. (1985). Accounting and Fixed Price Multipliers in a Social Accounting Matrix Framework, in Pyatt, G. and Round, J. (coord.), *Social Accounting Matrices. A Basis for Planning*. A World Bank Symposium, The World Bank, Washington, D.C.; also in *Economic Journal*, 89 (356), 1979, pp. 850-873.
- Reinert, K.A. and Roland-Holst, D. (1997). Social Accounting Matrices, in François, J.F. and Reinert, K.A. (eds.), *Applied Methods for Trade Policy Analysis. A Handbook*. Cambridge, Cambridge University Press, pp. 94-121.
- Round, J. (2003). Constructing SAMs for Development Policy Analysis: Lessons Learned and Challenges Ahead. *Economic Systems Research*, 15, 161-183.
- Santos, S. (1999). *The Social Accounting Matrix as a working instrument for defining economic policy. Its application to Portugal during the period 1986-90, with emphasis on the agroindustrial sector* (only available in Portuguese). Higher Institute of Economics and Business Administration, Ph.D. Dissertation, Lisbon.
- Santos, S. (2001). *The importance of the Social Accounting Matrix. Its application to Portugal during the period 1990-95*. Higher Institute of Economics and Business Administration, Department of Economics Seminar, Lisbon.
- Santos, S. (2003). *Quantitative analysis of the economic flows between Portugal and the other European Union Member States and Institutions in 1997*. Higher Institute of Economics and

Business Administration, Centre of Research on European and International Economics, Working Paper No. 2/03, Lisbon.

Santos, S. (2003a). *Social Accounting Matrices for Portugal in 1998-99. Modelling the effects of changes in government receipts and expenditure.* Higher Institute of Economics and Business Administration, Working Paper No. 07/2003/Department of Economics/Research Unit on Complexity in Economics, Lisbon.

Santos, S. (2004). Portuguese net borrowing and the government budget balance. A SAM approach. *Journal of Policy Modeling*, 26, 703-717.

Santos, S. (2004a). *Distribution of aggregate income in Portugal from 1995 to 2000 within a SAM framework. Modelling the household sector.* Higher Institute of Economics and Business Administration, Working Paper No. 12/2004/Department of Economics/Research Unit on Complexity in Economics, Lisbon.

Santos, S. (2005). *Social Accounting Matrix and the System of National Accounts: An Application.* Higher Institute of Economics and Business Administration. Working Paper No. 14/2005/Department of Economics/Research Unit on Complexity in Economics, Lisbon.

Santos, S. (2005a). *Effects of changes in flows of funds between Government and households. A SAM approach to Portugal.* EconWPA-GE (Working Paper Archive in Economics – General Equilibrium) 0507002.

Stone, R. (1981). *Aspects of Economic and Social Modelling.* Libraire Droz, Geneva, 159 pp.

Thorbecke, E. (2000). *The use of social accounting matrices in modelling.* Paper prepared for the 26th General Conference of the International Association for Research in Income and Wealth, Cracow, Poland

Thorbecke, E. (2001). *The Social Accounting Matrix: Deterministic or Stochastic Concept?* Paper prepared for a conference in Honour of Graham Pyatt's retirement, at the Institute of Social Studies, The Hague, Netherlands.

Thorbecke, E. (2003). Towards a stochastic Social Accounting Matrix for Modelling. *Economic Systems Research*, 15, 185-196.

Appendix A. Portuguese National Accounts for 1995 (SNA Tables)

Table A.1a. Integrated Economic Accounts (in millions of euros) - Uses

Current accounts											Code	Transactions and other flows stocks and balancing items	
Uses													
Accounts	Total	Goods and Services Account (Resources)	S.2 Rest of the World Account	S.1 Total of the Economy	S.15 NPISHs	S.14 Households	S.13 General Government	S.12 Financial Corporations	S.11 Non-Financial Corporations				
I. Production / external account of goods and services	29 454	29 454										P.7	Imports of goods and services
	24 433		24 433									P.6	Exports of goods and services
	154 394	154 394										P.1	Output of goods and services
	84 102			84 102	1 527	9 294	3 003	1 631	64 959			P.2	Intermediate consumption
	10 535	10 535										D.21-D.31	Net taxes on products
	80 827			80 827	1 190	16 966	12 386	4 333	39 105			B.1g/B.1'g	Gross added value/gross domestic product
	13 457			13 457	279	3 715	1 526	733	7 204			K.1	Consumption of fixed capital
	67 369			67 369	911	13 251	10 860	3 600	31 900			B.1n/B.1'n	Value added, net/Net domestic product
	5 021		5 021									B.11	External balance of goods and services
II.1.1. Generation of income account	38 683		120	38 563	1 126	2 111	10 990	2 309	22 027			D.1	Compensation of employees
	10 102			10 102	- 14	- 118	- 56	- 4	- 241			D.2-D.3	Net taxes on production and imports
	10 535			10 535								D.21-D.31	Net taxes on products
	- 433			- 433	- 14	- 118	- 56	- 4	- 241			D.29-D.39	Net taxes on production
	17 189			17 189	78		1 452	2 028	17 319			B.2g	Gross operating surplus
	14 973			14 973		14 973						B.3g	Gross mixed income
7 446			7 446	- 201		- 74	1 295	10 115			B.2n	Net operating surplus	
11 258			11 258		11 258						B.3n	Net mixed income	
II.1.2. Allocation of primary income account	31 314		3 123	28 191	38	2 976	5 066	12 175	7 936			D.4	Property income
	80 479			80 479	137	59 614	7 379	1 787	11 561			P.119	Adjustment to de FISIM (Financial Intermediation Services Indirectly Measured)
	67 022			67 022	- 142	55 899	5 853	1 054	4 357			B.5g	Gross national income/ Gross balance of primary incomes
												B.5n	Net national income/ Net balance of primary incomes
II.2. Secondary distribution income account	7 161			7 161	2	4 932		226	2 000			D.5	Current taxes on income, wealth, etc
	11 718			11 718		11 718						D.61	Social contributions
	11 659		29	11 630	13	42	9 515	720	1 339			D.62	Social benefits other than social transfers in kind
	15 737		3 931	11 807	19	1 865	8 194	1 066	663			D.7	Other current transfers
	83 517			83 517	1 388	57 105	13 371	2 311	9 342			B.6g	Gross disposable income
	70 059			70 059	1 109	53 390	11 845	1 578	2 138			B.6n	Net disposable income
II.3. Redistribution of income in kind account	10 177			10 177	1 288		8 889					D.63	Social transfers in kind
	83 517			83 517	100	67 282	4 482	2 311	9 342			B.7g	Gross adjusted disposable income
	70 059			70 059	- 178	63 566	2 956	1 578	2 138			B.7n	Net adjusted disposable income
II.4. Use of income account	83 517			83 517	1 388	57 105	13 371	2 311	9 342			B.6g	Gross disposable income
	70 059			70 059	1 109	53 390	11 845	1 578	2 138			B.6n	Net disposable income
	66 225			66 225		60 082	6 143					P.4	Actual Final Consumption
	66 225			66 225	1 288	49 905	15 032					P.3	Final consumption expenditure
	752			752				752				D.8	Adjustment for the change in the net equity of households in pension funds reserves
	17 291			17 291	100	7 952	- 1 661	1 558	9 342			B.8g	Gross saving
	3 834			3 834	- 178	4 237	- 3 187	825	2 138			B.8n	Net saving
2 331		2 331									B.12	Current external balance	
Accumulation accounts													
Changes in Assets													
III.1.1. Change in net worth due to saving and capital transfers account												B.8g	Gross saving
												B.8n	Net saving
												B.12	Current external balance
	6 165		40	6 125	110	5 324	- 2 902	496	3 096			D.9	Capital transfers, receivable
III.1.2. Acquisitions of non-financial assets account	18 457			18 457	359	5 383	3 018	918	8 781			D.9	Capital transfers, payable (-)
	- 13 457			- 13 457	- 279	- 3 715	- 1 526	- 733	- 7 204			B.10.1	Changes in net worth due to saving and capital transfers
	1 026			1 026	1	255			769			P.51	Gross fixed capital formation
	140			140	6	117		4	12			K.1	Consumption of fixed capital (-)
			0	0		- 738		29	20	689		P.52	Changes in inventories
			40	- 40	23	4 023	- 4 423	287	49			P.53	Acquisitions less disposals of valuables
											K.2	Acquisitions less disposals of non-produced non-financial assets	
											B.9	Net lending (+) / borrowing (-)	
			S.2	S.1	S.15 + S.14	S.13	S.12	S.11					
III.2. Financial account	44 247		9 257	34 990	9 771		1 282	18 231	5 706				Net acquisition of financial assets
													Net incurrence of liabilities
			- 13	13				13				F.1	Monetary gold and SDRs
	17 287		6 604	10 683		5 860	1 794	2 883	147			F.2	Currency and deposits
	6 379		1 679	4 699	1 320		- 15	2 838	557			F.3	Securities other than shares
	8 745		912	7 833	451		96	7 193	94			F.4	Loans
	4 175		48	4 127	- 86		- 420	3 162	1 471			F.5	Shares and other equity
	3 400		6	3 394		3 260	1	37	96			F.6	Insurance technical reserves
	4 260		20	4 240		- 1 033	- 173	2 105	3 342			F.7	Other accounts receivable/payable
			40	- 40	4 332		- 4 422	187	- 137			B.9 F	Net lending (+) / borrowing (-)
				287			- 100	- 187					Statistical discrepancy

Source: Instituto Nacional de Estatística

Table A.1b. Integrated Economic Accounts (in millions of euros) - Resources

											Current accounts	
											Resources	
Code	Transactions and other flows stocks and balancing items	S.11	S.12	S.13	S.14	S.15	S.1	S.2	Goods and Services Account (Uses)	Total	Accounts	
		Non-Financial Corporations	Financial Corporations	General Government	Households	NPISHs	Total of the Economy	Rest of the World Account				
P.7	Imports of goods and services							29 454		29 454	I. Production / external account of goods and services	
P.6	Exports of goods and services								24 433	24 433		
P.1	Output of goods and services	104 064	5 964	15 389	26 260	2 717	154 394			154 394		
P.2	Intermediate consumption								84 102	84 102		
D.21-D.31	Net taxes on products						10 535			10 535	II.1. Generation of income account	
B.1g/B.1'g	Gross added value/gross domestic product	39 105	4 333	12 386	16 966	1 190	80 874			80 874		
K.1	Consumption of fixed capital											
B.1n/B.1'n	Value added, net/Net domestic product	31 900	3 600	10 860	13 251	911	67 369			67 369		
B.1l	External balance of goods and services							5 021		5 021		
D.1	Compensation of employees				38 620		38 620	64		38 683		II.2. Allocation of primary income account
D.2-D.3	Net taxes on production and imports			9 937			9 937	165		10 102		
D.21-D.31	Net taxes on products			10 283			10 283	252		10 535		
D.29-D.39	Net taxes on production			1 220			- 346	- 87		- 433		
B.2g	Gross operating surplus	17 319	2 028	1 452		78	17 189			17 189		
B.3g	Gross mixed income				14 973		14 973			14 973		
B.2n	Net operating surplus	10 115	1 295	- 74		- 201	7 446			7 446		
B.3n	Net mixed income				11 258		11 258			11 258		
D.4	Property income	2 178	15 623	1 056	8 998	97	27 952	3 363		31 314	II.2. Secondary distribution income account	
P.119	Adjustment to de FISIM (Financial Intermediation Services Indirectly Measured)		- 3 688									
B.5g	Gross national income/ Gross balance of primary incomes	11 561	1 787	7 379	59 614	137	80 479			80 479		
B.5n	Net national income/ Net balance of primary incomes	4 357	1 054	5 853	55 899	- 142	67 022			67 022		
D.5	Current taxes on income, wealth, etc			7 161			7 161			7 161		
D.61	Social contributions	1 339	1 473	8 851	42	13	11 718			11 718		
D.62	Social benefits other than social transfers in kind				11 629		11 629	30		11 659		
D.7	Other current transfers	444	1 063	7 690	4 376	1 272	14 845	892		15 737		
B.6g	Gross disposable income	9 342	2 311	13 371	57 105	1 388	83 517			83 517		
B.6n	Net disposable income	2 138	1 578	11 845	53 390	1 109	70 059			70 059		
D.63	Social transfers in kind				10 177		10 177			10 177	II.3. Redistribution of income in kind account	
B.7g	Gross adjusted disposable income	9 342	2 311	4 482	67 282	100	83 517			83 517		
B.7n	Net adjusted disposable income	2 138	1 578	2 956	63 566	- 178	70 059			70 059		
B.6g	Gross disposable income	9 342	2 311	13 371	57 105	1 388	83 517			83 517		
B.6n	Net disposable income	2 138	1 578	11 845	53 390	1 109	70 059			70 059	II.4. Use of income account	
P.4	Actual Final Consumption							66 225		66 225		
P.3	Final consumption expenditure							66 225		66 225		
D.8	Adjustment for the change in the net equity of households in pension funds reserves				752		752			752		
B.8g	Gross saving											
B.8n	Net saving											
B.12	Current external balance											
											Accumulation accounts	
											Changes in liabilities and net worth	
B.8g	Gross saving	9 342	1 558	- 1 661	7 952	100	17 291			17 291	III.1. Change in net worth due to saving and capital transfers account	
B.8n	Net saving	2 138	825	- 3 187	4 237	- 178	3 834			3 834		
B.12	Current external balance							2 331		2 331		
D.9	Capital transfers, receivable	1 603	814	3 375	1 166	292	7 250	29		7 278	III.2. Acquisitions of non-financial assets account	
D.9	Capital transfers, payable (-)	- 645	- 1 143	- 3 089	- 78	- 4	- 4 959	- 2 320		- 7 278		
B.10.1	Changes in net worth due to saving and capital transfers	3 096	496	- 2 902	5 324	110	6 125	40		6 165		
P.51	Gross fixed capital formation								18 457	18 457		
K.1	Consumption of fixed capital (-)											
P.52	Changes in inventories								1 026	1 026		
P.53	Acquisitions less disposals of valuables								140	140		
K.2	Acquisitions less disposals of non-produced non-financial assets								0	0		
B.9	Net lending (+) /borrowing (-)											
											III.2 Financial account	
	Net acquisition of financial assets											
	Net incurrence of liabilities	5 844	18 044	5 704	5 438		35 030	9 217		44 247		
F.1	Monetary gold and SDRs											
F.2	Currency and deposits		12 961	1 317			14 278	3 010		17 287		
F.3	Securities other than shares	1 181	127	4 038			5 345	1 034		6 379		
F.4	Loans	2 145	134	545	4 626		7 450	1 295		8 745		
F.5	Shares and other equity	2 395	1 288				3 683	492		4 175		
F.6	Insurance technical reserves	150	3 213				3 362	37		3 400		
F.7	Other accounts receivable/payable	- 27	321	- 196	812		911	3 349		4 260		
B.9 F	Net lending (+) /borrowing (-)											
	Statistical discrepancy											

Table A.2.1a. Institutional Sector Accounts (in millions of euros) - (I) Production and (II.1.1.) Generation of Income Accounts (in millions of euros) – Uses

Total	Corresponding entries of the		S.1 Total of the Economy	S.12					S.11 Non-Financial Corporations	S.13			S.15 Non-Profit Institutions Serving Households (NPISHs)	S.14 Households	Transactions and other flows stocks and balancing items code		
	Goods and services account (resources)	Rest of the world account		Financial Corporations	S.125 Insurance Corporations and Pension Funds	S.124 Financial Auxiliaries	S.123 Other Financial Intermediaries, except Insur. Corp. and Pens. F.	S.122 Other Monetary Financial Institutions		S.121 Central Bank	General Government	S.1314 Social Security Funds				S.1313 Local Government	S.1311 Central Government
			I: Production account														
Uses																I: Production account	
154 394	154 394															P.1	Output of goods and services
134 323	134 323															P.11	market output
																P.119	Adjustment to de FISIM (Financial Intermediation Services Indirectly Measured)
15 532	15 532															P.13	Other non-market output
4 539	4 539															P.12	output produced for own final use
10 535	10 535															D21-D31	Net taxes on products
																R1	Total of resources
84 102		84 102	1 631	431	132	165	873	29	64 959	3 003	74	627	2 302	1 527	9 294	P.2	Intermediate consumption
3 688		3 688														P.119	Adjustment to de FISIM (Financial Intermediation Services Indirectly Measured)
80 827	80 827	80 827	4 333	673	117	363	3 173	7	39 105	12 386	247	1 964	10 175	1 190	16 966	B.1g	Gross added value/gross domestic product
13 457		13 457	733	74	63	51	528	17	7 204	1 526	8	687	831	279	3 715	K.1	Consumption of fixed capital
67 369		67 369	3 600	599	54	312	2 645	- 10	31 900	10 860	239	1 277	9 344	911	13 251	B.1n	Value added, net/Net domestic product
164 929		164 929	5 964	1 104	249	528	4 046	36	104 064	15 389	321	2 591	12 476	2 717	26 260	E1	Total of uses
Uses																II: Distribution and use of income account	
																II.1.1: Generation of income account	
																B.1g	Gross added value/gross domestic product
																B.1n	Value added, net/Net domestic product
																R211	Total of resources
38 563		38 563	2 309	396	43	79	1 700	91	22 027	10 990	235	1 350	9 406	1 126	2 111	D.1	Compensation of employees
30 390		30 390	1 736	282	34	64	1 297	60	17 136	8 807	218	1 156	7 434	923	1 787	D.11	Wages and salaries
8 173		8 173	573	115	9	15	403	30	4 891	2 183	17	194	1 972	203	324	D.12	Employers' social contribution
11 802		11 802	12	2	2	1	6		201					1	223	D.2	Taxes on production and imports
11 364		11 364														D.21	Taxes on products
437		437	12	2	2	1	6		201					1	223	D.29	Other taxes on production
- 1 700		- 1 700	- 16	- 4		- 1	- 11		- 442	- 56		- 2	- 54	- 15	- 341	D.3	Subsidies, receivable
- 830		- 830														D.31	Subsidies on products
- 870		- 870	- 16	- 4		- 1	- 11		- 442	- 56		- 2	- 54	- 15	- 341	D.39	Other subsidies on production
17 189		17 189	2 028	278	71	283	1 478	- 83	17 319	1 452	12	617	823	78		B.2g	Gross operating surplus
14 973		14 973													14 973	B.3g	Gross mixed income
7 446		7 446	1 295	204	9	232	951	- 101	10 115	- 74	4	- 70	- 8	- 201		B.2n	Net operating surplus
11 258		11 258													11 258	B.3n	Net mixed income
67 369		67 369	3 600	599	54	312	2 645	- 10	31 900	10 860	239	1 277	9 344	911	13 251	E211	Total of uses

Source: Instituto Nacional de Estatística

Table A.2.1b. Institutional Sector Accounts (in millions of euros) - (I) Production and (II.1.1.) Generation of Income Accounts (in millions of euros) – Resources

code	Transactions and other flows stocks and balancing items	S.11					S.12					S.13			S.14	S.15	S.1 Total of the Economy	Corresponding entries of the		Total
		Non-Financial Corporations	S.121 Central Bank	S.122 Other Monetary Financial Institutions	S.123 Other Financial Intermediaries, except Insur. Corp. and Pens. F.	S.124 Financial Auxiliaries	S.125 Insurance Corporations and Pension Funds	Financial Corporations	S.1311 Central Government	S.1313 Local Government	S.1314 Social Security Funds	General Government	Households	Non-Profit Institutions Serving Households (NPISHs)	Rest of the world account	Goods and services account (uses)				
I: Production account																	Resources			
P.1	Output of goods and services	104 064	36	4 046	528	249	1 104	5 964	12 476	2 591	321	15 389	26 260	2 717	154 394			154 394		
P.11	market output	103 638	36	4 046	528	249	1 104	5 964	713	420	11	1 145	22 148	1 430	134 323			134 323		
P.119	Adjustment to de FISIM (Financial Intermediation Services Indirectly Measured)		33	3 367	287			3 688							3 688			3 688		
P.13	Other non-market output								11 763	2 171	310	14 244		1 288	15 532			15 532		
P.12	output produced for own final use	426											4 113		4 539			4 539		
D21-D31	Net taxes on products														10 535			10 535		
R1	Total of resources	104 064	36	4 046	528	249	1 104	5 964	12 476	2 591	321	15 389	26 260	2 717	164 929			164 929		
P.2	Intermediate consumption																84 102	84 102		
P.119	Adjustment to de FISIM (Financial Intermediation Services Indirectly Measured)																			
B.1g	Gross added value/gross domestic product																			
K.1	Consumption of fixed capital																			
B.1n	Value added, net/Net domestic product																			
E1	Total of uses																			
II: Distribution and use of income account																	Resources			
II.1.1. Generation of income account																				
B.1g	Gross added value/gross domestic product	39 105	7	3 173	363	117	673	4 333	10 175	1 964	247	12 386	16 966	1 190	80 827			80 827		
B.1n	Value added, net/Net domestic product	31 900	- 10	2 645	312	54	599	3 600	9 344	1 277	239	10 860	13 251	911	67 369			67 369		
R211	Total of resources	31 900	- 10	2 645	312	54	599	3 600	9 344	1 277	239	10 860	13 251	911	67 369			67 369		
D.1	Compensation of employees																			
D.11	Wages and salaries																			
D.12	Employers' social contribution																			
D.2	Taxes on production and imports																			
D.21	Taxes on products																			
D.29	Other taxes on production																			
D.3	Subsidies, receivable																			
D.31	Subsidies on products																			
D.39	Other subsidies on production																			
B.2g	Gross operating surplus																			
B.3g	Gross mixed income																			
B.2n	Net operating surplus																			
B.3n	Net mixed income																			
E211	Total of uses																			

Table A.2.2b. Institutional Sector Accounts (in millions of euros) - (II.1.2.) Allocation of Primary Income and (II.2.) Secondary Distribution of Income Accounts (in millions of euros) – Resources

code	Transactions and other flows stocks and balancing items	S.11	S.12					S.13			S.14	S.15	S.1	Corresponding entries of the		Total		
		Non-Financial Corporations	S.121	S.122	S.123	S.124	S.125	S.12	S.1311	S.1313	S.1314	S.13	S.14	S.15	S.1		of the	
																	Rest of the world account	Goods and services account (uses)
		Central Bank	Other Monetary Financial Institutions	Other Financial Intermediaries, except Insur. Corp. and Pens. F.	Financial Auxiliaries	Insurance Corporations and Pension Funds	Financial Corporations	Central Government	Local Government	Social Security Funds	General Government	Households	Non-Profit Institutions Serving Households (NPISHs)	Total of the Economy				
II.1.2: Allocation of primary income account																	Resources	
B.2g	Gross operating surplus	17 319	- 83	1 478	283	71	278	2 028	823	617	12	1 452		78	17 189		17 189	
B.3g	Gross mixed income											14 973			14 973		14 973	
B.2n	Net operating surplus	10 115	- 101	951	232	9	204	1 295	- 8	- 70	4	- 74		- 201	7 446		7 446	
B.3n	Net mixed income												11 258		11 258		11 258	
D.1	Compensation of employees												38 620		38 620	64	38 683	
D.11	Wages and salaries												30 447		30 447	64	30 510	
D.12	Employers' social contribution												8 173		8 173		8 173	
D.2	Taxes on production and imports								9 622	1 055	346	11 023			11 023	779	11 802	
D.21	Taxes on products								9 517	723	346	10 586			10 586	779	11 364	
D.29	Other taxes on production								105	332		437			437		437	
D.3	Subsidies, payable								- 765	- 55	- 266	- 1 086			- 1 086	- 614	- 1 700	
D.31	Subsidies on products								- 274	- 28		- 303			- 303	- 527	- 830	
D.39	Other subsidies on production								- 491	- 27	- 266	- 783			- 783	- 87	- 870	
D.4	Property income	2 178	781	12 224	1 564	30	1 025	15 623	917	88	51	1 056	8 998	97	27 952	3 363	31 314	
D.41	Interest	1 364	773	12 013	1 452	29	660	14 928	598	21	51	670	7 233	18	24 213	2 731	26 944	
P.119	Adjustment to de FISIM (Financial Intermediation Services Indirectly Measured)		- 33	- 3 367	- 287			- 3 688										
D.42	Distributed income of corporations	698	7	179	112		363	661	319	1		321	547	76	2 302	272	2 575	
D.43	Reinvested earnings on direct foreign investment	37		30	1			30							67	352	419	
D.44	Property income attributed to insurance policy holders	77		2			1	4					985	3	1 068	8	1 075	
D.45	Rent	3							1	65		66	233		302		302	
B.5g/B.5*g	Gross national income																	
B.5n/B.5*n	Net national income																	
R212	Total of resources	12 293	647	9 807	1 509	38	1 229	13 230	9 767	1 017	135	10 919	58 875	- 104	95 213		95 213	
E212	Total of uses																	
II.2: Secondary distribution income account																		
B.5g/B.5*g	Gross national income	11 561	- 76	1 301	278	82	202	1 787	5 720	1 527	132	7 379	59 614	137	80 479		80 479	
B.5n/B.5*n	Net national income	4 357	- 93	773	227	19	128	1 054	4 889	840	124	5 853	55 899	- 142	67 022		67 022	
D.5	Current taxes on income, wealth, etc								6 808	353		7 161			7 161		7 161	
D.51	Taxes on income								6 557	307		6 864			6 864		6 864	
D.59	Other current taxes								250	46		296			296		296	
D.61	Social contributions	1 339	14	51	1	1	1 406	1 473	703	68	8 080	8 851	42	13	11 718		11 718	
D.62	Social benefits other than social transfers in kind												11 629		11 629	30	11 659	
D.7	Other current transfers	444		10	2		1 050	1 063	5 415	1 026	1 248	7 690	4 376	1 272	14 845	892	15 737	
D.71	Net non-life insurance premiums						1 042	1 042							1 042	116	1 158	
D.72	Non-life insurance claims	386		9	1		8	18				1	578	12	995	52	1 047	
D.73	Current transfers within general government								5 097	973		797	6 866		6 866		6 866	
D.74	Current international cooperation								145			405	550		550	87	637	
D.75	Miscellaneous current transfers	58		1	1		2		174	53	47	273	3 798	1 260	5 391	637	6 029	
B.6g	Gross disposable income																	
B.6n	Net disposable income																	
R22	Total of resources	6 140	- 79	834	230	21	2 584	3 590	17 815	2 287	9 452	29 554	71 946	1 144	112 374		112 374	
E22	Total of uses																	

Table A.2.3a. Institutional Sector Accounts (in millions of euros) - (II.3.) Distribution of Income in Kind, (II.4.1.) Use of Disposable Income and (II.4.2.) Use of Adjusted Income Accounts (in millions of euros) – Uses

Total	Corresponding entries of the		S.1 Total of the Economy	S.12					S.11 Non-Financial Corporations	S.13			S.15 Non-Profit Institutions Serving Households (NPISHs)	S.14 Households	Transactions and other flows stocks and balancing items				
	Goods and services account (resources)	Rest of the world account		Financial Corporations	S.125	S.124	S.123	S.122		S.121	General Government	S.1314					S.1313	S.1311	
					Insurance Corporations and Pension Funds	Financial Auxiliaries	Other Financial Intermediaries, except Insur. Corp. and Pens. F.	Other Monetary Financial Institutions		Central Bank		Social Security Funds					Local Government	Central Government	
Uses																	code		
																	II.3: Redistribution of income in kind account		
																	B.6g	Gross disposable income	
																	B.6n	Net disposable income	
10 177			10 177							8 889	209	1 232	7 448	1 288			D.63	Social transfers in kind	
1 157			1 157							1 157	62	30	1 065				D.631	Social benefits in kind	
9 020			9 020							7 732	147	1 202	6 383	1 288			D.632	Transfers of individual non-market goods and services	
83 517			83 517	2 311	963	67	249	1 110	- 78	9 342	4 482	- 311	1 276	3 517	100	67 282	B.7g	Gross adjusted disposable income	
70 059			70 059	1 578	889	4	197	582	- 95	2 138	2 956	- 319	589	2 686	- 178	63 566	B.7n	Net adjusted disposable income	
																	<i>R23</i>	Total of resources	
																	<i>E23</i>	Total of uses	
80 236			80 236	1 578	889	4	197	582	- 95	2 138	11 845	- 111	1 822	10 134	1 109	63 566			
																		II.4.1: Use of disposable income	
																		B.6g	Gross disposable income
																		B.6n	Net disposable income
66 225			66 225								15 032	365	2 158	12 509	1 288	49 905		P.3	Final consumption
60 082			60 082								8 889	209	1 232	7 448	1 288	49 905		P.31	Individual consumption expenditure
6 143			6 143								6 143	157	926	5 061				P.32	Collective consumption expenditure
752			752	752	752													D.8	Adjustment for the change in the net equity of households in pension funds reserves
17 291			17 291	1 558	211	67	249	1 110	- 78	9 342	- 1 661	- 468	350	- 1 544	100	7 952	B.8g	Gross saving	
3 834			3 834	825	137	4	197	582	- 95	2 138	- 3 187	- 476	- 337	- 2 375	- 178	4 237	B.8n	Net saving	
2 331		2 331															B.12	Current external balance	
																	<i>R241</i>	Total of resources	
																	<i>E241</i>	Total of uses	
70 812			70 812	1 578	889	4	197	582	- 95	2 138	11 845	- 111	1 822	10 134	1 109	54 142			
																		II.4.2: Use of adjusted disposable income	
																		B.7g	Gross adjusted disposable income
																		B.7n	Net adjusted disposable income
66 225			66 225								6 143	157	926	5 061		60 082		P.4	Actual final consumption
60 082			60 082													60 082		P.41	Actual individual consumption
6 143			6 143								6 143	157	926	5 061				P.42	Actual collective consumption
752			752	752	752													D.8	Adjustment for the change in the net equity of households in pension funds reserves
17 291			17 291	1 558	211	67	249	1 110	- 78	9 342	- 1 661	- 468	350	- 1 544	100	7 952	B.8g	Gross saving	
3 834			3 834	825	137	4	197	582	- 95	2 138	- 3 187	- 476	- 337	- 2 375	- 178	4 237	B.8n	Net saving	
2 331		2 331															B.12	Current external balance	
																	<i>R242</i>	Total of resources	
																	<i>E242</i>	Total of uses	
70 812			70 812	1 578	889	4	197	582	- 95	2 138	2 956	- 319	589	2 686	- 178	64 319			

Source: Instituto Nacional de Estatística

Table A.2.3b. Institutional Sector Accounts (in millions of euros) - (II.3.) Distribution of Income in Kind, (II.4.1.) Use of Disposable Income and (II.4.2.) Use of Adjusted Income Accounts (in millions of euros) – Resources

Transactions and other flows stocks and balancing items	S.11	S.12					S.13			S.14	S.15	S.1	Corresponding entries of the		Total			
	Non-Financial Coprorations	S.121	S.122	S.123	S.124	S.125	S.1311	S.1313	S.1314	General Government	Households	Non-Profit Institutions Serving Households (NPISHs)	Total of the Economy	Rest of the world account		Goods and services account (uses)		
		Central Bank	Other Monetary Financial Institutions	Other Financial Intermediaries, except Insur. Corp. and Pens. F.	Financial Auxiliaries	Insurance Corporations and Pension Funds	Financial Corporations	Central Government	Local Government								Social Security Funds	
code																		
II.3: Redistribution of income in kind account																		
B.6g	Gross disposable income	9 342	- 78	1 110	249	67	963	2 311	10 965	2 509	- 102	13 371	57 105	1 388	83 517		Resources	83 517
B.6n	Net disposable income	2 138	- 95	582	197	4	889	1 578	10 134	1 822	- 111	11 845	53 390	1 109	70 059			70 059
D.63	Social transfers in kind												10 177		10 177			10 177
D.631	Social benefits in kind												1 157		1 157			1 157
D.632	Transfers of individual non-market goods and services												9 020		9 020			9 020
B.7g	Gross adjusted disposable income																	
B.7n	Net adjusted disposable income																	
R23	<i>Total of resources</i>	2 138	- 95	582	197	4	889	1 578	10 134	1 822	- 111	11 845	63 566	1 109	80 236			80 236
E23	<i>Total of uses</i>																	
II.4.1: Use of disposable income																		
B.6g	Gross disposable income	9 342	- 78	1 110	249	67	963	2 311	10 965	2 509	- 102	13 371	57 105	1 388	83 517			83 517
B.6n	Net disposable income	2 138	- 95	582	197	4	889	1 578	10 134	1 822	- 111	11 845	53 390	1 109	70 059			70 059
P.3	Final consumption																66 225	66 225
P.31	Individual consumption expenditure																60 082	60 082
P.32	Collective consumption expenditure																6 143	6 143
D.8	Adjustment for the change in the net equity of households in pension funds reserves												752		752			752
B.8g	Gross saving																	
B.8n	Net saving																	
B.12	Current external balance																	
R241	<i>Total of resources</i>	2 138	- 95	582	197	4	889	1 578	10 134	1 822	- 111	11 845	54 142	1 109	70 812			70 812
E241	<i>Total of uses</i>																	
II.4.2: Use of adjusted disposable income																		
B.7g	Gross adjusted disposable income	9 342	- 78	1 110	249	67	963	2 311	3 517	1 276	- 311	4 482	67 282	100	83 517			83 517
B.7n	Net adjusted disposable income	2 138	- 95	582	197	4	889	1 578	2 686	589	- 319	2 956	63 566	- 178	70 059			70 059
P.4	Actual final consumption																66 225	66 225
P.41	Actual individual consumption																60 082	60 082
P.42	Actual collective consumption																6 143	6 143
D.8	Adjustment for the change in the net equity of households in pension funds reserves												752		752			752
B.8g	Gross saving																	
B.8n	Net saving																	
B.12	Current external balance																	
R242	<i>Total of resources</i>	2 138	- 95	582	197	4	889	1 578	2 686	589	- 319	2 956	64 319	- 178	70 812			70 812
E242	<i>Total of uses</i>																	

Table A.2.4a. Institutional Sector Accounts (in millions of euros) - (III) Accumulation Accounts (in millions of euros) – Changes in Assets

Total	Corresponding entries of the		S.1 Total of the Economy	S.12					S.11 Non-Financial Corporations	S.13			S.15 Non-Profit Institutions Serving Households (NPISHs)	S.14 Households	Transactions and other flows stocks and balancing items code			
	Goods and services account (resources)	Rest of the world account		Financial Corporations	S.125 Insurance Corporations and Pension Funds	S.124 Financial Auxiliaries	S.123 Other Financial Intermediaries, except Insur. Corp. and Pens. F.	S.122 Other Monetary Financial Institutions		S.121 Central Bank	General Government	S.1314 Social Security Funds				S.1313 Local Government	S.1311 Central Government	
Changes in assets																III. Accumulation accounts		
																III.1 Capital Account		
																III.1.1: Change in net worth due to saving and capital transfers account		
																B.8n	Gross saving	
																B.12	Current external balance	
																B.8n	Net saving	
																D.9	Capital transfers, receivable	
																D.91	Capital taxes	
																D.92	Investment grants	
																D.99	Other capital transfers	
																D.9	Capital transfers, payable	
																D.91	Capital taxes	
																D.92	Investment grants	
																D.99	Other capital transfers	
6 165		40	6 125	496	136	4	197	286	- 127	3 096	- 2 902	- 522	573	- 2 953	110	5 324	B.10.1	Changes in net worth due to saving and capital transfers
																R3II	<i>Total of changes in liabilities and net worth</i>	
6 165		40	6 125	496	136	4	197	286	- 127	3 096	- 2 902	- 522	573	- 2 953	110	5 324	E3II	<i>Total of changes in assets</i>
																III.1.2: Acquisitions of non-financial assets account		
																B.10.1	Changes in net worth due to saving and capital transfers	
19 623			19 623	922	136	29	370	323	65	9 562	3 018	9	1 218	1 791	366	5 755	P.5	Gross capital formation
18 457			18 457	918	135	29	370	320	63	8 781	3 018	9	1 218	1 791	359	5 383	P.51	Gross fixed capital formation
- 13 457			- 13 457	- 733	- 74	- 63	- 51	- 528	- 17	- 7 204	- 1 526	- 8	- 687	- 831	- 279	- 3 715	K.1	Consumption of fixed capital
1 026			1 026							769					1	255	P.52	Changes in inventories
140			140	4				3	1	12					6	117	P.53	Acquisitions less disposals of valuables
				20	1		- 4	20	3	689	29		- 15	44		- 738	K.2	Acquisitions less disposals of non-produced non-financial assets
				18			- 5	19	3	695	25		- 15	40		- 738	K.21	Acquisitions less disposals of land and other tangible non-produced assets
				2	1			1	- 6	4				4			K.22	Acquisitions less disposals of intangible non-produced assets
		40	- 40	287	73	38	- 117	472	- 178	49	- 4 423	- 523	58	- 3 957	23	4 023	B.9	Net lending (-)/ Net borrowing(-)
																R3I2	<i>Total of changes in liabilities and net worth</i>	
6 125			6 125	496	136	4	197	286	- 127	3 096	- 2 902	- 522	573	- 2 953	110	5 324	E3I3	<i>Total of changes in assets</i>

Source: Instituto Nacional de Estatística

Table A.2.4b. Institutional Sector Accounts (in millions of euros) - (III) Accumulation Accounts (in millions of euros) – Changes in Liabilities and Net Worth

Transactions and other flows stocks and balancing items code	S.11	S.12					S.13			S.14	S.15	S.1	Corresponding entries of the		Total			
	Non-Financial Coprorations	S.121	S.122	S.123	S.124	S.125	Financial Corporations	S.1311	S.1313	S.1314	General Government	House-holds	Non-Profit Institutions Serving House-holds (NPISHs)	Total of the Economy		Rest of the world account	Goods and services account (uses)	
		Central Bank	Other Monetary Financial Institutions	Other Financial Intermediaries, except Insur. Corp. and Pens. F.	Financial Auxilia-ries	Insurance Corporations and Pension Funds	Central Government	Local Government	Social Security Funds									
Changes in liabilities and net worth																		
III. Accumulation accounts																		
III.1 Capital Account																		
III.1.1: Change in net worth due to saving and capital transfers account																		
B.8n	Gross saving	9 342	- 78	1 110	249	67	211	1 558	- 1 544	350	- 468	- 1 661	7 952	100	17 291		17 291	
B.12	Current external balance															2 331	2 331	
B.8n	Net saving	2 138	- 95	582	197	4	137	825	- 2 375	- 337	- 476	- 3 187	4 237	- 178	3 834		3 834	
D.9	Capital transfers, receivable	1 603					814	814	2 239	1 113	22	3 375	1 166	292	7 250	29	7 278	
D.91	Capital taxes								57			57			57		57	
D.92	Investment grants	1 455					2	2	2 029	952	20	3 002	254	292	5 005	2	5 007	
D.99	Other capital transfers	148					812	812	153	161	2	316	911		2 188	27	2 214	
D.9	Capital transfers, payable	- 645	- 33	- 296			- 815	- 1 143	- 2 817	- 203	- 69	- 3 089	- 78	- 4	- 4 959	- 2 320	- 7 278	
D.91	Capital taxes												- 57		- 57		- 57	
D.92	Investment grants								- 2 541	- 197	- 69	- 2 806			- 2 806	- 2 201	- 5 007	
D.99	Other capital transfers	- 645	- 33	- 296			- 815	- 1 143	- 276	- 7		- 283	- 21	- 4	- 2 096	- 118	- 2 214	
B.10.1	Changes in net worth due to saving and capital transfers																	
R31I	Total of changes in liabilities and net worth	3 096	- 127	286	197	4	136	496	- 2 953	573	- 522	- 2 902	5 324	110	6 125	40	6 165	
E31I	Total of changes in assets																	
III.1.2: Acquisitions of non-financial assets account																		
B.10.1	Changes in net worth due to saving and capital transfers	3 096	- 127	286	197	4	136	496	- 2 953	573	- 522	- 2 902	5 324	110	6 125	40	6 165	
P.5	Gross capital formation																19 623	19 623
P.51	Gross fixed capital formation																18 457	18 457
K.1	Consumption of fixed capital																	
P.52	Changes in inventories																1 026	1 026
P.53	Acquisitions less disposals of valuables																140	140
K.2	Acquisitions less disposals of non-produced non-financial assets																	
K.21	Acquisitions less disposals of land and other tangible non-produced assets																	
K.22	Acquisitions less disposals of intangible non-produced assets																	
B.9	Net lending (+)/ Net borrowing(-)																	
R312	Total of changes in liabilities and net worth	3 096	- 127	286	197	4	136	496	- 2 953	573	- 522	- 2 902	5 324	110	6 125		6 125	
E313	Total of changes in assets																	

Table A.3a. Rest of the World Accounts (in millions of euros) – External Accounts (VI) of Goods and Services and (VII) of Primary Income and Current Transfers

Uses					Resources						
S.2	S.22	S.21	S.212	S.211	Transactions and other flows stocks and balancing items		S.21	S.22	S.2		
Rest of the world	Non-member countries and international organisations	European Union	Institutions of the EU	member states of the EU	Code		Institutions of the EU	member states of the EU	European Union	Non-member countries and international organisations	Rest of the world
					V.I: External account of goods and services						
					P.7	Imports of goods and services	21 952		21 952	7 502	29 454
					P.71	Imports of goods	18 912		18 912	5 998	24 911
						goods	19 595		19 595	6 484	26 079
						c.i.f./f.o.b. margins	- 683		- 683	- 485	- 1 168
					P.72	Imports of services	3 040		3 040	1 504	4 543
						services	1 589		1 589	734	2 323
						c.i.f./f.o.b. margins	455		455	438	894
						Direct purchases abroad by residents	996		996	331	1 327
24 433	5 063	19 369		19 369	P.6	Exports of goods and services					
19 444	3 651	15 793		15 793	P.61	Exports of goods					
18 498	3 438	15 060		15 060		goods					
946	213	733		733		Direct purchases by non-residents in the domestic market					
4 989	1 413	3 576		3 576	P.62	Exports of services					
2 658	873	1 785		1 785		services					
- 275	- 47	- 228		- 228		c.i.f./f.o.b. margins					
2 605	586	2 019		2 019		Direct purchases by non-residents in the domestic market					
5 021	2 438	2 583		2 583	B.11	External balance of goods and services					
5 467	2 348	3 119		3 119		External balance of goods					
- 446	91	- 536		- 536		External balance of services					
					V.II: External account of primary income and current transfers						
					B.11	External balance of goods and services	2 583		2 583	2 438	5 021
120	56	64		64	D.1	Compensation of employees	37		37	26	64
120	56	64		64	D.11	Wages and salaries	37		37	26	64
					D.12	Employers' social contribution					
					D.2	Taxes on production and imports		779	779		779
					D.21	Taxes on products		779	779		779
					D.29	Other taxes on production					
					D.3	Subsidies		- 614	- 614		- 614
					D.31	Subsidies on products		- 527	- 527		- 527
					D.39	Other subsidies on production		- 87	- 87		- 87
3 123	1 342	1 781	47	1 734	D.4	Property income	1 945	347	2 292	1 070	3 363
2 683	1 153	1 530	47	1 483	D.41	Interest	1 491	347	1 837	893	2 731
373	103	270		270	D.42	Distributed income of corporations	188		188	84	272
67	86	- 19		- 19	D.43	Reinvested earnings on direct foreign investment				91	352
					D.44	Property income attributed to insurance policyholders				2	8
					D.45	Rents					
					D.5	Current taxes on income, wealth, etc.					
					D.51	Taxes on income					
					D.59	Other current taxes					
					D.61	Social contributions					
29	14	16		16	D.62	Social benefits other than social transfers in kind	18		18	12	30
3 931	1 532	2 398	544	1 855	D.7	Other current transfers	325	221	547	345	892
33	14	18		18	D.71	Net non-life insurance premiums				29	116
25	8	17		17	D.72	Non-life insurance claims				6	52
550	9	541	541		D.74	Current international cooperation				74	87
3 323	1 501	1 822	3	1 819	D.75	Miscellaneous current transfers				237	637
2 331	948	1 383	142	1 241	B.12	Current External balance					

Source: Instituto Nacional de Estatística

Table A.3b. Rest of the World Accounts (in millions of euros) – External Accumulation Accounts (VIII)

Uses					Resources					
S.2	S.22	S.21		Transactions and other flows stocks and balancing items		S.21		S.22	S.2	
Rest of the world	Non-member countries and international organisations	European Union	S.212	S.211	Code	S.211	S.212	European Union	Non-member countries and international organisations	Rest of the world
			Institutions of the EU	member states of the EU		Institutions of the EU	member states of the EU			
					V.III External accumulation accounts					
					V. III.1 Capital accounts					
					V. III.1.1: Change in net worth due to saving and capital transfers account					
					B.12 Current External balance	1 241	142	1 383	948	2 331
					D.9 Capital transfers, receivable	11		11	18	29
					D.91 Capital taxes					
					D.92 Investment grants				2	2
					D.99 Other capital transfers				16	27
					D.9 Capital transfers, payable	- 42	- 2 234	- 2 275	- 44	- 2 320
					D.91 Capital taxes					
					D.92 Investment grants	- 4	- 2 198	- 2 201		- 2 201
					D.99 Other capital transfers	- 38	- 36	- 74	- 44	- 118
40	922	- 882	- 2 092	1 210	B.10.1 Changes in net worth due to saving and capital transfers					
					V.III.1.2: Acquisition of non-financial assets account					
					B.10.1 Changes in net worth due to saving and capital transfers	1 210	- 2 092	- 882	922	40
					K.2 Acquisitions less disposals of non-financial non-produced assets					
					K21 Acquisitions less disposals of land and other tangible non-produced assets					
					K22 Acquisitions less disposals of intangible non-produced assets					
40	922	- 882	- 2 092	1 210	B.9 Net lending (+)/borrowing (-)					

Table A.4a. Supply of products at basic prices (current prices, in millions of euros) – Output of goods and services by activities 01-24

Products	Output of goods and services by activities (P.1)																							
	01	02	05	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24						
01	4 902	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
02	0	704	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
05	0	0	454	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
13	0	0	0	0	0	0	211	0	0	0	0	0	0	0	0	0	0	0						
14	0	0	0	0	0	0	0	396	0	0	0	0	0	0	0	0	0	0						
15	375	0	0	0	0	0	0	0	10 161	0	0	0	0	0	0	0	0	0						
16	0	0	0	0	0	0	0	0	0	119	0	0	0	0	0	0	0	0						
17	0	0	0	0	0	0	0	0	0	0	4 585	0	0	0	0	0	0	0						
18	0	0	0	0	0	0	0	0	0	0	0	3 987	0	0	0	0	0	0						
19	0	0	0	0	0	0	0	0	0	0	0	0	2 395	0	0	0	0	0						
20	2	0	0	0	0	0	0	0	0	0	0	0	0	2 031	0	0	0	0						
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2 527	0	0	0						
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 675	0	0						
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 587	0						
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3 267						
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
29	2	0	0	0	0	0	1	1	1	0	1	0	0	1	10	0	0	5						
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
40	0	0	0	0	0	0	0	0	0	0	27	0	0	3	146	0	61	1						
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
45	2	0	0	0	0	0	2	0	3	0	2	0	0	1	0	0	0	2						
50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
70	2	0	0	0	0	0	0	0	5	0	3	1	0	1	0	2	0	2						
71	5	0	0	0	0	0	0	0	2	0	1	0	0	0	1	1	0	1						
72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
73	0	0	0	0	0	1	0	0	3	0	2	0	0	1	1	2	4	9						
74	9	0	1	0	0	0	0	2	47	3	22	5	3	8	14	10	31	19						
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Adjustment items:																								
c.i.f./f.o.b. on imports	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
direct purchases abroad by residents	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						
Total	5 300	705	456	0	0	1	214	400	10 221	122	4 644	3 994	2 399	2 047	2 700	1 691	1 688	3 302						

Source: Instituto Nacional de Estatística

See Tables A.7 and A.8 for the description of codes and grouping of products and activities

Table A.4b. Supply of products at basic prices (current prices, in millions of euros) – Output of goods and services by activities 25-51

Products	Output of goods and services by activities (P.1)																	
	25	26	27	28	29	30	31	32	33	34	35	36	37	40	41	45	50	51
01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	1 333	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	2 921	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	1 212	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	1	1 556	0	0	0	0	0	0	0	0	0	0	0	1	0	0
29	1	3	1	1	1 746	0	2	2	0	1	1	0	0	0	0	9	0	2
30	0	0	0	0	0	209	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	1 634	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	1 238	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	327	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	2 466	0	0	0	0	0	2	0	0
35	0	0	0	0	0	0	0	0	0	0	667	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	1 699	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	88	0	0	0	0	0
40	0	2	0	0	0	0	0	0	0	0	0	0	0	4 609	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	391	0	0	0
45	0	2	0	1	1	0	1	0	0	1	4	1	0	28	17	14 191	2	1
50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4 243	0
51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9 306
52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
64	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
70	0	1	0	1	1	0	1	0	0	0	0	1	0	0	0	0	13	0
71	0	3	0	0	0	0	0	0	0	1	2	0	0	0	0	0	3	10
72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
73	1	1	0	2	5	1	8	14	1	1	5	0	0	6	0	0	0	1
74	5	32	1	5	5	0	14	14	2	19	3	3	0	45	1	0	21	130
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	0	0	0
91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjustment items:																		
c.i.f./f.o.b. on imports	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
direct purchases abroad by residents	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1 341	2 964	1 223	1 566	1 758	210	1 660	1 268	331	2 489	682	1 705	88	4 688	459	14 204	4 283	9 451

Table A.4c. Supply of products at basic prices (current prices, in millions of euros) – Output of goods and services by activities 52-85

Products	Output of goods and services by activities (P.1)																	
	52	55	60	61	62	63	64	65	66	67	70	71	72	73	74	75	80	85
01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	1	0
23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	1	9	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	0	0
45	1	1	0	0	0	7	0	0	0	2	0	0	0	0	12	27	0	0
50	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52	4 808	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
55	0	5 581	0	0	0	0	0	0	0	0	0	0	0	0	0	49	1	18
60	0	0	2 240	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
61	0	0	0	467	0	0	0	0	0	0	0	0	0	0	0	0	0	0
62	0	0	0	0	998	0	0	0	0	0	0	0	0	0	0	0	0	0
63	0	0	0	0	0	1 423	0	0	0	0	0	0	0	0	0	6	0	0
64	0	0	0	0	0	0	2 671	0	0	0	0	0	0	0	0	0	0	0
65	0	0	0	0	0	0	0	4 349	0	0	0	0	0	0	0	0	0	0
66	0	0	0	0	0	0	0	0	1 028	0	0	0	0	0	0	0	0	0
67	0	0	0	0	0	0	0	0	0	387	0	0	0	0	0	0	0	0
70	0	28	4	0	0	11	0	83	76	0	5 915	0	0	0	146	42	1	14
71	2	1	7	0	0	3	1	0	0	0	2	934	1	0	10	33	0	0
72	0	0	0	0	0	0	0	0	0	0	0	0	608	0	5	0	0	0
73	0	0	5	0	0	0	8	0	0	0	0	0	3	142	2	0	1	0
74	173	26	29	2	0	16	187	178	0	2	30	0	0	3	7 061	677	32	3
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6 950	0	5
80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5 611	0
85	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	0	6 454
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0
91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	1	2
93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjustment items:																		
c.i.f./f.o.b. on imports	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
direct purchases abroad by residents	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	4 985	5 639	2 312	470	999	1 464	2 868	4 611	1 104	389	5 949	935	612	145	7 241	7 906	5 648	6 496

Table A.4d. Supply of products at basic prices (current prices, in millions of euros) – Output of goods and services by activities 90-95 and Total Output; Imports of goods and services; Total supply at basic prices; Trade and transport margins; Taxes and subsidies on products; Total supply at purchasers' prices

Products	Output of goods and services by activities (P.1)					Total of activities	Imports of goods and services (P.7)		Total of supply at basic prices	Trade and Transport Margins	Taxes on products (D.21)	Subsidies on products (D.31)	Total supply at purchasers prices	
	90	91	92	93	95		Imports of goods (P.71)	Imports of services (P.72)						
01	0	0	0	0	0	4 903	1 470	0	1 470	6 373	961	146	- 427	7 052
02	0	0	0	0	0	707	209	0	209	916	63	3	0	982
05	0	0	0	0	0	454	63	0	63	517	213	19	- 2	746
10	0	0	0	0	0	0	192	0	192	193	26	0	0	219
11	0	0	0	0	0	0	1 267	0	1 267	1 267	0	0	0	1 267
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	211	19	0	19	230	0	0	0	230
14	0	0	0	0	0	397	96	0	96	493	83	17	0	592
15	0	0	0	0	0	10 543	2 360	0	2 360	12 904	3 050	904	- 125	16 733
16	0	0	0	0	0	119	39	0	39	157	104	946	0	1 207
17	0	0	0	0	0	4 585	1 550	0	1 550	6 135	935	165	0	7 235
18	0	0	0	0	0	3 987	540	0	540	4 527	1 212	320	- 3	6 056
19	0	0	0	0	0	2 395	614	0	614	3 009	425	103	0	3 537
20	0	0	0	0	0	2 034	177	0	177	2 211	171	53	0	2 435
21	0	0	0	0	0	2 527	598	0	598	3 125	437	34	0	3 597
22	0	1	1	0	0	1 698	199	0	199	1 896	322	68	- 2	2 284
23	0	0	0	0	0	1 594	617	0	617	2 211	952	2 611	0	5 773
24	0	0	0	0	0	3 267	2 768	0	2 768	6 035	1 402	240	0	7 677
25	0	0	0	0	0	1 333	798	0	798	2 131	496	77	0	2 703
26	0	0	0	0	0	2 921	335	0	335	3 256	198	140	0	3 594
27	0	0	0	0	0	1 212	1 611	0	1 611	2 823	400	40	- 6	3 258
28	0	0	0	0	0	1 560	540	0	540	2 100	277	62	0	2 440
29	0	0	0	0	0	1 809	2 167	0	2 167	3 976	855	116	0	4 947
30	0	0	0	0	0	209	621	0	621	830	190	96	0	1 117
31	0	0	0	0	0	1 634	948	1	949	2 583	390	56	0	3 030
32	0	0	0	0	0	1 238	1 270	0	1 270	2 508	280	102	0	2 889
33	0	0	0	0	0	327	508	0	508	835	203	66	0	1 105
34	0	0	0	0	0	2 472	3 325	0	3 325	5 796	655	1 151	0	7 602
35	0	0	0	0	0	670	537	3	540	1 210	53	29	- 6	1 286
36	0	0	0	0	0	1 699	482	0	482	2 181	770	210	0	3 161
37	1	0	0	0	0	89	0	0	0	89	0	0	0	89
40	0	0	0	0	0	4 854	83	0	83	4 937	0	76	0	5 013
41	0	0	0	0	0	438	1	0	1	439	0	12	- 20	431
45	1	0	0	0	0	14 317	0	2	2	14 319	0	434	0	14 754
50	0	0	0	0	0	4 254	1	0	2	4 256	- 1 511	190	0	2 934
51	0	0	0	0	0	9 306	18	140	159	9 465	- 8 972	0	0	492
52	0	0	0	0	0	4 811	0	0	0	4 811	- 4 639	24	0	196
55	0	0	0	0	0	5 649	0	270	270	5 920	0	701	0	6 620
60	0	0	0	0	0	2 243	0	27	27	2 270	0	37	- 156	2 150
61	0	0	0	0	0	467	0	27	27	494	0	2	- 2	494
62	0	0	0	0	0	998	0	321	321	1 319	0	7	- 25	1 300
63	0	0	0	0	0	1 430	0	69	69	1 499	0	58	0	1 557
64	0	0	0	0	0	2 671	0	193	193	2 865	0	176	0	3 041
65	0	0	0	0	0	4 349	0	140	140	4 489	0	104	0	4 593
66	0	0	0	0	0	1 028	0	48	48	1 076	0	113	0	1 189
67	0	0	0	0	0	387	0	59	59	446	0	2	0	448
70	0	3	10	0	0	6 367	0	0	1	6 368	0	19	0	6 387
71	0	0	1	0	0	1 026	0	90	90	1 115	0	98	0	1 213
72	0	0	0	0	0	613	36	57	93	706	0	45	0	751
73	0	0	0	0	0	233	0	13	13	246	0	2	- 1	247
74	0	6	29	0	0	8 930	4	713	717	9 647	0	1 069	- 10	10 705
75	0	0	0	0	0	6 955	0	0	0	6 955	0	0	0	6 955
80	0	0	0	0	0	5 611	0	0	0	5 611	0	2	0	5 613
85	0	0	0	2	0	6 472	0	0	0	6 472	0	29	0	6 501
90	146	0	0	0	0	199	0	0	0	199	0	0	0	199
91	0	671	0	0	0	671	0	0	0	671	0	0	0	671
92	0	32	2 215	12	0	2 269	16	147	163	2 432	0	326	- 44	2 714
93	0	0	0	819	0	831	0	2	2	833	0	67	0	901
95	0	0	0	0	418	418	0	0	0	418	0	0	0	418
Adjustment items:														
c.i.f./f.o.b. on imports	0	0	0	0	0	0	- 1 168	894	- 275	- 275	0	0	0	- 275
direct purchases abroad by residents	0	0	0	0	0	0	0	1 327	1 327	1 327	0	0	0	1 327
Total	147	713	2 257	834	418	154 394	24 911	4 543	29 454	183 848	0	11 364	- 830	194 383

Table A.5a. Use of products at purchasers' prices (current prices, in millions of euros) – Intermediate consumption by activities 01-26

Products	Intermediate consumption by activities (P.2)																			
	01	02	05	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
01	564	5	0	0	0	0	0	0	3 440	24	282	14	0	2	0	0	0	4	12	0
02	0	0	0	0	0	0	0	0	0	0	0	0	0	499	266	0	0	9	0	0
05	0	0	36	0	0	0	0	0	86	0	0	0	0	0	0	0	0	0	0	0
10	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 229	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	6	3	0	0	0	0	0	0	10	0	0	18	0	256
15	1 139	0	0	0	0	0	0	2 588	0	0	0	93	0	11	0	0	15	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	2	0	0	0	8	0	0	1 474	1 946	69	1	0	2	0	14	23	13	0
18	0	0	0	0	0	1	2	6	1	3	489	1	1	2	2	4	5	0	2	0
19	0	0	0	0	0	0	0	0	0	17	1 081	0	0	0	0	0	0	0	0	0
20	5	0	0	0	0	0	0	13	0	2	0	2	568	14	0	0	1	2	11	0
21	30	0	8	0	0	0	2	213	5	24	19	30	21	797	396	0	58	15	70	0
22	5	0	0	0	0	1	3	70	1	33	15	9	5	1	221	4	14	1	8	0
23	161	10	27	0	0	7	50	39	0	45	15	6	12	10	6	146	122	7	16	0
24	233	1	2	0	0	4	27	42	0	521	5	128	67	94	61	69	1 399	569	189	0
25	0	0	2	0	0	0	0	136	0	24	12	78	24	18	37	0	35	144	27	0
26	15	0	0	0	0	0	0	77	0	0	0	0	1	0	0	0	7	5	522	0
27	0	0	0	0	0	0	0	0	0	1	0	3	1	0	6	0	16	9	105	0
28	10	0	3	0	0	0	6	133	0	9	10	17	7	3	2	0	49	11	5	0
29	27	9	0	0	0	7	3	49	1	26	19	11	18	1	1	1	13	10	133	0
30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	4	67	2	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	5	12	0
40	57	0	3	0	0	5	15	65	1	104	21	20	17	192	18	63	25	18	100	0
41	0	0	0	0	0	0	0	21	0	2	2	0	1	0	1	1	3	0	2	0
45	25	0	5	0	0	1	13	27	1	19	14	8	14	15	10	13	19	7	34	0
50	75	3	6	0	0	0	7	15	0	10	8	4	6	7	6	4	9	4	17	0
51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55	1	1	1	0	0	0	4	19	0	11	13	10	10	6	17	1	15	9	8	0
60	12	13	0	0	0	7	24	77	2	29	21	10	40	60	14	23	35	17	54	0
61	0	0	0	0	0	0	0	1	0	4	4	1	0	9	1	67	1	2	7	0
62	2	0	3	0	0	0	0	2	0	6	0	1	0	0	1	0	0	0	1	0
63	1	0	0	0	0	0	0	3	0	2	3	1	0	3	1	0	2	1	1	0
64	0	2	1	0	0	0	2	13	0	10	11	6	5	27	19	1	8	4	10	0
65	8	1	1	0	0	2	2	25	0	21	9	5	12	4	3	2	13	3	9	0
66	3	0	3	0	0	1	2	19	0	18	10	7	9	10	4	6	11	4	11	0
67	2	0	0	0	0	1	1	7	0	6	3	2	4	1	1	1	4	1	3	0
70	3	0	0	0	0	9	25	3	10	15	3	6	6	17	8	27	4	14	0	0
71	17	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0
73	0	0	0	0	1	0	0	3	0	3	0	0	1	3	2	4	9	1	1	0
74	48	10	13	0	0	2	12	567	4	148	111	49	37	102	210	42	302	52	107	0
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	1	0	1	0	0	3	2	25	2	14	10	5	4	11	7	12	20	4	11	0
85	22	0	0	0	0	0	0	13	0	2	1	1	1	0	4	0	1	0	1	0
90	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
91	1	0	0	0	0	0	0	5	0	4	3	2	1	3	1	0	3	0	3	0
92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	0	0	0	0	0
93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjustment items:																				
c.i.f./f.o.b. on exports	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
direct purchases abroad by residents	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
direct purchases by non-residents in the domestic market	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2 472	58	121	0	0	2	44	201	7 826	47	2 871	2 885	1 665	1 395	1 700	1 114	1 702	2 287	947	1 785
Gross added value (B1)	2 828	647	334	0	0	0	169	198	2 395	75	1 773	1 109	733	652	1 000	576	- 14	1 015	394	1 179
Compensation of employees[D.1(T.-S.2)]	490	29	134	0	0	1	27	118	1 261	23	1 009	815	484	368	295	371	50	557	237	629
Other net taxes on production (D.29-D.39)	- 163	0	- 7	- 2	0	0	0	- 1	- 18	0	5	2	- 9	- 7	- 1	- 8	2	4	- 3	- 4
Gross operating surplus/ Gross mixed income (B.2g/B.3g)	2 501	618	207	2	0	- 1	143	81	1 152	52	760	292	258	291	705	214	- 66	453	160	554
Consumption of fixed capital (K.1)	374	50	15	0	0	7	16	42	427	9	269	70	44	65	79	50	54	158	103	270
Net operating surplus/ Net mixed income (B.2n/B.3n)	2 127	568	193	2	0	- 9	127	39	725	43	490	221	215	226	626	164	- 119	295	57	285
Output of goods and serv. at basic prices (P.1)	5 300	705	456	0	0	1	214	400	10 221	122	4 644	3 994	2 399	2 047	2 700	1 691	1 688	3 302	1 341	2 964

Source: Instituto Nacional de Estatística

See Tables A.7 and A.8 for the description of codes and grouping of products and activities

Table A.5b. Use of products at purchasers' prices (current prices, in millions of euros) – Intermediate consumption by activities 27-61

Products	Intermediate consumption by activities (P.2)																			
	27	28	29	30	31	32	33	34	35	36	37	40	41	45	50	51	52	55	60	61
01	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	290	0	0
02	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
05	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79	0	0
10	24	0	0	0	0	0	0	0	0	0	0	158	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	17	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	2	1	0	0	0	0	0	0	0	0	0	0	0	210	0	0	0	5	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 930	0	0
16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	29	0	105	0	0	0	84	50	64	24	76	1	0
18	2	2	2	0	4	3	0	8	1	7	0	12	0	6	2	15	4	18	1	1
19	0	0	0	0	0	0	0	1	0	13	0	0	0	0	0	8	2	0	0	0
20	1	31	2	0	1	1	0	3	1	205	0	23	0	467	0	53	30	2	0	0
21	1	11	15	0	5	6	2	5	4	27	9	0	1	3	69	86	34	14	0	0
22	11	20	2	0	1	2	2	1	0	10	0	1	2	46	62	97	114	1	11	6
23	8	19	9	0	3	1	1	4	2	28	1	198	10	420	93	49	46	212	395	22
24	4	37	26	0	43	5	4	41	13	51	2	1	17	195	39	60	46	38	2	0
25	0	35	64	0	163	84	36	97	5	79	0	0	1	139	78	140	54	2	16	0
26	0	11	24	0	13	0	10	91	1	12	0	1	0	1 734	9	33	15	30	0	0
27	414	769	292	0	220	5	3	177	148	213	25	4	3	428	0	0	0	0	0	0
28	6	82	107	17	6	5	2	129	5	32	0	6	1	560	46	179	55	29	0	0
29	4	40	511	3	16	7	1	34	27	9	1	0	9	242	26	22	7	20	0	0
30	0	0	0	106	0	4	0	0	0	0	0	0	0	0	0	10	2	3	5	0
31	0	0	114	2	386	134	8	127	2	0	0	29	0	387	103	69	22	110	0	0
32	0	0	31	10	69	631	30	20	0	0	0	0	0	22	40	0	0	0	0	0
33	0	0	24	0	7	14	45	31	0	5	0	31	0	0	39	12	4	0	0	0
34	0	0	3	0	0	0	0	1 152	3	0	0	0	0	0	317	8	3	0	29	0
35	0	0	0	0	0	0	0	0	72	1	0	0	0	0	5	3	1	3	2	1
36	0	1	2	0	0	0	0	38	9	159	0	1	0	100	23	126	55	58	0	0
37	59	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40	50	29	17	0	10	5	2	13	10	15	1	1 830	17	45	38	178	70	148	27	0
41	0	1	1	0	1	0	0	1	1	0	0	0	48	9	3	19	9	32	2	0
45	6	11	7	0	4	3	1	7	2	6	1	5	3	3 394	11	73	25	35	57	8
50	4	6	4	0	2	2	0	4	1	3	0	0	5	48	93	242	101	61	57	4
51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	347	0	0	0	0
52	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	16	0	0
55	3	20	17	1	7	6	2	5	3	13	0	3	2	96	36	286	83	31	11	1
60	17	13	18	0	16	6	2	8	2	15	1	0	1	48	58	212	99	1	70	2
61	0	5	0	0	0	0	0	3	8	0	0	0	0	2	2	30	10	0	0	129
62	0	0	0	0	1	1	0	2	1	1	0	0	0	0	17	135	48	0	0	0
63	0	1	1	0	1	1	0	1	0	1	0	1	18	4	46	307	169	38	3	50
64	1	9	7	0	4	3	1	4	1	6	0	12	5	48	24	182	110	20	15	1
65	1	3	20	0	3	3	2	3	2	7	0	16	0	30	20	29	25	11	5	0
66	2	6	5	0	3	2	1	5	4	5	0	12	0	45	14	42	9	7	28	3
67	0	1	6	0	1	1	1	1	1	2	0	4	0	16	6	14	13	3	1	0
70	6	7	8	0	7	10	1	6	11	4	0	5	1	99	72	141	150	59	25	24
71	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	195	99	36	0	0
72	0	0	4	0	1	1	0	0	0	0	0	28	1	0	0	18	12	2	55	5
73	0	2	6	1	10	21	2	1	7	0	0	6	0	0	0	2	0	0	6	0
74	28	60	57	4	38	48	15	53	15	86	1	124	22	372	318	563	268	199	84	16
75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	6	8	9	0	12	12	1	15	9	4	0	1	2	24	11	34	9	15	13	1
85	0	1	1	0	0	0	0	1	0	1	0	0	0	6	3	11	6	6	1	0
90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0
91	1	1	1	0	1	0	0	1	1	1	0	5	0	8	4	13	20	4	3	1
92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	5	12	0	0
93	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	41	0	0
95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjustment items:																				
cif/f.o.b. on exports	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
direct purchases abroad by residents	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
direct purchases by non-residents in the domestic market	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	680	1 246	1 419	145	1 061	1 023	176	2 116	373	1 135	46	2 516	171	9 337	1 737	4 145	1 865	3 704	925	273
Gross added value (B1)	543	320	339	66	599	245	154	372	309	570	43	2 172	288	4 867	2 545	5 306	3 119	1 935	1 387	197
Compensation of employees(D.1(T.-S.2))	245	285	245	29	431	172	67	346	223	385	16	430	139	2 589	862	2 259	1 673	1 106	923	45
Other net taxes on production (D.29-D.39)	1	- 5	2	0	- 4	- 1	- 1	0	- 2	1	0	8	- 1	- 25	- 2	- 12	- 14	- 10	- 55	- 4
Gross operating surplus/ Gross mixed income (B.2g/B.3g)	296	40	92	36	172	74	88	26	88	183	27	1 733	150	2 303	1 685	3 058	1 461	839	519	156
Consumption of fixed capital (K.1)	41	97	131	2	125	105	20	203	45	41	3	355	87	569	312	294	359	307	529	103
Net operating surplus/ Net mixed income (B.2n/B.3n)	255	- 57	- 39	34	47	- 31	68	- 177	43	143	24	1 378	64	1 734	1 373	2 764	1 102	533	- 10	53
Output of goods and serv. at basic prices (P.1)	1 223	1 566	1 758	210	1 660	1 268	331	2 489	682	1 705	88	4 688	459	14 204	4 283	9 451	4 985	5 639	2 312	470

Table A.5c. Use of products at purchasers' prices (current prices, in millions of euros) – Intermediate consumption by activities 62-100

		Intermediate consumption by activities (P.2)																			
		62	63	64	65	66	67	70	71	72	73	74	75	80	85	90	91	92	93	95	100
Products																					
01		0	0	0	0	0	0	0	0	0	0	0	0	1	73	0	0	0	0	0	0
02		0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
05		0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14		0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
15		0	0	0	0	0	0	0	0	0	0	0	51	30	304	0	0	0	0	0	0
16		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17		0	0	0	0	0	0	0	0	0	0	2	4	1	151	0	0	0	9	0	0
18		9	2	17	0	0	0	1	0	0	0	12	1	2	36	0	0	38	0	0	0
19		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20		0	0	0	0	0	0	0	0	0	0	10	1	0	0	0	0	17	46	0	0
21		0	6	0	4	1	0	9	1	8	2	177	33	22	10	0	9	11	3	0	0
22		43	62	14	83	10	5	113	20	18	1	298	28	32	68	0	24	19	10	0	0
23		52	52	10	1	4	0	23	13	3	2	52	257	39	310	9	19	13	10	0	0
24		0	1	0	2	0	0	5	0	1	6	31	14	12	552	0	12	29	102	0	0
25		0	0	0	0	0	0	0	0	3	0	119	3	2	0	0	0	13	0	0	0
26		0	1	0	0	0	0	0	0	0	1	19	28	5	1	0	0	0	0	0	0
27		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28		1	0	1	9	0	2	0	0	0	0	90	20	6	19	0	0	15	0	0	0
29		0	0	0	0	0	0	0	16	0	0	0	75	2	8	0	0	0	0	0	0
30		2	1	1	46	0	8	0	0	0	0	0	17	7	0	0	0	2	0	0	0
31		0	2	54	7	24	1	0	0	0	0	0	28	7	9	1	2	0	0	0	0
32		0	0	77	0	0	0	0	0	0	0	0	5	2	0	0	0	24	0	0	0
33		0	0	0	0	0	0	0	0	0	2	5	4	3	62	0	0	74	0	0	0
34		0	0	0	0	0	0	0	0	0	0	1	11	1	3	1	1	0	0	0	0
35		31	0	0	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	0	0
36		0	0	0	0	0	0	3	0	0	0	2	21	22	13	0	8	26	4	0	0
37		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40		2	26	19	49	6	1	51	1	1	3	153	132	66	48	2	43	22	21	0	0
41		0	4	1	3	1	0	4	0	0	1	5	29	18	18	1	13	4	8	0	0
45		15	40	17	34	0	6	423	9	4	1	49	38	14	33	0	14	14	14	0	0
50		5	17	6	6	0	1	15	14	2	0	27	37	8	36	1	2	6	5	0	0
51		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
52		0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
55		1	68	2	63	18	4	23	3	10	2	178	143	52	47	0	10	14	5	0	0
60		1	82	7	5	0	0	17	1	2	1	60	25	18	7	5	21	4	2	0	0
61		0	0	2	0	0	0	2	0	0	1	20	0	3	1	0	0	0	0	0	0
62		139	13	6	0	0	0	21	1	3	0	54	20	15	9	0	21	8	2	0	0
63		115	16	0	0	0	0	6	1	2	0	19	7	1	44	2	0	3	1	0	0
64		7	82	477	164	36	6	32	5	4	1	63	85	49	41	0	105	22	7	0	0
65		2	2	9	27	0	6	5	6	2	0	51	33	3	6	0	0	17	1	0	3 688
66		4	3	5	7	5	0	2	14	1	0	12	3	2	2	0	1	2	0	0	0
67		1	1	3	65	183	0	1	2	1	0	15	0	1	1	0	0	5	0	0	0
70		8	30	23	107	32	20	143	11	16	0	97	42	25	27	0	9	26	7	0	0
71		0	1	0	34	5	1	0	0	2	2	84	45	107	73	1	28	8	0	0	0
72		11	14	36	80	0	3	33	11	4	0	70	40	16	45	0	3	15	9	0	0
73		0	0	8	0	0	0	0	0	3	7	2	11	4	0	0	0	0	0	0	0
74		33	132	184	241	106	68	501	50	96	32	1 563	281	268	501	22	151	440	86	0	0
75		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80		28	10	74	23	0	0	2	1	2	0	23	22	4	1	0	0	10	0	0	0
85		0	2	0	0	0	0	5	2	2	0	26	1	8	167	0	0	6	1	0	0
90		0	0	0	0	0	0	0	0	0	0	0	9	1	3	0	1	0	0	0	0
91		1	2	5	0	0	0	1	2	1	0	7	1	1	2	0	0	1	0	0	0
92		0	0	0	11	0	1	2	0	3	0	599	17	0	1	0	93	97	0	0	0
93		0	0	0	0	0	0	1	0	0	0	0	5	40	27	0	8	87	10	0	0
95		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjustment items:																					
c.i.f./o.b. on exports		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
direct purchases abroad by residents		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
direct purchases by non-residents in the domestic market		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total		512	670	1 057	1 067	431	132	1 442	190	193	67	3 998	1 652	923	2 761	48	599	1 091	363	0	3 688
Gross added value (B1)		487	794	1 810	3 543	673	257	4 507	745	420	79	3 243	6 254	4 725	3 736	99	114	1 166	471	418	- 3 688
Compensation of employees[D.1(T.-S.2)]		156	447	750	1 870	396	43	215	92	252	82	1 262	5 116	4 188	2 709	59	128	919	92	418	0
Other net taxes on production (D.29-D.39)		0	- 21	- 1	- 4	- 1	2	- 25	6	1	- 1	6	- 2	- 53	- 2	0	- 6	0	0	0	0
Gross operating surplus/ Gross mixed income (B.2g/B.3g)		331	368	1 061	1 678	278	211	4 317	647	167	- 2	1 975	1 141	590	1 029	39	- 8	247	379	0	- 3 688
Consumption of fixed capital (K.1)		243	76	236	597	74	63	3 590	186	34	20	166	1 188	271	284	39	20	527	13	0	0
Net operating surplus/ Net mixed income (B.2n/B.3n)		88	292	825	1 082	204	149	727	461	133	- 22	1 809	- 48	318	745	1	- 28	- 280	366	0	- 3 688
Output of goods and serv. at basic prices (P.1)		999	1 464	2 868	4 611	1 104	389	5 949	935	612	145	7 241	7 906	5 648	6 496	147	713	2 257	834	418	0

Table A.5d. Use of products at purchasers' prices (current prices, in millions of euros) – Total intermediate consumption by activities; Final consumption; Gross Capital Formation; Exports of goods and services; Total uses at purchasers' prices

Products	(P.2) Total of activities	Final consumption (P.3)			Gross capital formation (P.5)			Exports of goods and serv. (P.6)			Total uses at purcha- sers prices		
		General Govern- ment (S.13)	House- holds (S.14)	NPISHs (S.15)	Gross fi- xed capi- tal forma- tion(P.51)	Changes in inven- tories (P.52)	Acquisi- tions less disposals of valua- bles(P.53)	Exports of goods (P.61)	Exports of services (P.62)				
01	4 712	18	1 977	0	1 995	195	38	0	233	112	0	112	7 052
02	777	0	67	0	67	32	55	0	87	51	0	51	982
05	205	0	502	0	502	0	- 2	0	- 2	42	0	42	746
10	206	0	0	0	0	0	12	0	12	0	0	0	219
11	1 229	0	0	0	0	0	38	0	38	0	0	0	1 267
12	0	0	0	0	0	0	0	0	0	1	0	1	0
13	19	0	0	0	0	0	0	0	0	211	0	211	230
14	512	0	7	0	7	0	23	0	23	50	0	50	592
15	6 161	0	9 362	0	9 362	0	8	0	8	1 202	0	1 202	16 733
16	0	0	1 198	0	1 198	0	4	0	4	5	0	5	1 207
17	4 152	0	1 137	0	1 137	9	76	0	85	1 862	0	1 862	7 235
18	725	0	2 801	0	2 801	0	20	0	20	2 510	0	2 510	6 056
19	1 122	0	905	0	905	0	24	0	24	1 487	0	1 487	3 537
20	1 513	0	84	0	84	3	18	0	21	816	0	816	2 435
21	2 277	0	138	0	138	0	90	0	90	1 093	0	1 093	3 597
22	1 629	0	603	0	603	0	6	0	6	46	0	46	2 284
23	3 067	0	2 130	0	2 130	0	- 13	0	- 13	590	0	590	5 773
24	4 802	623	1 354	0	1 977	0	20	0	20	878	0	878	7 677
25	1 670	0	594	0	594	62	51	0	112	327	0	327	2 703
26	2 666	0	128	0	128	0	17	0	17	783	0	783	3 594
27	2 842	0	1	0	1	0	143	65	208	208	0	208	3 258
28	1 697	0	70	0	70	168	22	0	189	484	0	484	2 440
29	1 408	0	448	0	448	2 327	16	0	2 342	748	0	748	4 947
30	217	0	59	0	59	804	0	0	804	36	0	36	1 117
31	1 630	0	84	0	84	192	5	0	197	1 119	0	1 119	3 030
32	961	0	460	0	460	439	67	0	506	962	0	962	2 889
33	361	0	179	0	179	344	8	1	353	212	0	212	1 105
34	1 534	0	3 196	0	3 196	1 000	43	0	1 043	1 829	0	1 829	7 602
35	141	0	157	0	157	552	41	0	593	392	3	395	1 286
36	747	0	1 637	0	1 637	319	17	56	392	384	0	384	3 161
37	89	0	- 2	0	- 2	0	2	0	2	0	0	0	89
40	3 876	0	1 085	0	1 085	0	0	0	0	53	0	53	5 013
41	272	5	153	0	159	0	0	0	0	0	0	0	431
45	4 606	0	74	0	74	9 921	152	0	10 072	0	1	1	14 754
50	1 009	0	1 638	0	1 638	287	0	0	287	0	1	1	2 934
51	347	0	0	0	0	0	18	0	18	2	125	127	492
52	31	0	165	0	165	0	0	0	0	0	0	0	196
55	1 395	1	5 143	0	5 144	0	0	0	0	0	81	81	6 620
60	1 284	36	493	0	529	0	0	0	0	0	338	338	2 150
61	318	0	18	0	18	0	0	0	0	0	158	158	494
62	534	0	90	0	90	0	0	0	0	0	676	676	1 300
63	877	0	443	0	443	0	0	0	0	0	237	237	1 557
64	1 757	0	1 029	0	1 029	0	0	0	0	0	255	255	3 041
65	4 160	0	267	0	267	0	0	0	0	0	166	166	4 593
66	373	0	776	0	776	0	0	0	0	0	39	39	1 189
67	384	0	32	0	32	0	0	0	0	0	32	32	448
70	1 412	2	4 185	8	4 196	779	0	0	779	0	0	0	6 387
71	741	0	456	0	456	0	0	0	0	0	16	16	1 213
72	522	0	22	0	22	172	3	0	176	1	31	32	751
73	129	71	0	35	105	0	0	0	0	0	12	12	247
74	8 945	4	650	0	654	712	5	0	716	0	390	391	10 705
75	0	6 791	88	75	6 955	0	0	0	0	0	0	0	6 955
80	517	4 127	906	64	5 096	0	0	0	0	0	0	0	5 613
85	303	3 249	2 693	256	6 198	0	0	0	0	0	0	0	6 501
90	18	51	130	0	181	0	0	0	0	0	0	0	199
91	116	0	245	310	555	0	0	0	0	0	0	0	671
92	886	53	978	541	1 571	139	3	18	160	2	94	96	2 714
93	222	1	677	0	678	0	0	0	0	0	1	1	901
95	0	0	418	0	418	0	0	0	0	0	0	0	418
Adjustment items:													
c.i.f./f.o.b. on exports	0	0	0	0	0	0	0	0	0	0	- 275	- 275	- 275
direct purchases abroad by residents	0	0	1 327	0	1 327	0	0	0	0	0	0	0	1 327
direct purchases by non-residents in the domestic market	0	0	- 3 552	0	- 3 552	0	0	0	0	946	2 605	3 552	0
Total	84 102	15 032	49 905	1 288	66 225	18 457	1 026	140	19 623	19 444	4 989	24 433	194 383
Gross added value (B1)	70 292												
Compensation of employees[D.1(T.-S.2)]	38 563												
Other net taxes on production (D.29-D.39)	- 433												
Gross operating surplus/ Gross mixed income (B.2g/B.3g)	32 161												
Consumption of fixed capital (K.1)	13 457												
Net operating surplus/ Net mixed income (B.2n/B.3n)	18 704												
Output of goods and serv. at basic prices (P.1)	154 394												

Table A.6. "From whom to whom" matrices (in millions of euros)

D71 - net non-life insurance premiums									D72 - non-life insurance claims								
	S.14	S.11	S.12	S.13	S.15	S1	S.2	Total		S.14	S.11	S.12	S.13	S.15	S1	S.2	Total
S.14							0	0	S.14			578			578		578
S.11							0	0	S.11		362				362	23	386
S.12	652	327	13	4	14	1 010	33	1 042	S.12			16			16	2	18
S.13							0	0	S.13			1			1		1
S.15							0	0	S.15			12			12		12
S.1	652	327	13	4	14	1 010	33	1 042	S.1	0	0	970	0	0	970	25	995
S.2		108	8				116		S.2			52			52		
Total	652	435	21	4	14	1 126			Total	0	0	1 022	0	0	1 022		

D75 - miscellaneous current transfers								
	S.14	S.11	S.12	S.13	S.15	S1	S.2	Total
S.14	386	10		138		535	3 264	3 798
S.11		58	0			58		58
S.12		2				2		2
S.13	100	108	2		4	214	59	273
S.15	310	50	21	878	0	1 260		1 260
S.1	797	228	23	1 016	5	2 069	3 323	5 391
S.2	416			222		637		
Total	1 213	228	23	1 238	5	2 706		

D92 - investment grants									D99 - other capital transfers								
	S.14	S.11	S.12	S.13	S.15	S1	S.2	Total		S.14	S.11	S.12	S.13	S.15	S1	S.2	Total
S.14				204		204	50	254	S.14			812	2		814	97	911
S.11				579		579	877	1 455	S.11				128		128	20	148
S.12				2		2		2	S.12		484	328			812		812
S.13				1 729		1 729	1 273	3 002	S.13	6	161	3	141	4	314	2	316
S.15				291		291	1	292	S.15						0		0
S.1	0	0	0	2 804	0	2 804	2 201	5 005	S.1	6	645	1 143	271	4	2 069	118	2 188
S.2				2		2		2	S.2	15			12		27		27
Total	0	0	0	2 806	0	2 806			Total	21	645	1 143	283	4	2 096		

Source: Instituto Nacional de Estatística

Table A.7a. Description of codes and grouping of Products - Codes

Code ¹¹	Description
01	Products of agriculture, hunting and related services
02	Products of forestry, logging and related services
05	Fish and other fishing products, services incidental to fishing
10	Coal and lignite; peat
11	Crude petroleum and natural gas; services incidental to oil and gas extraction excluding surveying
12	Uranium and thorium ores
13	Metal ores
14	Other mining and quarrying products
15	Food products and beverages
16	Tobacco products
17	Textiles
18	Wearing apparel; furs
19	Leather and leather products
20	Wood and products of wood and cork (except furniture), articles of straw and plaiting materials
21	Pulp, paper and paper products
22	Printed matter and recorded media
23	Coke, refined petroleum products and nuclear fuel
24	Chemicals, chemical products and man-made fibres
25	Rubber and plastic products
26	Other non-metallic mineral products
27	Basic metals
28	Fabricated metal products, except machinery and equipment
29	Machinery and equipment n.e.c.
30	Office machinery and computers
31	Electrical machinery and apparatus n.e.c
32	Radio, television and communication equipment and apparatus
33	Medical, precision and optical instruments, watches and clocks
34	Motor vehicles, trailers and semi-trailers
35	Other transport equipment
36	Furniture; other manufactured goods n.e.c.
37	Recovered secondary raw materials
40	Electrical energy, gas, steam and hot water
41	Collected and purified water, distribution services of water
45	Construction work
50	Trade, maintenance and repair services of motor vehicles and motorcycles; retail trade services of automotive fuel
51	Wholesale trade and commission trade, except of motor vehicles and motorcycles
52	Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods
55	Hotels and restaurants

¹¹ CPA codes, the Classification of Products by Activity that shows the principal products of activities according to NACE Rev.1 (General Industrial Classification of Economic Activities within the European Union).

Code ¹¹	Description
60	Land transport; transport via pipelines
61	Water transport
62	Air transport
63	Supporting and auxiliary transport activities; activities of travel agencies
64	Post and telecommunications
65	Financial intermediation, except insurance and pension funding
66	Insurance and pension funding, except compulsory social security
67	Activities auxiliary to financial intermediation
70	Real estate activities
71	Renting of machinery and equipment without operator and of personal and household goods
72	Computer and related activities
73	Research and development
74	Other business activities
75	Public administration and defence; compulsory social security
80	Education
85	Health and social work
90	Sewage and refuse disposal, sanitation and similar activities
91	Activities of membership organisations n.e.c.
92	Recreation, cultural and sporting activities
93	Other service activities
95	Private households with employed persons

Table A.7b. Description of codes and grouping of Products - Groups

Group	Code	Description
1	01-05	Products of agriculture, hunting, forestry, fisheries and aquaculture
2	10-41	Products from mining and quarrying, manufactured products and energy products
3	45	Construction work
4	50-64	Wholesale and retail trade services; repair services, hotel and restaurant services, transport and communication services
5	65-74	Financial intermediation services, real estate, renting and business services
6	75-95	Other services

Table A.8a. Description of codes and grouping of Activities - Codes

Code ¹²	Description
01	Agriculture, hunting and related activities
02	Forestry, logging and related service activities
05	Fishing, operation of fish hatcheries and fish farms; service activities incidental to fishing
10	Mining of coal and lignite; extraction of peat
11	Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction excluding surveying

¹² NACE Rev.1 code, the classification of economic activities within the European Union.

Code ¹²	Description
12	Mining of uranium and thorium ores
13	Mining of metal ores
14	Other mining and quarrying
15	Manufacture of food products and beverages
16	Manufacture of tobacco products
17	Manufacture of textiles
18	Manufacture of wearing apparel; dressing and dyeing of fur
19	Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear
20	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
21	Manufacture of pulp, paper and paper products
22	Publishing, printing and reproduction of recorded media
23	Manufacture of coke, refined petroleum products and nuclear fuel
24	Manufacture of chemicals and chemical products
25	Manufacture of rubber and plastic products
26	Manufacture of other non-metallic mineral products
27	Manufacture of basic metals
28	Manufacture of fabricated metal products, except machinery and equipment
29	Manufacture of machinery and equipment n.e.c.
30	Manufacture of office machinery and computers
31	Manufacture of electrical machinery and apparatus n.e.c.
32	Manufacture of radio, television and communication equipment and apparatus
33	Manufacture of medical, precision and optical instruments, watches and clocks
34	Manufacture of motor vehicles, trailers and semi-trailers
35	Manufacture of other transport equipment
36	Manufacture of furniture; manufacturing n.e.c.
37	Recycling
40	Electricity, gas, steam and hot water supply
41	Collection, purification and distribution of water
45	Construction
50	Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel
51	Wholesale trade and commission trade, except of motor vehicles and motorcycles
52	Retail trade services, except of motor vehicles and motorcycles; repair services of personal and household goods
55	Hotel and restaurant services
60	Land transport; transport via pipeline services
61	Water transport services
62	Air transport services
63	Supporting and auxiliary transport services; travel agency services
64	Post and telecommunication services
65	Financial intermediation services, except insurance and pension funding services
66	Insurance and pension funding services, except compulsory social security services
67	Services auxiliary to financial intermediation
70	Real estate services
71	Renting of machinery and equipment without operator and of personal and household goods

Code ¹²	Description
72	Computer and related services
73	Research and development services
74	Other business services
75	Public administration and defence services; compulsory social security services
80	Education services
85	Health and social work services
90	Sewage and refuse disposal services, sanitation and similar services
91	Membership organisation services n.e.c.
92	Recreational, cultural and sporting services
93	Other services
95	Private households with employed persons

Table A.8b. Description of codes and grouping of Activities - Groups

Group	Code	Description
1	01-05	Agriculture, hunting and forestry; fishing and operation of fish hatcheries and fish farms
2	10-41	Industry, including energy
3	45	Construction
4	50-64	Wholesale and retail trade, repair of motor vehicles and household goods, hotels and restaurants; transport and communications
5	65-74	Financial, real-estate, renting and business activities
6	75-95	Other service activities

Note: In the Use of Products at purchasers' prices – Tables A.5 – there is also an activity 100 considered as a fictitious activity for the uses of the Financial Intermediation Services Indirectly Measured (FISIM), the intermediate consumption of which was added to the intermediate consumption by the group 5 activities of the group 5 products of the SAM.

Appendix B. Portuguese Pilot - National Accounting Matrix (NAM) for 1995

Table B.1. Aggregate Pilot – NAM (in millions of euros)

Account		Goods and services	Production	Generation of income	Allocation of primary income	Secondary distribution of income	Use of income	Capital	Gross fixed capital formation	Financial	RoW (current)	RoW (capital)	Total
	codes	1	2	3	4	5	6	7	8	9	10	11	12
Goods and services	1	TRADE AND TRANSPORT MARGINS	INTERMEDIATE CONSUMPTION				FINAL CONSUMPTION	CHANGES IN INVENTORIES (1)	GROSS FIXED CAPITAL FORMATION		EXPORTS OF GOODS AND SERVICES (2)		
		0	85 979				67 703	1 191	18 869		25 259		199 001
Production	2	OUTPUT											157 526
		157 526											
Generation of income	3	TAXES LESS SUBSIDIES ON PRODUCTS	NET VALUE ADDED								COMPENSATION OF EMPLOYEES FROM THE R.O.W.		
		11 084	57 789								123		68 996
Allocation of primary income	4			NET GENERATED INCOME	PROPERTY INCOME						PROPERTY INCOME (3) FROM THE R.O.W.		
				68 762	25 383						3 193		97 338
Secondary distribution of income	5				NET NATIONAL INCOME	CURRENT TRANSFERS					CURRENT TRANSFERS FROM THE R.O.W.		
					68 518	42 825					4 048		115 391
Use of income	6					NET DISPOSABLE INCOME	ADJUSTMENT FOR CHANGE IN NET EQUITY ON PENSION				ADJUSTMENT FOR CHANGE IN NET EQUITY ON PENSION FUNDS FROM THE		
						71 623	769				0		72 392
Capital	7						NET SAYING	CAPITAL TRANSFERS (4)		NET INCURRENCE OF LIABILITIES		CAPITAL TRANSFERS FROM THE R.O.W.	
							3 920	4 945		37 278		2 371	48 514
Gross fixed capital formation	8		CONSUMPTION OF FIXED CAPITAL					NET FIXED CAPITAL FORMATION					
			13 758					5 112					18 870
Financial	9							NET ACQUISITIONS OF FINANCIAL ASSETS				NET LENDING OF THE R.O.W.	
								37 137				141	37 278
RoW (current)	10	IMPORTS OF GOODS AND SERVICES (5)		COMPENSATION OF EMPLOYEES TO THE R.O.W.	PROPERTY INCOME (3) TO THE R.O.W.	CURRENT TRANSFERS TO THE R.O.W.	ADJUSTMENT FOR CHANGE IN NET EQUITY ON PENSION						
		30 392		233	3 438	943	0						35 006
RoW (capital)	11							CAPITAL TRANSFERS TO THE R.O.W.			CURRENT EXTERNAL BALANCE		
								29			2 383		2 412
Statistical discrepancy	SD							STATISTICAL DISCREPANCY					
								100				- 100	0
Total	12	199 002	157 526	68 995	97 338	115 391	72 392	48 514	18 869	37 278	35 006	2 412	852 724

Source : Instituto Nacional de Estatística

(1) Including acquisition less disposable of valuables

(2) Including purchases in domestic market by non-residents

(3) Including taxes less subsidies on production from the Rest of the World

(4) Including acquisitions less disposable of non-produced non-financial assets

(5) Including purchases abroad by residents

Table B.2¹³.1. Disaggregated Pilot-NAM cells (in millions of euros) – Cell (1,6) Final Consumption

Goods and services (CPA groups)	code	Use of income (Institutional sectors)							Total	
		Non-financial corporations	Financial corporations	General government	Households (by main source of income)					Non-profit institutions serving households
					Wages and salaries	Mixed income (including property income)	Income in connection with old age (retirement)	Other transfers income (including other households)		
		6a	6b	6c	6d-1	6d-2	6d-3	6d-4	6e	6f
Products of agriculture, hunting, forestry, fisheries and aquaculture (CPA A/E)	1a			18	1 465	491	533	73	0	2 581
Products from mining and quarrying, manufactured products and energy products (CPA C/D/E)	1b			642	17 395	5 564	4 117	918	0	28 637
Construction work (CPA F)	1c			0	41	10	22	3	0	75
Wholesale and retail trade services; repair services, hotel and restaurant services, transport and communication services (CPA G/H/I)	1d			38	5 264	1 559	891	250	0	8 002
Financial intermediation services, real estate, renting and business services (CPA J/K)	1e			79	3 711	1 574	861	183	44	6 451
Other services (CPA L to P)	1f			14 590	3 986	1 080	874	154	1 273	21 957
Total	1g			15 368	31 861	10 278	7 298	1 581	1 316	67 703

Source : Instituto Nacional de Estatística

¹³ a) See the methodological details on the cell's calculation in LEG (2003), pp. 159-163.

b) Due to the unavailability of certain data in this version, some values of cells from former versions were also used, although they are not presented here.

Table B.2.2. Disaggregated Pilot-NAM cells (in millions of euros) – Cell (4,3) Generated Income

Allocation of primary income (Institutional sectors)		Generation of income (value added categories)														Total		
		Compensation of employees						Net mixed income						Net operating surplus	Other taxes less subsidies on production		FISIM	
		Male			Female			Male			Female							
		Primary/lower secondary (ISCED 1-2)	Upper or post secondary (ISCED 3-4)	Tertiary (ISCED 5-6)	Primary/lower secondary (ISCED 1-2)	Upper or post secondary (ISCED 3-4)	Tertiary (ISCED 5-6)	Primary/lower secondary (ISCED 1-2)	Upper or post secondary (ISCED 3-4)	Tertiary (ISCED 5-6)	Primary/lower secondary (ISCED 1-2)	Upper or post secondary (ISCED 3-4)	Tertiary (ISCED 5-6)	3c	3d		3e	3f
codes	3a-1	3a-2	3a-3	3a-4	3a-5	3a-6	3b-1	3b-2	3b-3	3b-4	3b-5	3b-6						
Non-financial corporations		4a												10 097			10 097	
Financial corporations		4b												1 324		- 3 770	- 2 447	
General government		4c												- 76	10 473		10 398	
Households classified by main source of income	<i>Wages and salaries</i>	4d-1	13 463	4 100	6 003	7 599	3 253	2 848	1 031	297	271	926	220	155	260		40 426	
	<i>Mixed income (including property income)</i>	4d-2	235	127	38	515	274	97	4 649	560	268	1 676	298	35	117		8 888	
	<i>Income in connection with old age (retirement)</i>	4d-3	121	79	17	166	80	66	84	66	13	196	39	4	58		987	
	<i>Other transfers income (including other households)</i>	4d-4	96	48	45	159	45	13	71	33	8	73	12	0	15		618	
Non-profit institutions serving		4e												- 205			- 205	
Total		4f	13 916	4 354	6 103	8 438	3 652	3 025	5 835	955	559	2 871	569	194	11 589	10 473	- 3 770	68 762

Source : Instituto Nacional de Estatística

Table B.2.3. Disaggregated Pilot-NAM cells (in millions of euros)

– Cell (4,4) Property Income; Cell (5,4) Net National Income

CELL (4,4)											
Allocation of primary income (Institutional sectors)	codes	Allocation of primary income (Institutional sectors)								Total	
		Non-financial corporations	Financial corporations	General government	Households				Non-profit institutions serving households		
					Wages and salaries	Mixed income (including property income)	Income in connection with old age (retirement)	Other transfers income (including other households)			
		4a	4b	4c	4d-1	4d-2	4d-3	4d-4	4e	4f	
Non-financial corporations	4a	901	878	3	16	4	0	1	0	1 803	
Financial corporations	4b	5 111	2 240	3 062	2 237	527	51	148	34	13 410	
General government	4c	321	629	9	4	1	0	0	5	969	
Households classified by main source of income	Wages and salaries	4d-1	142	2 233	469	14	5	1	2	0	2 865
	Mixed income (including property income)	4d-2	298	3 558	906	16	5	1	3	0	4 787
	Income in connection with old age (retirement)	4d-3	15	695	180	1	0	0	0	0	891
	Other transfers income (including other households)	4d-4	4	553	17	0	0	0	0	0	575
Non-profit institutions serving	4e	54	29	0	0	0	0	0	0	83	
Total	4f	6 846	10 815	4 646	2 288	542	53	154	39	25 383	

CELL (5,4)										
Secondary distribution of income (Institutional sectors)	codes	Allocation of primary income (Institutional sectors)								Total
		Non-financial corporations	Financial corporations	General government	Households				Non-profit institutions serving households	
					Wages and salaries	Mixed income (including property income)	Income in connection with old age (retirement)	Other transfers income (including other households)		
		4a	4b	4c	4d-1	4d-2	4d-3	4d-4	4e	4f
Non-financial corporations	5a	4 211								4 211
Financial corporations	5b		1 078							1 078
General government	5c			6 298						6 298
Households classified by main source of income	Wages and salaries	5d-1			41 037					41 037
	Mixed income (including property income)	5d-2				13 194				13 194
	Income in connection with old age (retirement)	5d-3					1 809			1 809
	Other transfers income (including other households)	5d-4						1 036		1 036
Non-profit institutions serving	5e								- 145	- 145
Total	5f	4 211	1 078	6 298	41 037	13 194	1 809	1 036	- 145	68 518

Source : Instituto Nacional de Estatística

Table B.2.4. Disaggregated Pilot-NAM cells (in millions of euros)

– Cell (5,5) Current Transfers among residents; Cell (6,5) Net Disposable Income

CELL (5,5)											
Secondary distribution of income (Institutional sectors)	codes	Secondary distribution of income (Institutional sectors)								Total	
		Non-financial corporations	Financial corporations	General government	Households				Non-profit institutions serving households		
					Wages and salaries	Mixed income (including property income)	Income in connection with old age (retirement)	Other transfers income (including other households)			
		5a	5b	5c	5d-1	5d-2	5d-3	5d-5	5e	5f	
Non-financial corporations	5a	59	384	0	313	125	900	31	0	1 812	
Financial corporations	5b	401	37	4	1 698	221	143	42	13	2 558	
General government	5c	2 496	276	7 019	12 197	1 094	854	174	7	24 117	
Households classified by main source of income	Wages and salaries	5d-1	319	427	2 288	127	50	18	16	3	3 247
	Mixed income (including property income)	5d-2	126	93	905	53	21	7	7	1	1 214
	Income in connection with old age (retirement)	5d-3	900	498	6 385	39	15	5	5	9	7 855
	Other transfers income (including other households)	5d-4	34	295	260	72	28	10	9	0	707
Non-profit institutions serving	5e	51	34	897	220	66	17	28	1	1 314	
Total	5f	4 386	2 044	17 758	14 719	1 620	1 954	310	34	42 825	

CELL (6,5)										
Use of income (Institutional sectors)	codes	Allocation of primary income (Institutional sectors)								Total
		Non-financial corporations	Financial corporations	General government	Households				Non-profit institutions serving households	
					Wages and salaries	Mixed income (including property income)	Income in connection with old age (retirement)	Other transfers income (including other households)		
		5a	5b	5c	5d-1	5d-2	5d-3	5d-5	5e	5f
Non-financial corporations	6a	1 601								1 601
Financial corporations	6b		1 571							1 571
General government	6c			12 933						12 933
Households classified by main source of income	Wages and salaries	6d-1			31 629					31 629
	Mixed income (including property income)	6d-2				13 448				13 448
	Income in connection with old age (retirement)	6d-3					7 816			7 816
	Other transfers income (including other households)	6d-4						1 491		1 491
Non-profit institutions serving	6e								1 134	1 134
Total	6f	1 601	1 571	12 933	31 629	13 448	7 816	1 491	1 134	71 623

Source : Instituto Nacional de Estatística

Table B.2.5. Disaggregated Pilot-NAM cells (in millions of euros) – Cell (7,6) Net Saving

Capital (Institutional sectors)	codes	Use of income (Institutional sectors)								Total
		Non-financial corporations	Financial corporations	General government	Households				Non-profit institutions serving households	
					Wages and salaries	Mixed income (including property income)	Income in connection with old age (retirement)	Other transfers income (including other households)		
		6a	6b	6c	6d-1	6d-2	6d-3	6d-6	6e	6f
Non-financial corporations	7a	1 601								1 601
Financial corporations	7b		802							802
General government	7c			- 2 435						- 2 435
Households	Wages and salaries	7d-1			320					320
	Mixed income (including property income)	7d-2				3 319				3 319
	Income in connection with old age (retirement)	7d-3					556			556
	Other transfers income (including other households)	7d-4							- 62	- 62
Non-profit institutions serving	7e								- 182	- 182
Total	7f	1 601	802	- 2 435	320	3 319	556	- 62	- 182	3 920

Source : Instituto Nacional de Estatística

Table B.3. Description of the grouping of labour - male and female

Group	ISCED ¹⁴ level	Description
Lower	1&2	Primary and lower secondary school
Medium	3	Upper and post secondary school
Higher	4&5	Tertiary education

Table B.4. Description of codes and grouping of households

Group	Code ¹⁵	Description (in accordance with the main source of income)
Employees	S143	Wages and salaries
Employers (including own account workers)	S141+S142	Mixed income including property income - employers (including own account workers)
	S1441	- recipients of property income
Recipients of pensions	S1442	Income in connection with old age (retirement)
Others	S1443	Other transfer incomes (including other households) - recipients of other transfer incomes
	S145	- other households ¹⁶

¹⁴ International Standard Classification of Education (LEG, 2003).

¹⁵ ESA 95 (Eurostat, 1996) Household Classification (LEG, 2003).

¹⁶ Consists of persons permanently living in institutions. Such persons “are classified separately because the criterion of largest source of income does not allow a meaningful classification of these persons” (ESA 95, Prg. 2.84; LEG, 2003).