AN ANTI-AUSTERITY POLICY RECIPE AGAINST DEBT ACCUMULATION IN THE PRESENCE OF HIDDEN ECONOMY

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ABSTRACT

Contrary to what the literature on the linkage between debt accumulation and hidden economy suggests, this paper advocates that the two relationships, tax-hidden economy size and inflation-hidden economy size, have to be inverse because it is the relative, not the absolute hidden economy size that matters, and it is this that should be the yardstick for empirical work on the subject. It is also this that should be the yardstick for policymaking against debt accumulation by following the anti-austerity policy recipe that debt manipulation should be relying more on money than on taxation, that as soon as more money facilitates hidden activities, tax design should be counteracting this trend too, and that the Laffer curve should be peaking at an average tax rate which is less than one. This rule derives as a matter of preserving such official-cum-hidden economy technical-cum-allocative efficiency over the course of the business cycle that keeps the overall economy always in general equilibrium.

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1. INTRODUCTION

According to the United Nations (2008) definition of the non-observed or hidden economy, this economy consists of underground, illegal, and informal activities, activities undertaken by households for their final use, and deficiencies in the basic data collection systems. Assuming away statistical deficiencies, these are all activities weakening tax collection, and prompting in turn government budget deficits, and an increase in money supply and/or government borrowing to cover the deficit. And, if such borrowing persists, it becomes public debt, obtaining a clear-cut direct relationship between hidden economy and debt accumulation. Analytically, this implies that as Bovi and Claeys (2008) point out: "The budget constraint makes the relation between the [hidden] economy, taxes and spending inherently dynamic." And, from the viewpoint of empirical findings, as Uras and Ceyhun (2013) document: "a larger size of the [hidden economy] is associated with (1) higher public indebtedness, (2) higher interest rates paid on sovereign debt, (3) a higher level of financial instability and (4) a higher probability of sovereign default."

But, these are the only two points about which there is consensus in the relevant literature. They are two major points indeed, but there are two other equally significant points where an opinion differs. Mazhar and Pierre-Guillaume (2012) maintain that there is "a negative relation between the tax burden and the size of the shadow economy, and a positive relation between inflation and the size of the shadow economy". Although Cukierman *et al.*

(1992) and Huang and Shang-Jin (2006) appear to rationalize this claim about the relationship between inflation and hidden economy size, Ihrig and Karine (2004) or Dabla-Norris *et al.* (2008) argue the opposite about the relationship between size and taxation. And, in what follows, this paper agrees with Mazhar and Pierre-Guillaume (2012) and disagrees with Ihrig and Karine (2004) or Dabla-Norris *et al.* (2008) about the "tax-size" relationship, and disagrees with Mazhar and Pierre-Guillaume (2012) about the "inflation-size" relationship in so far as political stability rather than instability a la Cukierman *et al.* (1992) and Huang and Shang-Jin (2006) is the case.

More specifically, increased seigniorage does make easier hidden economy transactions, since they are carried out mostly in terms of cash to remain undetected by the authorities (Tanzi, 1983). But, equally easier become official economy transactions, total output increases, and there is an optimal official-unofficial economy mix such that the relative size of the unofficial one declines though the absolute size may very well be increasing. This optimality of the mix refers to structural, technical-cum-allocative efficiency, which is ignored by Mazhar and Pierre-Guillaume (2012) and which once disturbed by increased taxation hurting official-economy production, it is restored through a decline in the hidden economy due to the diminishing returns of the resources redirected from the official to the hidden economy. The two relationships, tax-hidden economy size and inflation-hidden economy size, have to be inverse because it is the relative, not the absolute hidden economy size that matters, and it is this that should be the yardstick for empirical work on the subject.

It is also this, the relative size, which should be of concern to policymaking, because in a recession, for instance, both economy types are expected to be shrinking in absolute size; and the alleged countercyclicality of the hidden economy should be taken to mean that things would have been much worse if there were no hidden economy from the point of view of increase in its relative size. This brings us to the other point of disagreement in the literature about the nexus between debt and hidden economy; namely, whether the hidden economy is countercyclical or amplifies the observed, the official-economy cycle. Granda-Carvajal (2012) is among the few advocating the "cycle amplification" point of view, based on additively separable preferences with respect to official and unofficial labor. Nevertheless, it is not plausible to be postulating that the decision to work in one sector does not influence the decision to do so in the other sector. Indeed, Schioppa (1994) observes that Italy: "is developing thanks to what the Italians call '*l'arte d'arrangiarsi*', their generalized talent for improvisation…"; improvisation in the realm of the underground economy as a response to: "drastic budgetary cuts aiming at curbing public debt to maintain sustainability", she means. And, Busato *et al.* (2012) note that: "The underground sector mitigates the distortionary impact of fiscal policies, while lessening the drop (rise) of aggregate production after contractionary (expansionary) tax shift." These are two only pieces from the bulk of evidence in support of the hidden economy's countercyclicality, which involves a "double business cycle" of opposite cyclicality as advanced originally by Busato and Bruno (2004) and as advocated below as well.

This paper reports the results of a study on the issue of appropriate policymaking against debt accumulation in the presence of hidden economy. Any policy proposal against sovereign debt crises is reasonable to dictate *inter alia* the subjugation of the hidden sector as a means of enhancing the tax base; much more so when the austerity underpinning such a policy, strengthens the incentive(s) to "go unofficial".[1] The next section concludes that the relationship between the average tax rate, τ, and the official-sector income elasticity of money demand, b, emerges to be one critical component of such a policy. The optimal policymaking against debt accumulation involves the rule $\tau < b$ once the debt is not monetized. The parameter b is the inverse of the velocity of money circulation, which, when judging from the quantity equation in growth terms, is inversely related to the inflation rate and to real output growth, and directly related to money growth. Therefore, the meaning of the rule $\tau < b$ is triple: First, that the Laffer curve should be peaking at some $\tau < 1$, second that debt manipulation should be relying more on money than on taxation, and third, that as soon as more money facilitates hidden activities, tax design should be counteracting this trend.[2]

Next, section 3 attributes the "third anti-debt" property of the proposed fiscal-monetary policy mix to the improvement that this mix brings about to the structural efficiency conditions surrounding the official and hidden sectors within the context of the overall economy. This efficiency is defined in line with Anandalingam and Nalin (1987) given Brada (1992) criteria. And, within the particular theoretical construct worked out below, it is manifested through Laffer-Gutmann curve considerations acknowledging the symmetric role of tax rate and tax base changes in determining tax revenue (Moszer, 1981; Barnett II and Walter, 2005; Bartlett, 2012). Referring to this curve just with the term "Laffer curve", its shape is found to be decided by the returns to scale prevailing in either or both sectors in a fashion echoing the evidence by Friedman *et al.* (2000) that: "higher tax rates are associated with less unofficial activity as a percent of GDP".[3] What the rule $\tau < b$ subsequently means as a policy prescription against debt accumulation, is that it helps increase the denominator of the debt-to-income ratio and decrease the numerator by improving structural efficiency.

It is a rule when debt is not monetized, preserving such structural efficiency over the course of the business cycle that keeps the overall economy always in general equilibrium, and holding under the condition that the probability of hidden activity detection should be at most equal to the income elasticity of the hidden-economy money demand. This is a condition closely related with hidden-economy motivation. This paper concludes with a section in connection with this matter. It is argued that once the subject of the unofficial economy is disassociated from the matter of corruption, the contribution of this economy to the struggle against debt accumulation is one of its merits. All the more when it appears as such to be the only viable anti-debt alternative to the alleged "orthodoxy" of fiscal consolidation and austerity!

2. HIDDEN ECONOMY, PUBLIC DEBT DYNAMICS, AND POLICYMAKING

Let total output, Y, consist of the observed, official output, Y_f, and the part coming out of the hidden sector, Y_u, so that: $Y = Y_f + Y_u$. Also, let p be the frequency probability of detecting hidden income so that the income reported,

$$\hat{Y} = Y_f + pY_u. \quad (1)$$

Hence, tax revenue is:

$$\tau\hat{Y} = \tau Y_f + \tau p Y_u \quad (2)$$

Where τ is the average tax rate. Although the assumption of such a tax rate is not realistic, $\hat{Y}$ is what actually the statistical service reports, disregarding the fact that part of it has originated in the hidden sector with the probability p enforced by the authorities appointed to be tracking this sector's activities down. Consequently, what is novel analytically with the discussion below is the incorporation of p into the standard approach to the public debt. It is a task, which to the author's knowledge, has not been undertaken so far.

Now, let us continue with the equilibrium condition in the money market:

$$M^s = bY_f + kY_u - er \quad (3)$$

where M^s is the supply of money, the right-hand side of (3) is the demand for real cash balances, r is the interest rate identified with the rate of return to capital in the official economy, $e = \partial M^s/\partial r$, and b and k are Pigou's constants, decimals, with $b > k$ for hidden transactions are carried out mostly in cash to remain undetected. Coefficients b and k reflect inverse velocities of circulation so that if the official and hidden velocities are say 4 and 5, respectively, the corresponding inverses will be 0.25 and 0.20. In the decomposition of the overall velocity, we follow Werner (2012). At steady state, (in the long-run), b, k, and e, may be seen as the elasticity of money demand with respect to steady state Y_f, Y_u, and the interest rate, while an increase in M^s will lead to a decrease in r so that $\partial M^s/\partial t = -er$, where t is time.

And, in so far as the public debt, B, is concerned, its course through time is:

$$M_t^s = G_{t-1} - \tau\hat{Y}_{t-1} + r_t B_t - (B_t - B_{t-1}) + M_{t-1}^s \quad (4)$$

where G is government expenditure. Inserting (3) in (4) and manipulating terms yields the following difference equation in B:

$$(1 - r_t)B_t - B_{t-1} = G_{t-1} + e(r_t - r_{t-1}) - bY_{f,t} + (b - \tau)Y_{f,t-1} - k(Y_{u,t} - Y_{u,t-1}]. \quad (5)$$

The steady state where the change in Y_f and Y_u is nil, is given by the particular integral:

$$\bar{B} = \frac{(1 - r)(G + er - \tau Y_f - bY_f - kY_u)}{2 - r}, \quad (6)$$

which implies that a government budget balanced by money financed deficits is required to keep the debt equal to zero:

$$\bar{B} = 0 \Leftrightarrow G = \tau Y_f + bY_f + kY_u - er \Leftrightarrow G = \tau Y_f + M \quad (7)$$

where M captures now the money-financed part of government expenditure beyond the tax-financed part. Presumably, at steady state, the mix $Y_f - Y_u$ is optimal and p should be equal to zero, implying steady state tax revenue equal to τY_f. The point is that a zero-debt does not necessarily presume a balanced budget, a $G = \tau Y_f$, as is commonly argued; a money-only financed deficit is enough, reminding Old Chicago's School urge against open market operations (see e.g. (Friedman, 1948)) and recently, DeLong and Summers (2012) suggestions for a self-financed-fiscal-policy against debt problems. Once government borrowing starts taking place, debt will start piling up explosively as the rate of increase $(1 - r)^{-t}$ in the complementary function suggests unless $r > 1$.

Debt accumulation need not trigger income fluctuations, since from $(1 - r_t)B_t - B_{t-1} = 0$ in (5), the following difference equation in Y_f is given rise:

$$bY_{f,t} - (b - \tau)Y_{f,t-1} = G_{t-1} + e(r_t - r_{t-1}) - k(Y_{u,t} - Y_{u,t-1}], \quad (8)$$

with fluctuations given by $[(b - \tau)/b]^t$ around the steady state:

$$\bar{Y}_f = \frac{b[G + er - kY_u]}{2b - \tau}. \quad (9)$$

Setting $b = \tau$, fluctuations are zeroed and $\bar{Y}_f = G + er - kY_u$ (9′). But, in general, an increasing at a rate φ debt would presuppose an increasing at a rate $\psi > \varphi$ income to be having a decreasing debt/income ratio, *ceteris paribus*, which herein is found to be the case when $b > \tau$, i.e. when taxation is not discouraging the monetary environment surrounding official economy transactions and thereby official income generation. Once debt has been accumulated and the accumulation has to be halted and reversed, the official and thereby total economy has to undergo business fluctuations.

From another point of view, (8) may be rewritten in the light of (1) as follows:

$$k(Y_t - Y_{t-1}) = [G_{t-1} + e(r_t - r_{t-1})] - (b - k)(Y_{f,t} - Y_{f,t-1}) - \tau Y_{f,t-1},$$

with no fluctuations since the complementary function is 1^t, and

$$\bar{Y} = G + er + [k - (b - \tau)]Y_f. \quad (10)$$

It appears that fluctuations in Y_f and Y_u cancel one another out taking away fluctuations from Y. In the presence of debt, (10) indicates that the policy of $b > \tau$ would lower $\bar{Y}$. Judging from (9) too, the overall picture regarding the confrontation of a debt problem is one of aggravated sectoral fluctuations about a lower steady state. Therefore, it would be prudent policy-wise to be keeping at least money-only-financed deficits if not a balanced altogether budget as in (7) – which is what here is defined to be a zero-debt policy – and to be using the stabilization rule $b = \tau$.

The general conclusion is that once debt has accumulated, it should be monetized as soon as possible countering the subsequent output loss exclusively through money financed deficits along with the fiscal-monetary stabilization rule of $\tau = b$. If debt is not monetized readily, the rule $\tau < b$ should be adopted rather than the painful alternative of fiscal austerity which would anyway defer monetization. This is a matter of sound macroeconomics independently of the institutional background surrounding government expenditure and tax collection. An improvement of this background would certainly corroborate the whole anti-debt effort, but has merit on its own shake regardless the matter of debt, which cannot anyway be confronted based only on such an improvement. But, the derived policy rule

$\tau \leq b$ does depend on the structural efficiency environing the official-unofficial economy nexus. The truth of the statement that the subjugation of the hidden, unofficial economy is inescapable as a means of increasing tax revenue against public debt problems derives from this precisely perspective. The relevant question is: Is the rule $\tau \leq b$ structurally efficient? The next section elaborates upon this matter.

3. THE STRUCTURAL EFFICIENCY OF THE PROPOSED POLICY RULE

The issue of the structural component of the overall-economy, efficiency refers to the optimal $Y_f - Y_u$ mix from the viewpoint of maximum technical and allocative efficiency (see e.g. (Anandalingam and Nalin, 1987)). Once there is a debt problem and once it is neither monetized readily nor fiscal austerity is followed, but instead the rule $\tau < b$ is adopted: Does this rule improves structural efficiency and is this efficiency optimized at $\tau = b$? Analytically Brada (1992) the relevant question is: Is the policy mix of $\tau < b$ corroborating allocative efficiency given sectoral technical efficiency at its optimum? Because, if it does corroborate, it will be much more overall-efficiency enhancing when technical efficiency is absent, too.

To tackle this issue as simply as possible, let $Y_f = hY$ and $Y_u = (1 - h)Y$, $0 < h < 1$, so that:

$$Y = hY + (1 - h)Y. \quad (12)$$

Let also output be produced in either sector according to a Cobb-Douglas technology, i.e. if $hY = Y_f = K_f^\gamma L_f^\delta$ and $(1 - h)Y = Y_u = K_u^\varepsilon L_u^\eta$, where K and L denote capital and labor, respectively, while γ, δ, ε, and η are positive constants capturing returns to scale. In this formulation, probability p is discarded because it would only complicate the discussion. To focus on allocative efficiency, we take technical efficiency for granted by rewriting production functions in terms of the corresponding output expansion path as follows:

$$Y_f = \Phi L_f^{\gamma+\delta} \quad (13)$$

and

$$Y_u = \Psi L_u^{\varepsilon+\eta}, \quad (14)$$

where $\Phi = (\gamma r_f / \delta w_f)^\gamma$ and $\Psi = (\varepsilon r_u / \eta w_u)^\varepsilon$, with r being the rate of return to K and w the reward to L, assuming of course competitive factor markets, (and identifying the r in (3) with r_f). Hence, (12) becomes:

$$Y = \Phi L_f^{\gamma+\delta} + \Psi L_u^{\varepsilon+\eta}. \quad (12')$$

The r's are in the numerator and the w's are in the denominator. And, it appears that an increase in r_f (or r_u) will raise Y_f (or Y_u) while an increase in w_f (or w_u) will lower Y_f (or Y_u), keeping always total output, Y, constant in line with (1'): $dY/dh = 0$.

To appreciate these comparative statics, let us see how the changes in labor affect output. If, $0 < v < 1$ and:

$$L = L_f + L_u = vL + (1 - v)L, \quad (15)$$

(12') obtains the form:

$$Y = \Phi(vL)^{\gamma+\delta} + \Psi[(1 - v)L]^{\varepsilon+\eta} \quad (12'')$$

providing the derivative:

$$\frac{dY}{dv} = v^{-1}\big[(\gamma + \delta)v^{\gamma+\delta}h - (\varepsilon + \eta)v^{\varepsilon+\eta}(1 - h)\big]Y, \quad (16)$$

Which has the sign of the bracketed term. So, an increase in the part of labor employed officially, will raise or lower Y and hence, total labor productivity, depending on whether $Y_f > [(\varepsilon + \eta)v^{\varepsilon+\eta}/(\gamma + \delta)v^{\gamma+\delta}]Y_u$ or $Y_f < [(\varepsilon + \eta)v^{\varepsilon+\eta}/(\gamma + \delta)v^{\gamma+\delta}]Y_u$, respectively. To appreciate the improvement/deterioration of overall labor productivity but constancy of h in response to a change in v, note that from (12''):

$$\frac{dY}{dL} = \frac{Y}{L} \quad (17)$$

Regardless returns to scale. This reflects the cost-minimization presumed through the use of output expansion paths above. It reflects the presence of technical efficiency in either sector *ex hypothesi*. Consequently, the

better/worse overall labor productivity should be related to allocative efficiency considerations. And, as soon as it is better or worse depending on whether $Y_f > [(\varepsilon + \eta)v^{\varepsilon+\eta}/(\gamma + \delta)v^{\gamma+\delta}]Y_u$ or $Y_f < [(\varepsilon + \eta)v^{\varepsilon+\eta}/(\gamma + \delta)v^{\gamma+\delta}]Y_u$, respectively, and the increase in v leaves unchanged these inequalities, overall productivity is augmented/impaired because too much labor was employed unofficially/officially before this change in v.

Consequently, the comparative statics surrounding $(12')$ above, and a Laffer curve, $= \tau\hat{Y} = \tau Y_f + \tau p Y_u = [\tau h + p(1 - h)]Y$, become meaningful, operative, only in the presence of allocative inefficiency, where T is total tax revenue. From (13) and (14), the Laffer curve may be rewritten either as:

$$\tau\hat{Y} = \tau\Phi L_f^{\gamma+\delta} + \tau p\Psi L_u^{\varepsilon+\eta} \quad (18)$$

or from $(12'')$:

$$\tau\hat{Y} = \tau\Phi(vL)^{\gamma+\delta} + \tau p\Psi[(1 - v)L]^{\varepsilon+\eta}. \quad (18')$$

In any case, the Laffer curve obtains a maximum at a $\tau < 1$ if decreasing returns to scale are exhibited in at least one of the two sectors of the economy, i.e. if $\gamma + \delta < 1$ and/or $\varepsilon + \eta < 1$, *ceteris paribus*. And, $(18')$ indicates that given τ and h, an increase in r_f (or r_u) raises Y and thereby T by increasing Y_f (or Y_u) while an increase in w_f (or w_u) lowers Y and thereby T by decreasing Y_f (or Y_u). These are all comparative statics under disturbed allocative optimum. This is the reason all derivatives of T are positive. That an increase, for instance, in Y_u will increase T, cannot be explained differently than by ascribing it to improved allocative efficiency in the official sector *vis a vis* this sector's pre-tax-increase status. Given technical efficiency, allocative efficiency reaches its maximum at the peak of the Laffer curve, which also marks the optimum $Y_f - Y_u$ mix.

Hidden labor takes away the subsidy to leisure induced by the tax in the official economy. Given an inelastic labor supply in the overall economy, the subsidy to leisure in the official sector becomes subsidy to work hidden and the welfare cost of taxation in the overall economy is always zero. So, given (16) and $(18')$, to have:

$$\frac{dT}{dv} = v^{-1}\tau[(\gamma + \delta)v^{\gamma+\delta}h - p(\varepsilon + \eta)v^{\varepsilon+\eta}(1 - h)]Y.$$

That is, to be output and tax-revenue augmenting the channeling of more labor in the official economy, it must be because of the increased productivity of labor in this sector relative to productivity in the hidden sector. Conversely, increasing taxation reduces labor availability in the official sector and enhances it in the hidden one, prompting subsequently increases in w_f and decreases in w_u to preserve technical efficiency, and increasing in turn v as a net result until the peak of the Laffer curve is reached. Indeed, the inequalities determining the sign of dY/dv apply also to the sign of dT/dv given that the term accompanying Y_u in these inequalities is now multiplied only by p. And, the adjustment process implied by them is reinforced by developments in the goods markets whereby the discrepancy between official and unofficial output is widened after an increase of τ and the rise in v serves as a means of restoring the price-gap at its pre-tax-increase level. This "relative-price-adjustment" (rather than price stabilization) part of the overall adjustment process induces one to think whether money stock manipulations instead of tax rate changes might be used to foster allocative efficiency.

Indeed, from (3) and $(12'')$:

$$M = [bh + k(1 - h)]\{\Phi(vL)^{\gamma+\delta} + \Psi[(1 - v)L]^{\varepsilon+\eta}\} - er$$

It follows that:

$$\frac{dM}{dv} = [bh + k(1 - h)]\frac{dY}{dv},$$

Which just says that more M is needed to accommodate the increased Y brought about by the increased v. And, disregarding for convenience the term er from (3), it is true that $T = [\tau h + p(1 - h)]Y < M = [bh + k(1 - h)]Y$, or that:

$$\tau h + p(1 - h) < bh + k(1 - h), \quad (19)$$

Which is the optimal combination of policy instruments towards technical and allocative efficiency given h. It follows that $\tau < b$ to the extent that $p \leq k$ as is expected to the case when steady state is approached given that there, $p = 0$. Consequently, to foster technical-cum-allocative efficiency, the tax rate in the official economy should be less than the income elasticity of money demand in this economy independently of returns to scale. And, what $\tau < b$ really means as a policy rule against debt accumulation is that it helps increase the denominator of the debt-to-income ratio and decrease the numerator by improving structural efficiency. At steady state, $\tau = b$ the debt is completely monetized, the Laffer curve is at its peak, and efficiency and hence, the mix $Y_f - Y_u$ are optimal.

4. CONCLUDING REMARKS

It may sound strange to be arguing in favour of taxation, which recently, for example, Orsi *et al.* (2014) consider it to be the driving force towards underground activities in general in Italy. But equally persuasive not only for Italy but for the entire OECD, is Bovi (2002) conclusion that: "the underground economy [is] positively correlated mainly with institutional failures and, to a lesser extent, with taxation and market regulations."[4] Whichever may be the case, the point is that the underground economy is an inescapable and growth-conducive for some (see e.g. (Voicu, 2012)) socioeconomic reality and that policymaking should be aiming at handling this economy as one more policy instrument to the benefit of the overall economy rather than as a public enemy. Dabla-Norris and Andrew (2005) are an example of those who do recognize that the optimal taxation has to be consistent with such a perception of the micro- and macro-economy. Much more so when tax evasion is used by politicians to conceal the real tax burden (see e.g. (Battaglini and Stephen, 2008)) in pork-barrel spending deliberations instead of social-welfare enhancing public-good provision (see e.g. (Dell'Anno and Brian, 2014)).

It is for such perhaps arguments that the rule $\tau < b$ was found in the last section to be sensible only if $p \leq k$ given that the unofficial economy is assumed herein to be one that finally remains untaxed. It is an assumption made for analytical convenience against the caveat that tax evasion and underground economy do not necessarily coincide. But, although inequality $p \leq k$ is the product of such an assumption, it nevertheless reflects the standard proposition that a government should be trying to control rather than ban unofficial activities altogether. It does so by coming out of the quest for improved structural efficiency, suggesting that the extent and content of hidden sector control should be designed aiming at improving structural efficiency; even more so under the pressure of a public debt problem. The alleged subjugation of the non-observed sector as a means of enhancing the tax base and confronting a debt problem is not at all a profound policy goal, since it disregards the fact that the enlargement of the tax base is a matter of incentives. As very instructively Bierbrauer and Pierre (2010) demonstrate, a Laffer curve should be interpreted to be the second-best Pareto frontier which incorporates incentive constraints; a Laffer curve in the Laffer-Gutmann sense one should add.

The "anti-austerity" character of the proposed policy off steady-state, that is reliance more on money stock manipulation than on taxation to handle public debt accumulation, derives from such Laffer curve considerations acknowledging the equalizing character of the non-observed economy. This economy may be an equilibrium phenomenon *à la* Gomis-Porqueras *et al.* (2014) only at steady-state, at the peak of the Laffer curve, but once the overall economy is off steady-state, the hidden economy corroborates keeping at equilibrium the overall economy. Borrowing from Clower (1965) and Leijonhufvud (1968) analysis, quantities adjust faster than prices in the official sector towards a "deviation-amplifying feedback loop, which hidden economy's price flexibility comes to turn the overall economy loop into a "deviation-counteracting" one. Of course, a genuine macroeconomic model of official-cum-unofficial economy effective and notional demand is needed to verify this conclusion, which the microeconomics of structural efficiency suggest, but this is also the conclusion to which the failure of austerity policies leads. These policies *per se* plus the accompanying measures of structural reform simply fail to appreciate the vital role of the hidden economy as one ensuring Walrasian equilibrium over the course of the business cycle. Worse

yet, when they try to limit hidden economy, disregarding the "fact" that it is this precisely economy that ensures the *laissez faire* character of the system.[5]

5. NOTES

[1] For a recent addition to this discussion, see the Fall 2014 issue of the *Journal of Economic Perspectives* with the "Symposium: Tax Enforcement and Compliance".

[2] For example, according to Neck *et al.* (2012) attention should be paid to that "a more complex tax system with more possibilities of legal tax avoidance implies, *ceteris paribus*, a smaller labor supply in the shadow economy". See also note 4.

[3] It is corruption mostly to blame for the unofficial economy: "Across 69 countries, higher tax rates are associated with less unofficial activity as a percent of GDP but corruption is associated with more unofficial activity. Entrepreneurs go underground not to avoid official taxes but to reduce the burden of bureaucracy and corruption." (Friedman *et al.*, 2000).

[4] For example, Auriol and Michael (2005) document for 64 developing countries that raising barriers to entry in the official economy is consistent with a deliberate and successful government policy for raising tax revenue. See also note 3.

[5] Many, like Kanniainen *et al.* (2004) are addressing the ethical dimension of the hidden economy in that: "Abstaining from participation of financing the public goods, those visiting the illicit markets exert a fiscal externality on honest consumers." But, isn't the subsequent smaller volume of public goods compensated by the hidden-economy supply of private goods to the "honest" consumer? And, couldn't this be "fine" by this consumer, implying that ethical glossary is only a government propaganda tool to secure its finances? The answer would be negative only if hidden economy developments cease to perform their role as overall economy equalizers over the course of the business cycle.

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