

Chapter 13 Lecture – FISCAL POLICY

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The Federal Budget

- The **federal budget** is the annual statement of the federal government's outlays and tax revenues.
- The federal budget has two purposes:
 - 1. To finance the activities of the federal government
 - 2. To achieve macroeconomic objectives
- **Fiscal policy** is the use of the federal budget to achieve macroeconomic objectives, such as full employment, sustained economic growth, and price level stability.

2

The Federal Budget

Employment Act of 1946

Fiscal policy operates within the framework of the **Employment Act of 1946** in which Congress declared that

. . . it is the continuing policy and responsibility of the Federal Government to use all practicable means . . . to coordinate and utilize all its plans, functions, and resources . . . to promote maximum employment, production, and purchasing power.

3

The Federal Budget

Surplus or Deficit

- The federal government's budget balance equals receipts minus outlays.
- If receipts exceed outlays, the government has a **budget surplus**.
- If outlays exceed receipts, the government has a **budget deficit**.
- If receipts equal outlays, the government has a **balanced budget**.
- The budget deficit in fiscal 2012 was \$1.1 trillion.
- **It plunged to \$483 Billion in FY2014**

4

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The Federal Budget

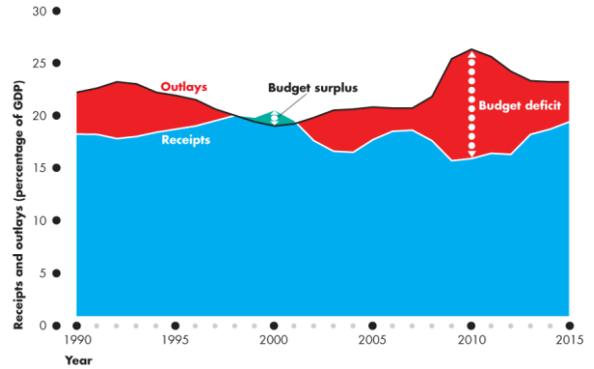
TABLE 13.1 Federal Budget in Fiscal 2015

Item	Projections (billions of dollars)	
Receipts	3,514	
Personal income taxes	1,505	
Social Security taxes	1,176	
Corporate income taxes	537	
Indirect taxes and other receipts	296	
Outlays	4,158	
Transfer payments	2,649	
Expenditure on goods and services	1,030	
Debt interest	479	
Deficit	644	

Source of data: Budget of the United States Government, Fiscal Year 2015, Table 14.1.

5

The Federal Budget

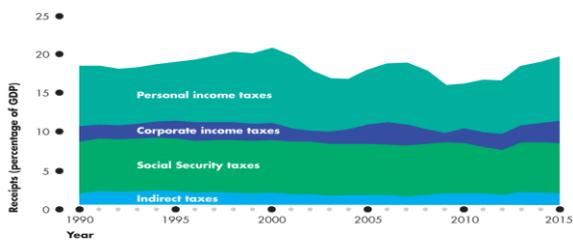


6

The Federal Budget

Receipts

■ Receipts as a percentage of GDP.



(a) Receipts

7

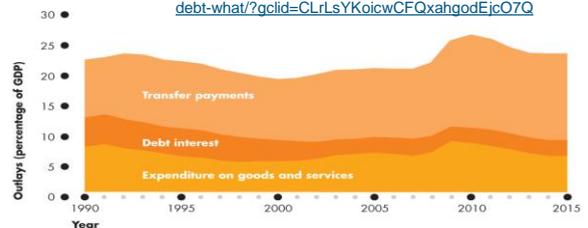
The Federal Budget

Outlays

<http://www.usdebtclock.org/>

■ Outlays as a percentage of GDP.

<https://www.nationalpriorities.org/campaigns/us-federal-debt-what/?gclid=CLrLsYKoiwCFQxahgodEjcO7Q>



(b) Outlays

8

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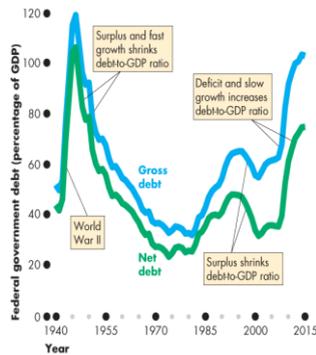
The Federal Budget

Budget Balance and Debt

Government debt is the total amount that the government borrowing.

It is the sum of past deficits minus past surpluses.

The figure shows the federal government's gross debt ... and net debt.



9

The Federal Budget

- State and Local Budgets
- The *total government sector* includes state and local governments as well as the federal government.
- In Fiscal 2015, when federal government outlays were about \$4,158 billion, state and local outlays were a further \$2,700 billion.
- Most of state expenditures were on public schools, colleges, and universities (\$550 billion); local police and fire services; and roads..

10

Generational Effects of Fiscal Policy

- Is the budget deficit a burden of future generations?
- Is the budget deficit the only burden of future generations?
- What about the deficit in the Social Security fund?
- Does it matter who owns the bonds that the government sells to finance its deficit?
- To answer questions like these, we use a tool called generation accounting.
- **Generational accounting** is an accounting system that measures the lifetime tax burden and benefits of each generation.

11

Generational Effects of Fiscal Policy

- **Generational Accounting and Present Value**
- Taxes are paid by people with jobs. Social security benefits are paid to people after they retire.
- So to compare the value of an amount of money at one date (working years) with that at a later date (retirement years), we use the concept of present value.
- A present value is an amount of money that, if invested today, will grow to equal a given future amount when the interest that it earns is taken into account.

12

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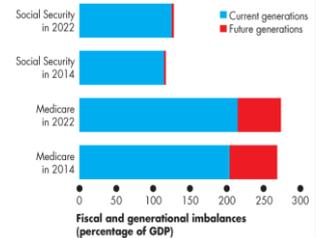
Generational Effects of Fiscal Policy

- The Social Security Time Bomb
- Using generational accounting and present values, economists have found that the federal government is facing a Social Security time bomb!
- In 2008, the first of the baby boomers started collecting Social Security pensions and in 2011, they will be eligible for Medicare benefits.
- By 2030, all the baby boomers will have reached retirement age and the population supported by Social Security will have doubled.

13

Generational Effects of Fiscal Policy

- Generational imbalance is the division between the current and future generations, assuming that the current generation will enjoy the existing levels of taxes and benefits.
- The bars show the scale of the fiscal imbalance.



14

Generational Effects of Fiscal Policy

TABLE 13.2 What the United States Owed the Rest of the World in June 2014

	\$ trillions
(a) U.S. liabilities	
Deposits in U.S. banks	1.2
U.S. government securities	5.8
U.S. corporate bonds and equities	8.6
Other items (net)	-3.9
Total	11.7
(b) U.S. government securities	
Held by rest of world	5.8
Held in the United States	6.2
Total	12.0

Source of data: Federal Reserve Board.

15

Fiscal Stimulus

- A **fiscal stimulus** is the use of fiscal policy to increase production and employment.
- Fiscal stimulus can be either
 - Automatic
 - Discretionary
- **Automatic fiscal policy** is a fiscal policy action triggered by the state of the economy with no government action.
- **Discretionary fiscal policy** is a policy action that is initiated by an act of Congress.

16

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Fiscal Stimulus

Automatic Changes in Tax Revenues

- Congress sets the tax *rates* that people must pay.
- The tax dollars people pay depend on tax rates and incomes.
- But incomes vary with real GDP, so tax revenues depend on real GDP.
- When the real GDP increases in an expansion, tax revenues increase.
- When real GDP decreases in a recession, tax revenues decrease.

17

Fiscal Stimulus

Needs-Tested Spending

- The government creates programs that pay benefits to qualified people and businesses.
- These transfer payments depend on the economic state of the economy.
- When the economy is in an expansion, unemployment falls, so needs-tested spending decreases.
- When the economy is in a recession, unemployment rises, so needs-tested spending increases.

18

Fiscal Stimulus

Automatic Stimulus

- In a recession, receipts decrease and outlays increase.
- So the budget provides an automatic stimulus that helps shrink the recessionary gap.
- In a boom, receipts increase and outlays decrease.
- So the budget provides automatic restraint that helps shrink the inflationary gap.

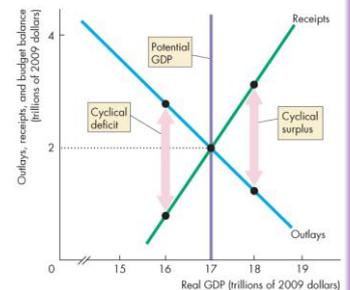
Cyclical and Structural Balances

- The **structural surplus or deficit** is the budget balance that would occur if the economy were at full employment and real GDP were equal to potential GDP
- The **cyclical surplus or deficit** is the actual surplus or deficit minus the structural surplus or deficit.
- That is, a cyclical surplus or deficit is the surplus or deficit that occurs purely because real GDP does *not* equal potential GDP.

19

Fiscal Stimulus

- The figure illustrates a cyclical deficit and a cyclical surplus.
- In part (a), potential GDP is \$17trillion.
- If real GDP is \$16 trillion, the budget is in deficit and it is a cyclical deficit.
- If real GDP is \$18 trillion, the budget is in surplus and it is a cyclical surplus.



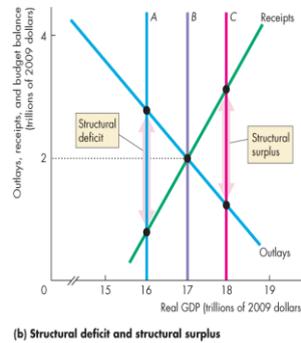
(a) Cyclical deficit and cyclical surplus

20

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Fiscal Stimulus

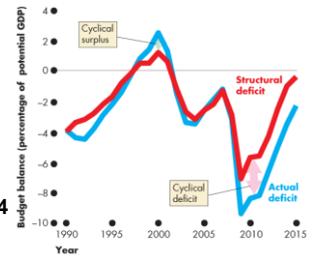
- In part (b), if real GDP and potential GDP are \$16 trillion, the budget is a deficit and the deficit is a structural deficit.
- If real GDP and potential GDP are \$17 trillion, the budget is balanced.
- If real GDP and potential GDP are \$18 trillion, the budget is a surplus and the surplus is a structural surplus.



21

Fiscal Stimulus

- **U.S. Structural Budget Balance in 2014**
- The figure shows the structural deficit, calculated by the CBO.
- The gap between the structural deficit and the actual deficit is the cyclical deficit.
- The cyclical deficit in 2014 was \$0.18 trillion.
- The structural deficit was 0.46 trillion.



22

Fiscal Stimulus

Discretionary Fiscal Stimulus

- Most discretionary fiscal stimulus focuses on its effects on aggregate demand.
- **Fiscal Stimulus and Aggregate Demand**
 - Changes in government expenditure and taxes change aggregate demand and have multiplier effects.
 - Two main fiscal multipliers are
 - Government expenditure multiplier
 - Tax multiplier

23

Fiscal Stimulus

- The **government expenditure multiplier** is the quantity effect of a change in government expenditure on real GDP.
- Because government expenditure is a component of aggregate expenditure, an increase in government expenditure increases real GDP.
- When real GDP increases, incomes rise and consumption expenditure increases. Aggregate demand increases.
- If this were the only consequence of the increase in government expenditure, the multiplier would be >1 .

24

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Fiscal Stimulus

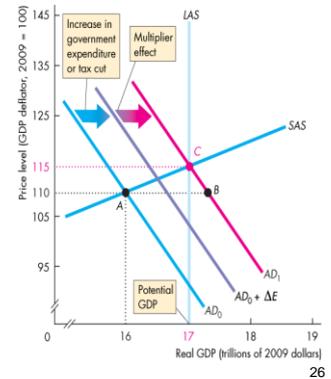
- But an increase in government expenditure increases government borrowing and raises the real interest rate.
- With the higher cost of borrowing, investment decreases, which partly offsets the increase in government expenditure.
- If this were the only consequence of the increase in government expenditure, the multiplier would be < 1 .
- Which effect is stronger?
- The consensus is that the crowding-out effect dominates and the multiplier is < 1 .

- The **tax multiplier** is the quantity effect a change in taxes on aggregate demand.
- The demand-side effects of a tax cut are likely to be smaller than an equivalent increase in government expenditure

25

Fiscal Stimulus

- The figure shows how fiscal policy is supposed to work to close a recessionary gap.
- An increase in government expenditure or a tax cut increases aggregate expenditure.
- The multiplier process increases aggregate demand.



26

Fiscal Stimulus

Fiscal Stimulus and Aggregate Supply

- Taxes drive a wedge between the cost of labor and the take-home pay and between the cost of borrowing and the return on lending.
- Taxes decrease employment, saving, and investment and decrease real GDP and its growth rate.
- A tax cut decreases these negative effects and increases real GDP and its growth rate.
- The supply-side effects of a tax cut probably dominate the demand-side effects and make the multiplier larger than the government expenditure multiplier.

27

Time Lags

The use of discretionary fiscal policy is seriously hampered by three time lags:

Inside and Outside Lags

- **Inside Lags** - The time it takes to formulate a policy. We can break this down into the:
 - Recognition lag—the time it takes to figure out that fiscal policy action is needed.
 - Law-making lag—the time it takes Congress to pass the laws needed to change taxes or spending.
- **Outside lags (Effect or Operational lag)** - The time it takes for the policy to actually work.
 - Impact lag—the time it takes from passing a tax or spending change to its effect on real GDP being felt

28

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Built-In Stability - Automatic Stabilizers

○ **Automatic Stabilizer:** an element of fiscal policy that changes automatically as income changes.

○ **Progressive Taxes:** a tax whose rate rises as income rises

U.S. income taxes currently range from a rate of 10% to 30% depending upon annual income.

○ **Transfer Payments:** a payment to one person that is funded by taxing others

Employees and employers in the U.S. pay a 7.65% Social Security tax to fund a variety of benefits administered through the Social Security program

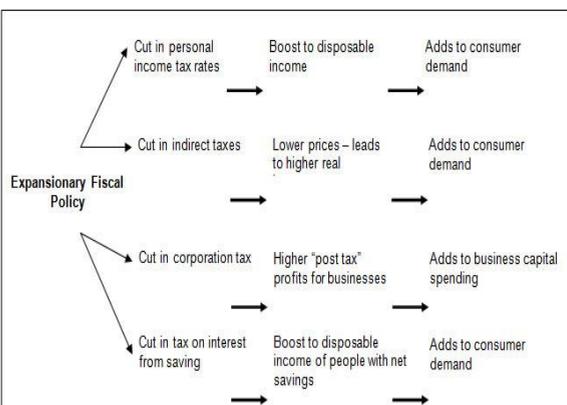
29

Fiscal Policy

■ **Discretionary Fiscal Policy:** changes in government spending and/or taxation aimed at achieving a policy goal.

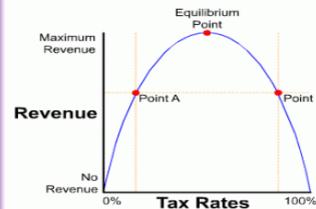
■ **Entitlement and Mandatory Spending:** Spending that Congress has authorized by prior law, primarily providing support for individuals

30



31

Laffer Curve and Supply-Side Economics



The equilibrium point is the rate of taxation at which maximum revenue is generated. However, we don't really know what that rate is.

Supply-side economics is a school of macroeconomic thought that argues that overall economic well-being is maximized by lowering the barriers to producing goods and services (the "Supply Side" of the economy). By lowering such barriers, consumers are thought to benefit from a greater supply of goods and services at lower prices. Typical supply-side policy would advocate generally lower income tax and capital gains tax rates (to increase the supply of labor and capital), smaller government and a lower regulatory burden on enterprises (to lower costs).

32