**Deficits and debts in the U.S. economy: a critique to Godley's imbalances approach to macroeconomics**[*]

Lucas Teixeira
Phd student at the Economic Institute of the Federal University of Rio de Janeiro (IE-UFRJ)
Email: lucas.teixeira@ie.ufrj.br

**Abstract**: in this paper we try to critically evaluate the macroeconomic imbalance approach to U.S. economy, originally proposed by Wynne Godley at the end of the 1990's. When applied to Great-Britain during the 1970's this methodology was known as "New Cambridge Economics" and nowadays it is called "stock-flow consistent approach" by its supporters. In this paper we will denominate it as "imbalances macroeconomics". This methodology basically consists in making inferences about the sustainability of some expenditures and indebtedness patterns of the macro-sectors of U.S. economy (usually private, external and public sectors) from its *ex-post* financial balance (the difference between each sector savings and investment), derived from the national accounts. Specifically, in the medium run it is assumed that the growth path of private sector consumption and investment expenditures would be regulated by a financial balance norm or goal for this sector. First of all, we present a brief exposition of the imbalances macroeconomics basic analytical framework. After that, we will present a critical evaluation. We will point out some general deficiencies of this approach in comparison with an effective demand analysis based on the levels and growth rates of each expenditure type. Then we will make some comments on the private sector as an *ex-ante* norm. We criticize some conceptual issues, which aim to show some stock flow inconsistencies in this approach caused by not taking into account the capital gains or losses. Also, we will asses the relevance of analyzing the private net borrowing to the others macro-sectors, since banks are included in the private sector. Finally, we will call attention to the fact that even the interpretation of the imbalances as leakages and injections of effective demand is not accurate in a context of a growing economy, exemplifying it with the external sector imbalance.

[*] The author would like to thank, but by no means implicate, Professor Franklin Serrano for discussions, classes and debates over the subject, and also for his generosity in giving me access to some unpublished material. The author also would like to thank, but not implicate, Fabrício Leite and Luiza Nassif for comments on drafts of this paper. CNPq financial support is acknowledged.

## I. Introduction

The purpose of this paper is to make a critical assessment of the framework of strategic analysis of the macroeconomics imbalances facing U.S. economy originally proposed by Wynne Godley at the end of the 1990's. During the 1970´s, this methodology was used to analyze Great-Britain economy and was known as New Cambridge Economics. Nowadays, it is called "stock-flow consistence approach" (or only, SFC) by its supporters. In this paper we will call it *imbalances macroeconomics*, by reasons that will soon be clear. In particular, the so called "New Cambridge hypothesis" is not a consensus between the imbalances macroeconomists and we do not agree that this is the only way (nor the better one) to treat stock and flows consistently. This methodology basically consists in making inferences about the sustainability of some expenditures and indebtedness patterns of the macro-sectors of U.S. economy (usually private, external and public sectors) from its *ex-post* financial balance (the difference between each sector savings and investment), derived from the national accounts. Usually, it is postulated that at the medium run the growth path of private sector total expenditure (consumption and investment) is driven by a financial balance norm or goal for this sector.

We shall argue that this approach has several deficiencies if compared with an analysis of effective demand based on the absolute levels and growth rates of every kind of expenditure. First of all, we present a brief exposition of the imbalances macroeconomics basic analytical framework. After that, we will present a critical evaluation. First, we will point out some general deficiencies of this approach when trying to connect the private financial balances with the pattern of private expenditures. Then, we will point out some general deficiencies of this approach, in particular when it uses the New Cambridge Hypothesis. After that we criticize some conceptual issues, which aim to show some stock flow inconsistencies in this approach caused by not taking into account the capital gains or losses. Also, we will assess the relevance of analyzing the private net borrowing to the others macro-sectors, since banks are included in the private sector. Finally, we will call attention to the fact that even the interpretation of the

imbalances as leakages and injections of effective demand is not accurate in a context of a growing economy.

## II. Macroeconomics imbalances basic framework to strategic analysis

The imbalances approach has been the basic framework of analysis that has been applied to the U.S. economy since the middle of the 1990's by W. Godley and others economists associated with the Levy Institute at U.S. (Godley, 1999; Godley et al., 2007). After Professor Godley moved back to England, this approach was also used in works realized at the Cambridge Endowment for Research in Finance (Godley and Izurieta, 2004). This approach has been quite successful within heterodox economists, in particular "post-Keynesians"[1].

The approach departs from the basic identity of national accounting:

$$C + I + G + X \equiv Y + M \equiv Yd + T + M$$

C is consumption; I is private investment; G is public expenditure; X, exports; Y national income; S, private savings; Yd, disposable income; T, taxes; and M, imports. The principle of effective demand ensues that we can go beyond the identity and establishes also causality from expenditure to income:

$$C + I + G + X\text{-}M \rightarrow Y$$

Subtracting the imports of the national income we have the gross internal income (GIY) or, as equivalent, the gross internal product (GIP):

$$GIP \equiv GIY \equiv C + I + G + X - M$$

As to establish financial balances we should include external net income (R) and subtract net taxes (T), which includes taxes payments, income transfers and interest payments made by the public sector. And we should separate three "institutional sectors" (or macro-sectors), private, government and the external sector:

$$GIY - C - I - T + R \equiv (G - T) + (X - M + R)$$

Or equivalently:

[1] It is not the main purpose of this paper to draw a line between different schools of thought. With few exceptions we can assume that the economists that embrace the imbalances approach wouldn't be offended about being called "post-Keynesian" or just "Keynesian".

PFB (private financial balance) = - GFB (government financial balance) + CAB (current account financial balance)

Where PFB = (GIY – C – I – T +R), GBP = (T-G) and CAB = (X – M + RLRE). Each of those elements is a considered measure of the financial balance of each macro-sector. We should notice that when we re-write the basic national accounting identity the causality imposed by the principle of effective demand is lost. So there is a loss of information.

Expressing the same identity in another way, we can write each sector financial balance (i) separately:

$NB_i = E_i – Y_i = I_i – S_i$

Where NB is the net borrowing of each sector *i*, private, public or external and equal is to its total expenditure less its income. This exposition is closer to Godley own way of showing the financial imbalances, since he used to consider private expending (PX) as an aggregate, without making any distinction between consumption and investment (Godley *et al.*, 2007). There is, of course, a restriction imposed by the national accounting fact that states that all financial balances add up to zero[2]:

$\sum NB_i = 0$

This approach departs from the basic and correct notion that in a monetary economy total expenditure determines total income, but the not necessarily an increase of one sector expenditure will increase its own income by the same amount. What Godley highlights is that each balance implies a change in a stock variable[3]. So, if a sector systematically presents an excess of expenditures over it income, it will have deficits, implying a growing stock of debts that, at any point, would bring the sector to realize that it is an unsustainable path. The sector reaction would be to cut expenditures aiming to stabilize its stock of debt. So, accordingly to Godley, private sector expenditure dynamics would be constrained by the need to keep its deficits under control. The same would

[2] It is relevant to note that for the restriction to hold, capital depreciation should be included at the private sector receipts. And that the government financial balance is the combined financial balance of federal government and state and local administrations.

[3] This is the reason why Godley calls the private sector balance (PFB) as NAFA (net acquisition of financial assets).

happen with other sectors, external and public, financial balances. Godley stated his approach in the following way:

> "Though in themselves nothing more than accounting identities, these equations carry some important implications. Each balance implies an equivalent change in a stock variable: subject to the effect of capital gains, the budget deficit implies a change in the stock of government debt, a current account deficit implies a change in the net stock of overseas assets, and the private balance implies a change in net private wealth. As there is a limit to the extent to which stocks of debt can be allowed to rise relative to GDP, there is a corresponding limit to the extent to which the financial balances can (be allowed to) fluctuate, implying that the ratios of stocks to GDP have *norms* that can sometimes be used to evaluate strategic options. For instance, if the government or overseas debt-to-GDP ratios are limited to 50 percent, this implies that the ratio of the budget or current account deficit to GDP cannot for long be allowed to exceed half the nominal growth rate." (Godley *et al.*, 2007: 2, italics in the original).

This extent quotation clarifies some important aspects of Godley's approach. First of all, shows that Godley estimates the financial balances from the national accounting data, so it does not include capital gains. In general, we can say that he does not compute any change at the initial values of each sector assets and liabilities, caused by changes on inflation, real interest rates and real exchange rates. So, it is important to notice that the deficits calculated by Godley are different from the net change of each sector liabilities.

Secondly, the sustainability condition pointed out by Godley is about total deficit over GDP, and not about primary deficit. By proceeding this way, he ignores the endogeneity of the financial portion of the deficit caused by the relation between interest rate and the GDP growth rate, which have some serious implications to the sustainability of the debt/GDP ratio. So what Godley pays attention to is:

Debt/GDP = total public sector deficit/ g

Where g is the GDP growth rate. But what really matters is[4]:

Debt/GDP = primary public sector deficit/ (i –g)

By looking to the second equation, we can see that even if the public sector presents a small primary deficit it can have a growing debt/GDP ratio if the interest rate of its debts is larger than the GDP growth rate.

[4] This is an approximation to continuous time. The formal condition applied to discrete time is a little bit different.

Finally we should note that Godley states that there are some well defined limits (but not specified) for the debt/GDP ratio of each sector, that could not be exceeded. This peculiar way of analyzing the deficits, debts and sustainability of each sector leads Godley to worry about negatives financial balances. Any lasting deficit, private, public or external, could cause problems. So he states: "at some stage there must (surely) be a return towards external and internal balance" (Godley and Izurieta, 2003: 2).

## III. Expenditures, financial balances and liquidity

### III.1 Private deficit and expenditures

Our main criticism to Godley's imbalance approach to macroeconomics is about the relevance of the private sector deficit. We do not think that it brings any new or suitable information to analyze the effective demand or the economy growth path, nor it is a good index of financial difficulties of the private sector.

It is interesting to begin with a simple case. Suppose a closed economy without public sector, or, what is more realistic, an economy in which external and public sectors financial balances add up to zero. If the aggregate private sector tries to increases its expenditures[5], the impact on the financial balance would be always the same: the private sector deficit would be zero. The reason is that any increase of private sector expenditure would increase its income by the same amount. In this case, there isn´t any relation between the private sector financial balance, which is always equal to zero, and its absolute expenditure level, nor with its growth rate[6] [7].

Let us introduce the possibility of a public sector financial balance different from zero, supposing autonomous public expenditure and, for now, also exogenous total net public receipts. In this case, the private sector is allowed to have a financial balance different from zero. But again it is totally independent of level or the change of private sector expenditures in consumption or investment. Even more, the private imbalance will be fully determined by the autonomous public decision to expend and to tax. Again, any

[5] We should remember that Godley usually didn´t make distinction between consumption and investment, when analyzing financial balances.
[6] Neither we can say anything about indebtedness, since the private sector financial balance includes the banking sector. This will be explored in the following sections.
[7] This analysis is analogous to Haavelmo theorem on the balanced budget.

change of the private sector expenditure will cause an identical change on its income (since we made the hypothesis of a zero marginal propensity to tax) and therefore it cannot affect its own financial balance.

In the same way, we can allow the external sector to play a role on the macro-imbalances determination. Let us suppose exports and external net income are exogenous, and, provisionally, so are the imports. In this case, the previous result is still valid: private net financial balance is uncorrelated with its own expenditures on consumption and investment. As we suppose a marginal propensity to import equal to zero, all private expenditure will increase by the same amount its income and, therefore, doesn´t cause any change on its financial balance. The private financial balance (its magnitude and sign) will be determined by the autonomous behavior of the public sector and the rest of the world.

It is true that a more realistic scenario would be the one with a large extent of taxes are induced by the level of income and also that imports is determined by the amount and composition of the private sector expenditure. In this case, there are positive marginal propensities to import and to tax, which implies that the private sector financial balance is a negative function of its own expenditures on consumption and investment. It is also true that in this case a reduction of private expenditure will reduce an eventual negative private financial balance and that an increase of expenditures would expand the deficits. Nevertheless, it is clear that **the balance is the effect and not the cause of the changes on private expenditure**.

That question that emerges is why Godley considered that aggregate private expenditure on consumption and investment would be affected by the *ex-post* financial balance in a systematically way.

### III.2 The private sector financial balance as an ex ante norm

To answer the question posed at the end of the last sub-section we must introduce clearly the New Cambridge hypothesis. It proposes that the private sector as a whole would have a norm for the aggregate net acquisition of financial assets (NAFA, as stated previously, it is the private sector financial balance) in the medium term, which ultimately would regulate the rate of expansion of their total expenditure on consumption

and investment. Thus, if the *ex-post* financial balance of the private sector (the one that we can calculate by the national accounting data) has been for some periods above (below) the target, the *ex-ante* rate of expansion of private spending would be reduced (increased) for the sector to get closer to its norm or desired NAFA[8]. According to Godley:

> "… a glance at the configuration of financial balances to infer that a situation had been developing which was unsustainable. The change in the government's balance had steadily, and on an increasing scale, been withdrawing purchasing power from the economy and the same thing was true of the balance of payments. It could therefore be inferred that the motor driving the economy had resided entirely in a wholly exceptional rise in private expenditure relative to disposable income, causing the whole private sector to fall ever more deeply into financial deficit. And it was easy to ascertain that this private sector deficit had itself been powered by a prolonged surge of lending, resulting in record levels of household and corporate debt relative to income. It was this pattern of balances which led us, in a series of papers published around that time, to point out that the private financial balance would eventually revert towards its long term average" (Godley and Izurieta, 2003: 4).

According to this approach, there would be in the medium-run a positive relationship between deviations of *ex-post* private financial balance in relation to its normal value (or its norm) and the rate of expansion of private aggregate expenditure on consumption and investment[9]. A priori this private expenditure function is quite implausible. It seems quite unreasonable to aggregate some decisions from the consumers and firms or the workers and capitalists as if they were subject to the same competitive forces and motivations or the same type of budget constraint.

For our present purposes there is no need in entering into a deeper theoretical discussion. It is sufficient to point out two important implications of this expenditure function. The first is that in this formulation the autonomous consumption and the residential investment financed by credit aren´t seen as "trend factors" that extend the internal market but as temporary phenomena that explains deviations from the short-term norm of net financial assets accumulation of the aggregate private sector.

[8] Assuming that money is the only kind o government liability in this economy, and abstracting from changes in the level of prices, the desired amount of assets over income would be k = M/(PY).

[9] Formally, at the medium run the private sector marginal propensity to save (s) and to invest (h) would depend on the long run growth rate of the economy (g) and the desired net liquid assets/ disposable income ratio (k). So, s-h = kg and the NAFA would be zero in a stationary economy and positive in a growing economy.

Furthermore, the use of this expenditure function, as presented in Godley and Cripps (1983) is not compatible with a non-residential private investment function where the investment rate gradually responds to changes in the growth rate and / or in the degree of capacity utilization. This reaction is caused by an adjustment mechanism of capital stock or via a flexible accelerator[10], for which there are reasonable empirical evidence. In fact, the flexible accelerator[11] is necessary to explain the tendency for the degree of capacity utilization in the U.S. economy to oscillate around relatively stable levels[12].

It seems much more reasonable to assume that private non-residential investment expenditures are crucially dependent on the level and pace of expansion of aggregate effective demand, regardless the existence or not of private consolidated deficits. And that autonomous consumer expenditure and residential investment depend on the availability of credit and on interest rates, while the induced consumption of workers depends on the evolution of wages and fiscal policy. The existence of a situation of private consolidated deficit *ex-post* itself should not significantly affect these determinants.

### III.3 Private deficit and financing expenditures

Unlike the supporters of the imbalances approach believe, the aggregate private financial balance doesn´t have any relation with the financing of private expenditures. The reason is that the banking sector is in inside the private sector. So, when looking to its deficit, we cannot say anything about the deficit of households or non-financial firms against banks, because they are all aggregated together. There is no reason to have a lack of credit or purchase power for the private sector to effectuate its expenditures just because the aggregate private sector has a deficit against the public sector or the rest of the world.

[10] Godley and Cripps (1983) admitted that if they introduced the induced non-residential private investment, their model would be chronically unstable, if the net liquid assets/ disposable income ratio (k) was different from the desired relation between the stock of productive capital and income. The Godley and Lavoie (2007) version of the model doesn´t seem to have this problem, as can be seen in Leite (2012) simulations. But this point needs further investigation.

[11] The kind of model that we have in mind is the one put forward by Serrano (1995 e 1996).

[12] For some evidence of this, econometric evidences and further references, see Serrano e Braga (2006) and Braga (2006).

Let us suppose that there is an *ex-post* private deficit, but the external sector financial balance is zero. Necessarily, the equivalent of the private sector deficit will be a surplus of the public sector financial balance. Why would it cause a reduction of private sector expenditures? While this situation exists, the aggregate private sector (banks included) will gradually reduce its stock of government bonds, money or other public sector liabilities. What has not been explained is why would it affect private decisions of consume and invest. It is possible that Godley and his supporters believe that the public sector finance the private sector expenditure beyond its disposable income and, as any creditor, can shrink the credit to block out private sector expending? An alternative, oddly enough, would be that the private sector (or at least the banks) would be afraid of this possibility to happen, so would avoid a large private deficit, restricting its expenditure (or the private credit).

Another possibility is that the counter-part of the private deficit is a surplus of the rest of the world (a current account deficit). In this scenario, it is generally true that if net external liabilities of a country grow indefinitely, under certain conditions it is possible to occur a reduction of the international financing drastic enough to ensure an unsustainability of the country balance of payment. But we should notice that external financing problems are not a direct concern of the private sector, but an issue to the government to solve. Even in this situation, there is no reason to have an autonomous reduction of private sector expenditures. Usually, the government is the responsible to intervene. This intervention can have the form of macroeconomic policies aiming to reduce the growth path of domestic expenditures (private or public), or with measures to redirect a growing portion of private expenditures to goods and services domestically produced. These measures can be exchange rate devaluation, imports tariffs, etc.

Of course private firms that externally financed their expenditures can suffer from an external credit restriction. Or that exchange rate devaluation can cause serious financial problems to this firms, or that the others public policy alternatives can have adverse effects. But as it is always possible that there is an alternative domestic credit source, or it is possible to by domestic production (instead of importing), it is not clear how to postulate a direct relation between the size of the current account deficit (even if it

is all private) and the levels and the growth path of private expenditures on consumption and investment[13].

What we see is that, in general, the analysis of the aggregate financial balances can be counter-productive. Let us assume that a sudden and large increase of the government bonds interest rate happens that causes an increase over all the yield curve extension (we assume that the spreads do not change). By empirical and theoretical reasons we should expect that the larger interest rates would cause a reduction of the credit financed consumption and of the residential investment. Moreover, we could expect some financial problems to a great portion of the private sector that is indebted with the banks. But, accordingly to Godley's approach, the increase of interest payments would increase the public sector deficit, causing a decrease of the private sector deficit. This reduction would imply that the aggregate private expenditure should increase, to restore the desired private deficit[14].

It is important to highlights that a problem with this approach is that assets and liabilities appreciation and depreciation are deliberately not taken into account. An example about the importance of changes in the initial value of assets and liabilities on assessing the each sector indebtedness is the effort of Papadimitriou, Zezza and Hannsgen (2006) to estimate U.S. net external debt. They estimation is the "sum of past current account balances" or, as they sometimes denominate it, the sum of past external sector financial balances. Nevertheless, they seem to be quite surprised that their numbers differ from the Bureau of Economic Analysis (BEA) data on U.S. "net investment position" in an amount of US $1,8 trillion at the end of 2005. This was 14,2% of 2005 GDP. This discrepancy appears because Papadimitriou *et al.* calculations don´t take into account changes in the value of U.S. dollar. When there is a dollar devaluation, the U.S. assets abroad (almost all of it is denominated in a foreign currency) increases in dollar

[13] There is and additional problem when this approach is applied to U.S. economy. The issue is that all external U.S. liabilities are in dollar denomination and, of course, can be paid with dollars. So the U.S. economy faces a peculiar situation in which there is no problem of international financing or a risk of exchange rate devaluation that would affect private agents with external liabilities. For more information about this "peculiar" situation, see Serrano (2003).

[14] This implausible result that an increase of the interest rate causes expansion of private expenditures is clearly stated in the original Godley and Cripps (1983) book and in the new version, Godley and Lavoie (2007). This result implies that a the marginal propensity to consume of a wealthy banker is as big the propensity to consume of the subprime client of the same bank.

value, while U.S. liabilities denominated in dollars don´t change in value. So depreciations of the dollar, what have happened since the 1970´s when U.S. starts to present systematic current account deficits, reduces total U.S. net external debt.

Moreover, on one side, these changes on the values of assets and debts would complicate the (already complex) theoretical models; on the other side, there is a lack of data to fulfill the empirical models. There isn´t any database that account to unrealized capital gains, or capital losses[15]. Therefore, in this context, neither a stock or real-state price boom that can induce banks to expand credit operations to their clients to expend more, nor a fall on stock prices that would cause a reduction of the credit to private expenditure, would appear on the aggregate private financial balance as estimated by Godley. Even if we take in consideration the efforts of making further de-aggregations on the private sector, separating households and business (Barbosa-Filho *et al.*), or separating firms, households and banks (Dos Santos and Macedo e Silva, 2010), capital gains or losses do not appear directly, since they do not appear on the financial balances.

## IV. The argument of last resort: the three balances as contributions to aggregate demand

One of the few arguments that seem to be undisputed between the imbalance approach supporters (new Cambridge, SFC, or any other version) is to interpret each sector balance as the contribution of the sector to aggregate demand. If the sector has a surplus it represents a leakage. If the sector has a deficit, it means an injection of demand into the economy. Zezza clearly states that view: "a positive balance implies that, for that sector, injections exceed leakages, so that that sector is a net contributor to aggregate demand. (...) Movements in the balances signal an increase (decrease) of injections against leakages. If any of the sectors changes its balance, this will have consequences on the growth rate" (2009, 19).

Of course this is not true in general. For instance, as stated by Haavelmo in his balanced budget multiplier theorem, the government can contribute to aggregate demand with a balanced budget. So, being aware of that, dos Santos and Macedo e Silva qualify Zezza´s statement:

[15] Godley *et al.* (2007) and Zezza (2009), for example, make this hypothesis clearly.

> "While this [Zezza´s] statement is generally true, it is important to notice that it holds strictly only in the case of the external 'sector'; if net exports are zero, there is no impact on GDP. (...) Therefore, we would rather stick to customary national accounting practices, which say that the contribution to aggregate demand of any 'sector' (and/or of any final demand component) depends on its relative size and on its relative growth rate" (2010, 9).

Following the usual practice of growth accounting, any sector or final demand component contribution would be:

$$((A - A_{-1})/A) \times (A/GDP) = (\Delta A/A)(A/GDP) = (\Delta A/GDP)$$

"A" denotes any final demand component. This implies that if net exports (NX) are zero at the preceding period and are still zero at the current period, the contribution of the "external sector" to the aggregate demand is also zero.

$$\Delta GDP = \Delta PX + \Delta G + \Delta X - \Delta M = \Delta PX + \Delta G + \Delta NX$$

But this does not seem to be the proper way to account to the external contribution to aggregate demand growth. An alternative growth accounting methodology is being developed by some authors as Serrano (2009) and Freitas and Dweck (2010). Those authors assert that to analyze the external sector contribution as net exports is misleading, since it mixes demand (exports) with supply (imports), and this distinction is central to the right accounting.

$$M + Y = D + X$$

"D" is the domestic demand. The left side of the equation is total supply (domestic produced or imported) and the right site is total demand (also separated by origin, domestic or external). The import penetration is:

$$(1-d) = M/ (D+X) = M/ (M+Y)$$

$$d = Y / (D+X) = Y / (M+Y)$$

"d" is the domestic content of the final demand components (domestic demand or exports). Instead of using the following equation to the determination of GDP

$$Y = D + (X - M)$$

It is better to use

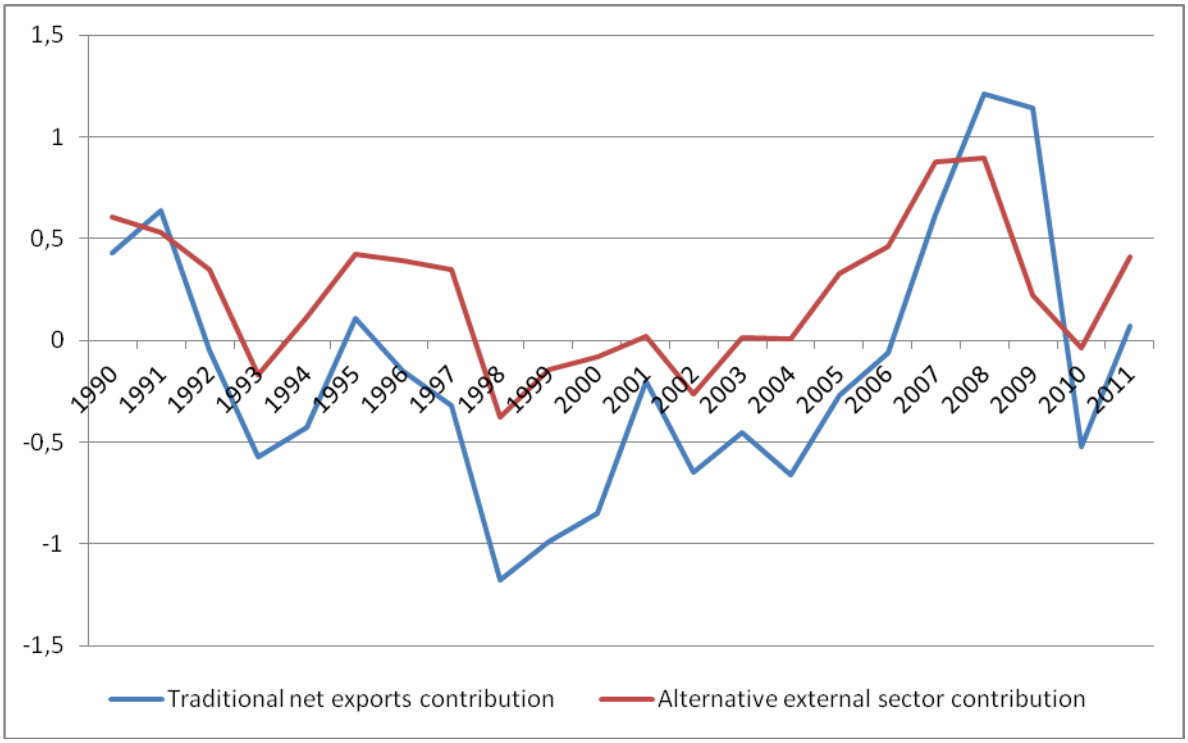
$$Y = d (D + X)$$

Supposing that the domestic content of every kind of expenditure, domestic or external, is the same[16].

With this equation, is possible to verify that every time exports grow, domestic product will grow as the same amount of the domestic content of exports. But, every time the import penetration grow, the effective demand and the GDP will reduce too (Serrano, 2008: 14). So, if there is a raise in exports, the immediate impact on GDP will be proportional of the domestic content of exports. If by chance all the raise of income is expend on imported products, there is no further raise on national income, but the initial effect is not neutralized (Serrano, *idem: ibidem*). But, by the traditional accounting, the contribution of the external sector would be zero. In general, traditional accounting results on an underestimation of the external sector contributions to aggregate demand. And as all sectors (final demand components) contribution must add up to the GDP rate of growth, it will also overestimate the domestic expenditures contribution. Let´s see the data for the period 1990-2011. We choose this period because this is the period that has been analyzed by the supports of the imbalance approach.

[16] Of course that "d" could be calculated as an average of the different domestic content of all kind of expenditures.

Figure 1: External sector contribution to growth – alternatives methodologies




Source: BEA, NIPA and author's calculation.

The blue line at the figure is the traditional way of account for the external sector contribution, used by the supporters of the imbalances approach. Only in seven years of this period the contribution showed a positive value. The average year contribution for this period was - 0,14%. In average, every year the external sector represented a drain of aggregate demand. This leaded to inappropriate view of the problems facing the U.S. economy. Godley (1999), for example, in his famous "seven unsustainable processes", presented the rise of the current account deficit as problem, not only because of increase on foreign indebtedness, but also he thought the external sector wasn´t contributing to the economic growth (Godley, 1999: 3). Papadimitriou *et al.* clear state: "the current account balance [deficit] (…) is a deduction from U.S. aggregate demand" (Papadimitriou *et al.*. 2006: 1)[17].

The alternative accounting methodology gives to us a different impression about the external sector contribution to growth. Accordingly to this methodology, it is possible

[17] Wray makes a statement also very close to that: "[current account deficit] is another leakage that drains domestic demand" (Wray, 2006: 2).

to the external sector to be an injection of demand, even with growing external deficits (Serrano, 2008:14). This seemed to be the case of U.S. economy; the external sector has been a positive source of growth over the period. Net exports has been negative for all period long, nevertheless it contributed with 0,22% per year, in average.

So, we can see that no even what seemed to be an undisputed point don´t hold strictly when analyzed with a special attention.

## V. Concluding remarks

In this paper we address a criticism to the imbalances approach to macroeconomics, firstly put through by Godley in the seventies to analyze Great Britain economy. The main hypotheses underlining this approach, the New Cambridge Hypotheses, was criticized by its lack of realism, and because of some theoretical flaws. The accounting aspect of this approach was also criticized by not considering changes in the initial values of assets and liabilities, meaning that this approach isn´t pursuing strictly the aim of treating stock and flows consistently. We also commented the interpretation of the imbalances approach as leakages and injections of demand, as it tends to underestimate the external sector contribution to growth. The general deficiencies of this approach lead us to find out that it gives less information about real economic processes than an effective demand analysis based on the levels and growth rates of each expenditure type.

## References:


BARBOSA-FILHO, N.; RADA, C.; TAYLOR, L.; ZAMPARELLI, L.; (2008). "Cycles and trends in US net borrowing flows". *Journal of Post-Keynesian Economics*, 30 (4), Summer.

BRAGA, J. (2006). Raiz unitária, Inércia e Histerese: o debate sobre as mudanças da NAIRU na economia americana nos anos 1990. 2006. PhD dissertation- Universidade Federal do Rio de Janeiro (UFRJ).

DOS SANTOS C.; MACEDO E SILVA A. C. (2010). Revisiting 'New Cambridge': The Financial Balances in a General Stock-flow consistent applied modeling strategy. New York: Levy economics institute, Annadale-on-hudson working paper 594.

FREITAS, F.N.P.; DWECK, E. (2010). Patterns of Economic Growth in the Brazilian Economy 1970-2007: demand led growth under balance payments constraints. Rome: Sraffa Conference.

GODLEY, W. (1999). *Seven unsustainable processes*. New York: Levy economics institute, Annadale-on-hudson (special report).

GODLEY, W.; CRIPPS, F. (1983). "*Macroeconomics*". New York: Oxford University Press.

GODLEY, W.; IZURIETA, A. (2004). *Balances, imbalances and fiscal targets*: a new Cambridgeview. CERF Cambridge Endowment for Research in Finance, University of Cambridge.

———. (2003). 'Coasting on the Lending Bubble. Both in the U.K. and the U.S.' Cambridge Endowment for Research in Finance Strategic Analysis, June

GODLEY, W.; LAVOIE, M. (2007). "*Monetary economics: an integrated approach to credit, money, income, production and wealth*". New York: Palgrave MacMillan.

GODLEY, W.; PAPADIMITRIOU, D.; HANNSGEN, G.; ZEZZA, G. (2007). *The US economy* - Is there a way out of the woods? Annandale-upon-Hudson, NY: Levy Institute, (Economics Strategic Analysis Archive, n. 07-11).

LEITE, F.P. (2012). Macrodinâmica à Keynesiana: uma travessia com consistência entre fluxos e estoques a partir do encadeamento de curtos períodos do multiplicador. Campinas: Unicamp, PhD dissertation – *mimeo*.

PAPADIMITRIOU, D. *et al*. (2006a). "Can global imbalances continue? Policies for the Us economy". *Strategic Analysis*. Annandale-on-Hudson, New York: Levy Ecomic Institute.

SERRANO, F. (2008). Los trabajadores gastan lo que no ganan: Kalecki y la economia americana em los años 2000. Revista Circus, v1, septiembre.

_____ (2003). From 'Static' Gold to the Floating Dollar. Contributions to Political Economy.

_____(1996). *The Sraffian Supermultiplier*, unpublished dissertation, Cambridge

University, England.

_____ (1995). "Long Period Effective Demand and the Sraffian Supermultiplier", *Contributions to Political Economy*, 14, pp. 67-90.

SERRANO, F.; BRAGA, J. (2006). O mito da contração fiscal expansionista durante o governo Clinton. *Economia e Sociedade* (UNICAMP), v. 15.

WRAY, R. (2006). Twins deficits and sustainability. *Policy Note*. Annandale on Hudson, New York: Levy Economics Institute.

ZEZZA, G. 2009. Fiscal Policy and the Economics of Financial Balances. Working Paper 569. Annandale on Hudson, NY: Levy Economics Institute of Bard College.