

1. Evaluate the effects on income and the rate of interest of a decision to meet the government's budget constraint by way of (a) an increase in taxes (b) a rise in monetary supply (c) increased bonds sales

Lecture notes 06/11/03
SMG 206...

Plan:

Intro. Budget Constraint: - Simply means that all g'ment expenditure must be financed; it is not a restraint on spending, but a recognition of need always to meet the financing requirement.

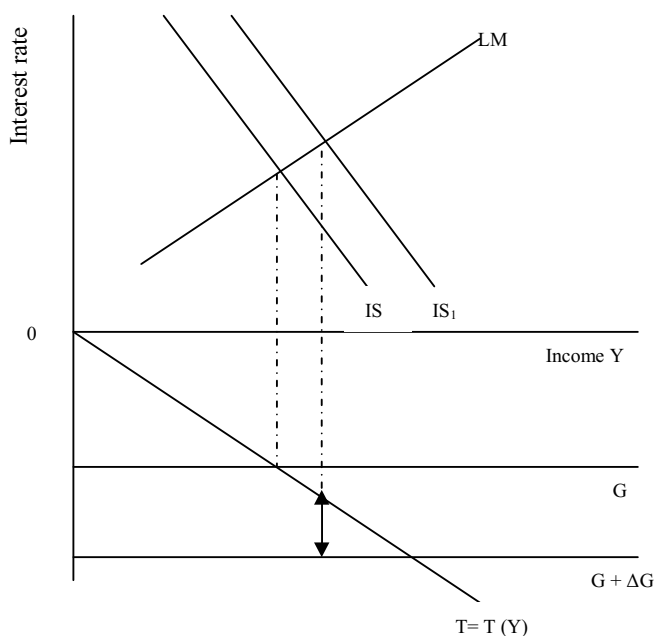
Diagram of Budget constraint, can be covered in 3 ways.

Effects on Y & r of \uparrow taxes

Effects on Y & r of \uparrow monetary supply

Effects on Y & r of \uparrow Bond sales

Conclusion (including evaluation of effective methods)



$G \uparrow$, IS shifts out.

G'ment outlay curve moves down

Income and r increase

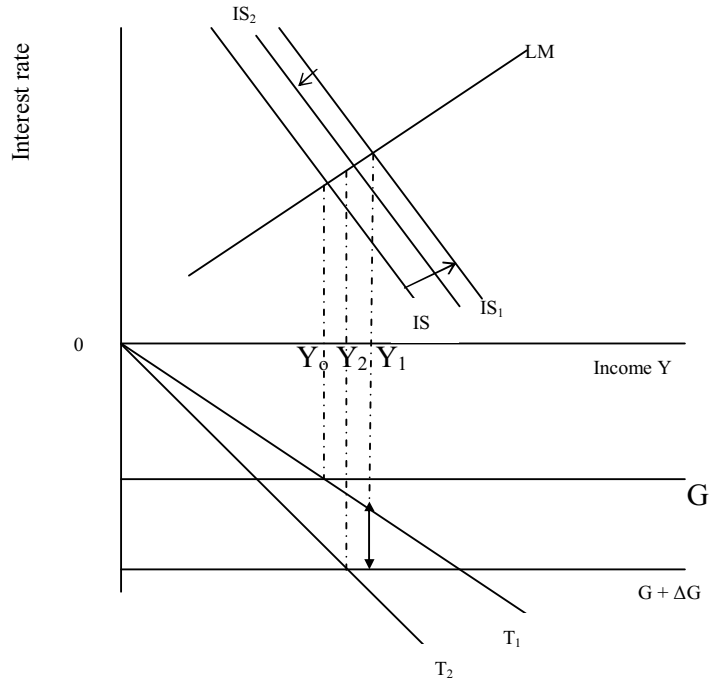
Gap between G & T represents Budget deficit which must be covered.

Three ways to cover this budget deficit:

a) Increase taxes

↑ Taxes. Equal to ↑ in g' ment expenditure.

This policy is the least expansionary out of the 3.



As taxes increase, slope of T changes (more tax at each level of Y).

IS shifts back as Y, exp & r are reduced.

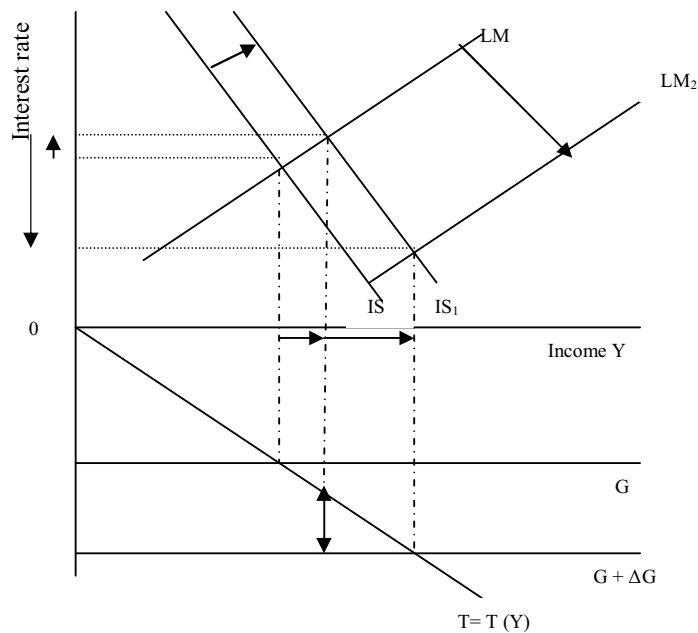
Net effect expansionary but Y and r increase less than in standard case.

Nb. The increase in government expenditure adds directly to demand an amount equal to the government outlay. However, the depletion in demand due to the tax increase equivalent to the government outlay is not the full amount of the tax. It is equal to the tax increase multiplied by the marginal propensity to consume. If marginal propensity to consume was 1, then the IS curve would shift all the way back to its original position, and there would be no net expansionary effect, but this is theoretical.

Therefore, IS does not shift all the way back because part of the tax falls on savings-not all on expenditure.

The tax increase partially offsets the expansionary impact of increased government expenditure.

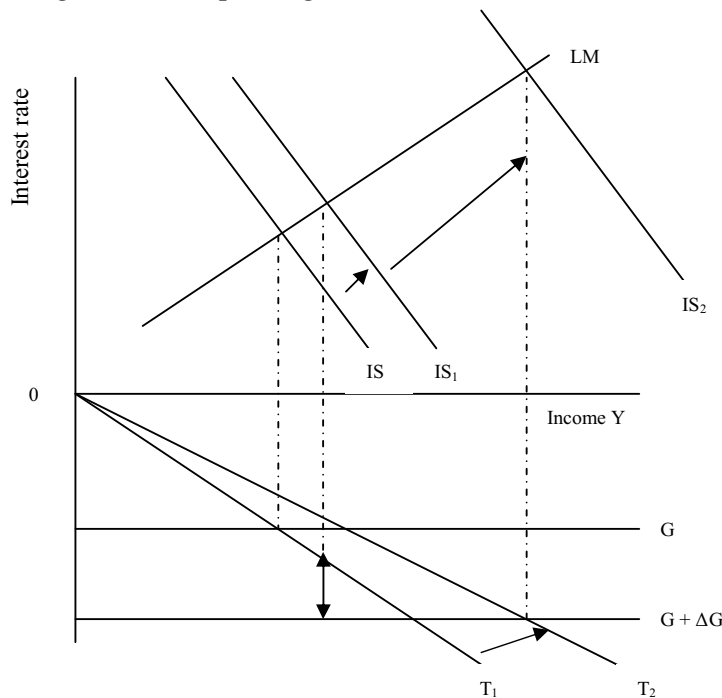
b: - ↑ Monetary Supply by equivalent amount of increase in G



As before, IS and Government outlay curve move together, but now there is also a shift in the LM curve. This reinforces the expansionary effect of the increase in G. It is partly due to this conclusion that the monetarists claim that fiscally oriented policies will exert a minor impact unless they are accompanied by accommodating changes in the money supply.

At new equilibrium Y is higher than in standard cases, but interest rate much lower. This is the second most expansionary policy of the 3.

c: - Increase in bond sales to the private sector by equivalent amount to increase in government spending.



Debt finance: A rise in the quantity of debt payments means more interest paid out to the public.

Two effects: -

- 1 Increase in disposable income- induces a rise in consumption and hence further shift right of IS curve.
- 2 The rise in transfer payments to the private sector count as a negative tax-shift in tax curve inwards.

The net effect is a higher income and also a higher interest rate. This is the most expansionary policy of the three.

Complications could arise from the increase in interest rate and decrease in bond prices, and the increase in quantity of bonds that have to be sold.

Wealth effects could increase money demand and shift LM inwards.

Conclusion

Clearly, the least expansionary type of policy is the tax-financed increase in government outlays, which causes a small increase in both income and interest rate, it is the so called 'pure fiscal policy' which leaves the budget surplus or deficit unchanged.

The monetary financed increase in government expenditure has much greater impact upon the level of income, partly because the increase in money stock exerts a downward pressure on interest rates. Both Keynesians and monetarists would agree with these results.

However, the most successful policy, in terms of income expansion, is shown to be the bond-financed expenditure measure, and implicitly, it is upon this case that the

Keynesians have rested their advocacy of the potency of fiscal policy. However, it could cause problems due to the increase in interest rate. This position rests fundamentally upon three assumptions which are seldom explicitly specified:

- 1) All requisite bonds can be sold. There is no limit to the extent to which the authorities can sell government bonds. This does not have universal application. In many of the less advanced economies, for example, the absence of confidence in the government of the day virtually prohibits this method of finance.
- 2) Public do not equate bonds to taxes (Ricardo-Barro Equivalence).
- 3) The resultant bond sales generate wealth effects. Whether bonds issued by the central government constitute net wealth from the viewpoint of the private sector is altogether a different issue and one which has generated considerable controversy.

If fiscal (sell more bonds) and monetary policy (increase money supply) were used together simultaneously, then expansion would take place without the problem of making the interest rate too unstable. We must remember to consider shapes and positions of IS and LM curves.