EC 202: Principles of Macroeconomics
Government Finances

1. Federal Government Budgets
2. Revenues, Spending & Deficits (or Surpluses)
3. Debt

Government Budgets

- Government Revenues
  - From <u>all</u> sources:
    - Income Tax
    - Social Security & Medicare Taxes
    - Excise Taxes
    - All other inflows of funds to the US Treasury
- Government outlays
  - Total outflow of funds for:
    - Government purchases
    - Transfer payments
    - Interest on the national debt

Government Budgets

- If Tax revenues are greater than total outlays → Budget Surplus
- If Tax revenues are less than total outlays → Budget deficit

How does the US government budget process work?

- Click here for a brief explanation of the process and what determines whether there is a budget surplus or a budget deficit.

Government Budgets and the Economy

- In a recession
  - Transfers rise and tax revenue falls
  - Budget deficit automatically increases
  - Or the budget surplus decreases
- In an expansion
  - Transfers decrease and tax revenue rises
  - Budget deficit automatically decreases
  - Or the budget surplus increases

Government Budget Deficits

- Economic fluctuations automatically affect
  - Transfer payments and tax revenues
- Budget deficits
  - Add to the public’s holdings of federal government bonds
  - Add to the national debt

Government Budget Deficits

- Budget surpluses
  - Decrease the public's bond holdings
  - Subtract from the national debt
- Budget deficit or surplus
  - Flow variable
- National debt
  - Stock variable

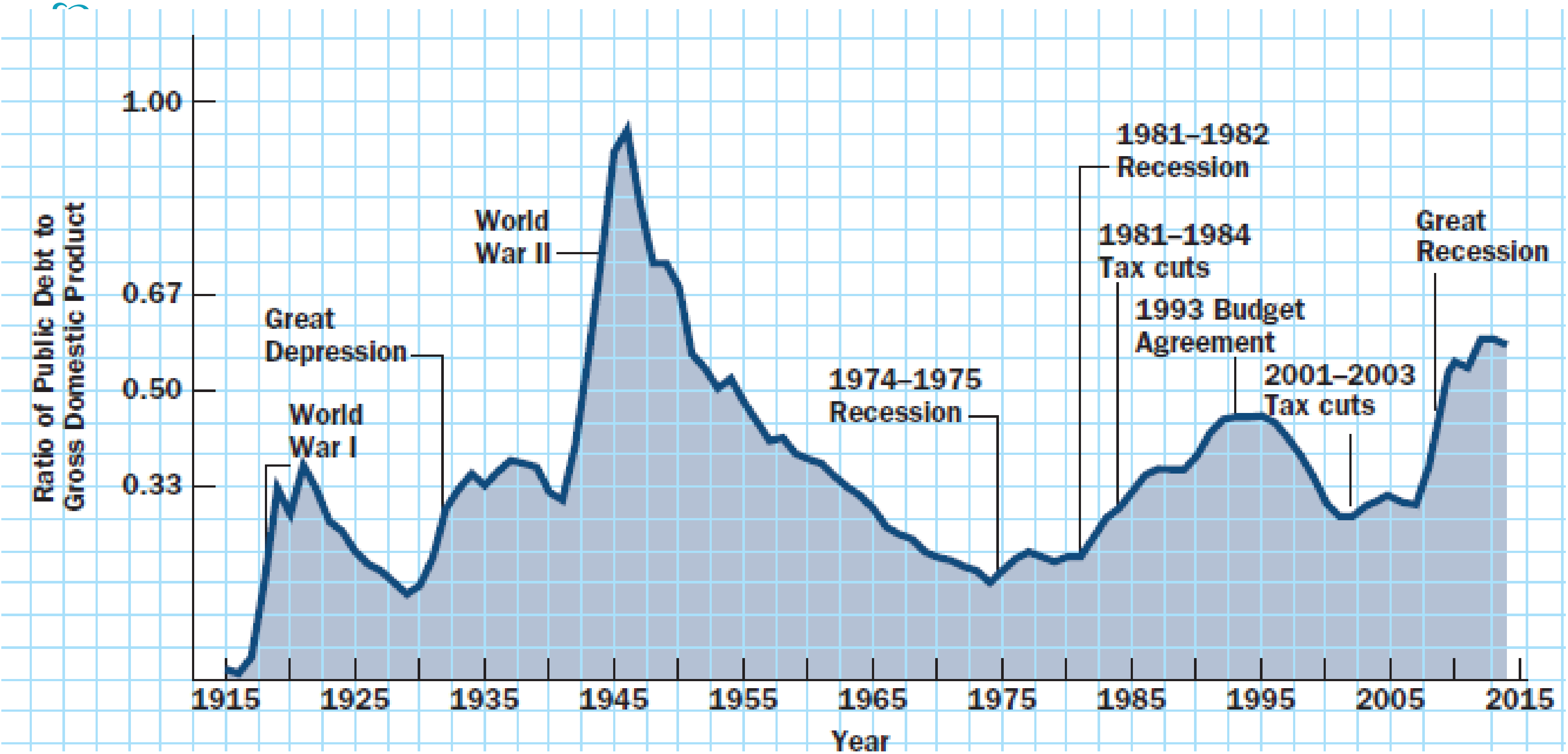
Deficits vs. the National Debt

- Budget deficit
  - When government purchases exceed net tax revenue during 1 fiscal year.
  - Fiscal year = “accounting year.” The US Government operates on a year that runs from October 1 through September 30.
- National debt
  - The **total** amount the federal government still owes to the general public from past borrowing

The National Debt

- The total national debt consists of
  - Amounts that government owes to the public
    - It has macroeconomic impact
  - Amounts that one government agency owes to another
    - No macroeconomic impact at all

The U.S. National Debt Relative to GDP, 1915–2014



The National Debt

- Debt held by the public
  - Sometimes called "net debt."
  - Measures the government's borrowing from the private sector (including banks and investors) and foreign governments.
  - At the end of 2015, debt held by the public was $12.8 trillion.
  - **The is the most meaningful measure of debt.** *This is the amount the US Government has to borrow.*

National Debt

- Separate the debt held by the public into
  - Debt owned by domestic citizens
    - Interest payments on the debt, each year - come out of current tax revenue
    - Future interest payments transfer funds from one group of Americans to another. From taxpayers to those holding US government bonds.
  - Debt owned by foreigners
    - Interest on foreign held public debt
      - Transfer of purchasing power from U.S. residents to foreign residents

The National Debt

- Gross Debt:
  - Debt held by the public PLUS securities the Treasury issues to US government trust funds – that is, money that one part of the government lends to another.
    - For example, each year Social Security takes in more money in payroll taxes and other income than it distributes in benefits.
    - The amounts not need to pay current benefits are invested in Treasury bonds, and the Treasury uses the proceeds to help pay for government operations. As a result, the Treasury owes money to the Social Security trust fund and will repay it when Social Security needs the money to pay future benefits.
    - At the end of 2014, Social Security, Medicare, and other trust funds held $5.0 trillion of Treasury securities

The National Debt

- Mythical concerns about the national debt
  1. “One day we’ll have to pay it all back”
  2. “The US government will be unable to run deficits in the future.”
  3. “The US government will go bankrupt.”

Paying off the Debt?!

- Mythical concerns about the national debt
  1. "One day we'll have to pay it all back"
     - No, we don't have to, ever.
     - The US government budget is **NOT** like a household.
     - Debt is "rolled over." This is a common practice in business and in government.
       - Example: An individual holding a bond issued by XYZ Corporation worth $1000 with a due date of January 1, 2018 will be entitled to receive $1000 from XYZ Corporation on this date. XYZ Corporation obtains funds to pay off the bonds due on January 1, 2018 by selling new bonds with a due date of January 1, 2025.
       - In essence, debt is paid by issuing new debt. This is called "rolling over" the debt.

The government won't be able to continue borrowing indefinitely?!

2. "The US government will be unable to run deficits in the future."
   - Sovereign governments borrow by issuing new bonds which are sold in financial markets.
   - The interest rate on new bonds typically depends on:
     - Current rates of interest
     - Degree of risk
   - Government bonds are usually considered "riskless" due to the unlikelihood of default. Thus, government bonds issued by *strong countries* like the US and Japan carry very low interest rates.
     - Investors buy these bonds, because they are considered safe compared to other securities that have a higher risk of default (i.e. becoming worthless).

The government won't be able to continue borrowing indefinitely?!

- Inability to sell debt
  - Sovereign countries face problems **if** investors lose confidence in government debt (bonds).
    - Investors will then only buy new debt, if it pays a <u>higher</u> rate of interest. This means that borrowing becomes more costly for the government.
    - The loss of confidence may stem from political disputes such as threats by government officials to refuse payment for existing government obligations.
    - In this case, the loss of confidence is entirely created by politics and is, therefore, usually temporary and eventually resolved.

The government won't be able to continue borrowing indefinitely?!

- Other countries' experiences.
- **Argentina**
  - Significant recession in 2000-2001.
  - Government debt equal to about 50% of GDP.
  - Investors demanded premiums on government debt.
  - Government of Argentina was unable to make the interest payments on its debt.
- **Ireland**
  - Rapid growth in government debt.
  - Ireland adopted fiscal austerity program – increased taxes and cut spending drastically.
    - Note: Ireland is a Euro zone country. Ireland cannot issue new debt on its own. Issuing debt depends on the willingness of the European central bank to issue new Euro bonds. The European central bank is dominated by Germany who does not face budget difficulties and generally opposes issuing new debt.

The government won't be able to continue borrowing indefinitely?!

- **<u>United States</u>**
- Confidence in US government debt depends on
  - Underlying strength of US economy.
  - Ability to generate increased economic growth.
  - Ability to count on increased tax revenues in future.
- US debt is regarded as a very safe investment, and new bonds do not require an interest premium.

Can the US Government go bankrupt?

- Sovereign default
  - Defined as the failure or inability of a national government to pay back borrowed money or service its debt (pay interest on the debt).
  - **Not possible as long as government has the ability to borrow in their own currencies.**
  - The US, Japan, the UK and other countries with their own currencies can borrow by issuing new debt (bonds). These countries ***cannot go bankrupt,*** since they are able to issue new debt as necessary.
    - Euro zone countries such as Greece and other countries face difficulties, because they do NOT have the ability to issue debt in their own currencies.

What should we worry about?

- The important consideration is the relationship between the debt and GDP.
  - As long as the debt grows by the same percentage as nominal GDP.
    - The ratios of debt to GDP and interest payments to GDP will remain constant
    - The government can continue to pay interest on its rising debt without increasing the average tax rate in the economy
  - If the national debt grows faster than GDP
    - May impose an opportunity cost in the future
      - A permanently higher tax burden
      - A period of inflation
      - A period of reduced government outlays or higher taxes relative to GDP

The National Debt

- For a brief overview of the relationship between deficits and the debt as well as recent data, click here.