Fiscal Policy

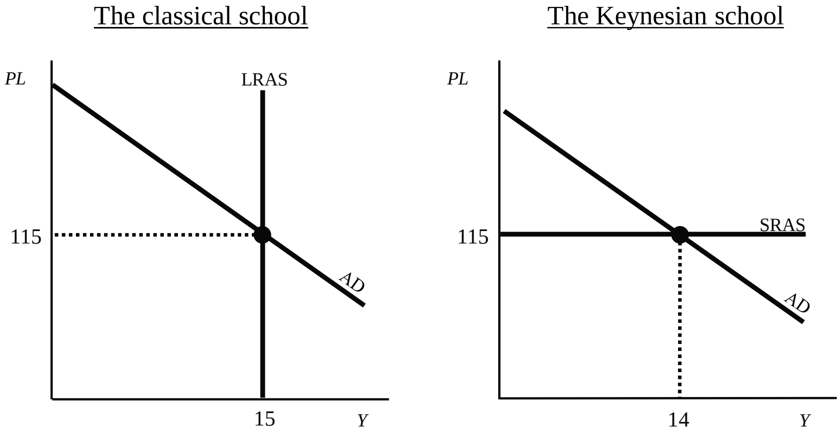
Fiscal policy was introduced earlier with the calculation of multipliers.

- AE multipliers imply fiscal policy is effective
  - because *PL* price is
  - SRAS's slope
- Aggregate market model multipliers indicate it is ineffective
  - because *PL* price is allowed to adjust
  - SRAS's slope
    - Multiplier decrease as SRAS's slope increases
    - Fiscal policy is increasingly less effective as SRAS's slope rises

SRAS's slope splits macroeconomics in two

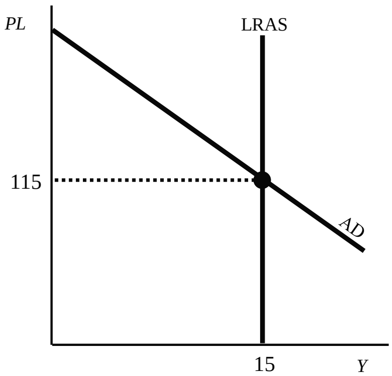
- The classical school
  - SRAS's slope
  - SRAS intersects AD at LRAS due to
  - The SR is
- The Keynesian school
  - SRAS's slope = because
  - SRAS AD to the of LRAS
  - The SR

Fiscal Policy

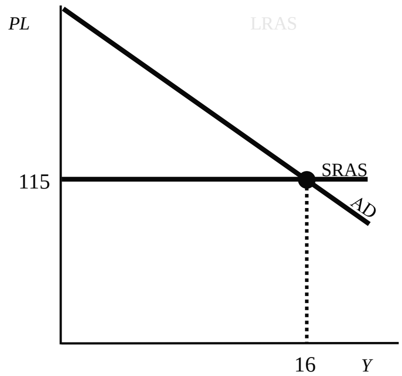


Fiscal Policy

The classical school



The Keynesian school



Fiscal Policy

Government bonds

The federal budget is the primary tool of fiscal policy.

Discretionary changes in fiscal policy are deliberate changes in *G* designed to affect the size of the budget deficit or surplus.

- ***Budget surplus***: Present when total government spending
  - Surpluses reduce the magnitude of the government's outstanding debt.
- ***Budget deficit***: Present when total government spending
  - Deficits are typically covered with borrowing.
- Changes in the size of the federal ***deficit*** or ***surplus*** are often used to gauge whether fiscal policy is stimulating or restraining AD, which arise from either:
  - A change in
  - A change in

Treasury borrows to cover deficits by auctioning

Fiscal Policy
Government bonds

1926 China Treasury 5 Yuan Government Bond

Fiscal Policy
Government bonds

1949 Lebanon Treasury Bond

Fiscal Policy
Government bonds

1952 Former USSR victory treasury 10 rub bond

Fiscal Policy
Government bonds

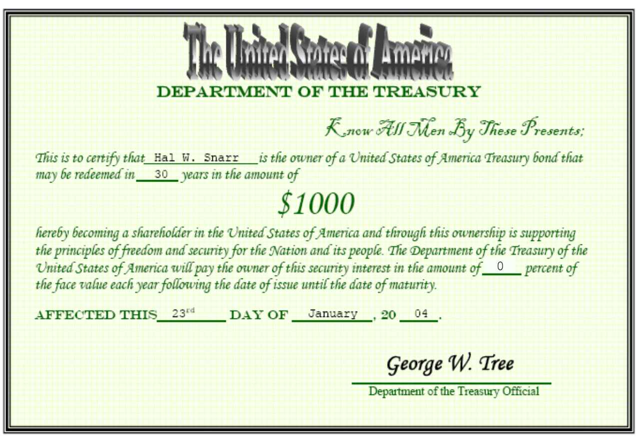
1922 Weimar Republic German treasury bond

Fiscal Policy
Government bonds

USA Treasury Bonds

Fiscal Policy
Government bonds

USA Treasury Bonds



The United States of America

DEPARTMENT OF THE TREASURY

Know All Men By These Presents;

This is to certify that Hal W. Snarr *is the owner of a United States of America Treasury bond that may be redeemed in* 30 *years in the amount of*

$1000

hereby becoming a shareholder in the United States of America and through this ownership is supporting the principles of freedom and security for the Nation and its people. The Department of the Treasury of the United States of America will pay the owner of this security interest in the amount of 0 *percent of the face value each year following the date of issue until the date of maturity.*

AFFECTED THIS 23rd DAY OF January, 20 04.

George W. Tree

Department of the Treasury Official

Mock Auction

$$FV = P(1+i)^n$$

Fiscal Policy
The Keynesian view

Keynesian theory highlights the potential of fiscal policy as a tool capable of reducing fluctuations in aggregate demand.

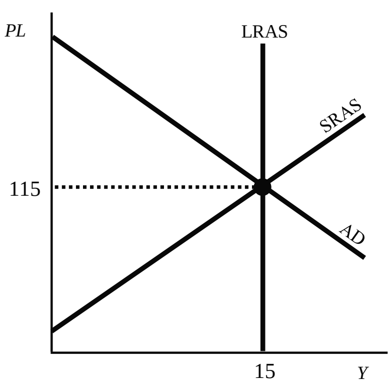
Following the Great Depression, Keynesians challenged the view that governments should always balance their budget.

Rather than balancing their budget annually, Keynesians argue that counter-cyclical policy should be used to offset fluctuations in aggregate demand.

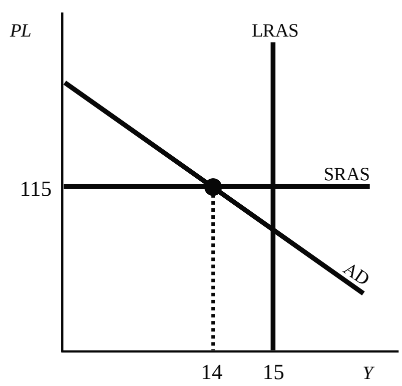
- ***Expansionary fiscal policy* –** used when the economy is weak
  - Recessionary gap exists if real GDP is less than potential output
  - Annual budget deficits
    -
    -
- ***Restrictive fiscal policy* –** used when strong demand threatens to cause inflation
  - Inflationary gap exists if real GDP exceeds potential output
  - Annual budget surpluses
    -
    -

Fiscal Policy
Expansionary

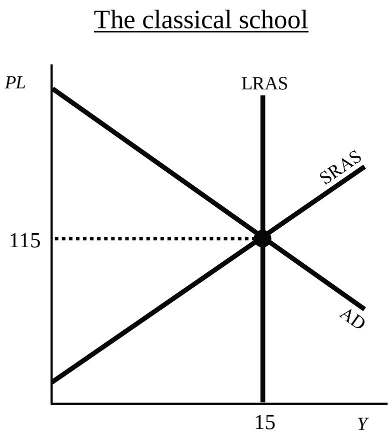
The classical school

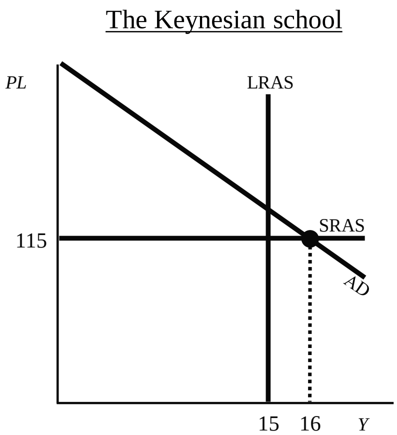


The Keynesian school



Fiscal Policy
Restrictive





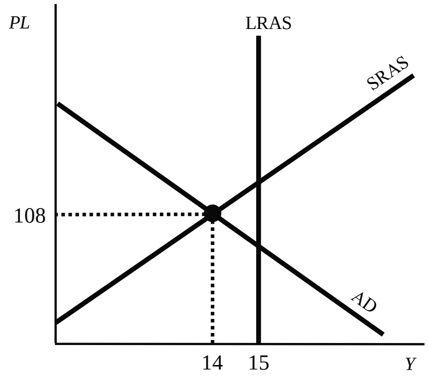
Shortcomings of Fiscal Policy
Forecasting

In the 1970s,
- there were inflationary recessions
- there was stagflation
- wages and prices are not rigid as Keynesians believed
- SRAS slopes upward

Even if the Keynesian view that fiscal policy can close output gaps is valid, doing so is futile because
- Predicting the size of the stimulus (ΔG or -ΔT) is difficult
- Forecasting is increasingly unreliable the further into the future predictions are made
- Undershooting
- Overshooting

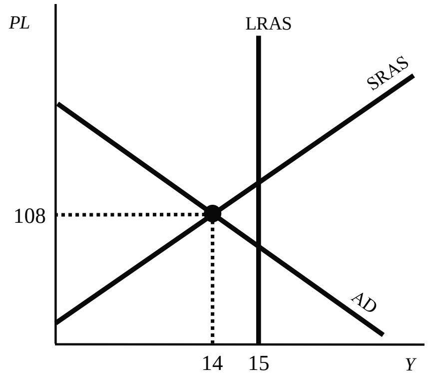
Shortcomings of Fiscal Policy
Forecasting

Undershooting a recessionary gap



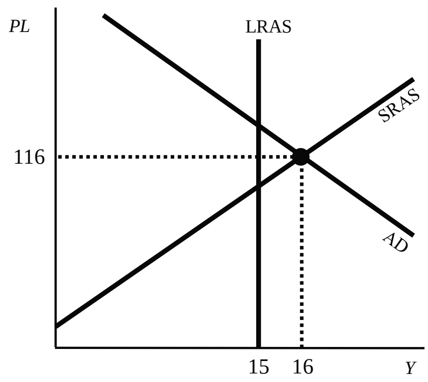
Shortcomings of Fiscal Policy
Forecasting

Overshooting a recessionary gap



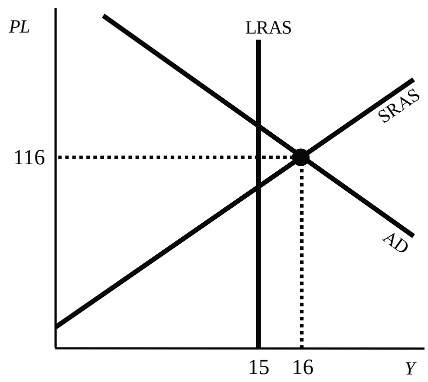
Shortcomings of Fiscal Policy
Forecasting

Undershooting an inflationary gap



Shortcomings of Fiscal Policy
Forecasting

Overshooting an inflationary gap

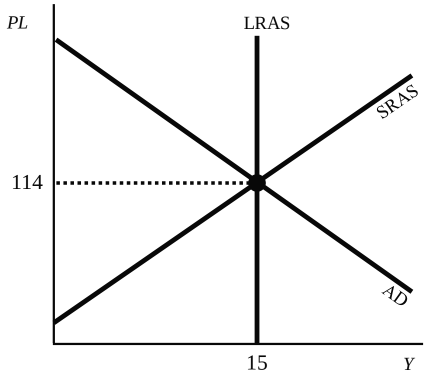


Shortcomings of Fiscal Policy
Policy lag

Even if fiscal stimulus is predictable, there are delays in its implementation.
- It takes time to observe recessionary gaps

- Months of observations are needed to make
- After a problem has been diagnosed, it takes time to decide the best course of action
  -
  -
  - the Senate minority can stop legislation with a 41 vote filibuster.
- After fiscal policy is signed into law, its effects are further delayed by
  - revenue from new taxes collected a year or more after a change
  - bureaucratic red tape that includes departments
    - –
    - –
    - –
  - Sometimes its implementation is purposely lagged by several years
    - –
    - –
- The multiplier theory implies the economic benefits of fiscal stimulus take time to unwind.

Shortcomings of Fiscal Policy
Policy lag



- Suppose there is a slump in private investment

Shortcomings of Fiscal Policy
Crowding-out

$$PL_{AD} = \left[W + Y_e - r - mpc \cdot T + I + G + X\right] - (mps + mpm)Y$$

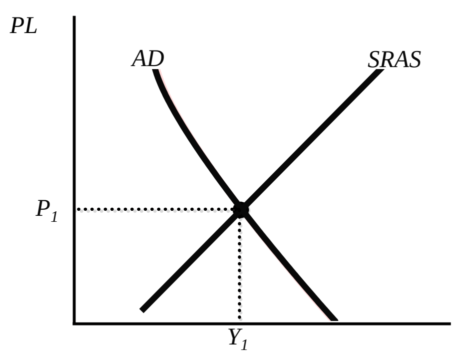
Decline in

Increase in **budget deficit** → Higher

Inflow of financial capital from abroad → Appreciation of the dollar → Decline in

- Increased government borrowing to finance an enlarged budget deficit places upward pressure
- In an open economy, high interest rates attract foreign capital.
- As foreigners buy more dollars to buy U.S. bonds and other financial assets, the dollar appreciates.
- The appreciation of the dollar causes
- Lower exports and private investment

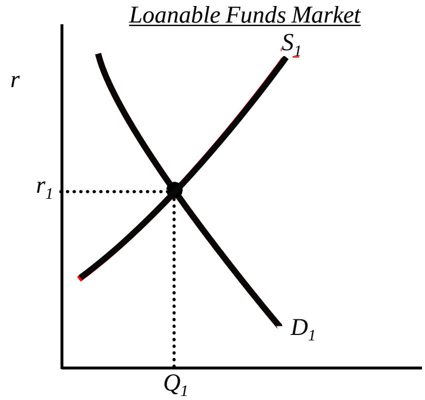
Shortcomings of Fiscal Policy
Rational expectations



New Classical**:** budget deficits merely substitute future taxes for current taxes.

- If households do not anticipate higher future taxes, AD would increase.
- However, households fully anticipate higher future taxes.
  They save instead

Shortcomings of Fiscal Policy
Rational expectations



To finance a budget deficit, the government borrows in the loanable funds market.

- Under the ***new classical*** view, people save to pay expected higher future taxes.

Shortcomings of Fiscal Policy
Vote buying

Political incentives also influence fiscal policy.

- Legislators are delighted to spend money on programs that directly benefit their own constituents but are reluctant to raise taxes because they impose a visible cost on voters.
- Politicians are half-Keynesians
  - Keynesians are proponents of budget deficits in recessionary gaps
    - Democrats push for higher
    - Republicans propose cuts in
    - Both are during recessions
  - Keynesians are proponents of budget surpluses in inflationary gaps.
    - Democrats are
    - Republicans are
    - Neither are during expansions
- There is a political bias towards spending and budget deficits. Predictably, deficits will be far more common than surpluses.

Shortcomings of Fiscal Policy
Automatic Stabilizers

Discretionary fiscal policy (even if it is effective) is unnecessary because there are automatic fiscal stabilizers:

- They increase the budget deficit (or reduce the surplus) during a recession
- They increase the surplus (or reduce the deficit) during an economic boom.
- The major advantage of automatic stabilizers is that they institute counter-cyclical fiscal policy without the delays associated with legislative action.
- Examples include
    -
    -
    -
    -

Shortcomings of Fiscal Policy
Modern synthesis

A ***modern synthesis view*** about the efficacy of fiscal policy emerged from the economic debates of the 1970s and 1980s.

- Predicting discretionary fiscal policy's size and properly *timing* it is
    -
    -
- *Automatic stabilizers* reduce the fluctuation of aggregate demand and help to direct the economy
- Fiscal policy is *much less potent* than

Supply-side Fiscal Policy

From a ***supply-side*** viewpoint, the marginal tax rate is of crucial importance:

- A reduction in marginal tax rates increases the reward derived from added work, investment, saving, and other activities that become less heavily taxed.
- High marginal tax rates will tend to retard total output because they
  - discourage work effort
  - adversely affect the rate of capital formation and
  - encourage individuals to substitute less desired tax-deductible goods for more

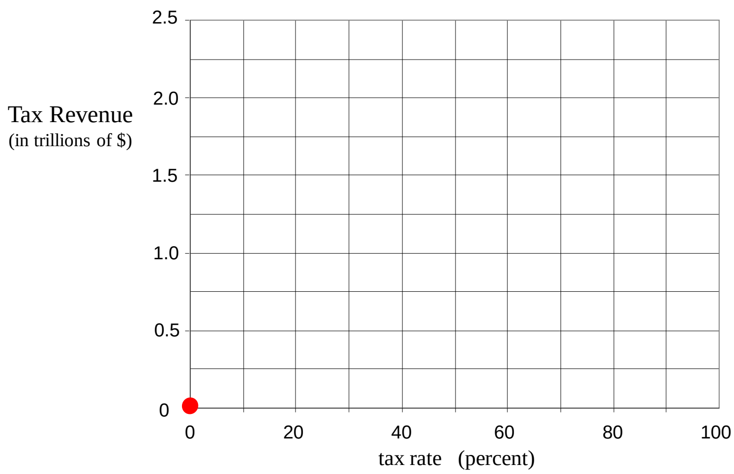
Federal regulations, tax code, capital gains tax rates, double taxation on domestic corporate profits, and triple taxation of overseas domestic profits can also be considered supply-side taxes.

If supply-side policy is adopted to increase Y_p by raising the LR production factors

Supply-side Fiscal Policy

People will not work and firms will not produce anything if the tax rate is 100%.

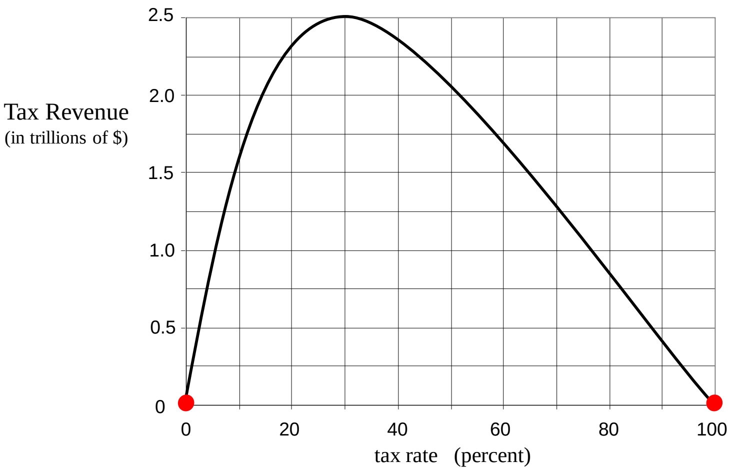
People pay no income taxes when the tax rate is



Supply-side Fiscal Policy

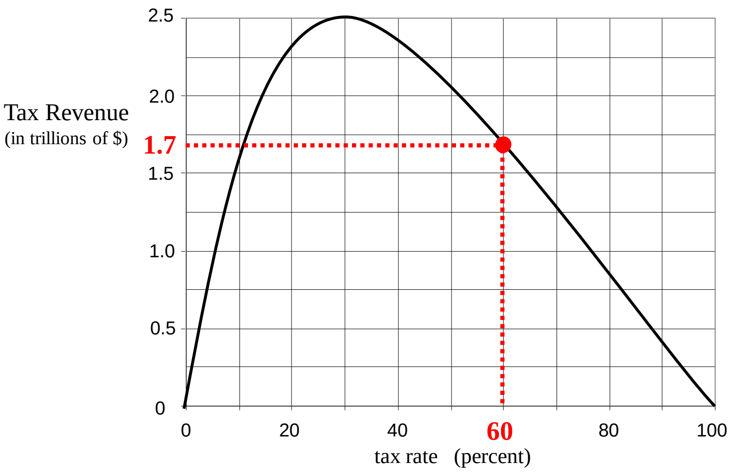
If tax revenue is 0 when the tax rate is 0% or 100%, there is a tax rate where tax revenue reaches a maximum value.

According to the diagram below, the optimal tax rate is . This tax rate generates in tax revenue.



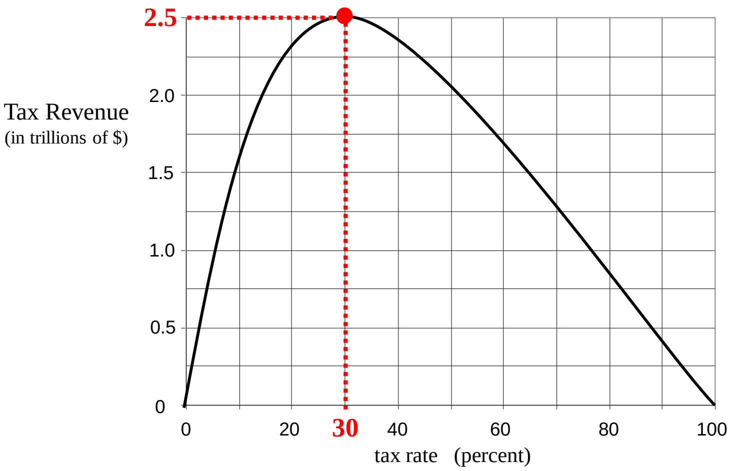
Supply-side Fiscal Policy

If the tax rate is **60%**, tax revenue is **$1.7 trillion**.



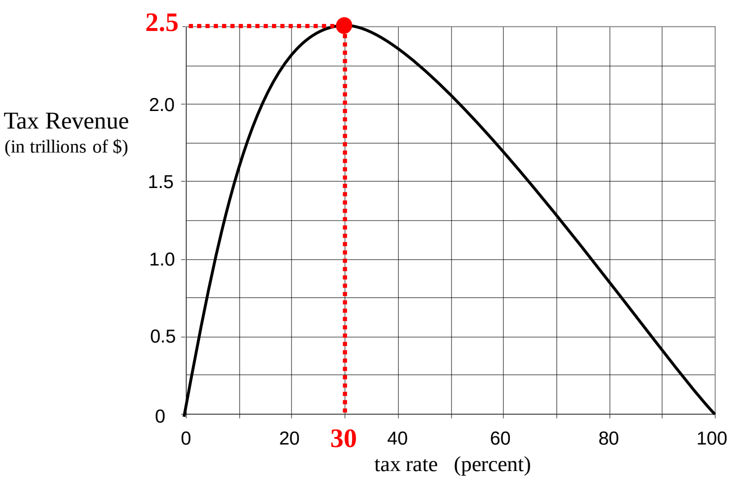
Supply-side Fiscal Policy

If the tax rate is **30%**, tax revenue is **$2.5 trillion**.

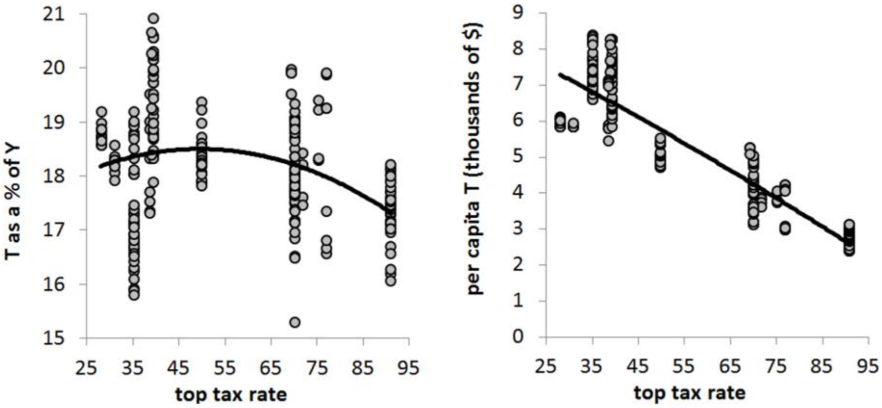


Supply-side Fiscal Policy

The Laffer Curve also suggests that when tax rates are “low,” a tax cut lowers tax revenue.



Supply-side Fiscal Policy



Source: quarterly data covering the 1954-2012 period from FRED and taxfoundation.org

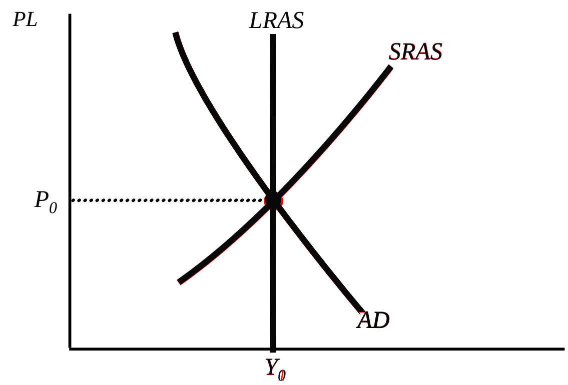
Supply-side Fiscal Policy

Changes in marginal tax rates may exert an impact on AS because the changes will influence the relative attractiveness of productive activity in comparison to leisure and tax avoidance.

Impact of ***supply-side effects***:

- Usually take place over a lengthy time period.
- There is some evidence that countries with high taxes grow more slowly—France versus United Kingdom.
- There is evidence they are important for taxpayers facing extremely high tax rates – say rates of 40 percent or above.

Supply-side Fiscal Policy



- Permanent reductions supply-side taxes raise the incentive to earn and use resources efficiently.
- *SRAS* and *LRAS* increase, which is followed by an increase
- Over time *permanent* lower (competitive) taxes promote more
- If the government temporarily *T* or temporarily raised *G*, ***AD***

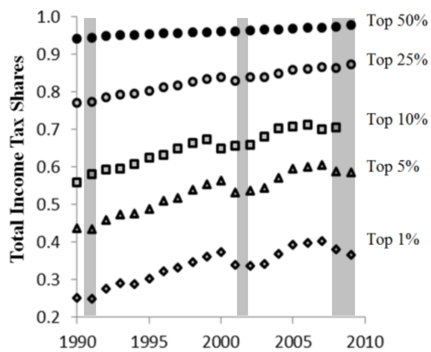
Supply-side Fiscal Policy

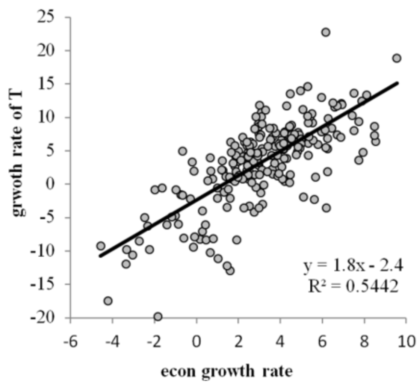
1986
Top rate cut from 50% to 30%

1990-93
Top rate raised from 30% to 39%

1997
Capital gains tax rate cut

2003
Income, Estate, and Capital Gains tax rate cuts





Austrian Economics and Fiscal Policy

The Austrian school of economics

- is an offshoot of classical economics
- advocates for a limited role for government in the economy
- is associated with classical (not present day political) liberalism.
- does not acknowledge the need for taxes and minimal intervention by the State
- *generally* does not don't acknowledge macroeconomics existence
  - The appropriate unit of analysis is at the individual level
  - Austrians comment on macroeconomic issues
  - fiscal and monetary stimulus should not be perused

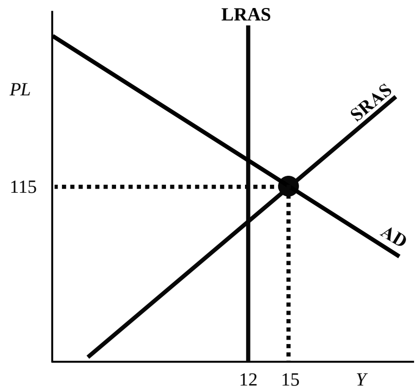
- Its solution for persistently high unemployment is the eliminate of policies that make wages and prices rigid

Austrian Economics and Fiscal Policy

The Austrian school of economics

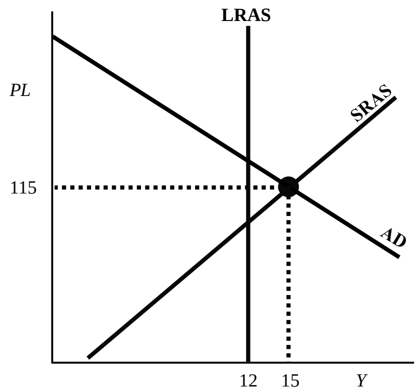
- Its solution for an inflationary gap is laissez faire, too.
  - The Fed raises i to close the gap because firms would bid up w & p
  - Innovation is inhibited by this
  - In the absence of fiscal or monetary intervention, allowing low unemployment to persist

Austrian Economics and Fiscal Policy



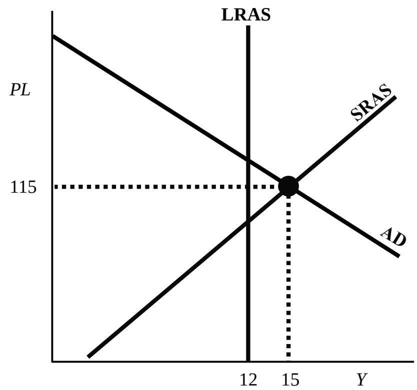
Mainstream economists want the Fed to close inflationary gaps because low u leads to higher ***w***

Austrian Economics and Fiscal Policy



The Fed counters a inflationary gap by adopting restrictive monetary policy that raises ***r***

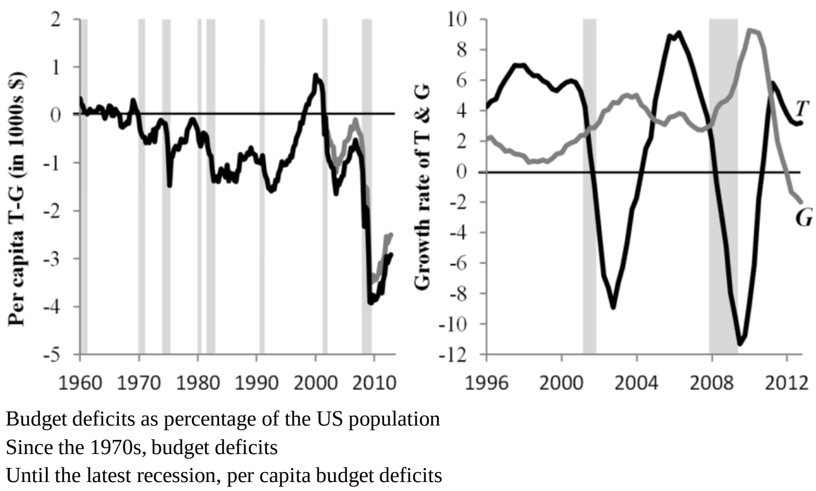
Austrian Economics and Fiscal Policy



Low unemployment driving up wages (w) and prices of other production inputs (p) are important signals to firms.

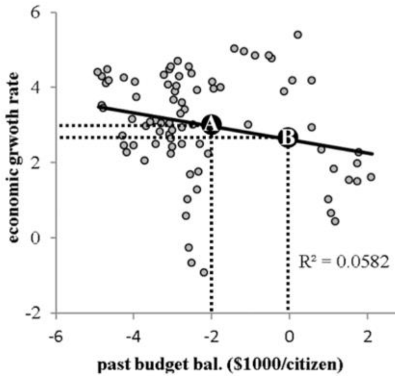
Higher labor costs (w) encourage firms to find labor saving technologies.

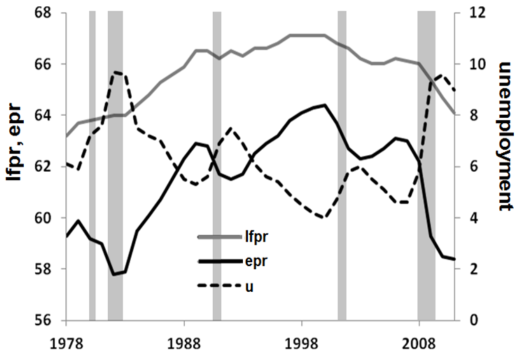
Fiscal Policy & Economic Performance



- Budget deficits as percentage of the US population
- Since the 1970s, budget deficits
- Until the latest recession, per capita budget deficits
- The per capita budget deficit in 2009 is the largest in US history
- Budget deficits rise during recessions and shrank during expansions, primarily as the result of automatic stabilizers

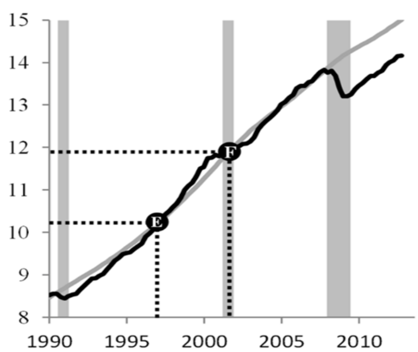
Fiscal Policy & Economic Performance

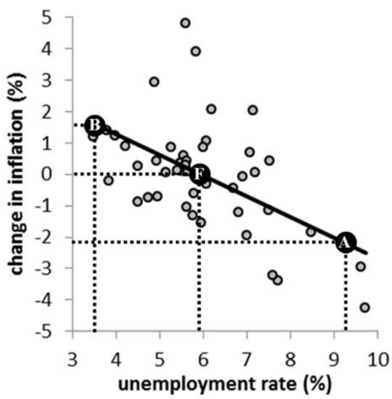




- Fiscal policy lag implies past budget deficits should impact growth.
- Correlations of growth & lags of the growth rate of budget balances is
- Correlations of growth & per capita budget balance is
- Strongest correlation: per capita budget balance is lagged eight quarters (See above).
- Increasing the budget deficit by => in growth 2 years later

Fiscal Policy & Economic Performance





- Given the weak correlation between growth and lags of these budget measures, should other policies perhaps be pursued?