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policy paper

*Alberto Majocchi*

## **Progressivity in Financing EU Budget**

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The **Policy Paper** series of the Centre for Studies on Federalism includes analyses and policy-oriented research in the field of national and supranational federalism. The papers aim to stimulate scholarly and political debate on topical issues by presenting original data, ideas and proposals.

## Progressivity in Financing EU Budget

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1. In the Draft General Budget of the European Union for 2017, appropriations to be covered during the financial year amount to around 135 billion and the revenue deriving from GNI-based own resources (a contribution proportional to the national income of each Member State) represents 69.4% of this amount. There appears to now be some agreement that reforming the system of financing, providing resources through direct taxation of economic agents rather than indirectly through GNI contributions, could considerably increase the transparency and the accountability of the budget.

The main justification for using national contributions is fairness between Member States - since take-up rates are set to collect equal proportions of national income from each country - and simplicity of the system that guarantees budgetary balance and long-term stability. But there are many limits in the so-called “fourth resource” that cannot be defined as an own resource perfectly in line with the prescription of Article 311 of the Treaty on the Functioning of the European Union, which stipulates that “the EU budget shall be financed wholly from own resources”. Furthermore, a system of bottom-up vertical grants powerfully supports the idea of *juste retour*, since it emphasises the amount that is being transferred by each country to the Union and induces to regard it as an expenditure in national budgets that must be given back through countervailing EU expenditures flowing to each Member State.

ALBERTO MAJOCCHI Emeritus Professor at the University of Pavia,  
Vice President of the Centre for Studies on Federalism, Turin  
[alberto.majocchi@unipv.it]

2. In a recent contribution to the High Level Group on Own Resources<sup>1</sup>, chaired by Prof. Monti, the authors consider the possibility of building some degree of cross-country redistribution using the financing instruments. More specifically, they say that “if there is to be a reform of at least some of the expenditure items, or else if the tax instrument selected as a new own resource has some undesirable regressive properties, it may be that an appropriate automatic correction mechanism could be found in a simple, progressive schedule applied to the remaining GNI resource”. And they illustrate this suggestion with a hypothetical example where the regressive effects of a carbon levy are at least partly offset by complementing the carbon levy with a progressive GNI national contribution.

A similar - but more challenging - proposal for a radical reform of the fourth resource has been looked at in a previous paper<sup>2</sup>, where the idea was explored to replace the current system of national contributions proportional to GNI by financing EU expenditures through a new European surtax, levied on the top of the income taxes existing in Member States, using a simple redistributive mechanism. According to this proposal, the total revenue ( $T_E$ ) to be raised through this surtax - defined, similarly to the fourth resource, as the difference between the level of EU expenditures and the revenue from other traditional own resources, including VAT-based own resource - is initially distributed among the Member States according to the relative share ( $q_i$ ) of each country's GDP in EU GDP, as in the current system of the fourth resource, so that  $T_i = q_i T_E$ .

The amount of resources to be conveyed from each Member State to the European budget is then modified by applying a progressivity coefficient ( $k_i$ ) estimated according to the ratio between the per capita income of that country and average European per capita income. The total amount of money that a country must pay to the EU budget is finally distributed among its citizens by imposing a surtax - whose revenue will be paid directly to the EU coffers - on top of their domestic income tax,

without any change in the national income tax systems.

3. To describe the nature of the proposed mechanism for financing the EU budget in a progressive way, an exercise can be developed with regard to the Draft Budget 2017, where total expenditures amount to 134.9 billion and will be covered by customs duties and sugar levies up to 20.1 billion, by VAT-based own resources up to 19.4 billion, while the residual part should be covered by the GNI-based own resources for an amount of 93.7 billion (the difference is covered by other miscellaneous revenues).

The main idea underlying this exercise is that the GNI contribution could be replaced by a progressive surtax levied on top of national income taxes and paid directly to the EU budget. In the 2017 Draft Budget the GNI contribution is fixed at a rate  $t_a = 0.6232\%$  and the amount of the GNI resource paid by each country  $i$  ( $T_i$ ) is obtained by multiplying this rate by the national GNI and is equal, as a share of the total yield, to the proportion  $q_i$  of each country's national income on total European income (see Table 1, cols. 1 and 2).

The parameter chosen for a progressive distribution of this kind of taxation among EU countries is per capita income. Table 1 col. 3 shows the ratio  $k_i$  between each country's per capita income and the European average. The amount of income tax attributed to each country under a progressive key is determined by multiplying first the proportional yield of col. 1 by the ratio  $k_i$  of col. 3. Thus the new share  $q_i^*$  of each country in the total yield is established (col. 4)<sup>3</sup>. By multiplying this share by the total yield to be provided, the amount of income tax  $T_i^*$  for each Member State is determined (col. 5).

The per capita burden of income taxation is thus different in each country. While the rate of the national contribution to the EU budget was fixed at the level  $t_a = 0.6232\%$ , now a new scale of rates follows, ranging from 0.1246% for Bulgaria to 1.688%

for Luxembourg (col. 6). The effective rate for each country equals the proportional rate multiplied by a progressivity coefficient  $\eta$  (col. 7), represented by the ratio between the effective share of each country in the total yield (col. 4) and the share of each country in the EU GNI (col. 2). In this way, if the size of the budget comes out to be greater or lower than that foreseen, the rate for each country can be simply established by multiplying the new proportional rate, fixed with regard to the level of expenditures to be covered through income taxation, by the progressivity coefficient  $\eta$  of col. 7. The degree of progressivity, as measured by the elasticity of the yield with regard to the change in income, is high and near 2%<sup>4</sup>.

4. Having defined how the burden of income taxation is to be distributed among Member States, the second step is to distribute this levy within each country among its citizens: in the proposed scheme it would be up to each Member State to determine this distribution in accordance with its income tax progressivity scale, reflecting its social preference function<sup>5</sup>. The distributive formula among the citizens is thus considered outside the remit of EU competence since, from a European standpoint, what is important is only the levelling of economic conditions of Member States or, at least, the reduction of regressive taxation implicit in other instruments financing the EU budget.
5. Following the description of the proposed mechanism to reform the fourth resource and to incorporate a degree of progressivity in the financing system of the European budget, the first question to be addressed is that, at first sight, it seems difficult to accept that the per capita burden of income taxation differs in the Member States depending on the level of average income in each country, since it seems to violate the fundamental principle of "equal treatment for equals". In this connection, it is useful to recall that the national quota of income taxation is distributed among the citizens according to the progressivity scale ruling domestic taxation. Hence, it is very unlikely that the poor in a rich

country pay more than the rich in a poor country. In any case, the difference in the burden of income taxation can be justified if taking into account the fact that poor citizens of a rich Member State can exploit more opportunities and enjoy benefits which are unavailable to the citizens of a poor State, since a rich Member State can provide more services through public expenditures given the higher revenues collected, even if its rates of income taxes are similar to those of poor countries.

But there is an efficiency effect of this reform to be considered as well, since a progressive structure of taxation provides a significant incentive to reduce disequilibria inside the Union. Strong countries have an interest in the growth of per capita income in weak regions because, if convergence ensues, their own burden of income taxation will be reduced. Eventually, if perfect equalisation is attained, the progressivity coefficient  $\eta$  will be the same for all countries and the distribution of income tax among the Member States becomes proportional. Meanwhile, the weak countries have no incentive to cut down their efforts to reduce disparities in the level of income since, with a progressive income taxation, the elasticity of disposable income is less than one, but considerably larger than zero.

It is clear that these redistributive and incentive effects will probably be weak at the moment, given the limited size of the EU budget. But the proposed reform could probably be given consideration - perhaps initially implementing a less robust degree of progressivity - when the heavy tasks put on the shoulders of the Union in order to face the new challenges of migration, security and foreign aid, while re-launching the economy after the long period of stagnation since the crisis in 2008, will require a larger budget of the Union.

## Notes

<sup>1</sup> J. Nuñez Ferrer, J. Le Cacheux, G. Benedetto, M. Saunier, *Study on the Potential and Limitations of Reforming the Financing of the EU Budget*, 3 June 2016, pp. 111-112

<sup>2</sup> A. Majocchi, *Financing the EU budget with a surtax on national income taxes*, Turin, Centre for Studies on Federalism, Turin, Policy Paper 01, October 2011. In a technical annex to this paper is presented the model underlying the exercise that will be developed here.

<sup>3</sup> Since  $q_i^*$  is the share of the total fiscal revenue due by each country  $i$  following the correction with a progressivity coefficient  $k_i$ , then

$$q_i^* = T_i^*/T_E = k_i T_i / \sum k_i T_i$$

$T_i^*$  being the revenue of country  $i$  after the correction and  $T_E$  the total revenue to be collected.

<sup>4</sup> The implicit tax function, estimated by normal cross-section regression, has in fact the following exponential form

$$\lg T/N = -15.028 + 1.953 \lg Y/N$$

(0.564) (0.562)  $R^2 = 0.98$

where the figures in brackets are the standard errors of coefficient.

<sup>5</sup> Given that  $T_i^* = t_{ai}^* Y_i$  is the amount of the income tax to be paid in country  $i$  to fund the EU budget, the tax to be charged on each citizen can be assessed as follows. If the revenue from domestic income tax in the same country is

$$R_i = r_i (Y_i)$$

then

$$T_i^* = (t_{ai}^*/r_i) R_i$$

hence the surtax rate for each taxpayer in country  $i$  will be  $(t_{ai}^*/r_i)$ . If Italy is taken as an example, the income tax revenue in 2015 was 176.2 billion, amounting to 10.7282% of Italian GDP (1642.4438 billion). Presuming that this share on GDP of income taxation in Italy will remain the same in 2017, the surtax rate that should be levied to collect a revenue equal to the amount shown in col. 5 (8.5255 billion) will be equal to  $0.005063/0.107282 = 0.048$

**Table 1**

	$T_i$ [1]	$q_i$ [2]	$k_i$ [3]	$q_i^*$ [4]	$T_i^*$ [5]	$t_a^*$ [6]	$\eta$ [7]
Belgium	2649.8	2.83	1.271	3.12	2923	0.6871	1.102
Bulgaria	278.7	0.3	0.2187	0.06	56.2	0.1246	0.2
Czech Republic	987.8	1.05	0.5486	0.50	468.4	0.2968	0.476
Denmark	1765.4	1.88	1.6597	2.71	2538.9	0.8983	1.441
Germany	20024.9	21.37	1.2881	23.88	22372.3	0.6963	1.117
Estonia	134.6	0.14	0.5347	0.07	65.6	0.3116	0.5
Ireland	1143.5	1.22	1.9131	2.03	1901.8	1.037	1.664
Greece	1122.3	1.2	0.5625	0.58	543.4	0.3012	0.483
Spain	7104.9	7.58	0.8055	5.3	4965.4	0.4357	0.699
France	14207.7	15.16	1.1388	14.98	14034.2	0.6158	0.988
Croatia	284.3	0.3	0.3611	0.09	84.3	0.1870	0.3
Italy	10489.8	11.2	0.9375	9.10	8525.5	0.5063	0.812
Cyprus	110.8	0.12	0.7222	0.07	65.6	0.3635	0.583
Latvia	166.4	0.18	0.4270	0.06	56.2	0.2077	0.333

Lithuania	248.1	0.26	0.4479	0.10	93.7	0.2397	0.416
Luxembourg	225.6	0.24	3.121	0.65	609	1.688	2.708
Hungary	706.5	0.75	0.3854	0.25	234.2	0.2077	0.333
Malta	59.0	0.06	0.7049	0.04	37.5	0.4155	0.666
Netherlands	4422.7	4.72	1.388	5.68	5321.4	0.7499	1.203
Austria	2119.8	2.26	1.368	2.68	2510.8	0.7390	1.186
Poland	2666.1	2.84	0.3888	0.96	899.4	0.2106	0.338
Portugal	1145.1	1.22	0.6006	0.64	599.6	0.3269	0.524
Romania	1084.4	1.16	0.2812	0.28	262.3	0.1504	0.241
Slovakia	246.8	0.26	0.5034	0.11	103.1	0.2637	0.423
Slovenia	497.3	0.53	0.6493	0.3	281.1	0.3527	0.566
Finland	1289.6	1.38	1.326	1.58	1480.2	0.7135	1.145
Sweden	3057.0	3.26	1.5833	4.47	4187.8	0.8545	1.371
United Kingdom	15446.4	16.49	1.375	19.66	18418.8	0.743	1.192
European Union	93686.5 (million €)	100.00		100.00	93639.7 (million €)		

## CENTRE FOR STUDIES ON FEDERALISM

The **Centre for Studies on Federalism (CSF)** was established in November 2000 under the auspices of the Compagnia di San Paolo and the Universities of Turin, Pavia and Milan. It is presently a foundation.

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**CENTRE FOR STUDIES ON FEDERALISM**

Via Real Collegio, 30  
10024 Moncalieri (Turin) - ITALY  
Phone +39 011 670 5024  
Fax +39 011 670 5081  
**[info@csfederalismo.it](mailto:info@csfederalismo.it)**  
**[www.csfederalismo.it](http://www.csfederalismo.it)**