A constructive critique of the Levy Sectoral Financial Balance approach: resurrecting a "Robin Hood" role for the state's taxing-and-spending functions

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Abstract
This paper revisits the Sectoral Financial Balance approach distinguishing between its usage by the Levy Economics Institute as a macro forecasting tool and by Modern Monetary Theorists as an accounting framework for justifying theoretical claims. As a forecasting tool the approach has been praised for connecting financial flows to the likely balance sheet implications and for providing clear warning of the credit crisis. That its practitioners alter standard terminology and interpret shifts in the three main sectoral balances in a stylised manner to suit "a model of aggregate demand" has also sparked recent debate. The approach need not but appears to lend itself to overstating the role of the government sector and to framing policymaking advice through a "budget deficit lever" prism. The paper also queries the claim by the deficit owls that "fiscal receipts cannot be spent" on the grounds of empirical relevance and because it sustains a view where higher budget deficits lead to better outcomes to the neglect of a rejuvenated taxing-and-spending role for the State.

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Introduction

> "The central contention of this paper is that, given unchanged fiscal policy and accepting the consensus forecast for growth in the rest of the world, continued expansion of the U.S. economy requires that private expenditure continues to rise *relative to income*... [It] seems impossible that this source of growth can be forthcoming on a strategic time horizon... [but if it were] to continue for another eight years, the implied indebtedness of the private sector would then be so extremely large that a sensational day of reckoning could then be at hand." W. Godley (1999, p. 5)

In the build-up to the crisis that began in mid-2007 the Levy Economics Institute cautioned that the "drivers" of aggregate demand in the United States were configured in an unsustainable fashion, at least over a strategic time horizon. Attention was drawn to the excess of private expenditures over disposable income from 1997 until 2007 and to the econometrically-implied rate of debt uptake by the nonfinancial private sector. This line of analysis was perhaps best exemplified in Wynne Godley's (1999, 2000, 2005) work utilising the Sectoral Financial Balance (SFB) approach. The SFB approach, known also as "New Cambridge", is an *ex post* accounting identity derived by rearranging the components of aggregate demand and typically presented as a three-sector model comprising the private, public and foreign sectors. It is an important identity insofar as it links aggregate demand with changes in sectoral net financial asset positions. The framework informs the Levy macro model which is in turn acclaimed as one of the few macro models that provided lucid forewarning about the mechanisms and timing of the credit crisis; hence, part of the reason for the intrigue here.

The analysis proceeds as follows. Section one argues that the SFB approach is quite useful for forecasting purposes but less so as a model of aggregate demand. Section two traces the shift in the Levy Economics Institute Strategic Analyses from a fairly cautious deficit dove position in the early- to mid-2000s to a deficit owl position. This shift may reflect the severity of the "Great Recession" or rising influence of Modern Monetary Theorists (MMTers) or both. It is argued that SFB adherents do tend to frame their policy prescriptions in terms of a "budget deficit lever" prism and in doing so relegate important issues to the background. Section four queries the level of determinacy that the deficit owls assign to budget deficits in the macroeconomic process. Section five lends support to those in heterodoxy who argue that reflating the US economy while keeping public debt volumes on a "desirable" longer-term path requires progressive taxation reforms and a reorientation of government expenditures to more socially-productive purposes with high multiplier effects.

1. The SFB approach: a useful but partial lens

> "[It is widely held that 'no one saw this crisis coming' but some did.] Take, for instance, Wynne Godley ... From 2000 he had consistently argued that a US housing market slowdown was unavoidable in the medium term, and that its implication would be recession in the US." D. Bezemer (2009, p. 4)

In the Levy Strategic Analyses published bi-annually the accent in the build-up to the current crisis was on the "unsustainable" configuration of US growth "drivers" in the form of persistently large private sector and current account deficits. The late Wynne Godley has received fitting kudos for his prescient assessment of the macro trends which culminated in the "Great Recession". Marc Lavoie recounted in an interview (Pilkington, 2012) that Godley used the SFB identity for three purposes: (1) to check the consistency of assumptions in official macro forecasts; (2) to assess the sustainability of any configuration of sectoral financial balances; and, (3) as a model of aggregate demand. It is the latter usage which Lavoie has reservations about and which will receive attention below. The line of inquiry focuses on examining how certain terminological choices and stylised interpretations of shifts in the three main sectoral balances, in turn, influence thinking on the policymaking front.

Unlike most Levy scholars I will not invert the financial balances (FBs) of any sector for reasons of conceptual clarity: it is much easier to grasp at the intuitive level what a FB portends for any sector when a positive or negative FB (i.e. surplus or deficit) is recorded under the same sign. Usually, the US private sector runs a surplus around 2% of GDP, but from the start of 1997 through to the end of 2007 it was mostly in deficit, averaging -2.4% of GDP. Godley (1999, p. 3) drew attention to what was an ominous and unprecedented development in the US economy as follows: "The descent of the private sector into financial deficit means that the sector as a whole has become a net borrower (or a net seller of financial assets) on a record and growing scale." Zezza (2009, p. 19) offers a similar view in his summation of how the SFB approach can be developed along three different lines:

> (1) [A] positive balance implies that, for that sector, injections exceed leakages, so that that sector is a net contributor to aggregate demand...
> (2) Movements in the balances signal an increase (decrease) of injections against leakages ... [and,]
> (3) Financial balances imply an accumulation of net financial assets. Whenever a balance is in negative territory, it can thus be interpreted as the net increase in debt.

Observe that with the general government FB redefined as a deficit and given a positive sign, the private FB inverted, and the foreign FB viewed as the US current account, one can make limited sense of points (1) and (2) but not point (3). A positive FB is equated in point (1) to an excess of "injections" over "leakages" (i.e. the sector is spending more than its income) and then in point (3) to an "accumulation of net financial assets". How can a sector accumulate net financial assets if it is deficit-spending? Moving past the questionable inversions of FBs I am not sure what to make of Zezza's (2009) point (1) and will reinterpret his idea in line with point (2) such that a downward shift in a sector's FB signals that its "net contribution" to aggregate demand is increasing.[1]

Consider that the main driver of aggregate demand is autonomous growth in private expenditures (consumption and investment) and disposable income but that this dynamic is all but invisible to a "net contribution" lens. Suppose that a $100 increase in private expenditures is associated with an extra $100 of disposable income in one situation and $99 in another situation. A "net contribution" lens implies that the private sector's contribution to growth in aggregate demand was zero in the first situation and $1 in the second situation when in both instances it was $100. Conversely, if a $10 increase in public sector deficit-spending generates an additional $10 of disposable income for the private sector, the full amount will be taken as "net driving" aggregate demand. There are surely better ways to proxy the contribution of the private sector to aggregate demand (say, by the growth rate of private expenditures net of income transfers from other sectors).

MMT scholar, Scott Fullwiler (2009), extends the SFB approach into a model of aggregate demand that is reminiscent of the IS-LM figure. His figures have surplus/deficit on the horizontal axis and output on the vertical axis; and, record the intersection point between the private FB and the sum of the government deficit and current account. There are three issues here. Firstly, the main source of growth in aggregate demand and national income (of which saving is the unconsumed portion) is neither the public nor foreign sector but transactions within the private sector, but these "net out" in Fullwiler's diagrams for reasons already discussed. Secondly, if the model of aggregate demand is intended to inform theory, then it should consider the array of intra-private sector variables which Godley (1999, p. 12) bypassed to make the SFB identity useful as a parsimonious means to query the medium-term plausibility of 'official' estimates for economic growth and the government budget:

> "The central point in the present context is that as the stock of liquid financial assets does not, as an empirical matter, fluctuate wildly and is not high relative to the flow of income, it is acceptable to bypass the specification of (several) consumption and investment functions as well as the labyrinthine interrelationships between the household and business sectors, for instance, the distribution of the national income between profits, proprietors' income and employment income, the retention of profits, and the provenance of finance for investment."

Thirdly, while changes in the aggregate *size* of the general government budget deficit can provide a floor under aggregate demand, it is by no means the only lever in the fiscal toolkit. Fullwiler (2009) abstracts from the budget *composition*; specifically, how changes to taxing-and-spending activities could raise aggregate demand while leaving the overall budget stance

[1] The idea that a sector is a "net contributor to aggregate demand" only when it is deficit-spending connotes, quite implausibly, that aside from 1997-2007 the US private sector was a "net drain on aggregate demand".

relatively unchanged yet actually improving the budget balance. An analyst must also be careful about drawing or inferring strong conclusions from an *ex post* accounting framework (see section three).

Turning to Zezza's (2009) point (3), while a negative FB is likely to result in a "net increase in debt" for the public sector (with a sidenote for privatisations), the same is not true for the other sectors. Credit market debt is only one financial claim in the calculation of net financial assets between the private and foreign sectors.[2] In January 2012 a blogosphere debate erupted over the concept of saving in MMT texts. An equation derived from the SFB three-sector model and, presented by an anonymous blogger who pens under the name of JKH, became the subject of an online exchange.[3] There are at least four points of conjecture in the so-called "S = I + (S - I)" debate.

The first relates to the suitability of redefining a private surplus as "net saving" in view of the overlap with standard terminology used in the National Income and Product Accounts. The second is that MMTers often use the term 'saving' when they mean the redefined "net saving".[4] Why co-opt and redefine an existing term only then to conflate it with another existing term? The third point of conjecture is that a private surplus does not capture the concept of (net) saving. To get to the crux, whereas private saving in gross or net terms reflects the cumulative contributions of all sectors, MMT texts typically focus on the three-sector SFB model which gives an incomplete picture of the saving-investment nexus because the saving of the private sector amassed on itself "net out" from the analysis. In the absence of qualifying remarks that abstraction could give the connotation that the public and foreign sectors are more important to driving private saving and aggregate demand. The fourth concern is whether the role of public sector supplied "net financial assets" (NFA) as a source of saving and vehicle for private agents to amass wealth, occurs more at the centre (which is the strong impression in MMT literature), or at the margins. The importance of public sector NFAs to private portfolios is drastically elevated when looking at net positions instead of gross positions.

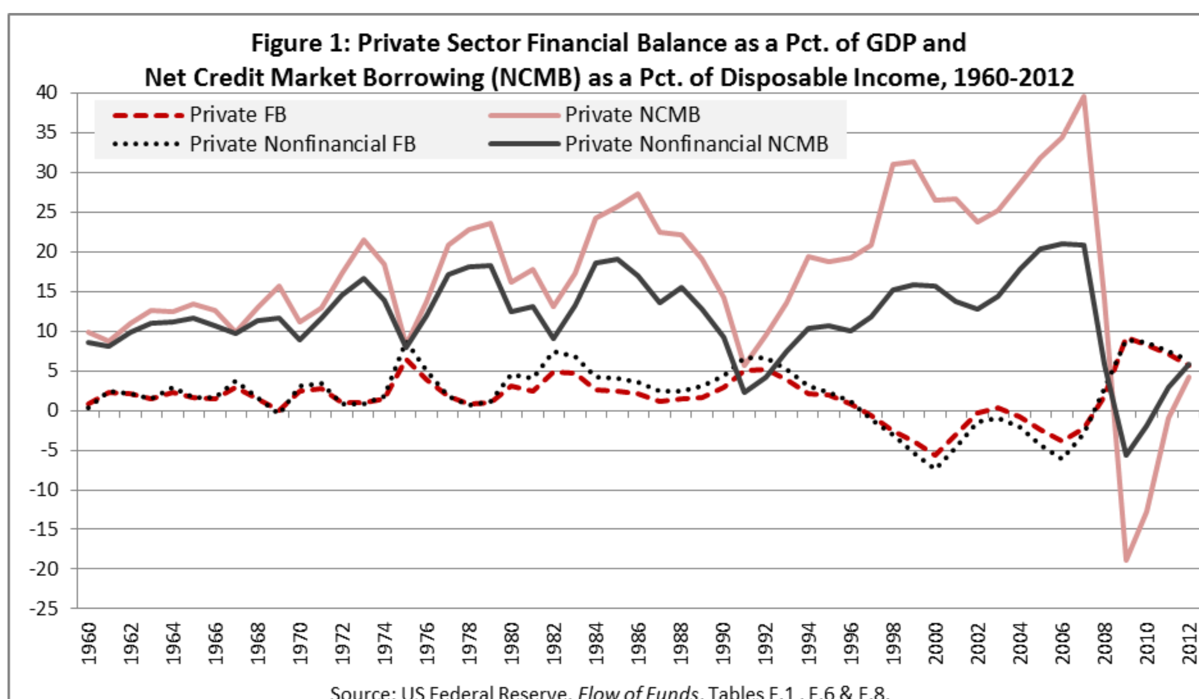
To sum up, the "S = I + (S - I)" debate is about precision and consistency in terminology; and the problems of excessive aggregation without qualification. There is a link between Zezza's (2009) stylised interpretations of movements in sectoral FBs, Fullwiler's (2009) SFB-inspired "model of aggregate demand" and the "S = I + (S - I)" debate. It is the potential to overstate the macro role of the government sector by netting out intra-private sector developments. Perhaps the terminology of "net saving" to denote a sectoral surplus and "net increase in debt" (Zezza, 2009) or "net borrowing" (Godley, 1999) for a sectoral deficit is able to convey the gist of complex economic phenomena to non-specialists; however, as it is technically incorrect it could also confuse. A sector's FB implies only a change in its NFA position *vis-á-vis* at least one other sector and hints mainly at the following:

> "To reiterate: a negative (positive) financial balance means only that (cet. par.) the agent/sector is getting less (more) liquid and more (less) fragile. It does not imply that it is getting poorer, nor does it convey any information

[2] Consider that direct investment and portfolio equity comprise around three-fifths of US gross foreign assets and one-third of US gross foreign liabilities at market value excluding financial derivatives.
[3] For a meticulous overview of the debate see JKH (2012A).
[4] As one example Galbraith, Wray and Mosler (2009, p. 9) argue that a sector's FB/surplus "is called saving" and remark soon after "The nongovernment sector accumulates net claims on the government; the nongovernment sector's *"net saving"* is equal (by identity) to the U.S. government's deficits [Emphasis added]."

> about how the composition of its balance sheet has changed precisely." (Dos Santos and Silva, 2010, p. 10).

While the above quote suggests that the SFB framework can provide Minskyan-styled insights on financial fragility it must be remembered that Minsky's (1975) concern was with gross liabilities not net liabilities. Prior to the crisis many of the Levy Strategic Analyses conveyed the message why we should be worried about a private deficit by supposing a stable relationship (at least "stable" enough to give plausibility to modelling projections) between the *private* sector's FB (percentage of *GDP*) and *private nonfinancial* sector's net borrowing in credit markets (percentage of *disposable income*). Godley and Zezza's (2006, p. 2) comments on such a projection suggest econometric derivation: "This may or may not be a correct inference, but the history of the relationship between the two series gives it some plausibility." Figure 1 shows this inverse though somewhat erratic relationship.

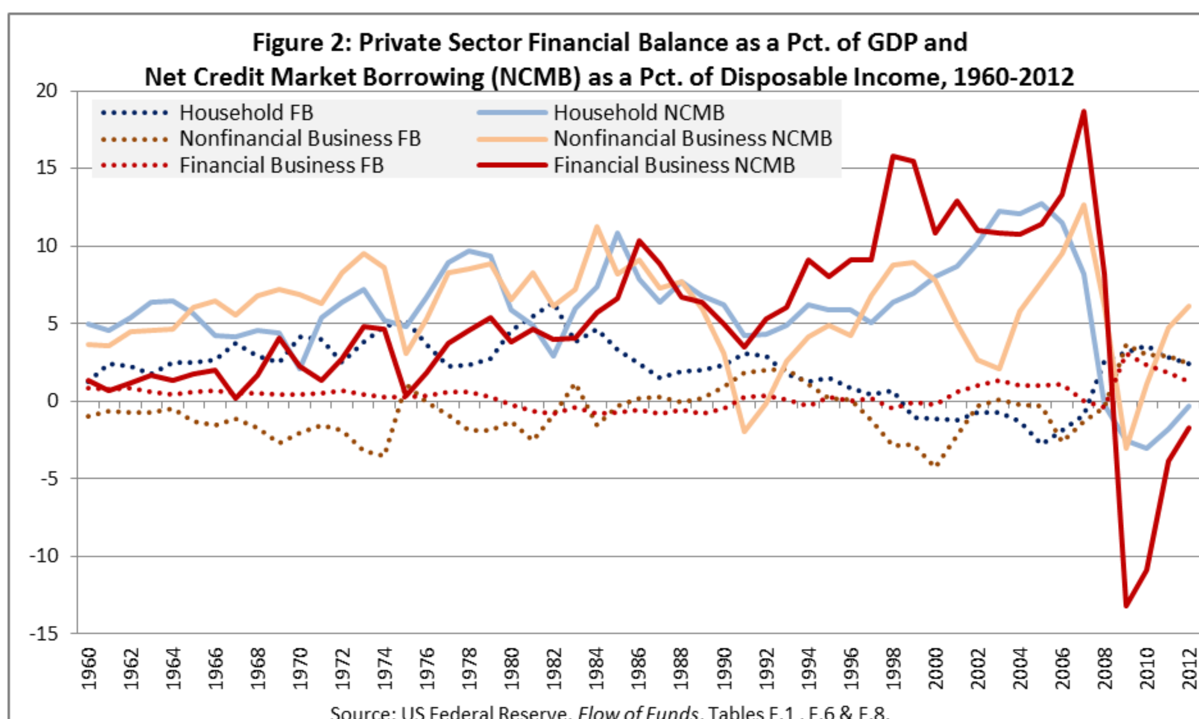


It is noteworthy that the rate of net credit market borrowing by the US nonfinancial private sector (scaled against disposable income) during 1997-2007 was not significantly more elevated than in the 1970s and 1980s when the private sector was running large surpluses. The two data series have an inverse but inconsistent relationship.[5] The astute reader may wonder why Levy scholars decided to infer an econometric relationship between the private sector FB and net credit market borrowing by the private *nonfinancial* sector. Where does the debt of financial businesses fit into the picture? During 1997-2007 the financial sector's FB summed to $478bn while its debt outstanding mounted by $11,475bn. What should one make

[5] One doubts whether the econometric shortcut can be relied on in general and particularly in an altered macro environment where private agents are deleveraging from debt or reluctant to take on new debt. The inference that it is not important to differentiate amongst the types of borrowing occurring is also a little unsettling. A rise (or fall) in the proportion of credit going to mortgage finance say relative to that going to fixed investment by nonfinancial firms surely bodes for different macro implications.

of the US financial sector "net saving" in the SFB jargon while amassing credit market debt on a record scale: it was not getting more liquid and less fragile.

Figure 2 shows the FBs and net credit market borrowing rates of the three main private *subsectors*. Two points are worth making. The FB of any subsector does not give any indication of the state of financial fragility *within* that subsector. Such issues may be exceedingly important to understanding the financing relations in the build-up to the 'Great Recession'. The contrasting robustness of US household balance sheets amidst widening wealth and income inequalities suggest a need to explain an expansion of credit flows to net debtor households from banks *and* from net creditor households (intermediated by nonbank financial institutions). Secondly, in a macro context where net debtor private agents are expected to rebuild savings for some time (either paying down debt outright or reluctant to re-lever to any significant degree), the ability of the SFB approach to offer insight on the extent to which such processes could occur autonomously or otherwise be impeded seems limited for palpable reasons (e.g. most private sector debts are "inside debts" owed to itself).



A three-sector macro model that abstracts from the labyrinthine interrelationships between the household and business sectors and uses econometric inference to infer plausible changes in the gross levels of private nonfinancial debts clearly puts to the side many issues that are important to understanding the macro economy and that are of interest to heterodoxy. That the approach is useful for modelling real capitalist economies in historical time is not a disputed matter.[6] It does nevertheless offer a stylised lens that is suited to drawing conclusions of a tentative nature and one finds such nuance in Godley's (1999, 2000, 2005) papers along with the Levy Strategic Analyses he co-authored. There are instances when SFB proponents forward analysis and policymaking prescriptions under the pretence that it is

[6] See also Dos Santos and Silva (2010, p. 1) who remark that there is considerable doubt in heterodox circles as to "*why exactly* the New Cambridge three balances approach (which many consider too aggregated and/or simple and/or based on implausible behavioural assumptions) is useful for applied macroeconomic modelling."

derived from the logic of an "accounting identity" when it is not so. JKH (2012A) records concerns that MMTers do tend to frame arguments as a "matter of accounting" that stretch the SFB accounting prism too far. There is a perception that MMTers conflate the private FB with the household FB and ardently push the view that a public deficit is vital in order for households to save and, in the process, oversimplify their discussion of the macro economy and policy advice.

2. The rise of the deficit owls at the Levy Economics Institute?

> "I should note that Wynne [Godley] came to explicitly adopt my 'government-centred' view of money, concisely stated as 'taxes drive money'. He proposed to write a textbook in which money entered the first chapter as the means of paying tax liabilities." R. Wray (2011, p. 23)

A recurrent feature of the Levy Strategic Analyses is the modelling of a "baseline" scenario which seeks to examine the likely economic outcomes of present fiscal and monetary policies using the Congressional Budget Office's (CBO) estimates for GDP growth and the general government budget. Alternative modelling scenarios are typically provided. Sometimes in the build-up to the crisis the alternative scenarios included projections where the private sector FB reverted back more in line with its longer-term historical average, that is, with changes in the size of the general government budget balance essentially modelled as the balancing item needed to attain the "official" estimates for GDP growth.[7] Framing the macro outlook and policy thinking as pivoting on changes in the *size* of the budget deficit may be appropriate under certain circumstances. When a big crisis hits, the endogeneity of fiscal policy (i.e. in the sense that tax receipts and unemployment benefits both move in a countercyclical fashion) means that policymakers have relatively little control over the budget balance. There is also no debate that efforts to curb the budget deficit should not come at a risk of impeding an economic recovery as that could be self-defeating and ultimately more costly. But one also wonders about the relevance of changes in the *composition* of the government budget.

Many scholars who publish at the Levy Economics Institute are MMTers while many others are sympathetic to the MMT view. To what extent Godley embraced MMT is unclear. Wray's (2011) remarks quoted at the start of the section suggest that Godley was willing only to accept that centralised authorities and the imposition of taxes were important in the historical evolution of monetary systems. There is little nonetheless in Godley's published work which indicates that he followed MMTers in arguing "tax receipts cannot be spent" and bond sale receipts "cannot finance or fund deficit spending (Wray, 1998, pp. 78, 85)." From those counterintuitive claims it is concluded that a "sovereign government" can never default or go insolvent unless its policymakers choose to do so and perhaps, unsurprisingly, that all of the fuss over the sustainability of the US public finances is exactly that. In the words of Nersisyan and Wray (2010, p. 11):

> "Government actually spends by crediting bank deposits (and simultaneously crediting the reserves of banks)... This is a key to understanding why perpetual budget deficits are 'sustainable' in the conventional sense of that term... Indeed, we argue that modern sovereign governments spend by crediting bank accounts—they do not really spend tax revenue, nor do they borrow by selling bonds."

[7] See, for example, Godley, Izurieta and Zezza (2004) and Godley *et al.* (2007).

MMTers reject the conventional understanding of "money-financed fiscal policy" (i.e. the Fed buying T-bonds in the open market) in favour of an unconventional position that *all* "government" spending is financed by "government" via "crediting bank accounts" or "keystrokes".[8] The MMT description of how the modern monetary system and public finances work in practice is counterintuitive and has received critique from several heterodox analysts (e.g. Gnos and Rochon, 2002; Lavoie, 2003, 2011; Fiebiger, 2011, 2013; JKH, 2012B). In short there is no utility in depicting the "government" as financing *all* spending by net/new money creation when that claim applies only to the central bank.[9]

The above issues provide context for the following discussion. Any heterodox economist who admits to worrying about the "sustainability" of public finances is potentially liable to a dismissive critique from MMTers. Strangely enough, concerns about keeping the budget deficit and public debt levels at "tolerable levels" do find a hearing in the Levy Strategic Analyses published after the 2001 recession, but not in the wake of the "Great Recession". After warning about the perils of a private deficit prior to the 2001 US recession, and lamenting the make-up of the Bush Administration's budget deficits (on wars of choice and tax cuts weighted towards the rich), the focus of the Levy Strategic Analyses in 2004 was on the return of "twin deficits". The expansion in the US budget deficit and ballooning trade deficit were taken as boding for trouble. As remarked by Papadimitriou *et al.* (2004, pp. 8-9):

> "Unsustainably high budget deficits and record current account deficits are characteristic of this [baseline scenario] path... Because relative government and foreign deficits would both be higher than the growth rate of GDP, government and foreign debt would rise steadily, relative to GDP. By the end of 2008, the former would rise from its 2003 level of 44 percent to 58 percent... Even with interest rates assumed to be constant, this would imply a growing interest burden for general government and for the nation. Were interest rates actually to rise over time, as the CBO now assumes, then matters would be much worse."

The macro projections did not come to pass. Worrying about a rise in the general government debt to 58% of GDP seems out of place in the aftermath of the 'Great Recession'. Nonetheless, what is important is that the authors expressed explicit concern about what was considered in their own words to be an "unsustainable" path for the budget deficit; and that the very implausibility of the baseline scenario led them to model alternative scenarios that would cut the budget deficit in half as a percentage of GDP (within five years). The alternative scenarios included one where the deficit was curbed by cutting public spending and another by rescinding the Bush Administration's regressive tax cuts. Godley, Izurieta, and Zezza (2004 p. 5) were also concerned with US public debt:

> "[In the baseline scenario,] a government deficit ratio equal to 9 percent of GDP, combined with interest rates in excess of 5 percent, would send the

[8] The reader might surmise a meaning of *ex nihilo* money creation for "credit bank accounts" and "keystrokes" but neither phrase contains qualitative information to that effect (i.e. most spending by any agent involves the "crediting" of a bank account and authorisation by pressing "keystrokes" on a computer keyboard).

[9] Fullwiler, Kelton and Wray (2012, p. 7) defended their position that fiscal receipts cannot finance spending by the federal government because the central bank can purchase T-bonds in the secondary market. That defence is unconvincing: to the extent that some portion of T-bonds outstanding are held on the central bank's books as monetary assets that only means that the Treasury previously issued bonds and then spent the proceeds.

> internal *and* the external debts hurtling towards 100 percent of GDP, with more to come after that. And, if there is anyone who considers a 9-percent budget deficit to be tolerable, what about 15 percent, or 30 percent? It has to stop somewhere. The longer the debt and deficit ratios go on rising, the larger and more painful the adjustment will be when the tide eventually turns."

The authors did not think a budget deficit of 9% of GDP was tolerable and also argued that the only remedy to the "disastrous situation" envisioned in their baseline scenario was a sustained rise in net export demand and dollar devaluation. As noted above, perhaps owing to the severe costs and extraordinary nature of the "Great Recession", the authors of Levy Strategic Analyses are no longer as concerned with the path of the US budget deficit or public debt levels. When the crisis first hit the Strategic Analyses by Godley *et al.* (2007) and Papadimitriou, Hannsgen and Zezza (2008) were well ahead of most analysts in recognising the direness of the economic situation and urgency to relax fiscal policy. The following remarks from Godley, Papadimitriou and Zezza (2008, p. 4) are intriguing:

> "It seems to us unlikely that, purely for political reasons, U.S. budget deficits on the order of 8–10 percent through the next two years could be tolerated... But looking at the matter more rationally, we are bound to accept that nothing like the configuration of balances [in the baseline scenario]... could possibly be sustained over any long period of time. The budget deficits imply that the public debt relative to GDP would rise permanently to about 80 percent, while GDP would remain below trend, with unemployment above 6 percent. Fiscal policy alone cannot, therefore, resolve the current crisis."

As we all know the US general government budget came in at -11.9% of GDP in 2009, -11.4% in 2010, -10.2% in 2011 and -8.7% in 2012. The expansion in general government debt since the crisis began was rapid by any standards: rising from 57.0% of GDP in 2007 to 92.9% at year-end 2012. The above quote is intriguing as there was explicit concern about an "unsustainable" path of fiscal policy amidst a recognition that even if the budget deficit was in the order of 8-10% (which it was) the crisis would still not be fixed (which it was not) at least in the short-term. Given that comparatively large budget deficits are here for a while under any foreseeable circumstances and the follies of orthodoxy on the macro effects of government deficits (e.g. Ricardian equivalence) it is understandable why Papadimitriou, Hannsgen and Zezza (2009, pp. 2-3) thought it appropriate to remind everyone that US federal government liabilities were still at levels below those recorded at the end of World War II (expressed as a percentage of GDP). The March 2010 Levy Strategic Analysis made an argument for a sustained expansion in the budget deficit to bring down the unemployment rate:

> "A Growing Public Debt Will Bring Unemployment Down: A first alternative scenario to be considered uses more plausible assumptions about fiscal policy than those of the CBO... Accordingly, in our alternative scenario we assume permanent tax cuts and a larger increase in government outlays related both to expenditure and transfers to the private sector... [In this scenario the] government deficit remains high relative to GDP, with public debt growing at approximately 101 percent of GDP by the end of 2015" (Zezza, 2010, pp. 3-4).

We have come a long way from when Papadimitriou *et al.* (2004, pp. 8-9) expressed unease about a baseline projection for a rise in the general government debt to 58% of GDP in 2008.

On page four Zezza (2010) wrote: "In this report we have shown that a large and persistent government deficit is and will be needed in the short run in order to reduce the unemployment rate." Whether or not his 'growing public debt' path required large public deficits only in the "short run" was not discernable as the projection stopped at 2015 with the budget deficit coming in at just under 10% of GDP.[10] Moreover, while "generalised" expansions in the budget deficit can lift the employment rate, there is surely much leeway for policymakers to affect economic outcomes by changing the composition of the budget. In the December 2011 Strategic Analysis Papadimitriou, Hannsgen and Zezza (2011, p. 5) commented favourably on President Obama's proposed "deficit-neutral" $447bn stimulus package but did not provide any alternative modelling simulations for a "deficit-neutral" scenario. It is worth recalling that Papadimitriou *et al.* (2004) thought the path of US fiscal policy was so "unsustainable" at the time that they considered modelling alternative scenarios to cut the budget deficit in half within a five-year period. What can explain the documented shift in the analysis and policy advice by the authors of the Levy Strategic Analyses from a cautious "deficit dove" position in the early- to mid-2000s to a more brazen deficit owl position in recent years? There are probably many factors at play.

Perhaps the greater deterioration in labour market conditions in the current crisis relative to the 2001 recession, along with widespread fears that prolonged stagnation looms large (with the Euroland fiasco showing no signs of abatement), are taken as sufficient reasons to relegate all concerns about keeping the US federal budget deficit and public debt levels "under control" to the background for the time being. But given the political derision on the state of public finances and the verity that policymakers should always pursue the public purpose in the most cost-efficient manner the question arises why not model how various changes to taxing-and-spending programs could impact economic growth and unemployment within a relatively unchanged overall budget stance? For example, it would be interesting to know relative to the "baseline" scenario, how a reorientation of government spending away from certain activities (say, military expenditures on wars of choice and regressive tax expenditures) towards more socially-productive activities (say, investment in 'clean and green' technologies) could promote economic growth and employment while leaving the overall budget stance relatively unchanged *but improving* the budget balance.[11] Time considerations may be a factor in why the Strategic Analysis team has yet to pursue that line of analysis, then again, in the April 2012 publication there was a subtle objection to progressive tax reform efforts:

> "Corporate tax loopholes bring up fairness and efficiency issues that are also crucial to the national debate... On the other hand, as the debate over a new reform effort takes shape, some people are hoping that any final bill will be revenue neutral or revenue increasing overall. We, too, are concerned about the equity issues raised by reform advocates, but we worry that arguments over the reform agenda will divert Congress's attention from the need for more realistic and timely tax-incentive legislation that could spur job creation

[10] That Zezza (2010, p. 3) pointed to the "exorbitant tribute" (i.e. the USA "maintains its international role as issuer of the major reserve currency") as a reason not to be alarmed about the financing of public debt in his "growing public debt" scenario was also a little troubling due to the implied inequitable dimensions. For the centre country to be receiving an "exorbitant tribute" other nations (typically poorer) must be paying the bill.

[11] It would also be interesting to know how reforming the inefficient US health care system (say, more in line with the Canadian system) could improve the federal government's budget bottom line while obtaining better health care outcomes.

> over the relatively short time horizon used in the scenarios above" (Papadimitriou *et al*., 2012, p. 8).

Papadimitriou *et al.* (2012) modelled three different scenarios for the US economy: (1) GDP reverts quickly back to its potential growth rate in line with the CBO's estimates; (2) a more "plausible" outcome where the Obama Administration's temporary tax breaks were renewed; and, (3) a "small" fiscal stimulus. In 2010 President Obama reneged on his promise to let the Bush era tax cuts expire and extended them for two years. When considering that the top 1% of taxpayers receive around 25% of the tax cuts while the bottom 40% get only 9% there seems no justification in defending or extending them (Crotty, 2011, p. 13). It could be reasoned that any increase in rates of taxation are undesirable now if it leads to a decrease in private spending, still, why not advocate for replacing the Bush era tax cuts with progressive tax cuts? Intriguingly, Papadimitriou *et al.* (2012, p. 3) made the following point, but did not model any scenarios involving progressive changes to the tax system:

> "This increasing concentration of income among the very wealthiest tends to slow down economic growth for reasons that vary from the simple to the complex. For starters, lower-income households tend to consume almost all of their income, while the highest-income 1 percent of households puts aside perhaps 50 percent of its lifetime income (Dynan, Skinner, and Zeldes 2004). Therefore, if the government were to raise taxes by, say, $100 billion a year on the richest people, and transfer that money to the poorest tenth or quarter of Americans via tax credits, consumption spending would rise by perhaps $50 billion."

Let me do some back of the envelope calculations. In 2011 the income share of the top 1% of US income earners was around 20% (and for the top 10% around 48%). Raising an extra $100bn from the top 1% of income earners would raise the ultra-rich's tax rate for the year 2011 by about 3.3% (assuming that their personal income was taxed at a rate of 22.5%). Why stop at a 3.3% increase? Doubling the average income tax rate on the top 1% of taxpayers from the present 22.5% to 45% would have generated an additional $673bn in government revenues for the year 2011 and if spent on investment (preferably non-military) or distributed to consumers with high propensities to spend increased GDP by $336.8bn (i.e. 2.2% of total GDP) all *without* increasing the public sector deficit. The point here is that there is considerable elasticity within any given budget for changes in the composition of spending and tax base to affect economic outcomes. SFB adherents put these issues largely to the side for reasons that may need to be revisited. A new fiscal stimulus could probably pay for itself in the current macro environment. In recent Levy Strategic Analyses the impression often given is that there are no financial constraints on public finances. The question arises what theory is being drawn on to support what could be taken as nonchalant calls for policymakers to spend with little regard to the longer-term implications for public finances?

This author has had difficulty in finding Levy papers that cover tax reform in depth.[12] Analysing the ins and outs of the US taxation system including reform debates does not appear to be a major focus of the Levy Economics Institute. Why? After all, the structure of the tax system matters to shaping the incentives of businesses to invest, and to obtaining progressive social outcomes. It should be uncontroversial to say that taxes constitute the

[12] Consider that since 2000 until the time of writing only one of the sixty-nine Levy *Public Policy Briefs* discusses the progressivity of the tax system and it was published over a decade ago (Moudud and Zacharias, 2001).

main source of government revenues; yet, this point is rejected by MMTers. Many MMT papers are published at the Levy Economics Institute guided by the "taxes drive money" view. So there is some discussion of taxation from an unusual perspective where the role of taxes is to create demand for the State's money and not to finance expenditures. As Tcherneva (2011, p. 13) puts it, "taxes and bonds do not finance government liabilities in modern monetary systems that use non-convertible free-floating currencies." The following quote from Papadimitriou and Hannsgen (2010, p. 6) indicates that some authors of the Levy Strategic Analyses have gone further than Godley did (at least in published writing) in embracing MMT:

> "[T]here is no doubt that the Fed coordinates its activities carefully with those of the Treasury Department to ensure that funds are available to pay for government operations while, at the same time, interest-rate targets are met" (Wray 1998; Bell 2000).

The referenced works are widely recognised as "classic" MMT scholarly texts and deny that fiscal receipts can finance federal spending. Elsewhere Hannsgen and Papadimitriou (2010, p. 6, ft. 3) argue "In the current era, the government 'prints money' mostly by sending people checks. Banks eventually redeem these checks at the Fed and are credited with the proper amount of bank reserves, which can be created with a few keystrokes." Referring to a "government" that finances spending by "printing money" and, or, by "keystroking money" into existence on an *ex nihilo* basis is MMT 101:

> "The federal government spends by cutting checks—or, what is functionally the same thing, by directly crediting private bank accounts. This is a matter of typing numbers into a machine ... There is no operational procedure through which federal government 'uses' tax receipts or borrowings for its spending" (Galbraith, Wray, and Mosler, 2009, p. 7).[13]

> "At the level of the national government, taxes don't pay for nothing... If government doesn't spend tax revenue, how does it finance its spending? It spends its currency into existence. In modern economies, this is accomplished through keystrokes that credit bank reserves, with banks crediting accounts of recipients" (Wray, 2012, pp. 14, 16).

Perhaps the rise of MMTers at the Levy Economics Institute can explain why the policy content of Strategic Analyses have shifted from a deficit dove to deficit owl position in recent publications. If so does it matter? It is worth quoting from two Circuit theorists, Bougrine and Seccareccia (2001, p. 12), who came to embrace the counterintuitive MMT description of how fiscal policy works:

> "[I]t should now be obvious to the reader that taxes cannot fund, say, social programmes that support the poor... Taxes... are there to destroy money; their role is *not* to fund public spending... For this reason, when one sees policy makers on the political Left fighting against tax cuts because supposedly taxes are needed to 'fund' social programmes, we would argue that their fight is somewhat misdirected" [emphasis in original].

[13] Galbraith, Wray, and Mosler (2009) seek to reassure that the costs of Social Security and Medicaid can be afforded over the longer-term: presenting counterfactuals as factual is surely counterproductive.

In the March 2013 Strategic Analysis Papadimitriou, Hannsgen and Nikiforos (2013, p. 24) offered in the conclusion that "we advocate no more tax increases *whatsoever* given the vast amounts of unemployed resources in the US economy and in the rest of the world [Emphasis added]." As there were no clarifications on the circumstances when that policy advice would no longer be advocated the reader is left to deduce that it is at least until there are no unemployed resources. The subtitle of this paper reflects a perceived need to rejuvenate a "Robin Hood" role for the State. The argument is that changes to the US federal government's taxing-and-spending activities could make a significant contribution to boosting the still fragile economic recovery without expanding the budget deficit or public debt volumes. This author is not against an additional fiscal stimulus (even if that results in a higher deficit) but has reservations about the robustness of MMT-styled nonchalant analyses of public debt and external debt sustainability; in particular, the pivoting of analysis around the counterintuitive claim that the general public cannot finance federal government spending.[14]

An October 2012 Levy Public Policy Brief by Hannsgen and Papadimitriou (2012) on the "fiscal cliff" was an intriguing read for several reasons. In that paper the authors invoked the MMT notion of a "sovereign currency issuer" as a reason why there is little if any reason to be concerned about the *long-term* sustainability of public finances, including the stability of interest rates on Treasury bonds, citing a paper by themselves and another by Nersisyan and Wray (2010). Given that the MMT notion of a "sovereign currency issuer" is used to justify a "benign neglect" view on fiscal policy it is worth devoting some time to this concept. Consider first the following remarks where Hannsgen and Papadimitriou (2012, p. 6) seek to dispel concerns of a "bond strike" as a generalised matter:

> "Central banks in countries with sovereign currencies and flexible exchange rates use open market operations to keep short-term interest rates stable, and can even, given enough time, consistently hit a target for long-term yields. [In footnote] In fact, chartalists point out that, all things being equal, *increases in government spending* tend to *reduce interest rates*, as they *add to the stock of money*. *Securities sales occur after* the fact and are a means of stabilizing interest rates, *rather than 'financing' government spending* (Wray 1998). In practice, this view is a bit less convincing with regard to *long-term* interest rates, without some form of open market purchases near that end of the maturity spectrum—a type of operation that is often seen as 'unconventional'" [emphasis added].

If sales of Treasury securities do not "finance" spending but are issued "voluntarily" after spending to "stabilise interest rates", then, the "fiscal cliff" should be a non-issue as according to MMT the Treasury deficit-spends *first and* then "voluntarily" issues bonds *later* as a part of monetary policy (to set the overnight federal funds rate target). In contrast to Hannsgen and Papadimitriou (2012), critics have difficulty with MMT claims that fiscal receipts are not financing operations, and that federal expenditures increase the "stock of money" putting downward pressures on interest rates.[15] One problem with the MMT "benign neglect" / "do not worry" analyses of public finances is that the "keystroke" theme is non-descriptive. Most

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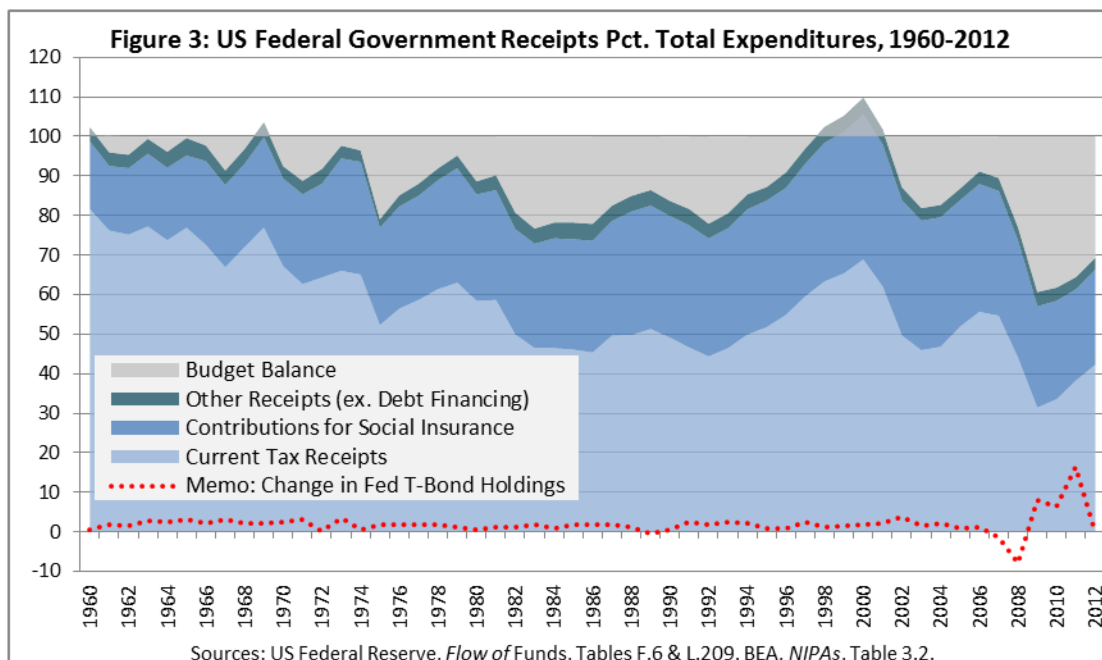
[14] Note that MMT advocacy of a 'Big Government' agenda is not instituted merely in view to combating the fallout from the "Great Recession". As one example, Wray (2007) argued prior to crisis, for economists to approach government spending in operational terms as a "ratchet" increasing in downswings and *upswings*.

[15] Obviously, as the Treasury (i.e. the coordinating agent for federal government agencies) must first procure deposit balances in order to finance spending, it is misleading to infer that its spending activities are analogous to the central bank's *ex nihilo* financed asset acquisitions and credit extensions.

analysts would infer from Figure 3 that taxation receipts (including contributions to social insurance as a compulsory quasi-tax) are the main revenue source for the US federal government followed by bond sales. The red line shows the change in T-bonds on the Fed's books as a percentage of total federal expenditures. By that measure it is correct to say that "government" financing of "government" spending via "keystrokes" is usually a bit above zero.



The misleading "keystroke" theme permeates through much of the MMT discourse including the binary schematisation of a "sovereign currency issuer" operating on a floating exchange rate versus a "nonsovereign currency user" operating on a fixed exchange rate. When Nersisyan and Wray (2010, p. 11) argue that "The United States, like many other developed and developing countries, has been operating on a sovereign monetary system ever since it went off the gold peg in 1973" the analyst is left wondering which of the "many" developing countries they are referring to? Surely not those caught up in the 1980s Majority World debt crisis or spate of financial crises in the 1990s such as the 1997/1998 East Asian crisis?[16] Those crises strongly support an alternative view that the critical issue when it comes to macro policy autonomy is not adoption of a "flexible exchange rate" but the *currency denomination of external liabilities; and, the extent to which a nation's currency is utilised by other nations as international money*. Wray (2003, 2006) went as far to argue that the US dollar's lynchpin role as the "key" currency did not make the centre country a "special" case when matters are surely otherwise.[17] Quoting now from Wray (2006, pp. 9-10) in a paper on

[16] The authors are omitting actual history where the IMF under the auspices of US Treasury officials has at repeated times bled debtors dry and spread "global neoliberalism" for paltry "debt relief" in a way reminiscent of the ancient usurers and made possible by an international monetary system built on dollar hegemony.
[17] Wray (2006, p. 21) was unaware that external deficits can be financed by incurring foreign-currency debts. The truth is that developing countries have external liabilities contracted mainly in foreign-currencies (i.e. public and *private* debts as well as import bills). Floating the exchange rate is no cure-all to policy autonomy as currency depreciation increases the costs of servicing external liabilities relative to the domestic currency unit.

why MMT "full employment" policies are thought to be effortlessly affordable *and* on a universal basis:

> "Banks prefer interest-earning treasury debt over non-interest earning excess (undesired and/or nonrequired) reserves, hence there is no problem selling the treasury debt. Note, also, that *if banks did not prefer to buy government bonds*, *the treasury* (and central bank) *would simply avoid selling them*, and, indeed, would not *need* to sell the debt as the banks preferred to hold non-interest earning reserves. In other words, far from requiring the treasury to 'borrow' by selling new issues, government deficits only require the central bank and treasury to drain excess reserves to avoid downward pressure on overnight interest rates. *This means that the wide-spread fear that 'markets' might decide not to buy treasury debt if budget deficits are deemed to be too large is erroneous*: bonds are not sold to 'borrow' but rather to drain excess reserves. *If 'markets' prefer excess reserves, then bonds need not be sold*—and won't be because there will not be pressure on the overnight rate to be relieved" [emphasis added].

Equivalent remarks can be found in Wray (2013) and Mosler (2013); however, as modern Treasuries issue bonds *first* to deficit-spend at a *later* point the above line of reasoning provides no reason to completely disregard the willingness of financial markets to buy government bonds.[18] Additionally, as discussed below, the belief that "sovereign" Treasuries spend by "keystroking" net/new money into existence as per a bank compromises MMT analysis attributed to the SFB approach.

3. The SFB approach and MMT dictums

> "[Federal] government deficits always add disposable income and wealth to the private sector; the income is received first as a Treasury check and then *may be transformed into an interest-earning government debt"* [emphasis added]. R. Wray (1999, p. 2)

The New Cambridge emphasis on using the SFB accounting identity as a means to gain predictive content on the economy's evolution to inform policymaking differs from its usage by MMTers as an accounting framework to justify theoretical claims. An oft made dictum by SFB proponents is that "budget deficits *create* disposable income and wealth for the private sector." Through the *ex post* SFB identity the public sector adds to disposable income when its expenditures exceed tax revenues. Technically, what is correct from *ex post* vantage point may not be so in *ex ante* terms; and it is only by way of a qualified argument (e.g. underemployment equilibrium) that an analyst can begin to build a case that a planned increase in public spending will raise disposable income and increase private "wealth" relative to an *ex ante* decision to consolidate or keep the budget stance unchanged.

[18] Explanations for why sovereign defaults need not occur should stress the capacity of the central bank to act as the federal government's banker. The restrictions in Euroland on that role were forcefully exposed by the crisis.

When it comes to MMT scholars the above dictum takes on an additional deterministic/totalising meaning owing to the "net" money creating and destroying powers attributed to the "government":

> "Budget deficits lead to net credits to bank accounts and budget surpluses lead to net debits [note: the authors mean net money creation and destruction]... If banks already have the quantity of desired reserves (which would be the normal case), Treasury spending creates excess reserves in the system... In order to provide a substitute for the excess reserves and hit its target rate, the Fed sells Treasuries to the private sector, thereby transforming the wealth held in the form of bank deposits and reserves into Treasury securities... In other words, sales of Treasuries should be thought of as a monetary policy operation... To recap, a government deficit generates a net injection of disposable income into the private sector that increases saving and wealth, which can be held either in the form of government liabilities (cash or Treasuries) or noninterest-earning bank liabilities (bank deposits)... A government budget surplus has exactly the opposite effect on private sector income and wealth: it's a net leakage of disposable income from the nongovernment sector that reduces net saving and wealth by the same amount" (Nersisyan and Wray, 2010, p. 11-2).

The authors intermingle and confuse *why* the central bank conducts open market sales of T-bonds (i.e. to drain excess reserves in the banking system) with *why* the federal government *sells bonds* in the first instance (i.e. to procure financing in order to spend). All other economists would describe federal deficit-spending as financed after the sale of T-bonds not before; and, not depict the sale of bonds by the Treasury as a "voluntary" monetary policy operation. Drawing the threads together and, abstracting from the foreign sector, in the MMT rendering of the SFB prism a federal deficit *must* increase disposable income and add to private sector "wealth" because it is financed by net/new money creation. If the Treasury did not "voluntarily" perform the central bank's core responsibility (i.e. set interest rate policy) then the "net/new money" thought to be created *as* the Treasury deficit-spends need not be converted into T-bonds; indeed, for that reason MMTers redefine Treasury debt as "money" (i.e. an alternative interest-bearing-asset to reserves and currency). Furthermore, due to the belief that the Treasury issues bonds to drain "excess" reserves (said to be created by the Treasury having already deficit-spent), that is taken as evidence that federal budget deficits can only create downward pressures on interest rates (Tcherneva, 2010, p. 18). All of the above claims pivot on the counterfactual claim that the Treasury creates net/new money whenever it spends.

Public sector activities can have "crowding in" effects though the MMT dictums that "budget deficits create disposable income and private sector wealth" and, vice versa for budget surpluses, go too far.[19] Such dictums are not "truth" statements that can be assumed as

[19] There are times when running or trying to attain a budget surplus is inappropriate but there is no reason to fear budget surpluses as a generalised matter because the private sector would "run out of net money hoards" (Wray, 1998, p. 79). Budget surpluses do not in theory "automatically" lower disposable income or for that matter "destroy/deactivate" the "public's money" (i.e. the proceeds can be used to pay down debt such that there is no change in the money supply). Nor must a budget surplus

"operational realities" of the modern monetary system or the "pure accounting logic" of the SFB model. The US Treasury does not create money whenever it spends and the SFB accounting framework is only an *ex post* identity. Government bonds can be a "wealth" vehicle and portfolio income source for private agents; however, that should not guide policymaking considerations. It is the net creditor private and foreign agents who are likely to be the holders of any increases in public debt (with sidenotes for funds managed by pensions and central bank purchases of T-bonds). Private agents who are overextended and/or underemployed do not need "savings" in the form of public debt *per se* but debt relief and spending to sustain income and employment. In the modern monetary system the choice between taxes and bond sales is not a debate over "alternative tools of monetary policy (Bell, 2000, p. 617)" but of alternative *financing* operations. That choice can be cast to some extent as whether policymakers finance a portion of spending by supplying wealthier creditor agents with an interest-bearing asset or by taxing them. As the crisis continues policymakers should assist distressed/unemployed agents without paying much regard to the "net saving desires" of wealthier domestic creditor agents.

4. A taxing-and-spending role for the state?

Few issues are more polarised than the state of US public finances. The deficit doves and deficit owls both agree that if a significant number of governments prioritise fiscal consolidation the result will be stagnation. In an outstanding paper Crotty (2011) offers compelling *political* economy arguments as to whom *within society* should pay for the costs of the crisis and the longer-term costs of an aging population, which have been made all the more difficult, by the imprudent draining of public finances on regressive Bush era tax cuts and wars of choice. His analysis is influenced by the research of the Centre for Budget and Policy Priorities which suggests a longer-term budget crisis is brewing in the United States due in substantial part to projected spending increases on Medicare, Medicaid and on debt servicing (e.g. Greenstein, 2010). Neoliberals are already advocating their "solution" (i.e. downsizing the Welfare State); and, it is surely the job of heterodoxy to provide alternatives so the costs will not be borne by the most vulnerable members of society.

Table 1 lists a variety of revenue raising and spending efficiency options for the United States detailed in Crotty (2011). The point is not the merits of any specific policy option but that there is significant scope to restrain US public debt growth without impeding the recovery or slashing "federal spending on programs that fund productive government investment and assist the poor, the middle class, the sick and the elderly" (Crotty, 2011, p. 23).

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necessarily make everyone all the poorer: a fall in public sector issued NFAs can be counterbalanced by a rise in intra-private sector financial claims.

Table 1: Cumulative Budget Possibilities over 2011-2021 (in Trillions)	
Projected deficit with Bush Jr. era tax cuts and exemption for Alternative Minimum Tax	$11.6
(a) Cost of Bush era tax cuts and Alternative Minimum Tax	$4.6
(b) Gain from reducing troops in Iraq and Afghanistan from 225,000 to 45,500 by 2015	$1.3
Projected deficit excluding (a) and including (b)	$5.7
Memo Items: Revenue Raising Options	
Doubling average individual income tax on top 1% of income earners	$4.0
Increasing effective tax rate (ETR) on top 1% of income earners by 10 pct. points	$1.7
Increasing ETR on top 1% of taxpayers by 5 pct. points and top 2-5% by 3 pct. points	$1.2
Eliminating 20% of the more than $900bn in revenues lost through "tax expenditures"	$1.8
Taxing dividends and capital gains at same rate as wages and not excluding capital gains on inherited assets from taxable income	$1.1
Raising corporate ETR by eliminating 75% of business "tax expenditures"	$1.2
Small financial transactions tax on stocks and derivative sales	$1.5
Removing excessive payments to pharmaceutical companies in Bush Jr. Medicare Bill	$1.0
Memo Items: Spending Efficiency Options	
Adoption of Canadian-style health care system	$10.0
Adoption of single-payer system based on Medicare	$4.0
Source: Crotty (2011).	

Evidently, that Washington policymakers must ensure a self-sustaining recovery is able to take hold provides no reason not to contemplate how to get the most out of any given budget stance, or to consider changes to the revenue base. Taxation is the main source of fiscal activism and a factor in shaping the incentives of businesses to invest.[20] A rejuvenated taxing-and-spending "Robin Hood" role for the State could also help amend the imbalance after 1980 where most of the gains from economic growth accrued to wealthier individuals (e.g. Atkinson *et al.*, 2011). Stockhammer (2012) argues cogently that rising income and wealth inequalities played an important causative role in the "Great Recession" by: (1) contributing to downward pressures on aggregate demand as higher income groups have a lower marginal propensity to consume; (2) "pushing" lower income groups into debt to compensate for stagnating or falling real wages; and, (3) encouraging dangerous speculation as richer households tend to hold more riskier financial assets. Recalling Papadimitriou, Hannsgen and Nikiforos' (2013, p. 24) remarks that "we advocate no more tax increases whatsoever" one can only hope that they do not intend to oppose progressive tax reforms, for example, the efforts to raise revenues from the estimated $21-32trillion held in tax havens (Shaxson, 2012).[21]

[20] The shift in accumulation patterns to profit generation through financial channels suggests that there is merit in considering policies, which would provide incentives for a reorientation of economic activity back into the productive sphere (e.g. increasing capital gains taxation and adopting a financial transactions tax).
[21] There is no reason why tax rate increases on the top-income earners would impede net debtor private agents from repairing balance sheets. As the top-income earners save a greater portion of their income it follows that raising the rates of taxation on the ultra-rich could have a net stimulatory effect on the economy assuming that the additional revenues are spent on appropriate programs.

Conclusion

> "So, what we see is an attempt to coordinate the government's spending with taxes and bond sales and it creates the *illusion* that what's happening is that the government is taking money from us and using it to pay for the things that it purchases. But that's not really what's going on" [emphasis added]. S. Kelton (2010)

The practitioners of the three-sector SFB model have been widely praised for reminding everyone about the importance of flow-of-funds analysis. That the approach views the macro economy through a "net" lens need not but appears to lend itself to overstating the role of the public sector and to framing policymaking advice through a "budget deficit lever" prism. The "Great Recession" provided a lesson on how fiscal policy can help stabilise unstable economies. At the same time as public debt requires management a "moderate" legacy is surely desirable so as to permit greater "policy space" down the line. Robust arguments are required to defend federal budget deficits (especially in Euroland where the anti-deficit mantra is producing disastrous socioeconomic effects) *and* to revive the State along a taxing-and-spending "Robin Hood" theme. While one can concur with MMTers about the need for an expanded role for the public sector it must be accepted that most federal spending is financed by taking money from people *within society* (non-voluntarily for taxes) creating winners and losers. That is not an "illusion" and to insist otherwise is counterproductive.

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