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## PONENCIA

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## EMPIRICAL ESTIMATES OF FISCAL VISIBILITY IN SOME OECD COUNTRIES

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### I.- INTRODUCTION:

Improvements in the efficient allocation of resources between the private and public sectors of an economy - as well as among its several public sub-sectors - can be reached insofar as both public revenue and expenditure have *visibility*, this is, the *burden* of public revenue and the *benefit* of public expenditure should be fully noticeable by individuals<sup>1</sup>.

Concerning public revenue, its visibility has changed in the course of history, depending on both economic (as the development level of a country) and political (as mechanisms of fiscal illusion used by politicians, bureaucrats, and interest groups to overcome taxpayers' resistance) factors (Wagner, 1976; Borcharding, 1977; Buchanan and Wagner, 1977; Fiorina and Noll, 1978; Pommerehne and Schneider, 1978; Brennan and Buchanan, 1980; Frey and Pommerehne, 1982; Tullock, 1989; Tabellini and Alesina, 1990; Dunleavy, 1991; Mueller, 1993). In a similar way, the compliance with such required property by fiscal systems now in force might differ remarkably among countries.

With regard to public expenditure, the final or intermediate, the public or private nature, the spacial effects or dimensions, the costs necessary to obtain consumption, and other inherent characteristics of publicly provided goods and services represent major factors determining their benefit visibility (Weingast, Shepsle, and Johnsen, 1981; Solano, 1983; Hamilton, 1983; Becker, 1983, 1985; Mueller and Murell, 1985, 1986; Wright, 1986; Mueller, 1987; Wolff, 1987; Wildasin, 1990; Henrekson, 1992).

In any case, it is necessary to dispose of logical and general indicators permitting to quantify, as exactly as possible, to what extent the required property of visibility is reached at every moment by local, state, federal or confederal, supranational, and general fiscal sub-systems and systems of countries, since "...the systematic misperception of key fiscal parameters may significantly distort fiscal choices by the electorate"<sup>2</sup>. Although some authors (Puviani, 1903; Buchanan, 1967) have analyzed several elements of the tax structure largely hidden so that voters do not perceive the entire cost of providing public goods, very few attempts have been performed till now to measure fiscal illusion or fiscal visibility in a systematic, general and direct way. However, many contributions have tried to detect and measure different manifestations or types (debt illusion, flypaper effect, income elasticity of the tax structure, complexity of the tax system, etc.) of this characteristic for empirical applications trying to explain the absolute or relative sizes of public budget and biases in budgetary decisions.

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<sup>1</sup>By revenue visibility we mean visibility of *direct burden* of public revenue. Some types of public revenue (for instance, revenue from public property) might not involve any burden in the sense here reserved for this term. Symmetrically, by public expenditure visibility, visibility of *direct benefit* of public expenditure must be understood. Again, some types of public expenditure (for example, public purchases of private financial assets at market prices) might not carry any benefit with them.

<sup>2</sup>(Oates, 1991, page 431).

Wagner (1976) undertook a Herfindahl index as a proxy variable to capture the complexity of public revenue systems. But his approach suffered, as acknowledged by himself, from serious deficiencies, since the visibility of the several classes of public revenue is likely to vary greatly, and this characteristic is not captured by this index. For this reason, it is not surprising that subsequent econometric work based on the Herfindahl index has yielded confuse and contradictory results (see: Munley and Greene, 1978; Clotfelter, 1976; Pommerehne and Schneider, 1978; Baker, 1983; Breeden and Hunter, 1985). When measuring fiscal illusion or fiscal visibility, many factors, like the relative size and the internal structure of types of revenue and public expenditure, the institutional framework, etc., are to be taken into account. So, in spite of the crucial importance of the visibility variable, its measurement is not done till now in a systematic, general and direct way because of its underlying complexity.

This contribution, referring to the several levels of territorial public administrations of any country, presents:

- A) Indicators permitting to make, in an operative way, time and space fiscal visibility measurements and comparisons, in order to assess the quality of sub-systems and systems of public revenue and expenditure as instruments for efficiently re-allocating economic resources.
- B) Systematic and direct estimates on fiscal visibility of sub-systems and systems of public revenue now in force in the member countries of twenty significant OECD countries, showing a) the low values of revenue visibility for all these countries and b) the high divergences now existing among them.

Policy implications from these estimates seem straightforward for such OECD countries: allocation improvements could be obtained by implementing changes and reforms aiming a) to raise values of public revenue visibility and b) to make domestic fiscal sub-systems and systems converge to OECD countries recording the highest values.

## II.- INDEX OF BURDEN VISIBILITY / INVISIBILITY OF TOTAL PUBLIC REVENUE:

In general, for every level, L, of territorial public administrations of an economy, a visibility / invisibility index of its total public revenue,  $V_L^T$ , can be defined in such a way that

$$0 \leq V_L^T \leq 1$$

based on the following formula:

$$V_L^T = \sum_{i=1}^n x_{iL}^T y_{iL}^T$$

where:

- a) n = number of types of public revenue for level L of territorial public administrations;
- b)  $x_{iL}^T$  = relative financial weight of public revenue of type i for level L of territorial public administrations, with  $i = 1, 2, \dots, n$ ; this is:

$$0 \leq x_{iL}^T = \frac{GF_{iL}^T}{\sum_{i=1}^n GF_{iL}^T} \leq 1$$

with  $GF_{iL}^T$  = absolute quantity of public revenue of type  $i$  for level  $L$  of territorial public administrations;

c)  $y_{iL}^T$  = visibility or perceptibility (for the policy intended - or legal - revenue-provider) factor of burden of public revenue of type  $i$ , to which level  $L$  of territorial public administrations is entitled, with

$$0 \leq y_{iL}^T \leq 1$$

### III.- BURDEN VISIBILITY / INVISIBILITY OF A SPECIFIC PUBLIC REVENUE:

An objective estimation of  $y_{iL}^T$  - factor of perceptibility of the direct burden by a policy intended - or legal - revenue-provider of a public revenue of type  $i$  for level  $L$  of territorial public administrations - can be defined according to the following criteria:

$$y_{iL}^T = v_{iL}^T p_{iL}^T m_{iL}^T q_{iL}^T i_{iL}^T$$

where:

a)  $v_{iL}^T$  = voluntary ( $v_{iL}^T = 0$ ) or coercive ( $v_{iL}^T = 1$ ) nature of public revenue of type  $i$  for its policy intended - or legal - revenue-provider (coerciveness parameter), with

$$0 \leq v_{iL}^T \leq 1$$

b)  $p_{iL}^T$  = full ( $p_{iL}^T = 0$ ) or null ( $p_{iL}^T = 1$ ) proportionality of the amount of public revenue of type  $i$  - the burden of which is borne by a policy intended - or legal - revenue-provider - to the cost of efficiently producing the good or service *specifically* received by him in return for his burden (proportionality parameter), with

$$0 \leq p_{iL}^T \leq 1$$

c)  $m_{iL}^T$  = full ( $m_{iL}^T = 1$ ) or null ( $m_{iL}^T = 0$ ) information to the policy intended - or legal - revenue-provider on the concept of the direct burden he is bearing when providing public revenue of type  $i$  (concept-information parameter), with

$$0 \leq m_{iL}^T \leq 1$$

d)  $q_{iL}^T$  = full ( $q_{iL}^T = 1$ ) or null ( $q_{iL}^T = 0$ ) information to the policy intended - or legal - revenue-provider on the amount of the direct burden he is bearing when providing public revenue of type  $i$  (amount-information parameter), with

$$0 \leq q_{iL}^T \leq 1$$

e)  $i_{iL}^T$  = intermediate ( $i_{iL}^T = 0$ ) or final ( $i_{iL}^T = 1$ ) position of the policy intended - or legal - revenue-provider in relation to his direct burden (burden-shifting parameter), with

$$0 \leq i_L^T \leq 1$$

#### IV.- INDEX OF BENEFIT VISIBILITY / INVISIBILITY OF TOTAL PUBLIC EXPENDITURE:

Similarly to the case of public revenue, for every level of territorial public administrations, L, an index of benefit visibility / invisibility of total public expenditure,  $V_L^E$ , can be defined in such a way that

$$0 \leq V_L^E \leq 1$$

based on the following formula:

$$V_L^E = \sum_{f=1}^q x_{fL}^E y_{fL}^E$$

where:

a)  $q$  = number of types of public expenditure performed by level L of territorial public administrations;

b)  $x_{fL}^E$  = relative financial weight of public expenditure of type f performed by level L of territorial public administrations, with  $f = 1, 2, \dots, q$ ; this is:

$$0 \leq x_{fL}^E = \frac{GF_{fL}^E}{\sum_{f=1}^q GF_{fL}^E} \leq 1$$

with  $GF_{fL}^E$  = absolute quantity of public expenditure of type f performed by level L of territorial public administrations;

c)  $y_{fL}^E$  = visibility or perceptibility (by the policy intended - or legal - consumer) factor of benefit of public expenditure of type f performed by level L of territorial public administrations, where

$$0 \leq y_{fL}^E \leq 1$$

#### V.- BENEFIT VISIBILITY / INVISIBILITY OF A SPECIFIC PUBLIC EXPENDITURE:

An objective estimation of  $y_{fL}^E$  (factor of perceptibility by a policy intended - or legal - consumer of the direct benefit of a public expenditure of type f performed by level L of territorial public administrations) can be defined according to the following criteria:

$$y_{fL}^E = v_{fL}^E p_{fL}^E m_{fL}^E q_{fL}^E i_{fL}^E$$

where:

a)  $v_{fL}^E$  = null ( $v_{fL}^E = 0$ ) or full ( $v_{fL}^E = 1$ ) consumption of a publicly supplied good of type f by

its policy intended - or legal - user or beneficiary (consumption parameter), with

$$0 \leq v_n^E \leq 1$$

b)  $p_n^E$  = full ( $p_n^E = 0$ ) or null ( $p_n^E = 1$ ) proportionality of cost of efficient production of the publicly supplied good of type f to a *specifically required monetary burden* borne by the policy intended - or legal - user or beneficiary (proportionality parameter), with

$$0 \leq p_n^E \leq 1$$

c)  $m_n^E$  = full ( $m_n^E = 1$ ) or null ( $m_n^E = 0$ ) information to the policy intended - or legal - consumer or user on the concept of the direct benefit he is receiving when public expenditure of type f is being performed (concept-information parameter), with

$$0 \leq m_n^E \leq 1$$

d)  $q_n^E$  = full ( $q_n^E = 1$ ) or null ( $q_n^E = 0$ ) information to the policy intended - or legal - consumer or user on the amount of the direct benefit he is receiving when public expenditure of type f is performed (amount-information parameter), with

$$0 \leq q_n^E \leq 1$$

e)  $i_n^E$  = intermediate ( $i_n^E = 0$ ) or final ( $i_n^E = 1$ ) position of the policy intended - or legal - user or beneficiary of the publicly supplied good of type f in relation to his direct benefit (benefit-shifting parameter), with

$$0 \leq i_n^E \leq 1$$

## VI.- EMPIRICAL ESTIMATES ON BURDEN VISIBILITY OF TOTAL PUBLIC REVENUE:

The following table presents weighted estimates on burden visibility of public revenue and grants of twenty significant OECD countries, obtained by applying index

$$V_L^T = \sum_{i=1}^n x_{iL}^T y_{iL}^T$$

defined in sections II and III of this paper, to fiscal systems and sub-systems now in force in these countries. Such values have been calculated mainly from information and primary data on public cash flows provided by both the Commission of the European Communities<sup>3</sup>, reflecting tax structures of - and institutional situation in - every member country on January 1, 1992, and the International Monetary Fund<sup>4</sup>. For brevity reasons, intermediate working tables are here omitted.

<sup>3</sup>Inventory of Taxes Levied in the Member States of the European Communities, 15th edition, Commission of the European Communities, Luxembourg, 1993.

<sup>4</sup>A Manual on Government Finance Statistics, International Monetary Fund, Washington, 1986, and Government Finance Statistics Yearbook 1994, Volume XVIII, International Monetary Fund, Washington, 1994.

Three hypotheses on minimum, plausible, and maximum shifting of tax burden have been assumed, giving rise to the corresponding series of maximum,  $V_M$ , plausible,  $V_p$ , and minimum,  $V_m$ , values of weighted-visibility estimates of revenue burden for the policy intended - or legal - revenue-providers.

According to the  $V_M$  - maximum weighted - visibility estimates of public revenue and grants:

A) Australia, with a value of 21,36%, has the most visible central sub-system, Portugal having the least one, with 5,53%.

B) Switzerland, with a value of 18,98%, has the most visible intermediate sub-system, and Spain the least one, with 1,15%. Belgium, Denmark, Finland, France, Greece, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Sweden, and United Kingdom lacked state, region, or province government level for the years respectively considered.

C) Sweden, with a value of 48,92%, has the most visible local sub-system, Netherlands having the least one, with 0,40% only. Estimations for Greece were not possible because of non-availability of primary data.

D) Luxembourg, with a value of 43,50%, has the most visible supranational sub-system, and Greece the least one, with 1,03%<sup>5</sup>. Estimations were not possible:

a) For Italy because of non-availability of primary data.

b) For Austria, Finland, and Sweden because these countries were not still members of the European Union for the years considered.

E) Sweden, with a value of 33,36%, has the most visible general system, Portugal having the least one, with 6,29%. Estimations for Greece and Italy were not possible because of non-availability of primary data.

According to the  $V_p$  - plausible weighted - visibility estimates:

A) Again Australia, with a value of 15,58%, has the most visible central sub-system, Portugal having the least one, with 3,88%.

B) Switzerland, with a value of 14,26%, has the most visible intermediate sub-system, and Spain the least one, with 0,89% only.

C) Sweden, with a value of 30,58%, has the most visible local sub-system, Netherlands having the least one, with 0,23%. An estimate for Greece was not possible because of non-availability of primary data.

D) Luxembourg, with a value of 37,95%, has the most visible supranational sub-system, Greece having the least one, with 0,87%. Estimations were not possible:

a) For Italy because of non-availability of primary data.

b) For Austria, Finland, and Sweden because these countries were not still members of the European Union for the years considered.

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<sup>5</sup>Notice that Australia, Canada, Norway, Switzerland and U.S.A. do not have supranational government level.

E) Sweden, with a value of 20,22%, again has the most visible general system, Portugal having the least one, with 4,33%. Estimates for Greece and Italy were not possible because of non-availability of primary data.

According to the  $V_m$  - minimum weighted - visibility estimates:

A) Australia, with a value of 9,81%, has the most visible central sub-system, Sweden having the least one, with 2,02%.

B) Switzerland, with a value of 9,53%, again has the most visible intermediate sub-system, and Australia the least one, with 0,42% only.

C) Sweden, with a value of 12,23%, has the most visible local sub-system, Finland and United Kingdom having the least one, with practically 0,00%. An estimate for Greece was not possible because of non-availability of primary data.

D) Luxembourg, with a value of 32,40%, has the most visible supranational subsystem, Portugal having the least one, with practically 0,00%. Estimations were not possible:

a) For Italy because of non-availability of primary data.

b) For Austria, Finland, and Sweden because these countries were not members of the European Union for the years considered.

E) Denmark, with a value of 12,63%, has the most visible general fiscal system, and Portugal the least one, with 2,36%. Estimates for Greece and Italy were not possible because of non-availability of primary data.

## VII.- CONCLUSIONS:

The quality of public revenue and expenditure sub-systems and systems as policy instruments for efficiently allocating economic resources among private and public sectors and sub-sectors varies in time and space as a result of economic, political, and social factors.

The indices of fiscal visibility / invisibility defined in the previous sections of this paper bring forward a general measurement method which can be used to make relevant quantified comparisons among member countries of the International Monetary Fund provided that detailed statistic figures on execution of public budgets as well as information about the structure of the different types of public administrations' revenue and expenditure programmes are available to researchers.

Estimates obtained from different assumptions on tax shifting by applying these indices to measure the burden visibility of revenue sub-systems and systems now in force in twenty significant OECD countries show:

First.- Low plausible values of burden visibility for all these countries, specially for:

a) Norway (4,39%), Greece (4,38%), Luxembourg (4,21%) and Portugal (3,88%) at a central level of government.

b) Australia (1,74%) and Spain (0,89%) at an intermediate (state, region or province) level of government.

c) Italy (0,69%), United Kingdom (0,63%), Ireland (0,36%) and Netherlands (0,23%) at a local level of government.

d) Portugal (1,67%) and Greece (0,87%) - among European Union member countries - at a supranational level of government.



e) Germany (6,86%), Austria (6,58%), Luxembourg (6,06%) and Portugal (4,33%) at the general government level.

These low values of revenue visibility stem from the concurrence of several factors such as non-coerciveness, existence of specific requitals, lack of information on concepts and quantities, partial shifting of burden by tax-payers, intergovernmental grants, etc.

Second.- Significant divergences between plausible values recorded by the three most visible general governments (Sweden, 20,22%; Denmark, 18,40%; Finland, 16,11%) and the three least ones (Austria, 6,58%; Luxembourg, 6,06%; and Portugal, 4,33%).

Policy implications of these estimates seem straightforward for countries becoming economically more efficient and integrated: present revenue visibility values are low in general, and allocation improvements could be obtained by implementing changes and reforms a) to raise values of public revenue visibility and b) to make domestic fiscal sub-systems and systems converge to OECD countries recording the highest values.

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Country	Year	Local government	Supranational government	General government
Denmark	1993	4.2%	2.2%	6.4%
Finland	1990	4.2%	2.2%	6.4%
France	1992	4.2%	2.2%	6.4%
Germany	1991	4.2%	2.2%	6.4%
Italy	1991	4.2%	2.2%	6.4%
Japan	1991	4.2%	2.2%	6.4%
Netherlands	1991	4.2%	2.2%	6.4%
Norway	1991	4.2%	2.2%	6.4%
Sweden	1991	4.2%	2.2%	6.4%
Switzerland	1991	4.2%	2.2%	6.4%
USA	1991	4.2%	2.2%	6.4%

PUBLIC REVENUE VISIBILITY

COUNTRIES/YEARS	V <sub>M</sub>	V <sub>p</sub>	V <sub>m</sub>
<b>AUSTRALIA, 1992</b>			
A) Consolidated central government . . . . .	21,36%	15,58%	9,81%
B) State, region or province government . . . . .	3,06%	1,74%	0,42%
C) Local government . . . . .	18,85%	14,14%	9,43%
D) Supranational government . . . . .	-	-	-
<i>General government</i> . . . . .	18,43%	13,11%	7,78%
<b>AUSTRIA, 1992</b>			
A) Consolidated central government . . . . .	7,52%	5,18%	2,83%
B) State, region or province government . . . . .	6,30%	5,03%	3,76%
C) Local government . . . . .	7,11%	5,61%	4,11%
D) Supranational government . . . . .	-	-	-
<i>General government</i> . . . . .	9,05%	6,58%	4,12%
<b>BELGIUM, 1992</b>			
A) Consolidated central government . . . . .	12,06%	8,25%	4,45%
B) State, region or province government . . . . .	-	-	-
C) Local government . . . . .	6,14%	4,44%	2,75%
D) Supranational government . . . . .	17,22%	14,53%	11,84%
<i>General government</i> . . . . .	13,11%	9,10%	5,09%
<b>CANADA, 1991</b>			
A) Consolidated central government . . . . .	17,74%	13,14%	8,54%
B) State, region or province government . . . . .	10,48%	8,20%	5,93%
C) Local government . . . . .	9,95%	7,40%	4,85%
D) Supranational government . . . . .	-	-	-
<i>General government</i> . . . . .	18,03%	13,62%	9,21%
<b>DENMARK, 1993</b>			
A) Consolidated central government . . . . .	11,38%	8,93%	6,47%
B) State, region or province government . . . . .	-	-	-
C) Local government . . . . .	17,17%	12,88%	8,58%
D) Supranational government . . . . .	12,91%	10,03%	7,15%
<i>General government</i> . . . . .	24,16%	18,40%	12,63%
<b>FINLAND, 1990</b>			
A) Consolidated central government . . . . .	14,76%	11,66%	8,55%
B) State, region or province government . . . . .	-	-	-
C) Local government . . . . .	21,07%	10,54%	0,00%
D) Supranational government . . . . .	-	-	-
<i>General government</i> . . . . .	26,06%	16,11%	6,16%
<b>FRANCE, 1992</b>			
A) Consolidated central government . . . . .	10,09%	6,44%	2,79%
B) State, region or province government . . . . .	-	-	-
C) Local government . . . . .	17,52%	13,14%	8,76%
D) Supranational government . . . . .	31,27%	27,27%	23,27%
<i>General government</i> . . . . .	14,77%	10,18%	5,59%

<b>GERMANY, 1992</b>			
A) Consolidated central government . . . . .	8,33%	5,34%	2,34%
B) State, region or province government . . . . .	8,77%	6,53%	4,28%
C) Local government . . . . .	3,01%	2,10%	1,20%
D) Supranational government . . . . .	30,43%	26,01%	21,60%
<i>General government</i> . . . . .	<i>9,91%</i>	<i>6,86%</i>	<i>3,80%</i>
<b>GREECE, 1993</b>			
A) Consolidated central government . . . . .	5,60%	4,38%	3,17%
B) State, region or province government . . . . .	-	-	-
C) Local government . . . . .	...	...	...
D) Supranational government . . . . .	1,03%	0,87%	0,70%
<i>General government</i> . . . . .			
<b>IRELAND, 1991</b>			
A) Consolidated central government . . . . .	11,86%	8,94%	6,02%
B) State, region or province government . . . . .	-	-	-
C) Local government . . . . .	0,48%	0,36%	0,24%
D) Supranational government . . . . .	26,17%	22,76%	19,34%
<i>General government</i> . . . . .	<i>13,13%</i>	<i>9,98%</i>	<i>6,83%</i>
<b>ITALY, 1993</b>			
A) Consolidated central government . . . . .	10,79%	7,50%	4,21%
B) State, region or province government . . . . .	-	-	-
C) Local government . . . . .	0,92%	0,69%	0,46%
D) Supranational government . . . . .	...	...	...
<i>General government</i> . . . . .			
<b>LUXEMBOURG, 1991</b>			
A) Consolidated central government . . . . .	6,05%	4,21%	2,38%
B) State, region or province government . . . . .	-	-	-
C) Local government . . . . .	9,76%	7,32%	4,88%
D) Supranational government . . . . .	43,50%	37,95%	32,40%
<i>General government</i> . . . . .	<i>8,32%</i>	<i>6,06%</i>	<i>3,79%</i>
<b>NETHERLANDS, 1993</b>			
A) Consolidated central government . . . . .	12,14%	9,04%	5,95%
B) State, region or province government . . . . .	-	-	-
C) Local government . . . . .	0,40%	0,23%	0,06%
D) Supranational government . . . . .	16,43%	13,25%	10,06%
<i>General government</i> . . . . .	<i>11,54%</i>	<i>8,56%</i>	<i>5,58%</i>
<b>NORWAY, 1990</b>			
A) Consolidated central government . . . . .	6,33%	4,39%	2,46%
B) State, region or province government . . . . .	-	-	-
C) Local government . . . . .	17,29%	12,96%	8,64%
D) Supranational government . . . . .	-	-	-
<i>General government</i> . . . . .	<i>15,30%</i>	<i>11,18%</i>	<i>7,06%</i>
<b>PORTUGAL, 1989</b>			
A) Consolidated central government . . . . .	5,53%	3,88%	2,24%
B) State, region or province government . . . . .	-	-	-
C) Local government . . . . .	4,06%	2,26%	0,46%
D) Supranational government . . . . .	3,34%	1,67%	0,00%
<i>General government</i> . . . . .	<i>6,29%</i>	<i>4,33%</i>	<i>2,36%</i>

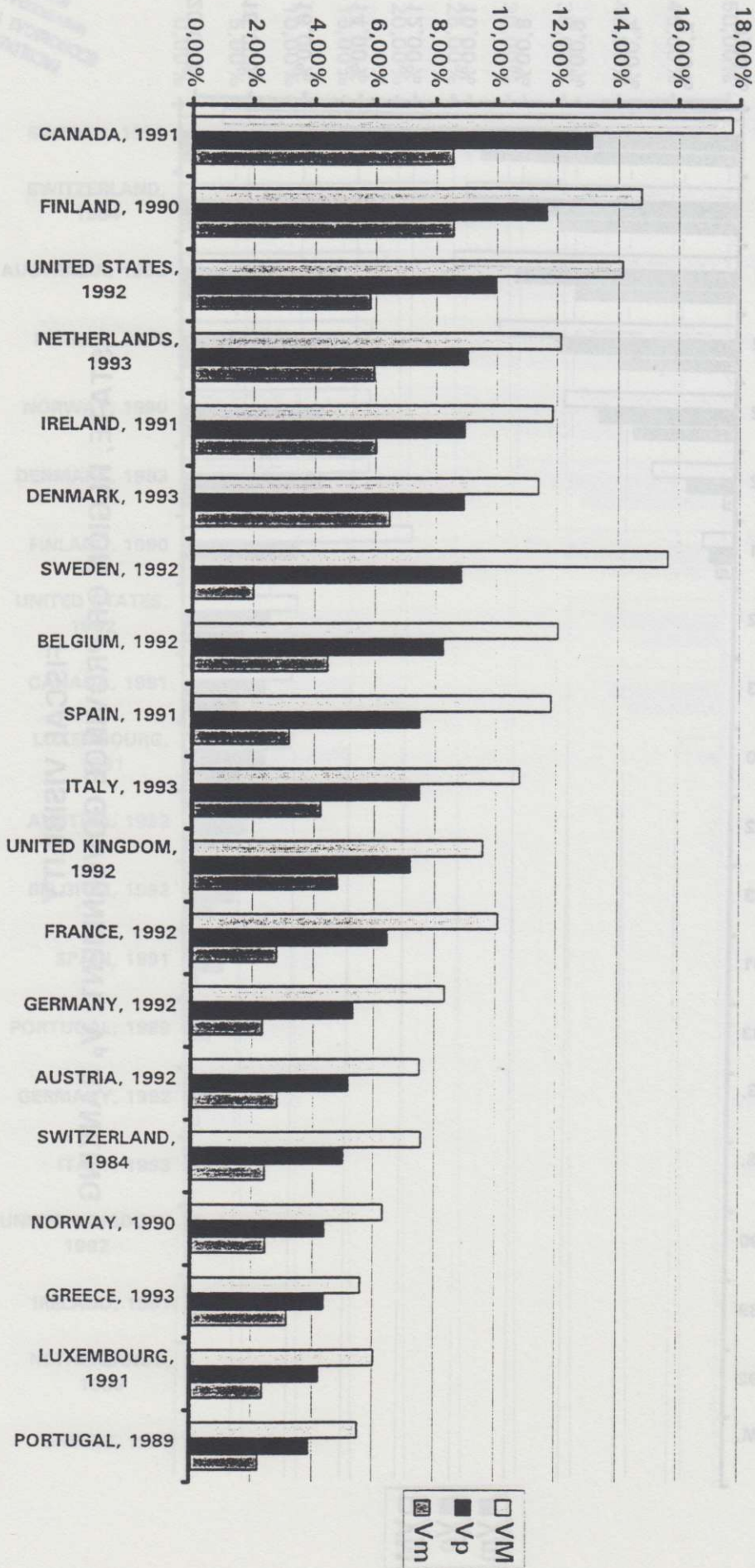
<b>SPAIN, 1991</b>			
A) Consolidated central government . . . . .	11,83%	7,51%	3,18%
B) State, region or province government . . . . .	1,15%	0,89%	0,64%
C) Local government . . . . .	5,84%	3,51%	1,17%
D) Supranational government . . . . .	11,01%	9,41%	7,81%
<i>General government</i> . . . . .	<i>11,95%</i>	<i>7,74%</i>	<i>3,53%</i>
<b>SWEDEN, 1992</b>			
A) Consolidated central government . . . . .	15,66%	8,84%	2,02%
B) State, region or province government . . . . .	-	-	-
C) Local government . . . . .	48,92%	30,58%	12,23%
D) Supranational government . . . . .	-	-	-
<i>General government</i> . . . . .	<i>33,36%</i>	<i>20,22%</i>	<i>7,07%</i>
<b>SWITZERLAND, 1984</b>			
A) Consolidated central government . . . . .	7,58%	5,01%	2,43%
B) State, region or province government . . . . .	18,98%	14,26%	9,53%
C) Local government . . . . .	23,43%	17,57%	11,71%
D) Supranational government . . . . .	-	-	-
<i>General government</i> . . . . .	<i>20,04%</i>	<i>14,65%</i>	<i>9,26%</i>
<b>UNITED KINGDOM, 1992</b>			
A) Consolidated central government . . . . .	9,58%	7,19%	4,79%
B) State, region or province government . . . . .	-	-	-
C) Local government . . . . .	1,26%	0,63%	0,00%
D) Supranational government . . . . .	29,92%	26,16%	22,39%
<i>General government</i> . . . . .	<i>11,14%</i>	<i>7,99%</i>	<i>4,85%</i>
<b>UNITED STATES, 1992</b>			
A) Consolidated central government . . . . .	14,15%	9,98%	5,82%
B) State, region or province government . . . . .	10,05%	8,31%	6,58%
C) Local government . . . . .	10,46%	7,91%	5,35%
D) Supranational government . . . . .	-	-	-
<i>General government</i> . . . . .	<i>16,76%</i>	<i>12,49%</i>	<i>8,21%</i>

**Notes:**

- $V_M$  = maximum weighted-visibility estimates of revenue burden for the legal revenue provider.  
 $V_P$  = plausible weighted-visibility estimates of revenue burden for the legal revenue provider.  
 $V_m$  = minimum weighted-visibility estimates of revenue burden for the legal revenue provider.  
- = non-existing government level for the year considered.  
... = datum lacking for the year considered.

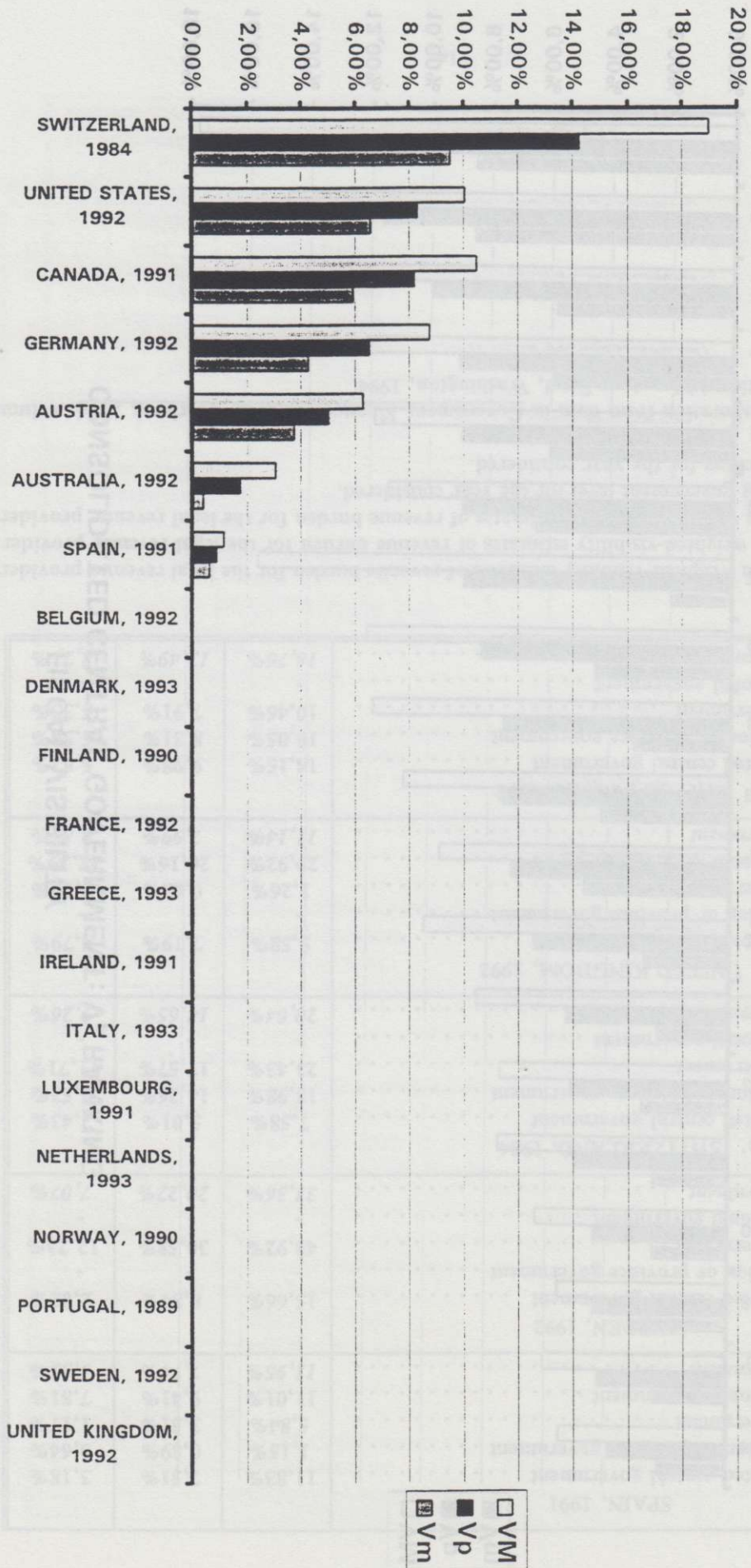
Source: own elaboration from data in *Government Finance Statistics Yearbook 1994*, volume XVIII, International Monetary Fund, Washington, 1994.

FISCAL VISIBILITY  
CONSOLIDATED CENTRAL GOVERNMENT: V<sub>p</sub> RANKING

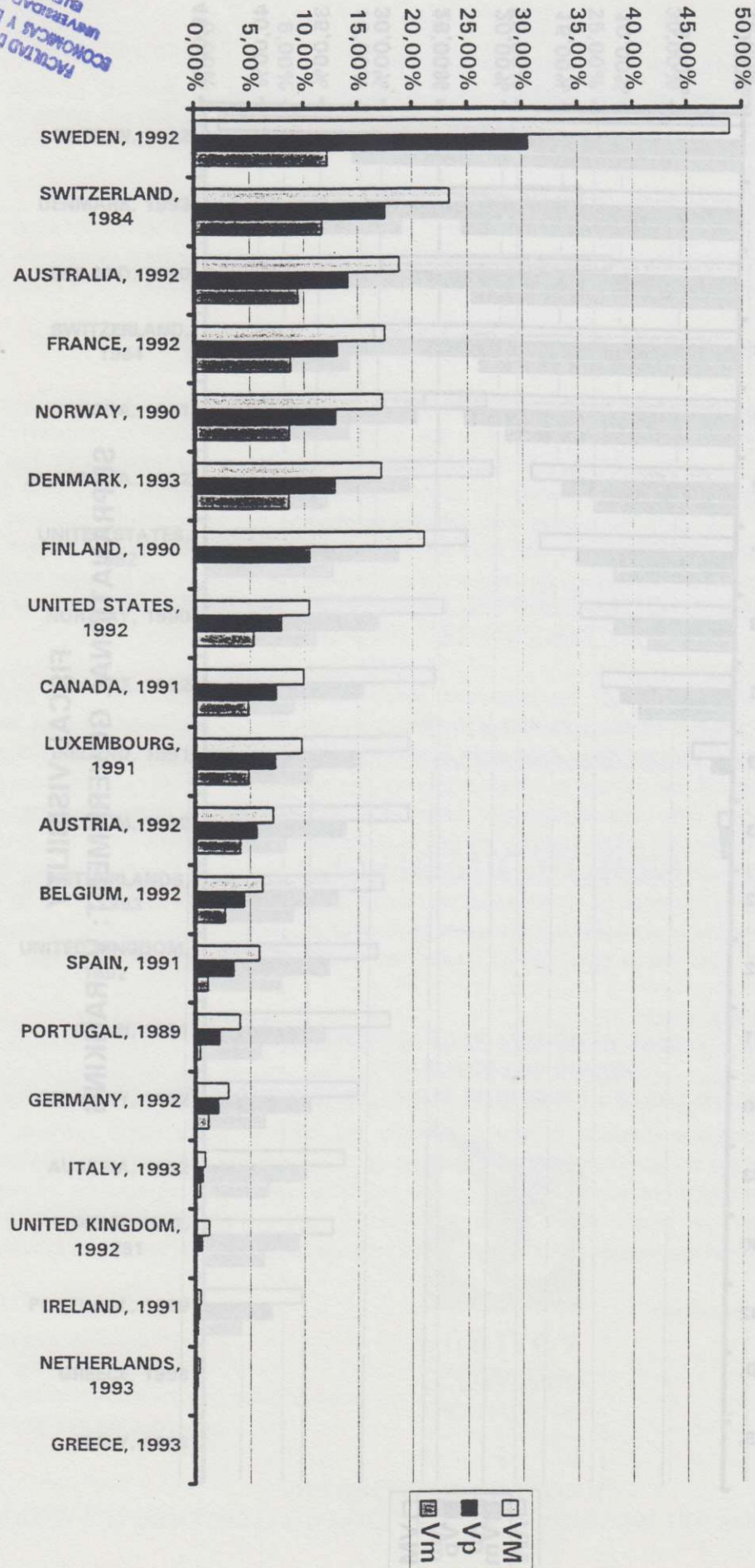


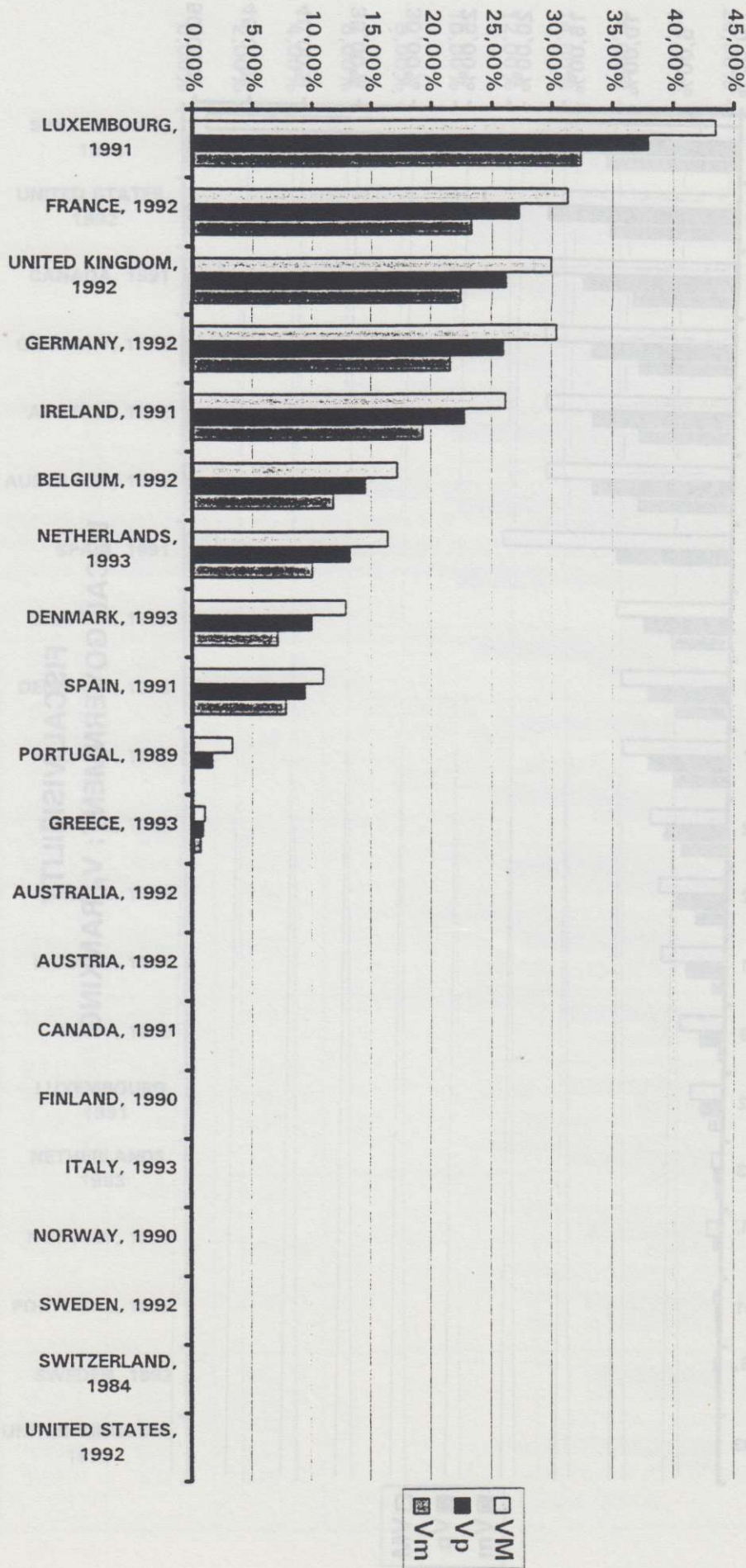


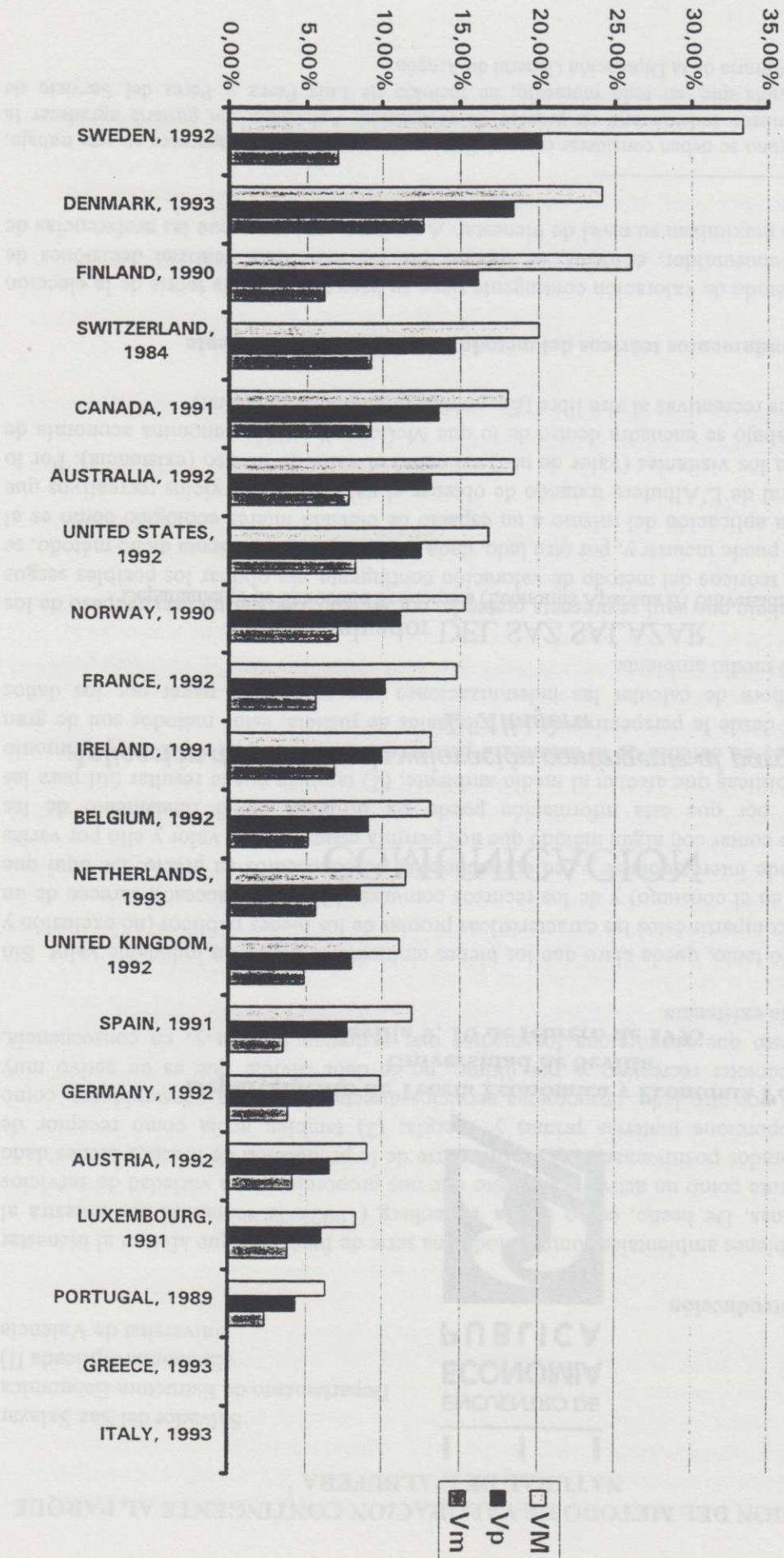
FISCAL VISIBILITY  
STATE, REGION OR PROVINCE GOVERNMENT: V<sub>p</sub> RANKING



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**FISCAL VISIBILITY**  
**GENERAL GOVERNMENT: V<sub>p</sub> RANKING**

VM  
V<sub>p</sub>  
V<sub>m</sub>