EC132.02
Principles of Macroeconomics

Boston College

Tuesday, March 12

Announcements and Reminders

Aplia homework on Saving, Investment and the Financial System due Friday, March 22, at 9am.

This week: Ch 26 Saving, Investment and the Financial System

Next: Ch 28 Unemployment

Ch 26 Saving Investment and the Financial System

1. Financial Institutions in the US Economy ✔
   A. Financial Markets
   B. Financial Intermediaries
2. Saving and Investment in the National Income Accounts
3. The Market for Loanable Funds
   A. Supply and Demand for Loanable Funds
   B. Public Policies and the Market for Loanable Funds

Saving, Investment and the National Income Accounts

The national income identity decomposes GDP as

$$Y = C + I + G + NX$$

In a closed economy, NX = 0, and therefore

$$Y = C + I + G$$

Saving, Investment and the National Income Accounts

Rearrange

$$Y = C + I + G$$

as

$$Y - C - G = I$$

Define national saving S as the amount of output not consumed by households or the gov't:

$$S = Y - C - G$$

Saving, Investment and the National Income Accounts

It follows from the identity

$$Y - C - G = I$$

and the definition

$$S = Y - C - G$$

that in a closed economy, saving equals investment:

$$S = I$$

Saving, Investment and the National Income Accounts

In an open economy:

$$Y = C + I + G + NX$$

$$Y - C - G = I + NX$$

$$S = I + NX$$

so that saving and investment need not be equal in every period.

Saving, Investment and the National Income Accounts

In an open economy:

$$S = I + NX$$

If NX > 0, then S > I. An economy is saving more than it is investing; hence, lending to the rest of the world.

If NX < 0, then S < I. An economy is saving less than it is investing; hence, borrowing from the rest of the world.

Hence, there is a tight link between a country's trade surplus (example: China) or trade deficit (example: US) and its international lending and borrowing activity.

But, since funds borrowed must eventually be repaid, saving and investment are still linked in the long run.

Saving, Investment and the National Income Accounts

Let T denote taxes paid by households (net of transfer payments that simply get returned to other households) and firms economywide.

Then the definition of national saving implies

$$S = Y - C - G$$

$$S = (Y - C - T) + (T - G)$$

Saving, Investment and the National Income Accounts

$$S = Y - C - G$$

$$S = (Y - C - T) + (T - G)$$

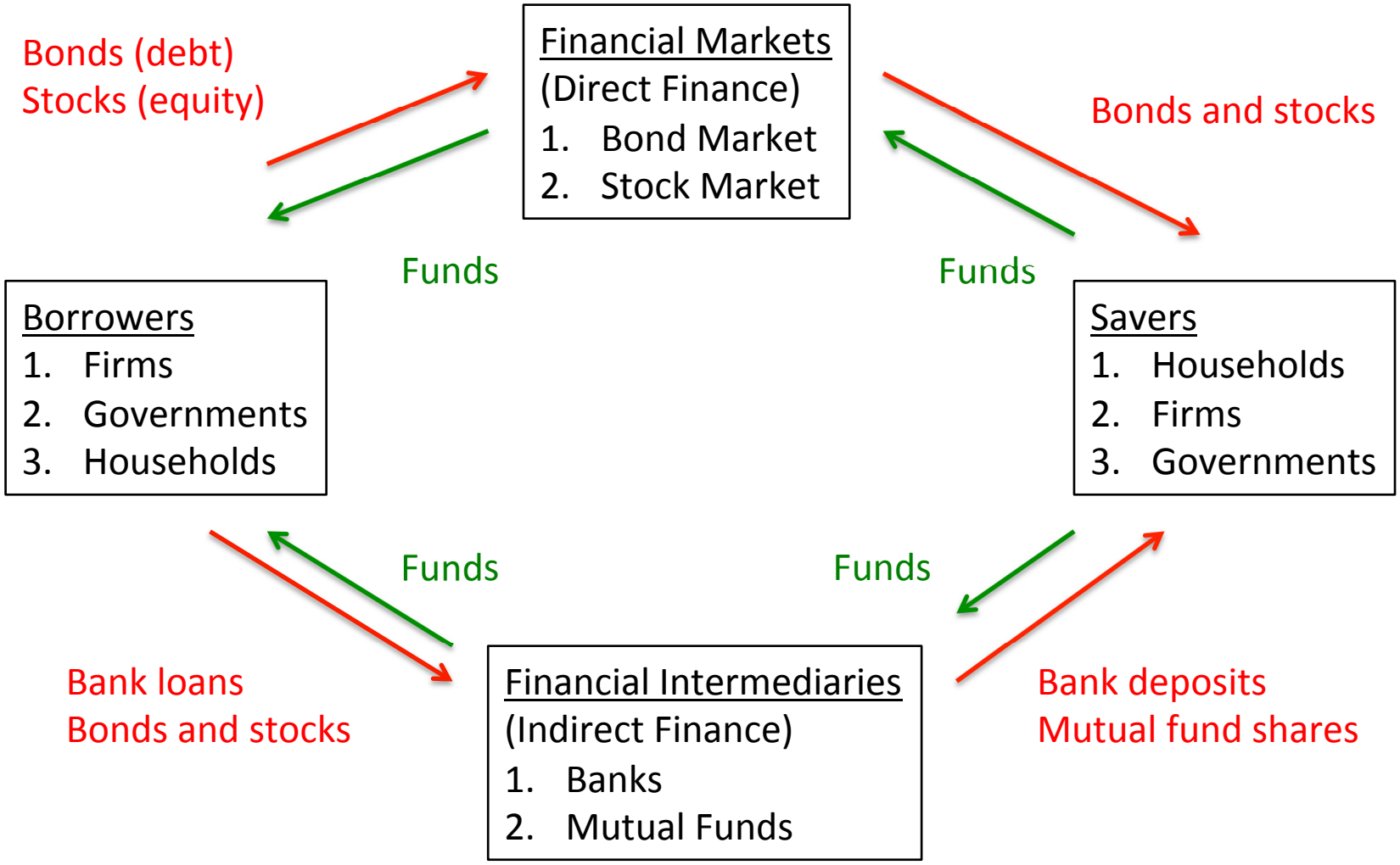
$Y - C - T$ = Private Saving

$T - G$ = Public Saving

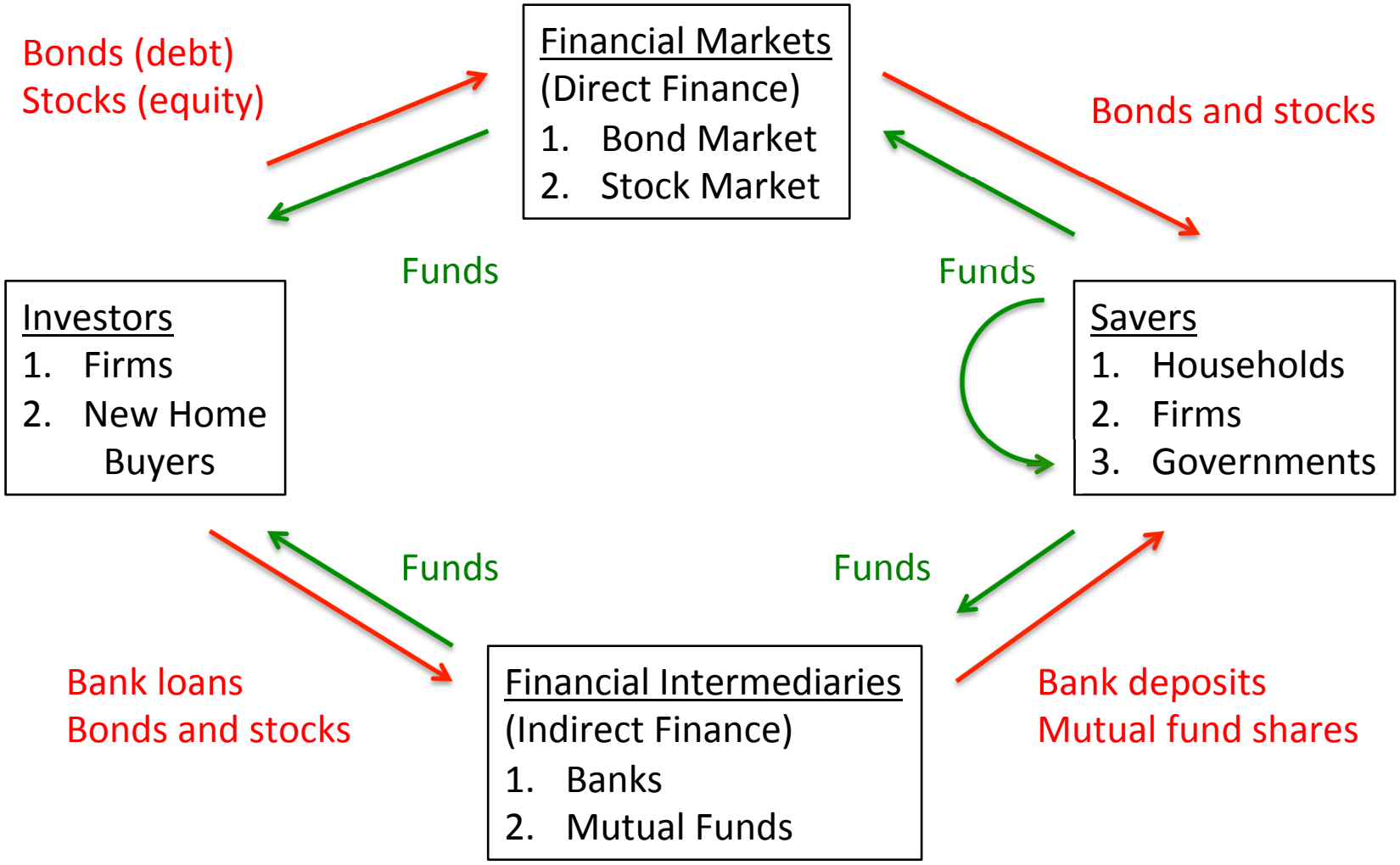
If $T - G > 0$, the government is running a budget surplus.

If $T - G < 0$, the government is running a budget deficit.

Financial Institutions in the US



Financial Institutions in the US



The Market for Loanable Funds

Financial markets and intermediaries allow individual savers to spend less than they earn and individual borrowers to spend more than they earn.

But, at the level of the economy as a whole, saving must equal investment.

The loanable funds framework shows how these two views can be reconciled.

The Market for Loanable Funds

The loanable funds framework applies microeconomic supply and demand analysis to the activities of saving and borrowing.

Saving = supplying loanable funds.

Borrowing/investing (purchasing new capital goods) = demanding loanable funds.

The interest rate is the "price" that coordinates these activities.