Principles of Macroeconomics

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The Modern Fiscal Policy Dilemma

Fiscal Policy: federal government policy on taxes, spending, and borrowing that is designed to influence business fluctuations.

- Two categories of fiscal policy during a recession – One goal
  - The government spends more money.
  - The government cuts taxes.

  In either case, the goal: greater spending.
- The modern fiscal policy dilemma is that when faced with the economy falling into a depression:
  - Governments need to run large deficits (for limited periods)
- A government that cannot easily sell its debt will either go bankrupt or have to resort to inflationary finance, with the central bank financing the government by printing money

Classical Economics and Sound Finance

- **Sound finance** was a view of fiscal policy that the government budget should always be balanced except in wartime
  - This view was based on a combination of political and economic grounds, but primarily on political grounds
- Ricardian equivalence theorem is that deficits do not affect the level of output because people increase savings to pay future taxes to repay the deficit
  - Most economists felt that, in practice, deficits could affect output and that it mattered a lot

The Sound-Finance Precept

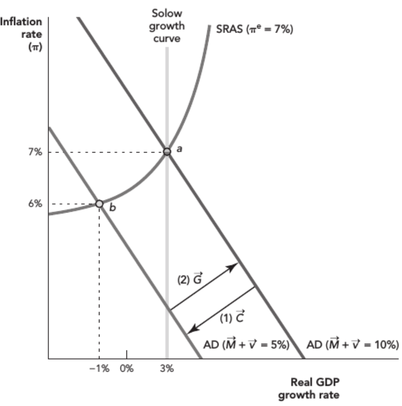
- Given the collapse of economic expectations in the 1930s, many economists of the time favored giving up the principle of sound finance, at least temporarily, and using government spending to stimulate the economy
- If the economy is in a small recession, do nothing
- If the economy is in a depression, use deficit spending

Keynesian Economics and Functional Finance

- **Functional finance** held that governments should make spending and taxing decisions on the basis of their effect on the economy, not on the basis of some moralistic principle that budgets should be balanced
- If spending was too low, government should run a deficit; if spending was too high, government should run a surplus
- Functional finance nicely fits the AS/AD model

Watch:
"Fear the Boom and Bust" a Hayek vs. Keynes Rap Anthem
`http://youtu.be/d0nERTFo-Sk`
Fight of the Century: Keynes vs. Hayek Round Two
`http://youtu.be/GTQnarzmT0c`

Fiscal Policy: The Best Case



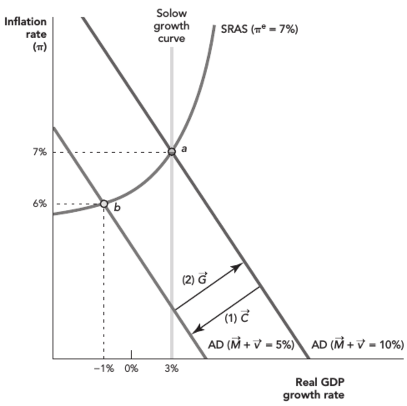
Effect of a decrease in consumer spending growth:

- This is equivalent to a decrease in velocity

  What happens?
  - AD shifts to the left
  - Because wages are sticky, the decline in velocity is split between lower real growth and lower inflation.
  - The economy goes into a recession.

Can fiscal policy help?

Fiscal Policy: The Best Case

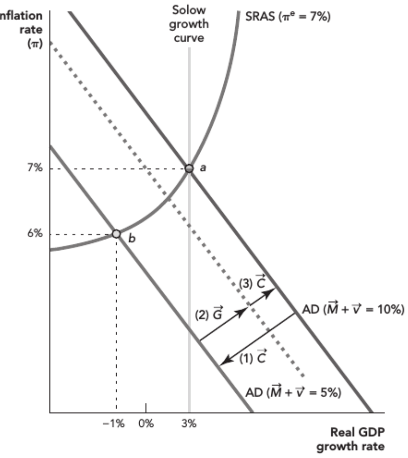


Effect of a decrease in consumer spending growth:

- In the long-run wages will adjust and will return to its normal growth rate.
- The economy will move from b to a.
- The recession will be over.
- The point of increasing is to end the recession sooner.

… the long-run may take too long.

Fiscal Policy: The Best Case



The Multiplier Effect: the additional increase in AD caused when expansionary fiscal policy increases income and thus consumer spending.

- When government spends money, incomes of certain people rise.
- As these people spend their money, incomes of additional people rise and so on.
- The greater the multiplier, the greater will be the effect of the increase in government spending on the velocity.

Public Finance in Practice

Six assumptions (of the multiplier model) that could lead to problems with fiscal policy are:

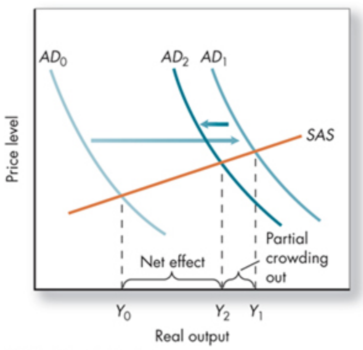
1. Financing the deficit doesn't have any offsetting effects
2. Government knows what the situation is
3. Government knows the economy's potential income level
4. Government has flexibility in changing spending and taxes
5. The size of the government debt doesn't matter
6. Fiscal policy doesn't negatively affect other goals

...and some further limits:

1. The economy may so large that government can rarely increase spending enough to have a large impact.
2. Shifting AD doesn't help much to combat real shocks.

Financing the deficit does(n't) have any offsetting effects

Crowding out is the offsetting of a change in government expenditures by a change in private expenditures in the opposite direction



(b) The Goods Market

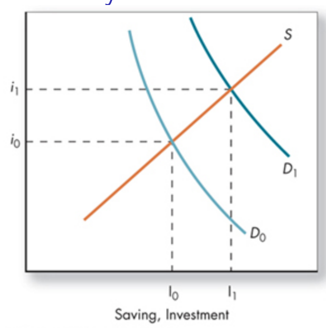
Crowding out as a Result of Raising Taxes to Finance Fiscal Policy

- Higher taxes reduce private spending.
- The greater the fraction of additional income that is spent, the greater will be crowding out.
- Fiscal policy will be most effective when people are otherwise afraid to spend their money.

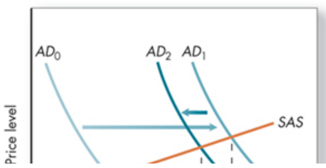
Financing the deficit does(n't) have any offsetting effects

- Government borrowing can squeeze out private borrowing especially if the pool (of funds) is limited...
- Selling More Bonds to Finance Fiscal Policy
  - The supply of bonds increases.
  - Bond prices fall and interest rates rise
  - Higher interest rates lead to less private spending.
  - Bond-financed fiscal policy will be most effective when the private sector is reluctant to save or invest.
    Private spending will be less sensitive to changes in interest rates.

Crowding out through Selling More Bonds to Finance Fiscal Policy



(a) Loanable Funds Market



Crowding out: Ricardian Equivalence

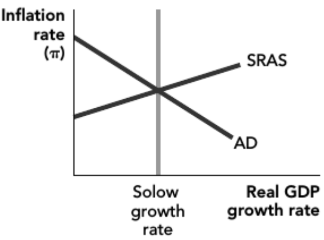
Ricardian Equivalence occurs when people see that lower taxes today mean higher taxes later. They save their tax cut to pay future taxes.

- Ricardian equivalence describes some people but not all. How many of us systematically save tax cuts to prepare for future government austerity?
- To the extent that this occurs, bond-financed tax cuts are less effective in the short-run.

Crowding IN

Crowding out: A decrease in private consumption or investment in response to an increase in government purchases.
The idea works in reverse as well.

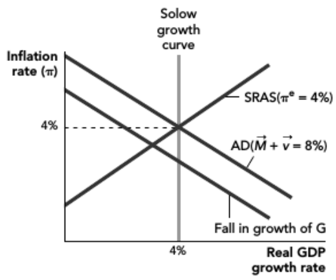
A shock! A large decrease in government purchases, perhaps caused by the end of a war.



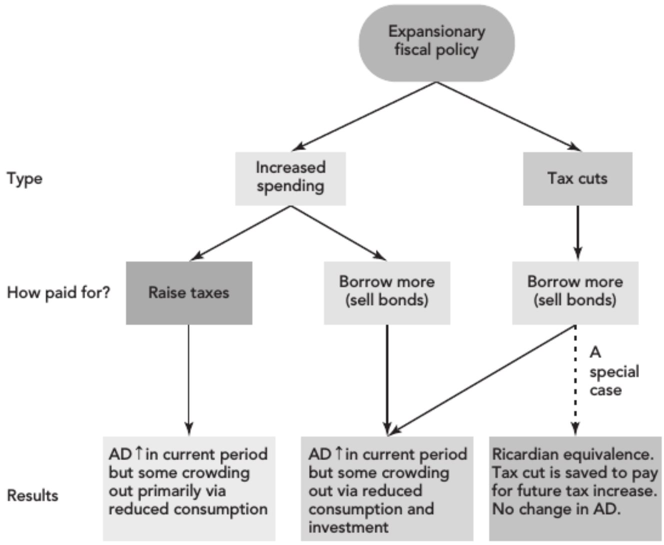
- Consider a possible side effect of the fall in the growth of G: the reversal of crowding out or crowding in.
  If there is 100% "crowding in," what happens to the AD shift just described?
- If there were 100% crowding out/in and no multiplier effect, what can we say about the effect of a change in the growth of G on aggregate demand?

Crowding IN

- With 100% crowding in, the decrease in G is matched by an increase in private consumption and investment spending, which returns us to the original AD curve.
- If there is 100% crowding out/in and no multiplier, then any change in the growth of G has absolutely no impact on aggregate demand.



- Consider all of the laid-off government workers in this question: If there were 100% crowding out/in and no multiplier effect, where do these laid-off workers end up?



(Not) Knowing What the Situation Is

- Data problems limit fiscal policy for fine tuning
  - Getting reliable numbers on the economy takes time
  - We may be in a recession and not know it
- The government has large econometric models and leading indicators to predict where the economy will be in the future, but the forecasts are imprecise

(Not) Knowing the Level of Potential Income

- No one knows for sure the potential full-employment income
- Almost all economists believe that potential income is within an unemployment rate range of 3.5% to 10%
- Differences in estimates of potential income often lead to different policy recommendations
- In most cases, the economy is in an ambiguous state where some economists are calling for expansionary policy and others are calling for contractionary policy

(No) Flexibility in Changing Taxes and Spending

- Fiscal policy is intended to correct short-term problems.
- By the time fiscal policy is in place, economic conditions have often changed.
- Putting fiscal policy into place takes time and has serious implementation problems
  - Recognition – Problem must be recognized.
  - Legislative – Parliament must propose and pass a plan.
  - Implementation – Bureaucracies must implement the plan.
  - Effectiveness – The plan takes time to work.
  - Evaluation and Adjustment – Did the plan work? Have conditions changed?
- Numerous political and institutional realities make implementing fiscal policy difficult
- Disagreements between the legislative and the executive branch of government may delay implementing appropriate fiscal policy for months, even years

Building Fiscal Policy into Institutions

- To avoid the problems of direct fiscal policy, economists have attempted to build fiscal policy into their countries' institutions
- An automatic stabilizer is any government program or policy that will counteract the business cycle without any new government action
- Automatic stabilizers include:
  - Welfare payments
  - Unemployment insurance
  - The income tax system

How Automatic Stabilizers Work

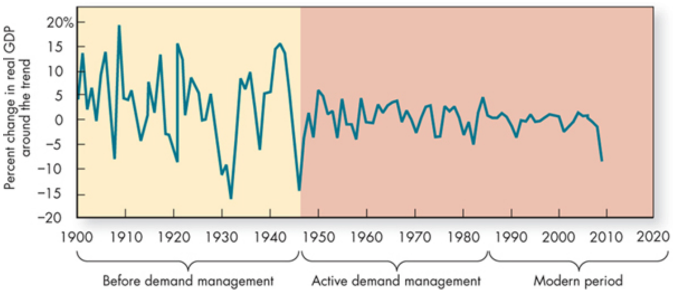
- When the economy is in a recession, the unemployment rate rises
  - Unemployment insurance is automatically paid to the unemployed, offsetting some of the fall in income
  - Income tax revenues also decrease when income falls in a recession, providing a stimulus to the economy
- Automatic stabilizers also work in reverse
  - When the economy expands, government spending for unemployment insurance decreases and taxes increase

State Government Finance and Procyclical Fiscal Policy

- State constitutional provisions mandating balanced budget act as automatic **destabilizers**
  - During recessions states cut spending and raise taxes
  - During expansions states increase spending and cut taxes
- **Procyclical fiscal policy** is changes in government spending and taxes that increase the cyclical fluctuations in the economy instead of reducing them
- Economists have suggested alternatives to state government procyclical budget policy
  - States can establish rainy season funds which are reserves kept in good times to offset declines in revenues during recessions
  - States could use a five-year rolling-average budgeting procedure as the budget they are required to balance

The Negative Side of Automatic Stabilizers

- When the economy is first starting to climb out of a recession, automatic stabilizers will slow the process, rather than help it along, for the same reason they slow the contractionary process
- As income increases, automatic stabilizers increase government taxes and decrease government spending, and as they do, the discretionary policy's expansionary effects are decreased



Size of the Government Debt Does(n't) Matter

- Although there is no inherent reason why activist functional finance policies should have caused persistent deficits, increases in government debt have occurred because:
  - Early activists favored not only fiscal policy, but also large increases in government spending
  - Politically it's easier for government to increase spending and decrease taxes than vice versa

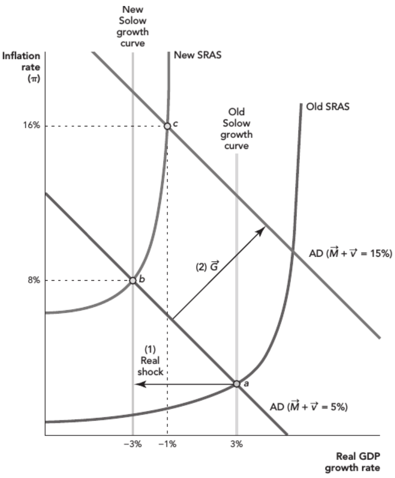
Fiscal Policy Does(n't) Negatively Affect Other Goals

- A society has many goals: achieving potential income is only one of those goals
- National economic goals may conflict
- For example, when the government runs expansionary fiscal policy, the trade deficit increases
  1. New government bonds offer higher return
  2. Companies competing for credits must also offer higher returns
  3. Foreign investors need the domestic currency, its demand goes up
  4. The domestic currency appreciates
     (it becomes more expensive from the perspective of foreigners)
  5. Domestic goods become relatively more expensive on the international market
  6. exports decrease, imports increase

A Drop in the Bucket

- Normally changes in fiscal policy in terms of percentage of GDP are small.
  - Most of the non-security discretionary spending is less than 20% of the federal budget.
  - Stimulus plan passed under President Obama in 2009 – largest since WWII.
    - Spread over 3 - 4 years.
    - At its peak, it was only about 2% of annual GDP.
    - September 2010: Unemployment rate still high (9.6%)

Fiscal policy does not work well to combat real shocks



- Real shocks reduce the productivity of labor and capital – Solow growth curve shifts to the left.
- Government responds by increasing their spending.
- Because the economy is at full employment most of the increase in government spending will crowd out private spending.
- Most of the effect shows up as higher inflation

Fiscal Policy Might Make Matters Worse

- If expansionary fiscal policy is paid for by borrowing...
  - Taxes will rise in the future.
  - Higher future taxes will contract the economy.
- Ideal fiscal policy will increase AD in bad times and pay off the debt in good times.
  But: Governments usually operate like this...
  - Increase spending in bad times.
  - Increase spending in good times.
  - Result: Rising debt
- When the debt is large, interest payments on become a large fraction of the budget.
- In extreme situations, additional government borrowing can lead to economic collapse.
  - Example: Argentina, Greece, Thailand, Mexico, Indonesia.... And many more.
  - Government debt rose to compared to GDP.
  - Countries are in danger of defaulting on their debt.
  - Drives investment away from these countries, and causes all sorts of larger ramifications.

Summary: Fiscal Policy is best...

- When the economy needs a short-run boost, even at the expense of the long run
- When the problem is a deficiency in aggregate demand rather than a real shock
- When many resources are unemployed

Modern Macro Policy Precepts

- The modern macro policy precept is a blend of functional and sound finance
- Modern economists' suggestion of government policy in a recession is to do nothing in terms of specific tax or spending policy, but let the automatic stabilizers in the economy do the adjustment
- If the economy is falling into a severe recession or depression, then the government should run expansionary fiscal policy
- Indeed, the general agreement of economists today is that:
  - If the economy is headed toward a depression, the appropriate fiscal policy is functional finance; fiscal policy should be expansionary
  - If the economy is headed toward hyperinflation, the appropriate fiscal policy is functional finance; fiscal policy should be contractionary; government should be running surpluses and paying off debt
  - If the economy is in normal times, the appropriate fiscal policy is sound finance; balance the budget