Aggregate Expenditure and Equilibrium Output

Aggregate Expenditure and Equilibrium Output *(1 of 2)*

- **aggregate output** The total quantity of goods and services produced (or supplied) in an economy in a given period.
- **aggregate income** The total income received by all factors of production in a given period.

- In any given period, there is an exact equality between aggregate output and aggregate income.

Chapter 8 Aggregate Expenditure and Equilibrium Output *(2 of 2)*

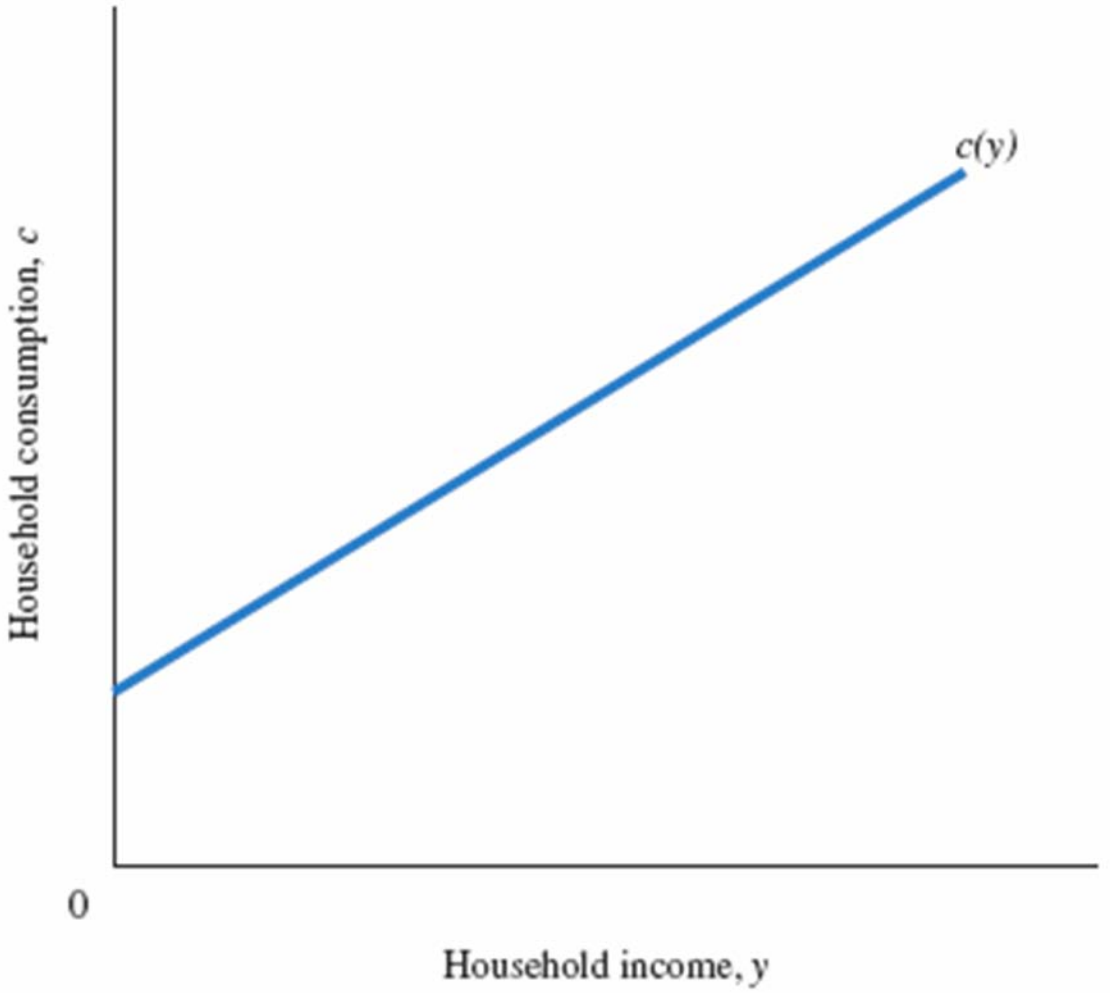
- **aggregate output (income) (*Y*)** A combined term used to represent the exact equality between aggregate output and aggregate income.
- Output *Y* refers to the quantities of goods and services produced, expressed in "real terms", not the dollars circulating in the economy.

The Keynesian Theory of Consumption
(1 of 4)

- In Keynes's *The General Theory of Employment, Interest, and Money*, current income played the key role in determining consumption levels in the economy.
- **consumption function** The relationship between consumption and income.

A Consumption Function for a Household

A consumption function for an individual household shows the level of consumption at each level of household income.



The Keynesian Theory of Consumption

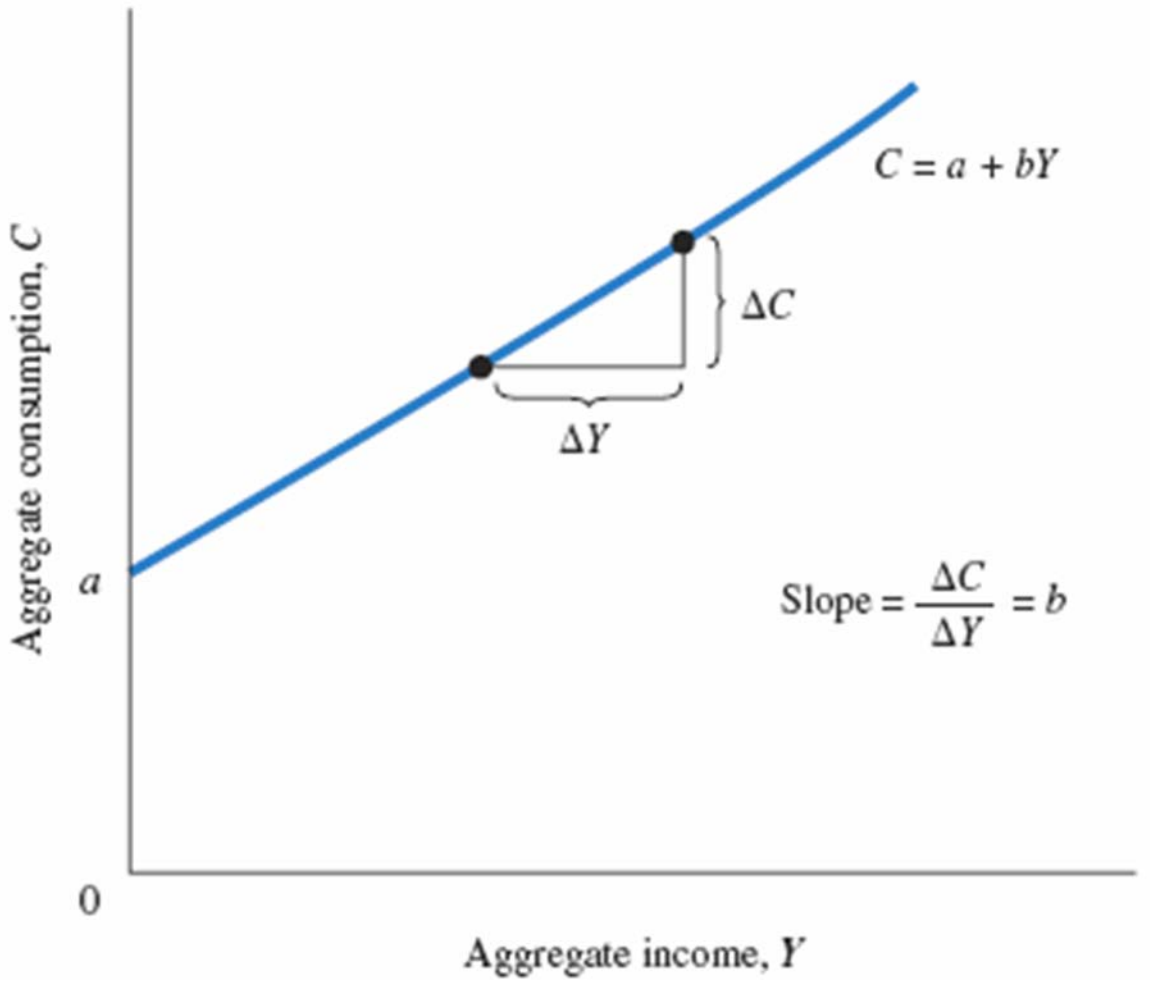
"The fundamental psychological law, …, is that men are disposed, as a rule and on average, to increase their consumption as their incomes increase, but not by as much as the increase in their income."

- To reflect this view, we have drawn the consumption function with a slope of less than 1.

An Aggregate Consumption Function

The aggregate consumption function shows the level of aggregate consumption at each level of aggregate income.

The upward slope indicates that higher levels of income lead to higher levels of consumption spending.



The Keynesian Theory of Consumption
(2 of 4)

- We can use the following equation to describe a straight-line consumption curve:

$$C = a + bY$$

- **marginal propensity to consume (*MPC*)** That fraction of a change in income that is consumed, or spent.

$$\text{marginal propensity to consume} \equiv \text{slope of consumption function} \equiv \frac{\Delta C}{\Delta Y}$$

- Thus, from $C = a + bY$, we have $MPC = b$.

The Keynesian Theory of Consumption
(3 of 4)

- **aggregate saving (*S*)** The part of aggregate income that is not consumed.

$$S \equiv Y - C$$

- ≡ means that this equation is an identity, and thus is always true by definition.

The Keynesian Theory of Consumption
(4 of 4)

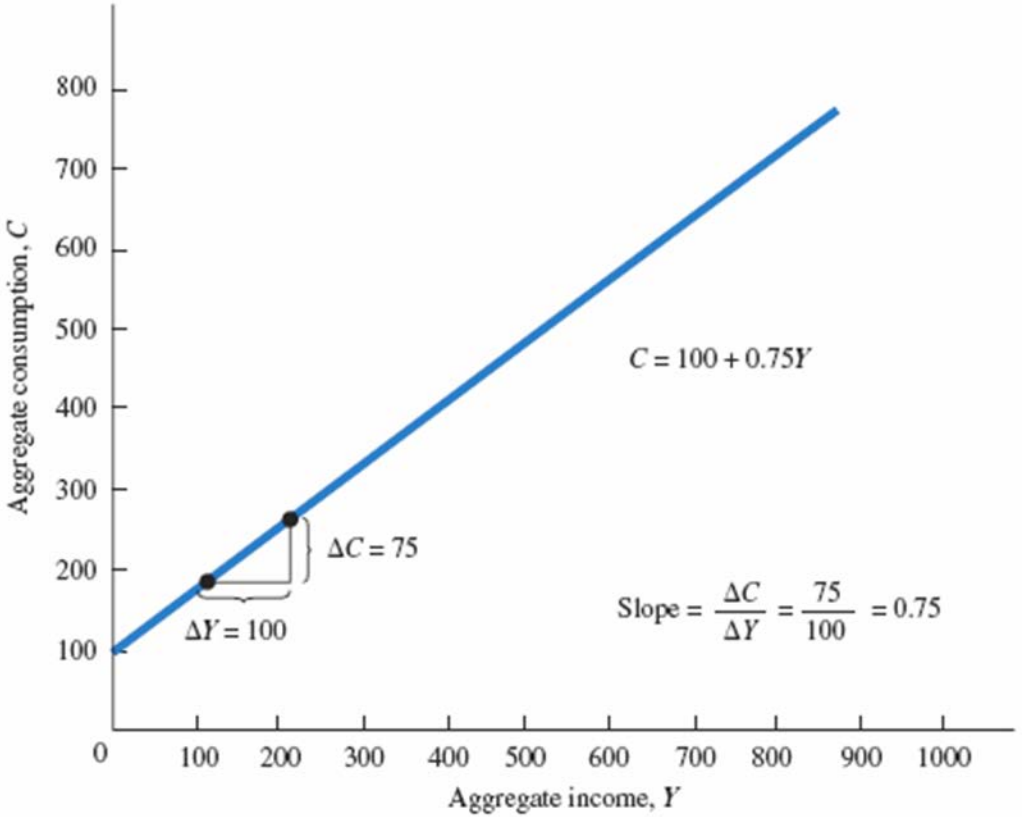
- **marginal propensity to save (*MPS*)** That fraction of a change in income that is saved.

$$MPC + MPS \equiv 1$$

- *MPC* is the fraction of an increase in income that is consumed (or the fraction of a decrease in income that comes out of consumption).
- *MPS* is the fraction of an increase in income that is saved (or the fraction of a decrease in income that comes out of saving).

The Aggregate Consumption Function Derived from the Equation $C = 100 + 0.75Y$

Aggregate Income, Y	Aggregate Consumption, C
0	100
80	160
100	175
200	250
400	400
600	550
800	700
1,000	850

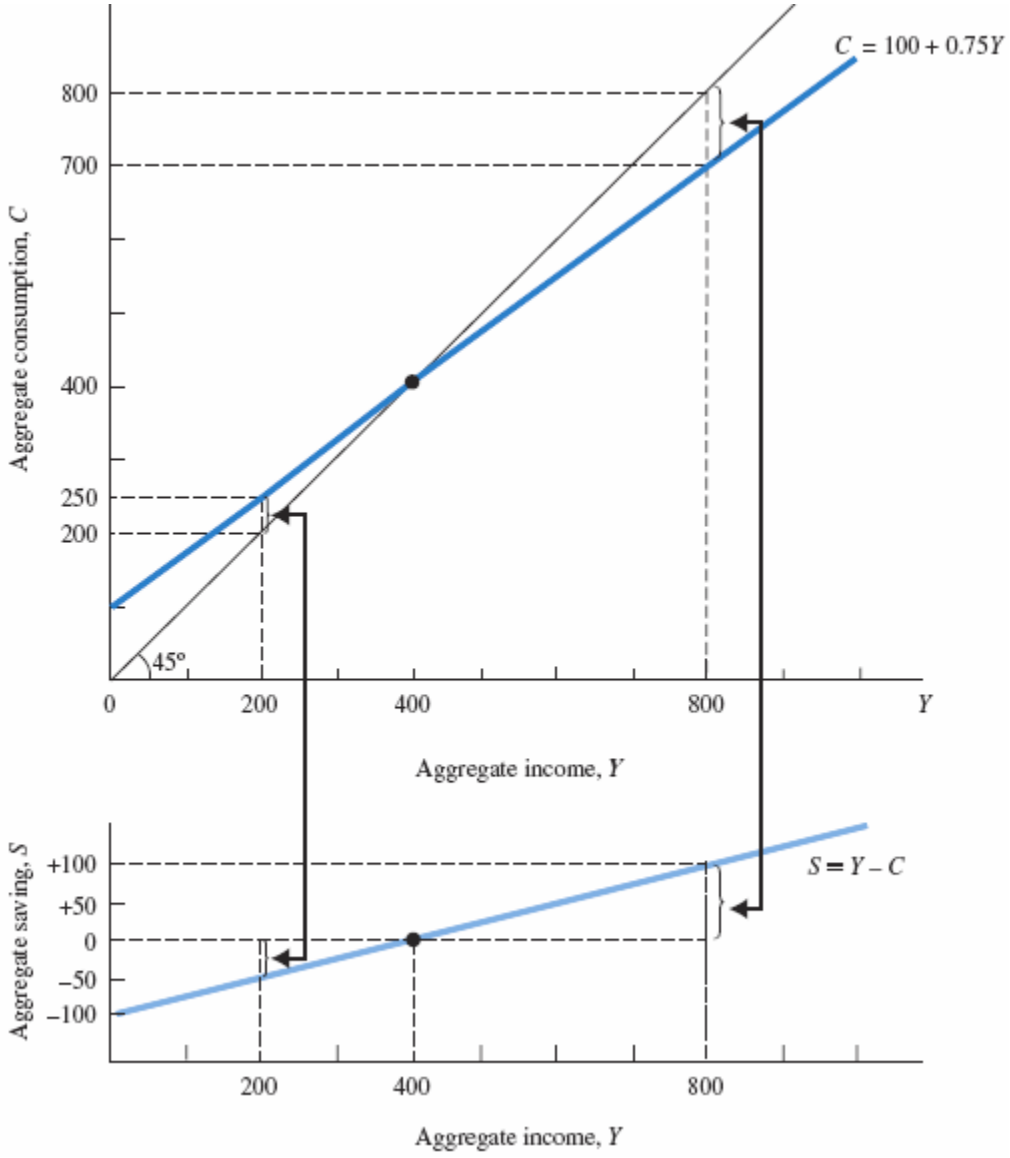


In this simple consumption function, consumption is 100 at an income of zero.
As income rises, so does consumption.
For every 100 increase in income, consumption rises by 75.
The slope of the line is 0.75.

Deriving the Saving Function from the Consumption Function

Y − Aggregate Income	C Aggregate Consumption	= S Aggregate Saving
0	100	−100
80	160	−80
100	175	−75
200	250	−50
400	400	0
600	550	50
800	700	100
1,000	850	150

Because $S \equiv Y - C$, it is easy to derive the saving function from the consumption function. A 45° line drawn from the origin can be used as a convenient tool to compare consumption and income graphically. At $Y = 200$, consumption is 250. The 45° line shows us that consumption is larger than income by 50. Thus, $S \equiv Y - C = -50$. At Y = 800, consumption is less than income by 100. Thus, $S = 100$ when $Y = 800$.



Other Determinants of Consumption

- In practice, the decisions of households about how much to consume in a given period are also affected by:
  - Their wealth
  - The interest rate
  - Their expectations of the future

ECONOMICS IN PRACTICE

Behavioral Biases in Saving Behavior

Saving decisions involve thinking about trade-offs between present and future consumption.

Recent work in behavioral economics has highlighted the role of psychological biases in saving behavior.

In studying retirement systems, researchers have found that simply changing the enrollment process from an opt-in structure to an opt-out system increases enrollment in retirement pension plans.

- opt-in: you have to choose to enter into the retirement plan
- opt-out: you have to choose to quit from the retirement plan (i.e. you have been automatically entered into the plan)