

CHAPTER 21

CONSUMPTION AND INVESTMENT



Chapter in a Nutshell

Producers and consumers make their production and consumption decisions simultaneously and independently of each other. This simple observation may help to explain why the economy can, at times, slide into recession and at other times bound into prosperity. For example, if production exceeds consumption, then inventories accumulate and firms will likely cut back production, causing an increase in unemployment. On the other hand, if consumption exceeds production, then firms will increase production, hire more workers, and cause unemployment to decrease. So it is critical to understand how households make consumption decisions.

Economists posit that a relationship exists between people's consumption and their disposable income. The **consumption function** is written as $C = f(Y)$, that is to say, consumption is a function of income. John Maynard Keynes developed the **absolute income hypothesis**, which states that as national income increases, consumption increases, but by diminishing amounts. Keynes believed that the **marginal propensity to consume (MPC)** decreased as the absolute level of income increased. However, Simon Kuznets's research showed that the MPC tends to remain fairly constant regardless of the absolute level of national income. New hypotheses about consumption were developed as a result of Kuznets's work. These included the **relative income hypothesis**, the **permanent income hypothesis**, and the **life-cycle hypothesis**. As a result of the work done by numerous economists on the nature of consumption spending, we now represent consumption as a straight-line curve that increases as national income increases. Some consumption, called **autonomous consumption**, would occur at zero national income. The consumption curve shifts as a result of changes in real asset and money holdings, expectations of price changes, changes in credit and interest rates, and changes in taxation. Based on the fact that the part of national income not spent on consumption is **saving**, a saving curve can be derived from the consumption curve. The **marginal propensity to save (MPS)**, which is the slope of the saving curve, is analogous to the MPC.

Another spending decision in the economy is that made by producers on investment. Economists use the concept **autonomous investment** to reflect the fact that investment is independent of the level of national income. Determinants of investment include the level of technology, the interest rate, expectations of future economic growth, and the rate of capacity utilization. Compared to consumption, investment is quite volatile, meaning that it can change quite dramatically over short periods of time. Together, consumption and investment form the two major building blocks of the Keynesian model.

After you study this chapter, you should be able to:

- Discuss Keynes's **absolute income hypothesis**.
- Define the **marginal propensity to consume**.
- Describe the **relative income hypothesis**.
- Explain the **permanent income hypothesis**.
- Present examples to illustrate the **life-cycle hypothesis** of consumption.
- List factors that cause shifts in the consumption curve.
- Derive the saving curve from the consumption curve.
- Write an equation for the consumption function.
- Discuss the determinants of **autonomous investment**.
- Explain the volatile nature of investment.

Concept Check — See how you do on these multiple choice questions.



What was Keynes's hypothesis about change in the marginal propensity to consume as income increased?

1. Keynes's **absolute income hypothesis** states that as a person's
 - a. income increases, his/her MPC decreases
 - b. income increases, his/her MPC increases
 - c. income increases, his/her MPC is constant
 - d. income is more transitory, his/her MPC is lower
 - e. age increases, his/her MPC decreases

How does a person's social class status influence consumption behavior in the relative income hypothesis?

2. The **relative income hypothesis** states that the marginal propensity to consume is
 - a. the same across different social classes
 - b. lower for people with high incomes than for people with low incomes
 - c. decreasing as income is increasing
 - d. a function of disposable income
 - e. a function of transitory income

What does autonomous mean?

3. **Autonomous consumption** is
 - a. a function of disposable income
 - b. a function of national income
 - c. a function of GDP
 - d. a function of saving
 - e. independent of the level of income

If the marginal propensity to consume is the change in consumption that results from a change in income, then what would be the definition of the marginal propensity to save?

4. When the consumption curve is a straight line, the **marginal propensity to save**
 - a. is equal to one plus the MPC
 - b. increases as income increases
 - c. is equal to one minus the MPC
 - d. decreases as income increases
 - e. is that part of national income not spent on consumption

How do changes in the current level of income influence autonomous investment?

5. **Autonomous investment** is determined by all of the following **except**
 - a. income
 - b. the level of technology
 - c. the interest rate
 - d. expectations of future economic growth
 - e. the rate of capacity utilization

Am I on the Right Track?



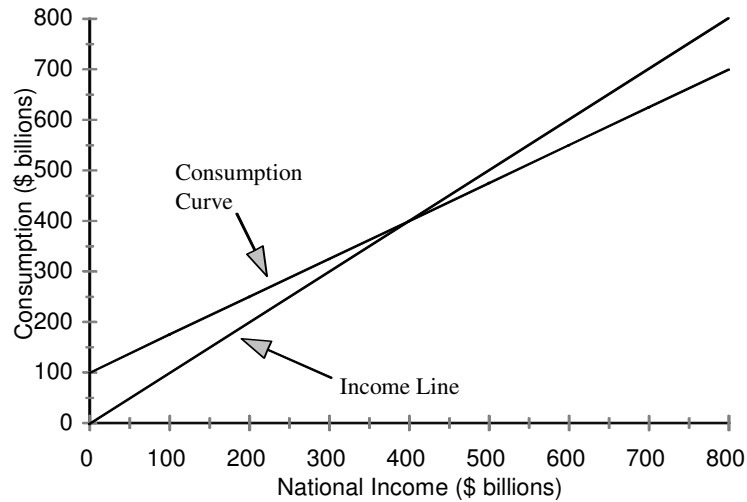
Your answers to the questions above should be **a, b, e, c,** and **a**. You need to take four distinct steps to get on the right track in this chapter. First, you must understand the various hypotheses about consumption that have been advanced by different economists. Second, you need to be comfortable graphing the consumption curve and working with the consumption equation. That done, graphing the saving curve should be no problem because saving is the part of national income not spent on consumption. The last step is to understand the determinants of investment spending by firms and why economists use the concept of autonomous investment.

Key Terms Quiz — Match the terms on the left with the definitions in the column on the right.

- | | |
|---|--|
| 1. consumption function | _____ a. consumption spending that is independent of income |
| 2. transitory income | _____ b. as national income increases, consumption spending increases at a constant rate |
| 3. absolute income hypothesis | _____ c. investment spending that producers intend to undertake |
| 4. autonomous consumption | _____ d. the unexpected gain or loss of income that a person experiences |
| 5. marginal propensity to consume (MPC) | _____ e. a line drawn at a 45-degree angle showing all points at which the distance to the horizontal axis equals the distance to the vertical axis; same as income line |
| 6. saving | _____ f. the ratio of the change in consumption spending to a given change in income |
| 7. relative income hypothesis | _____ g. the change in saving induced by a change in income |
| 8. marginal propensity to save (MPS) | _____ h. the relationship between consumption and income |
| 9. permanent income hypothesis | _____ i. investment that is independent of the level of income |
| 10. 45-degree line | _____ j. the regular income a person expects to earn annually |
| 11. life-cycle hypothesis | _____ k. that part of national income not spent on consumption |
| 12. intended investment | _____ l. a person's consumption spending is related to his or her permanent income |
| 13. permanent income | _____ m. as national income increases, consumption spending increases, but by diminishing amounts |
| 14. autonomous investment | _____ n. typically, a person's MPC is high during young adulthood, decreases during the middle-age years, and increases when the person retires |

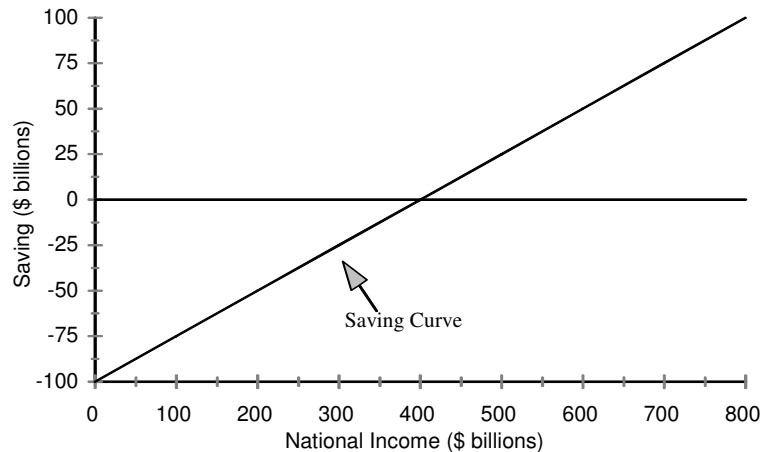
Graphing Tutorial

It would be surprising to find any students who have not graphed linear equations in their high school algebra classes. Drawing these graphs wasn't terribly difficult then, and it isn't now. The consumption curve, saving curve and investment curve are all variants of graphs of equations for straight lines. Suppose that we have a consumption function in the form $C = a + bY$, where C is consumption spending, a is autonomous consumption, b is the MPC, and Y is the level of national income. Let $a = 100$ and $b = .75$. Now the equation reads $C = 100 + .75Y$. Graphing this equation is fairly easy because we know the value for autonomous consumption and the MPC. In algebraic terms, autonomous consumption is the vertical intercept for the graph of the consumption equation, and the MPC is the slope. We know that when $Y = 0$, $C = 100$ and that for every \$100 increase in national income there is a \$75 increase in consumption. That's all we need to know in order to graph the consumption curve. The consumption curve that corresponds to this consumption equation is shown on the following page along with the income line.



Note that the intercept on the consumption axis for the consumption curve is \$100 billion. This is autonomous consumption — the value for a in the consumption equation. Also, for each \$100 billion increase in national income, there is a \$75 billion increase in consumption spending, which gives us a slope of .75 — the value for b in the consumption equation. The income line (also known as the 45-degree line) shows all of the points where the distance along the horizontal axis is equal to the distance along the vertical axis.

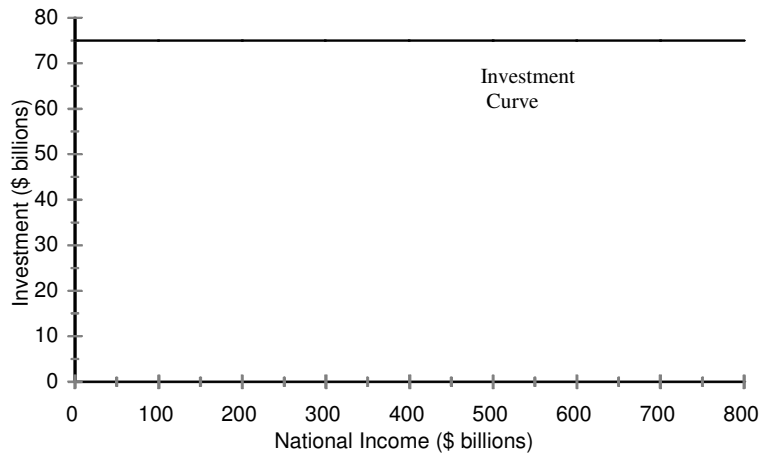
Now let's derive the saving function and graph the saving curve. We know that saving is the amount of national income that isn't spent on consumption. Therefore, national income minus consumption is equal to saving. Algebraically, we have $Y - C = S$, where S is saving. Substituting our expression $a + bY$ for C in the equation we have $S = Y - (a + bY)$. Factoring and rearranging terms, the saving equation can be written as $S = -a + (1 - b)Y$. In this equation, the vertical intercept is equal to $-a$ and the slope is equal to $1 - b$. Staying with the values for a and b used above for the consumption function, when income is equal to zero, saving is $-\$100$ billion and the slope of the saving function (the marginal propensity to save) is equal to $1 - .75$, or .25. For every \$100 increase in national income, there is a \$25 increase in saving. The saving equation is $S = -100 + .25Y$. The saving curve that corresponds to this saving equation is shown below.



Compare the consumption curve to the saving curve. Suppose that national income is \$800 billion. In the graph of the consumption curve, when national income is \$800 billion, consumption is \$700 billion. Therefore, national income minus consumption ($Y - C$) is \$100 billion. This is the value of saving at the \$800 billion level of national income. The saving curve shows that saving is indeed \$100 billion when national income is \$800 billion.

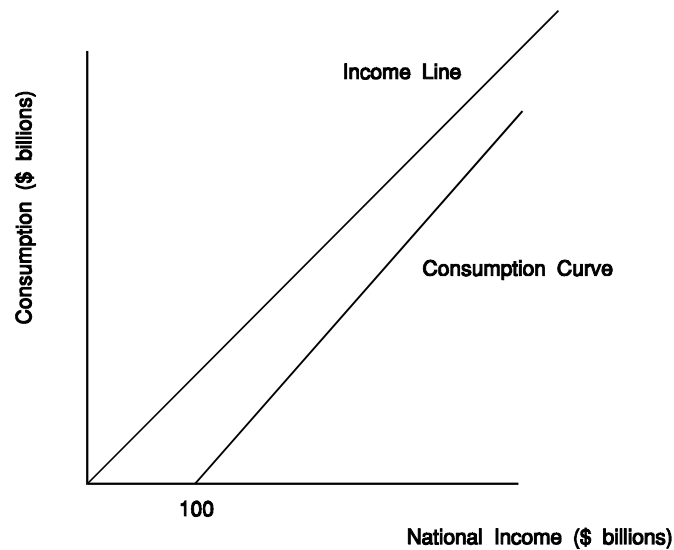
Now find the point in the graph of the saving curve where saving is zero. This point corresponds to a national income of \$400 billion. In the graph of the consumption curve, at an income level of \$400 billion, the consumption curve intersects the income line. National income minus consumption, which is equal to saving, is zero at the \$400 billion income level. You can see the correspondence between the points on the consumption curve and the points on the saving curve at different levels of national income.

Finally, we turn to graphing the investment curve. Investment is considered autonomous, that is, independent of the level of national income. Therefore, the investment curve can be graphed as a horizontal line at the level of autonomous investment. Suppose that the level of autonomous investment is \$75 billion. A graph of this investment curve is shown below.



Graphing Pitfalls

The consumption curve, saving curve, and investment curve are all plotted on axes that measure national income on the horizontal axis and consumption, saving, and investment, respectively, on the vertical axis. Therefore, each of these curves will start from an intercept on the vertical axis. You will never find one of these curves starting from the national income axis. For example, the consumption curve drawn below, starting from the national income axis, makes no sense. What is autonomous consumption in this case? Why aren't there values for consumption when national income is below \$100 billion? The consumption function always originates from an intercept on the vertical axis.



Never draw a consumption curve with the intercept on the national income axis. The intercept for the consumption curve is always on the consumption axis!



True-False Questions — If a statement is false, explain why.

1. Consumption spending decisions are carefully coordinated with production decisions in our economy. (T/F)
2. The most important factor determining people's consumption behavior is the level of their income. (T/F)
3. Keynes's absolute income hypothesis asserts that as national income increases, consumption increases, but at an increasing rate. (T/F)
4. Keynes believed that the marginal propensity to consume is constant. (T/F)
5. Simon Kuznets's data supported the idea that the marginal propensity to consume is constant. (T/F)
6. The relative income hypothesis suggests that the rich have relatively high MPCs and the poor have relatively low MPCs. (T/F)
7. If all people's incomes increase at the same rate, then their relative incomes increase as well. (T/F)
8. The life-cycle hypothesis suggests that consumption fluctuates less than income over a person's life. (T/F)

9. The expectation that the price level will increase induces consumers to save less and consume more now, which causes the consumption function to shift upward. (T/F)
10. If autonomous consumption increases, then the consumption curve shifts up and the saving function shifts down. (T/F)
11. An increase in interest rates shifts the consumption curve upward. (T/F)
12. We can determine consumption spending for any income level if we know the level of autonomous consumption and the marginal propensity to consume. (T/F)
13. The saving curve crosses the national income axis at the level of income where the consumption curve crosses the income line. (T/F)
14. Intended investment will increase when new technology is introduced. (T/F)
15. Because intended investment is related to the level of national income, it is called autonomous investment. (T/F)

Multiple-Choice Questions

1. All of the following are characteristics of intended investment **except** that
 - a. its level is influenced by the rate of capacity utilization
 - b. as the interest rate falls, the quantity of intended investment increases
 - c. its size is dependent on the level of national income
 - d. it is by nature volatile
 - e. its level is influenced by the introduction of new technologies
2. Milton Friedman proposed the
 - a. permanent income hypothesis
 - b. life-cycle hypothesis
 - c. absolute income hypothesis
 - d. relative income hypothesis
 - e. saving equals investment hypothesis
3. At a specific level of national income, saving can be measured by
 - a. the MPS multiplied by the level of national income
 - b. $1 + MPC$ multiplied by the level of national income
 - c. the vertical distance between the income line and the consumption function
 - d. the vertical distance between the consumption function and the saving function
 - e. $1 - MPC$ multiplied by the level of national income

4. The theory of consumption which argues that consumption is based on a household's long-run estimate of their income is called the
 - a. relative income hypothesis
 - b. Duesenberry theory
 - c. permanent income hypothesis
 - d. life-cycle hypothesis
 - e. absolute income hypothesis
5. All of the following are examples of Friedman's concept of transitory income concept **except**
 - a. a jockey winning the Triple Crown — the Kentucky Derby, the Preakness, and Belmont — in one year
 - b. a \$10 million winner of the Texas lottery
 - c. a farmer whose crops are wiped out by a drought
 - d. a physician experiencing a 20-fold increase in her patient load during a one-year epidemic
 - e. David Letterman's \$40 million salary at CBS
6. The marginal propensity to save (MPS)
 - a. plus the MPC = national income
 - b. plus the MPC = one
 - c. plus intended investment = one
 - d. minus national income = consumption
 - e. represents the economy's level of savings
7. The life-cycle hypothesis on consumption behavior suggests that people at various stages of the life cycle,
 - a. spend everything they earn so saving ends up at zero
 - b. increase their marginal propensity to consume as income increases
 - c. decrease their marginal propensity to consume as income increases
 - d. have differing MPCs, which is still consistent with a constant MPC for the economy
 - e. consume according to class status
8. Because intended investment is independent of the level of national income, we graph the investment curve as
 - a. downward sloping
 - b. upward sloping
 - c. horizontal
 - d. vertical
 - e. diagonal
9. The change in consumption divided by the change in income is
 - a. the relative income hypothesis
 - b. the marginal propensity to consume
 - c. equal to $a + bY$
 - d. equal to $1 + MPS$
 - e. equal to autonomous consumption
10. Keynes's absolute income hypothesis cannot be correct because studies have shown that
 - a. as disposable income increases, consumption increases at a diminishing rate
 - b. the marginal propensity to consume is constant
 - c. rich households save a larger fraction of additional income than poor households
 - d. income is never absolute and thus a hypothesis can't be formed
 - e. autonomous consumption is zero

11. Autonomous consumption refers to
 - a. MPCs that are less than one
 - b. MPCs that are greater than one
 - c. consumption that is independent of the level of income
 - d. permanent consumption associated with Friedman's permanent income hypothesis
 - e. transitory consumption associated with Friedman's permanent income hypothesis
12. Shifts in the consumption curve are caused by all of the following **except** changes in
 - a. asset holdings
 - b. income
 - c. price level expectations
 - d. credit availability
 - e. interest rates
13. If the consumption curve is drawn through the origin,
 - a. consumption and income are the same
 - b. the marginal propensity to consume is zero
 - c. autonomous saving is very high
 - d. autonomous consumption is zero
 - e. the marginal propensity to consume will decrease as income increases
14. If the government increases income taxes, the
 - a. intended investment curve shifts upward
 - b. consumption curve shifts upward
 - c. consumption curve shifts downward
 - d. national income decreases because people's after-tax income has fallen
 - e. actual investment curve shifts downward
15. When the $MPS = 0.30$ and autonomous consumption is \$30 billion, then
 - a. the $MPC = 0.30$
 - b. consumption spending = \$10 billion
 - c. consumption spending = \$900 billion
 - d. the $MPC = 0.70$
 - e. the $MPC = 1.00$
16. Research regarding the relationship between consumption and the level of national income shows that the marginal propensity to consume
 - a. increases as income increases
 - b. decreases as income increases just as Keynes predicted
 - c. is constant as income increases
 - d. is higher for workers in their peak income earning years than for retirees
 - e. is lower for young people who have just finished college
17. The demand curve for investment is downward sloping. When it is graphed, it shows _____ on the horizontal axis and _____ on the vertical axis.
 - a. income; investment
 - b. investment; income
 - c. investment; the interest rate
 - d. the interest rate; investment
 - e. income; the interest rate

18. Which of the following is not a determinant of autonomous investment?
- income
 - the level of technology
 - the interest rate
 - expectations of future economic growth
 - the rate of capacity utilization
19. If producers expect economic growth to be more rapid in the future, then it is likely that
- saving will decrease
 - interest rates will decrease
 - the investment curve will shift up
 - the marginal propensity to consume will decrease
 - autonomous consumption will decrease
20. If stock market prices increase dramatically so that those who own stock perceive that their wealth has increased, then, *ceteris paribus*
- the consumption function shifts downward because saving increases
 - intended investment increases because it is now more profitable
 - the saving curve shifts upward
 - the saving curve is unchanged because only consumption is affected
 - the consumption function shifts upward

The following questions relate to the historical perspectives and the appendix in the text.

21. Keynes's approach to dealing with the Great Depression of the 1930s differed from the conventional wisdom of classical economics in that
- he argued the depression was temporary and the economy would recover on its own
 - he advanced long-run economic policies to end the depression whereas classical economics focused on the short run
 - he pushed for harsher reparations from Germany to provide financial resources for the British economic recovery
 - he believed the economy would not recover on its own and that policies should focus on the short run
 - he advanced a theory of probability that could be applied to economics
22. Which of the following is not a reason for saving according to either Alfred Marshall or Christopher Carroll?
- family affection
 - to increase the wealth of the family for future generations
 - to acquire power
 - to increase the level of consumption achieved during retirement
 - to acquire social status
23. Research suggests that the short-run consumption curve _____ while the long-run consumption curve _____.
- is quite steep; is very flat
 - intersects the vertical axis above the origin; runs through the origin
 - has a large average propensity to consume; has a large marginal propensity to consume
 - has a large marginal propensity to consume; has a small marginal propensity to consume
 - has a large marginal propensity to consume; has a large average propensity to consume

Fill in the Blanks

1. The consumption function is a _____ relationship stating that a(n) _____ in income _____ consumption.
2. Friedman developed the permanent income hypothesis that distinguishes between _____ income and _____ income and states that consumption is dependent on _____ income.
3. Empirical research done by Simon Kuznets showed that contrary to Keynes's _____, the nation's _____ is constant.
4. The consumption function shifts due to changes in _____, _____, _____, and _____.
5. Because changes in investment tend to be unrelated to the level of _____, investment is regarded as _____.



Discussion Questions

1. Suppose that Keynes's absolute income hypothesis had been shown to be correct. What would happen to consumption spending as national income increased in a country? How would producers respond to this change in consumption spending and what would be the likely impact on GDP growth over time?
2. Suppose that your boss gives you a year-end bonus and you count it as transitory income. Suppose that this happens three years in a row. Would you continue to count this income as transitory? Why or why not?
3. Why does the relative income hypothesis predict that the MPC will be constant as national income increases?
4. What is the difference between a shift in the consumption curve and a movement along the consumption curve?

Everyday Applications

Duesenberry, Friedman, and Modigliani each presented very different hypotheses to explain consumption spending behavior. Apply each theory to your own family's experience. How well do these economists' ideas describe your family's consumption behavior? Does one theory seem to fit better than the others?

Economics Online



Most of you are entering young adulthood — the stage of the life cycle where people typically accumulate substantial debt. You may be incurring debt with your college education. Buying a home and a new car with borrowed funds are other ways that young adults add to their debt levels. You can generate considerable information about these key life-cycle consumption spending decisions from the Web. HSH Associates supports a site (<http://www.hsh.com/calc-amort.html>) that provides information about monthly payments over time for purchasing a home, a car, and other items purchased with loans.

Answers to Questions

Key Terms Quiz

- | | | |
|-------|-------|-------|
| a. 4 | f. 5 | k. 6 |
| b. 7 | g. 8 | l. 9 |
| c. 12 | h. 1 | m. 3 |
| d. 2 | i. 14 | n. 11 |
| e. 10 | j. 13 | |

True-False Questions

1. False. Consumption spending and consumption-production decisions are made independently of each other.
2. True
3. False. The absolute income hypothesis states that as national income increases, consumption increases at a decreasing rate.
4. False. Keynes believed that the marginal propensity to consume decreases as income increases.
5. True
6. False. The relative income hypothesis suggests that the poor have high MPCs and the rich have relatively low MPCs. The economy's MPC is constant, however.
7. False. If all incomes go up at the same rate, relative income is unchanged.
8. True
9. True
10. True
11. False. Consumer purchases of costly durable goods, which are typically financed, will fall, and the consumption curve shifts down.
12. True
13. True
14. True
15. False. Investment is called autonomous because it is unrelated to the level of income.

Multiple-Choice Questions

- | | | | | |
|------|-------|-------|-------|-------|
| 1. c | 6. b | 11. c | 16. e | 21. d |
| 2. a | 7. d | 12. b | 17. c | 22. d |
| 3. c | 8. c | 13. d | 18. a | 23. b |
| 4. c | 9. b | 14. c | 19. c | |
| 5. e | 10. b | 15. d | 20. e | |

Fill in the Blanks

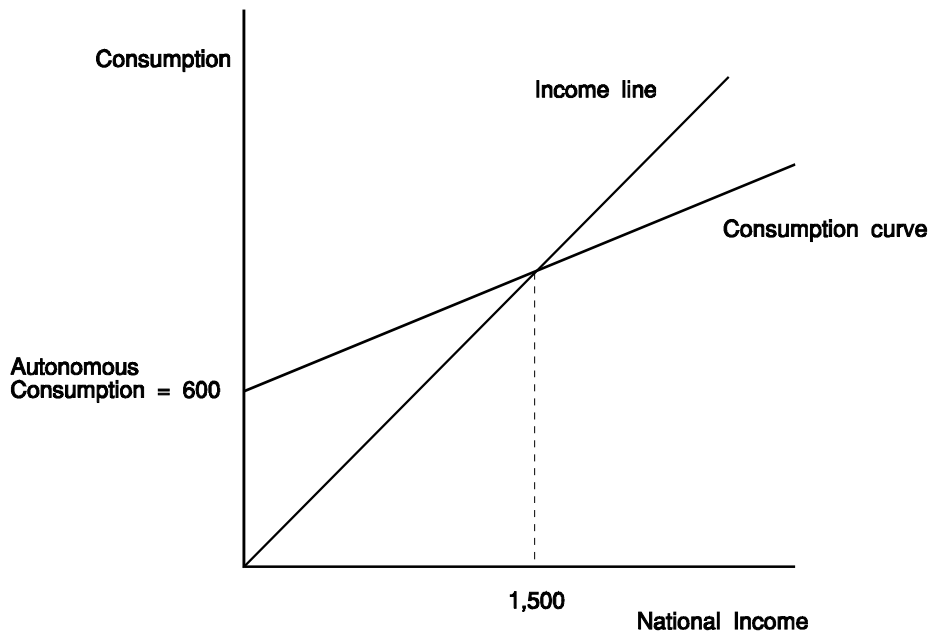
- causal; increase; increases
- permanent; transitory; permanent
- absolute income hypothesis; MPC
- real asset and money holdings; expectations of changes in the price level; credit and interest rates; taxes
- national income; autonomous

Discussion Questions

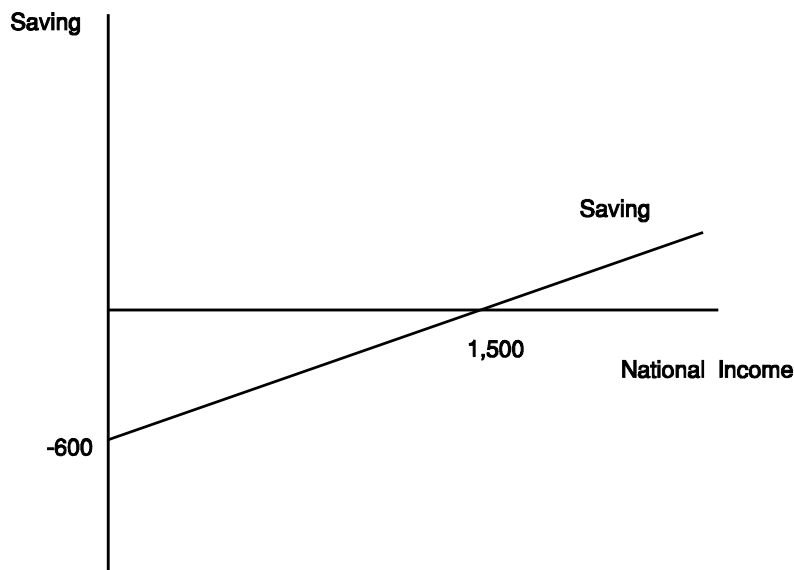
- Because Keynes's absolute income hypothesis for consumption spending states that the MPC decreases as national income increases, consumption spending would tend to rise at a rate slower than national income. Producers would probably note unsold goods piling up in their warehouses and would respond by slowing production. GDP growth would likely slow down over time as a result.
- Probably not. Once income that is initially perceived to be transitory is received in consecutive years, it becomes part of permanent income. Is three years enough? Would you expect to earn a bonus every year? If so, this year-end bonus becomes a part of permanent income.
- The relative income hypothesis states that the MPC differs between social classes with the poor and middle classes having a higher MPC than upper-class households. However, as national income increases, if everyone's income rises at roughly the same rate, the poor are still poor in relative terms. Therefore they will still have a higher MPC than those who earn higher incomes. On average, for the entire spectrum of social classes, the MPC remains unchanged.
- A shift in the consumption curve is caused by a change in one or more of the determinants of consumption — real asset and money holdings, expectations of changes in the price level, credit and interest rates, and taxes. Movements along the consumption function are caused by changes in national income. If national income increases, then consumption increases at a rate determined by the marginal propensity to consume — the slope of the consumption function.

Problems

- The consumption equation is $C = 600 + .6Y$.
 - The graph of this equation is shown on the following page..



- c. The consumption curve intersects the income curve at the \$1,500 level of national income. This can be calculated by setting consumption equal to national income and solving for Y . We can write $C = 600 + .6Y = Y$. Then, $600 = .4Y$ and $Y = 1,500$.
- 2. a. Because we know that the $MPC + MPS = 1$, the MPS must be $.4$ if the $MPC = .6$.
- b. Saving will be zero at the \$1,500 level of national income. This is because saving is that part of national income not spent on consumption. If consumption is equal to national income, then saving must be zero. The saving curve must run through the point \$1,500 on the national income axis. In order to draw the saving curve, we need one more point. We can use the fact that the slope is $.4$ to find another point. Suppose there is a change in national income equal to $-1,500$. Then, $.4 = \text{change in saving} / -1,500$. The change in saving is equal to $.4 \times -1,500 = -600$. When income is zero, saving is -600 . A sketch of the saving curve is shown below.



Homework Questions

True-False Questions — If a statement is false, explain why.

1. In the Keynesian aggregate expenditures model, investment is dependent on the level of income. (T/F)
2. The relative income hypothesis holds that poorer households have higher marginal propensities to consume than do middle class and wealthy households. (T/F)
3. Contrary to Keynes's assertion that consumption increases at a slower rate than income, Kuznets used data to show that consumption increases in proportion to income at a constant rate. (T/F)
4. An increase in autonomous consumption will cause the saving function to shift downward. (T/F)
5. Technological advance saves resources, hence the autonomous investment function shifts downward. (T/F)

Multiple-Choice Questions

1. Research has demonstrated that as national income increases, consumption increases at a constant rate that is equal to
 - a. marginal propensity to consume
 - b. the average propensity to consume
 - c. $1 + \text{MPS}$
 - d. $1 + \text{MPC}$
 - e. permanent consumption
2. When the $\text{MPS} = 0.30$ and autonomous consumption is \$30 billion, then the consumption equation is
 - a. $C = 90 + .3Y$
 - b. $C = 10 + 30Y$
 - c. $C = 0.3 + 30Y$
 - d. $C = 30 + 0.3Y$
 - e. $C = 30 + 0.7Y$
3. Suppose that the consumption equation is given by $C = 30 + .7Y$ (in billions of dollars). Consumption is equal to income when income is equal to
 - a. \$70 billion
 - b. \$100 billion
 - c. \$90 billion
 - d. \$30 billion
 - e. \$10 billion
4. One conclusion to be drawn from the life-cycle hypothesis is that consumption is
 - a. a decreasing function of income for the entire economy
 - b. a smaller fraction of income during a person's peak income years
 - c. determined by one's class status
 - d. very responsive to changes in transitory income
 - e. virtually impossible to model because of its volatile nature

5. According to the permanent income hypothesis, consumption depends primarily on
- the regular income a person expects to earn annually
 - transitory income
 - changes in permanent income
 - changes in transitory income
 - a person's estimate of their peak income during the years just preceding retirement

Discussion Questions/Problems

- Why do people save?
- Suppose the consumption equation is given by $C = 100 + .75Y$.
 - Write an equation for saving that corresponds to this consumption equation.
 - Sketch a graph for the saving curve. Calculate and label on your graph the level of national income where saving is equal to zero.