

6 The financial system

6.1 Introduction

As we have markets related to goods and services produced in a country, we also have financial markets where securities are transacted. Whenever a firm wants to borrow money from banks or from the citizens, or when the government treasury wants to borrow money from the economic agents, the financial markets will help these institutions and people transfer money between.

Financial markets can be divided into:

- **Bond market:** Whenever a manufacturing firm, or any other entity, wants to borrow money from people, it can create a bond which will allow it to do so. A bond is a contract between the issuer (the firm) and the investor (economic agents) in which the investor, e.g., gives to the firm \$1000, and the issuer promises to give the money back at the end of the year (maturity) and also promises to give a percentage of that money monthly, quarterly or semi-annually to the investor. The bond maturity can be months, 1 year, 2 years, etc.
- **Stock market:** Another way to have the firm raise money from the public is by selling stock through a stock exchange. A stock is a security in which the investor (economic agents) pays a certain amount for each share of stock and the issuer gives in exchange ownership of the firm to that investor and also promises to give dividends to the investor whenever the firm is able to do so. A stock exchange is where all this happens. The stock exchange is a specialized and structured financial market in which we can trade stocks of any company that has gone public in that exchange. Please check our [Primer on Stocks](#) to have a better understanding of this topic.

6.2 Financial intermediaries

There are two types of intermediaries in financial markets

- **Banks:** These are financial institutions which lend money to people and firms. They receive money from individuals as deposits and they use that money to lend it to other people or firms. Banks pay a “passive” interest for people’s deposits and receive an “active” interest for the lent money. The difference is the spread rate and it should be positive to make banks profitable.
- **Mutual funds:** Mutual funds are financial institutions which allow citizens or firms to buy and sell their funds’ shares. The money they receive from the public is used to invest in the financial markets, such as stocks, bonds, forex pairs, etc.

6.3 Saving and Investment

$$GDP = C + G + I + NX$$

Where

GDP: Gross Domestic Product

C: Consumption

G: Government spending

I: Investment

NX: Net exports.

This is the case in an open economy. Let's simplify this equation. Let's imagine the country doesn't trade with international markets. This means there aren't exports and imports. Consequently, we can use Y instead of GDP in the equation:

$$Y = C + G + I$$

We can rearrange the formula to have

$$Y - C - G = I$$

This means, once we subtract consumption and government spending to the GDP (which is the country's income), then it would be equal to investment. However, we can also say that savings equals income minus expenses.

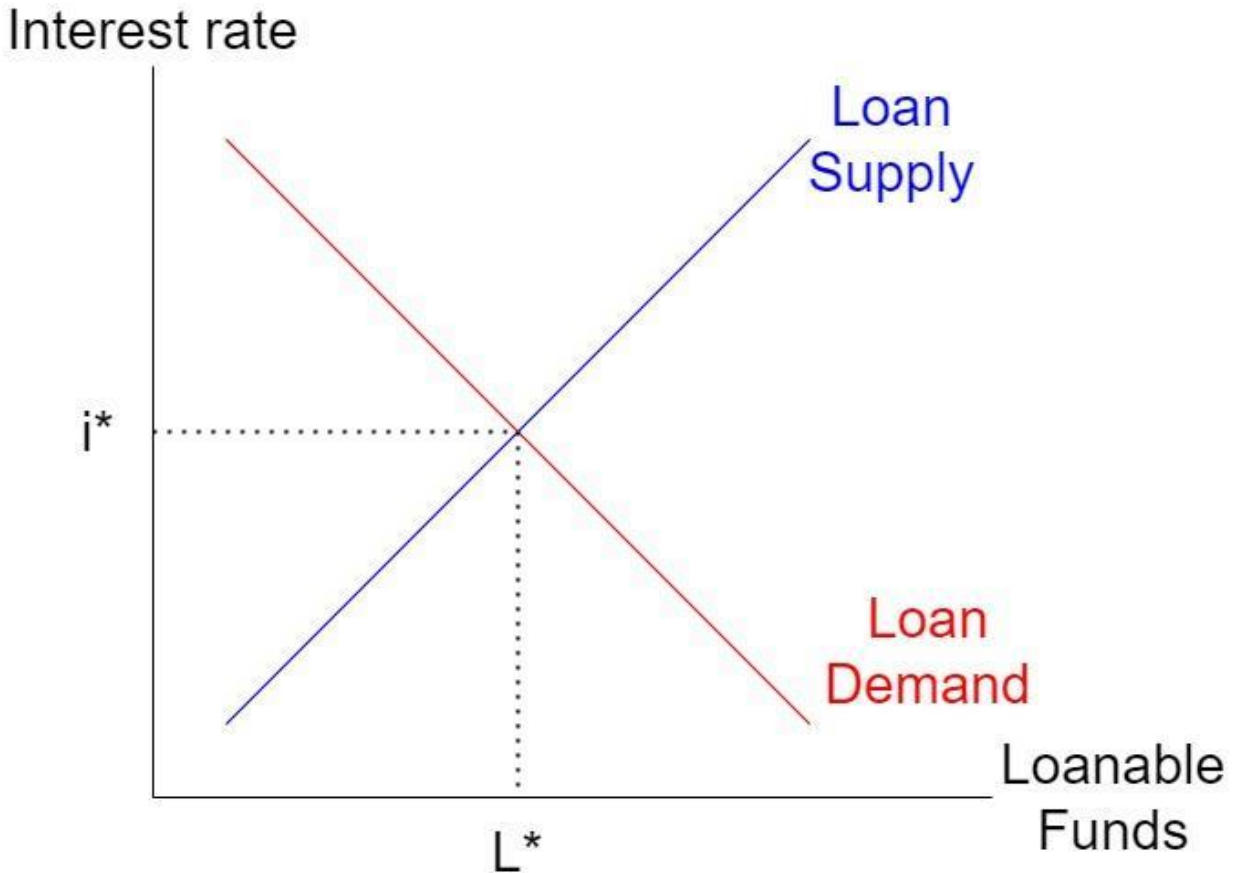
So, we have:

$$S = Y - C - G = I$$

$$S = I$$

In a closed economy (with no exports or imports), we should always have that savings are equal to investment.

We can create a model to understand the relationship between savings and investment. This relationship occurs in the financial market and we can relate savings as the loan supply and the investment to the loan demand. As we previously discussed, a supply and demand curve will always have an equilibrium. Check this graph:



In this case, our endogenous variables aren't the price and quantity of goods. This time our endogenous variables are the interest rate and loanable funds. The demand for loanable funds is given by investment because in order to spend money on investment products, investors need to raise capital to fund those investments. The supply is given by people or firms who have extra income and need to allocate their resources to receive interest from their savings, or, interest from lending money. The equilibrium between these two curves is given by i^* and L^* . Banks are a typical financial intermediary that makes this possible in a country.