

ECON1002 Sample Notes

Chapter 2 - Measuring macroeconomic performance: saving, investment and wealth

What is the relationship between saving and wealth

Saving: current income – spending on current needs

Saving rate: proportion of total income devoted to saving

Wealth: the value of assets – liabilities

a) How are stocks and flows related

Flow: a measure that is defined per unit of time (eg; saving \$20 per week)

Stock: a measure that is defined at a point in time (eg; total money at a particular time)

What reasons do people save?

There are 3 main reasons why people save:

- Lifecycle saving:
 - Saving to meet long-term objectives, (retirement, university or purchase of a home)
- Precautionary saving:
 - Saving for protection against unexpected setbacks, (the loss of a job)
- Bequest saving:
 - Saving done for the purpose of leaving an inheritance

Saving and the real interest rate

- Rate of return that is most relevant to saving decisions is the **real interest rate**
 - The rate at which the real purchasing power of a financial asset increases over time
- Real interest rate is the reward for saving
 - Higher interest rate, the more attractive saving is, as higher benefit is received
- Target saving:
 - Higher interest rates decrease amount saved (will achieve target faster)

What has happened to the household saving ratio in Australia?

- Household saving in Australia, which has always been comparatively low, has fallen even further in the past decade
- Significant fraction of households, especially those on low incomes, saving nothing at all

Possible reasons

- The availability of government assistance to the elderly
 - Main reason to save is to provide for retirement, however many believe that the government will help them
 - Reduces incentive to save
- Ready availability of mortgages with low down payments reduces the need to save for the purchase of a home
- Nations prosperous history has led many to be more confident about the future and hence less inclined to save for economic emergencies

What does national saving mean?

National saving: total saving in the economy undertaken by households, firms and the government

$$\text{National saving: } S = Y - C - G$$
$$\text{National savings} = \text{national investment}$$

a) What has happened to the components of nation saving in Australia?

- Introduction of taxes as well as payments to the private sector
 - 'T' = net taxes

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

Therefore, $S = \text{private saving} + \text{public saving}$

Two major components of national saving:

Private saving = $(Y - T - C)$ = income – taxes – consumption

Public saving = $(T - G)$ = government saving - taxes

b) How is the government's budget related to national saving?

Government budget deficit $(G - T)$: the excess of government spending over tax collections

Government budget surplus $(T - G)$: the excess of government tax collections over government spending – government saving

Balanced budget: taxes and spending are equal

c) Is a low rate of household saving necessarily a problem?

- National saving, not household saving, is the key determinant of the economy's capacity to invest in new capital goods and to achieve continual improvement in living standards

How are investment and capital formation related?

- Importance of national saving is that it provides the resources needed for investment
- Investment (creation of new capital goods and housing) is critical to increasing productivity and improving standards of living

Marginal benefit: the additional benefit received for a unit increase

Marginal cost: the additional cost for a unit increase

Cost-benefit principle

- Whether and how much a firm should choose to invest
 - Marginal cost of investment \leq marginal benefit of investment

Determinants of the level of investment

- The price of the capital goods
 - More expensive, the more reluctant a firm is to purchase
- Real interest rate (opportunity cost of capital investment)
 - Determines the real cost to the firm of paying back its debt
- Taxation rate

What role does the real interest rate play in determining saving and investment?

Saving, investment and financial markets

- Savings and investment are determined by a number of factors
- Supply of savings and demand of savings are determined through financial markets

Supply and demand for savings

- **Demand curve for savings**
 - Downward sloping curve – higher interest rates reduce firms willingness to invest
 - Shows how the demand for investment funds, when all else is equal, varies with changes in real interest rate
- **Supply curve of savings**
 - Upward sloping curve – increases in real interest rate increase saving
 - Shows the quantity of national saving at each value of real interest rate

Changes in demand for investment

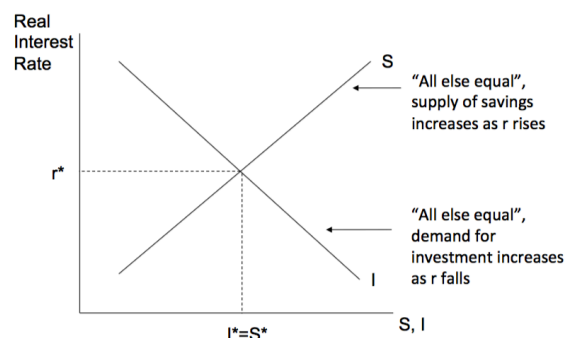
- Anything that changes the marginal product of investment will shift demand for investment funds, Because:
 - Anything that decreases the marginal product of the investment will reduce the demand for investment funds, at every interest rate level
 - Anything that increases the marginal product of the investment will increase the demand for investment funds, at every interest rate level

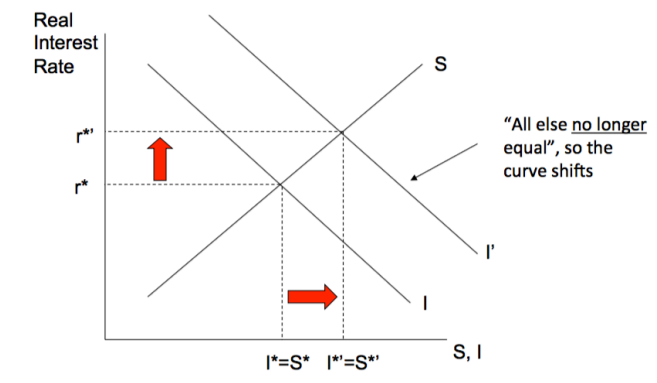
Changes in supply of savings

- Anything that changes the level of saving in the economy will shift the supply of savings
 - This is because as savings is made up of public and private saving, anything that makes households, businesses or governments choose to change their saving rate will shift the supply curve

a) How does technological change affect the market for saving and investment?

- A technological breakthrough raises the marginal product of new capital goods, increasing desired investment and the demand for saving
 - Real interest rate rises, as do national saving and investment





b) How does government's budget affect the market for saving and investment?

- An increase in the government budget deficit reduces the supply of saving, raising the real interest rate and lowering investment

