

# FISCAL AND MONETARY ILLUSION AND THE MAASTRICHT RULES

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# FISCAL AND MONETARY ILLUSION AND THE MAASTRICHT RULES

by Francesco Forte

## SECTION I .

### THE NATURE AND RELEVANCE OF FISCAL AND MONETARY ILLUSIONS

1. Fiscal illusion and monetary illusion have a well recognized place both in public economics and in fiscal sociology. They consist in the wrong perception of some phenomenon, by given subjects either as a consequence of an intentional action by somebody to let them have that illusion or because of some endogenous inability of having the correct perception or for both reasons. In Paretian analytics, fiscal and monetary illusions are a sub class of the non logical actions as contrasted to the logical ones.<sup>1</sup> And the distinctive tract of the non logical actions *in general* as compared with the logical ones it is that that in the last the subjective view, coincides by and large, with the objective view, while in the first the subjective view differs from the objective one<sup>2</sup>. In his work Pareto generally did not label as fiscal and monetary illusions his examples of “non logical actions” that could deserve this denomination<sup>3</sup>. But it is clear, that they would fit the list to which the label, of fiscal illusion is applied, after the seminal works on this topic of Amilcare Puviani<sup>4</sup>, contemporary to Pareto elaboration of his category of non logical actions. And, any way, as we shall see, lately<sup>5</sup>, in a short writing, he explicitly labelled as fiscal illusion

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<sup>1</sup> See V. PARETO(1906) *Manuale di Economia politica, con una introduzione alla scienza sociale*, Milano, Società Editrice libraria, Chapter II, “Introduzione alla scienza sociale”, § 3 ss..

<sup>2</sup> It should be noted that, according to Pareto, the distinction between the two classes of action may be made clearly only at the abstract level. In real life as sharp distinction it is practically impossible. For instance, he observes, there are individual who, in the stock exchange, more easily speculate on the going up than down and other individuals who have the opposite (non logical) attitude See *Manuale*, Chapter II, §3.

<sup>3</sup> It is clear also from his own writings. See for instance, what he writes in a Letter to G. Sensini, quoted by James Buchanan, in *The Effects of Institutions on Fiscal Choices*, Ch.10, The Fiscal Illusion, p.126, footnote 2, Vol. 4 of the *Collected works* of JAMES BUCHANAN, about tax payers' behaviour, “who does not know the many effects of taxes, or more generally and better, of the many financial transactions”. His actions. Pareto rites “are not of the nature of logical actions such as occupies political economy and for which the theory is less difficult. But they are of the nature of non logical actions, of which the theory is much more difficult”

<sup>4</sup> PUVIANI A. (1903), *Teoria dell'illusione finanziaria*, Palermo. A good edition by F. VOLPI(1973), Milan, Isedi it is currently available

<sup>5</sup> In 1917 in the last of the three letters addressed to B. GRIZIOTTI quoted above, not 2.

the phenomena of deception arising for the creditors of public debt, by monetary manipulations and debt conversions.

As for fiscal illusions, the most important authors which have explicitly dealt with it, from the theoretical economic or from the economic-sociological point of view after Puviani, as Mauro Fasiani<sup>6</sup>, Gunter Schmolders<sup>7</sup>, James M. Buchanan<sup>8</sup>, Richard E. Wagner<sup>9</sup>, Annibal A. Cavaco Silva<sup>10</sup> Werner Pommerhene and Fritz Schneider<sup>11</sup>, Alan T. Peacock and Ilde Rizzo<sup>12</sup> and A. T. Peacock and E. Giardina<sup>13</sup> generally consider the *deliberate* actions by political and bureaucratic actors, to illude the citizens, members of national and local communities both as taxpayers and as perceivers of public expenditure benefits and, most of all, as for the effects of governments deficits and debts. Even if the results are, some time, controversial the bulk of the literature pointing to the relevance of fiscal illusions has achieved a solid reputation.

2. More controversial is the case as for the monetary illusion, arising from the changes in value of currencies, in terms of purchasing power or of some other yard stick as other currencies or precious metals, as for the economic and financial transactions in the market and for the accounting of firms Here one should distinguish the illusion caused in the public by sovereign powers through a deliberate devaluation of the domestic currency from the illusion that may be caused by an

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<sup>6</sup> M. FASIANI (1951), *Principi di Scienza delle Finanze*, Torino, Giappichelli, 2nd editino (the first it is in 1941)

<sup>7</sup> G: SCHMOLDERS (1960) Introduction to A: PUVIANI (1960), *Die Illusionen in der oeffentlichen Finanzwirtschaft*, Berlin

<sup>8</sup> JAMES BUCHANAN, (1964), "Public Debt, Cost Theory and Fiscal Illusion", in J.M. FERGUSON (editor)(1964), *Public Debt and Future Generations*, Chapel Hill, University of North Carolina Press and J. M. BUCHANAN (1967) *Public Finance in Democratic Process*, reprinted as vol. 4 of the collected works of J. BUCHANAN, Indianapolis, Liberty Fund, 1999, Ch.10, "The Fiscal Illusion",

<sup>9</sup> R. E. WAGNER (1976), "Revenue Structure, Fiscal Illusion and Budgetary Choices", *Public Choice*, n.25. And BUCHANANA and WAGNER (1977), *Democracy in Deficit. The Political Legacy of Lord Keynes*, London Academic Press exp. pp 180-95

<sup>10</sup> A. CAVACO SILVA (1977), *Economic Effects of Public Debt*, London, Martin Robertson, pp.37-40, also discussed in PEACOCK (1992) see below.

<sup>11</sup> W. POMMEHRHENE and FRITZ SCHNEIDER (1978), "Fiscal Illusion Political Institutions and local spending", *Kyklos*, n.31

<sup>12</sup> A:T: PEACOCK and I. RIZZO (1987) "Government Debt and Growth in Public Spending", *Public Finance*, n. 2, with a "Reply" of H. SHIBATA and Y. KIMURA in the same issue

<sup>13</sup> A. T. PEACOCK, (1992), *Public Choice Analysis in Historical Perspective*, Cambridge University Press, New York, "Fourth Lecture", 3. "The case of a Balanced Budget Constraint", and the discussion by E. GIARDINA in his "Commentary 4. Control of Public Sector Growth" p. 160-163.

ongoing inflation . It is well known since the ancient times, that currencies may be altered and indeed have been altered by the Sovereign powers to capture a benefit deriving from the deception of creditors in these currencies and from their bearer. However the benefit thus obtained by the Sovereign powers centuries needs not derive from the intent of the national monetary authority of deceiving the owners of that currency about its real value. The deception may simply arise from a violation of their “bona fide” expectations. The illusion then , in Paretian terms, is not a wrong perception of the value of the currency but a wrong trust in the behaviour of the public authorities Pareto maintains that Governments *deliberately* cause currency depreciations (eventually causing inflations) to spoil creditors of the state <sup>14</sup>. One may argue that more than often Governments and monetary authorities are forced to do so by factors overriding their willingness of respecting their commitments. Still, one may observe that this is a typical case of monetary illusion arising from the naive belief that fiscal and monetary Sovereign powers are really able to pursue their declared commitments, that, in spite of the contrary evidence, is endowed of a multi secular persistence <sup>15</sup>.

In the case of *an ongoing* inflationary process , originated from a combination of factors, rather than a deliberate act of a given authority , which the economic operators expect to persist , monetary illusions appear as much more doubtful phenomenon , unless underwined with other factors of difficult perception. Thus it is quite doubtful the validity of the time honoured theorem of the asymmetric behaviour of the workers and their Unions in relation to changes in real wages due to

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<sup>14</sup> See W: PARETO (1917), “Sugli effetti dei prestiti e delle imposte”, letter to B. Griziotti, reprinted B. GRIZIOTTI (1956). *Studi di scienza delle finanze e diritto finanziario*, Milano, Giuffrè, Vol. II, pp. 263-67 and W. PARETO (1920) “Imposte, debito, carta moneta”, L ‘ *Economista*, March 28, reprinted in *Battaglie liberistiche* Salerno, Casa Editrice Salernitana n. d. Pareto discusses, as fiscal illusions, also the various manipulation of public debt as conversions from short term to long term issues at a reduced interest rate in (not so long lasting) periods of low inflation. See GIARDINA (19092) quoted below p. 163.

<sup>15</sup> A characteristic recent case of this type of monetary illusion deriving from the wrong belief that public monetary and fiscal authorities of a given State are willing and capable of respecting their commitments as for the value of the national currency has been that of the pesos of Argentina whose value was warranted by a currency board system where by the issuance of an unit of pesos had to be accompanied by the ownership of a dollar , by the Central Bank of Argentina. It is still a mystery the reason why the international community was under the illusion that the currency board system could not collapse (as actually did ) through an huge gap in the Argentinian balance of payment due to the unrealistic rate of exchange of the pesos vis a vis the currencies different from the dollar accompanied by a recession in the domestic economy due to the automatic credit restraint relating to the outflow of dollars.

price changes with invariant nominal wages and to changes in real wages due do changes in nominal wages with invariant prices. It may be true that workers and their Unions would strongly oppose to a wage cut when prices go down but does not appear true that they do not react with the same strength when real wages are reduced by a price increase. Nor it is true that savers would buy bonds overlooking the ongoing inflation rate and the likelihood of its persistence in future times. On these phenomena, perhaps, one may recall the old sentence that somebody may deceive one person several times or several person one time but not several persons several times.

3. The two kinds of illusion, the fiscal and the monetary one, even when caused by deliberate actions by politicians and bureaucrats, might be considered as different phenomena caused public authorities playing respectively with the confusion between nominal and real value of money and with the understatement or overstatement of the real effects of fiscal economy on individual al collective welfare. But among the most intriguing illusions , i.e. those more difficult to detect and to get rid of , there are those which arise by a nexus between monetary and fiscal factors. Let me mention some typical phenomena. The first and most known fiscal illusion of monetary nature, in the area of taxation, it is the fiscal drag due to the automatic increase of real tax rates, in a personal income tax, due to the loss of value of monetary income subject to the progressive rates and of the lump sum deductions from the taxable income. Especially when the annual rate of price rise is low the fiscal drag may go unnoticed , at least for a umber of years. And politicians who announce and carry on a reduction in the rates of the progressive income tax are often acclaimed as if they did reduce them really rather than simply adjusting to the change in the real value of money. Less known is another, perhaps more distorting kind of monetary-fiscal illusion in the income taxation , i.e. that of revenues of capital, in the income tax, at their face value, which normally includes a compensation for the loss

of value of the capital invested. With an inflation of 6 per cent and a revenue from capital of 10 per cent, a rate of 44 per cent as the Italian top rate of the personal income tax, would mean a tax of 44,4 i.e. of 0,4 more than the real revenue, net of the compensation for inflation. No wonder that in several countries, as in the case of Italy, revenues from capital are subject to a final withholding tax at a flat rate ranging between 12 and 20 per cent. Finally, a monetary-fiscal illusion of crucial importance is that in the taxation of profits, due to the fact that depreciations allowances are based on the book value of the assets and this value, in turn, in most cases is not the actual value, but the historical one. Here again one may find the true economic reason why so often special deduction are “granted” to “stimulate” the business investment: indeed, in many cases, they are not “tax expenditures”, but merely a remedy for the over taxation of the profits, relating to real capital investments.

Both in areas of fiscal illusion, of monetary illusion and of monetary-fiscal illusion the focus generally, as the above review shows, is on the wrong perceptions of economic phenomena by the *citizens*, in market operations, as for the effects of public economy. The distortion of choices chiefly relates to their behaviour in the market place and eventually as political actors affecting public choices. The *politicians and bureaucrats i.e. the public authorities* whether intentionally or unintentionally, are on the other side of the causal nexus

4. However there may be other kinds of illusions originating unintentionally or intentionally by the politicians and bureaucrats with the effect of causing not only a wrong perception among the citizens of the given economic phenomena and possibly distorting their choices, but also, *and primarily*, a wrong perception among the public authorities themselves .

And actually other phenomena, different from the monetary magnitudes and the fiscal fixtures may be at the basis of the illusions. A macro case, that I have exposed, some years ago, it is the way how national product and per capita product or income

are evaluated, by official statistics of developed and under developed countries<sup>16</sup>. Rather than considering aggregate national product at factor cost, the figure of GDP, i.e. of gross domestic product at market prices and of per capita gross domestic product have been considered: which include, as national and per capita economic values, depreciations and indirect taxes. A curious result of this illusory way of inflating the value of national product it is that an increase of taxes classified as indirect taxation, accompanied by an equivalent reduction of taxes which are not classified as indirect, as, for instance profit taxes, increase the aggregate and per capita product of the nation, via the increase of its GDP. One might object that generally the introduction of indirect taxes increases prices, so that even if nominal GDP increases, because of new indirect taxes, real GDP does not, so that the inclusion of indirect taxation in national product does not affect its real value. However it is not always true that the substitution of taxes classified as indirect to taxes to profit taxes cause an increase of prices. For instance in Italy, in 1997, has been introduced a new local tax on the value added of business and independent workers, to replace national health social security contributions and local income taxes on profits and income of self employed workers. That new value tax in spite of its nature of tax on value added of income type, has been classified as indirect tax and, therefore, has been added to the product at factor costs, while the local income taxes replaced were not added to it and the result has been an artificial increase of GDP. It does not seem that the substitution to the new tax to the older ones could have any effect on market prices. At any rate, countries with higher depreciations and higher indirect taxes have, *ceteris paribus*, a greater GDP and there is no reason to assume that this artificial effect is reflected in the rate of exchange of their currencies, if not for other reasons, because domestic indirect taxes are rebated on exports and equivalent taxes are applied on imports.

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<sup>16</sup> See F: FORTE, (1997) "The Measurement of Fiscal Burden on GDP instead than on National Net Value Added Produced. A Chapter in Fiscal Illusion", Banca Nazionale del Lavoro Quarterly Review, n. 202, September.

This singular methodology of inflating national and per capita product, by which indirect taxes and depreciations enter in the measure of national product, creates a underassessment of the effective fiscal burden, of the public debt burden and of the place of the public sector in the aggregate economic process. One may well argue that the illusion thus created not only deceive the citizens, but also the political and bureaucratic actors . i.e. the public authorities and influence their choices, potentially distorting them, as well as and their public appreciation.

While in the area of economic welfare analysis and of fiscal policy the reference to GDP rather than to national income at factor costs may create distorting illusions, this may not be the case, as for monetary policy, in relation to the quantity of money to be issued, as far as indirect taxes really add to prices and therefore to the volume of market transactions. However here a reference to the domestic product at market prices really sold on the market, i. e. net of value added produced by the public administration would appear more appropriate<sup>17</sup>

To my knowledge the area of illusions affecting politicians, exogenously or endogenously created, and influencing their choices in different ways, has not been systematically explored, except in a seminal sociological work, about ninety years ago, by Wilfred Pareto, in his already mentioned “monstrous”<sup>18</sup> *Treaties of general Sociology*, where they are extensively dealt under the label of “non logical actions”.

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<sup>17</sup> See in this issue F: FORTE and J. M. BUCHANAN, *The Evaluation of Public Services*, Journal of Political Economy, 1961, LXIX, n.2

<sup>18</sup> The definition belongs to Raymond Aron, quoted by N. BOBBIO in his “Introduction” to the 1964 Italian edition of the work which extends in two volumes of nearly two thousand pages. “Non logical actions” together with the “residuals”, which are permanent non logical beliefs, occupy about 800 hundred pages of the first volume.



## II.

### THE MONETARY-FISCAL ILLUSION BUILT IN THE MAASTRICHT DEFICIT RULE.

1. In this paper I deal with a big instance of monetary-fiscal illusion unintentionally created by the monetary and fiscal authorities of the EU and of the member countries and affecting their very perception of the fiscal and monetary phenomena on which they must tune their fiscal and monetary policies : the rules on deficit set for the countries of the European Monetary Union, by the Maastricht Treaty and by the Stability and Growth Pact of Amsterdam. As it will appear , in this case, monetary and fiscal illusion are intertwined and cause a great disturbance in the discussion and decision making about the proper choices between the various European fiscal and monetary authorities *and a about a possible change of interpretation of the Maastricht Treaty rules by those of the stability pact .*

As it is well known, according to these rules EU states member of the European Monetary Union - and particularly those belonging to the Euro area (Ea), constrained by the Amsterdam pact- as for the General Government Budget , should never trepass the threshold of a deficit of 3 per cent of GDP. And in period of depression Government would be allowed to do this only by drawing on a budgetary surplus accumulated in previous years. On the other hand, the States member of EU should never trepass the treshold of 60 per cent of Public Debt on GDP. The rationale of these rules has been under fire , with several arguments relating to the logic of fiscal policy in periods of depression. To them one might add arguments about the need of countervailing an excessive increase of the value of the Euro currency vis a vis other currencies , due to a divergence between the rate of the European Central Bank and to its diffusion as reserve currency, by a more permissive fiscal policy. As for the budgetary deficits of specific countries as France and Germany that tend to rise above the 3 per cent fatidic threshold, has been objected that they are only temporary, because structural reforms of the welfare state have been introduced, with

beneficial effects in the long run on the General Government budget. And in a sense, the deficits trespassing the 3 per cent rule represent the price to buy a social consensus for these heavy structural changes. But, discussing these topics, in principle or referring to specific European countries, whether arguing pro or cons the relaxation of this Maastricht rule, to my knowledge, every body has dealt with the strictures of the Maastricht deficit rule, from the point of view of the nominal deficits, never has been considered the real deficit, which differs from the real one, when the depreciation of public debt, due to the increase in the prices level of the considered fiscal year, is taken in to account.

2. Let us now work out how the monetary-fiscal illusion operates in concealing the real deficit or surplus of General Governments of the EU countries, under the Maastricht rule according to which deficits of General Governments should never trespass the threshold of 3 per cent of GDP and under the stability pact of Amsterdam by which the long run objective of General Governments of the 12 Euro area (Ea) member countries should be the balanced budget, *supposedly as an end of neutral fiscal policy*. Let us now calculate, for the three fiscal years 2000, 2001 and 2002, the real deficit or surplus of the General Government budgets of the 15 Eu states and of the 12 Ea states and compare them with the nominal deficits or surplus, by taking in to account the effect of the inflation rate on the real value of their stocks of public debt, outstanding at the end of every year. They, in Paretian methodology, give the *objective view* of the balance of budgets of General Governments of the 15 Eu countries, and of their macro economic effects as contrasted with the subjective view, arising by the existing lawfully interpretation of the Maastricht rules.

To do so, I simply take the rate on inflation of any given country in any of the three fiscal years, as measured by Eurostat by its Index of Consumer Prices, i. e. HICP, and multiply it for the ratio of the stock of debt of General Government of that country at the end of the considered year to its GDP, thus obtaining the loss of real

value of the stock of debt outstanding at the end of every considered year for every given country. This loss of value of the outstanding debt stock of the General Government , for any given country, in each of the three years, is a capital gain of its General Government which, logically, in a correct accounting methodology, has to be added algebraically to the balance of its budget in the same year. And since one , according to the Maastricht fiscal rules, considers not the absolute values of public debts and budgetary balances, but their ratio to GDP, the correction of this balance for the capital gain in the outstanding debt stock too has to be done in terms of ratios to GDP.

3.The results are in given Table 1 .They are rather startling .

**TABLE 1**  
**NOMINAL AND REAL DEFICIT OR SURPLUS OF THE EU GENERAL**  
**GOVERNMENTS**  
**(2000-2002)\***

	HICP	Deficit/GDP	DEBT/GDP	AMM=HICPxDEBT		AMM+deficit
	annual	General	general			( % )
	percentage	government	government			
	changes					
<b>BE=BELGIUM</b>	BE	BE	BE	BE		BE
2000	2,7	-0,1	1,096	2,9592		2,8592
2001	2,4	-0,4	1,085	2,604		2,204
2002	1,6	0,0	1,054	1,6864		1,6864
<b>DE=GERMANY</b>	DE	DE	DE	DE		DE
2000	1,4	1,1	0,602	0,8428		1,9428
2001	1,9	-2,8	0,595	1,1305	-	-1,6695
2002	1,3	-3,6	0,608	0,7904	-	-2,8096
<b>GR=GRECE</b>	GR	GR	GR	GR		GR
2000	2,9	-1,9	1,062	3,0798		1,1798
2001	3,7	-1,4	1,07	3,959		2,559
2002	3,9	-1,2	1,049	4,0911		2,8911
<b>ES=SPAIN</b>	ES	ES	ES	ES		ES
2000	3,5	-0,8	0,605	2,1175		1,3175
2001	2,8	-0,1	0,569	1,5932		1,4932
2002	3,6	-0,1	0,54	1,944		1,844
<b>FR=FRANCE</b>	FR	FR	FR	FR		FR
2000	1,8	-1,4	0,572	1,0296		-0,3704
2001	1,8	-1,5	0,568	1,0224	-	-0,4776
2002	1,9	-3,1	0,591	1,1229		-1,9771
<b>IE=IRELAND</b>	IE	IE	IE	IE		IE
2000	5,3	4,3	0,393	2,0829		6,3829
2001	4,0	1,1	0,368	1,472		2,572
2002	4,7	-0,1	0,34	1,598		1,498
<b>IT=ITALY</b>	IT	IT	IT	IT		IT

2000	2,6	-0,6	1,106	2,8756		2,2756
2001	2,3	-2,6	1,095	2,5185		-0,0815
2002	2,6	-2,3	1,067	2,7742		0,4742
LU=LUXEMBURG	LU	LU	LU	LU		LU
2000	3,8	6,1	0,056	0,2128		6,3128
2001	2,4	6,4	0,056	0,344		6,5344
2002	2,1	2,6	0,057	0,1197		2,7197
NL=THE NETHERLANDS	NL	NL	NL	NL		NL
2000	2,3	2,2	0,558	1,2834		3,4834
2001	5,1	0,1	0,528	2,6928		2,7928
2002	3,9	-1,1	0,526	2,0514		0,9514
AT=AUSTRIA	AT	AT	AT	AT		AT
2000	2,0	-1,5	0,668	1,336		-0,164
2001	2,3	0,3	0,673	1,5479		1,8479
2002	1,7	-0,6	0,679	1,1543		0,5543
PT=PORTUGAL	PT	PT	PT	PT		PT
2000	2,8	-2,8	0,533	1,4924		-1,3076
2001	4,4	-4,2	0,556	2,4464		-1,7536
2002	3,7	-2,7	0,58	2,146		-0,554
FI=FINLAND	FI	FI	FI	FI		FI
2000	3,0	6,9	0,445	1,335		8,235
2001	2,7	5,1	0,438	1,1826		6,2826
2002	2,0	4,7	0,427	0,854		5,554
DK=DENMARK	DK	DK	DK	DK		DK
2000	2,7	2,6	0,474	1,2798		3,8798
2001	2,3	3,1	0,454	1,0442		4,1442
2002	2,4	1,9	0,452	1,0848		2,9848
SE=SWEDEN	SE	SE	SE	SE		SE
2000	1,3	3,4	0,528	0,6864		4,0864
2001	2,7	4,5	0,544	1,4688		5,9688
2002	2,0	1,2	0,524	1,048		2,248
UK	UK	UK	UK	UK		UK
2000	0,8	3,9	0,421	0,3368		4,2368
2001	1,2	0,8	0,39	0,468		1,268
2002	1,3	-1,4	0,386	0,5018		-0,8982
						0

Source for the first three columns: European Central Bank, Statistics Pocket Book, pages 31 and 37

One can see that, among the General Governments of the considered 15 member States, except Luxembourg, Finland and Sweden, all the other, in at least some of the three considered years or in all of them, had a *nominal budgetary deficit*. After the correction for the loss of real value of the public debt, due to the increase in the price level, the number of countries with a surplus in the budget in each of the three considered years has increased to include Belgium, Greece, Spain, Netherland and Denmark. The countries with some surplus years, in their General Government budgets, considering the nominal deficits, are only Germany, Austria and UK. After the correction, Italy joins the list. After the correction, only the General Governments of France and Portugal have a deficit in each of the three considered

years: France with deficits ranging from 0,37, to 0,47 per cent of GDP to increase to 1,9 per cent of GDP in 2002 and Portugal with deficits that from 1,3 and 1,7 per cent of GDP go down to 0,55 in 2002. Even more interesting it is the result of the correction if one focuses on the various years. Indeed in 2000, among the big countries, Germany, now, shows a sizable surplus of the General Government's *real* budget of 1,9 per cent of GDP, Spain exhibits a *real* surplus of 1,3 per cent of GDP, Italy of 2,2 per cent of GDP, UK has a *real* surplus of 4,2 of GDP. The only big country with a *real* deficit in the General Government's budget it is France, however with a tiny 0,37 per cent of its GDP. And among the not so big countries but not so small countries, one notices the huge *real* surplus of the General Government's budget of Netherland reaching 3,48 of GDP and of Sweden with a 4 per cent of GDP. No wonder if the Eu, and Emu entered, after that year, in a period of sluggish growth and then of semi-recession. But also in 2001, after the correction for the Pigou-Patinkin negative effect, the general impression, as for the Eu and Emu countries, is not that of a "Keynesian democracies in deficit". Indeed, only Germany, among the big countries in 2001, has a *real* deficit higher 1 per cent of GDP (1,66 per cent), Spain has a *real* surplus of 1,4 per cent of GDP. France has a *real* deficit of only 0,47 of GDP and Italy a mere -0,08 per cent. UK has a *real* surplus of 1,8. And among the minor countries only Portugal shows a *real* deficit :1,7 per cent of GDP. On balance one cannot say that 2001 has been characterised in EU or Emu, by and expansionary fiscal policy, in spite of the socio-political events, that caused, at the world wide level and particularly in US, a dramatic deterioration of the economic perspective. So that one, perhaps, can better understand why in 2002 Germany shows a *real* deficit of 2,8 per cent, France of 1,9 per cent, Uk of 0,8 per cent. But still Spain has still a *real* surplus of 1,8 per cent and Italy of 0,47 per cent of GDP (as against the small *real* deficit of the previous year) and all the minor countries too have a *real* surplus, with the only exception of Portugal with a *real* deficit of 0,55 per cent of GDP, lower than that of the previous year.

And , in any event, no country has infringed the rule of 3 per cent deficit , in any of the three considered years, if a real economy view it is adopted.

4. Let me deal with the likely objections to my claim that the official balances of the these 15 budgets are illusory subjective views while the correct objective view is the one obtained by my methodology

To begin with, one may ask why to apply this procedure, for budgets, as those of Governments that ordinarily are only conceived in terms of flows and do not take in to account the variations in the assets of the considered Governments. A first answer it is in terms of accounting principles. One has to remind that General Governments budgets, according to the methodology of Eurostat '95 national accounting rules , are conceived as debts and credits budget, in accord to the general statistical principles of national economic accounting . And there fore in order to ascertain the balance one has to add to the credits and debt that have been *realized* in the years also those relating to revenues and expenditures that have been formalised in the year (in Pigouvian terminology their announcement effects have been materialised in that year ), but did not yet became cash flows.

It should be obvious that the absolute money value of the balance of a (General Government's) budget or of the outstanding debt of a given year cannot be compared with that of a different year , in meaningful economic terms , unless adjusted for the change in real value of the considered monetary yardstick. And clearly if one asses the General Government budgets and debts in *real terms* , to compare them over the years , should take in to account the loss of value of the amount of credits and debts outstanding at the end of the year as compared to those outstanding at the beginning of the year. Public debt is noting but an overhang of debts outstanding at the beginning and at the end of the year and since the budget of General Government must comprehend any obligation even if born off budget , there is no reason to exclude it in a real accounting point of view.

Maastricht rules elegantly bypass -but not overlook- the question of change of value of money in assessing the balances of the budgets and the outstanding of the various years of the General Governments of the various Eu countries, by considering not their absolute values, but their ratio to GDP. And it is clear that a given GDP, measured in real terms, has an increased value in nominal terms when the prices level changes, given by the ratio of the *relevant* price changes. Assuming that HICP is a good proxy of the inflationary process relevant for GDP, a given GDP - measured in a given currency at HICP prices at the beginning of the year- at the end of the year shall appear increased in money terms by the rate of increase of HICP prices. And the ratio of a given stock the debt of General Government of the considered country, at the end of the year, shall be correspondingly reduced by the ratio of HICP prices multiplied by the ratio of that debt stock to GDP. Thus it is clear that what we are doing, i. e. to add algebraically the capital gain arising in the stock of debt of General Government at the end of the year, due to the rate of change of HICP during that year, to the balance of the budget of that General Government pertaining to that year it is noting but an application of the accounting principles underlying the Maastricht rules.

But one may object that even if this may be true, I have not yet demonstrated that the procedure that I have adopted and that I claim to be consistent with the Eurostat economic accounting principles and with the basic principles underlying the construct of Maastricht fiscal rules on deficit and debts, is the correct one to have an objective view without fiscal and monetary illusion; and that the legally binding lecture of these rule belongs to a subjective views contaminated by illusion about the reality.

5. Between the balance of the budget of the General Government and the change in value of its debt stock, outstanding at the end of every fiscal year, there isn't a mere accounting relation. There is an objective macro economic relation. If the net result of a deficit of General Government equal to the depreciation of the real value of the outstanding public debt does not increase (non decreases) the ratio Debt/PIL, when

the PIL in real terms is unchanged, there must be a deflationary stock effect on the Debt side that compensates the inflationary flow effect on the Budget side. Actually what I do by adding algebraically the capital gain on the debt of the General Government to the balance of its budget, implies a subtraction from the market economy of an equivalent capital loss, due to the devaluation of the public debt in the hands of the savers, creditors of the Government. This “capital loss” is nothing but the Pigou-Patinkin effect<sup>19</sup>: considered not *as a positive effect* as - in the *theoretically* more familiar - case of reduction of the general price level but *as a negative effect*, caused by the - *empirically* more familiar- case of an increase of the general price level. It may appear odd that this negative Pigou- Patinkin normally it is overlooked by the current theory of fiscal policy, to the point that it is possible to consider relevant the “expansionary effects of a balanced budget”, considered in nominal terms, on the mere basis of the Haavelmo theorem, without considering the fact that normally prices do rise and there is a public debt.

But clearly there is, in this case, a fiscal-monetary illusion of the economists as well as of the fiscal and monetary authorities.

On the other hand, one cannot argue that normally savers, as for the value of their stock of public debt, in relation to the changes in price level, are under a monetary illusion. Indeed, it is easy to observe that the nominal rate of interest on public debt (and bank deposits and bonds in general) is systematically affected by the existing rate of inflation and from the expectation on the future inflation rates. And, for this reason, in periods of high inflation, short term bonds have a better market than long term ones. If savers ask for a premium to buy and keep public debt, to take account of the inflation, it follows that they, normally, are not under a monetary illusion about the effective value of their savings invested in public debt. And, by the same reasoning, it follows that they normally, do not consider as their true income the

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<sup>19</sup> For the seminal works See G. HABERLER ( 1937 and 1958) *Prosperity and depression*,. Cambridge Harvard (the 1958 ed. Includes, as Appendix the paper “On the Pigou effect once more”, originally published in the *Journal of Political Economy* ), and the “classics” A. C. PIGOU (1941), *Employment and Equilibrium*, London, McMillan and D. PATINKIN, (1957), *Money, Interests and Prices*, Evanston, Ill. Row and Paterson



entire interest perceived on it , but only the difference between the rate of inflation and the interest rate.

From a mere monetary point of view, one may observe that the money flow outgoing from the General Government's budget, because of its deficit, in so far as there is an equivalent Pigou-Patinkin negative effect on the holder of public debt, it is sterilised by them, to keep their financial investment intact.<sup>20</sup>

5. There is only one possible objection to this line of reasoning, about the true effects of a given deficit of the budget of the General Government: i.e. that , in an open economy, while the General Government may get a capital gain, due to the loss of value of public debt not necessarily there is an equivalent capital loss i.e. an equivalent Pigou-Patinkin negative effect on domestic savers, because a share of the domestic public debt may be well owned by foreign investors. This, *in principle*, is certainly a relevant observation. And it may perhaps help to explain why for some countries as US, whose public debt is , for a substantial share, in the hands of foreign investors, the deflationary effect of the increase in price level on the economy, via the related Pigou-Patinkin negative effect may be less important, than normally . But as for the General Governments of the Eu 15 countries, the opposite may be true , particularly in relation to the 12 that are member of the European Monetary Union, considered as a whole. Indeed it is reasonable to assume that , because of the Emu, the public bonds issued in one member country are considered, in the portfolios, of the investors of the other member countries , as *ceteris paribus*, preferable to the public bonds issued by states non belonging to the Emu. And a similar reasoning may hold as for the investors of Eu countries not belonging to Emu (Uk, Sweden and Denmark) as for their portfolio choices , when considering debt issued by non Emu states.

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<sup>20</sup> Notice that I am not arguing that the share of the deficit of the General Government due to the expenditure on interests on public debt , as premium for inflation , in a given year, corresponds to the capital loss on the debt stock incurred by the savers in that year, because of the increase of price level of that year. The share of interests paid by the General Government as premium for inflation on its public debt may be lower or greater than the share of interests that the savers must keep to avoid a reduction of the real value of their stock of public debt, in relation to the price increase of that year, depending from the average interest rate due by the Government on the stock of medium long term debt issued in previous year and still outstanding in that year. .

An important inference from the above discussion it is that when considering the effects of the balances of the budgets of the General Governments of the Eu and Emu countries, in real terms, the “objective” point of view thus obtained in contrast with the subjective one, must take in due consideration the cross effects of these balances from each country to all the others.

TABLE 2  
NOMINAL NAD REAL DEFICIT OR SUPRLUS OF EU AND EMU\*

	HICP	Deficit/GDP	DEBT/GDP	AMM=HICP×DEBT		AMM+deficit (%)
	Annual percentage changes	General government	general government			
<b>UE=EUROPEAN UNION</b>	EU	EU	EU	EU		EU
2000	1,9	0,8	0,648	1,2312		2,0312
2001	2,2	-0,9	0,635	1,397		0,497
2002	2,1	-1,9	0,632	1.3272	-	-0,5728
						0
<b>EA=EURO AREA</b>	EA	EA	EA	EA		EA
2000	2,1	-1,3	0,702	1,4742		0,1742
2001	2,3	0,1	0,692	1,5916		1,6916
2002	2,3	-1,6	0,691	1,5893	-	-0,0107

Source for the first three columns: European Central Bank, Statistics Pocket Book, pages 31 and 37

One can see that the aggregate of the General Governments’ budgets of the 15 Eu member states, in the two years 2000 and 2001 has a *real* surplus of 2 per cent and then of about 0,5 per cent of the aggregate domestic product , while in 2002 has a small real deficit of 0,57. And the aggregate of the General Governments’ budgets of the 12 Ea countries shows a small *real* surplus in 2000, a much larger *real* surplus in 2001 and almost balanced *real* budget in 2002.

If the budgetary figures are divested of the subjective monetary-fiscal illusion and the objective view is adopted , it seems clear that , on balance, in the considered period the Eu member countries did not adopt an expansive, bur rather a restrictive fiscal policy. This view is reinforced as for Emu , particularly considering the *objectively* counter cyclical fiscal policy of 2002.

6. In his “Treatise of general sociology”, Pareto distinguishes non logical from logical actions , by the following preliminary double classification

- all logical actions, by definition, have a logical end and the subjective end is identical to the objective one
- non logical actions may have or not a logical end and the subjective end may differ or not from the objective end.

Considering then the non logical actions , the combination between the first couple of possibilities- that they have or not a logical end and the second couple of possibilities, that the subjective end does differ or not from the objective one, one has the following cases<sup>21</sup>:

- non logical actions without a subjective non logical end
- non logical actions with a subjective logical end different from the objective end
- non logical actions with a subjective logical end identical to the objective end

Let us apply this classification to the monetary-fiscal illusion relating to the Maastricht rules, considering

- the experts and the Governments that set forth the Maastricht rule on deficit for the European Monetary Union
- the experts that drafted the Amsterdam pact applying it to the countries that entered the Emu ,
- the authorities in charge of its surveillance, at the European Commission level and at the European Council level
- and the Governments that are individually responsible of comply to them.

It seem fair to say that perhaps some of the experts and the politicians that draw the Maastricht Treaty and the Amsterdam pact were aware of the real effects of the General Government’s deficit rule, but preferred to conceal them under the monetary-fiscal illusion arising from focusing on the deficit/GDP ratio and on the

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<sup>21</sup> See PARETO, *Trattato di sociologia generale*, Vol. I, Chapter 2, §151

Debt/GDP ratio. Indeed, the greater it is this last ratio, for a given country, the greater, is the Pigou-Patinkin negative effect of a given inflation rate, for any budgetary deficit of that country. And the Pigou-Patinkin negative effect is also greater, for a given country, with a given Debt/GDP ratio the greater its inflation rate. Therefore the monetary-fiscal illusion works to make more restrictive, the Maastricht deficit rule, for countries with an higher Debt/GDP ratio and a greater propensity to inflation like Italy or Greece, in comparison with countries with a smaller Debt/GDP ratio and a lower propensity to inflation as Germany. The rule is also more restrictive for countries with an higher propensity to inflation as Spain and Portugal, as compared with countries with a similar Debt/GDP ratio as many Nordic countries and Germany. Finally, the rule is severe with countries with an high Debt/GDP ratio as Belgium as compared with countries at the same (moderate) tendency to inflation but a lower Debt/GDP ratio. Therefore one can say that, under the illusion thus created, the Eu authorities and those of the member states would work more effectively to the ends that the Maastricht rule and Amsterdam pact inventors were pursuing than if deprived from illusion. This would not distort their choices provided that they *shared these ends*, even at the expense of the pursuance of others, as economic growth and employment.

But while the public authorities in control of the application of the Maastricht rules may share the end of the reduction of the debt/GDP ratio, even at expense of these other objectives, the Governments, who are under the same monetary-fiscal illusion, do feel more concerned with their domestic economic growth and with the European growth than with the “orthodoxy” of the fiscal policy at the Eu or Emu level, when the two ends seem to *enter in sharp conflict*. One may quote here what Pareto argued, when introducing the theory of non logical actions “One has to keep in mind that non –logical dose not mean illogical; i.e. a non- logical action may be the best that one could find with the observation of the facts and with logic to adapt the

means to the end. But this adaptation has been obtained by a way different from the logic”<sup>22</sup> .

In this case the non logical rule leads to *illogical* Government’s reactions. They are led to suggest *illogical* changes in the deficit rule, as the exclusion of some expenditures from the 3 per cent threshold as those on (specific ) investments, or those for scientific and technological research or those for defence : i.e. respectful objectives, but inconsistent with the macro economic aim of fiscal orthodoxy of the Maastricht and Amsterdam deficit rules .

“Illogical changes ” , that they would not suggest if an objective view of the phenomena under discussion was adopted , focusing on the real balances rather than on the nominal ones . These subjective non logical ends , that gained relevance under the above considered fiscal illusion, appear to differ from the optimal mix of ends that could emerge rationally by a reconciliation of the logical actions of fiscal orthodoxy and monetary stability with the logical actions aiming at economic growth and employment .

However it may be impossible to devise a *first best* rational deficit rule, that pursues the above balanced mix of ends and *logically* takes in to account of the differences in Debt/GDP ratios and inflation rates of the various General Governments, beside the difficulty of determining which kinds of inflation rates are relevant.

Perhaps it would be preferable, as a *second best* solution, a more tolerant attitude toward the trespasses of the 3 per cent *nominal deficit* rule, focusing on the ratio of debt to GDP and distinguishing the European countries with higher and lower ratio and between those engaged in long run structural reforms , that have good reasons to pursue a short run pro growth and employment policy from the others. To focus, as for fiscal orthodoxy, on the debt rule and on structural reforms that affect the future debt appears to be the true rational point of view , because the rate of inflation that inflates the real meaning of the debt arising from a given nominal budgetary deficit,

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<sup>22</sup> PARETO (1906), Chapter II,§ 3.

enters *proportionally* in the GDP magnitude, *leaving their proportion unaltered*. The monetary veil does not change the ratio, does not create fiscal illusion here and does not lead to illogical actions and reactions.