

Chapter 8

Saving, Investment, and the Financial System

Introduction

- Read the definitions
 - I am not going to go over all of them in class
- Until now, all that we have covered deals with goods and services market
- There are two other types of markets
 - money markets
 - Input markets

- While the goods and services market and the input market consist of *real* (concrete) economic activity, money markets do not
- Money serves as an accessory to concrete, real economic activity, meaning that exchanging money is not an end in and of itself.

- Events in money markets influence real economic activity through three channels
 - exchange rates
 - Interest rates
 - Price level in the output market
- and vice versa

- By far the largest component of the money supply that circulates in the Canadian economy is comprised of CREDIT, not cash
- The structure of the financial system:
 - Savers who SUPPLY loanable funds
 - Borrowers who DEMAND loanable funds
 - Financial intermediaries who broker deals between these two sets of actors

- The ultimate destination of much of the loanable funds is for investment spending, which in turn is directed toward capital spending, which hopefully maintains and augments the productive capacity of the macroeconomy

Financial Institutions in the Canadian economy

- Many, many different instruments within financial markets, as saving and lending is very specialised
- Canadian financial markets are among the deepest, or most developed, in the world
 - Lots of credit available, and many different types of credit available
 - In very good condition relative to those of just about any other country

ECO1102 Macroeconomics

Université d'Ottawa / University of Ottawa

7

14:02

• Bond market

- A loan or an IOU that is MARKETABLE or transferable from one individual to another
 - This means that the price is determined by supply and demand forces
 - Proper spelling is “I owe you”
- Characteristics:
 - The coupon rate of interest
 - The face value
 - The term to maturity
 - Credit risk (reliability of borrower)

ECO1102 Macroeconomics

Université d'Ottawa / University of Ottawa

8

14:02

• Stock market

- Read the box on how to read the newspaper's stock tables
- Stocks are also called equities
- Like bonds, they are totally marketable, and therefore the price is determined by supply and demand forces
- Stockholders in theory own the enterprise, and have claim on its profits
- Potentially high risk, potentially high return

ECO1102 Macroeconomics

Université d'Ottawa / University of Ottawa

9

14:02

• The textbook mentions two types of intermediaries

- Banks
- Mutual funds
 - Ideal way for small investors to 'play the stock market' by diversifying their risk, which means avoiding placing all of one's eggs in one basket

ECO1102 Macroeconomics

Université d'Ottawa / University of Ottawa

10

14:02

Saving and Investment in the National Income Accounts

- Back to the framework of chapter 5
 - Name of the game is to assign every \$ of spending into one of 4 or 5 types of spending
 - In other words, an exercise in taxonomy or classification
- $Y = C + I + G + NX$
- Assume a closed economy
 - The absence of trade is called autarky
 - Opposite is called an open economy, which is what we have in Canada

– Therefore, $NX = 0$

- $Y = C + I + G$

- $Y - C - G = I$

- Define national savings, $S = Y - C - G$

- This yields $S = I$, i.e. national savings = investment spending

- Since $S = Y - C - G$, then $S = (Y - T - C) + (T - G)$

- S is thus decomposed into private saving (on the left) and public saving (on the right)

ECO1102 Macroeconomics

Université d'Ottawa / University of Ottawa

12

14:02

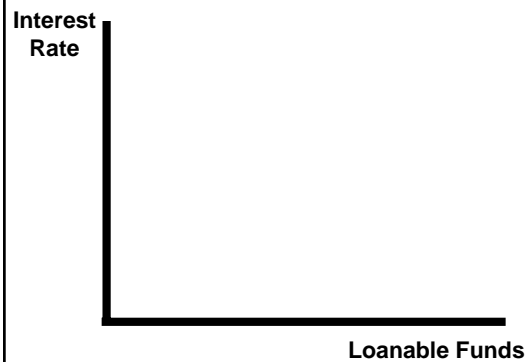
- $Y - T$ is called disposable income (like take-home pay), and whatever remains after consumption spending is private saving
- $T - G$ is public saving, or the government's balance
 - If $T - G > 0$, it runs a surplus, like (until recently) the federal government of Canada
 - If $T - G < 0$, it runs a deficit, like the federal government of the USA and the province of Ontario

- **Punch-line: for the aggregate economy, $S = I$ (always)**
 - Only applies in the aggregate
 - The money market, whose institutions and players I have presented, works to bring about this equality

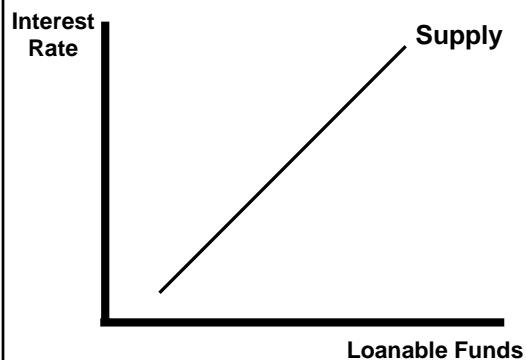
The market for loanable funds

- It is the savers who SUPPLY the loanable funds
- It is the investors who DEMAND the loanable funds
 - Does not include the government's demand for funds
- The price of loanable funds is the interest rate
- Figure 8.1 in the textbook

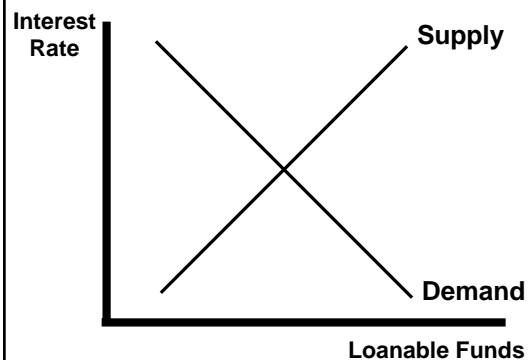
The Market For Loanable Funds

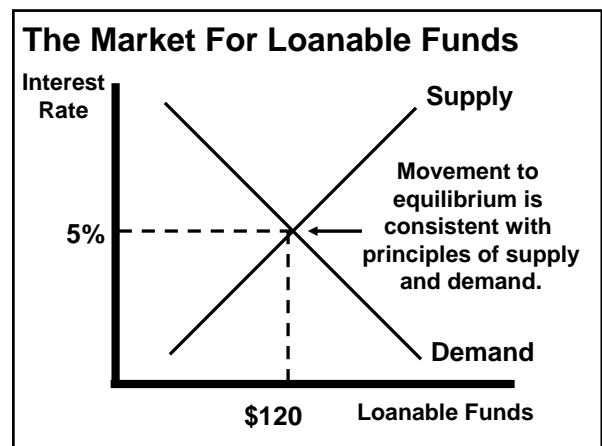
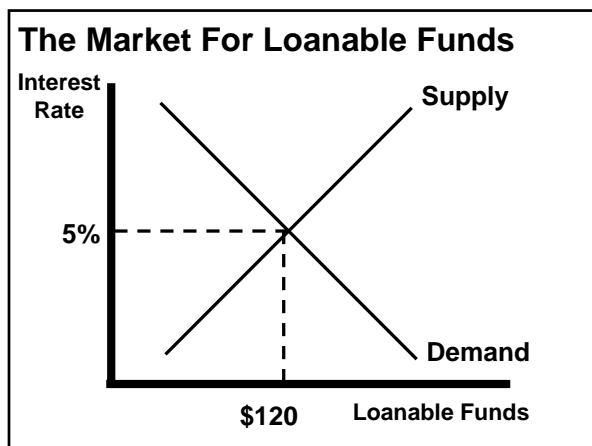


The Market For Loanable Funds



The Market For Loanable Funds

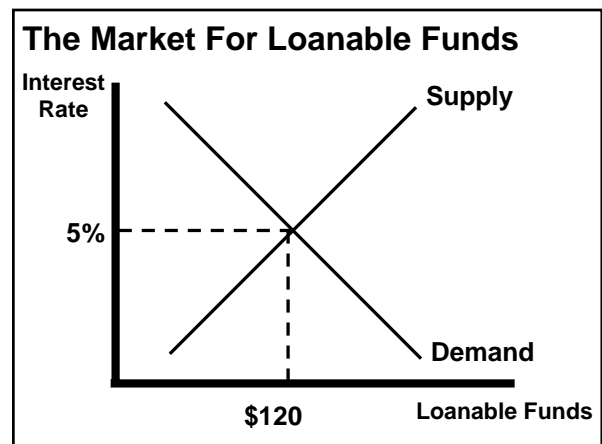


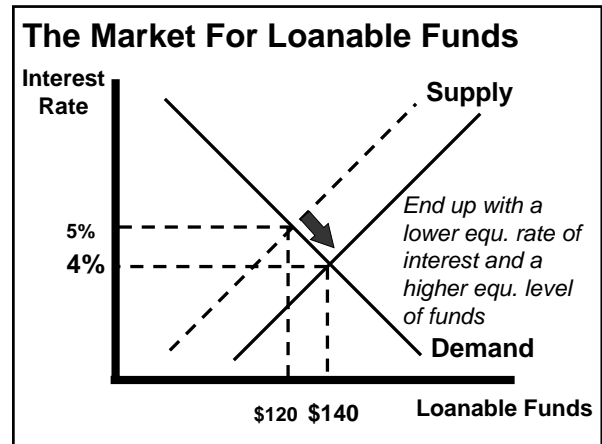
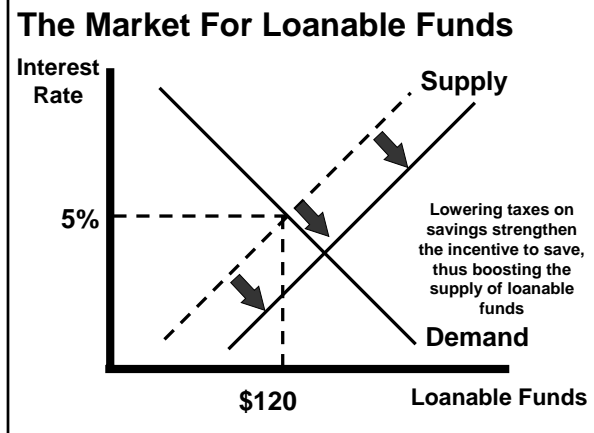


- The law of demand applies to the D for loanable funds
 - As the interest rate goes up (down), the quantity demanded for them goes down (up)
- The law of supply applies to the S for loanable funds
 - As the interest rate goes up (down), the quantity supplied for them goes up (down)

- We say that the interest rate adjusts to equilibrate the market
 - When loanable funds are relatively scarce (plentiful), we will have high (low) interest rates

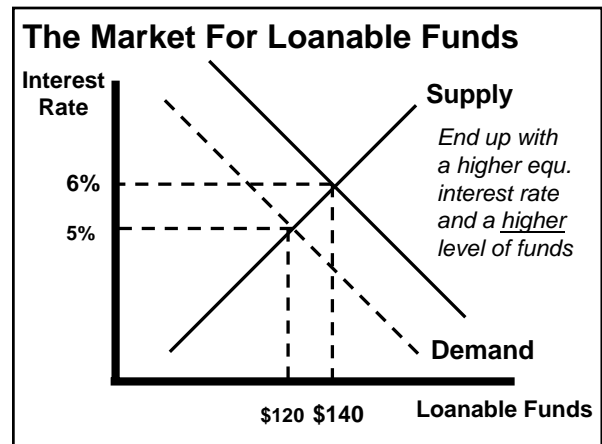
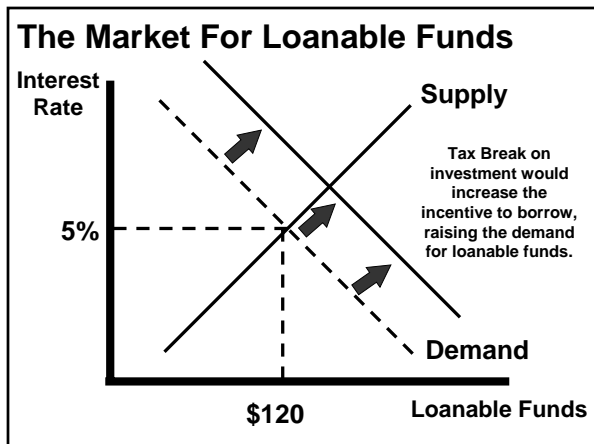
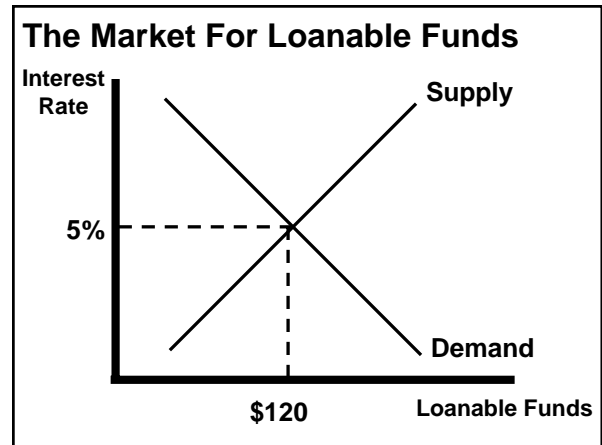
- What types of policies can be implemented to encourage saving, a goal which most economists favor?
 - Lower taxes on the returns to saving and instead shift the incidence of taxation to consumption
 - Idea behind the GST
 - Most economists think that it would have been better to cut income taxes rather than the GST because with income taxes you are taxing individuals according to what they put into the economy as opposed to what they take out of it
 - Increase tax shelters for retirement saving
 - RRSP
 - Illustrated in figure 8.2





- What types of policies can be implemented to encourage investment, a goal which most economists favor?
 - Investment tax credit
 - Illustrated in figure 8.3
 - 'right-wingers' favour this

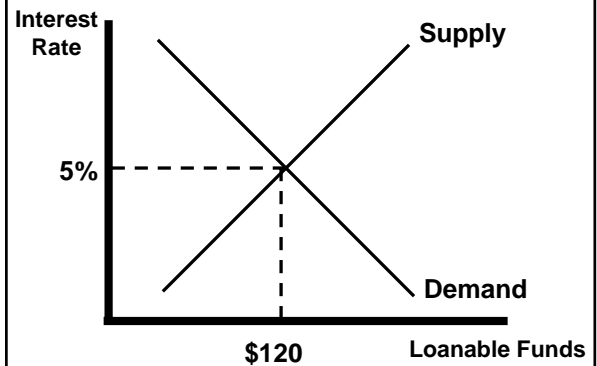
ECO1102 Macroeconomics 27
 Université d'Ottawa / University of Ottawa 14:02



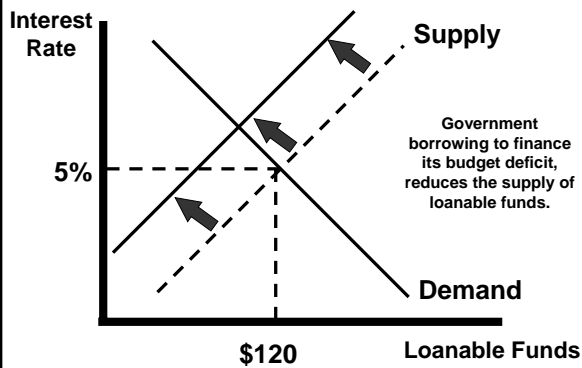
- **What about the government's most important intervention in the money market: its deficit or surplus?**

- Running a deficit results in the 'crowding out' effect, which I call the 'government credit hog' effect
- Illustrated in figure 8.4

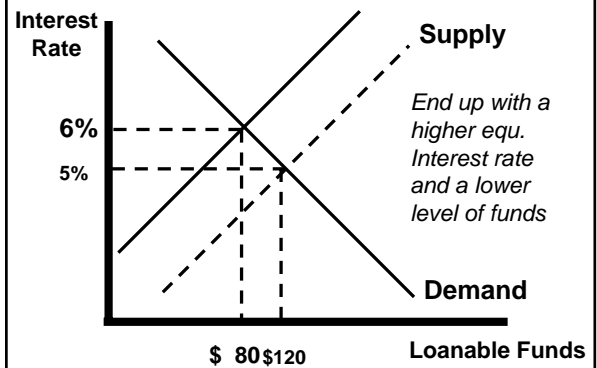
The Market For Loanable Funds



The Market For Loanable Funds



The Market For Loanable Funds



- The public borrowing **CROWDS OUT** the private borrowing, thus reducing private investment spending and capital formation
- Textbook makes the distinction between debt and deficits
 - Deficit is the **FLOW** of $(T - G)$ over a time period
 - Debt is the **STOCK** of money that the government owes, and is the cumulative deficit or surplus
- Vicious circle on next page
 - Self-reinforcing

Continual budget deficits



Higher interest rates through crowding out



Lower investment



Lower growth in GDP



Even higher deficits – back to square one

- Process in reverse is a virtuous circle

Canadian case

- Involves the vicious circle from 1975-1997 and the virtuous circle until 2008
 - See figure 8.5
 - The switch required enormous political courage and was painful
 - Have to consider both federal debt and provincial debt
 - Page 182 reiterates the lesson: “by using some of the private sector’s saving to finance budget deficits, governments pull resources away from investment in new capital and, by doing so, depress the living standards of future generations”

- Old policy debate was whether deficits were desirable or not
 - Left-wingers were in favour of them, and right-wingers were not
- New policy debate is over how soon the fiscal stimulus, which was brought on to fight the recession, should be removed
 - Left-wingers tend to favour higher social spending, and right-wingers tend to favour tax cuts and debt repayment