**Federal budget deficit/surplus**

Relationship between tax revenues and expenditures of federal government

Deficit is a flow concept

Measure rate at which expenditures flow relative to revenues

Distinguish from debt (stock concept)

Debt – represents accumulated deficits less surpluses over time

Deficit government spending can be thought as present expenditures paid for by future taxes

Most states do not formally allow for deficits – expenditures constrained by tax revenue

**Efficiency of federal deficit spending**

All government expenditure reallocates resources from alternative uses

government

goods/services

GB

B

GA

A

RA

RB

Private goods/services

Moving from point A to B, government goods/services increase GA to GB

Opportunity cost of increasing government goods/services:

Reduction in private goods/services RA to RB

What are the goods/services that make up the opportunity cost?

Depends on how the increase in government is financed

If expenditure financed through income taxes

Goods/services that would have been privately purchased with the taxed income are not acquired (example: clothes meals, books)

Part of income is saved

If the increase in government is financed by deficit borrowing

Opportunity cost (RA to RB) is primarily in form of private uses for savings – capital goods

example: houses, cars machinery buildings

Deficits convert private uses of savings to government uses

The efficiency of moving from points A to B depends on the form of the increase in government, and on how it is financed

Two scenarios:

I. GA to GB represents increase in roads/bridge construction

II. GA to GB represents increase in hours national parks are open

Which should government deficit finance?

**Interest rates and government “crowding out”**

Market for loanable funds:

interest rate

S

government

i2

i1

D+G

L2

L1

D

L3

loanable funds

S - supply of savings

Positively related to interest rate

D – demand for savings by private (non-government) consumers and companies

Without government borrowing (by issuing bonds), **market equilibrium is i1, L1**

L1 – quanity of savings supplied and demanded

Represents transfer of present consumption to demanders who wish to purchase capital goods

example: Cars, equipment, buildings, machinery, houses

With government borrowing

Demand increases D to D+G; **new market equilibrium is i2, L2**

L3 – amount of savings borrowed by private consumers businesses

Government borrows L2 – L3 savings

Private borrowing of savings falls from L1 to L3

This is “crowding out”

[Federal budget data](http://milesfinney.net/433/handout/historical_budget.xlsx)

[Federal Government Yield Rates](http://www.ustreas.gov/offices/domestic-finance/debt-management/interest-rate/yield_historical_main.shtml)

[Federal Expenditure Breakdown](http://milesfinney.net/433/handout/fedexpend.xls)