



# STATISTICS IN FOCUS

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### Structure of government debt in the Member States of the European Union

In the context of the establishment of the Economic and Monetary Union between the Member States which signed the Maastricht Treaty, budgetary criteria were established by the Protocol on the Excessive Deficit Procedure and by Council Regulation (EC) n°3605/93 of 22 November 1993. The reference values established by the Article 1 of the Protocol are 3% of GDP for government deficit and 60% of GDP for government debt.

The European System of Integrated Economic Accounts (ESA)<sup>1</sup> constitutes a conceptual framework setting common methodologies for compilation and analysis of economic accounts. It allows international comparability of budgets. Nevertheless, different sources of disparities have to be considered:

- ◆ institutional, resulting from differing administrative developments, in particular where local and social structures are concerned (decentralisation, level of local activities, the financing of hospital services, management of retirement scheme, etc.), or
- ◆ political, depending on the different forms of

State intervention (government subsidies, capital transfers, the release of loans or increases/decreases in assets in the form of shares and other equities in the capital of the enterprises concerned), or

- ◆ statistical, relating to organisation of data collecting or data precision.

The government debt is defined in the Protocol on the excessive deficit procedure as the total gross debt at nominal value outstanding at the end of the year of the sector of general government.

In the summer of 1996, Eurostat conducted a survey covering the period 1991 to 1995, to obtain more detailed information on the structure of government debt in the various Member States<sup>2,3</sup>. Sixteen countries were invited to take part in this exercise: the fifteen Member States of the European Community plus Norway which participates in statistical exercises of the European Union as observer. The study of aspects such as the breakdown of government debt by government sub-sector, financial instrument and lending sector has

<sup>1</sup> The European System of Integrated Economic Accounts (ESA) referred to here is the ESA-1979 (2nd edition) to which is the legislative bases for the Protocol on the excessive deficit procedure. A third edition was established during 1995. It will not be put into practice for this exercise before 1999.

<sup>2</sup> This study takes into account the last official notification (September 1997) of the Member states of the European Union concerning deficit and debt. In particular, The notification establishes data on maturity and breakdown of the government debt by financial instrument in 1996.

<sup>3</sup> This publication has been prepared by Mrs. F. Perret, Tel.(. 352) 42-31-13-497 in collaboration with Eurostat unit B4, "Accounts and financial indicators, statistics for the excessive deficit procedure".

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highlighted general characteristics of the structure of government debt and emphasised certain specific national features. Luxembourg is in an exceptional position in the sense of presenting a budgetary surplus and a government debt below 7% of GDP for several years.

## 1. Breakdown by sub-sector

The concept of *general government* is defined in the European System of Integrated Economic Accounts (ESA 1979), § 239, as follows:

*The sector general government (S60) includes all institutional units which are principally engaged in the production of non-market services intended for collective consumption and/or in the redistribution of national income and wealth. The principal resources of these units are derived directly or indirectly from compulsory payments made by units belonging to other sectors.*

*General government (S60) is thus not the same as the public sector, which is a more general concept covering public enterprises classified in the ESA as non-financial corporate and quasi-corporate enterprises (S10).*

The central banks, incidentally, come under *credit institutions* (S40), although currency issues come under the *general government* sector in most of the countries. In this respect, treatment in the United

Kingdom is unusual, where the Banking Department of the Bank of England is part of the *credit institutions* sub-sector (S40) whilst the Issue Department of the Bank is classified under *central government* (S61).

*General government* (S60) is broken down in the ESA 1979 into three sub-sectors:


- ◆ central government (S61),
- ◆ local government (S62), and
- ◆ social security funds (S63).

The financial statistics compiled according to the ESA norms are generally obtained by converting data produced in line with national methodologies. The divergences between national and European systems may lead to:

- ◆ statistical conventions. This is the case with the German Länder, which have some of the characteristics of *central government* and some of *local government*, and will be classified, as in the German nomenclature, under *central government*<sup>1</sup>,
- ◆ less detailed breakdowns. *Social security funds* are not always shown separately from *central government*, as in the United Kingdom.

As a general rule, *central government* is responsible for over 75% of government debt. Norway and Luxembourg, where *local government* is responsible for one-quarter and one-half of government debt respectively, are exceptions to this rule. *Social security funds* account for only a minute - in some cases negligible -

**Table 1: Classification of Member States by distribution of government debt between central and local government, after consolidation, 1991-1995**

 Share of the government debt imputable to the central government	Share of government debt imputable to local government			
	Under 5 %	5% to 10%	10% to 25%	Over 25%
Over 95%	Greece Ireland Italy Portugal United Kingdom			
90 % to 95%		Belgium Denmark Austria Finland Sweden		
75% to 90%			Germany Spain France Netherlands	
Under 75%				Luxembourg Norway

<sup>1</sup> The breakdown by sectors proposed by the ESA 1995 divides the general government among four sub-sectors, including State government (S.1312), where the Länder will be categorised.

share of government debt (i.e. under 1% for all Member States since 1994). France is the only exception, with 4% of its government debt imputable to social security funds in 1995.

Table 1 shows three other groups of country according to the percentage of government debt imputable to *central government*:

- ◆ over 95%: Greece, Ireland, Italy, Portugal and the United Kingdom;
- ◆ between 90% and 95%: Belgium, Denmark, Austria, Finland (since 1994) and Sweden;
- ◆ between 75% and 90%: Germany, Spain, France and the Netherlands.

In particular, the share of *central government* has strengthened in Greece, as it has in countries where the share of *local government* exceeded 20% of government debt in 1991 (France, Luxembourg, Norway and Finland).


## 2. Maturity of government debt

Medium-/long-term indebtedness covers issues of *bonds* and the use of non-trade *credits* generally granted for a term of over one year<sup>1</sup>. Graph 1 shows the government debt breakdown between short- and medium-/long-term in the sixteen countries. There are

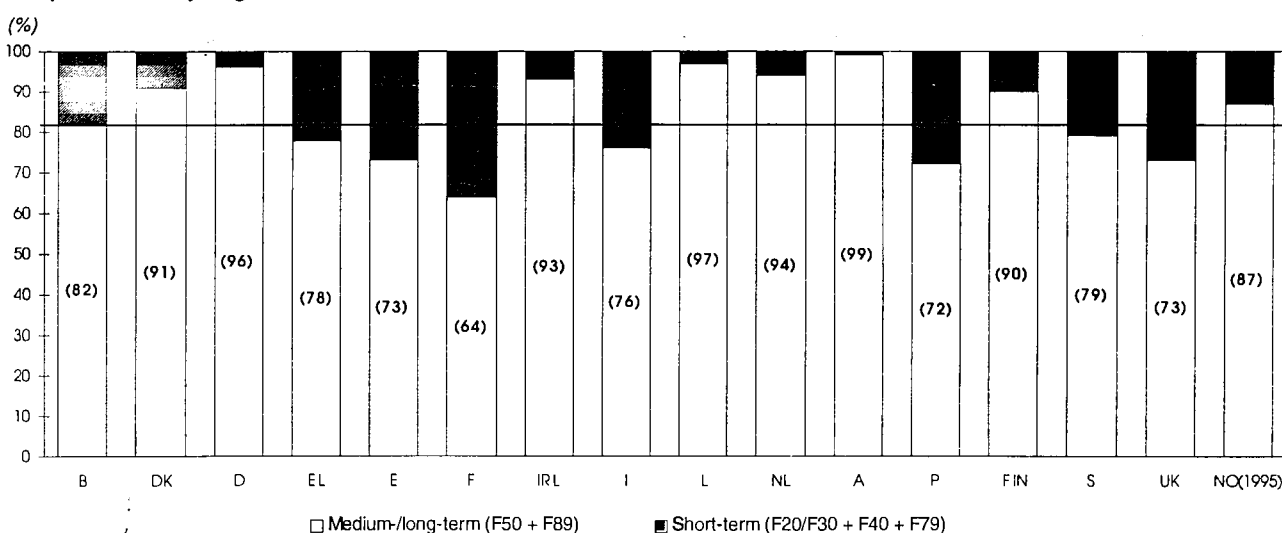
two separate groups:

- ◆ for eight countries, medium-/long-term indebtedness covers over 87% of government debt, as is the case in Germany, Denmark, Ireland, Luxembourg, the Netherlands, Norway, Austria and Finland;
- ◆ for the eight others, medium-/long-term financial instruments account for under 82% of government debt, despite a marked increase since 1991. Consequently, in 1996 short-term government debt varied from 18% to 28% of the debt in these countries (cf. Table 2). Only France had a higher rate (36% of government debt in 1996).

**Table 2: Short-term debt, 1991-1996, as a percentage of government debt**

 eurostat	1991	1992	1993	1994	1995	1996
Belgium	28	25	25	27	19	18
Greece	41	38	25	27	24	22
Spain	44	39	30	30	27	27
France	38	40	38	37	38	36
Italy	40	40	33	27	26	24
Portugal	34	31	26	29	28	28
Sweden	42	48	29	28	24	21
United Kingdom	41	37	30	29	30	27

**Graph 1: Maturity of government debt in 1996**



<sup>1</sup> The distinction between credit according to their maturity is not available in the survey for Spain and Denmark, so all credit have been registered as long-term credit.

### 3. Breakdown by financial instrument

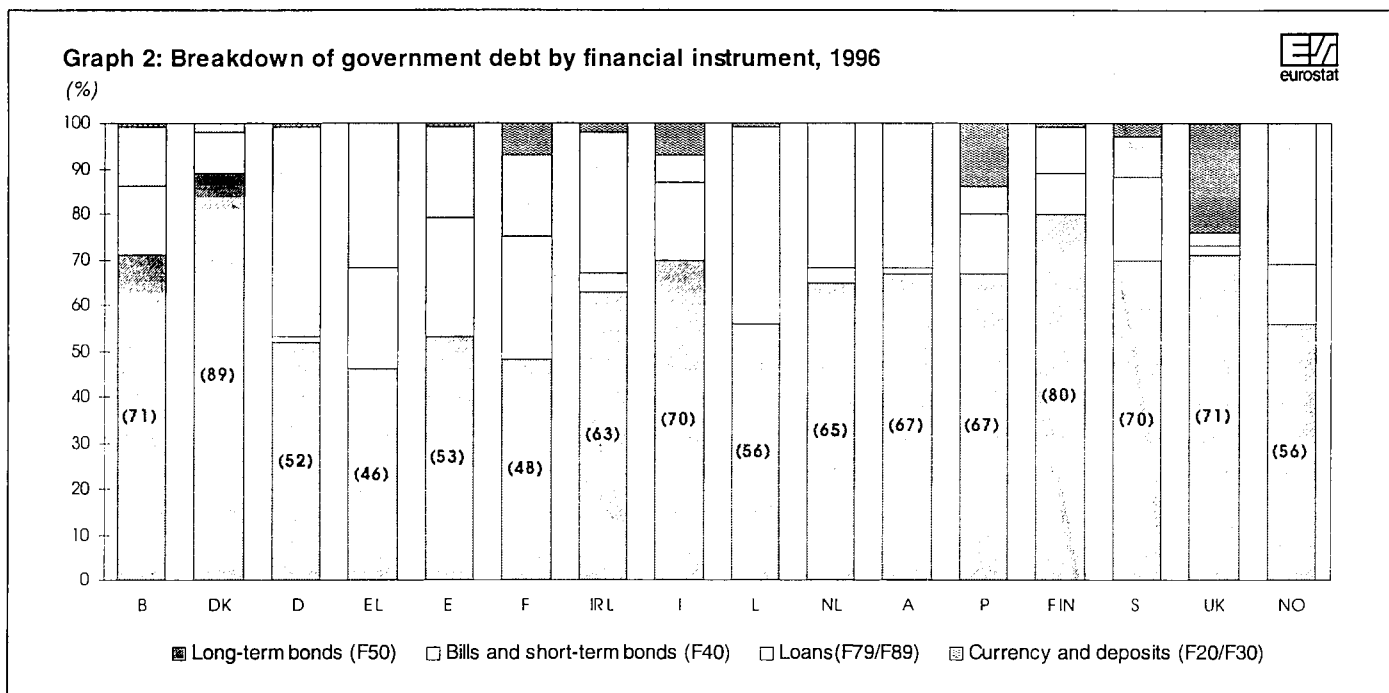
The international comparability of financial statistics is also hampered by the wide variety of financial markets and instruments and heterogeneity of accounting practices<sup>1</sup> (cf. the way in which bonds with capitalised interest, zero-coupons, etc. are entered in the accounts).

Graph 2 shows for sixteen countries the government debt breakdown between four different types of

financial instrument established by Council Regulation (EC) n° 3605/93:

- ◆ long-term bonds (F50),
- ◆ bills and short-term bonds (F40),
- ◆ loans (F 79/F 89), and
- ◆ currency and deposits (F20/F30).

Trade credits and accounts receivable and payable (F71/F81) have been excluded from the calculations owing to practical valuation problems<sup>2</sup>.



#### 3.1 Long-term bond issues

Long-term bond issues of fourteen countries account for 46% to 71% of government debt in 1996. There are two exceptions to this rule Denmark and Finland, where 91% and 80% of government debt are respectively based on bond issues.

Three different structures appear:

1. over 95% of long-term bond issues, whose volume varies from a Member state to another in the financing of government debt, are of traditional or similar type (issued in fungible tranches). That is the case in Belgium, Germany, Spain, France, the Netherlands and Finland. There was an increase in this type of financing between 1991 and 1995;
2. In addition to classical bonds, one type of specific

bond issue may be significant: for example, floating rate notes in Ireland, Italy, Austria and Sweden; zero coupons in Denmark; index-linked instruments in United Kingdom and bonds with capitalised interest in Luxembourg.

Italy also issued a large amount of zero coupons in 1995.

3. Greece, where long term bond issues are the less important in government debt financing (42% in 1995), mainly issues specific bonds of which more than 87% are in floating rate notes and 11% bonds with a foreign exchange clause.

Since 1991, most Member States have made increasing use of bond issues, with a corresponding fall in the share of loans and of issues of bills and short-term bonds.

<sup>1</sup> Preparatory work and decisions on these kind of questions are arranged by Eurostat.

<sup>2</sup> Equity held by general government in private or public enterprises, which is a financial asset classified under shares and other equities (F 60), is not included in the calculation of government debt.

### 3.2 Other financial instruments

After long term bonds, *bills and short-term bonds* are generally the second largest source of public financing. Amounts concerned represent up to 27% of government debt in 1996, as follows during 1993-1996:

- ◆ 19% to 29% in Spain, France, Greece, Italy and Sweden;
- ◆ 8% to 18% in Belgium, Denmark, Norway, Portugal and Finland, and
- ◆ under 6% in Germany, Ireland, the Netherlands, Austria and the United Kingdom (no issues in Luxembourg).

Use of this type of security declined between 1991 and 1996, by only a little in Germany, Denmark, Norway and Austria and by a larger percentage in Belgium, Spain, Greece, Italy, Sweden and Portugal.


Use of non-trade credits varies considerably from one Member State to another. The percentage fell between 1991 and 1996, with figures below 50% of government debt except in Luxembourg. If Member States were to be classified by the proportion of non-trade credits in government debt, the result would be as follows:

- ◆ under 10%: Denmark, Italy, Portugal and the United-Kingdom;
- ◆ between 10% and 30%: Belgium, Spain, France, Finland and Sweden;
- ◆ over 30%: Germany, Greece, Ireland, Luxembourg, the Netherlands, Norway and Austria.

Most of these *loans* are granted long-term. The percentage of non-trade short-term credits is highest in Belgium, where figures varied between 2% and 10% of government debt from one year to another, with a downward tendency since 1993.

*Currency and deposits* are issues of currency by the Treasury and highly liquid deposits with institutions which come under the public authorities (mainly postal services). Four countries have a substantial share of *currency and deposits* in their debt (cf. Table 3): France, Italy, and above all Portugal and the United Kingdom<sup>1</sup>.

**Table 3: Percentage of currency and deposits in the composition of government debt**

 eurostat	1991	1992	1993	1994	1995	1996
France	11	9	8	8	7	7
Italy	10	10	6	7	7	7
Portugal	11	15	13	13	13	14
United Kingdom	33	29	26	25	24	24


### 4. Breakdown by creditor sector

Government debt may be financed by operators classified in various sectors of the economy as defined by international classifications, namely, in the ESA 1979:

- ◆ credit institutions (S40);
- ◆ insurance enterprises (S50);
- ◆ general government (S60);
- ◆ non-financial corporate and quasi-corporate enterprises, private non-profit institutions and households (S10 and S70/S 80), and
- ◆ the rest of the world (S90).

However, the government debt has to be consolidated according to the Protocol on the excessive deficit procedure; it thus does not include financial transactions between sub-sectors of *general government*. The impact of consolidation on the accounts may be negligible in Belgium, Germany, Spain, Norway and the United Kingdom; or reach fairly substantial levels in Luxembourg, Finland and Sweden (cf. Table 4).

**Table 4: Percentage of government debt held by the general government itself between 1991 and 1995**

 eurostat	1991	1992	1993	1994	1995
Greece	4	5	4	7	8
France	12	10	9	9	8
Luxembourg	21	9	3	4	16
Finland	4	4	7	12	17
Sweden	14	14	17	18	19

In Belgium, Germany, Spain, France, Greece, Luxembourg, Austria and Norway, government debt is financed largely via *credit institutions*. In the Netherlands and the United Kingdom, the main lenders to the government are *insurance enterprises* (including pension fund investments) and in Italy *households* and *non-financial corporate and quasi-corporate enterprises* (cf. Table 5).

In eleven countries, foreign capital accounts for between 12% and 27% of government debt in 1995 (cf. Graph 3).

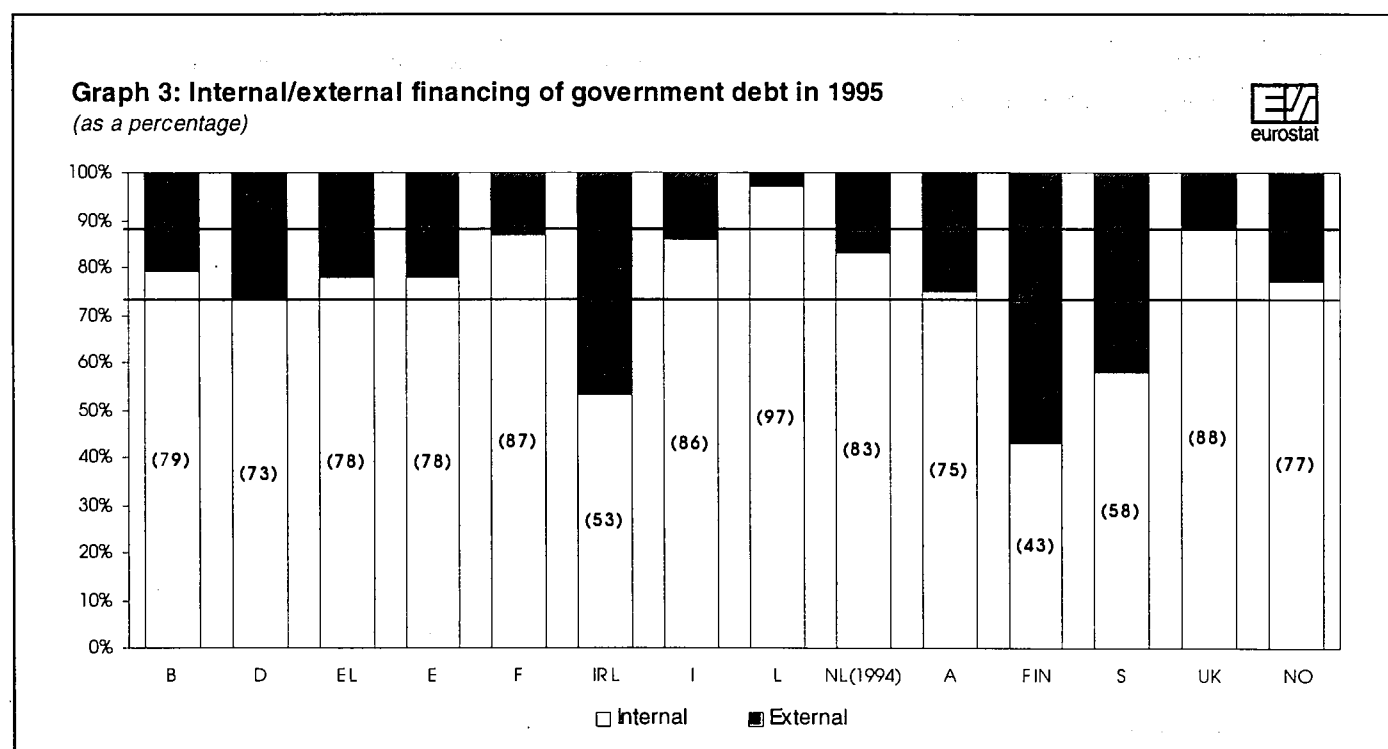
The following points should be noted, however:

- ◆ in Finland, Ireland and Sweden, respectively 57%, 47% and 42% of government debt is financed by non-residents. Foreign currency issues account for up to a quarter of the government debt of these three countries.
- ◆ in Luxembourg, only 3% of public financing consists of foreign capital.

<sup>1</sup> In 1995, 6% of the British public debt have been financed by currencies issued by Issue Department of the Bank of England and 14% by National Savings products.

**Table 5: Classification of Member states by creditor sectors of government debt , 1993-1995**

	<i>External financing</i>		
	Under 20%	20% to 30%	Over 40%
<b>Credit institutions (S40)</b>			
<i>Under 25%</i>	United Kingdom		Ireland Finland Sweden
<i>25% to 50%</i>	Italy Netherlands	Greece Norway	
<i>Over 50%</i>	France Luxembourg	Belgium Germany Spain Austria	
<b>Insurance enterprises (S50)</b>			
<i>Under 5%</i>	France Italy Luxembourg	Germany	Finland
<i>5% to 10%</i>		Belgium Spain	
<i>10% to 20%</i>		Austria Norway	Ireland Sweden
<i>Over 40%</i>	Netherlands United Kingdom		
<b>Households, private non-profit institutions serving households (S70/S80) and non financial corporate and quasi corporate enterprises (S10)</b>			
<i>Under 6%</i>		Austria Norway	
<i>6% to 20%</i>	France Luxembourg Netherlands	Belgium Germany Spain	Ireland Finland
<i>Over 20%</i>	Italy United Kingdom	Greece	Sweden



## 5. Additional information

Three aspects of debt are of interest in addition to the above information:

### a) Negotiability

In nine Member States, over 55% of government debt is negotiable (cf. graph 4) and this share tended to increase between 1991 and 1995.

### b) Government guarantees

With the exception of the Netherlands (38%) and Finland (21%), the amount of the debt of non-

government institutions guaranteed by the State did not exceed 15% of total government debt in 1995 (cf. graph 5). These amounts have been tended to decline since 1991.

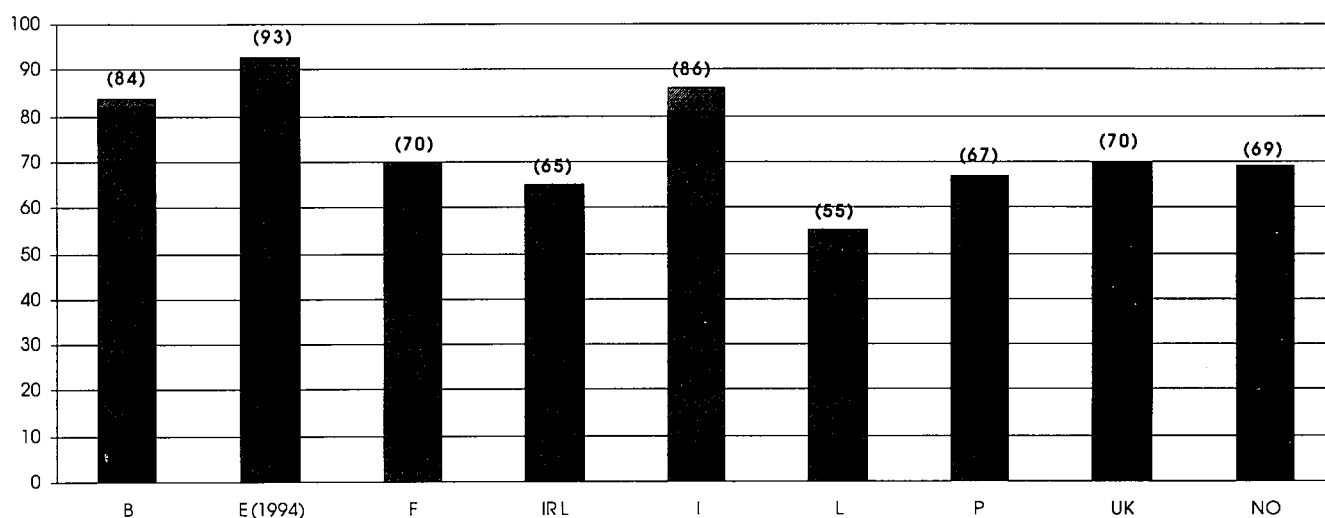
### c) Currency unit of issue

With the exception of Ireland and Finland, over 70% of government debt is issued in national currency (cf. graph 6). Germany and the Netherlands have no debts in any other than their national currency. France issues debt in ECUs but not in foreign currencies.

When statistics are available, it appears that ECU issues do not exceed 5% of government debt. ECUs are not separated from foreign currencies in Finland.

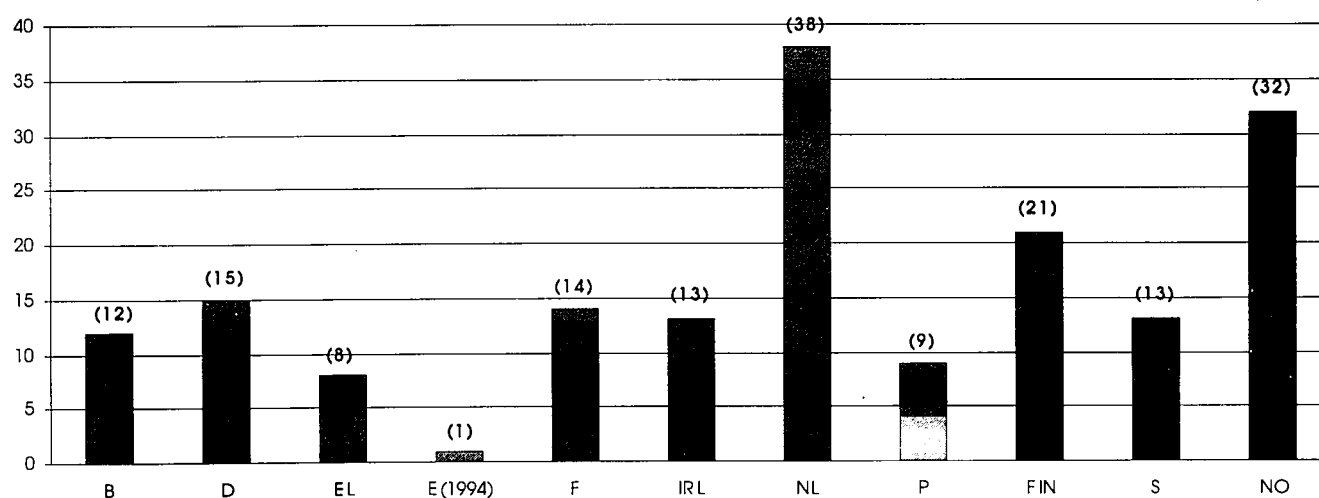
**Graph 4: Share of negotiable debt in 1995**

(as a percentage of government debt)



**Graph 5: Debt of non-government institutions guaranteed by the State in 1995**

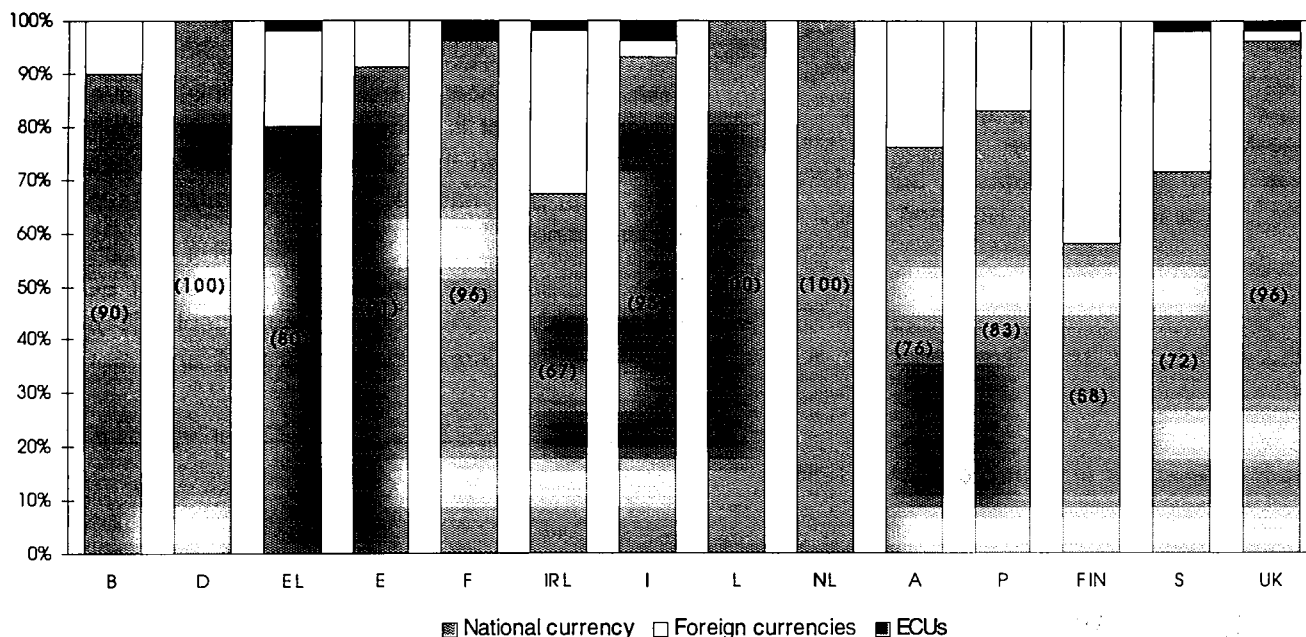
(as a percentage of the government debt)





**Graph 6: Currency unit of issue in 1995**

(as a percentage of government debt)



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