

DEBT MANAGEMENT AND THE FISCAL BALANCE

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Abstract

The paper presents a method of integrating debt management into fiscal policy using principles derived from the work of Kalecki. It proposes dividing the government budget up into a functional budget containing taxes and expenditure that may affect expenditures in the non-financial economy, and a financial budget containing taxes on wealth and higher incomes that do not affect expenditures in the real economy, but affect the liquidity of wealth portfolios. This gives the government two more or less independent instruments to manage economic growth and government debt. The respective balances between the functional and financial budgets then affect the fiscal multiplier showing how cases of expansionary fiscal contraction, contractionary fiscal expansion, expansionary financial instability, and deflationary financial instability may arise. The analysis applies to domestically financed debt.

Keywords: Fiscal multiplier, Fiscal policy, Kalecki, debt management.

JEL codes: E62, H21, H62, H63

The management of government debt plays a key role in public finance. But the discussion of it is on the whole driven by political economy considerations. On the one hand fiscal conservatives regard any government debt as a drain on future resources, and therefore to be avoided. On the other hand, Keynesians tend to dismiss concerns about government borrowing by arguing that the future growth assisted by debt-financed fiscal stimulus will allow the debt to be repaid. The conservative argument may be true of foreign borrowing,

and even perhaps of domestic borrowing under a gold standard, but it is certainly not true of domestic borrowing in a credit economy. The Keynesian case, on the other hand, depends on assumptions about the fiscal multiplier that need more than just assertions that this ratio will be sufficient. Both cases need a more careful analysis of the principles and methods of government debt management and its effect on macroeconomic dynamics: the conservative case to show the resource constraints on government debt in a credit economy; and the Keynesian case to show the effective connections between government debt and the fiscal multiplier. This paper provides such an analysis of domestic debt financed using fiscal principles derived from the work of Michał Kalecki.

1. Debt management and the fiscal balance

The budget of the government may be divided up into a functional or effective budget, and a financial budget. The functional or primary budget contains all the government expenditure in the real economy (the provision of public services, welfare payments and subsidies to economic activities) together with their financing by taxes on incomes, excluding profits and rents, and on trade in the economy. The financial budget contains, on the expenditure side, the servicing of government debt and, on the income side, taxes on wealth, including financial assets, and taxes on profits and rents:

Fiscal budget = Functional Balance + Balance of Financial Operations ;

Functional Budget = Government Taxation of Incomes and Trade

- Government Expenditure on Goods, Services and Welfare Transfer Payments ;

Balance of Financial Operations = Government Taxation of Assets (Real and Financial)

Rents and Profits – Government Expenditure on Debt Interest

The balance of the functional, or effective, budget may be called the primary balance. But it is perhaps slightly misleading to call this balance the primary balance, since this term is normally reserved for the fiscal balance *excluding* debt servicing, but including taxes on assets, profits and rents. The functional balance is more obviously the economically effective one, because it is through this balance that incomes and expenditures are affected, for example through Keynesian fiscal stimulus or fiscal deflation. The financial budget merely affects the liquidity of private sector portfolios and preferences about the composition of those portfolios, rather than macroeconomic variables such as income, expenditure and employment.

This may be illustrated by Michał Kalecki's proposal for deficit spending to maintain a high level of employment by means of a fiscal deficit, but with the annual cost of servicing government debt paid for by a wealth tax, or capital levy, or a tax on profits, with appropriate deductions for investment, equal to the servicing required in that fiscal year. These taxes will, in general, fall upon wealthy individuals. But the money will be returned to them in proportion to their holdings of government bonds.¹ If the financial budget is balanced, so that the tax to pay the cost of servicing the debt is returned to the wealthy in the form of interest payments on the bonds, then the money in the portfolios of the wealthy remains the same, and the money markets can be relied upon to redistribute this liquidity in accordance with individual preferences. A crucial advantage of this kind of taxation is that does not affect the incentives to invest, in the sense that the liability for a tax on wealth depends on the overall value of the portfolio of assets of the wealthy, and not on the share of industrial assets in that portfolio. In the case of the profits tax the calculation is a little more complicated. But a deduction for business investment can be calibrated in such a way as to

¹ '... If full employment is maintained by government spending financed by borrowing, the national debt will continuously increase. This need not, however, involve any disturbances in output and employment, if the interest on the debt is financed by an annual capital tax. The current income, after payment of capital tax, of some capitalists will be lower and of some higher... but their aggregate income will remain unaltered...' Kalecki 1943/1990, p. 348. See also Toporowski (2020) forthcoming. A wealth tax, or capital levy as a means of covering the debt costs of a government, has a long record of support among economists such as David Ricardo, Otto Bauer, Joseph Schumpeter, J.A. Hobson, as well as Keynes and Kalecki.

maintain the calculated profitability of particular projects.² Kalecki's proposal of setting the financial balance at zero therefore represents a sustainable debt position that allows the government to engage in deficit financing of its functional or effective budget, while at the same time keeping up payments on its debt with a neutral effect on the liquidity of private sector portfolios.

2. Debt management and the fiscal multiplier

Dividing up the fiscal budget into a functional budget that affects the real economy, and a financial budget that just maintains debt payments and the liquidity of the financial system overcomes the dilemma that makes fiscal policy ineffective, namely whether the fiscal budget is to be used for macroeconomic management (the Keynesian position) or for debt management. By splitting the fiscal budget, the government can have two independent instruments that can be used target the macro-economy and government debt, satisfying the Tinbergen Rule of an independent instrument for every target of economic policy. In this case, the targets are economic growth, using the instrument of the functional budget, and financial stability (debt management), using the instrument of the government's financial operations.

This feature of the budget arrangement can be illustrated by considering a situation where the financial balance (of wealth taxation and financial operations) is positive and greater than the functional fiscal deficit. This is the 'expansionary fiscal contraction' that made a brief appearance in policy discussions a couple of years ago.³ Because the financial budget is positive and its balance is greater than the functional deficit, the government has an overall surplus with which to pay off some portion of its debt, at the same time as stimulating the economy with its functional deficit. In effect, monetary resources are being transferred from

² Such taxes can finance a growing debt service in a way that is 'harmless in the sense that it will have no repercussions on output and employment.' Kalecki 'The Burden of the National Debt' 1943/1997, p. 163.

³ See Nuti 2015 for a summary of the controversy around the fiscal multiplier.

rentier capitalists (who are paying more in taxes than they are receiving back in interest on government debt and repayments) to entrepreneurs who are receiving as profits the amount of the functional fiscal deficit. In effect, the liquidity of rentier capitalists is modestly reduced by the difference between the financial budget surplus (which is taxed away from rentiers), and the overall fiscal surplus that is returned to holders of government bonds in the process of paying off the national debt.⁴

(*Ex post* of course the overall budget cannot have an overall surplus, since any excess of total revenue over total expenditure can only be transferred to the financial account, there to buy in and cancel government debt, or to buy in other assets and, in this way, expand the balance sheet of the government. This is further discussed below.)

Somewhat more common than this 'expansionary fiscal contraction' is what may be called a 'contractionary fiscal expansion'. This may be used to describe a situation in which the financial budget of a government is in deficit, and a part of that deficit is financed by running a surplus in the functional budget. This kind of fiscal outcome typically results from considerations of 'supply-side economics', in which wealth taxes are deemed to act as a disincentive to business enterprise, and are therefore reduced. At the same time, attempts at reducing government expenditure in the functional budget are frustrated by the overall surplus in the functional budget that reduces the overall profitability of business and thereby moves the economy into recession. Unless the surplus in the functional budget exceeds the deficit in the financial budget, the overall government budget remains in deficit, so that government debt continues to rise, with a growing financing requirement. Thus efforts at stimulating economic growth through reduction in wealth taxation fail.

⁴ Cf. '...capital taxation is perhaps the best way to stimulate business and reduce unemployment. It has all the merits of financing state expenditure by borrowing, but it is distinguished from borrowing by the advantage of the state not becoming indebted.' (Kalecki 1937/1990, p. 325).

Slow growth and rising government debt are not the only consequences of such 'supply-side' policies. Since governments are contractually obliged to service their national debt, the deficit in the financial balance is in effect covered by the transfer of financial resources from the real (non-financial) economy into the portfolios of the wealthy asset-holders. The implication of a deficit in a government's financial balances is the rising liquidity in the portfolios of the wealthy. This rising liquidity makes the financial system less stable, as the overall situation of slow economic growth and rising government debt keeps the wealthy on the look-out for more assured returns in other assets and currencies, no matter how delusory those returns may turn out to be.

Two further possible outcomes may be identified. One is what may be called 'expansionary financial instability' where the government operates with a deficit on the functional budget and a further deficit on its financial budget, so that there is an even larger overall fiscal deficit. The government would have two means of financing such an expansionary policy. One would be through monetisation of the overall deficit, using central bank credit to pay for the functional and financial deficits. The outcome of this would be rising liquidity in the financial system, and the bank accounts of big businesses that would benefit disproportionately (with higher profit margins) from the deficit spending in the functional budget. Excess liquidity would drain off into asset markets or foreign currency, in the event of any alarm in the financial system, for example over growing government indebtedness, or an increasing (credit) money supply.

The other means of financing the overall fiscal deficit is through increasing the velocity of circulation of existing monetary resources, by issuing of bills or longer-term government bonds. These transfer otherwise 'idle' balances into circulation in the real economy. However, financing a deficit by means of bill issue entails rolling over increasing quantities of governments bills. Reliance on long-term bond issues runs the risk of having to raise the interest rates on those bonds to effect the portfolio adjustment necessary to absorb the

bonds. This can be avoided by means of what is called in the markets 'operation twist': issuing short-term bills and using the proceeds to buy in long-term bonds⁵. But this would have to be done on such a scale as to raise the price of government bonds, and thereby lower their yields. With a given bank balance sheet, it is easy to show that a government, relying on the central bank to maintain its official policy rate in the money markets, can also control the long-term rate of interest on its bonds. But the transactions involved increase the velocity of circulation of existing bank deposits.

A sale of governments bonds to the public is paid for by a transfer of bank deposits held by the public to the account of the government. If this sale cannot be effected without raising the rate of interest on the bonds, then the government can issue short term bills at or just slightly above the central bank's policy rate of interest. These will be readily bought up by banks because such bills are a liquid addition to a bank's balance sheet. Effectively, the bills are swapped for bank deposits, which the government then swaps back for its own bonds in the secondary market. Given a certain preference for holding government bonds (nowadays the main influence on this preference is the regulations on the amount of government bonds that institutional investors – pension funds and insurance companies – must hold against their given liabilities – see Toporowski 2010) holders of financial securities will now have bank deposits to exchange for new bonds issued by the government at its preferred rate of interest.⁶

With government borrowing, the usual monetary circulation is that the government borrows bank deposits from the public, which deposits are then returned to the public in the course of government expenditure on public services and welfare payments, and payments on

⁵ 'If the Government long-term rate of borrowing is so low that nobody is prepared to lend this rate, the Government must finance all the Budget deficit by floating debt. It then loses the control of the long-term rate unless it is prepared to borrow short over and above the deficit requirements and buy long-term securities from the public.' Kalecki 1943, p. 46.

⁶ Cf. Kalecki 1944/1990, where Kalecki suggests that control of long and short term interest rates may be achieved through the issue of bills and bonds in similar proportions.

government debt (Toporowski 2020). With government financial operations along the yield curve, such as 'operation twist', this 'financial circulation' of money is augmented by additional exchange of the public's bank deposits for Treasury bills issued by the government, and the government's return of those bank deposits to the public in exchange for government bonds. As the price of government bonds rises, the government issues new new government bonds in exchange for bank deposits, to be then returned to the public with government expenditure. Whereas simple government borrowing to finance its expenditure requires two exchanges of bank deposits (at bond issue and then at government expenditure), operations along the yield curve require at least three exchanges of bank deposits: the government acquiring bank deposits in exchange for Treasury bills; the government returning the bank deposits to the public in exchange for governments bonds from the secondary market; and the government then re-acquiring the bank deposits. The same bank deposits may therefore undergo three exchanges in order to control long-term interest rates. This is in addition to the two exchanges when government simply borrows in order to finance expenditure.

The aim of such operations is of course the issue of government debt at the longest possible maturity, in order to fix the rate of interest on that debt and minimise the amount of rolling over (issue of new debt to repay maturing debt) of debt. However, while the issue of long-term debt may extend the average maturity of government debt, control of the terms of that issue may require reduction of that average, through the issue of bills. In addition to reducing the average maturity of government debt, the issue of bills put government financing at the mercy of any possible future change in short-term interest rates. Hence the term used in Keynes's and Kalecki's time to describe such financing by means of bills issue as 'floating debt'.

The control of the conditions of government borrowing through operations along the yield curve or debt management was familiar to Keynes and Kalecki who routinely commented on

war finance and the debt problems of governments in inter-war Europe. However, such control has been ignored in recent monetary economics, where debt management is reduced to the issue of government paper in the primary market.⁷ Without such control, the financial markets readily become disorderly. The challenge of maintaining order in the markets is of course greater when both the financial and the functional budgets are operating in deficit.

A fourth outcome is the Mecca of fiscal conservatives in which the government operates an overall fiscal surplus, both on the financial account, and on the functional account. The fiscal surplus reduces the overall rate of profit and drains liquidity from the non-financial economy, resulting in recession. At the same time, the financial surplus exacerbates the conditions of financial instability, as the government taxes wealth portfolios more than it is obliged to pay to holders of those portfolios, at the same time as that surplus, and the surplus on the functional account, are applied to buy in government bonds, or to buy other assets. The concentration of corporate liquidity in wealth portfolios, at the same time as risk-free government bonds or bills are becoming more scarce, also threatens government control of interest rates: an over-issue of bonds, to maintain the long-term rate of interest, in order to invest in short term securities (either directly, or through the central bank), would reinforce downward pressure on short-term interest rates.

The possible outcomes may be summarised in the following table.

Functional Budget Balance	Financial Balance	Overall balance (<i>ex ante</i>)	Macroeconomic outcome
Deficit	Surplus	Surplus or balance	Expansionary fiscal contraction
Surplus	Deficit	Deficit	Contractionary fiscal expansion
Deficit	Deficit	Large deficit	Expansionary

⁷ An exception here is Allen 2019. See Toporowski 2019.

			financial instability
Surplus	Surplus	Surplus	Deflationary financial instability.

The analysis in this paper applies in the case of borrowing in domestic financial markets.

The situation is of course considerably more problematic in the case of foreign borrowing. A fundamental advantage of domestic financing of government debt, as opposed to foreign borrowing, is that *domestic borrowing keeps financial resources within the economy*.

Domestic borrowing merely recycles (increases the velocity of circulation of) existing money stocks, redistributing them among the wealthy who hold the largest monetary stocks. It fixes government borrowing on terms which the government itself determines, through the central bank's control over domestic interest rates. At the same time, the central bank's open market operations allow that bank to control the liquidity of the portfolios of the wealthy, so that government bonds may be 'rolled over', limiting payments out of the financial budget to interest payments. With such government borrowing, it is not that future generations of tax-payers pay the cost of government expenditure today, but future generations of tax-payers paying future generations of government bond-holders. Servicing government debt by means of taxes on wealth and adjusted taxes on profits means future generations of the wealthy paying future generations of the wealthy (Toporowski 2020).

3. Conclusion

The debt management operations of the government should not be viewed in isolation from taxes on wealth and profits. Combined with such taxation, debt management can be an independent instrument to manage the portfolios of the wealthy in such a way as to maintain the stability of the capital market and assure financing of fiscal deficits.

This fiscal-financial analysis suggests that economic stagnation in rich countries is not so much a failure of Keynesianism, as a sign that the wealthy do not pay their dues towards servicing government debt, so that governments' financial resources are diverted from fiscal stimulus of the real economy towards financial circulation. At the same time the financial instability that plagues poor countries may be because government debt is insufficiently domestic and the wealthy are, as in richer countries, insufficiently taxed to pay for debt servicing. A financial budget, servicing government debt from taxes on wealth and profits that do not affect incomes and expenditures in the economy allows government to manage its debts without compromising the economic goals set for fiscal policy in the functional budget.

A further conclusion from this analysis concerns the apportionment of taxes among different wealth and income classes. With rising government debt and annual debt service commitments, such a system of debt management implies that the incidence of taxation needs to be adjusted in a progressive direction to maintain the balance in the financial operations budget. If this is not done and the financial budget falls into deficit, then the redistribution from tax-payers to bond holders becomes regressive and the fiscal stance becomes contractionary, even if the overall fiscal balance is in deficit. This may be a factor in the recent differing assessments of the fiscal multiplier.

In sum, a disaggregation of the government's budget identifying a financial budget balance is critical not only for the financing of government debt, but also for the effectiveness of fiscal policy. A financial budget deficit diverts expenditure from the functional budget to financial circulation. So, whether it is the functional fiscal deficit, or the total amount of non-debt expenditure that determines the value of the fiscal multiplier, the effectiveness of fiscal stimulus is reduced by the deficit in the financial balance. It requires little reflection to show that 'supply-side' policies, reducing taxes on wealth, profits, and luxury consumption have

contributed to a decline in the fiscal multiplier and the economic efficiency of government finances.

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References

Allen, W.A. (2018) *The Bank of England and the Government Debt Operations in the Gilt-Edged Markets, 1928-1972* Cambridge: Cambridge University Press.

Kalecki, M. (1937/1990) 'A Theory of Commodity, Income and Capital Taxation' in J. Osiatyński (ed.) *Collected Works of Michał Kalecki Volume I Capitalism: Business Cycles and Full Employment* Oxford: The Clarendon Press 1990.

Kalecki, M. (1943) *Studies in Economic Dynamics* London: George Allen and Unwin.

Kalecki, M. (1943/1990) 'Political Aspects of Full Employment' in J. Osiatyński (ed.) *Collected Works of Michał Kalecki Volume I Capitalism: Business Cycles and Full Employment* Oxford: The Clarendon Press 1990.

Kalecki, M. (1943/1997) 'The Burden of the National Debt' in J. Osiatyński (ed.) *Collected Works of Michał Kalecki Volume VII Studies in Applied Economics 1940-1967 Miscellanea* Oxford: The Clarendon Press 1997.

Kalecki, M. (1944/1990) 'Three Ways to Full Employment' in J. Osiatyński (ed.) *Collected Works of Michał Kalecki Volume I Capitalism: Business Cycles and Full Employment* Oxford: The Clarendon Press 1990.

Nuti, D.M. (2015) 'Michał Kalecki's Capitalist Dynamics from Today's Perspective' in J. Toporowski and Ł. Mamica (eds.) *Michał Kalecki in the 21st Century* Basingstoke: Palgrave Macmillan.

Toporowski, J. (2010) 'A Theory of Capital Rationing' *Working Paper* No. 166, Department of Economics, School of Oriental and African Studies, University of London.

Toporowski, J. (2019) 'Open Market Operations' in D.G. Mayes, P.L. Siklos and J-E. Sturm (eds.) *The Oxford Handbook of the Economics of Central Banking* Oxford: Oxford University Press 2019, pp. 436 – 453.

Toporowski, J. (2020 forthcoming) 'The Transfer Theory of Government Debt: What Keynes Learned from Kalecki' in P. Hawkins and I. Negru (eds.) *Essays in Honour of Sheila Dow*.