Sustainable level of government debt

RIDLEY COLLEGE
SINCE 1889

Assessment Objectives

Specific Expectations	
AO2	Define the government budget surplus (deficit) and national debt.
AO2	Explain the issues involved with the burden of the national debt.
AO2	Explain the relationship between a budget deficit and government (national debt).
AO2	Explain that government (national) debt is measured as a percentage of GDP.
AO2	Explain the costs of high government (national debt) on: debt servicing costs, credit ratings, future taxation and government spending.

Government Budget

- A **government budget** is a type of plan of a country's revenues and expenditures over a period of time (usually a year).
    - A government budget which records the balance of its expenditures and revenues can be in either a surplus or a deficit.
    - **Budget surplus** is the situation where government tax revenues are greater than government expenditures over a specific period of time (usually a year).
    - **Budget deficit** is the situation where government tax revenues are less than government expenditures over a specific period of time (usually a year).
        - Governments borrow by issuing bonds, which are form of debt.
        - When the government borrowers to finance a deficit, it issues a certificate called a bond that promises to pay interest at various intervals until a certain date when the money is to be repaid to the bond holder.

Effect of Fiscal Policy

- A government's fiscal policy has a direct and immediate impact on its budget balance.
  - **Expansionary fiscal policy** when taxes are cut or government spending is increased, move the budget toward deficit.
    - If the budget is in surplus, the surplus will shrink or more to deficit
    - If the budget is already in deficit, the size of the deficit will increase.
  - **Contractionary fiscal policy** when taxes are increased or spending is cut, move the budget toward surplus.
    - If the budget is in deficit, the deficit will shrink as tax receipts increase and spending is cut.
    - If the budget is already in surplus, the size of the surplus will grow.

Government Debt

- **Government Debt**, also known as **National Debt** refers to the government's accumulation of budget deficits minus budget surpluses.
  - It is the total amount owed by the government to all creditors (lenders)
  - It is the amount the government owes the public, including domestic and international lenders (bondholders), from all the borrowing the government has done to finance past budget deficits.
  - In years when a government has a deficit, its total debt increases.
  - When the budget is in surplus, the government has the opportunity to reduce its debt by paying back past lenders.
- **Sustainable debt** a level of debt where the borrowing government has enough revenues to meet debt obligations (payment of interest and repayment of borrowed amount) without overdue debt payments, while also allowing economic growth at an acceptable rate.

Measurement of Debt as a share of GDP

- The **Debt-to-GDP ratio**, is the ratio of a country's debt to its gross domestic product (GDP).
  - Expressed as a percentage, the ratio is used to gauge a country's ability to repay its debt.
  - Debt-to-GDP ratio compares a country's public debt to its annual economic output.
  - Once a country's total debt exceeds 100% of its GDP, fiscal policymakers must consider the future costs of further increases in spending or decreases in taxation.
  - As total debt grows, so to do total debt payments. The interest rate on the debt must increase to attract lenders willing to put their faith in the government's ability to repay its debts as the size of the debt grows relative to its income.

Debt-to-GDP Ratio

- The following is a table showing the Debt-to-GDP ratios in selected countries.

Country	**Debt-to-GDP (% 2021)**	**Credit Rating**
Japan	237.54%	A+
Venezuela	214.45%	B-
United States	106.70%	AA+
Canada	83.81%	AAA
China	55.36%	A+
Mexico	54.11%	BBB

Costs of High levels of Debt

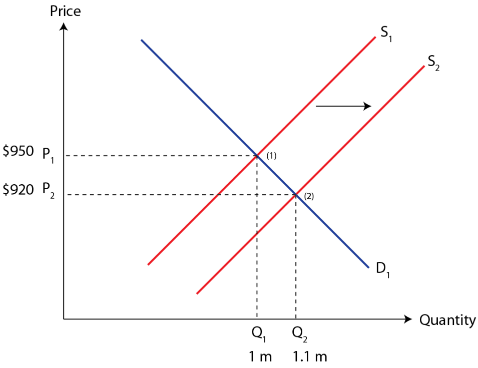
- High levels of debt have a number of disadvantages for the economies of debtor countries.

  1. **Debt servicing costs:** refers to the payments that must be made in order to repay the principal (the amount of the loan) plus interest payments.

     - Large debt service payments have major opportunity costs because the government has fewer resources to spend on social services (health, education) and infrastructure.
     - As a government in deficit spends, more bonds must be issued to investors who lent it money.
     - Once the government increases the supply of bonds to finance a growing deficit, the interest rate the government must pay investors rises.
     - As total debt increases, the government, must pay interest on that debt just to maintain confidence among lenders that it is a reliable debtor.

Costs of High levels of Debt

- A government's total interest payments in a year can be roughly estimated by multiplying the total amount of debt by the interest rate expressed as a percentage.
- Interest payments $=$ Total debt $\times$ Interest rate



Costs of High levels of Debt

- In addition, the portion of debt that is from external (foreign) lenders must be repaid in foreign exchange (foreign currencies).
- This means the government is forced to use export earnings for debt servicing, resulting in less foreign exchange to pay for imports.
- The forgone imports are an additional opportunity cost with negative consequences for economic growth.

2. **Poor credit ratings:** a credit rating is an assessment of the ability of a borrower to pay back loans, usually carried out by agencies that are qualified to do this (Standard & Poor's, Fitch Ratings, and Moody's).
    - A high credit rating received by a government means that it is expected to be able to pay back its loans in full and on time without difficulties.
    - A low credit rating means that it is expected that the government may have difficulties servicing its debt.

Costs of High levels of Debt

3. **Impacts on future taxation and government spending:** if a government wants to decrease the size of its debt, it must have budget surpluses rather than budget deficits.
    - In order to achieve budget surpluses, it must either increase taxes, or it must decrease spending. Both of these are politically unpopular.
    - Contractionary fiscal policies result in lower GDP and a high debt-to-GDP ratio.
4. **Increase income inequality:** government debt is likely to increase income inequality.
    - Buyers of government bonds, who are lenders to the government, tend to be higher income people.
    - When government pays them interest, it does so through tax revenues.
    - Therefore, there is a transfer of income away from lower income taxpayers and toward higher income bond holders.

Costs of High levels of Debt

5. **Lower Private Investment**: fears that a government may be unable to service its debts create uncertainty regarding economic conditions and scares away private investors, both domestic and foreign.
   - Even if investment does take place, it is more likely to involve short-term investment projects with quick returns, rather than longer-term ones with greater potential to support economic growth.
6. **Possibility of a debt trap:** As levels of debt rise, there comes a point where the level of debt cannot be sustained.
   - Involves a situation where a country must keep taking out new loans in order to pay back the old ones.
7. **Lower economic growth:** The above factors may work to lower economic growth in countries with high levels of debt, due to lower government spending, increased taxes, reduced investment and fewer imports of capital goods.

Summary

- **Enduring Understanding**
  - There are long-run implications of monetary and fiscal policy.
- **Essential Knowledge**
  - The government budget surplus (deficit) is the difference between tax revenues and government purchases plus transfer payments in a given year.
  - A government adds to the national debt when it runs a budget deficit.
  - A government must pay interest on its accumulated debt, thus increasing the national debt and increasingly forgoing using those funds for alternative uses.