

***International Economics, 10e (Krugman/Obstfeld/Melitz)***  
**Chapter 1 Introduction**

**1.1 What Is International Economics About?**

1) Historians of economic thought often describe \_\_\_\_\_ written by \_\_\_\_\_ and published in \_\_\_\_\_ as the first real exposition of an economic model.

- A) "Of the Balance of Trade," David Hume, 1776
- B) "Wealth of Nations," David Hume, 1758
- C) "Wealth of Nations," Adam Smith, 1758
- D) "Wealth of Nations," Adam Smith, 1776
- E) "Of the Balance of Trade," David Hume, 1758

Answer: E

Page Ref: 1

Difficulty: Easy

2) From 1960 to 2012

- A) the U.S. economy roughly tripled in size.
- B) U.S. imports roughly tripled in size.
- C) the share of US Trade in the global economy roughly tripled in size.
- D) U.S. Imports roughly tripled as compared to U.S. exports.
- E) U.S. exports roughly tripled in size.

Answer: C

Page Ref: 1

Difficulty: Easy

3) The United States is less dependent on trade than most other countries because

- A) the United States is a relatively large country with diverse resources.
- B) the United States is a "Superpower."
- C) the military power of the United States makes it less dependent on anything.
- D) the United States invests in many other countries.
- E) many countries invest in the United States.

Answer: A

Page Ref: 2

Difficulty: Easy

4) Theories of international economics from the 18th and 19th Centuries are

- A) not relevant to current policy analysis.
- B) only of moderate relevance in today's modern international economy.
- C) highly relevant in today's modern international economy.
- D) the only theories that actually relevant to modern international economy.
- E) not well understood by modern mathematically oriented theorists.

Answer: C

Page Ref: 2

Difficulty: Easy

5) An important insight of international trade theory is that when two countries engage in voluntary trade

A) one country always benefits at the expense of the other.

B) it is almost always beneficial to both countries.

C) it only benefits the low wage country.

D) it only benefits the high wage country.

E) it is almost never beneficial to both countries.

Answer: B

Page Ref: 4

Difficulty: Easy

✓ 6) If there are large disparities in wage levels between countries, then

A) trade is likely to be harmful to both countries.

B) trade is likely to be harmful to the country with the high wages.

C) trade is likely to be harmful to the country with the low wages.

D) trade is likely to be harmful to neither country.

E) trade is likely to have no effect on either country.

Answer: D

Page Ref: 4

Difficulty: Easy

7) The benefits of international trade are derived from trade in

A) tangible goods only.

B) intangible goods only.

C) goods but not services.

D) services but not goods.

E) anything of value.

Answer: E

Page Ref: 4

Difficulty: Easy

8) Which of the following does NOT belong?

A) NAFTA

B) Uruguay Round

C) World Trade Organization

D) non-tariff barriers

E) major free trade agreements of the 1990s

Answer: D

Page Ref: 5-6

Difficulty: Easy

9) International economics \_\_\_\_\_ use the same fundamental methods of analysis as other branches of economics, because \_\_\_\_\_.

A) does not, the level of complexity of international issues is unique

B) does not, the interactions associated with international economic relations is highly mathematical

C) does not, international economics takes a different perspective on economic issues

D) does not, international economic policy requires cooperation with other countries

E) does, the motives and behavior of individuals are the same in international trade as they are in domestic transactions

Answer: E

Page Ref: 3

Difficulty: Easy

10) Because the Constitution forbids restraints on interstate trade

A) the U.S. may not impose tariffs on imports from NAFTA countries.

B) the U.S. may not affect the international value of the \$ U.S.

C) the U.S. may not put restraints on foreign investments in California if it involves a financial intermediary in New York State.

D) the U.S. may not impose export duties.

E) the U.S. may not disrupt commerce between Florida and Hawaii.

Answer: E

Page Ref: 3

Difficulty: Easy

11) Which of the following is NOT a major concern of international economic theory?

A) protectionism

B) the balance of payments

C) exchange rate determination

D) bilateral trade relations with China

E) the international capital market

Answer: D

Page Ref: 3

Difficulty: Easy

12) "Trade is generally harmful if there are large disparities between countries in wages."

A) This is generally true.

B) This is generally false.

C) Trade theory has nothing to say about this issue.

D) This is true if the trade partner ignores child labor laws.

E) This is true if the trade partner uses prison labor.

Answer: B

Page Ref: 4

Difficulty: Easy

13) Who sells what to whom

A) has been a major preoccupation of international economics.

B) is not a valid concern of international economics.

C) is not considered important for government foreign trade policy since such decisions are made in the private competitive market.

D) is determined by political rather than economic factors.

E) is less important than international economic theory.

Answer: A

Page Ref: 5

Difficulty: Easy

14) The insight that patterns of trade are primarily determined by international differences in labor productivity was first proposed by

A) Adam Smith.

B) David Hume.

C) David Ricardo.

D) Eli Heckscher.

E) Lerner and Samuelson.

Answer: A

Page Ref: 5

Difficulty: Easy

15) After World War II, the United States has pursued a broad policy of

A) strengthening "Fortress America" protectionism.

B) removing barriers to international trade.

C) isolating Iran and other members of the "axis of evil."

D) protecting the U.S. from the economic impact of oil producers.

E) restricting trade of manufactured goods.

Answer: B

Page Ref: 5

Difficulty: Easy

16) The balance of payments has become a central issue for the United States because

A) when the balance of payments is not balanced, society is unbalanced.

B) the U.S. economy cannot grow when the balance of payments is in deficit.

C) the U.S. has run huge trade deficits in every year since 1982.

D) the U.S. never experienced a surplus in its balance of payments.

E) the U.S. once ran a large trade surplus of about \$40 billion.

Answer: C

Page Ref: 6

Difficulty: Easy

17) The euro, a common currency for most of the nations of Western Europe, was introduced

A) before 1900.

B) before 1990.

C) before 2000.

D) in order to snub the pride of the U.S.

E) in order to fix currencies in terms of the U.S dollar.

Answer: C

Page Ref: 6

Difficulty: Easy

18) During the first three years of its existence, the euro

A) depreciated against the \$U.S.

B) maintained a strict parity with the \$U.S.

C) strengthened against the \$U.S.

D) proved to be an impossible dream.

E) exported exclusively to the U.S.

Answer: A

Page Ref: 6

Difficulty: Easy

✓ 19) The study of exchange rate determination is a relatively new part of international economics, since

A) for much of the past century, exchange rates were fixed by government action.

B) the calculations required for this were not possible before modern computers became available.

C) economic theory developed by David Hume demonstrated that real exchange rates remain fixed over time.

D) dynamic overshooting asset pricing models are a recent theoretical development.

E) the exchange rate never fluctuates.

Answer: A

Page Ref: 7

Difficulty: Easy

✓ 20) A fundamental problem in international economics is how to produce

A) a perfect degree of monetary harmony.

B) an acceptable degree of harmony among the international trade policies of different countries.

C) a world government that can harmonize trade and monetary policies

D) a counter-cyclical monetary policy so that all countries will not be adversely affected by a financial crisis in one country.

E) a worldwide form of currency.

Answer: B

Page Ref: 7

Difficulty: Easy

21) For almost 70 years international trade policies have been governed

A) by the World Trade Organization.

B) by the International Monetary Fund.

C) by the World.

D) by an international treaty known as the General Agreement on Tariffs and Trade (GATT).

E) by the North American Free Trade Agreement (NAFTA).

Answer: D

Page Ref: 7

Difficulty: Easy

✓ 22) The international capital market is

A) the place where you can rent earth moving equipment anywhere in the world.

B) a set of arrangements by which individuals and firms exchange money now for promises to pay in the future.

C) the arrangement where banks build up their capital by borrowing from the Central Bank.

D) the place where emerging economies accept capital invested by banks.

E) exclusively concerned with the debt crisis that ended in the 1990s.

Answer: B

Page Ref: 8

Difficulty: Easy

23) International capital markets experience a kind of risk not faced in domestic capital markets, namely

A) "economic meltdown" risk.

B) Flood and hurricane crisis risk.

C) the risk of unexpected downgrading of assets by Standard and Poor.

D) the risk of exchange rate fluctuations.

E) the risk of political upheaval.

Answer: D

Page Ref: 6-7

Difficulty: Easy

24) Since 1994, trade rules have been enforced by

A) the WTO.

B) the G10.

C) the GATT.

D) The U.S. Congress.

E) the European Union.

Answer: A

Page Ref: 5-6

Difficulty: Easy

25) In 1998 an economic and financial crisis in South Korea caused it to experience

- A) a surplus in their balance of payments.
- B) a deficit in their balance of payments.
- C) a balanced balance of payments.
- D) an unbalanced balance of payments.
- E) a lull in international trade.

Answer: A

Page Ref: 6

Difficulty: Easy

26) In 1999, demonstrators representing a mix of traditional and new ideologies disrupted a major international trade meeting in Seattle of

- A) the OECD.
- B) NAFTA.
- C) the WTO.
- D) GATT.
- E) the G8.

Answer: C

Page Ref: 6

Difficulty: Easy

✓ 27) International Economists cannot discuss the effects of international trade or recommend changes in government policies toward trade with any confidence unless they know

- A) their theory is the best available.
- B) their theory is internally consistent.
- C) their theory passes the "reasonable person" legal criteria.
- D) their theory is good enough to explain the international trade that is actually observed.
- E) their theory accounts for China's unique position in international trade.

Answer: D

Page Ref: 5

Difficulty: Easy

28) Trade theorists have proven that the gains from international trade

- A) must raise the economic welfare of every country engaged in trade.
- B) must raise the economic welfare of everyone in every country engaged in trade.
- C) must harm owners of "specific" factors of production.
- D) will always help "winners" by an amount exceeding the losses of "losers."
- E) usually outweigh the benefits of protectionist policies.

Answer: E

Page Ref: 4

Difficulty: Easy

29) The international financial crisis of 2007 was the result of

- A) failure of the Euro currency.
- B) runaway inflation in the U.S.
- C) a deep global recession.
- D) the collapse of global currency markets.
- E) defaults on U.S. mortgage-backed securities.

Answer: E

Page Ref: 8

Difficulty: Easy

30) In September 2010, the finance minister of \_\_\_\_\_ declared that the world was "in the midst of an international currency war" because of rapid appreciation in the value of the country's currency, the \_\_\_\_\_.

- A) England; pound sterling
- B) Germany; euro
- C) Japan; yen
- D) China; renminbi
- E) Brazil; Real

Answer: E

Page Ref: 8

Difficulty: Easy

## 1.2 International Economics: Trade and Money

1) Cost-benefit analysis of international trade

- A) is basically useless.
- B) is empirically intractable.
- C) focuses attention primarily on conflicts of interest within countries.
- D) focuses attention on conflicts of interest between countries.
- E) never leads to government intervention in international trade.

Answer: C

Page Ref: 8-9

Difficulty: Easy

2) An improvement in a country's balance of payments means a decrease in its balance of payments deficit, or an increase in its surplus. In fact we know that a surplus in a balance of payments

- A) is always beneficial.
- B) is usually beneficial.
- C) is never harmful.
- D) is sometimes harmful.
- E) is always harmful.

Answer: D

Page Ref: 8-9

Difficulty: Easy



3) The GATT is

- A) an international treaty.
- B) an international U.N. agency.
- C) an international IMF agency.
- D) a U.S. government agency.
- E) a collection of tariffs.

Answer: A

Page Ref: 8-9

Difficulty: Easy

4) The international debt crisis of early 1982 was precipitated when \_\_\_\_\_ could not pay its international debts.

- A) Russia
- B) Mexico
- C) Brazil
- D) Malaysia
- E) China

Answer: B

Page Ref: 8-9

Difficulty: Easy

✓ 5) International economics can be divided into two broad sub-fields

- A) macro and micro.
- B) developed and less developed.
- C) monetary and barter.
- D) international trade and international money.
- E) static and dynamic.

Answer: D

Page Ref: 8-9

Difficulty: Easy

✓ 6) International monetary analysis focuses on

- A) the real side of the international economy.
- B) the international trade side of the international economy.
- C) the international investment side of the international economy.
- D) the issues of international cooperation between Central Banks.
- E) the monetary side of the international economy, such as currency exchange.

Answer: E

Page Ref: 8-9

Difficulty: Easy

✓ 7) The distinction between international trade and international money is not entirely clear because

A) real developments in the trade accounts do not have monetary implications.

B) the balance of payments includes only real measures.

C) developments caused by purely monetary changes have no real effects.

D) trade models focus on real, or barter relationships.

E) most international trade involves monetary transactions.

Answer: E

Page Ref: 8-9

Difficulty: Easy

8) It is argued that global trade tends to be more important to countries with smaller economies than the U.S. Is this empirically verified?

Answer: Yes. Figure 1-2 shows exports and imports as a percentage of national income in the U.S. and five other countries and notes that "International trade is even more important to most other countries than it is to the U.S."

Page Ref: 8-9

Difficulty: Easy

9) It is argued that if a rich high wage country such as the United States were to expand trade with a relatively poor and low wage country such as Mexico, then U.S. industry would migrate south, and U.S. wages would fall to the level of Mexico's. What do you think about this argument?

Answer: The student may think anything. The purpose of the question is to set up a discussion, which will lead to the models in the following chapters.

Page Ref: 8-9

Difficulty: Moderate

10) How are the patterns of international trade, that is the pattern of what different countries export and import, explained?

Answer: Climate explains why Brazil exports coffee. Natural resources explain why Saudi Arabia exports oil. More generally, differences in labor productivity and in the availability of land, labor, and capital within different countries explain patterns of trade. More recent research suggests that there is a significant random component involved, as well.

Page Ref: 8-9

Difficulty: Moderate

11) International trade theory implies that international trade is beneficial to all trading countries. However, casual observation leads to the conclusion that official obstruction of international trade flows is widespread. How might you reconcile these two facts?

Answer: This question is meant to allow students to offer preliminary discussions of issues, which will be explored in depth later in the book.

Page Ref: 8-9

Difficulty: Moderate

**International Economics, 10e (Krugman/Obstfeld/Melitz)**  
**Chapter 13 (Finance Ch 2) National Income Accounting and the Balance of Payments**

**13.1 The National Income Accounts**

1) A country's gross national product (GNP) is

A) the value of all final goods and services produced by its factors of production and sold on the market in a given time period.

B) the value of all intermediate goods and services produced by its factors of production and sold on the market in a given time period.

C) the value of all final goods produced by its factors of production and sold on the market in a given time period.

D) the value of all final goods and services produced by its factors of production and sold on the market.

E) the value of all final goods and services produced by its factors of production, excluding land, and sold on the market in a given time period.

Answer: A

Page Ref: 313-318

Difficulty: Easy

✓ 2) For most macroeconomists

A) national income accounts and national output accounts are equal to each other.

B) national income accounts exceed national output accounts.

C) national output accounts exceed national income accounts.

D) it is impossible to tell whether national income accounts equal to national output accounts.

E) national income accounts is much more important than national output accounts.

Answer: A

Page Ref: 313-318

Difficulty: Easy

3) For most macroeconomists

A) gross national income and gross national product are the same.

B) gross national income exceeds gross national product.

C) gross national product exceeds gross national product.

D) it is hard to tell whether gross national income equal gross national product.

E) gross national product is much more important than gross national income.

Answer: A

Page Ref: 313-318

Difficulty: Easy

4) The highest component of GNP is

- A) the current account.
- B) investment.
- C) government purchases.
- D) consumption.**
- E) trade.

Answer: D

Page Ref: 313-318

Difficulty: Easy

✓ 5) An example of how GNP accounts for services provided by foreign-owned capital (and GDP does not) is

- A) earnings of a Spanish factory with British owners counts only in Spain's GDP.
- B) earnings of a Spanish factory with British owners counts only in Britain's GNP.
- C) earnings of a Spanish factory counts in Spain's GNP but are part of Britain's GDP.
- D) earnings of a Spanish factory counts in Spain's GDP but are part of Britain's GNP.**
- E) earnings of a Spanish factory counts in Spain's GNP but not in Britain's GDP or GNP.

Answer: D

Page Ref: 313-318

Difficulty: Easy

✓ 6) The sale of

- A) a used textbook does enter GNP.
- B) a used textbook does not enter GNP, but the sale of a used house does.
- C) both a used textbook and a used house do not enter GNP.**
- D) a used house does not enter GNP, but the sale of a used book does.
- E) the GNP does not include sale of used items priced below \$1000.

Answer: C

Page Ref: 313-318

Difficulty: Easy

7) Which one of the following statements is the MOST accurate?

- A) The sale of a used textbook does generate income for factors of production.
- B) The sale of a used textbook does not generate income for any factor of production.**
- C) The sale of a used textbook sometimes does and sometimes does not generate income for factors of production.
- D) It is hard to tell whether a sale of a used textbook does or does not generate income for factors of production.
- E) The sale of a used textbook is a part of the GNP.

Answer: B

Page Ref: 313-318

Difficulty: Easy

✓ 8) Which one of the following statements is the MOST accurate?

- A) GNP plus depreciation is called net national product (NNP).
- B) GNP less depreciation is called net national product (NNP).
- C) GNP less depreciation is called net factor product (NFP).
- D) GDP plus depreciation is called net national product (NNP).
- E) GDP less depreciation is called net national product (NNP).

Answer: B

Page Ref: 313-318

Difficulty: Easy

✓ 9) National income equals GNP

- A) less depreciation, less net unilateral transfers, less indirect business taxes.
- B) less depreciation, plus net unilateral transfers, plus indirect business taxes.
- C) less depreciation, less net unilateral transfers, plus indirect business taxes.
- D) plus depreciation, plus net unilateral transfers, less indirect business taxes.
- E) less depreciation, plus net unilateral transfers, less indirect business taxes.

Answer: E

Page Ref: 313-318

Difficulty: Easy

10) The United States began to report its gross domestic product (GDP) only since

- A) 1900.
- B) 1921.
- C) 1931.
- D) 1941.
- E) 1991.

Answer: E

Page Ref: 313-318

Difficulty: Easy

11) GDP is supposed to measure

- A) the volume of production within a country's borders.
- B) the volume of services generated within a country's borders.
- C) the volume of production of a country's output.
- D) GNP plus depreciation.
- E) net unilateral transfers from foreigners.

Answer: A

Page Ref: 313-318

Difficulty: Easy

12) GNP equals GDP

- A) minus net receipts of factor income from the rest of the world.
- B) plus receipts of factor income from the rest of the world.
- C) minus receipts of factor income from the rest of the world.
- D) plus net receipts of factor income from the rest of the world.
- E) minus depreciation.

Answer: D

Page Ref: 313-318

Difficulty: Easy

✓ 13) Movements in GDP

- A) and GNP usually do not differ greatly.
- B) and GNP usually do not differ greatly, as a practical matter.
- C) and GNP usually do differ greatly.
- D) are usually smaller than those of GNP movements, in practice.
- E) are inversely proportional to movements in GNP.

Answer: B

Page Ref: 313-318

Difficulty: Easy

14) In 2006, the United States had

- A) a surplus in the current account.
- B) a balance in the current account.
- C) a deficit in the current account.
- D) From 2006 data, it is too difficult to determine whether a surplus or a deficit existed in the current account.
- E) a positive balance of net financial flows.

Answer: C

Page Ref: 313-318

Difficulty: Easy

✓ 15) Net unilateral transfers

- A) are part of a national income.
- B) are part of a country's product.
- C) must be added to NNP in calculations of national income.
- D) are part of a country's GNP.
- E) Only A and C.

Answer: E

Page Ref: 313-318

Difficulty: Easy

- 16) GDP is different than GNP in that
- A) it accounts for net unilateral transfers.
  - B) it does not account for indirect business taxes.
  - C) it does not account for a country's production using services with foreign-owned capital.
  - D) it accounts for depreciation.
  - E) it is unhelpful when tracking national income.

Answer: C

Page Ref: 313-318

Difficulty: Easy

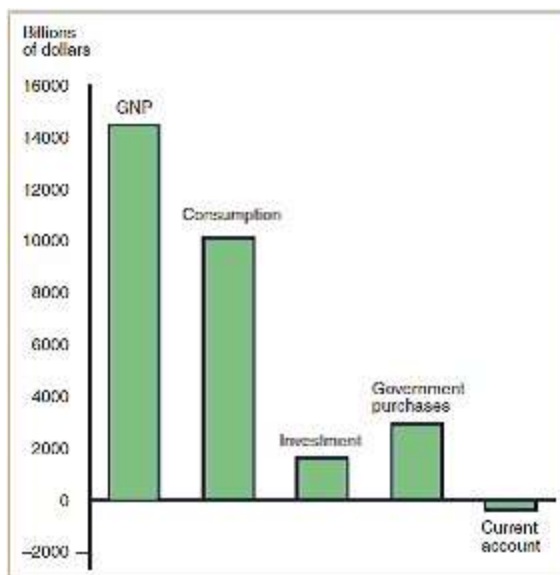
- 17) What are the main aspects of economic life that macroeconomics analysis is most concerned with?

Answer: There are four main aspects: unemployment, saving, trade imbalances, and money and the price level.

Page Ref: 313-318

Difficulty: Easy

- 18) What can you learn from the figure below (Figure 13-1 from the text) which depicts the U.S. GNP and its components for the year 2009?



Answer: The highest component of GNP is consumption and the U.S. has a negative current balance.

Page Ref: 313-318

Difficulty: Easy

## 13.2 National Income Accounting for an Open Economy

### ✓ 1) Movements in GDP

A) differ greatly from movements in GNP.

**B) do not differ greatly from movements in GNP.**

C) are not allowed to differ at all from movements in GNP by definition.

D) need to be inflation adjusted in order to match movements in GNP.

E) are not relevant to an examination of national income.

Answer: B

Page Ref: 318-326

Difficulty: Easy

### ✓ 2) Purchases of inventories by

A) firms are not counted in investment spending.

**B) firms are also counted in investment spending.**

C) households are also counted in investment spending.

D) households and Firms are also counted in investment spending.

E) foreign consumers are counter in investment spending.

Answer: B

Page Ref: 318-326

Difficulty: Easy

### ✓ 3) In open economies

A) saving and investment are necessarily equal.

B) as in a closed economy, saving and investment are not necessarily equal.

**C) saving and investment are not necessarily equal as they are in a closed economy.**

D) saving and investment are necessarily equal contrary to the case of a closed economy.

E) investment always refers to the domestic stock market.

Answer: C

Page Ref: 318-326

Difficulty: Easy

### 4) Investment is usually

**A) more variable than consumption.**

B) less variable than consumption.

C) as variable as consumption.

D) It is hard to tell from the data whether investment is more or less variable than consumption.

E) a larger component of the GNP than consumption.

Answer: A

Page Ref: 318-326

Difficulty: Easy



5) Government purchases are defined as

- A) only goods purchased by federal, state, or local governments.
- B) all goods and services purchased by the federal government.
- C) all goods and services purchased by the federal or state government.
- D) all goods and services purchased by the federal, state, or local government.
- E) goods and services purchased from the government.

Answer: D

Page Ref: 318-326

Difficulty: Easy

6) Government transfer payments like social security and unemployment benefits are

- A) included in government purchases.
- B) not included in government purchases.
- C) not included in government purchases, but they are included in the consumption component of GNP.
- D) not included in government purchases, but they are part of the investment component of GNP.
- E) included in government purchases but not in the GNP.

Answer: B

Page Ref: 318-326

Difficulty: Easy

7) In 1929, government purchases accounted for

- A) only 18.5 percent of U.S. GNP.
- B) only 8.5 percent of U.S. GNP.
- C) 28.5 percent of U.S. GNP.
- D) 38.5 percent of U.S. GNP.
- E) 48.5 percent of U.S. GNP.

Answer: B

Page Ref: 318-326

Difficulty: Easy

8) Which one of the following expressions is the MOST accurate?

- A)  $CA = EX - IM$
- B)  $CA = IM - EX$
- C)  $CA = EX = IM$
- D)  $CA = EX + IM$
- E)  $CA - IM = EX$

Answer: A

Page Ref: 318-326

Difficulty: Easy

✓ 9) A country's current account

A) balance equals the change in its net foreign wealth.

B) balance equals the change in its foreign wealth.

C) surplus equals the change in its foreign wealth.

D) deficit equals the change in its foreign wealth.

E) balance equals its GNP.

Answer: A

Page Ref: 318-326

Difficulty: Easy

10) The CA is equal to

A)  $Y - (C - I + G)$ .

B)  $Y + (C + I + G)$ .

C)  $Y - (C + I + G)$ .

D)  $Y - (C + I - G)$ .

E)  $Y + (C - I - G)$ .

Answer: A

Page Ref: 318-326

Difficulty: Easy

✓ 11) Which of the following is TRUE?

A) A country with a current account surplus is earning more from its exports than it spends on imports.

B) A country could finance a current account deficit by using previously accumulated foreign wealth to pay for its imports.

C) A country with a current account deficit must be increasing its net foreign debts by the amount of the deficit.

D) We can describe the current account surplus as the difference between income and absorption.

E) All of the above are true of current account balances.

Answer: E

Page Ref: 318-326

Difficulty: Easy

12) Over the 1980s

A) there is no question that a large increase in U.S. foreign assets did occur.

B) there is a question whether a large decrease in U.S. foreign assets did occur.

C) there is no question that a large decrease in U.S. foreign assets did occur.

D) there is no question that there was almost no change in U.S. foreign assets.

E) there is no question that rising exports exceeded U.S. foreign debt.

Answer: C

Page Ref: 318-326

Difficulty: Easy

13) In a closed economy, national saving

A) sometimes equals investment.

B) always equals investment.

C) is always less than investment.

D) is always more than investment.

E) is never equal to investment.

Answer: B

Page Ref: 318-326

Difficulty: Easy

14) For open economies,

A)  $S = I$ .

B)  $S = I + CA$ .

C)  $S = I - CA$ .

D)  $S > I + CA$ .

E)  $S < I + CA$ .

Answer: B

Page Ref: 318-326

Difficulty: Easy

✓ 15) An open economy

A) can save only by building up its capital stock.

B) can save only by acquiring foreign wealth.

C) cannot save either by building up its capital stock or by acquiring foreign wealth.

D) can save either by building up its capital stock or by acquiring foreign wealth.

E) can save by avoiding excessive imports.

Answer: D

Page Ref: 318-326

Difficulty: Easy

16) A closed economy

A) can save either by building up its capital stock or by acquiring foreign wealth.

B) can save only by building up its capital stock.

C) can save only by acquiring foreign wealth.

D) cannot save either by building up its capital stock or by acquiring foreign wealth.

E) can save by avoiding excessive imports.

Answer: B

Page Ref: 318-326

Difficulty: Easy

17) Disposable income is National income

- A) less taxes collected from households and firms by the government.
- B) plus net taxes collected from households and firms by the government.
- C) less net taxes collected from firms by the government.
- D) less net taxes collected from households by the government.
- E) less net taxes collected from households and firms by the government.

Answer: E

Page Ref: 318-326

Difficulty: Easy

✓ 18) Government savings,  $S^g$ , is equal to

- A)  $T - G$ .
- B)  $T + G$ .
- C)  $T = G$ .
- D)  $T + G - I$ .
- E)  $T - G = I$ .

Answer: A

Page Ref: 318-326

Difficulty: Easy

19) Which of the following is FALSE about private savings and government savings?

- A)  $S^P = Y - T - C$
- B) Unlike private saving decisions, government saving decisions are often made with an eye toward their effect on output and employment.
- C) Total savings ( $S$ ) =  $S^P + S^g$ .
- D) The national income identity can help us to analyze the channels through which government saving decisions influence macroeconomic conditions.
- E) None of the above; all statements are true.

Answer: E

Page Ref: 318-326

Difficulty: Easy

20) In a closed economy, private saving,  $S^P$ , is equal to

- A)  $I - (G - T)$ .
- B)  $I + (G - T)$ .
- C)  $I + (G + T)$ .
- D)  $I - (G + T)$ .
- E)  $I + (G - T) + C$ .

Answer: B

Page Ref: 318-326

Difficulty: Easy

✓21) In an open economy, private saving,  $s^p$ , is equal to

- A)  $I - CA + (G - T)$ .
- B)  $I + CA - (G - T)$ .
- C)  $I + CA + (G - T)$ .
- D)  $I - CA - (G - T)$ .
- E)  $I + CA + (G + T)$ .

Answer: C

Page Ref: 318-326

Difficulty: Easy

22) Ricardian equivalence argues that when the government cuts taxes and raises its deficit,

- A) consumers anticipate that they will face lower taxes later to pay for the resulting government debt.
- B) consumers anticipate that they will higher services from the government.
- C) consumers anticipate that they will face higher taxes later to pay for the resulting government debt.
- D) consumers anticipate it will affect their future taxes, in general in the direction of lowering future taxes.
- E) consumers anticipate that the low tax rates will continue.

Answer: C

Page Ref: 318-326

Difficulty: Easy

23) Ricardian equivalence argues that when the government

- A) increases taxes and raises its deficit, consumers anticipate that they will face higher taxes later to pay for the resulting government debt, thus people will raise their own private saving to offset the fall in government saving.
- B) cuts taxes and decreases its deficit, consumers anticipate that they will face higher taxes later to pay for the resulting government debt, thus people will raise their own private saving to offset the fall in government saving.
- C) cuts taxes and raises its surplus, consumers anticipate that they will face higher taxes later to pay for the resulting government debt, thus people will raise their own private saving to offset the fall in government saving.
- D) cuts taxes and raises its deficit, consumers anticipate that they will face lower taxes later to pay for the resulting government debt, thus people will raise their own private saving to offset the fall in government saving.
- E) cuts taxes and raises its deficit, consumers anticipate that they will face higher taxes later to pay for the resulting government debt, thus people will raise their own private saving to offset the fall in government saving.

Answer: E

Page Ref: 318-326

Difficulty: Easy

24) In the United States over the past fifty years, the fraction of GNP devoted to consumption has fluctuated in a range of about

- A) 42 to 49 percent.
- B) 32 to 39 percent.
- C) 22 to 29 percent.
- D) 82 to 89 percent.
- E) 62 to 70 percent.

Answer: E

Page Ref: 318-326

Difficulty: Easy

✓ 25) In the United States, (gross) investment has fluctuated between \_\_\_\_\_ of GNP in recent years.

- A) 2 and 12 percent
- B) 11 and 22 percent
- C) 22 and 32 percent
- D) 32 and 42 percent
- E) 42 and 52 percent

Answer: B

Page Ref: 318-326

Difficulty: Easy

26) Government purchases currently take up about

- A) 20 percent of U.S. GNP, and this share has not changed much since the late 1950s.
- B) 38 percent of U.S. GNP, and this share has not changed much since the late 1950s.
- C) 18 percent of U.S. GNP, and this share has been increasing since the late 1950s.
- D) 18 percent of U.S. GNP, and this share has been decreasing since the late 1950s.
- E) 25 percent of U.S. GNP, and this share has been decreasing since the late 1950s.

Answer: A

Page Ref: 318-326

Difficulty: Easy

27) The position of the United States current account balance in 2009 was

- A) lent over 6 percent of its GNP, resulting in a large current account surplus.
- B) borrowed over 9 percent of its GNP, leading to a large current account deficit.
- C) achieved a current account balance of zero.
- D) borrowed over 10 percent of its GNP, leading to a large current account deficit.
- E) borrowed less than 5 percent of its GNP, leading to a large current account surplus.

Answer: B

Page Ref: 318-326

Difficulty: Easy

28) Which one of the following statements is FALSE?

- A) The United States had accumulated substantial foreign wealth by the early 1980s.
- B) The 1980s witnessed a sustained current account deficit of proportions unprecedented in the twentieth century opened up.
- C) In 1987, the country became a net debtor to foreigners for the first time since World War I.
- D) U.S. foreign debt has continued to grow and now stands at 25 percent of GNP.
- E) The U.S. foreign debt was paid off in the 1990s, allowing the U.S. to attain a current account surplus. However, the deficit has returned in recent years.

Answer: E

Page Ref: 318-326

Difficulty: Easy

29) What is the national income identity for a closed economy?

Answer:  $Y = C + I + G$

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Difficulty: Easy

30) What is the national income identity for an open economy?

Answer:  $Y = C + I + G + EX - IM$

Page Ref: 318-326

Difficulty: Easy

31) Discuss the values of private saving in closed and open economies.

Answer: In a closed economy, private saving,  $S^P$ , is equals to,  $I + (G - T)$ . In a open economy, private saving,  $S^P$ , is equals to  $I + CA + (G - T)$ . Open economy helps in extending the opportunities for private saving or dis-saving, or borrowing.

Page Ref: 318-326

Difficulty: Moderate

32) Discuss the effects of government deficits on the current account.

Answer: A hard and difficult issue. During the Reagan administration, the creation of twin deficits, where by slashing taxes, government deficits increased, which was accompanied with increased current account deficits.

Using the identity,  $CA = S^P + S_g - I$  and Ricardian equivalence, which argues that an increase in the government deficit (by definition lowers  $S_g$ ) will cause a roughly equal increase in  $S^P$  to offset an expected tax hike in the future. Thus, for  $I$  constant, there is roughly no effect on the current account.

However, government budget deficit may change both private savings and investment, thus avoiding a creation of the twin deficits. An example is the European countries reducing their budget deficits just prior to the introduction of the euro in January 1999. Now, under the "twin deficits: theory, one would have expected the EU's current account surpluses to increase. This has never happened. The main reason was sharp reduction in private saving rates.

A good answer should discuss Ricardian equivalence that argues that when the government cut taxes and raises its deficit, consumers anticipate that they will face higher taxes later to pay for the resulting government debt. In anticipation, they raise their own private saving to offset the fall in government saving. In addition, one should mention wealth effect in anticipation of one Europe, assets prices increased, lowering private saving rates.

Page Ref: 318-326

Difficulty: Difficult

33) Explain how government deficits fell yet current account surpluses remained the same in the EU prior to adopting the euro. Also explain this in the context of the "twin deficits" theory.

Answer: Current accounts didn't change due to a sharp fall in the private saving rate, which declined by about 4 percent of output, almost as much as the increase in government saving. The behavior of private savers neutralized the government's efforts to raise national saving. The twin deficits theory, the idea of government deficit coupled with a sharply increased current account deficit, expects the EU's current account surplus sharply as a result of the fiscal change, which didn't work in this case.

Page Ref: 318-326

Difficulty: Moderate

34) Explain the concept of Ricardian equivalence.

Answer: This an economic theory of taxes and government deficits. It argues that when the government cuts taxes and raises its deficit, consumers anticipate higher taxes later to pay off the eventual government debt. Thus, they will raise their own private saving to offset the fall in government saving. Governments that lower their deficits will induce the private sector to lower its own saving. However, this doesn't hold in practice. Economists attribute only half of the decline in European private saving to Ricardian effects.

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Difficulty: Moderate



35) Assume:

$$C = 40 + 0.8(Y - T)$$

$$G = 10$$

$$I = 20$$

$T = 0$ , where  $T$  are taxes.

(a) Calculate  $Y$  at equilibrium.

(b) Calculate  $C$ ,  $I$ , and  $G$  at equilibrium.

(c) Now assume,

$$EX = 5 + 4EP^*/P$$

$$IM = 10 + 0.1(Y - T) - 3EP^*/P$$

$$E = 3$$

$$P^* = 1.5$$

$$P = 2$$

Find equilibrium  $Y$ .

Answer: (a)  $Y = C + I + G$

$$Y = 350$$

(b)  $C = 40 + 0.8Y = 320$

$$I = 20$$

$$G = 10$$

(c)  $Y = 269.1667$

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Difficulty: Moderate

36) Fill in the following table.

GNP					
Total Output	Consumption		Government		
Consumption	Investment	Investment	Purchases	Exports	Imports
100		25	10	10	20
115	75		12	14	16
120	70	25		20	30
69	58	10	10		32
135	75	30	35	25	
	140	140	140	140	140
940		140	200	300	200
1150	600		300	200	150
1250	700	200		200	150

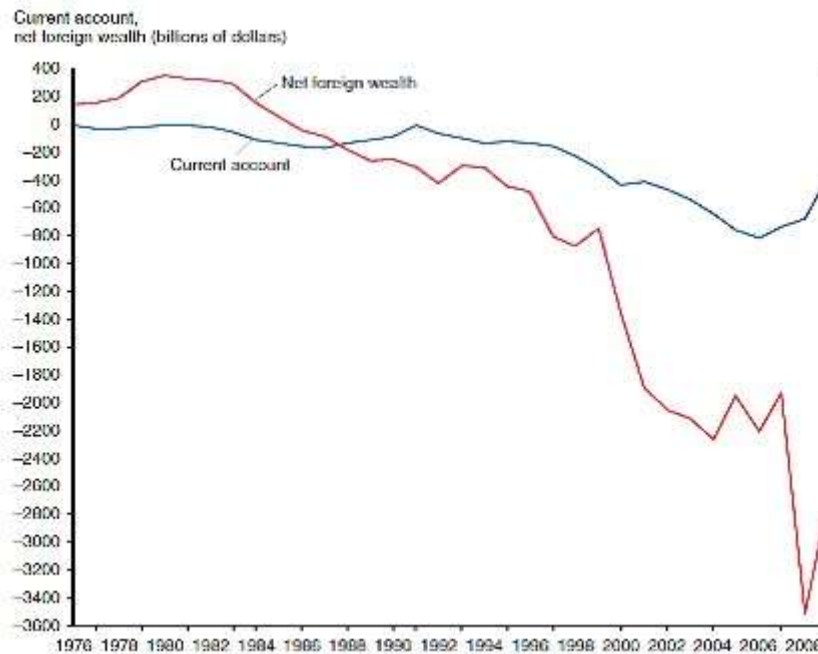
Answer:

GNP					
Total Output	Consumption		Government		
Consumption	Investment	Investment	Purchases	Exports	Imports
100	75	25	10	10	20
115	75	30	12	14	16
120	70	25	35	20	30
69	58	10	10	23	32
135	75	30	35	25	30
420	140	140	140	140	140
940	500	140	200	300	200
1150	600	200	300	200	150
1250	700	200	300	200	150

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Difficulty: Moderate

37) What can one learn from the following figure?



Answer: The figure shows the U.S. current account and net foreign wealth from 1977 until 2008. It shows that a string of current account deficits in the 1980s reduced America's net foreign wealth until, by the end 2008, the country had accumulated a substantial net foreign debt. In 1987 the country became a net debtor to foreigners for the first time since World War I.

Page Ref: 318-326

Difficulty: Easy

38) Assume:

$$C = 50 + 0.6 (Y - T)$$

$$G = 15$$

$$I = 15$$

$$T = 2$$

(a) Calculate Y at equilibrium

(b) Calculate C

(c) Assume

$$EX = 4 + 3EP^*/P$$

$$IM = 8 + 0.1 (Y - T) - 2EP^*/P$$

$$E = 3$$

$$P^* = 1$$

$$P = 1.5$$

Find equilibrium Y.

Answer:

(a)  $Y = C + I + G$

$$Y = 50 + 0.6(Y - 2 + 15 + 15)$$

$$Y = 197$$

(b)  $C = 50 + 0.6 (197 - 2) = 117$

(c)  $Y = 170$

Page Ref: 318-326

Difficulty: Moderate

39) Fill in the following table.

GNP					
Total Output	Consumption	Government			
Consumption	Investment	Investment	Purchases	Exports	Imports
135	100		5	20	30
	200	30	30	30	10
530	400	60		20	50
630	0	75	50	15	10
550	300	100	200		100
	600	200	40	20	60
975	800		75	150	200
680	500	80	300	100	
740		40	200	200	100

Answer:

GNP					
Total Output	Consumption	Government			
Consumption	Investment	Investment	Purchases	Exports	Imports
135	100	40	5	20	30
280	200	30	30	30	10
530	400	60	100	20	50
630	500	75	50	15	10
550	300	100	200	50	100
800	600	200	40	20	60
975	800	150	75	150	200
680	500	80	300	100	300
740	400	40	200	200	100

Page Ref: 318-326

Difficulty: Moderate

40) Fill in the following table.

CA	Sp	I	G	T
15	50	25	12	
8	50		15	3
9		25	10	4
35	50	10		5
	10	30	20	10
22	200		50	12
-25		140	100	15
	400	200		20
-280	100	200	200	

Answer:

CA	Sp	I	G	T
15	50	25	12	2
8	50	30	15	3
9	40	25	10	4
35	50	10	10	5
-30	10	30	20	10
22	200	140	50	12
-25	200	140	100	15
70	400	200	150	20
-280	100	200	200	20

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Difficulty: Moderate

### 13.3 The Balance of Payments Accounts

1) Every international transaction automatically enters the balance of payments

A) once either as a credit or as a debit.

B) twice, once as a credit and once as a debit.

C) once as a credit.

D) twice, both times as debit.

E) the times, once as a credit, once as a debit, and once as an exchange.

Answer: B

Page Ref: 326-337

Difficulty: Easy

- 2) The official settlements balance or balance of payments is the sum of
- A) the current account balance, the capital account balance, the non reserve portion of the financial account balance, the statistical discrepancy.
  - B) the current account balance and the capital account balance.
  - C) the current account balance, the capital account balance, the non reserve portion of the financial account balance.
  - D) the current account balance and the non reserve portion of the financial account balance.
  - E) the current account balance and the interest in all investments.

Answer: A

Page Ref: 326-337

Difficulty: Easy

- ✓ 3) An American buys a Japanese car, paying by writing a check on an account with a bank in New York. How would this be accounted for in the balance of payments?

- A) current account, a Japanese good import
- B) current account, a U.S. good import
- C) financial account, a U.S. asset import
- D) financial account, a U.S. asset export
- E) a current account as a U.S. good import and a financial account, a U.S. asset export

Answer: E

Page Ref: 326-337

Difficulty: Easy

- 4) The United States issues a \$10,000 debt forgiveness to Argentina. How is this accounted for in the balance of payments?

- A) financial account, U.S. asset import
- B) current account, Argentina transfer payment
- C) current account, U.S. service export
- D) financial account, U.S. asset export
- E) current account, Argentina good import

Answer: D

Page Ref: 326-337

Difficulty: Easy

- 5) A U.S. citizen buys a newly issued share of stock in England, paying for his order with a check, which the British company deposits in its own U.S. bank account in New York. How is this transaction accounted for in the balance of payments?

- A) financial account, U.S. asset export
- B) current account, U.S. service import
- C) current account, British good export
- D) financial account, British asset import
- E) financial account, U.S. asset import

Answer: A

Page Ref: 326-337

Difficulty: Easy

6) You travel to Paris and pay for a \$100 dinner with your credit card. How is this accounted for in the balance of payments?

- A) current account, French service import
- B) current account, U.S. good export
- C) financial account, U.S. asset export
- D) financial account, U.S. asset import
- E) financial account, French asset export

Answer: C

Page Ref: 326-337

Difficulty: Easy

7) The German government carries out an official foreign exchange intervention in which it uses dollars held in an American bank to buy French currency from its citizens. How is this accounted for in the balance of payments?

- A) current account, French good export
- B) current account, German good import
- C) financial account, French asset export
- D) financial account, German asset export
- E) financial account, German asset import

Answer: C

Page Ref: 326-337

Difficulty: Easy

8) The earnings of a Spanish factory with British owners are

- A) counted in Spain's GDP.
- B) part of Britain's GNP.
- C) only counted in Britain's GDP.
- D) only part of Spain's GNP.
- E) counted in Britain's GDP and are a part of Spain's GNP.

Answer: E

Page Ref: 326-337

Difficulty: Easy

9) The services British capital provides in Spain are a service export from Britain

- A) therefore they are subtracted from British GDP in calculating British GNP.
- B) therefore they are added to Spanish GDP in calculating Spanish GDP.
- C) therefore they are added to British GDP in calculating British GNP.
- D) therefore they are added to Spanish GNP in calculating Spanish GDP.
- E) therefore they are subtracted from Spanish GNP.

Answer: C

Page Ref: 326-337

Difficulty: Easy



10) Unilateral transfers between countries are

A) long-term loans.

B) only international gifts, never payments that do not correspond to the purchase of any good, service, or asset.

C) part of the current account but not a part of national income.

D) known for reducing the income of capital owners.

E) the difference between Y and GNP if the identity  $Y = C + I + G + CA$  holds exactly.

Answer: E

Page Ref: 326-337

Difficulty: Easy

11) Which of the following statements about the central bank is TRUE?

A) Only the central bank may hold foreign reserves and intervene officially in exchange markets.

B) Central banks have little power to alter macroeconomic conditions.

C) Today, central banks' reserves consist largely of gold.

D) The Federal Reserve holds only a small level of official reserve assets other than gold.

E) Central banks never inject money into the economy.

Answer: D

Page Ref: 326-337

Difficulty: Easy

✓ 12) How do we allocate statistical discrepancy among the current, capital, and financial accounts?

A) We have no way of knowing exactly how to allocate this discrepancy.

B) Depend on the degree of certainty by which we attribute to these accounts.

C) Divide it evenly amongst the three accounts.

D) Depend on the convention adopted by the specific financial institution.

E) Statistical discrepancy signals human errors made when dealing with financial accounts.

Answer: A

Page Ref: 326-337

Difficulty: Easy

13) Which of the following is TRUE about current cost method and market value method?

A) They are used by the BEA to place current values on foreign indirect investments.

B) These methods lead to the same valuations.

C) Based on the current cost method, the BEA's 2009 estimate of U.S. net foreign wealth was \$2,737.86 billion.

D) The current cost method is preferred by the BEA.

E) Foreign direct investments of the U.S. are valued at their original purchase price.

Answer: C

Page Ref: 326-337

Difficulty: Moderate

14) What types of international transactions are recorded in the balance of payment accounts?

Answer: Three types: transactions that involve exports and imports of good and services; transactions that involve the purchase or sell of financial assets; and exports and imports of good and services; other activities resulting in transfer of wealth between countries which are recorded in the capital account.

Page Ref: 326-337

Difficulty: Moderate

15) "The Balance of payments is always balances." Discuss.

Answer: True. Every international transaction automatically enters the balance of payments twice, once as a credit and once as a debit.

$$\text{Current account} + \text{financial account} + \text{capital account} = 0$$

Page Ref: 326-337

Difficulty: Easy

16) "The balance of payments is seldom in balance in practice." Discuss.

Answer: True. The main reasons are due to the fact that data collected or received from different sources may differ in coverage, accuracy, and timing. In addition, data on services are not reliable as well as data from the financial account. Moreover, accurate measurements of international interest and dividend receipts are particularly difficult.

Page Ref: 326-337

Difficulty: Easy

17) How does an economy's central bank manage the supply of money through official reserve transactions?

Answer: Official foreign exchange interventions are a way for the central bank to inject money into the economy or withdraw it from circulation. They can buy or sell international reserves in private asset markets in order to alter macroeconomic conditions without noticeably impacting the money supply. When a central bank purchases or sells a foreign asset, the transaction appears in its country's financial account as if a private citizen had carried out the same transaction.

Page Ref: 326-337

Difficulty: Moderate

18) How can changes in the market price of wealth previously acquired alter a country's net foreign wealth?

Answer: When Japan's stock market lost value in the 1990s, American and European owners of Japanese asset lost value in their claims, while Japan's net foreign wealth increased. Similarly, exchange rate changes can have this effect. When the dollar depreciates against foreign currency, foreigners who hold dollar assets will see their wealth fall when measured in their home currencies.

Page Ref: 326-337

Difficulty: Moderate

19) Discuss the two different methods the Bureau of Economic Analysis (BEA) uses to place current values on foreign direct investments.

Answer: The current cost method values direct investments at the cost of buying them today. The market value method is meant to measure the price at which the investments could be sold. These two methods can lead to different valuations because the cost of replacing a particular direct investment and the price it would command if sold on the market may be hard to measure.

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Difficulty: Moderate

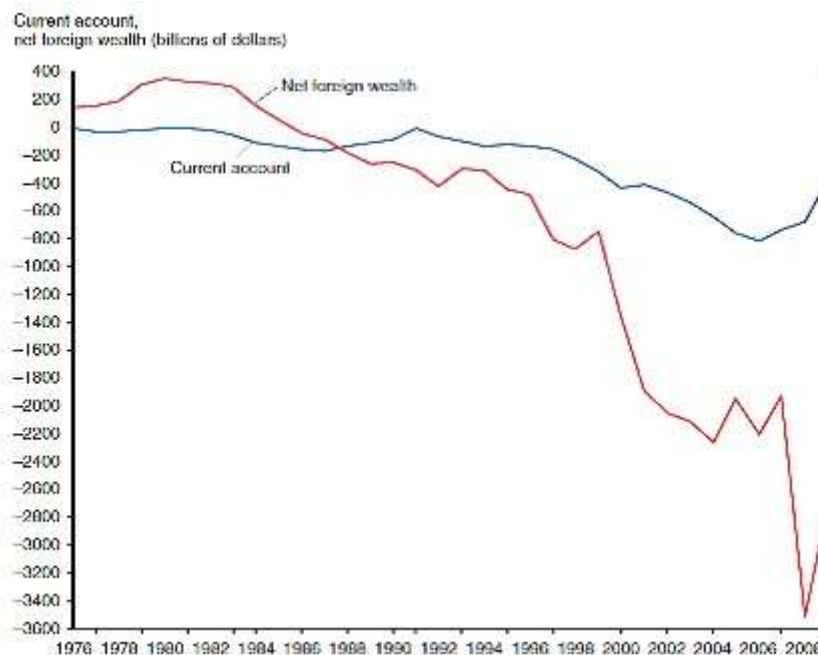
20) Consider how the United States balance of payments accounts are affected when U.S. banks forgive two billion in debt owed to them by the government of Argentina.

Answer: In this case, the United States makes a two billion dollars capital transfer to Argentina, which should appear as a negative two billions entry in the capital account. The associated credit is in the financial account, in the form of a two billion dollars reduction in U.S. assets held abroad, i.e., a net asset "export," and therefore a positive balance of payments entry.

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Difficulty: Moderate

21) What can one learn from Figure 13-3 from the text, shown below?



Answer: This figure shows that since the 1980s, United States foreign assets and liabilities have both increased rapidly. However, liabilities have risen faster than assets, resulting in a substantial net foreign debt.

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Difficulty: Easy

14.1 Exchange Rates and International Transactions

1) How many dollars would it cost to buy an Edinburgh Woolen Mill sweater costing 50 British pounds if the exchange rate is 1.25 dollars per one British pound?

- A) 50 dollars
- B) 60 dollars
- C) 70 dollars
- D) 62.5 dollars**
- E) 40 British pounds

Answer: D

Page Ref: 342-346

Difficulty: Easy

2) How many dollars would it cost to buy an Edinburgh Woolen Mill sweater costing 50 British pounds if the exchange rate is 1.50 dollars per one British pound?

- A) 50 dollars
- B) 60 dollars
- C) 70 dollars
- D) 80 dollars
- E) 75 dollars**

Answer: E

Page Ref: 342-346

Difficulty: Easy

3) How many dollars would it cost to buy an Edinburgh Woolen Mill sweater costing 50 British pounds if the exchange rate is 1.80 dollars per one British pound?

- A) 40 dollars
- B) 90 dollars**
- C) 50 dollars
- D) 100 dollars
- E) 95 dollars

Answer: B

Page Ref: 342-346

Difficulty: Easy

4) The Japanese currency is called the

- A) DM.
- B) Yen.**
- C) Euro.
- D) Dollar.
- E) Pound.

Answer: B

Page Ref: 342-346

Difficulty: Easy

5) How many British pounds would it cost to buy a pair of American designer jeans costing \$45 if the exchange rate is 1.50 dollars per British pound?

- A) 10 British pounds
- B) 20 British pounds
- C) 30 British pounds**
- D) 35 British pounds
- E) 25 British pounds

Answer: C

Page Ref: 342-346

Difficulty: Easy

6) How many British pounds would it cost to buy a pair of American designer jeans costing \$45 if the exchange rate is 1.80 dollars per British pound?

- A) 10 British pounds
- B) 25 British pounds**
- C) 20 British pounds
- D) 30 British pounds
- E) 40 British pounds

Answer: B

Page Ref: 342-346

Difficulty: Easy

7) How many British pounds would it cost to buy a pair of American designer jeans costing \$45 if the exchange rate is 2.00 dollars per British pound?

- A) 22.5 British pounds**
- B) 32.5 British pounds
- C) 12.5 British pounds
- D) 40 British pounds
- E) 30 British pounds

Answer: A

Page Ref: 342-346

Difficulty: Easy

8) How many British pounds would it cost to buy a pair of American designer jeans costing \$45 if the exchange rate is 1.60 dollars per British pound?

- A) 38.125 British pounds
- B) 28.125 British pounds**
- C) 48.125 British pounds
- D) 58.125 British pounds
- E) 18.125 British pounds

Answer: B

Page Ref: 342-346

Difficulty: Easy

9) What is the exchange rate between the dollar and the British pound if a pair of American jeans costs 50 dollars in New York and 100 Pounds in London?

- A) 1.5 dollars per British pound
- B) 0.5 dollars per British pound
- C) 2.5 dollars per British pound
- D) 3.5 dollars per British pound
- E) 2 dollars per British pound

Answer: B

Page Ref: 342-346

Difficulty: Easy

10) What is the exchange rate between the dollar and the British pound if a pair of American jeans costs 60 dollars in New York and 30 Pounds in London?

- A) 1.5 dollars per British pound
- B) 0.5 dollars per British pound
- C) 2.5 dollars per British pound
- D) 3.5 dollars per British pound
- E) 2 dollars per British pound

Answer: E

Page Ref: 342-346

Difficulty: Easy

11) When a country's currency depreciates

- A) foreigners find that its exports are more expensive, and domestic residents find that imports from abroad are more expensive.
- B) foreigners find that its exports are more expensive, and domestic residents find that imports from abroad are cheaper.
- C) foreigners find that its exports are cheaper; however, domestic residents are not affected.
- D) foreigners are not affected, but domestic residents find that imports from abroad are more expensive.
- E) foreigners find that its exports are cheaper and domestic residents find that imports from abroad are more expensive.

Answer: E

Page Ref: 342-346

Difficulty: Easy

12) An appreciation of a country's currency

- A) decreases the relative price of its exports and lowers the relative price of its imports.
- B) raises the relative price of its exports and raises the relative price of its imports.
- C) lowers the relative price of its exports and raises the relative price of its imports.
- D) raises the relative price of its exports and lowers the relative price of its imports.
- E) raises the relative price of its exports and does not affect the relative price of its imports.

Answer: D

Page Ref: 342-346

Difficulty: Easy

13) Which one of the following statements is the MOST accurate?

- A) A depreciation of a country's currency makes its goods cheaper for foreigners.
- B) A depreciation of a country's currency makes its goods more expensive for foreigners.
- C) A depreciation of a country's currency makes its goods cheaper for its own residents.
- D) A depreciation of a country's currency makes its goods cheaper.
- E) An appreciation of a country's currency makes its goods more expensive.

Answer: A

Page Ref: 342-346

Difficulty: Easy

14) A(n) \_\_\_\_\_ of a nation's currency will cause imports to \_\_\_\_\_ and exports to \_\_\_\_\_, all other things held constant.

- A) depreciation; increase; decrease
- B) appreciation; decrease; increase
- C) depreciation; decrease; increase
- D) appreciation; increase; increase
- E) depreciation; decrease; decrease

Answer: C

Page Ref: 342-346

Difficulty: Easy

15) If the goods' money prices do not change, an appreciation of the dollar against the pound

- A) makes British sweaters cheaper in terms of American jeans.
- B) makes British sweaters more expensive in terms of American jeans.
- C) doesn't change the relative price of sweaters and jeans.
- D) makes American jeans cheaper in terms of British sweaters.
- E) makes British jeans more expensive in Britain.

Answer: A

Page Ref: 342-346

Difficulty: Easy

✓ 16) If the goods' money prices do not change, a depreciation of the dollar against the pound

- A) makes British sweaters cheaper in terms of American jeans.
- B) makes British sweaters more expensive in terms of American jeans.
- C) makes American jeans more expensive in terms of British sweaters.
- D) doesn't change the relative price of sweaters and jeans.
- E) makes British jeans more expensive in Britain.

Answer: B

Page Ref: 342-346

Difficulty: Easy

17) In the year 2012, Shinzo Abe became prime minister of Japan, promising bold policies to improve Japan's economy. What was the focus of his policies and how did they affect Japan's trade position?

Answer: What has been called "Abenomics" involved monetary policies designed to reduce the value of the Japanese Yen relative to other currencies. This resulted in increased exports and reduced imports, strengthening the Japanese economy.

Page Ref: 342-346

Difficulty: Moderate

18) Based on the case study, "Exchange Rates, Auto Prices, and Currency Wars," explain why exchange rates are of critical importance to firms in the automobile industry, and how Japan has benefited from changes in the value of the Yen.

Answer: See the discussion at the beginning of the chapter and in the case. Japan experienced a 15% drop in the value of the yen relative to the U.S. dollar in 2013. This increased Japanese exports of autos while reducing imports from the U.S.

Page Ref: 342-346

Difficulty: Moderate



19) Compute how many dollars it would cost to buy an Edinburgh Woolen Mill sweater costing 50 British pounds for the following exchange rates.

Exchange Rate (Number of Dollars per One British Pound)	Price of a Sweater in British Pounds	Price in Dollars
1	50	
1.1	50	
1.2	50	
1.25	50	
1.3	50	
1.4	50	
1.5	50	
1.6	50	
1.7	50	
1.75	50	
1.8	50	
1.9	50	
2	50	

Answer:

Exchange Rate (Number of Dollars per One British Pound)	Price of a Sweater in British Pounds	Price in Dollars
1	50	\$50.00
1.1	50	\$55.00
1.2	50	\$60.00
1.25	50	\$62.50
1.3	50	\$65.00
1.4	50	\$70.00
1.5	50	\$75.00
1.6	50	\$80.00
1.7	50	\$85.00
1.75	50	\$87.50
1.8	50	\$90.00
1.9	50	\$95.00
2	50	\$100.00

Page Ref: 342-346

Difficulty: Easy

20) Compute how many British pounds it would cost to buy a pair of American designer jeans costing \$45.

Exchange Rate (Number of Dollars per One British Pound)	Price of a Pair of American Designer Jeans	Price in British Pounds
1	45	
1.1	45	
1.2	45	
1.25	45	
1.3	45	
1.4	45	
1.5	45	
1.6	45	
1.7	45	
1.75	45	
1.8	45	
1.9	45	
2	45	

Answer:

Exchange Rate (Number of Dollars per One British Pound)	Price of a Pair of American Designer Jeans	Price in British Pounds
1	45	45
1.1	45	40.90909091
1.2	45	37.5
1.25	45	36
1.3	45	34.61538462
1.4	45	32.14285714
1.5	45	30
1.6	45	28.125
1.7	45	26.47058824
1.75	45	25.71428571
1.8	45	25
1.9	45	23.68421053
2	45	22.5

Page Ref: 342-346

Difficulty: Easy

21) Find the exchange rate between the dollar and the British pounds for the following cases.

Price of a pair of American Designer Jeans	Price in British Pounds	Exchange Rate (Number of Dollars per one British Pound)
45	10	
45	20	
45	30	
45	40	
45	50	
45	60	
45	70	
45	80	
45	90	
45	100	
45	110	
45	120	
45	130	
45	140	

Answer:

Price of a pair of American Designer Jeans	Price in British Pounds	Exchange Rate (Number of Dollars per one British Pound)
45	10	4.5
45	20	2.25
45	30	1.5
45	40	1.125
45	50	0.9
45	60	0.75
45	70	0.642857143
45	80	0.5625
45	90	0.5
45	100	0.45
45	110	0.409090909
45	120	0.375
45	130	0.346153846
45	140	0.321428571

Page Ref: 342-346

Difficulty: Moderate

## 14.2 The Foreign Exchange Market

1) The largest trading of foreign exchange occurs in

A) New York.

B) London.

C) Tokyo.

D) Frankfurt.

E) Singapore.

Answer: B

Page Ref: 346-352

Difficulty: Easy

2) Which of the following type of funds cater to wealthy individuals, are not bound by government regulations, and are actively traded in foreign exchange markets?

A) pension funds

B) mutual funds

C) hedge funds

D) exchange funds

Answer: C

Page Ref: 346-352

Difficulty: Easy

3) The future date on which the currencies are actually exchanged is called what?

A) the value date

B) the spot exchange date

C) the two-day window

D) the commitment date

E) the forward exchange rate

Answer: A

Page Ref: 346-352

Difficulty: Easy

4) In 2010, about

A) 20 percent of foreign exchange transactions involved exchanges of foreign currencies for U.S. dollars.

B) 10 percent of foreign exchange transactions involved exchanges of foreign currencies for U.S. dollars.

C) 30 percent of foreign exchange transactions involved exchanges of foreign currencies for U.S. dollars.

D) 40 percent of foreign exchange transactions involved exchanges of foreign currencies for U.S. dollars.

E) 85 percent of foreign exchange transactions involved exchanges of foreign currencies for U.S. dollars.

Answer: E

Page Ref: 346-352

Difficulty: Easy

5) Which one of the following statements is the MOST accurate?

- A) Spot exchange rates are always higher than forward exchange rates.
- B) Spot exchange rates are always lower than forward exchange rates.
- C) Spot exchange rates and forward exchanges rates are always equal.
- D) Spot exchange rates and forward exchanges rates are equal when the value date and the date of the spot transaction are the same.
- E) Spot exchange rates and forward exchange rates never move closely together.

Answer: D

Page Ref: 346-352

Difficulty: Easy

6) Forward and spot exchange rates

- A) are necessarily equal.
- B) do not move closely together.
- C) are always such that the forward exchange rate is higher.
- D) move closely together and are equal on the value date.
- E) are unrelated to the value date.

Answer: D

Page Ref: 346-352

Difficulty: Easy

7) A foreign exchange swap

- A) is a spot sale of a currency.
- B) is a forward repurchase of the currency.
- C) is a spot sale of a currency combined with a forward repurchase of the currency.
- D) is a spot sale of a currency combined with a forward sale of the currency.
- E) make up a negligible proportion of all foreign exchange trading.

Answer: C

Page Ref: 346-352

Difficulty: Easy

8) Nondeliverable forward exchange markets in centers such as Hong Kong and Singapore help to circumvent which problem?

- A) loss of goods shipped from Hong Kong and Singapore
- B) inconvertible currencies cannot be traded in foreign markets
- C) lag between the spot exchange date and the value date
- D) high travel costs from Asia to "traditional" foreign exchange markets
- E) unstable currencies that hold no purchasing power

Answer: B

Page Ref: 346-352

Difficulty: Easy

- ✓ 9) The following is an example of Radio Shack hedging its foreign currency risk
- A) needing to pay 9,000 yen per radio to its suppliers in a month, Radio Shack makes a forward-exchange deal to buy yen.
  - B) needing to pay 9,000 yen per radio to its suppliers in a month, Radio Shack makes a forward-exchange deal to sell yen.
  - C) needing to pay 9,000 yen per radio to its suppliers in a month, Radio Shack buys yen at a spot-exchange 1 month from now.
  - D) needing to pay 9,000 yen per radio to its suppliers in a month, Radio Shack sells yen at a spot-exchange 1 month from now.
  - E) needing to pay 9,000 yen per radio to its suppliers in a month, Radio Shack sells yen in a forward-exchange deal.

Answer: A

Page Ref: 346-352

Difficulty: Easy

- 10) Which of the following is NOT an example of a financial derivative?

- A) forwards
- B) bonds
- C) swaps
- D) futures
- E) options

Answer: B

Page Ref: 346-352

Difficulty: Easy

- 11) Which major actor is at the center of the foreign exchange market?

- A) corporations
- B) central banks
- C) commercial banks
- D) non-bank financial institutions
- E) individual firms

Answer: C

Page Ref: 346-352

Difficulty: Easy

- 12) Which of the following is NOT a major actor in the foreign exchange market?

- A) corporations
- B) central banks
- C) commercial banks
- D) non-bank financial institutions
- E) tourists

Answer: E

Page Ref: 346-352

Difficulty: Easy

13) By April 2010

- A) only about 10 percent of foreign exchange trades were against euros.
- B) only about 24 percent of foreign exchange trades were against euros.
- C) only about 39 percent of foreign exchange trades were against euros.
- D) only about 42 percent of foreign exchange trades were against euros.
- E) only about 60 percent of foreign exchange trades were against euros.

Answer: C

Page Ref: 346-352

Difficulty: Easy

14) Which of the following statements is TRUE about a vehicle currency?

- A) It is widely used to denominate contracts made by parties who reside in the country that issues the vehicle currency.
- B) The dollar is sometimes called a vehicle currency because of its pivotal role in many foreign exchange deals.
- C) There is much skepticism that the euro will ever evolve into a vehicle currency on par with the dollar.
- D) The pound sterling, once second only to the dollar as a key international currency, is beginning to rise in importance.
- E) Vehicle currencies include nondeliverable currencies like the renminbi.

Answer: B

Page Ref: 346-352

Difficulty: Easy

15) The action of arbitrage is

- A) the process of buying a currency cheap and selling it dear.
- B) the process of buying a currency dear and selling it cheap.
- C) the process of buying and selling currency at the same price.
- D) the process of selling currency at different prices in different markets.
- E) the process of buying a currency and holding onto it to take it off the market.

Answer: A

Page Ref: 346-352

Difficulty: Easy

16) Futures contracts differ from forward contracts in that

- A) future contracts ensures you will receive a certain amount of foreign currency at a specified future date.
- B) future contracts bind you into your end of the deal.
- C) future contracts allow you to sell your contract on an organized futures exchange.
- D) future contracts are a disadvantage if your views about the future spot exchange rate are to change.
- E) futures contracts don't allow you to realize a profit or a loss right away.

Answer: C

Page Ref: 346-352

Difficulty: Easy

17) Exxon Mobil wants to pay €160,000 to a German supplier. They get an exchange rate quotation from its own commercial bank and instructs it to debit their dollar account and pay €160,000 to the supplier's German account. If the exchange rate quoted is \$1.2 per euro, how much is debited to Exxon Mobil's account?

- A) \$160,000
- B) \$172,000
- C) \$180,000
- D) \$192,000
- E) \$150,000

Answer: D

Page Ref: 346-352

Difficulty: Easy

18) Who are the major participants in the foreign exchange market?

Answer: (1) Commercial banks

(2) Corporations

(3) Nonbank financial institutions

(4) Central banks

Page Ref: 346-352

Difficulty: Easy

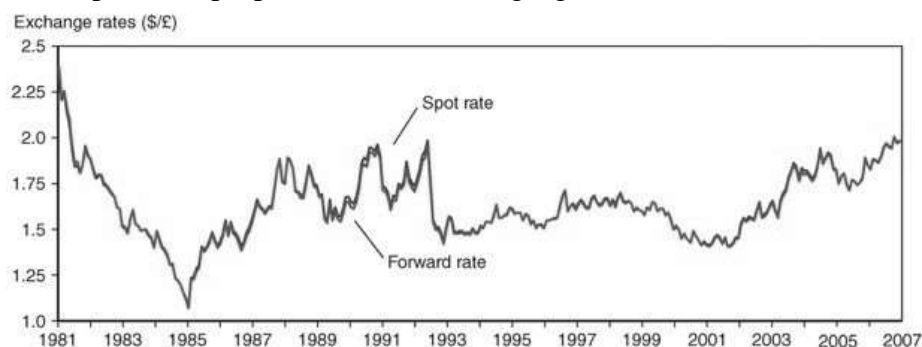
19) Explain what is a "vehicle currency." Why is the U.S. dollar considered a vehicle currency?

Answer: A vehicle currency is one that is widely used to denominate international contracts made by parties who do not reside in the country that issues the vehicle currency. Since in 2004, nearly 90 percent of foreign exchange transactions involve exchanges of foreign currencies for U.S. dollars; therefore, it is considered a vehicle currency.

Page Ref: 346-352

Difficulty: Moderate

20) Explain the purpose of the following figure.



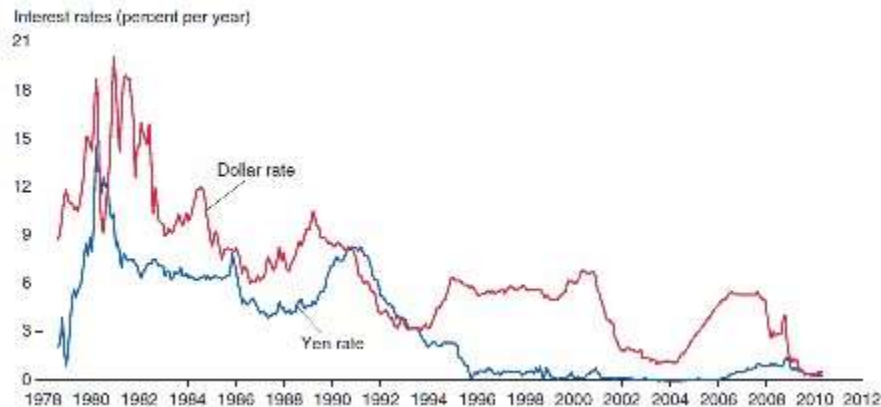
Answer: To show that spot and forward exchange rates are in general close to each other.

Page Ref: 346-352

Difficulty: Easy



21) Explain the purpose of the following figure 14-2 from the text in the context of the interest rates on the dollar and the Japanese Yen between 1980 and 2010.



Answer: Since the dollar and the Yen interest rates are not measured in comparable terms, they can move quite differently over time. Except for a period from 1990 to 1993 when the Yen interest rate was higher than the dollar, dollar interest rates have been higher than the Yen, indicating depreciation of the dollar against the Yen.

Page Ref: 346-352

Difficulty: Easy

### 14.3 The Demand for Foreign Currency Assets

1) What is the expected dollar rate of return on euro deposits if today's exchange rate is \$1.10 per euro, next year's expected exchange rate is \$1.166 per euro, the dollar interest rate is 10%, and the euro interest rate is 5%?

- A) 10%
- B) 11%
- C) -1%
- D) 0%
- E) 15%

Answer: B

Page Ref: 352-361

Difficulty: Easy

2) What is the expected dollar rate of return on dollar deposits if today's exchange rate is \$1.10 per euro, next year's expected exchange rate is \$1.165 per euro, the dollar interest rate is 10%, and the euro interest rate is 5%?

- A) 10%
- B) 11%
- C) -1%
- D) 0%
- E) 15%

Answer: A

Page Ref: 352-361

Difficulty: Easy

3) What is the expected dollar rate of return on euro deposits if today's exchange rate is \$1.167 per euro, next year's expected exchange rate is \$1.10 per euro, the dollar interest rate is 10%, and the euro interest rate is 5%?

- A) 10%
- B) 11%
- C) -1%
- D) 0%

Answer: C

Page Ref: 352-361

Difficulty: Easy

4) The dollar rate of return on euro deposits is

- A) approximately the euro interest rate plus the rate of depreciation of the dollar against the euro.
- B) approximately the euro interest rate minus the rate of depreciation of the dollar against the euro.
- C) the euro interest rate minus the rate of inflation against the euro.
- D) the rate of appreciation of the dollar against the euro.
- E) the euro interest rate plus the rate of inflation against the euro.

Answer: A

Page Ref: 352-361

Difficulty: Easy

5) If the dollar interest rate is 10 percent and the euro interest rate is 6 percent, then an investor should

- A) invest only in dollars.
- B) invest only in euros.
- C) be indifferent between dollars and euros.
- D) invest only in dollars if the exchange rate is expected to remain constant.
- E) invest only in euros if the exchange rate is expected to remain constant.

Answer: D

Page Ref: 352-361

Difficulty: Easy

6) If the dollar interest rate is 4 percent, the euro interest rate is 6 percent, then

- A) an investor should invest only in dollars.
- B) an investor should invest only in euros.
- C) an investor should be indifferent between dollars and euros.
- D) invest only in dollars if the exchange rate is expected to remain constant.
- E) invest only in euros if the exchange rate is expected to remain constant.

Answer: E

Page Ref: 352-361

Difficulty: Easy

- 7) If the dollar interest rate is 10 percent, the euro interest rate is 6 percent, then
- A) an investor should invest only in dollars if the expected dollar depreciation against the euro is 4 percent.
  - B) an investor should invest only in euros if the expected dollar depreciation against the euro is 4 percent.
  - C) an investor should be indifferent between dollars and euros if the expected dollar depreciation against the euro is 4 percent.
  - D) an investor should invest only in dollars.
  - E) an investor should invest only in euros.

Answer: C

Page Ref: 352-361

Difficulty: Easy

- ✓ 8) If the dollar interest rate is 10 percent and the euro interest rate is 6 percent, then
- A) an investor should invest only in dollars if the expected dollar depreciation against the euro is 8 percent.
  - B) an investor should invest only in euros if the expected dollar depreciation against the euro is 8 percent.
  - C) an investor should be indifferent between dollars and euros if the expected dollar depreciation against the euro is 8 percent.
  - D) an investor should invest only in dollars.
  - E) an investor should invest only in euros.

Answer: B

Page Ref: 352-361

Difficulty: Easy

- 9) If the dollar interest rate is 10 percent, the euro interest rate is 12 percent, then
- A) an investor should invest only in dollars if the expected dollar appreciation against the euro is 4 percent.
  - B) an investor should invest only in euros an investor should invest only in dollars if the expected dollar appreciation against the euro is 4 percent.
  - C) an investor should be indifferent between dollars and euros an investor should invest only in dollars if the expected dollar appreciation against the euro is 4 percent.
  - D) an investor should invest only in dollars.
  - E) an investor should invest only in euros.

Answer: A

Page Ref: 352-361

Difficulty: Easy

10) At the beginning of 2012, you pay \$100 for a share of stock that then pays you a dividend of \$1 at the beginning of 2013. If the stock price rises from \$100 to \$109 per share over the year, then you have earned an annual rate of return of

- A) 5 percent.
- B) 1 percent.
- C) 9 percent.
- D) 4 percent.
- E) 10 percent.

Answer: E

Page Ref: 352-361

Difficulty: Easy

11) What are the three factors that affect the demand for foreign currency?

Answer: The three factors that affect the demand for foreign currency are expected return, risk and liquidity.

Page Ref: 352-361

Difficulty: Easy

12) Explain risk and liquidity of assets.

Answer: Risk is the variability an asset contributes to a savers' wealth. An asset's real return can be unpredictable and savers dislike this uncertainty if the return fluctuates widely. Liquidity refers to the ease with which an asset can be sold or exchanged for goods. Cash is the most liquid of assets because it is always acceptable at face value as payment for goods or other assets. Thus, savers consider an asset's liquidity and its expected return and risk in deciding how much of it to hold.

Page Ref: 352-361

Difficulty: Moderate

13) For the following 15 cases, compare the dollar rates of return on dollar and euro deposits.

Case	Dollar Interest Rate, $R_{\$}$	Euro Interest Rate, $R_{\text{€}}$	Expected Rate of Dollar Depreciation Against Euro	Rate of Return Difference Between Dollar and Euro Deposits
1	0.1	0.06	0	
2	0.1	0.06	0.04	
3	0.1	0.06	0.08	
4	0.1	0.12	-0.04	
5	0.1	0.18	0	
6	0.15	0.06	0	
7	0.15	0.06	0.04	
8	0.15	0.06	0.08	
9	0.15	0.12	-0.04	
10	0.15	0.18	0	
11	0.2	0.06	0	
12	0.2	0.06	0.04	
13	0.2	0.06	0.08	
14	0.2	0.12	-0.04	
15	0.2	0.18	0	

Answer:

Case	Dollar Interest Rate, $R_{\$}$	Euro Interest Rate, $R_{\text{€}}$	Expected Rate of Dollar Depreciation Against Euro	Rate of Return Difference Between Dollar and Euro Deposits
1	0.1	0.06	0	0.04
2	0.1	0.06	0.04	0
3	0.1	0.06	0.08	-0.04
4	0.1	0.12	-0.04	0.02
5	0.1	0.18	0	-0.08
6	0.15	0.06	0	0.09
7	0.15	0.06	0.04	0.05
8	0.15	0.06	0.08	0.01
9	0.15	0.12	-0.04	0.07
10	0.15	0.18	0	-0.03
11	0.2	0.06	0	0.14
12	0.2	0.06	0.04	0.1
13	0.2	0.06	0.08	0.06
14	0.2	0.12	-0.04	0.12
15	0.2	0.18	0	0.02

Page Ref: 352-361

Difficulty: Moderate

14) For the table below calculate the EXACT relationship.

Case	R <sub>\$</sub>	R <sub>E</sub>	Expected Rate of Dollar Depreciation Against Euro E	Rate of Return Difference Between Dollar and Euro Deposits	Exact Formula
1	0.1	0.06	0	0.04	
2	0.1	0.06	0.04	0	
3	0.1	0.06	0.08	-0.04	
4	0.1	0.12	-0.04	0.02	
5	0.1	0.18	0	-0.08	
6	0.15	0.06	0	0.09	
7	0.15	0.06	0.04	0.05	
8	0.15	0.06	0.08	0.01	
9	0.15	0.12	-0.04	0.07	
10	0.15	0.18	0	-0.03	
11	0.2	0.06	0	0.14	
12	0.2	0.06	0.04	0.1	
13	0.2	0.06	0.08	0.06	
14	0.2	0.12	-0.04	0.12	
15	0.2	0.18	0	0.02	

Answer:

Case	R <sub>\$</sub>	R <sub>E</sub>	Expected Rate of Dollar Depreciation Against Euro E	Rate of Return Difference Between Dollar and Euro Deposits	Exact Formula
1	0.1	0.06	0	0.04	0.04
2	0.1	0.06	0.04	0	-0.0024
3	0.1	0.06	0.08	-0.04	-0.0448
4	0.1	0.12	-0.04	0.02	0.0248
5	0.1	0.18	0	-0.08	-0.08
6	0.15	0.06	0	0.09	0.09
7	0.15	0.06	0.04	0.05	0.0476
8	0.15	0.06	0.08	0.01	0.0052
9	0.15	0.12	-0.04	0.07	0.0748
10	0.15	0.18	0	-0.03	-0.03
11	0.2	0.06	0	0.14	0.14
12	0.2	0.06	0.04	0.1	0.0976
13	0.2	0.06	0.08	0.06	0.0552
14	0.2	0.12	-0.04	0.12	0.1248
15	0.2	0.18	0	0.02	0.02

Page Ref: 352-361

Difficulty: Moderate

15) Assume that the euro interest rate is constant at 5 percent, and that the expected exchange rate is 1.05 dollars per one euro. Find the expected dollar return on euro deposits for the following cases.

Case	Today's Dollar/Euro Exchange Rate	Interest Rate on Euro Deposits	Expected Dollar Depreciation Rate Against Euro $(1.05 - E)/E$	Expected Dollar Return on Euro Deposits $Re + (1.05 - E)/E$
1	1.07			
2	1.06			
3	1.05			
4	1.04			
5	1.03			
6	1.02			
7	1.01			
8	1			
9	0.99			
10	0.98			

Answer:

Case	Today's Dollar/Euro Exchange Rate	Interest Rate on Euro Deposits	Expected Dollar Depreciation Rate Against Euro $(1.05 - E)/E$	Expected Dollar Return on Euro Deposits $Re + (1.05 - E)/E$
1	1.07	0.05	-0.0186916	0.031308411
2	1.06	0.05	-0.009434	0.040566038
3	1.05	0.05	0	0.05
4	1.04	0.05	0.0096154	0.059615385
5	1.03	0.05	0.0194175	0.069417476
6	1.02	0.05	0.0294118	0.079411765
7	1.01	0.05	0.039604	0.08960396
8	1	0.05	0.05	0.1
9	0.99	0.05	0.0606061	0.110606061
10	0.98	0.05	0.0714286	0.121428571

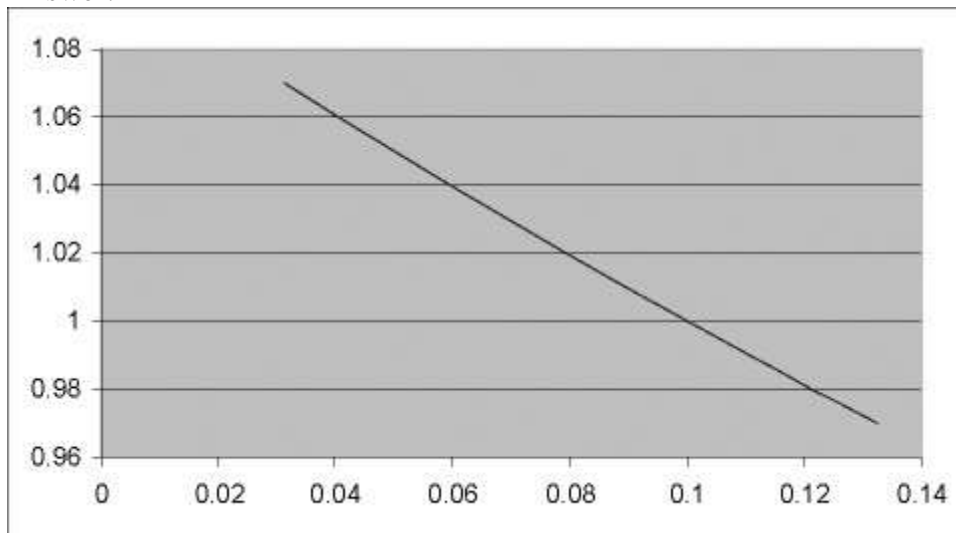
Page Ref: 352-361

Difficulty: Moderate

Case	Today's Dollar/Euro Exchange Rate	Interest Rate on Euro Deposits	Expected Dollar Depreciation Rate Against Euro $(1.05 - E)/E$	Expected Dollar Return on Euro Deposits $R_e + (1.05 - E)/E$
1	1.07	0.05	-0.0186916	0.031308411
2	1.06	0.05	-0.009434	0.040566038
3	1.05	0.05	0	0.05
4	1.04	0.05	0.0096154	0.059615385
5	1.03	0.05	0.0194175	0.069417476
6	1.02	0.05	0.0294118	0.079411765
7	1.01	0.05	0.039604	0.08960396
8	1	0.05	0.05	0.1
9	0.99	0.05	0.0606061	0.110606061
10	0.98	0.05	0.0714286	0.121428571

16) Using the data in the table above, plot today's dollar/euro exchange rate against the expected dollar return on euro deposits.

Answer:



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Difficulty: Moderate



17) Determine for each, whether the interest parity condition holds or not, if  $E_{\$/\epsilon}^e = 1.10$

Interest Rate for the Dollar $R_{\$}$	Interest Rate for the Euro $R_{\epsilon}$	Exchange Rate $E_{\$/\epsilon}$
0.04	0	1.037
0.07	0.02	0.99
0.08	0.08	0.948
0.09	0.04	1.047
0.2	0.1	1
0.1	0	0.99
0.12	0.04	0.948

Answer:

Interest Rate for the Dollar $R_{\$}$	Interest Rate for the Euro $R_{\epsilon}$	Expected Rate of Dollar Depreciation Against Euro $(E_{\$/\epsilon}^e - E_{\$/\epsilon}) / E_{\$/\epsilon}$	Interest Parity Condition Holds?
0.04	0	0.06	No
0.07	0.02	0.11	No
0.08	0.08	0.16	Yes
0.09	0.04	0.05	Yes
0.2	0.1	0.1	Yes
0.1	0	0.11	No
0.12	0.04	0.16	Yes

Page Ref: 352-361

Difficulty: Moderate

#### 14.4 Equilibrium in the Foreign Exchange Market

1) Which one of the following statements is the MOST accurate?

- A) Since dollar and yen interest rates are measured in comparable terms, they can move quite differently over time.
- B) Since dollar and yen interest rates are not measured in comparable terms, they can move quite differently over time.
- C) Since dollar and yen interest rates are measured in comparable terms, they move quite the same over time.
- D) Since dollar and yen interest rates are measured in comparable terms, they still move quite differently over time.
- E) Since dollar and yen interest rates are so similar, they move quite the same way over time.

Answer: B

Page Ref: 361-365

Difficulty: Easy

2) Suppose that the one-year forward price of euros in terms of dollars is equal to \$1.113 per euro. Further, assume that the spot exchange rate is \$1.05 per euro, and the interest rate on dollar deposits is 10 percent and on euro it is 4 percent. Under these assumptions

A) interest parity does not hold.

B) interest parity does hold.

C) it is hard to tell whether interest parity does or does not hold.

D) Not enough information is given to answer the question.

E) interest parity fluctuates.

Answer: B

Page Ref: 361-365

Difficulty: Easy

3) What is the interest parity condition?

Answer: The condition that the expected returns on deposits of any two currencies are equal when measured in the same currency is called the interest parity condition. It implies that potential holders of foreign currency deposits view them as equally desirable assets, i.e. risk is assumed away.

In notational forms:

$$R_{\$} = R_E + (E^e_{\$/E} - E_{\$/E})/E_{\$/E}$$

Page Ref: 361-365

Difficulty: Easy

4) Explain why the interest parity condition must hold if the foreign exchange market is in equilibrium.

Answer: The foreign exchange market is in equilibrium when deposits of all currencies offer the same expected rate of return. Potential holders of foreign currency deposits view them all as equally desirable assets. If expected rate of return on any currency deposit is higher or lower than the other, there will exist an excess supply or demand for that currency because one will yield a higher return than the other.

Page Ref: 361-365

Difficulty: Moderate

5) Calculate the interest rate in the United States, if interest parity condition holds, for the following 15 cases.

Case	Expected Rate of Dollar Depreciation Against Euro		R <sub>\$</sub>
	R <sub>E</sub>	E	
1	0.06	0	
2	0.06	0.04	
3	0.06	0.08	
4	0.12	-0.04	
5	0.18	0	
6	0.06	0	
7	0.06	0.04	
8	0.06	0.08	
9	0.12	-0.04	
10	0.18	0	
11	0.06	0	
12	0.06	0.04	
13	0.06	0.08	
14	0.12	-0.04	
15	0.18	0	

Answer:

Case	Expected Rate of Dollar Depreciation Against Euro		R <sub>\$</sub>
	R <sub>E</sub>	E	
1	0.06	0	0.06
2	0.06	0.04	0.1
3	0.06	0.08	0.14
4	0.12	-0.04	0.08
5	0.18	0	0.18
6	0.06	0	0.06
7	0.06	0.04	0.1
8	0.06	0.08	0.14
9	0.12	-0.04	0.08
10	0.18	0	0.18
11	0.06	0	0.06
12	0.06	0.04	0.1
13	0.06	0.08	0.14
14	0.12	-0.04	0.08
15	0.18	0	0.18

Page Ref: 361-365

Difficulty: Moderate

6) Calculate the interest rate in the euro zone if interest parity condition holds, for the following 15 cases.

Case	$R_E$	Expected Rate of Dollar Depreciation Against Euro E	$R_{\$}$
1		0	0.06
2		0.04	0.11
3		0.08	0.16
4		-0.04	0.05
5		0	0.1
6		0	0.11
7		0.04	0.16
8		0.08	0.21
9		-0.04	0.1
10		0	0.15
11		0	0.16
12		0.04	0.21
13		0.08	0.26
14		-0.04	0.15
15		0	0.2

Answer:

Case	$R_E$	Expected Rate of Dollar Depreciation Against Euro E	$R_{\$}$
1	0.06	0	0.06
2	0.07	0.04	0.11
3	0.08	0.08	0.16
4	0.09	-0.04	0.05
5	0.1	0	0.1
6	0.11	0	0.11
7	0.12	0.04	0.16
8	0.13	0.08	0.21
9	0.14	-0.04	0.1
10	0.15	0	0.15
11	0.16	0	0.16
12	0.17	0.04	0.21
13	0.18	0.08	0.26
14	0.19	-0.04	0.15
15	0.2	0	0.2

Page Ref: 361-365

Difficulty: Moderate

7) Assume the U.S. interest rate is 10 percent, and the interest rate on euro deposits is 5 percent. For the following exchange rates, find the forward exchange rates.

Today's Dollar/Euro Exchange Rate E\$/E	Forward Exchange Rate F\$/E
1	
1.05	
1.1	
1.2	
1.3	

Answer: Using the covered interest rate parity will yield the second column in the table:

$$F\$/E = (R\$ - R_E) E\$/E + E\$/E$$

Today's Dollar/Euro Exchange Rate E\$/E	Forward Exchange Rate F\$/E
1	1.05
1.05	1.1025
1.1	1.155
1.2	1.26
1.3	1.365

Page Ref: 361-365

Difficulty: Moderate

8) Calculate the Expected Dollar Depreciation Rate against the euro and the expected dollar return on euro deposits if the expected exchange rate is \$1.10 per euro.

Today's Dollar/Euro Exchange Rate $E_{\$/\epsilon}$	Interest Rate on Euro Deposits $R_{\epsilon}$	Expected Dollar Depreciation Rate Against Euro $(1.10 - E_{\$/\epsilon})/E_{\$/\epsilon}$	Expected Dollar Return on Euro Deposits $R_{\epsilon} + (1.10 - E_{\$/\epsilon})/E_{\$/\epsilon}$
1.10	0.03		
1.08	0.03		
1.06	0.03		
1.04	0.03		
1.02	0.03		

Answer:

Today's Dollar/Euro Exchange Rate $E_{\$/\epsilon}$	Interest Rate on Euro Deposits $R_{\epsilon}$	Expected Dollar Depreciation Rate Against Euro $(1.10 - E_{\$/\epsilon})/E_{\$/\epsilon}$	Expected Dollar Return on Euro Deposits $R_{\epsilon} + (1.10 - E_{\$/\epsilon})/E_{\$/\epsilon}$
1.10	0.03	0	0.03
1.08	0.03	0.018519	0.048519
1.06	0.03	0.037736	0.067736
1.04	0.03	0.057692	0.087692
1.02	0.03	0.078431	0.108431

Page Ref: 361-365

Difficulty: Moderate

#### 14.5 Interest Rates, Expectations, and Equilibrium

- ✓ 1) Which one of the following statements is the MOST accurate?
- A) A rise in the interest rate offered by dollar deposits causes the dollar to appreciate.
  - B) A rise in the interest rate offered by dollar deposits causes the dollar to depreciate.
  - C) A rise in the interest rate offered by dollar deposits does not affect the U.S. dollar.
  - D) For a given euro interest rate and constant expected exchange rate, a rise in the interest rate offered by dollar deposits causes the dollar to appreciate.
  - E) A rise in the interest rate offered by the dollar causes the euro to appreciate.

Answer: D

Page Ref: 366-370

Difficulty: Easy

2) Which one of the following statements is the MOST accurate?

A) For a fixed interest rate, a rise in the expected future exchange rate causes a rise in the current exchange rate.

B) For a fixed interest rate, a rise in the expected future exchange rate causes a fall in the current exchange rate.

C) For a fixed interest rate, a rise in the expected future exchange rate does not cause a change in the current exchange rate.

D) For a given dollar interest rate and a constant expected exchange rate, a rise in the interest rate of the euro causes the dollar to depreciate.

E) For a fixed interest rate, a fall in the expected future exchange rate causes a rise in the current exchange rate.

Answer: A

Page Ref: 366-370

Difficulty: Easy

3) Discuss the effects of a rise in the dollar interest rate on the exchange rate.

Answer: There are two effects to consider. A rise in the interest rate offered by dollar deposits combined with a constant expected exchange rate will cause the dollar to appreciate (see Figure 14-5 from the text). However, the expected exchange rate will likely change. As Figure 14-6 from the text shows, if the expected exchange rate increases, the dollar will depreciate.

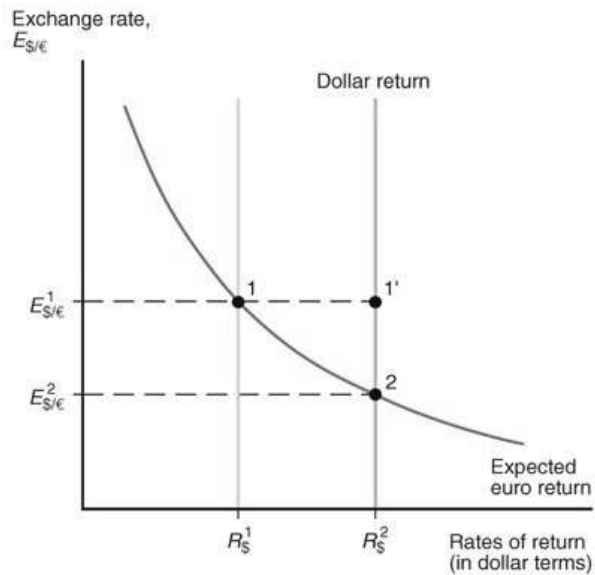


Figure 14-5

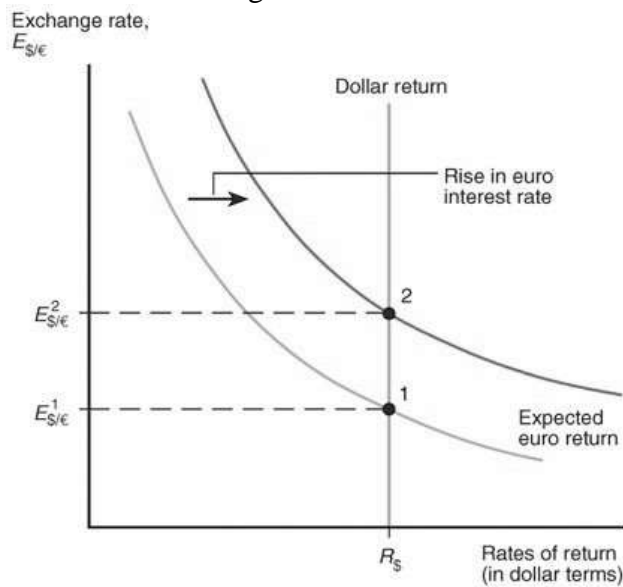


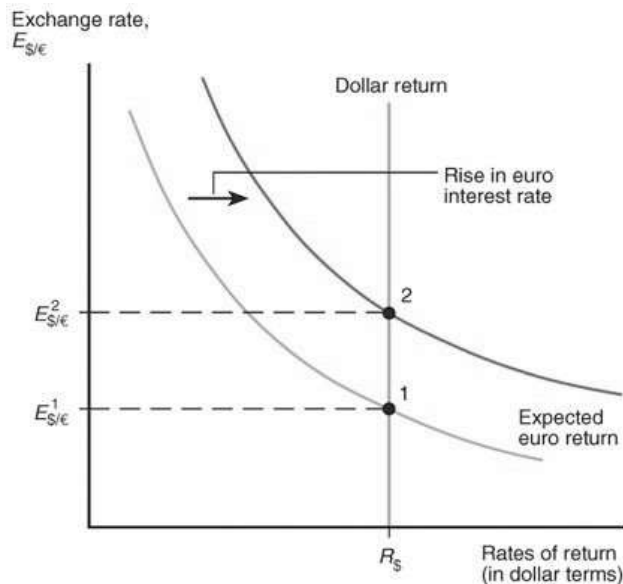
Figure 14-6

Page Ref: 366-370

Difficulty: Moderate



4) Discuss the effects of a rise in the interest rate paid by euro deposits on the exchange rate.  
 Answer: There are two effects to consider. If we make the unrealistic assumption that the expected exchange rate will not change, then a rise in the interest rate paid by Euro deposits causes the dollar to depreciate. However, if the expected exchange rate were to rise, then the current exchange rate would also rise. (See Figure 14-6 from the text.)



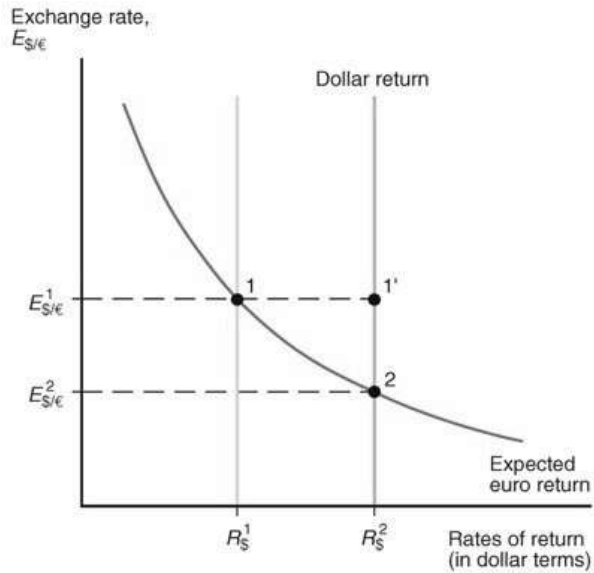
Page Ref: 366-370  
 Difficulty: Moderate

5) Explain why (holding interest rates constant), a rise in the expected depreciation in a country's currency leads to depreciation of that currency today.  
 Answer: A rise in the expected depreciation rate of the dollar raises the expected dollar return on euro deposits. Now, there are excess supply of dollar deposits (euro deposits offer higher expected rate of return than do dollar deposits). The dollar must depreciate to remove this excess supply.

Page Ref: 366-370  
 Difficulty: Moderate

6) Show graphically a drop in the interest rate paid by euro deposits. What is the effect on the dollar?

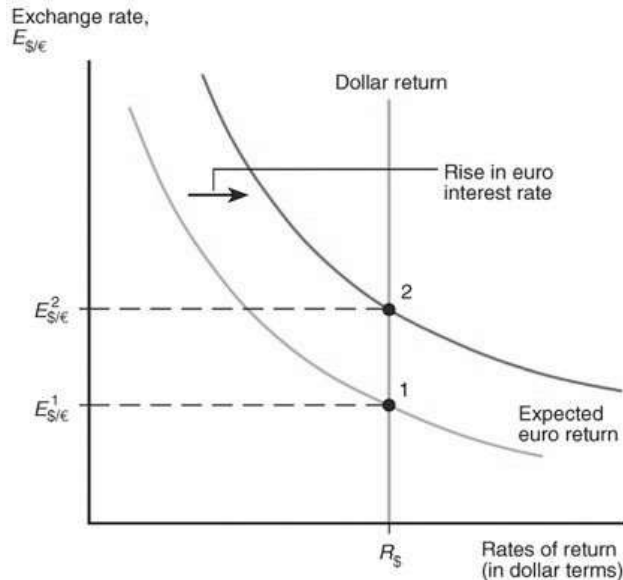
Answer: A drop in the interest rate from  $R_1^{\$}$  to  $R_2^{\$}$  causes the dollar to depreciate from  $E_{\$/\text{€}}^1$  (point 2) to  $E_{\$/\text{€}}^2$  (point 1). (See Figure 14-5 from the text.)



Page Ref: 366-370  
Difficulty: Difficult

7) Show graphically a drop in the interest rate offered by dollar deposits,  $R_{\$}$ , and the effect on the exchange rate,  $E_{\$/\epsilon}$ .

Answer: A drop in the interest rate paid by euro deposits causes the dollar to appreciate from  $E_{\$/\epsilon}^1$  (point 2) to  $E_{\$/\epsilon}^2$  (point 1). The expected future exchange rate also drops. (See Figure 14-6 from the text.)



Page Ref: 366-370

Difficulty: Difficult

#### 14.6 Appendix to Chapter 14: Forward Exchange Rates and Covered Interest Parity

1) The covered interest rate parity condition can be stated as follows: The interest rate on dollar deposits equals the interest rate on euro deposits \_\_\_\_\_ the forward \_\_\_\_\_ on euros against dollars.

- A) plus; premium
- B) minus; premium
- C) plus; discount
- D) minus; discount
- E) times; premium

Answer: A

Page Ref: 376-378

Difficulty: Easy

2) The covered interest rate parity condition can be stated as follows: The interest rate on dollar deposits equals the interest rate on euro deposits \_\_\_\_\_ the forward \_\_\_\_\_ on dollars against euros.

- A) plus; discount
- B) minus; premium
- C) plus; premium
- D) minus; discount
- E) times; premium

Answer: A

Page Ref: 376-378

Difficulty: Easy

**International Economics, 10e (Krugman/Obstfeld/Melitz)**  
**Chapter 15 (4) Money, Interest Rates, and Exchange Rates**

15.1 Money Defined: A Brief Review

- 1) The exchange rate between currencies depends on
- A) the interest rate that can be earned on deposits of those currencies.
  - B) the interest rate that can be earned on deposits of those currencies and the expected future exchange rate.
  - C) the expected future exchange rate.
  - D) national output.
  - E) the interest rate that can be earned on deposits of those countries and the national output.

Answer: B

Page Ref: 379-381

Difficulty: Easy

- ✓ 2) Money serves as all of the following EXCEPT
- A) a medium of exchange.
  - B) a unit of account.
  - C) a store of value.
  - D) a symbol that is made of or can be redeemed for a fixed amount of precious metal.
  - E) a highly liquid asset.

Answer: D

Page Ref: 379-381

Difficulty: Easy

- 3) Money includes
- A) currency.
  - B) checking deposits held by households and firms.
  - C) deposits in the foreign exchange markets.
  - D) currency and checking deposits held by households and firms.
  - E) futures and deposits in the foreign exchange market.

Answer: D

Page Ref: 379-381

Difficulty: Easy

- 4) In the United States at the end of 2012, the total money supply, M1, amounted to approximately
- A) 16 percent of that year's GNP.
  - B) 20 percent of that year's GNP.
  - C) 30 percent of that year's GNP.
  - D) 40 percent of that year's GNP.
  - E) 50 percent of that year's GNP.

Answer: A

Page Ref: 379-381

Difficulty: Easy

5) What are the main functions of money?

Answer: Money serves in general three important functions: a medium of exchange; a unit of account; and a store of value. As a medium of exchange, money avoids going back to a barter economy, with the enormous search costs connected with it. As a unit of account, the use of money economizes on the number of prices an individual faces. Consider an economy with  $N$  goods, then one needs only  $(N - 1)$  prices. As a store of value, the use of money in general ensures that you can transfer wealth between periods.

Page Ref: 379-381

Difficulty: Moderate

## 15.2 The Demand for Money by Individuals

1) Individuals base their demand for an asset on

A) the expected return the asset offers compared with the returns offered by other assets.

B) the riskiness of the asset's expected return.

C) the asset's liquidity.

D) the expected return, how risky that expected return is, and the asset's liquidity.

E) the aesthetic qualities of the asset.

Answer: D

Page Ref: 382-383

Difficulty: Easy

2) A family's summer house on Cape Cod pays a return in the form of

A) interest rate.

B) capital gains.

C) the pleasure of vacations at the beach.

D) stock options.

E) capital gains and pleasure.

Answer: E

Page Ref: 382-383

Difficulty: Easy

3) In a world with money and bonds only

A) it is not risky to hold money.

B) it is risky to hold money.

C) risk is an important factor in the demand for money.

D) there is no relationship between risk and holding money.

E) assets become meaningless.

Answer: B

Page Ref: 382-383

Difficulty: Easy

4) Which one of the following statements is the MOST accurate?

A) A rise in the average value of transactions carried out by a household or a firm causes its demand for money to fall.

B) A reduction in the average value of transactions carried out by a household or a firm causes its demand for money to rise.

C) A rise in the average value of transactions carried out by a household or a firm causes its demand for money to rise.

D) A rise in the average value of transactions carried out by a household or a firm causes its demand for real money to rise.

E) a decrease in the average value of transactions carried out by a household or a firm causes its demand for real money to rise.

Answer: D

Page Ref: 382-383

Difficulty: Easy

5) An individual's need for liquidity would increase if

A) the average value of transactions carried out by the individual fell.

B) the average value of transactions carried out by the individual rose.

C) the individual got a raise.

D) the individual received a new ATM card.

E) the individual wanted to avoid risks.

Answer: B

Page Ref: 382-383

Difficulty: Easy

6) What are the factors that determine the amount of money an individual desires to hold?

Answer: Three main factors: first, the expected return the asset offers compared with the returns offered by other assets; second, the riskiness of the asset's expected return; and third, the asset's liquidity.

Page Ref: 382-383

Difficulty: Moderate

### 15.3 Aggregate Money Demand

1) The aggregate money demand depends on

A) the interest rate.

B) the price level.

C) real national income.

D) the interest rate, price level, and real national income.

E) the price level and the liquidity of the asset.

Answer: D

Page Ref: 383-385

Difficulty: Easy

2) If there is initially an

A) excess demand for money, the interest rate will fall, and the supply of money it will rise.

B) excess supply of money, the interest rate will fall, and if there is initially an excess demand, it will rise.

C) excess supply of money, the interest rate will rise, and if there is initially an excess demand, it will fall.

D) excess supply of money, the interest rate will fall, and if there is also an excess demand, it will fall rapidly.

E) excess supply of money, the interest rate will rise, and if there is also an excess demand, it will rise rapidly.

Answer: B

Page Ref: 383-385

Difficulty: Easy

✓ 3) Which one of the following statements is the MOST accurate?

A) A decrease in the money supply lowers the interest rate while an increase in the money supply raises the interest rate, given the price level and output.

B) An increase in the money supply lowers the interest rate while a fall in the money supply raises the interest rate, given the price level.

C) An increase in the money supply lowers the interest rate while a fall in the money supply raises the interest rate, given the output level.

D) An increase in the money supply lowers the interest rate while a fall in the money supply raises the interest rate, given the price level and output.

E) An increase in the money supply does not usually affect the interest rate.

Answer: D

Page Ref: 383-385

Difficulty: Easy

4) An increase in

A) nominal output raises the interest rate while a fall in real output lowers the interest rate, given the price level and the money supply.

B) real output decreases the interest rate while a fall in real output increases the interest rate, given the price level.

C) real output raises the interest rate while a fall in real output lowers the interest rate, given the money supply.

D) nominal output raises the interest rate while a fall in real output lowers the interest rate, given the price level.

E) real output raises the interest rate while a fall in real output lowers the interest rate, given the price level and the money supply.

Answer: E

Page Ref: 383-385

Difficulty: Easy



5) The aggregate demand for money can be expressed by

A)  $M_d = P \times L(R, Y)$ .

B)  $M_d = L \times P(R, Y)$ .

C)  $M_d = P \times Y(R, L)$ .

D)  $M_d = R \times L(P, Y)$ .

E)  $M_d = R \times L(R, P)$ .

Answer: A

Page Ref: 383-385

Difficulty: Easy

6) What are the main factors that determine aggregate money demand?

Answer: The three main factors are interest rate, the price level and real national income. A rise in the interest rate causes individuals in the economy to reduce their demand for money. If the price level rises, individual households and firms will spend more money than before. When real national income (GNP) rises the demand for money will also rise.

Page Ref: 383-385

Difficulty: Moderate

7) Explain why one can write the demand for money as the price level times a function of the interest rate and real income as follows:

$$M_d = P \times L(R, Y)$$

Answer: The aggregate money demand is proportional to the price level. Imagine that all prices in an economy doubled, but the interest rate and everyone's real incomes remained unchanged. Then, the money value of each individual's average daily transactions would simply double, as would the amount of money each wishes to hold.

Page Ref: 383-385

Difficulty: Moderate

#### 15.4 The Equilibrium Interest Rate: The Interaction of Money Supply and Demand

1) The aggregate real money demand schedule  $L(R, Y)$

A) slopes upward because a fall in the interest rate raises the desired real money holdings of each household and firm in the economy.

B) slopes downward because a fall in the interest rate reduces the desired real money holdings of each household and firm in the economy.

C) has a zero slope because a fall in the interest rate keeps constant the desired real money holdings of each household and firm in the economy.

D) slopes downward because a fall in the interest rate raises the desired real money holdings of each household and firm in the economy.

E) slopes downward because a rise in the interest rate makes consumers less focused on the liquidity of their assets.

Answer: D

Page Ref: 385-388

Difficulty: Easy

2) For a given level of

- A) nominal GNP, changes in interest rates cause movements along the  $L(R, Y)$  schedule.
- B) real GNP, changes in interest rates cause a decrease of the  $L(R, Y)$  schedule.
- C) real GNP, changes in interest rates cause an increase of the  $L(R, Y)$  schedule.
- D) nominal GNP, changes in interest rates cause an increase in the  $L(R, Y)$  schedule.
- E) real GNP, changes in interest rates cause movements along the  $L(R, Y)$  schedule.

Answer: E

Page Ref: 385-388

Difficulty: Easy

3) The money supply schedule is

- A) horizontal because  $M^S$  is set by the central bank while  $P$  is taken as given.
- B) horizontal because  $M^S$  is set by the central bank.
- C) vertical because  $M^S$  is set by the households and firms while  $P$  is taken as given.
- D) vertical because  $M^S$  and  $P$  are set by the central bank.
- E) vertical because  $M^S$  is set by the central bank while  $P$  is taken as given.

Answer: E

Page Ref: 385-388

Difficulty: Easy

4) If individuals are holding more money than they desire

- A) they will attempt to reduce their liquidity by using money to purchase goods.
- B) they will attempt to reduce their liquidity by using money to purchase interest-bearing assets.
- C) they will attempt to reduce their liquidity by converting real money holdings into nominal money holdings.
- D) they will keep their holdings constant.

Answer: B

Page Ref: 385-388

Difficulty: Easy

5) If there is an excess supply of money

- A) the interest rate falls.
- B) the interest rate rises.
- C) the real money supply shifts left to make an equilibrium.
- D) the real money supply shifts right to make an equilibrium.
- E) the interest rate stays constant, but consumer confidence falters.

Answer: A

Page Ref: 385-388

Difficulty: Easy

- 6) A reduction in a country's money supply causes
- A) its currency to depreciate in the foreign exchange market.
  - B) its currency to appreciate in the foreign exchange market.
  - C) does not affect its currency in the foreign market.
  - D) does affect its currency in the foreign market in an ambiguous manor.
  - E) affects other countries currency in the foreign market.

Answer: B

Page Ref: 385-388

Difficulty: Easy

- 7) What will be the effects of an increase in the money supply on the interest rate?

Answer: An increase in the money supply will cause interest rate to decrease. This should increase investment and possibly consumption of durable goods. The reduction in the interest rate will cause a depreciation of the dollar.

Page Ref: 385-388

Difficulty: Moderate

- 8) What will be the effects of an increase in real output on the interest rate?

Answer: An increase in real output will increase the interest rate. If investment depends only on interest rate, this will cause investment to go down. The increases interest rate will cause an appreciation of the dollar.

Page Ref: 385-388

Difficulty: Moderate

### 15.5 The Money Supply and the Exchange Rate in the Short Run

- ✓ 1) An increase in a country's money supply causes
- A) its currency to appreciate in the foreign exchange market while a reduction in the money supply causes its currency to depreciate.
  - B) its currency to depreciate in the foreign exchange market while a reduction in the money supply causes its currency to appreciate.
  - C) no effect on the values of it currency in international markets.
  - D) its currency to depreciate in the foreign exchange market while a reduction in the money supply causes its currency to further depreciate.
  - E) its currency to depreciate in the domestic market and appreciate in the foreign market.

Answer: B

Page Ref: 389-394

Difficulty: Easy

2) Which one of the following statements is the MOST accurate?

- A) Given  $P_{US}$ , when the money supply rises, the dollar interest rate declines and the dollar depreciates against the euro.
- B) Given  $Y_{US}$ , when the money supply rises, the dollar interest rate declines and the dollar depreciates against the euro.
- C) Given  $P_{US}$  and  $Y_{US}$ , when the money supply decreases, the dollar interest rate declines and the dollar depreciates against the euro.
- D) Given  $P_{US}$  and  $Y_{US}$ , when the money supply rises, the dollar interest rate declines and the dollar appreciates against the euro.
- E) Given  $P_{US}$  and  $Y_{US}$ , when the money supply rises, the dollar interest rate declines and the dollar depreciates against the euro.

Answer: E

Page Ref: 389-394

Difficulty: Easy

3) Given  $P_{US}$  and  $Y_{US}$

- A) An increase in the European money supply causes the euro to appreciate against the dollar, but it does not disturb the U.S. money market equilibrium.
- B) An increase in the European money supply causes the euro to appreciate against the dollar, and it creates excess demand for dollars in the U.S. money market.
- C) An increase in the European money supply causes the euro to depreciate against the dollar, and it creates excess demand for dollars in the U.S. money market.
- D) An increase in the European money supply causes the euro to depreciate against the dollar, but it does not disturb the U.S. money market equilibrium.
- E) An increase in the European money supply causes the euro to depreciate against the dollar, and disturbing the U.S. money market equilibrium.

Answer: D

Page Ref: 389-394

Difficulty: Easy

4) Analyze the effects of an increase in the European money supply on the dollar/euro exchange rate.

Answer: The main points are: An increase in the European money supply will reduce the interest rate on the euro, and thus causes the euro to depreciates against the dollar. The U.S. money demand and money supply are not going to be affected, and thus the interest rate in the U.S. will remain the same.

Page Ref: 389-394

Difficulty: Moderate

5) Explain how the money markets of two countries are linked through the foreign exchange market.

Answer: The monetary policy actions by the Fed affect the U.S. interest rate, changing the dollar/euro exchange rate that clears the foreign exchange market. The European System of Central Banks (ESCB) can affect the exchange rate by changing the European money supply and interest rate.

Page Ref: 389-394

Difficulty: Moderate

6) What would be the effect of an increase in the European Money Supply in the Dollar Euro Exchange Rate?

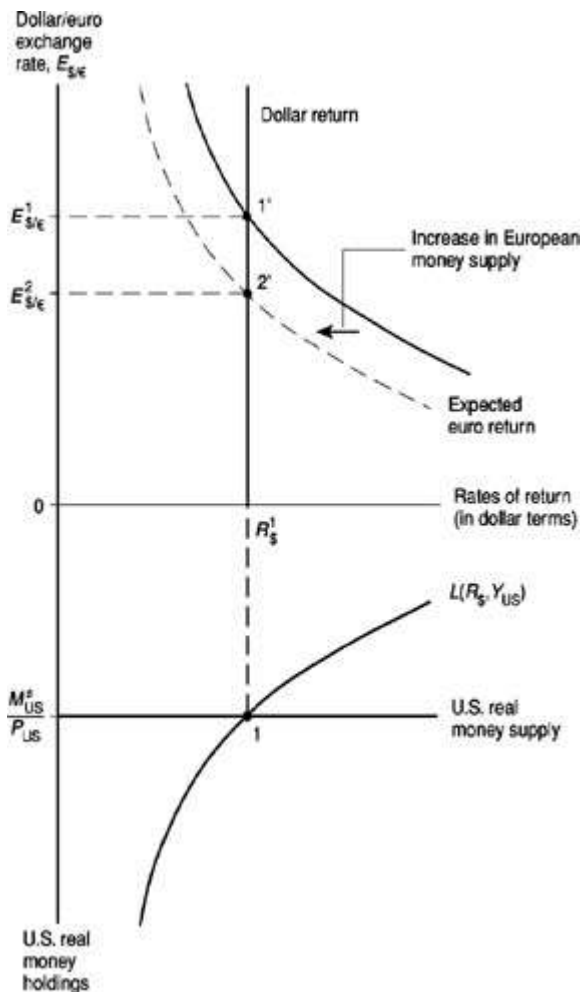
Answer: An increase in the European money supply lowers the dollar return on Euro deposits, i.e. the dollar appreciates against the Euro. There is no change in the US money market.

Page Ref: 389-394

Difficulty: Moderate

7) Using a figure describing both the U.S. money market and the foreign exchange market, analyze the effects of a temporary increase in the European money supply on the dollar/euro exchange rate.

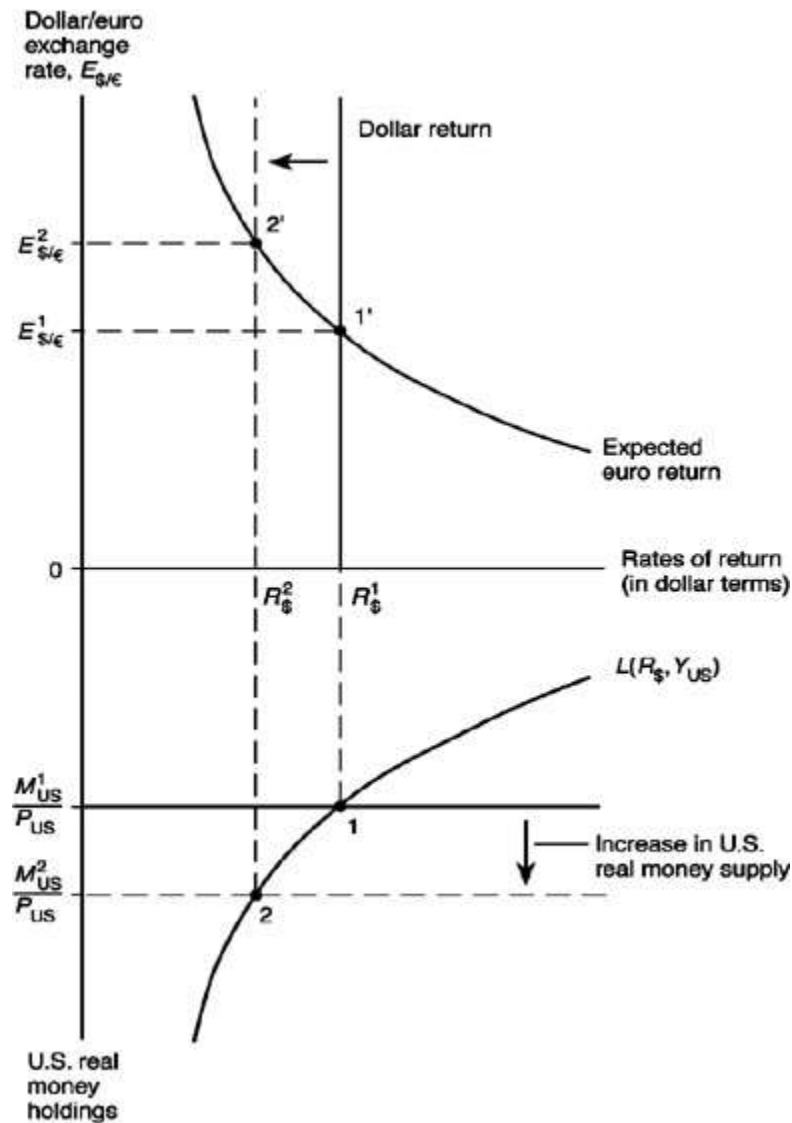
Answer: An increase in the European money supply will reduce the interest rate on the euro and thus will cause the schedule of the expected euro return expressed in dollars to shift down, causing a reduction in the dollar/euro exchange rate, i.e., an appreciation of the U.S. Dollar. The euro depreciates against the dollar. The U.S. money demand and money supply are not going to be affected, and thus the interest rate in the U.S. will remain the same.



Page Ref: 389-394

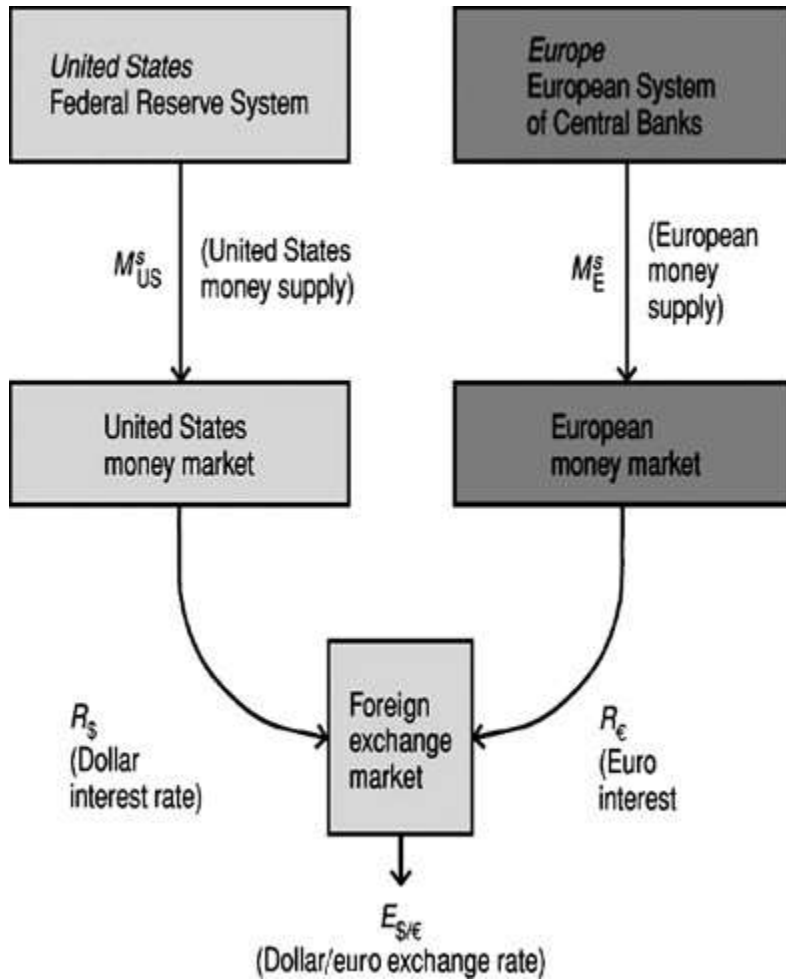
Difficulty: Moderate

8) Using a figure describing both the U.S. money market and the foreign exchange market, analyze the effects of an increase in the U.S. money supply on the dollar/euro exchange rate.  
 Answer: An increase in the U.S. money supply will cause interest rate to decrease. This should increase investment and possibly consumption of durable goods. The reduction in the interest rate will cause a movement to the left along the schedule depicting the expected euro return expressed in dollar. The result is an increase in  $E$  or a depreciation of the dollar.



Page Ref: 389-394  
 Difficulty: Moderate

9) Explain the following figure.



Answer: The figure explains how the money markets of two countries are linked through the foreign exchange market. The monetary policy actions by the Fed affect the U.S. interest rate, changing the dollar/euro exchange rate that clears the foreign exchange market. The European System of Central Banks (ESCB) can affect the exchange rate by changing the European money supply and interest rate.

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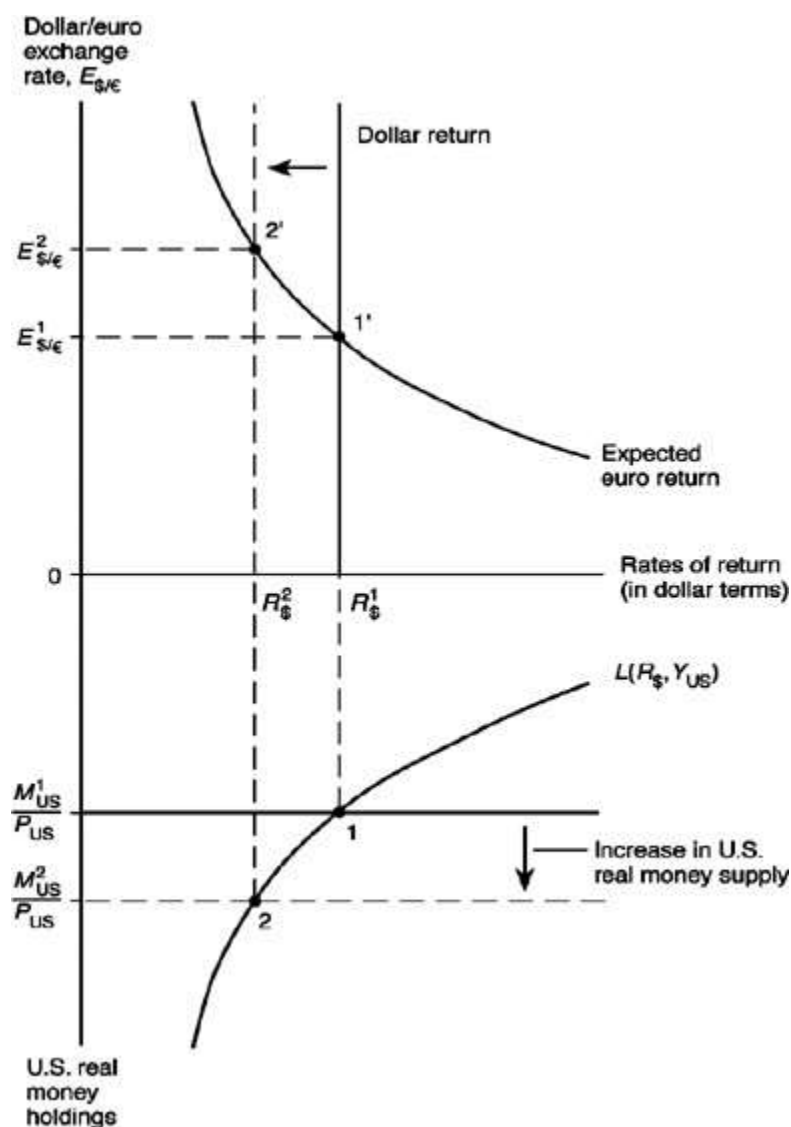
Difficulty: Moderate



10) Combine a graph showing the interest parity condition and one showing money demand and supply to demonstrate simultaneous equilibrium in the money market and the foreign exchange market.

How would an increase in the U.S. money supply affect the Dollar/Euro exchange rate and the U.S. interest rate? Illustrate your answer graphically and explain.

Answer: Above the axis is depicted the foreign exchange market, where changes in the rate of return on the dollar are mapped into changes in the exchange rate. Below the axis is depicted the U.S. money market and shows the relation between the rate of return on the dollar and U.S. real money holdings. The mechanism works as follows. Consider an increase in the U.S. real money holdings. Supply and demand dictate that the demand for money must increase, so the rate of return must lower to equilibrate at point 2. The lower rate of return on the dollar will cause the dollar to depreciate (exchange rate moves to point 2').



Page Ref: 389-394

Difficulty: Moderate

## 15.6 Money, the Price Level, and the Exchange Rate in the Long Run

1) An economy's long-run equilibrium is

A) the equilibrium that would occur if prices were perfectly flexible.

B) the equilibrium that would occur if prices were perfectly flexible and always adjusted immediately.

C) the equilibrium that would occur if prices were perfectly flexible and always adjusted immediately to preserve full employment.

D) the equilibrium that would occur if prices were perfectly fixed to preserve full employment.

E) the equilibrium that would occur if prices were perfectly fixed at the full employment point.

Answer: C

Page Ref: 394-397

Difficulty: Easy

2) A permanent increase in a country's money supply

A) causes a more than proportional increase in its price level.

B) causes a less than proportional increase in its price level.

C) causes a proportional increase in its price level.

D) leaves its price level constant in long-run equilibrium.

E) causes an inversely proportional fall in its price level.

Answer: C

Page Ref: 394-397

Difficulty: Easy

3) A change in the level of the supply of money

A) increases the long-run values of the interest rate and real output.

B) decreases the long-run values of the interest rate and real output.

C) has no effect on the long-run values of the interest rate, but may affect real output.

D) has no effect on the long-run values of real output, but may affect the interest rate.

E) has no effect on the long-run values of the interest rate and real output.

Answer: E

Page Ref: 394-397

Difficulty: Easy

4) Changes in the money supply growth rate

A) are neutral in the short run.

B) need not be neutral in the short run.

C) are neutral in the long run.

D) need not be neutral in the long run.

E) affect the real output of the economy.

Answer: D

Page Ref: 394-397

Difficulty: Easy

✓  
5) A sustained change in the monetary growth rate will

- A) immediately affect equilibrium real money balances by raising the money interest rate.
- B) eventually affect equilibrium nominal money balances by raising the money interest rate.
- C) eventually affect equilibrium real money balances by reducing the money interest rate.
- D) eventually affect equilibrium real money balances by raising the real interest rate.
- E) eventually affect equilibrium real money balances by raising the money interest rate.

Answer: E

Page Ref: 394-397

Difficulty: Easy

6) Money demand behavior may

- A) change as a result of demographic trends or financial innovations such as electronic cash-transfer facilities.
- B) change only as a result of demographic trends.
- C) change only as a result of financial innovations such as electronic cash-transfer facilities.
- D) not change as a result of demographic trends or financial innovations such as electronic cash-transfer facilities.
- E) change as a result of demographic trends but not as a result of financial innovations such as electronic cash-transfer facilities.

Answer: A

Page Ref: 394-397

Difficulty: Easy

7) Using year-by-year data from 1987-2007 shows that

- A) there is a strong positive relation between average Latin American money-supply growth and inflation.
- B) there is a strong negative relation between average Latin American money-supply growth and inflation.
- C) there is a strong positive relation between average Latin American money-supply growth and deflation.
- D) it is difficult to find a strong positive relation between average Latin American money-supply growth and inflation.
- E) there is a weak positive relation between average Latin American money-supply growth and inflation.

Answer: A

Page Ref: 394-397

Difficulty: Easy

8) Which one of the following statements is the MOST accurate?

A) A permanent increase in a country's money supply causes a proportional long-run depreciation of its currency against foreign currencies.

B) A temporary increase in a country's money supply causes a proportional long-run depreciation of its currency against foreign currencies.

C) A permanent increase in a country's money supply causes a proportional long-run appreciation of its currency against foreign currencies.

D) A permanent increase in a country's money supply causes a proportional short-run depreciation of its currency against foreign currencies.

E) A permanent increase in a country's money supply causes a proportional short-run appreciation of its currency against foreign currencies.

Answer: A

Page Ref: 394-397

Difficulty: Easy

9) The long run effects of money supply change

A) ambiguous effect on the long-run values of the interest rate or real output, a proportional change in the price level's long-run value in the opposite direction.

B) proportional effect on the long-run values of the interest rate or real output, a proportional change in the price level's long-run value in the same direction.

C) no effect on the long-run values of the interest rate or real output, a proportional change in the price level's long-run value in the same direction.

D) no effect on the long-run values of the interest rate or real output, no change in the price level's long-run value.

E) ambiguous effect on the long-run values of the interest rate or real output, A disproportional change in the price level's long-run value in the same direction.

Answer: C

Page Ref: 394-397

Difficulty: Easy

## 15.7 Inflation and Exchange Rate Dynamics

1) What term means an explosive and seemingly uncontrollable inflation in which money loses value rapidly and may even go out of use?

A) superinflation

B) stagflation

C) hyperinflation

D) maginflation

E) deflation

Answer: C

Page Ref: 398-405

Difficulty: Easy

2) The most extreme inflationary conditions occurred

A) in Zimbabwe in 2008.

B) in Chile in 2012.

C) in Eastern Europe in the 1990s.

D) in Western Europe in the 1980s.

E) in Germany in 20013.

Answer: A

Page Ref: 398-405

Difficulty: Easy

3) For main industrial countries such as Japan and the U.S.

A) there is much less month-to-month variability of the exchange rate, suggesting that price levels are relatively sticky in the short run.

B) there is much more month-to-month variability of the exchange rate, suggesting that price levels are relatively sticky in the short run.

C) there is almost the same month-to-month variability of the exchange rate and price levels.

D) it is hard to tell whether month-to-month variability of the exchange rate is similar to changes in price levels.

E) there is much more month-to-month variability of the exchange rate, suggesting that price levels are relatively sticky in the long run.

Answer: B

Page Ref: 398-405

Difficulty: Easy

4) Which one of the following statements is the MOST accurate?

A) There is a lively academic debate over the possibility that seemingly sticky wages and prices are in reality quite fixed.

B) There is a lively academic debate over the possibility that seemingly sticky wages and prices are in reality much more sticky than theory assumes.

C) There is a lively academic debate over the possibility that seemingly sticky wages and prices are in reality quite flexible.

D) There is no debate over the possibility that wages and prices are sticky in the long run.

E) There is no debate over the possibility that wages and prices are sticky in the short run.

Answer: C

Page Ref: 398-405

Difficulty: Easy

- 5) During hyperinflation, exploding inflation causes real money demand to
- A) fall over time, and this additional monetary change makes money prices rise even more quickly than the money supply itself rises.
  - B) increase over time, and this additional monetary change makes money prices rise even more quickly than the money supply itself rises.
  - C) fall over time, and this additional monetary change makes money prices decrease even more quickly than the money supply itself rises.
  - D) increase over time, and this additional monetary change makes money prices decrease even more quickly than the money supply itself rises.
  - E) fall over time, and this additional monetary change makes money prices decrease even less quickly than the money supply itself rises.

Answer: A

Page Ref: 398-405

Difficulty: Easy

- 6) In a classic paper, Columbia University economist Phillip Cagan drew the line between inflation and hyperinflation at an inflation rate of
- A) 50 percent per month.
  - B) 10 percent per month.
  - C) 20 percent per month.
  - D) 5 percent per month.
  - E) 25 percent per month.

Answer: A

Page Ref: 398-405

Difficulty: Easy

- 7) In a classic paper, Columbia University economist Phillip Cagan drew the line between inflation and hyperinflation at an inflation rate of
- A) more than 120 percent per year.
  - B) more than 100 percent per year.
  - C) more than 200 percent per year.
  - D) more than 12,000 percent per year.
  - E) more than 1,000 percent per year.

Answer: D

Page Ref: 400

Difficulty: Easy

8) In a world where the price level could adjust immediately to its new long-run level after a money supply increase

A) The dollar interest rate would increase because prices would adjust immediately and prevent the money supply from rising.

B) The dollar interest rate would fall because prices would adjust immediately and prevent the money supply from rising.

C) The dollar interest rate would fall because prices would adjust immediately and prevent the money supply from decreasing.

D) The dollar interest rate would decrease because prices would adjust immediately and prevent the money supply from decreasing.

E) The dollar interest rate would fall because prices would not be able to prevent the money supply from rising.

Answer: B

Page Ref: 398-405

Difficulty: Easy

9) After a permanent increase in the money supply

A) the exchange rate overshoots in the short run.

B) the exchange rate overshoots in the long run.

C) the exchange rate smoothly depreciates in the short run.

D) the exchange rate smoothly appreciates in the short run.

E) the exchange rate remains the same.

Answer: A

Page Ref: 398-405

Difficulty: Easy

10) A change in the money supply creates demand and cost pressures that lead to future increases in the price level from which main sources?

I. Excess demand for output and labor

II. Inflationary expectations

III. Raw materials prices

A) I

B) II

C) II and III

D) I and II

E) I, II, and III

Answer: E

Page Ref: 398-405

Difficulty: Easy

✓  
11) In Zimbabwe, the government stopped the country's hyperinflation by

- A) reducing domestic monetary growth drastically.
- B) returning to a gold/silver currency standard.
- C) switching to foreign currencies. that are relatively stable.
- D) passing a law making price increases illegal.
- E) implementing a new currency based on diamonds.

Answer: C

Page Ref: 400-401

Difficulty: Easy

12) Which of the following can help to explain why higher inflation may lead to currency appreciations?

- A) The interest rate is not the prime target of monetary policy.
- B) Most central banks adjust their policy interest rates expressly so as to keep inflation in check.
- C) Central banks increase the money supply leading to overshooting of the exchange rate.
- D) Inflation will increase the purchasing power of a currency.
- E) The world market does not adjust their currency trade to reflect inflation.

Answer: B

Page Ref: 398-405

Difficulty: Easy

13) Which one of the countries below announces inflation targets?

- A) Japan
- B) U.S.
- C) Canada
- D) Mexico
- E) Nicaragua

Answer: C

Page Ref: 398-405

Difficulty: Easy

14) Michael Woodford says the following is an advantage of interest-rate instruments for central banks.

- A) Conduct monetary policy without inflation.
- B) Conduct monetary policy even if checking deposits pay interest at competitive rates.
- C) Conduct monetary policy without government approval.
- D) Conduct monetary policy with consumers in mind.
- E) Conduct monetary policy with workers in mind.

Answer: B

Page Ref: 405

Difficulty: Easy



15) Inflation targeting was initiated by which central bank in 1989?

- A) U.S.
- B) Japan
- C) Canada
- D) New Zealand
- E) U.K.

Answer: D

Page Ref: 398-405

Difficulty: Easy

16) "Although the price levels appear to display short-run stickiness in many countries, a change in the money supply creates immediate demand and cost pressures that eventually lead to future increase in the price level." Discuss.

Answer: (See Section 7). The statement is true. The pressures come from three main sources: excess demand for output and labor; inflationary expectations; and, raw material prices.

Page Ref: 398-405

Difficulty: Moderate

17) Explain the effects of a permanent increase in the U.S. money supply in the short run and in the long run. Assume that the U.S. real national income is constant.

Answer: An increase in the nominal money supply raises the real money supply, lowering the interest rate in the short run. The money supply increase is considered to continue in the future; thus, it will affect the exchange rate expectations. This will make the expected return on the euro more desirable and thus the dollar depreciates. In the case of a permanent increase in the U.S. money supply, the dollar depreciates more than under a temporary increase in the money supply. Now, in the long run, prices will rise until the real money balances are the same as before the permanent increase in the money supply. Since the output level is given, the U.S. interest rate, which decreased before, will start to increase, until it will move back to its original level. The equilibrium interest rate must be the same as its original long run value. This increase in the interest rate must cause the dollar to appreciate against the euro after its sharp depreciation as a result of the permanent increase in the money supply. So a large depreciation is followed by an appreciation of the dollar. Eventually, the dollar depreciates in proportion to the increase in the price level, which in turn increases by the same proportion as the permanent increase in the money supply. Thus, money is neutral, in the sense that it cannot affect in the long run real variables, such as output, investment, etc.

Page Ref: 398-405

Difficulty: Difficult

18) Explain the exchange rate over-shooting hypothesis.

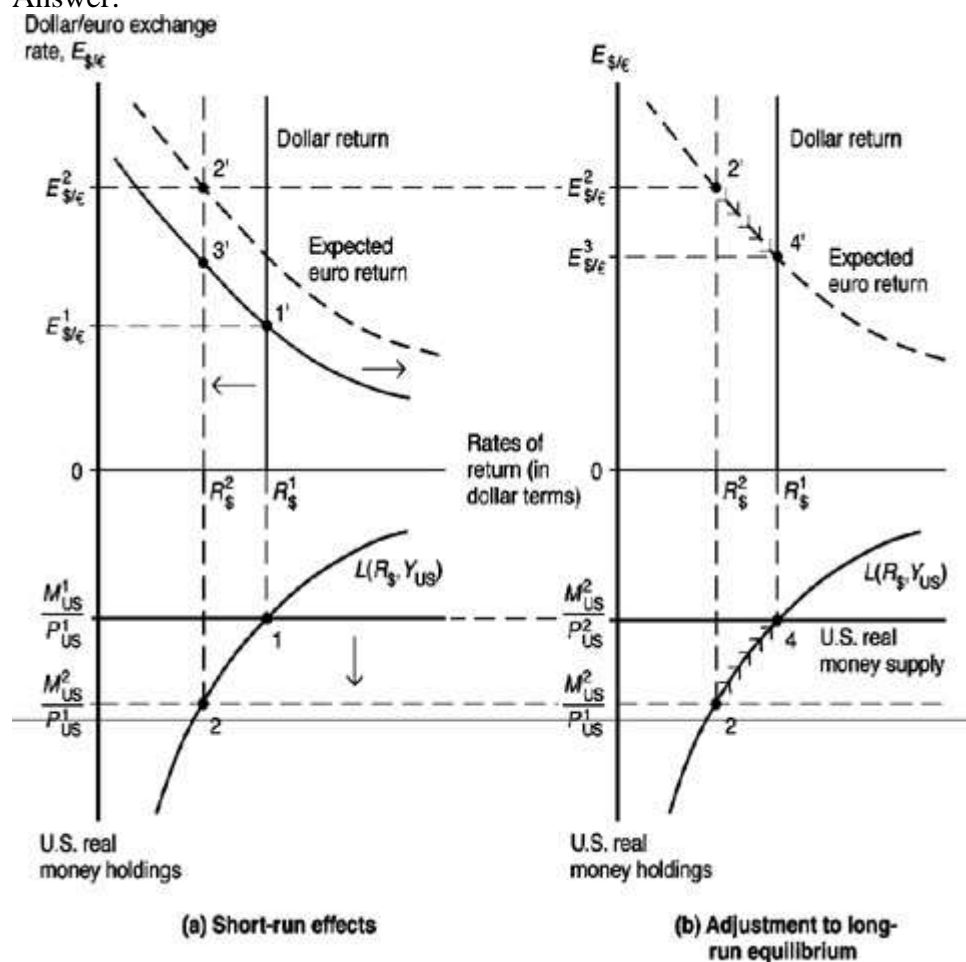
Answer: Many prices in the economy are written into long-term contracts and cannot be changed immediately when changes in the money supply occur. A permanent increase in  $M$ , holding  $P$  constant, increases the real money supply ( $M/P$ ) and lowers the nominal interest rate ( $R$ ). This shifts the dollar return schedule left. A permanent increase in  $M$  also creates the expectation that in the long run all prices including the exchange rate would rise. A rise in the expected exchange rate shifts the  $ERR(DM)$  schedule right. Therefore, in the short run equilibrium is established at point 2. In the long run the price level adjusts and rises proportionately with the money supply. Therefore,  $M/P$  and  $R$  return to their initial levels in the long run and the equilibrium exchange rate is determined at point 3. In other words, the exchange rate first overshoots and then returns to its long run level. Therefore, the fluctuations in  $E$  are much stronger than those of  $P$ .

Page Ref: 398-405

Difficulty: Difficult

19) Using figures for both the short run and the long run, show the effects of a permanent increase in the U.S. money supply. Try to line up your figures to the short and long run equilibria side by side. Assume that the U.S. real national income is constant.

Answer:



An increase in the nominal money supply raises the real money supply, lowering the interest rate in the short run (the movement from 1 to 2 on the lower left figure). The money supply increase is considered to continue in the future, and thus it will affect the exchange rate expectations. This will make the expected return on the euro more desirable and thus the dollar depreciates. In the case of a permanent increase in the U.S. money supply, the dollar depreciates more than under a temporary increase in the money supply (from point 1' to point 2' in the upper left figure). Now, in the long run, (the right hand side figure), prices will rise until the real money balances are the same as before the permanent increase in the money supply (from point 2 to point 4, in the lower right figure). Since the output level is given, the U.S. interest rate which decreased before, will start to increase, until it will move back to its original level (from Point 2 to 4 in the lower left figure). The equilibrium interest rate must be the same as its original long run value (at point 4 in the lower right figure). This increase in the interest rate must cause the dollar to appreciate against the euro after its sharp depreciation as a result of the permanent increase in the money supply (this process is depicted in the upper right figure from point 2' to 4'). So a large depreciation (from Point 1' in the left upper figure to point 2' in both the left and right upper figures) is followed by an appreciation of the dollar (the movement from 2' to point 4' in the upper right hand side figure). Eventually, the dollar depreciates in proportion to the increase in the price level, which in turn increases by the same proportion as the permanent increase in the money supply. Thus, money is neutral, in the sense that it cannot affect in the long run real variables, such as output, investment, etc. Note that points 3' and 4' represent the same exchange rate.

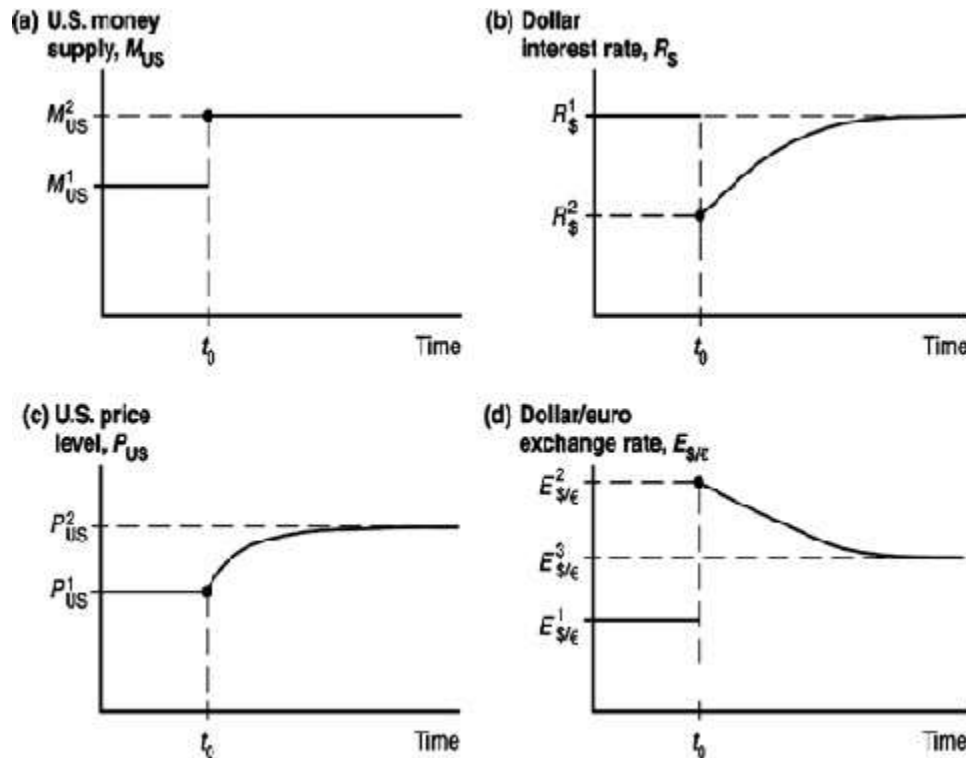
Page Ref: 398-405

Difficulty: Moderate

20) Using 4 different figures, plot the time paths showing the effects of a permanent increase in the United States money supply on:

- (a) U.S. Money supply
- (b) The dollar interest rate.
- (c) The U.S. price level
- (d) The dollar/euro exchange rate

Answer: See below.



Page Ref: 398-405  
Difficulty: Difficult



## International Economics chapter 16

국제경제론(International Economics) (Changwon National University)

**International Economics, 10e (Krugman/Obstfeld/Melitz)**  
**Chapter 16 (5) Price Levels and the Exchange Rate in the Long Run**

**16.1 The Law of One Price**

- 1) Which of the following statements is the **MOST accurate**? The law of one price states  
**A) in competitive markets free of transportation costs and official barriers to trade, identical goods sold in different countries must sell for the same price when their prices are expressed in terms of the same currency.**  
B) in competitive markets free of transportation costs and official barrier to trade, identical goods sold in the same country must sell for the same price when their prices are expressed in terms of the same currency.  
C) in competitive markets free of transportation costs and official barrier to trade, identical goods sold in different countries must sell for the same price.  
D) identical goods sold in different countries must sell for the same price when their prices are expressed in terms of the same currency.  
E) in competitive markets free of official barrier to trade, identical goods are sold at the same price regardless of transportation costs.

Answer: A

Page Ref: 413-415

Difficulty: Easy

- 2) Under **Purchasing Power Parity**

**A)  $E\$/E = P_{US}/P_E$ .**

B)  $E\$/E = P_E/P_{ES}$ .

C)  $E\$/E = P_{US} + P_E$ .

D)  $E\$/E = P_{US} - P_E$ .

E)  $E\$/P = P_{US}/P_E$ .

Answer: A

Page Ref: 413-415

Difficulty: Easy

- 3) Explain the Law of One Price. Give an example.

Answer: The law of one price states that in competitive markets free of transportation costs and trade barriers, identical goods sold in different countries must sell for the same price when expressed in terms of the same currency.

$$P_{US}^i = (E\$/\pounds) \times (P_{\pounds}^i) \text{ for good } i.$$

$$E\$/\pounds = P_{US}^i / P_{UK}^i$$

If, for example, the price of the same sweater was cheaper in London than in New York, U.S. importers and British exporters would have an incentive to buy sweaters in London and ship them to New York, pushing the London price up and the New York price down, until both were equal.

Page Ref: 413-415

Difficulty: Moderate

4) Fill in the following table, assuming the law of one price prevails.

Price in the United States of a Sweater Expressed in Dollars, $P^i_{US}$	Price in Europe Expressed in Euro, $P^i_E$	Exchange Rate Between the Dollar and the Euro, $E_{\$/E}$
25	32	0.78125
35		0.833333333
45	54	
	65	0.846153846
65		0.82278481
	85	0.882352941
85		0.787037037
95		0.871559633
115	139	

Answer:

Price in the United States of a Sweater Expressed in Dollars, $P^i_{US}$	Price in Europe Expressed in Euro, $P^i_E$	Exchange Rate Between the Dollar and the Euro, $E_{\$/E}$
25	32	0.78125
35	42	0.833333333
45	54	0.833333333
55	65	0.846153846
65	79	0.82278481
75	85	0.882352941
85	108	0.787037037
95	109	0.871559633
115	139	0.827338129

Page Ref: 413-415

Difficulty: Moderate

## 16.2 Purchasing Power Parity

1) Under Purchasing Power Parity

A)  $E_{\$/E} = P^i_{US}/P^i_E$ .

B)  $E_{\$/E} = P^i_E/P^i_{US}$ .

C)  $E_{\$/E} = P_{US}/P_E$ .

D)  $E_{\$/E} = P_E/P_{ES}$ .

E)  $E_{\$/E} = P^i_E + P^i_{US}/P^i_E$ .

Answer: C

Page Ref: 415-417

Difficulty: Easy



2) Which of the following statements is the **MOST accurate**?

- A) The law of one price applies only to the general price level.
- B) The law of one price applies to the general price level while PPP applies to individual commodities.
- C) The law of one price applies to individual commodities while PPP applies to both the general price level and to individual commodities.
- D) PPP applies only to individual commodities.
- E) The **law of one price** applies to **individual commodities** while **PPP** applies to the **general price level**.

Answer: E

Page Ref: 415-417

Difficulty: Easy

3) Which of the following statements is the MOST accurate?

- A) If PPP holds true, then the law of one price holds true for every commodity as long as the reference baskets used to reckon different countries' price levels are the same.
- B) If the law of one price holds true for every commodity, PPP must hold automatically.
- C) If the law of one price holds true for every commodity, PPP must automatically hold as long as the reference baskets used to reckon different countries' price levels are the same.
- D) If the law of one price does not hold true for every commodity, PPP cannot be true as long as the reference baskets used to reckon different countries' price levels are the same.
- E) If PPP holds true, then the law of one price must hold true automatically.

Answer: C

Page Ref: 415-417

Difficulty: Easy

4) Which of the following statements is the MOST accurate?

- A) Absolute PPP does not imply relative PPP.
- B) Relative PPP implies absolute PPP.
- C) There is no causality relation between the two.
- D) **Absolute PPP implies relative PPP.**
- E) Absolute PPP is inversely related to relative PPP.

Answer: D

Page Ref: 415-417

Difficulty: Easy

5) Which of the following statements is the MOST accurate?

A) Relative PPP may be valid even when absolute PPP is not, provided the factors causing deviations from absolute PPP are more or less stable over different commodities space.

B) Absolute PPP may be valid even when relative PPP is not, provided the factors causing deviations from relative PPP are more or less stable over time.

C) Relative PPP may be valid even when absolute PPP is not, provided the factors causing deviations from absolute PPP are more or less stable over time.

D) Relative PPP is not valid when absolute PPP is not.

E) Relative PPP is only valid when absolute PPP is valid, providing the factors causing deviations from relative PPP are more or less stable over time.

Answer: C

Page Ref: 415-417

Difficulty: Easy

6) Explain Purchasing Power Parity.

Answer: PPP states that the exchange rate between two countries' currencies equals the ratio of the countries' price levels.

A fall in a currency's domestic purchasing power (i.e. an increase in the domestic price level) will be associated with a proportional currency depreciation in the foreign exchange market and vice versa.

$E_{\$/\epsilon} = P_{US}/P_E$  where P is the price of a reference commodity basket.

Rearrange:  $P_{US} = E_{\$/\epsilon} \times (P_E)$

Thus, PPP asserts that all countries' price levels are equal when measured in terms of the same currency.

Page Ref: 415-417

Difficulty: Moderate

7) Discuss the relationship between PPP and the Law of One Price.

Answer: The law of one price applies to individual commodities while PPP applies to the general price level.

Proponents of PPP argue that its validity in the long run doesn't require the law of one price to hold exactly. When goods and services temporarily become more expensive in one country than in others, the demands for its currency and its products falls, pushing the exchange rate and domestic prices back in line with PPP and vice versa.

Page Ref: 415-417

Difficulty: Moderate

8) Discuss the differences between Absolute PPP and Relative PPP.

Answer: Absolute PPP states that the exchange rate between two currencies equals the ratio of their price levels. Relative PPP states that the percentage *change* in the exchange rate between two currencies over a given period equals the difference between the inflation rates of those two currencies.

Page Ref: 415-417

Difficulty: Moderate

9) Explain why Relative PPP is useful when comparing countries that base their price levels on different product baskets.

Answer: For Example: If the U.S. price level rises by 10% over a year while Europe's rises by only 5%, relative PPP predicts a 5% depreciation of the dollar against the euro. This just cancels the 5% by which U.S. inflation exceeds European, leaving the relative domestic and foreign purchasing powers of both currencies unchanged.

$(E_{\$/\text{€},t} - E_{\$/\text{€},t-1})/E_{\$/\text{€},t-1} = (\pi^e)_{\text{US},t} - (\pi^e)_{\text{E},t}$  between dates  $t$  and  $t - 1$ .

Relative PPP is useful when comparing countries that base their price levels on different product baskets. Relative PPP may be valid even when absolute PPP is not.

Page Ref: 415-417

Difficulty: Moderate

10) Suppose Russia's inflation rate is 200% over one year but the inflation rate in Switzerland is only 2%. According to relative PPP, what should happen over the year to the Swiss franc's exchange rate against the Russian ruble?

Answer:  $(E_{\text{ruble/franc},t} - E_{\text{ruble/franc},t-1})/E_{\text{ruble/franc},t-1} = 2 - 0.02 = 1.98$

So there will be a 198% depreciation of the ruble against the franc or, conversely, a 198% appreciation of the franc against the ruble.

Page Ref: 415-417

Difficulty: Moderate

11) Assuming relative PPP, fill in the table below:

$E_{\$/\text{€}, t}$	$E_{\$/\text{€}, t-1}$	$\Pi_{\text{US}, t}$	$\Pi_{\text{€}, t}$
2		0.03	-0.08111
2.1	2	0.04	-0.01
2.2	2.1		0.002381
	2.2	0.06	0.014545
2.4		0.07	0.026522
2.5	2.4	0.08	
2.6	2.5		0.05
2.7	2.6	0.1	0.061538
	2.7	0.11	0.072963
2.9	2.8		0.084286
3	2.9	0.13	

Answer: Using  $(E_{\$/\text{€}, t} - E_{\$/\text{€}, t-1})/E_{\$/\text{€}, t-1} = \Pi_{\text{US}, t} - \Pi_{\text{€}, t}$  one gets:

$E_{\$/\text{€}, t}$	$E_{\$/\text{€}, t-1}$	$\Pi_{\text{US}, t}$	$\Pi_{\text{€}, t}$
2	1.8	0.03	-0.08111
2.1	2	0.04	-0.01
2.2	2.1	0.05	0.002381
2.3	2.2	0.06	0.014545
2.4	2.3	0.07	0.026522
2.5	2.4	0.08	0.038333
2.6	2.5	0.09	0.05
2.7	2.6	0.1	0.061538
2.8	2.7	0.11	0.072963
2.9	2.8	0.12	0.084286
3	2.9	0.13	0.095517

Page Ref: 415-417

Difficulty: Moderate

### 16.3 A Long-Run Exchange Rate Model Based on PPP

1) In order for the condition  $E_{\$/\text{HK\$}} = P_{\text{US}}/P_{\text{HK}}$  to hold, what assumptions does the principle of purchasing power parity make?

A) Only that there are no transportation costs and restrictions on trade.

B) Only that the markets are perfectly competitive, i.e.,  $P = MC$ .

C) The factors of production are identical between countries.

D) No arbitrage exists.

E) HK and the US are perfectly competitive and there are no transportation costs or restrictions on trade.

Answer: E

Page Ref: 417-423

Difficulty: Easy

2) Which of the following statements is the MOST accurate?

- A) In the long run, national price levels play a minor role in determining both interest rates and the relative prices at which countries' products are traded.
- B) In the long run, national price levels play a key role only in determining interest rates.
- C) In the long run, national price levels play a key role only in determining the relative prices at which countries' products are traded.
- D) In the long run, national price levels play a key role in determining both interest rates and the relative prices at which countries' products are traded.
- E) In the long run, national price levels play no role in determining interest rates and the relative prices at which countries' products are traded.

Answer: D

Page Ref: 417-423

Difficulty: Easy

3) Which of the following statements is the MOST accurate? In general

- A) the monetary approach to the exchange rate is a long run theory.
- B) the monetary approach to the exchange rate is a short run theory.
- C) the monetary approach to the exchange rate is both a short and long run theory.
- D) the monetary approach to the exchange rate neither long run nor short run theory.
- E) the monetary approach to the exchange rate is considered less practical than the law of one price.

Answer: A

Page Ref: 417-423

Difficulty: Easy

✓ 4) The monetary approach makes the general prediction that

- A) the exchange rate, which is the relative price of American and European money, is fully determined in the long run by the relative supplies of those monies.
- B) the exchange rate, which is the relative price of American and European money, is fully determined in the short run by the relative supplies of those monies and the relative demands for them.
- C) the exchange rate, which is the relative price of American and European money, is fully determined in the short run and long run by the relative supplies of those monies and the relative demands for them.
- D) the exchange rate, which is the relative price of American and European money, is fully determined in the long run by the relative supplies of those monies and the relative demands for them.
- E) the money supply in the U.S. will adjust to European monetary equilibrium.

Answer: D

Page Ref: 417-423

Difficulty: Easy

5) Under the monetary approach to exchange rate theory, money supply growth at a constant rate  
A) eventually results in ongoing price level deflation at the same rate, but changes in this long-run deflation rate do not affect the full-employment output level or the long-run relative prices of goods and services.

B) eventually results in ongoing price level inflation at the same rate, but changes in this long-run inflation rate do affect the full-employment output level and the long-run relative prices of goods and services.

C) eventually results in ongoing price level inflation at the same rate, but changes in this long-run inflation rate do not affect the full-employment output level or the long-run relative prices of goods and services.

D) eventually results in ongoing price level inflation at the same rate, but changes in this long-run inflation rate do not affect the full-employment output level, only the long-run relative prices of goods and services.

E) eventually results in ongoing price level deflation at the same rate, but changes in this long-run deflation rate do not affect the full-employment output level, only the long-run relative prices of goods and services.

Answer: C

Page Ref: 417-423

Difficulty: Easy

6) Which of the following statements is the MOST accurate? In general, under the monetary approach to the exchange rate

A) the interest rate is not independent of the money supply growth rate in the short run.

B) the interest rate is independent of the money supply growth rate in the long run.

C) the interest rate is not independent of the money supply growth rate in the long run, but independent in the short run.

D) the interest rate is not independent of the money supply growth rate in the long run.

E) the interest rate is a factor of the money supply growth rate only in the short term.

Answer: D

Page Ref: 417-423

Difficulty: Easy

7) Which of the following statements is the MOST accurate? In general, under the monetary approach to the exchange rate

A) while the short-run interest rate does not depend on the absolute *level* of the money supply, continuing *growth* in the money supply eventually will affect the interest rate.

B) while the long-run interest rate does depend on the absolute *level* of the money supply, continuing *growth* in the money supply do not affect the interest rate.

C) while the long-run interest rate does not depend on the absolute *level* of the money supply, continuing *growth* in the money supply eventually will affect the interest rate.

D) the long-run interest rate does not depend on the absolute *level* of the money supply, and thus continuing *growth* in the money supply will not affect the interest rate.

E) while the short-run interest rate does not depend on the absolute *level* of the money supply, continuing *decline* in the money supply eventually will not affect the interest rate.

Answer: C

Page Ref: 417-423

Difficulty: Easy

8) Who among the following list of people is an early 20th century economist from Yale University who wrote the book *The Theory of Interest*?

A) Gustav Cassel

B) Irving Fisher

C) David Ricardo

D) Paul Krugman

E) Israel Kirzner

Answer: B

Page Ref: 417-423

Difficulty: Easy

9) If people expect relative PPP to hold

A) the difference between the interest rates offered by dollar and euro deposits will equal the difference between the inflation rates expected, in the United States and Europe, respectively, over the relevant horizon.

B) the difference between the interest rates offered by dollar and euro deposits will equal the difference between the inflation rates expected in Europe and the United States, respectively.

C) the difference between the interest rates offered by dollar and euro deposits will equal the difference between the inflation rates expected, over the relevant horizon, in the United States and Europe, respectively, in the short run.

D) the difference between the interest rates offered by dollar and euro deposits will be above the difference between the inflation rates expected, over the relevant horizon, in the United States and Europe, respectively.

E) the difference between the interest rates offered by dollar and euro deposits will be below the difference between the inflation rates expected, over the relevant horizon, in the United States and Europe, respectively.

Answer: A

Page Ref: 417-423

Difficulty: Easy

10) Under PPP (and by the Fisher Effect), all else equal

A) a rise in a country's expected inflation rate will eventually cause a more-than proportional rise in the interest rate that deposits of its currency offer in order to accommodate for the higher inflation.

B) a fall in a country's expected inflation rate will eventually cause an equal rise in the interest rate that deposits of its currency offer.

C) a rise in a country's expected inflation rate will eventually cause an equal rise in the interest rate that deposits of its currency offer.

D) a rise in a country's expected inflation rate will eventually cause a less than proportional rise in the interest rate that deposits of its currency offer to accommodate the rise in expected inflation.

E) a fall in a country's expected inflation rate will eventually cause an inversely proportional rise in the interest rate that deposits of its currency offer to accommodate the rise in expected inflation.

Answer: C

Page Ref: 417-423

Difficulty: Easy

11) In the short run

- A) the interest rate can rise when the domestic money supply falls.
- B) the interest rate can decrease when the domestic money supply falls.
- C) the interest rate stays constant when the domestic money supply falls.
- D) the interest rate rises in the same proportion as the domestic money supply falls.
- E) the interest rate never rises when the domestic money supply falls.

Answer: A

Page Ref: 417-423

Difficulty: Easy

12) Under a flexible-price monetary approach to the exchange rate

- A) when the domestic money supply falls, the price level would eventually fall, increasing the interest rate.
- B) when the domestic money supply falls, the price level would fall right away, causing a reduction in the interest rate.
- C) when the domestic money supply falls, the price level would fall right away, causing an increase in the interest rate.
- D) when the domestic money supply falls, the price level would eventually fall, keeping the interest rate constant.
- E) when the domestic money supply falls, the price level would fall right away, keeping the interest rate constant.

Answer: E

Page Ref: 417-423

Difficulty: Easy

13) Under sticky prices

- A) a fall in the money supply raises the interest rate to preserve money market equilibrium.
- B) a fall in the money supply reduces the interest rate to preserve money market equilibrium.
- C) a fall in the money supply keeps the interest rate intact to preserve money market equilibrium.
- D) a fall in the money supply does not affect the interest rate in the short run, only in the long run.
- E) a fall in the money supply raises the interest rate to preserve money market equilibrium in the long run.

Answer: A

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Difficulty: Easy



14) Under sticky prices

- A) an interest rate rise is associated with lower expected deflation and a long-run currency appreciation, so the currency appreciates immediately.
- B) an interest rate rise is associated with higher expected inflation and a long-run currency appreciation, so the currency appreciates immediately.
- C) an interest rate rise is associated with lower expected inflation and a long-run currency depreciation, so the currency appreciates immediately.
- D) an interest rate rise is associated with lower expected inflation and a long-run currency depreciation, so the currency depreciates immediately.
- E) an interest rate rise is associated with lower expected inflation and a long-run currency appreciation, so the currency appreciates immediately.

Answer: E

Page Ref: 417-423

Difficulty: Easy

15) Under the monetary approach to the exchange rate

- A) an interest rate decrease is associated with higher expected inflation and a currency that will be weaker on all future dates.
- B) an interest rate increase is associated with higher expected deflation and a currency that will be weaker on all future dates.
- C) an interest rate increase is associated with higher expected inflation and a currency that will be strengthened on all future dates.
- D) an interest rate increase is associated with higher expected deflation and a currency that will be strengthened on all future dates.
- E) an interest rate increase is associated with higher expected inflation and a currency that will be weaker on all future dates.

Answer: E

Page Ref: 417-423

Difficulty: Easy

16) Under the monetary approach to the exchange rate

- A) a reduction in the money supply will cause immediate currency depreciation.
- B) a rise in the money supply will cause currency depreciation.
- C) a rise in the money supply will cause immediate currency appreciation.
- D) a rise in the money supply will cause depreciation.
- E) a rise in the money supply will cause immediate currency depreciation.

Answer: E

Page Ref: 417-423

Difficulty: Easy

17) Explain why exchange rate model based on PPP is a long run theory.

Answer: PPP theory is a monetary approach to the exchange rate. It is a *long-run* theory because it does not allow for price rigidities. It assumes that prices can adjust right away to maintain full employment as well as PPP.

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Difficulty: Moderate

18) Present and explain the Fundamental Equation of the Monetary Approach.

Answer: Assume  $E_{\$/\epsilon} = P_{US}/P_E$  and that domestic price levels depend on domestic money demands and supplies:

$$P_{US} = M_{US}^S/L(R_{\$}, Y_{US})$$

$$P_E = M_E^S/L(R_{\epsilon}, Y_E)$$

Therefore, the exchange rate is fully determined in the long run by the relative supplies of those monies and the relative real demands for them. Shifts in interest rates and output levels affect the exchange rate only through their influence on money demand.

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Difficulty: Moderate

19) What are the predictions for the long run equilibrium of the Monetary Approach?

Answer: **Money supplies:** Given the equations,

$$E_{\$/\epsilon} = P_{US}/P_E$$

$$P_{US} = M_{US}^S/L(R_{\$}, Y_{US})$$

$$P_E = M_E^S/L(R_{\epsilon}, Y_E)$$

one can show that an increase in the U.S. money supply  $M_{US}^S$  causes a proportional increase in the U.S. price level  $P_{US}$ , which in turn causes a proportional increase in  $E_{\$/\epsilon}$ . Thus, an increase in U.S. money supply causes a proportional long-run depreciation of the dollar against the euro and vice versa.

**Interest rates:** A rise in the interest rate  $R_{\$}$  lowers U.S. money demand  $L(R_{\$}, Y_{US})$  thereby causing a rise in the U.S. price level and a proportional depreciation of the dollar against the euro.

**Output levels:** A rise in U.S. output  $Y_{US}$  raises real U.S. money demand leading to a fall in the long-run U.S. price level and an appreciation of the dollar against the euro.

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Difficulty: Moderate

20) Discuss the effects of ongoing inflation based on the PPP theory.

Answer: Other things equal, money supply growth at a constant rate eventually results in ongoing price level inflation at the same rate as the money supply growth, but changes in this long-run inflation rate do not affect the full-employment output level or the long-run relative prices of goods and services.

The interest rate, however, is affected by continuing growth in the money supply (inflation). This can be shown by combining PPP with the interest parity condition. To show it analytically, recall that the condition of parity between dollar and euro assets is:

$$R\$ = R\epsilon + (E_{\$/\epsilon}^e - E_{\$/\epsilon})/E_{\$/\epsilon}$$

And according to relative PPP:

$$(E_{\$/\epsilon, t} - E_{\$/\epsilon, t-1})/E_{\$/\epsilon, t-1} = \Pi_{US, t} - \Pi_{E, t}$$

If people expect relative PPP to hold, the difference between interest rates offered by dollar and euro deposits will equal the difference between the expected inflation rates, over the relative horizon, in the U.S. and Europe.

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Difficulty: Moderate

21) Describe and explain the relationship between expected inflation rates in two countries and their interest rate differential according to the PPP theory.

Answer: Expected inflation is given by the following equation:

$\Pi^e = (P^e - P)/P$  where  $P^e$  is the expected price level in a country a year from today.

If relative PPP is expected to hold then:

$$(E_{\$/\epsilon}^e - E_{\$/\epsilon})/E_{\$/\epsilon} = \Pi_{US}^e - \Pi_E^e$$

Combine the expected version of relative PPP with the interest parity condition:

$$R\$ = R\epsilon + (E_{\$/\epsilon}^e - E_{\$/\epsilon})/E_{\$/\epsilon}$$

Rearrange:

$$R\$ - R\epsilon = \Pi_{US}^e - \Pi_E^e$$

If, as PPP predicts, currency depreciation is expected to offset international inflation difference, the interest rate difference must equal the expected inflation difference.

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Difficulty: Difficult

22) What is the Fisher Effect? Provide an example.

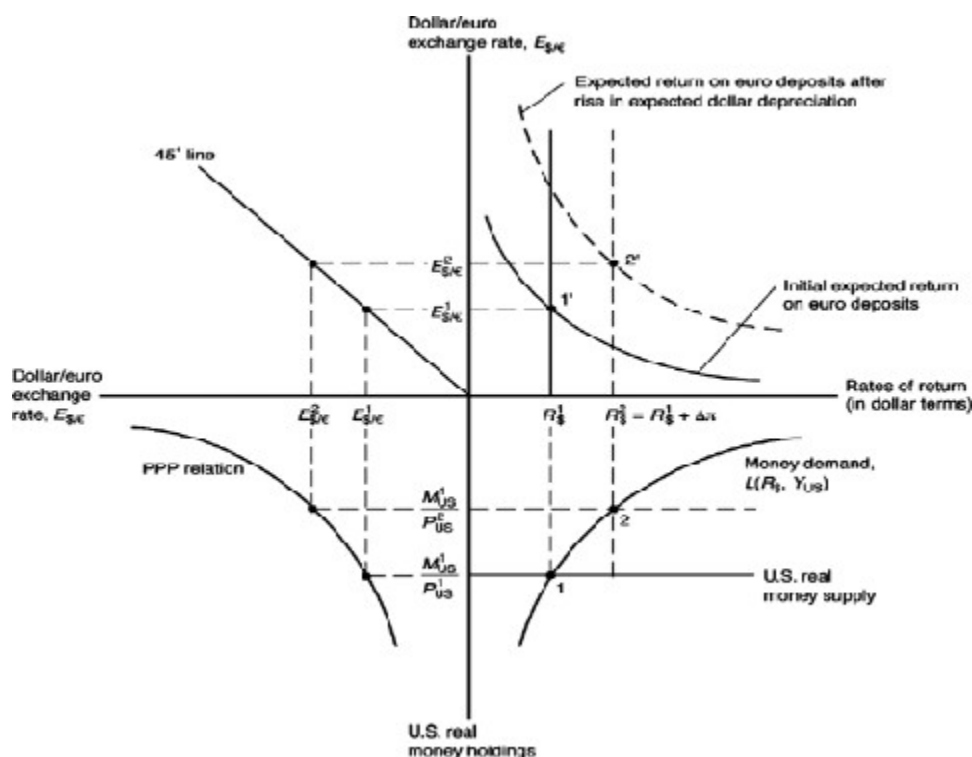
Answer: All else equal, a rise in a country's expected inflation rate will eventually cause an equal rise in the interest rate that deposits of its currency offer. Similarly, a fall in the expected inflation rate will eventually cause a fall in the interest rate.

Ex: If the expected U.S. inflation were to rise permanently from  $\Pi$  to  $\Pi + \Delta\Pi$ , current dollar interest rates  $R_\$$  would eventually catch up to the higher inflation, rising by a value  $\Delta R_\$ = \Delta\Pi$  in accordance with the Monetary Approach that in the long run purely monetary developments should have no effect on an economy's relative prices since the real rate of return on dollar assets would remain unchanged.

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Difficulty: Moderate

23) To answer the following question, please refer to the figure below. Concentrating only at the lower right quadrant, discuss the effects of a change in U.S. expected inflation.



Answer: Lower right quadrant shows the equilibrium in the U.S. Money Market, where

$$R_{\$}^1 = M_{US}^1 / P_{US}^1$$

A given interest rate  $R_{\$}^1$  corresponds with a given U.S. real money supply,  $M_{US}^1 / P_{US}^1$ .

Consider a rise of  $\Delta\pi$  in the future rate of U.S. money supply growth (i.e. an increase in the expected rate of inflation).

The Key Point: The rise in expected future inflation generates expectations of more rapid currency depreciation in the future.

Under PPP the dollar now depreciates at a rate of  $\pi + \Delta\pi$ . Interest parity therefore requires the dollar interest rate to rise where

$$R_{\$}^2 = R_{\$}^1 + \Delta\pi. \text{ (Point 2 in the figure.)}$$

$$\text{Note: } R_{\$} - R_{\text{€}} = \pi_{US}^e - \pi_E^e$$

This relation shows a change in the U.S. interest rate due to an increase in expected U.S. inflation has no effect on the euro interest rate.

The rise in the interest rate from  $R^1_{\$}$  to  $R^2_{\$}$  creates a momentary excess supply of real U.S.

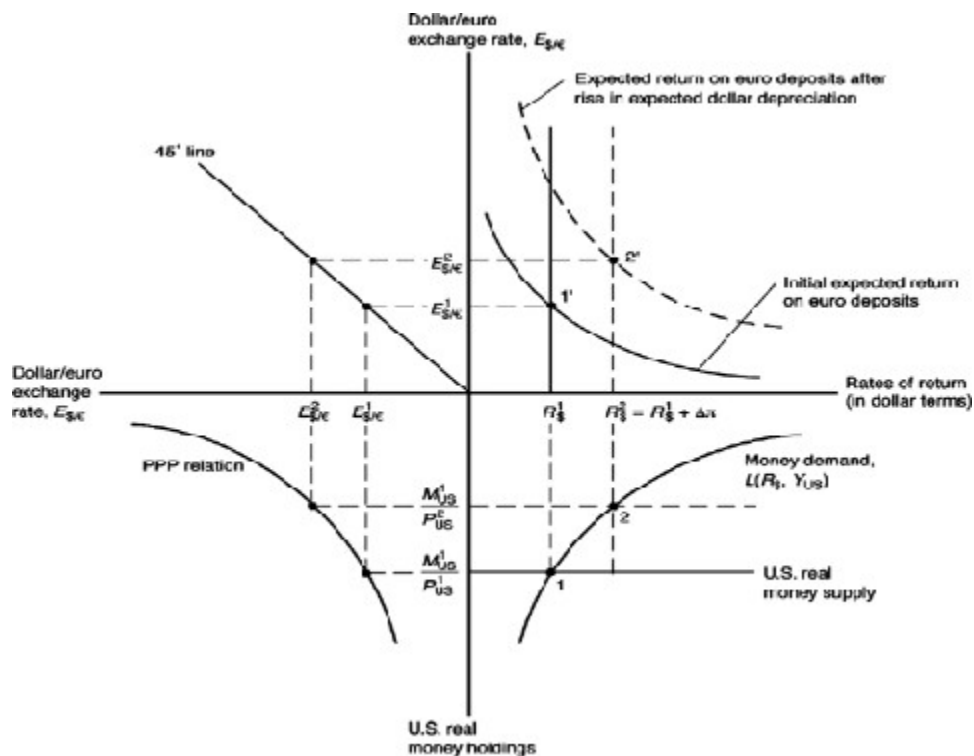
money balances at the prevailing price level  $P^1$ . However, since under this.

**Monetary Approach**, prices are assumed to be flexible, prices will immediately adjust from  $P^1$  to  $P^2$ , thus causing the following two effects: One, Reducing real money supply and two, bringing U.S. money market back into equilibrium.

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Difficulty: Moderate

24) To answer the following question, please refer to the figure below. Concentrating only at the lower left quadrant, discuss the relationship between the U.S. real money supply and the dollar/euro exchange rate,  $E_{\$/\text{€}}$ .



Answer: The lower left quadrant in the figure described the Purchasing Power Parity (PPP) relationship. The relationship between the U.S. real money supply and the dollar/euro exchange rate,  $E_{\$/\text{€}}$  is negative.

$E_{\$/\text{€}}$  is equal to the price level ratio,  $P_{US}/P_{\text{€}}$ .

In this derivation of the relationship, the following variables are assumed constants:  $M_{US}^1$ ,  $R_{\text{€}}$ , and  $P_{\text{€}}$ .

$$\text{So, } E_{\$/\text{€}} = M_{US}^1 / P_{US}$$

$$P_{US} \uparrow \rightarrow E_{\$/\text{€}} \uparrow$$

$$P_{US}^1 \rightarrow P_{US}^2$$

Thus, the purchasing power of dollar decreases due to the increase in the price level.

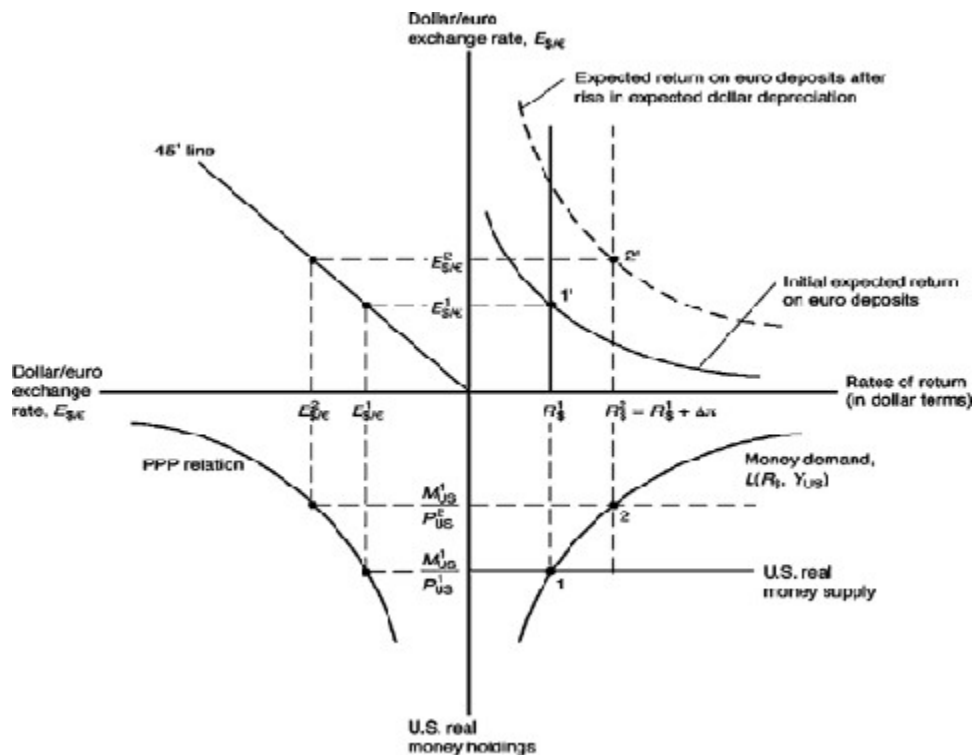
$$E_{\$/\text{€}}^1 \rightarrow E_{\$/\text{€}}^2$$

i.e., dollar depreciates due to PPP

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Difficulty: Moderate

25) To answer the following question, please refer to the figure below. Concentrating only at the upper right quadrant, discuss the foreign exchange market equilibrium.



Answer: The upper right quadrant describes the equilibrium in the foreign exchange market. We begin with the Interest Parity Condition.

$$R_{\$} = R_{\text{€}} + (E_{\$/\text{€}}^e - E_{\$/\text{€}}) / E_{\$/\text{€}}$$

In general, two effects are present:

$$R_{\$}^1 \rightarrow R_{\$}^2 \text{ and } E_{\$/\text{€}}^1 \rightarrow E_{\$/\text{€}}^2$$

A rise in the interest rate normally creates an excess demand for dollar deposits and appreciation in the currency market.

However, in this case the increase is due to higher expected inflation or higher expected monetary growth in the U.S. which implies a faster *expected* depreciation of the dollar against

the euro, €, thus,  $E_{\$/\text{€}}^e$  goes up and thus reduced the attractiveness of U.S. deposits.

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Difficulty: Moderate



26) Is a depreciation of the dollar/euro exchange rate correlated with a decrease in the dollar return on U.S. deposits?

Answer: No.

Assume that the Interest Parity is maintained, i.e.,

$$R_{\$} = R_{\text{€}} + (E_{\$/\text{€}}^e - E_{\$/\text{€}})/E_{\$/\text{€}}$$

Holding  $R_{\text{€}}$  constant, one would expect a depreciation of the dollar/euro exchange rate (i.e. increase in  $E_{\$/\text{€}}$ ) to be correlated with a decrease in  $R_{\$}$ , dollar returns on euro deposits.

**However**, the higher expected inflation in the U.S. implies an increase in the  $E_{\$/\text{€}}^e$ , the expected future dollar to euro exchange rate. Thus, the quantity  $(E_{\$/\text{€}}^e - E_{\$/\text{€}})/E_{\$/\text{€}}$  goes up and, increases despite a depreciation in the current dollar to euro exchange rate,  $E_{\$/\text{€}}$ .

Page Ref: 417-423

Difficulty: Difficult

27) Does the existence of non-tradable goods allow for deviations from Purchasing power Parity?

Answer: Yes, the existence of nontradables allows deviations from PPP. This is because the price of a nontradable is determined entirely by its domestic supply and demand curves, and in turn fluctuations in demand and supply for these good will affect the price level. Examples include housing, haircut, services etc.

Page Ref: 417-423

Difficulty: Moderate

28) What effect do non-tradable goods have on PPP?

Answer: The effect is quite substantial.

In 2006, the output of non-tradable goods accounted for about 46% of U.S. GNP. Along with haircuts, non-tradable goods include routine medical treatment, housing etc. For the most part, non-tradable goods are comprised of services, and the output of the construction industry. Non-tradable help explain much of the wide departure from PPP that is present in empirical data.

Page Ref: 417-423

Difficulty: Moderate

29) How can long run values in the real exchange rate change?

Answer: An *increase* in world relative **demand** for U.S. output causes a long-run real *appreciation* of the dollar against the euro (a *fall* in real dollar/euro exchange rate).

A relative *expansion* of U.S. **output** causes a long-run real *depreciation* of the dollar against the euro (a *rise* in real dollar/euro exchange rate).

Page Ref: 417-423

Difficulty: Moderate

30) Describe the chain of events leading to exchange rate determination for the following cases:

- (a) An increase in U.S. money supply
- (d) Increase in growth rate of U.S. money supply
- (c) Increase in world relative demand for U.S. products
- (d) Increase in relative U.S. output supply

Answer: Chain of events leading to exchange rate determination:

$$E_{\$/\text{€}} = q_{\$/\text{€}} \times (P_{\text{US}}/P_{\text{E}})$$

**Increase in U.S. money supply:**  $P_{\text{US}}$  rises in proportion to the money supply;  $q$  remains the same. All dollar prices will rise (including dollar price of euro).

**Increase in growth rate of U.S. money supply:** Inflation rate, dollar interest rate,  $P_{\text{US}}$ ,  $E$ , rises in proportion to  $P_{\text{US}}$ .

**Increase in world relative demand for U.S. products:**  $E$  falls, and  $q$  does as well.

**Increase in relative U.S. output supply:** Dollar depreciates, lowers relative price of U.S. output, rise in  $q$ , effect on  $E$  is **not clear since**  $q$  and  $P_{\text{US}}$  work in opposite directions.

Page Ref: 417-423

Difficulty: Difficult

31) Construct a table that will summarize the effects of money market and output market changes on the long-run nominal dollar/euro exchange rate

Answer:

Increase in...	Effect
US money supply	Proportional
European money	Proportional
US money supply	Increase
European money	Decrease
Demand for US output	Decrease
Demand for European	Increase
Output supply in US	Ambiguous
Output supply in	Ambiguous

Page Ref: 417-423

Difficulty: Difficult

## 16.4 Empirical Evidence on PPP and the Law of One Price

1) In practice

A) changes in national price levels often tell us relatively little about exchange rate movements.

B) changes in national price levels raise the exchange rate.

C) changes in national price levels lower the exchange rate.

D) changes in national price levels often tell us about exchange rate movements.

E) changes in national price levels match identical changes in the exchange rate.

Answer: A

Page Ref: 423-424

Difficulty: Easy

2) Which of the following statements is the MOST accurate?

A) The prices of identical commodity baskets, when converted to a single currency, are the same across countries.

**B) The prices of identical commodity baskets, when converted to a single currency, differ substantially across countries.**

C) The prices of identical commodity baskets, when converted to a single currency, do not differ substantially across countries.

D) The prices of identical commodity baskets, when converted to a single currency, are often the same across countries.

E) The prices of identical commodity baskets, when converted to a single currency, are the same across countries more than 50% of the time.

Answer: B

Page Ref: 423-424

Difficulty: Easy

3) Which of the following statements is the MOST accurate?

A) The law of one price does fare well in all recent studies.

B) The law of one price does fare well in many recent studies.

C) The law of one price sometimes fares well in recent studies.

**D) The law of one price does not fare well in recent studies.**

E) The law of one price has not been studied recently.

Answer: D

Page Ref: 423-424

Difficulty: Easy

4) Which of the following statements is the MOST accurate?

A) Relative PPP is not a reasonable approximation to the data.

**B) Relative PPP is sometimes a reasonable approximation to the data but often performs poorly.**

C) Relative PPP is sometimes a reasonable approximation to the data.

D) PPP is sometimes a reasonable approximation to the data.

E) PPP is sometimes a reasonable approximation to the data but usually performs poorly.

Answer: B

Page Ref: 423-424

Difficulty: Easy

5) What can explain the failure of relative PPP to hold in reality?

Answer: Government measures of the price level differ from country to country.

One reason for these differences is that people living in different countries spend their income in different ways.

Because of this inherent difference among countries, certain baskets will be affected more by price changes given their consumptions basket. For example, consumers in country, X, eats more fish relative to another country. More than likely, the government, upon determining a commodity basket to reflect preference, will have an overwhelming representation of fish in their basket. Any price level change in the fish market will be felt particularly by country X, and their overall price level will reflect this. Thus, changes in the relative prices of basket components can cause relative PPP to become distorted.

Page Ref: 423-424

Difficulty: Moderate

### 16.5 Explaining the Problems with PPP

1) Which of the following are theories meant to explain "Why Price Levels are Lower in Poorer Countries"?

A) only Bhagwati-Kravis-Lipsey

B) only Balassa-Samuelson

C) only Goldberg-Knetter

**D) Bhagwati-Kravis-Lipsey and Balassa-Samuelson**

E) Bhagwati-Kravis-Lipsey and Goldberg-Knetter

Answer: D

Page Ref: 425-432

Difficulty: Easy

2) In January 2013, the world's cheapest Big Macs were sold in

A) the Philippines.

B) Russia.

C) China.

**D) Malaysia.**

E) the Czech Republic.

Answer: D

Page Ref: 425-432

Difficulty: Easy

3) The PPP theory fails in reality for all of the following reasons EXCEPT

A) transport costs.

B) monopolistic or oligopolistic practices in goods markets.

C) the inflation data reported in different countries are based on different commodity baskets.

D) restrictions on trade.

**E) inflation rates are unrelated to money supply growth.**

Answer: E

Page Ref: 425-432

Difficulty: Easy

4) Which one of the following statements is the MOST accurate?

A) The purchasing power of any given country's currency will increase in countries where the prices of non-tradable goods rise.

B) The purchasing power of any given country's currency will fall in countries where the prices of non-tradable goods fall.

C) The purchasing power of any given country's currency will fall in countries where the prices of non-tradable goods rise.

D) The purchasing power of any given country's currency will remain constant in countries where the prices of non-tradable goods rise.

E) The purchasing power of any given country's currency will fall in countries where the prices of non-tradable goods remain constant.

Answer: C

Page Ref: 425-432

Difficulty: Easy

5) Which one of the following statements is the MOST accurate?

A) Relative price changes could not lead to PPP violations even if trade were free and costless.

B) Relative price changes could lead to PPP violations only if trade were free and costless.

C) Relative price changes could lead to PPP violations even if trade were free and costless.

D) Price changes could lead to PPP violations even if trade were free and costless.

E) Price changes could not lead to PPP violations even if trade were free and costless.

Answer: C

Page Ref: 425-432

Difficulty: Easy

6) Which one of the following statements is the MOST accurate?

A) Departures from PPP are similar in both the short run and long run.

B) Departures from PPP are even greater in the long run than in the short run.

C) Departures from PPP are always greater in the short run than in the long run.

D) It is hard to tell whether departures from PPP are greater in the short run than in the long run.

E) Departures from PPP may often be greater in the short run than in the long run.

Answer: E

Page Ref: 425-432

Difficulty: Easy

7) Floating exchange rates

A) systematically lead to much larger but less frequent short-run deviations from the absolute PPP.

B) systematically lead to much larger and more frequent short-run deviations from the relative PPP.

C) systematically lead to much smaller and less frequent short-run deviations from the relative PPP.

D) systematically lead to much smaller but more frequent short-run deviations from the relative PPP.

E) systematically lead to much smaller and less frequent short-run deviations from the absolute PPP.

Answer: B

Page Ref: 425-432

Difficulty: Easy

8) Explain why price levels are lower in poorer countries.

Answer: One theory explains the difference in prices on different endowments of capital and labor (Bhagwait, Kravis, and Lipsey). The explanation is as follows:

- Rich countries have high capital-labor ratios while poor countries have much more labor relative to capital.
- Because rich countries have high capital labor ratios, the MPL is greater and thus they have a higher wage.
- Higher wages lead to higher disposable income, and citizens' demand for goods will increase.
- Because labor is cheaper in poor countries and is used intensively in producing non-tradable goods; non-tradable goods will be cheaper in the poor countries than in the rich.
- The price of non-tradable goods will move with the increase in wage, thus increasing the price level of the good.

Rich Countries: Expensive Non-tradable goods vs. Poor Countries: Cheap Non-tradable goods.

Page Ref: 425-432

Difficulty: Moderate

## 16.6 Beyond Purchasing Power Parity: A General Model of Long-Run Exchange Rates

1) Which of the following statements is the MOST accurate about the Law of One Price on Scandinavian ferry lines?

A) Due to menu costs, the Law of One Price does not hold.

B) To avoid arbitrage opportunities, the Law of One Price must hold.

C) Transaction costs of exchanging currency causes the Law of One Price to fail.

D) Transportation costs between ferry lines leads to a violation of the Law of One Price.

E) The physical distance allowed the Law of One Price to hold.

Answer: C

Page Ref: 432-440

Difficulty: Easy

2) Which of the following statements is MOST accurate?

A) The United States price level will place a relatively light weight on commodities produced and consumed in America, while the European price level will place a relatively heavy weight on commodities produced and consumed in Europe.

B) The United States price level will place a relatively light weight on commodities produced and consumed in America, and the European price level will place a relatively light weight on commodities produced and consumed in Europe.

C) The United States price level will place a relatively heavy weight on commodities produced and consumed in America, and the European price level will place a relatively heavy weight on commodities produced and consumed in Europe.

D) The United States price level will place a relatively heavy weight on commodities produced and consumed in Europe, and the European price level will place a relatively heavy weight on commodities produced and consumed in America.

E) The United States price level will place a relatively light weight on commodities produced and consumed in Europe, and the European price level will place a relatively heavy weight on commodities produced and consumed in America.

Answer: C

Page Ref: 432-440

Difficulty: Easy

3) When the domestic money prices of goods are held constant

A) a nominal dollar appreciation makes U.S. goods cheaper compared with foreign goods.

B) a nominal dollar depreciation makes U.S. goods less appealing in foreign markets.

C) a nominal dollar appreciation does not affect the prices of U.S. goods.

D) a nominal dollar depreciation makes U.S. goods more expensive compared with foreign goods.

E) a nominal dollar depreciation makes U.S. goods cheaper compared with foreign goods and a nominal dollar appreciation makes U.S. goods more expensive compared with foreign goods.

Answer: E

Page Ref: 432-440

Difficulty: Easy

4) An increase in the world relative demand for U.S. output causes

A) a short-run real depreciation of the dollar against the euro.

B) a long-run real appreciation of the dollar against the euro.

C) a long-run real depreciation of the dollar against the euro.

D) a short-run real appreciation of the euro against the dollar.

E) a long-run real appreciation of the euro against the dollar.

Answer: B

Page Ref: 432-440

Difficulty: Easy



✓ 5) Which of the following statements is MOST accurate?

A) A relative expansion of U.S. output causes a long-run depreciation of the dollar against the euro, while a relative expansion of European output causes a long-run real appreciation of the dollar against the euro.

B) A relative decline of U.S. output causes a long-run depreciation of the dollar against the euro, while a relative expansion of European output causes a long-run real appreciation of the dollar against the euro.

C) A relative expansion of U.S. output causes a long-run appreciation of the dollar against the euro, while a relative expansion of European output causes a long-run real depreciation of the dollar against the euro.

D) A relative expansion of U.S. output causes a long-run depreciation of the dollar against the euro, while a relative decline of European output causes a long-run real appreciation of the dollar against the euro.

E) A relative decline of U.S. output causes a long-run depreciation of the dollar against the euro, while a relative decline of European output causes a long-run real appreciation of the dollar against the euro.

Answer: A

Page Ref: 432-440

Difficulty: Easy

6) When all variables start out at their long-run equilibrium levels, the most important determinant of long-run swings in nominal exchange rates is

A) a shift in relative money supply levels.

B) a shift in relative money supply growth rates.

C) a change in relative output demand.

D) a change in relative output supply.

E) a change in relative inflation rates.

Answer: E

Page Ref: 432-440

Difficulty: Easy

7) Which of the following statements is MOST accurate?

A) In the output market, an increase in demand for U.S. output leads to an increase in the long-run nominal dollar/euro exchange rate.

B) In the output market, an increase in the demand for European output leads to an increase in the long-run nominal dollar/euro exchange rate.

C) In the output market, a decrease in demand for U.S. output leads to a decrease in the long-run nominal dollar/euro exchange rate.

D) In the output market, an increase in the demand for European output leads to a decrease in the long-run nominal dollar/euro exchange rate.

E) In the output market, an increase in the demand for European output leads to an increase in the long-run nominal euro/dollar exchange rate.

Answer: B

Page Ref: 432-440

Difficulty: Easy



8) Which of the following statements is MOST accurate?

A) In the money market, an increase in U.S. money supply level leads to a proportional increase in the long-run nominal dollar/euro exchange rate.

B) In the money market, an increase in European money supply level leads to a proportional increase in the long-run nominal dollar/euro exchange rate.

C) In the money market, an increase in U.S. money supply growth rate leads to a decrease in the long-run nominal dollar/euro exchange rate.

D) In the money market, an increase in European money supply growth leads to an increase in the long-run nominal dollar/euro exchange rate.

E) In the money market, an increase in U.S. money supply level leads to a proportional decrease in the long-run nominal dollar/euro exchange rate.

Answer: A

Page Ref: 432-440

Difficulty: Easy

9) In the long run

A) exchange rates obey relative PPP when all disturbances occur in the output markets.

B) exchange rates obey absolute PPP when all disturbances occur in the output markets.

C) exchange rates are unlikely to obey relative PPP when all disturbances occur in the output markets.

D) exchange rates are unlikely to obey relative PPP when all disturbances are monetary in nature.

E) exchange rates obey absolute PPP when all disturbances are monetary in nature.

Answer: C

Page Ref: 432-440

Difficulty: Easy

10) Discuss the different effects on the domestic interest rates when prices are assumed flexible and when they are assumed to be sticky.

Answer: When prices are flexible, a decrease in the domestic money supply has no effect on the interest rate, because of the immediate decrease in the price level. However, when prices are assumed to be sticky, a decrease in the domestic money supply will cause the interest rate to rise, because the sticky domestic price level leads to an excess demand for real money balances at the initial interest rate.

Page Ref: 432-440

Difficulty: Moderate

11) What are the predictions of the PPP theory with regards to the real exchange rates?

Answer: The real exchange rate between two countries is a broad summary measure of the prices one country's goods and services relative to the other's. PPP predicts that the real exchange rate never permanently changes, which is different from nominal exchange rates that deals with the relative price of two *currencies*.

Page Ref: 432-440

Difficulty: Moderate

12) What is the real exchange rate between the dollar and the euro equal to?

Answer: Let

- Real dollar/euro exchange rate =  $q_{\$/\epsilon}$
- Nominal exchange rate =  $E_{\$/\epsilon}$
- Price of an unchanging basket in US =  $P_{US}$
- Price of an unchanging basket in Europe =  $P_E$

Then,

$$q_{\$/\epsilon} = (E_{\$/\epsilon} \times P_E) / P_{US}$$

A rise in the real dollar/euro exchange rate is called a **real depreciation** of the dollar against the euro, a fall in purchasing power of the dollar.

A fall in the real dollar/euro exchange rate is called a **real appreciation** of the dollar against the euro, a rise in purchasing power of the dollar.

Page Ref: 432-440

Difficulty: Difficult

13) Discuss why the empirical support for PPP and the law of one price is weak in recent data.

Answer: The failure of these propositions in the real world is related to trade barriers and departures from free competition, factors that can result in *pricing to market* by exporters. In addition, different definitions of price levels in different countries bedevil attempts to test PPP using the price indexes governments publish. For some products, including many services, international transport costs are so steep that these products become non-tradable (see page 425).

Page Ref: 432-440

Difficulty: Moderate

14) Define the concept of the real exchange rate and explain how it differs from the nominal exchange rate.

Answer: In general, the real exchange rate between two countries' currencies is the price of the second country's commodity basket (in terms of the first country's currency) relative to the price of the first country's commodity basket. For example, in the case of U.S. and Europe, the real dollar/euro exchange rate is the dollar value of Europe's price level divided by the U.S. price

level. We can thus denote the real dollar/euro exchange rate ( $q^e_{\$/\epsilon}$ ) as:

$$q^e_{\$/\epsilon} = (E_{\$/\epsilon} \times P_E) / P_{US}$$

where  $E_{\$/\epsilon}$  is the *nominal* dollar/euro exchange rate,  $P_E$  is Europe's price level, and  $P_{US}$  is the U.S. price level. Unlike the real exchange rate, which is the relative price of two *output baskets*, the nominal exchange rate is the relative price of two *currencies*. However, as we can see from the equation above, real exchange rates are defined in terms of nominal exchange rates.

Page Ref: 432-440

Difficulty: Difficult

## 16.7 International Interest Rate Differences and the Real Exchange Rate

1) Interest rate differences between countries depend on

- A) differences in expected inflation, but not on expected changes in the real exchange rate.
- B) differences in expected changes in the real exchange rate, but not on expected inflation.
- C) neither differences in expected inflation, nor on expected changes in the real exchange rate.
- D) differences in expected inflation and nothing else.
- E) differences in expected inflation, and on expected changes in the real exchange rate.

Answer: E

Page Ref: 440-441

Difficulty: Easy

2) The expected rate of change in the nominal dollar/euro exchange rate is best described as

- A) the expected rate of change in the real dollar/euro exchange rate *minus* the U.S.-Europe expected inflation difference.
- B) the expected rate of change in the real dollar/euro exchange rate *plus* the U.S.-Europe real interest rate difference.
- C) the expected rate of change in the real dollar/euro exchange rate *plus* the U.S.-Europe expected inflation difference.
- D) the expected rate of change in the real dollar/euro exchange rate *minus* the U.S.-Europe real interest rate difference.
- E) the expected rate of change in the real dollar/euro exchange rate *plus* the European expected inflation.

Answer: C

Page Ref: 440-441

Difficulty: Easy

## 16.8 Real Interest Parity

1) The expected real interest rate ( $r^e$ ) in terms of the nominal interest rate ( $R$ ) and the expected inflation rate ( $\pi^e$ ) is given by

- A)  $r^e = \pi^e + R$ .
- B)  $r^e = 2\pi^e + R^2$ .
- C)  $r^e = \pi^e + R^2$ .
- D)  $r^e = R - \pi^e$ .
- E)  $r^e = R^2 - \pi^e$ .

Answer: D

Page Ref: 441-442

Difficulty: Easy

2) The difference between nominal and real interest rates is that

A) nominal interest rates are measured in terms of a country's output, while real interest rates are measured in monetary terms.

B) nominal interest rates are measured in monetary terms, while real interest rates are measured in terms of a country's output.

C) nominal interest rates can fluctuate, while real interest rates always remain fixed.

D) real interest rates can fluctuate, while nominal interest rates always remain fixed.

E) real interest rates are the same in every country, while nominal interest rates are different for every country.

Answer: B

Page Ref: 441-442

Difficulty: Easy

3) What is the real interest rate parity condition?

Answer: The nominal interest rates are rates of return measured in monetary terms. The real interest rates are rates of return measured in real terms.

Real Interest Parity Condition:  $(r_{US}^e - r_E^e) = (q_{\$/\epsilon}^e - q_{\$/\text{€}}) / q_{\$/\text{€}}$

Page Ref: 441-442

Difficulty: Moderate

## 16.9 Appendix to Chapter 16: The Fisher Effect, the Interest Rate, and the Exchange Rate Under the Flexible-Price Monetary Approach

1) The monetary approach to interest rates assumes that the prices of goods are \_\_\_\_\_, which implies that a country's currency will \_\_\_\_\_, when nominal interest rates \_\_\_\_\_ because of \_\_\_\_\_ expected future inflation.

A) perfectly flexible; depreciate; increase; higher

B) perfectly flexible; appreciate; increase; higher

C) immutable; depreciate; increase; higher

D) immutable; appreciate; decrease; higher

E) absolutely inflexible; depreciate; decrease; higher

Answer: A

Page Ref: 448-450

Difficulty: Moderate

2) When the nominal dollar interest rate \_\_\_\_\_, money demand will \_\_\_\_\_, and the general price level will \_\_\_\_\_.

A) increases; decrease; increase

B) increases; increase; increase

C) increases; decrease; decrease

D) increases; increase; decrease

E) decreases; increase; increase

Answer: A

Page Ref: 448-450

Difficulty: Easy

**International Economics, 10e (Krugman/Obstfeld/Melitz)**  
**Chapter 17 (6) Output and the Exchange Rate in the Short Run**

17.1 Determinants of Aggregate Demand in an Open Economy

1) How does an increase in the real exchange rate affect exports and imports?

- A) Exports increase; imports decrease.
- B) Exports decrease; imports increase.
- C) Exports increase; imports change ambiguously.
- D) Exports change ambiguously; imports decrease.
- E) Exports increase; imports are constant.

Answer: C

Page Ref: 451-455

Difficulty: Easy

2) Which one of the following statements is MOST accurate?

- A) In general, consumption demand rises by less than disposable income.
- B) In general, consumption demand rises by more than disposable income.
- C) In general, consumption demand rises by more than income.
- D) In general, consumption demand rises by the same amount as disposable income rises.
- E) In general, consumption demand rises are unrelated to disposable income rises.

Answer: A

Page Ref: 451-455

Difficulty: Easy

3) The current account balance is

- A) the supply of a country's exports less the country's own demand for imports.
- B) the demand for a country's exports plus the country's own demand for imports.
- C) the country's own demand for imports less the demand for a country's exports.
- D) the demand for a country's exports less the country's own demand for imports.
- E) the country's federal reserves minus the national debt.

Answer: D

Page Ref: 451-455

Difficulty: Easy

4) The domestic currency price of a representative foreign expenditure basket is

- A)  $P$ , the domestic price level.
- B)  $E$ , the nominal exchange rate.
- C)  $P$  times  $E$ , the domestic price level times the domestic price level.
- D)  $P^*$ , the foreign price level.
- E)  $P^*$  times  $E$ , the foreign price level times the nominal exchange rate.

Answer: E

Page Ref: 451-455

Difficulty: Easy

5) Current account is given by the equation:

- A)  $CA = IM - EX$  (measured in terms of domestic output).
- B)  $CA = IM - EX$  (measured in terms of foreign output).
- C)  $CA = EX - IM$  (measured in terms of domestic output).
- D)  $CA = EX - IM$  (measured in terms of foreign output).
- E)  $CA = EX + IM$  (measured in terms of domestic output).

Answer: C

Page Ref: 451-455

Difficulty: Easy

6) The domestic currency price of a representative domestic expenditure basket is

- A)  $P$ , the domestic price level.
- B)  $E$ , the nominal exchange rate.
- C)  $P$  times  $E$ , the domestic price level times the domestic price level.
- D)  $P^*$ , the foreign price level.
- E)  $P^*$  times  $E$ , the foreign price level times the nominal exchange rate.

Answer: A

Page Ref: 451-455

Difficulty: Easy

7) The real exchange rate,  $q$ , is defined as

- A) the price of the foreign basket in terms of the domestic one.
- B) the price of the domestic basket in terms of the foreign one.
- C) the price of the foreign basket.
- D) the price of the domestic basket.
- E) the nominal exchange rate in terms of the domestic basket.

Answer: A

Page Ref: 451-455

Difficulty: Easy

8) A country's domestic currency's real exchange rate,  $q$ , is defined as

- A)  $E$ .
- B)  $E$  times  $P$ .
- C)  $E$  times  $P^*$ .
- D)  $(E \text{ times } P^*)/P$ .
- E)  $P/(E \text{ times } P^*)$ .

Answer: D

Page Ref: 451-455

Difficulty: Easy

9) If the representative basket of European goods and services costs 40 euros, the representative U.S. basket costs \$50, and the dollar/euro exchange rate is \$0.90 per euro, then the price of the European basket in terms of U.S. basket is

- A)  $[(0.9 \text{ \$/euro}) (40 \text{ euro per a European basket})] / [(50 \text{ \$/U.S. basket})]$ .
- B)  $[(0.9 \text{ \$/euro}) (50 \text{ \$/U.S. basket})] / [(40 \text{ euro per a European basket})]$ .
- C)  $[(40 \text{ euro per a European basket})] / [(50 \text{ \$/U.S. basket}) (0.9 \text{ \$/euro})]$ .
- D)  $[(50 \text{ \$/U.S. basket})]$ .
- E)  $[(0.9 \text{ \$/euro}) (40 \text{ euro per a European basket}) (50 \text{ \$ U.S. basket})]$ .

Answer: A

Page Ref: 451-455

Difficulty: Easy

10) When  $EP^*/P$  rises

- A) IM will rise.
- B) IM will fall.
- C) IM may rise or fall.
- D) IM is not affected.
- E) IM and  $P^*$  will both rise.

Answer: C

Page Ref: 451-455

Difficulty: Easy

11) When the real exchange rate rises

- A) imports measured in terms of domestic output will rise.
- B) imports measured in terms of domestic output will fall.
- C) imports measured in terms of domestic output will never be affected.
- D) imports measured in terms of domestic output may rise or fall.
- E) imports measured in terms of foreign output will rise.

Answer: D

Page Ref: 451-455

Difficulty: Easy

12) Which one of the following statements is the MOST accurate?

- A) An increase in disposable income improves the current account.
- B) An increase in disposable income does not affect the current account.
- C) An increase in disposable income worsens the current account.
- D) An increase in income worsens the current account.
- E) An increase in income improves the current account.

Answer: C

Page Ref: 451-455

Difficulty: Easy

$$CA = E - X$$

13) Which one of the following statements is the MOST accurate?

A) An increase in the real exchange rate and an increase in disposable income improve the current account.

B) A decrease in the real exchange rate and a decrease in disposable income improve the current account.

C) A decrease in the real exchange rate and a increase in disposable income improve the current account.

D) An increase in the real exchange rate and a decrease in disposable income improve the current account.

E) An increase in the real exchange rate and a decrease in disposable income lowers the current account.

Answer: D

Page Ref: 451-455

Difficulty: Easy

14) Disposable income is defined as

A)  $Y - C$ .

B)  $Y - T$ .

C)  $C - T$ .

D)  $I - C$ .

E)  $Y - I$ .

Answer: B

Page Ref: 451-455

Difficulty: Easy

15) The real exchange rate is:

A) how much of a foreign currency you can buy with the domestic currency.

B) foreign CPI divided by the domestic CPI.

C) the price of foreign goods in terms of domestic goods.

D) the price of foreign goods in dollars.

E) the domestic currency divided by the price level.

Answer: C

Page Ref: 451-455

Difficulty: Easy

16) An increase in the real exchange rate

A) makes imports more expensive.

B) makes imports less expensive.

C) does not affect import values.

D) always makes the number of imports rise.

E) makes domestic consumers spend more on only foreign imports.

Answer: A

Page Ref: 451-455

Difficulty: Easy



17) Which of the following compete to determine whether the current account improves or worsens following a rise in the real exchange rate?

- A) appreciation and depreciation
- B) crowding Out effect and producers effect
- C) volume effect and value effect
- D) volume effect and inflation
- E) producers effect and value effect

Answer: C

Page Ref: 451-455

Difficulty: Easy

18) Assuming that the value effect dominates, the current account will increase if

- A) the real exchange rate decreases.
- B) the real exchange rate increases.
- C) disposable income increases.
- D) exports fall.
- E) domestic prices fall.

Answer: B

Page Ref: 451-455

Difficulty: Easy

19) Which of the following would cause the current account to decrease?

- A) an increase in the nominal exchange rate, E
- B) an appreciation of the home currency
- C) an increase in disposable income
- D) an increase in foreign prices,  $P^*$
- E) a decrease in domestic prices, P

Answer: C

Page Ref: 451-455

Difficulty: Easy

20) What is the best way to describe aggregate demand?

- A) quantity required to satisfy equilibrium
- B) exports decrease; imports increase
- C) amount of a country's goods and services demanded by household and firms throughout the world
- D) individual's demand
- E) domestic demand of foreign imports.

Answer: C

Page Ref: 451-455

Difficulty: Easy

21) What have we assumed when we conclude that a real depreciation of the currency improves the current account?

- A) The volume effect outweighs the value effect.
- B) The value effect outweighs the volume effect.
- C) All else equal and the volume effect outweighs the value effect.
- D) All else equal and the value effect outweighs the volume effect.
- E) All else equal and the volume effect equals the value effect.

Answer: C

Page Ref: 451-455

Difficulty: Easy

22) A country's domestic currency's real exchange rate,  $q$ , is best described by

- A) the price of similar goods in the same market.
- B) the price of the domestic basket in terms of the foreign one.
- C) the price of a domestic basket.
- D) the price of the foreign basket in terms of the domestic basket.
- E) the price of different goods baskets in the same market.

Answer: D

Page Ref: 451-455

Difficulty: Easy

23) Explain how does an increase in the real exchange rate affect exports and imports?

Answer: When the real exchange rate increases, domestic products are cheaper relative to foreign products. Due to this, exports increase as foreigners demand more of our exports. The change in imports is ambiguous because fewer units of imports are purchased (the volume effect), but each foreign unit is now more expensive (the value effect). Remember: exports and imports are measured in terms of domestic output, *i.e.* dollar value, not volume of units. However, we often **assume** that the volume effect outweighs the value effect, so that imports decrease when the real exchange rate rises.

Page Ref: 451-455

Difficulty: Moderate

24) Please discuss the volume effect and the value effect in regards to how the current account will move given a change in the real exchange rate.

Answer: The volume effect takes place when consumer spending shifts on export and import quantities, while the value effect results when the domestic output worth of a given amount of foreign imports is changed. It is assumed that the volume effect outweighs the value effect, so that, other things equal, a real depreciation of the currency improves the current account.

Page Ref: 451-455

Difficulty: Moderate

25) What is the real exchange rate? What is its relationship to the current account?

Answer: Defined as:  $EP^*/P$  (the exchange rate multiplied by foreign prices, divided by domestic prices).

While the nominal exchange rate measures how much of a foreign currency one can buy with a unit of domestic currency, the *real* exchange rate measures how many *goods and services* one could buy.

A rise in the real exchange rate (a depreciation of domestic currency) means that domestic goods are cheaper compared to foreign goods, so exports increase and imports decrease. Aggregate demand increases and the CA rises. A fall in the real exchange rate has the opposite effect: Aggregate demand decreases and the CA falls.

Page Ref: 451-455

Difficulty: Moderate

26) *Monetary expansion causes the current account balance to increase in the short run.*

Discuss. Is the same the case for fiscal expansion?

Answer: An increase in the money supply leads to an increase in  $Y$  and  $E$  (output increases and the currency depreciates, respectively). Because of the currency depreciation, domestic goods are now cheaper compared to foreign goods. Exports increase and imports decrease, therefore the CAB increases.

An expansion of fiscal policy actually *reduces* the CAB: the DD curve is shifted right. Therefore  $Y$  rises, but  $E$  falls (output rises but the currency *appreciates*.) Domestic goods are more expensive, and the CAB falls.

Page Ref: 451-455

Difficulty: Moderate

27) Find the real exchange rate for the following case: Assume that the representative basket of European goods and services costs 40 euros and the representative U.S. basket costs \$50, and the dollar/euro exchange rate is \$0.90 per euro, then the price of the European basket in terms of U.S. basket is \_\_\_\_\_.

Answer:  $[(0.9 \text{ \$/euro}) (40 \text{ euro per a European basket})] / [(50 \text{ \$/U.S. basket})]$

Page Ref: 451-455

Difficulty: Moderate

28) Find the real exchange rate for the following case: Assume that the representative basket of European goods costs 150 euros and the representative U.S. basket costs \$90, and the dollar/euro exchange rate is \$0.80 per euro, then the price of the European basket in terms of U.S. basket is:

Answer:  $[(0.80 \text{ \$/euro}) (150 \text{ euro per a European basket})] / [(90 \text{ \$/U.S. basket})] = 1.33 \text{ U.S. baskets/European basket.}$

Page Ref: 451-455

Difficulty: Moderate

29) Find the real exchange rate for the following case: Assume that the representative basket of European goods costs 150 euros and the representative U.S. basket costs \$200, and the dollar/euro exchange rate is \$1.20 per euro, then the price of the European basket in terms of U.S. basket is:

Answer:  $[(1.20 \text{ \$/euro}) (150 \text{ euro per a European basket})] / [(200 \text{ \$/U.S. basket})] = 0.9 \text{ U.S. baskets/European basket.}$

Page Ref: 451-455

Difficulty: Moderate

30) Find the real exchange rate for the following case: Assume that the representative basket of European goods costs 100 euros and the representative U.S. basket costs \$125, and the dollar/euro exchange rate is \$0.75 per euro, then the price of the European basket in terms of U.S. basket is:

Answer:  $[(0.75 \text{ \$/euro}) (100 \text{ euro per a European basket})] / [(125 \text{ \$/U.S. basket})] = 0.60 \text{ U.S. baskets/European basket.}$

Page Ref: 451-455

Difficulty: Moderate

31) Fill in the following table.

E	P	P*	EP*/P
24		100	0.48
50	0.5		0.416667
2	6	3	
	20	2	10
8		1	8
	3	5	60
212	22		259.1
75	5	32	
18	9		27
12		9	8

Answer:

E	P	P*	EP*/P
24	2	100	0.48
50	0.5	60	0.416667
2	6	3	4
1	20	2	10
8	1	1	8
100	3	5	60
212	22	18	259.1
75	5	32	11.718
18	9	6	27
12	6	9	8

Page Ref: 451-455

Difficulty: Moderate

32) Fill in the following table.

Nominal Exchange Rate	Domestic Price Level	Foreign Price Level	Real Exchange Rate
5	20		7.5
	30	40	13.3333333
50		50	62.5
	50	60	120
25		70	29.16667
56	70		64
107	80	90	
	90	100	564.444
	100	110	1109
53	110		57.8181818

Answer:

Nominal Exchange Rate	Domestic Price Level	Foreign Price Level	Real Exchange Rate
5	20	30	7.5
10	30	40	13.3333333
50	40	50	62.5
100	50	60	120
25	60	70	29.16667
56	70	80	64
107	80	90	120.375
50	90	100	564.444
1009	100	110	1109
53	110	120	57.8181818

Page Ref: 451-455

Difficulty: Moderate

## 17.2 The Equation of Aggregate Demand

1) How does a rise in real income affect aggregate demand?

A)  $Y \uparrow$  implies  $Y_d \uparrow$  implies  $Im \uparrow$  implies  $CA \downarrow$  implies  $AD \downarrow$ , but  $Y \uparrow$  implies  $Y_d \uparrow$  implies  $C \uparrow$  implies  $AD \uparrow$  by more.

B)  $Y \uparrow$  implies  $Y_d \uparrow$  implies  $Im \downarrow$  implies  $CA \downarrow$  implies  $AD \downarrow$ , but  $Y \uparrow$  implies  $Y_d \uparrow$  implies  $C \uparrow$  implies  $AD \uparrow$  by more.

C)  $Y \uparrow$  implies  $Y_d \uparrow$  implies  $Im \uparrow$  implies  $CA \uparrow$  implies  $AD \uparrow$ , and  $Y \uparrow$  implies  $Y_d \uparrow$  implies  $C \uparrow$  implies  $AD \uparrow$ .

D)  $Y \uparrow$  implies  $Y_d \uparrow$  implies  $Im \uparrow$  implies  $CA \downarrow$  implies  $AD \downarrow$ , but  $Y \uparrow$  implies  $Y_d \uparrow$  implies  $C \uparrow$  implies  $AD \uparrow$  by less.

E)  $Y \uparrow$  implies  $Y_d \uparrow$  implies  $Im \downarrow$  implies  $CA \downarrow$  implies  $AD \downarrow$ , but  $Y \uparrow$  implies  $Y_d \uparrow$  implies  $C \uparrow$  implies  $AD \uparrow$  by less.

Answer: A

Page Ref: 455-456

Difficulty: Easy

2) Which one of the following statements is the MOST accurate?

A) A rise in domestic real income raises aggregate demand for home output.

B) A rise in domestic real income decreases aggregate demand for home output because of the increase demand for import.

C) A rise in domestic real income keeps aggregate demand for home output at the same level.

D) It is difficult to tell whether a rise in domestic real income affects positively or negatively aggregate demand for home output.

E) A rise in domestic real income decreases aggregate demand for home output because the CA is raised.

Answer: A

Page Ref: 455-456

Difficulty: Easy

3) The aggregate demand for home input can be written as a function of:

I. Real exchange rate.

II. Government spending.

III. Disposable income.

A) I only

B) III only

C) I and III

D) II and III

E) I, II, and III

Answer: E

Page Ref: 455-456

Difficulty: Easy

4) What is an accurate implication resulting from an increase in income?

A) an increase in exchange rate

B) a decrease in exchange rate

C) a decrease in consumption

D) a decrease in output

E) an increase in consumption

Answer: E

Page Ref: 455-456

Difficulty: Easy

5) Explain how does a rise in real income affect aggregate demand?

Answer: A rise in domestic real income,  $Y$ , leads to a rise in disposable income,  $Y_d$ . This raises the spending on imports,  $IM$ , thus lowering the current account,  $CA$ , and reducing aggregate demand,  $AD$ . However, the rise in  $Y_d$  also causes a rise in consumption,  $C$ , and raises aggregate demand,  $AD$ , by more than the corresponding decrease.

Page Ref: 455-456

Difficulty: Easy

6) Explain the difference between the following two expressions:

$$Y = C(Y^d) + I + G + CA(EP^*/P, Y^d) \text{ and} \\ Y = C + I + G + CA$$

Answer: The first one represents a behavioral equation and thus may express equilibrium condition for the output market or the aggregate desired demand for output. The second equation is only an identity that is always true.

Page Ref: 455-456

Difficulty: Moderate

### 17.3 How Output Is Determined in the Short Run

1) Which one of the following statements is MOST accurate?

- A) Factors of production can only be over-employed in the short run.
- B) Factors of production can only be under-employed in the short run.
- C) Factors of production can be over- or under-employed in the long run.
- D) Factors of production can be over- or under-employed in the short run.
- E) Factors of production are fully employed in the short run.

Answer: D

Page Ref: 457-458

Difficulty: Easy

2) In the short-run, any rise in the real exchange rate,  $EP^*/P$ , will cause

- A) an upward shift in the aggregate demand function and a reduction in output.
- B) an upward shift in the aggregate demand function and an expansion of output.
- C) a downward shift in the aggregate demand function and an expansion of output.
- D) a downward shift in the aggregate demand function and a reduction in output.
- E) an upward shift in the aggregate demand function but leaves output intact.

Answer: B

Page Ref: 457-458

Difficulty: Easy

3) In the short-run, any fall in  $EP^*/P$ , regardless of its causes, will cause

- A) an upward shift in the aggregate demand function and an expansion of output.
- B) an upward shift in the aggregate demand function and a reduction in output.
- C) a downward shift in the aggregate demand function and an expansion of output.
- D) a downward shift in the aggregate demand function and a reduction in output.
- E) an upward shift in the aggregate demand function but leaves output intact.

Answer: D

Page Ref: 457-458

Difficulty: Easy

4) The unique equilibrium output level in the short-run is found at the intersection of the following curves.

- A) aggregate demand and aggregate supply
- B) aggregate demand and 45 degree line
- C) aggregate supply and 45 degree line
- D) aggregate demand and short-run aggregate supply
- E) aggregate supply and long-run demand

Answer: B

Page Ref: 457-458

Difficulty: Easy

5) Why is the economy at full employment in the long run?

- A) Only wages have the ability to adjust.
- B) Only price can adjust.
- C) Prices don't adjust.
- D) Wages and the price level eventually adjust to full employment equilibrium levels.
- E) Government policies eventually converge on the full employment strategy.

Answer: D

Page Ref: 457-458

Difficulty: Easy

6) In the short-run, we assume that the money prices of goods and services are

- A) temporarily fixed.
- B) permanently fixed.
- C) allowed to fluctuate.
- D) equal to long-run prices.
- E) fully employed.

Answer: A

Page Ref: 457-458

Difficulty: Easy

7) What would be the best description of what we assume about money prices in the short run?

- A) Money prices of goods and services vary.
- B) Money prices of goods and services not related to each other.
- C) Money prices of goods are fixed.
- D) Money prices of services are fixed.
- E) Money prices of goods and services are only temporarily fixed.

Answer: E

Page Ref: 457-458

Difficulty: Easy



## 17.4 Output Market Equilibrium in the Short Run: The *DD* Schedule

1) The DD schedule shows all combinations of which 2 variables so that the output market is in equilibrium?

- A) imports and exports
- B) exports and the exchange rate
- C) foreign prices and the exchange rate
- D) output and the exchange rate
- E) output and exports

Answer: D

Page Ref: 458-462

Difficulty: Easy

2) Which of the following does NOT affect the position of the DD curve?

- A) monetary policy
- B) government spending
- C) taxes
- D) export demand
- E) price levels

Answer: A

Page Ref: 458-462

Difficulty: Easy

3) Temporary tax cuts would cause

- A) the AA-curve to shift left.
- B) the AA-curve to shift right.
- C) the DD-curve to shift left.
- D) the DD-curve to shift right.
- E) a shift in the AA-curve, although the direction is ambiguous.

Answer: D

Page Ref: 458-462

Difficulty: Easy

4) How would you define a DD schedule?

- A) the combinations of output and the exchange rate that must hold when the home money market and the foreign exchange market are in equilibrium
- B) the combinations of output and the exchange rate that must hold when the output market is in short-run equilibrium
- C) factors of production in the long run
- D) the aggregate demand in relation to the foreign market value
- E) the currency depreciation in relation to the exchange rate

Answer: B

Page Ref: 458-462

Difficulty: Easy

5) Which of the following is the MOST accurate?

A) Any disturbance that lowers aggregate demand for domestic output shifts the DD schedule to the right.

B) Any disturbance that lowers aggregate demand for foreign output shifts the DD schedule to the left.

C) Any disturbance that raises aggregate demand for domestic output shifts the DD schedule to the right.

D) Any disturbance that raises aggregate demand for domestic output shifts the DD schedule to the left.

E) Any disturbance that lowers aggregate demand for domestic output shifts the DD schedule downward.

Answer: C

Page Ref: 458-462

Difficulty: Easy

6) Discuss the main factors affecting the position of the DD schedule.

Answer: The level of government demand, taxes, and investment; the domestic and foreign price levels; variations in domestic consumption behavior; and the foreign demand for home output.

Page Ref: 458-462

Difficulty: Moderate

7) Give 4 examples of situations that would cause the DD-curve to shift to the left.

Answer: Correct answers include any situations that involve:

(1) an decrease in government spending (e.g., decrease in military spending)

(2) an increase in taxes

(3) a fall in Investment demand

(4) a price increase, which would lower net export demand (assuming E and  $P^*$  stay constant)

(5) a fall in foreign prices (assuming E and P stay constant)

(6) an autonomous fall in consumption demand (as long as it is not entirely a change in import demand)

(7) a shift to demanding more foreign goods at the expense of domestic good demand

Page Ref: 458-462

Difficulty: Difficult

8) Explain what are the factors that shift the DD Schedule.

Answer: A change in government demand, change in Taxes, a change in investment, change in domestic prices, change in foreign prices, changes in the consumption function and a demand shift between foreign and domestic goods.

Page Ref: 458-462

Difficulty: Moderate

## 17.5 Asset Market Equilibrium in the Short Run: The AA Schedule

1) How is the AA schedule derived?

A) The AA schedule has a positive slope because an increase in output leads to a depreciation of the currency.

B) The AA schedule has a negative slope because an increase in output leads to a decrease in the domestic interest rate.

C) The AA schedule has a negative slope because an increase in output leads to an increase in the domestic interest rate and a domestic currency appreciation.

D) The AA schedule has a positive slope because an increase in the money supply leads to an increase in the domestic interest rate.

E) The AA schedule has a positive slope because a decrease in output leads to a depreciation of the currency.

Answer: C

Page Ref: 462-466

Difficulty: Easy

2) Which one of the following statements is MOST accurate?

A) In the long run, foreign output depends only on the available domestic supplies of factors of production.

B) In the short run, domestic output depends only on the available domestic supplies of factors of production.

C) In the long run, domestic output depends only on the available domestic supplies of factors of production.

D) In the long run and in the short run, domestic output depends only on the available domestic supplies of factors of production.

E) In the long run, domestic output depends only on the real exchange rate.

Answer: C

Page Ref: 462-466

Difficulty: Easy

3) In the short-run, a temporary increase in the money supply

A) shifts the AA curve to the right, increases output and depreciates the currency.

B) shifts the AA curve to the left, increases output and depreciates the currency.

C) shifts the AA curve to the left, decreases output and depreciates the currency.

D) shifts the AA curve to the left, increases output and appreciates the currency.

E) shifts the AA curve to the right, increases output and appreciates the currency.

Answer: A

Page Ref: 462-466

Difficulty: Easy

4) Which of the following equations does **NOT** state a condition required for equilibrium output:?

- A)  $Y = C(Y^d) + I + G + CA(EP^*/P, Y^d)$
- B)  $Y = C(Y - T) + I + G + CA(EP^*/P, Y - T)$
- C)  $Y = D(EP^*/P, Y - T, I, G)$
- D)  $R = R^* + (EP/E)$
- E)  $Y = D(EP^*/P, Y^d, I, G)$

Answer: D

Page Ref: 462-466

Difficulty: Easy

5) The interest parity condition requires that:

- A) all countries have the same interest rate.
- B) there is a unique exchange rate for every output level.
- C) purchasing power parity hold.
- D) interest rates are fixed in the short run.
- E) the money supply is held constant.

Answer: B

Page Ref: 462-466

Difficulty: Easy

6) How is the AA schedule derived?

- A) It is derived by the schedule of interest rate and output combinations that are consistent with equilibrium in the domestic money market and the foreign exchange market.
- B) It is derived by the schedule of exchange rate and output combinations that are consistent with equilibrium in the foreign money market and the domestic exchange market.
- C) It is derived by the schedule of exchange rate and output combinations that are consistent with equilibrium in the domestic money market and the foreign exchange market.
- D) It is derived by the schedule of exchange rate and output combinations that are consistent with equilibrium in the domestic bond market and the foreign asset market.
- E) It is derived by the schedule of exchange rate and output combinations that are greater than equilibrium in the foreign money market and the domestic exchange market.

Answer: C

Page Ref: 462-466

Difficulty: Easy

7) Explain how the AA schedule is derived.

Answer: For a fixed real money supply, an increase in output leads to an increase in the domestic interest rate. In the foreign exchange market, an increase in the domestic interest rate leads to a lower nominal exchange rate, thus appreciating the currency. Therefore, the relationship between nominal exchange rate and output is negative; this leads to a negative slope of the AA schedule, which has the nominal exchange rate and output on its axes.

Page Ref: 462-466

Difficulty: Moderate

8) Discuss the main factors affecting the position of the AA schedule.

Answer: Changes in the domestic money supply; changes in the domestic price level; changes in the expected future exchange rate; changes in the foreign interest rate; and shifts in the aggregate real money demand schedule.

Page Ref: 462-466

Difficulty: Moderate

9) What is the AA-curve? Why does it have a negative slope? What factors cause it to shift?

Answer: The AA-curve is the specific levels of E and Y under which the money and foreign exchange markets are in equilibrium.

The AA-curve has a negative slope because an increase in Y will cause E to fall (a domestic currency appreciation).

The factors that affect it are: the money supply, price level, expected exchange rate, foreign interest rates, and the level of real money demand.

Page Ref: 462-466

Difficulty: Difficult

10) Explain what are the factors that shift the AA Schedule?

Answer: Changes in the domestic money supply; changes in the domestic price level; changes in the expected future exchange rates; changes in the foreign interest rate and shifts in the aggregate real money demand.

Page Ref: 462-466

Difficulty: Moderate

11) Which one of the following statements is the MOST accurate?

A) For asset markets to remain in equilibrium, a rise in domestic output must be accompanied by a depreciation of domestic currency, all else equal.

B) For asset markets to remain in equilibrium, a fall in domestic output must be accompanied by a depreciation of foreign currency, all else equal.

C) For asset markets to remain in equilibrium, a rise in domestic output must be accompanied by an appreciation of domestic currency, all else equal.

D) For asset markets to remain in equilibrium, a fall in domestic output must be accompanied by an appreciation of domestic currency, all else equal.

E) For asset markets to remain in equilibrium, a fall in domestic output must be accompanied by an appreciation of foreign currency, all else equal.

Answer: C

Page Ref: 462-466

Difficulty: Easy

## 17.6 Short-Run Equilibrium for an Open Economy: Putting the *DD* and *AA* Schedules Together

1) Imagine that the economy is at a point that is above both *AA* and *DD*, where both the output and asset markets are out of equilibrium. Which first action is TRUE?

A) The economy will stay at this level in the short run.

B) The exchange rate will first drop to a point on the *AA* schedule.

C) The exchange rate will first move to a point on the *DD* schedule.

D) The *AA*-*DD* equilibrium will shift to the position of the economy.

E) The exchange rate will first move left to a position on the *AA* schedule.

Answer: B

Page Ref: 466-467

Difficulty: Easy

2) Which of the following have to be in equilibrium for the economy to be in equilibrium?

A) the money market only

B) the goods market only

C) the output and asset markets

D) the savings and investment markets

E) the goods and output markets

Answer: C

Page Ref: 466-467

Difficulty: Easy

3) Assume the asset market is always in equilibrium. Therefore a fall in *Y* would result in

A) higher inflation abroad.

B) a decreased demand for domestic products.

C) a contraction of the money supply.

D) a depreciation of the home currency.

E) an appreciation of the home currency.

Answer: D

Page Ref: 466-467

Difficulty: Easy

4) Why does an exchange rate-output combination lying above both *DD* and *AA* jump first to *AA* in equilibrium?

A) Asset prices can adjust immediately.

B) Production plans can adjust immediately.

C) to preserve full employment

D) Prices are nominal and demand is real.

E) Aggregate demand adjusts faster than output.

Answer: A

Page Ref: 466-467

Difficulty: Easy

5) Explain how an increase in government spending would affect the DD-AA schedule in the short run.

Answer: An increase in government spending will increase aggregate demand, which will shift the DD to the right. If AA remains unchanged, the new equilibrium will be at a higher  $Y$  and lower  $E$ . Since  $E$  is the nominal exchange rate, a lower  $E$  is an appreciation of the currency.

Page Ref: 466-467

Difficulty: Moderate

6) Imagine that the economy is at a point on the DD-AA schedule that is above both AA and DD and where both the output and asset markets are out of equilibrium. Explain what will happen next?

Answer: Since the asset market adjusts very quickly, the exchange rate drops immediately to a point on the AA schedule. There will be excess demand for the domestic currency because the high expected future appreciation rate of the domestic currency implies that the expected domestic currency return on foreign deposits is below that on domestic deposits. This excess demand leads to an immediate fall in the exchange rate.

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Difficulty: Moderate

7) A naïve implication of the DD-AA framework is that either fiscal or monetary policy can lead to full employment. Discuss why this view is naïve.

Answer:

(1) Inflation may arise without any gain in output if the government misuses its power to print money.

(2) In practice, it is sometimes hard to be sure whether a disturbance to the economy originates in the output or assets markets.

(3) Shifts in fiscal policy often can be made only after lengthy legislative deliberations.

Governments are likely to respond to disturbances by changing the monetary policy even when a shift in fiscal policy would be more appropriate.

(4) Fiscal policy impacts the government budget and may lead to government budget deficit that must be sooner or later be closed by a fiscal reversal. The state of the electoral cycle may be more important.

(5) Policies operate in reality with lags of varying length.

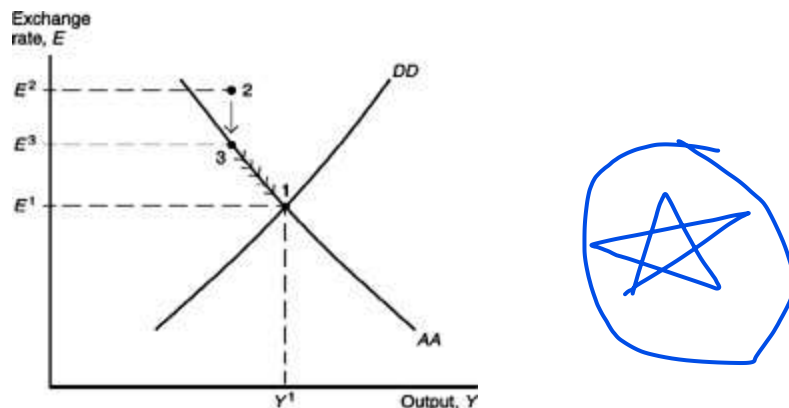
Page Ref: 466-467

Difficulty: Difficult

8) Use a figure to study the following question: Imagine that the economy is at a point on the DD-AA schedule that is above both AA and DD, where both the output and asset markets are out of equilibrium. Explain what will happen next.

Answer: Since the **asset market adjusts very quickly**, the exchange rate **drops immediately to a point on the AA schedule**. There will be **excess demand** for the domestic currency because the high expected future appreciation rate of the domestic currency implies that the expected **domestic currency return on foreign deposits is below that on domestic deposits**. This excess demand leads to an immediate fall in the exchange rate.

The figure:



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Difficulty: Easy

9) Imagine that the economy is at a point on that is below both AA and DD, where both the output and asset markets are out of equilibrium. Which first action is TRUE?

- A) The economy will stay at this level in the short run.
- B) The exchange rate will first rise to a point on the AA schedule.**
- C) The exchange rate will first rise to a point on the DD schedule.
- D) The AA-DD equilibrium will shift to the position of the economy.
- E) The output level will first increase to a position on the DD schedule.

Answer: B

Page Ref: 466-467

Difficulty: Easy

10) Assume the output market adjusts more rapidly than the asset market. A point of disequilibrium that is below both AA and DD will therefore initially result in

- A) an increase in output.
- B) a decrease in output.**
- C) a contraction of the money supply.
- D) a depreciation of the home currency.
- E) an appreciation of the home currency.

Answer: B

Page Ref: 466-467

Difficulty: Easy



## 17.7 Temporary Changes in Monetary and Fiscal Policy

1) In the short run, with prices fixed, how would an increase in government spending affect the DD-AA equilibrium?

- A) It will increase output and appreciate the currency.
- B) It will increase output and depreciate the currency.
- C) It will decrease output and appreciate the currency.
- D) It will decrease output and depreciate the currency.
- E) It will increase output and have no effect on the currency.

Answer: A

Page Ref: 468-471

Difficulty: Easy

2) In the short-run, an increase in government purchases will cause

- A) a shift of the DD curve to the left and an increase in output.
- B) a shift of the DD curve to the right and a decrease in output.
- C) a shift of the DD curve to the left and a decrease in output.
- D) a shift of the DD curve to the right and an increase in output.
- E) a shift of the DD curve the left and an appreciation of the currency.

Answer: D

Page Ref: 468-471

Difficulty: Easy

3) What are two ways the government can use to maintain full employment in an open economy? Also give an example for each.

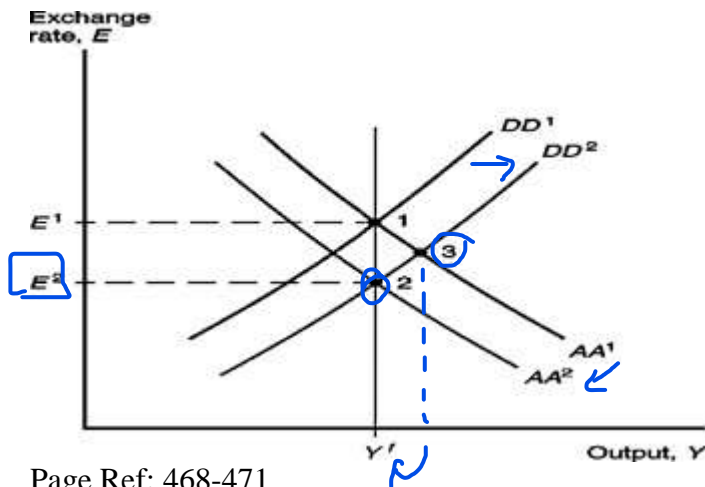
Answer: There are two types of government policy, monetary and fiscal policy. Examples of monetary policy are changes in the money supply. Examples of fiscal policy are changes in government spending or taxes.

Page Ref: 468-471

Difficulty: Moderate

4) Using a figure show that under full employment, a temporary fiscal expansion would increase output (over-employment) but cannot increase output in the long run.

Answer: A temporary fiscal expansion will move the economy from  $DD^1$  to  $DD^2$ , and output increases. A permanent fiscal expansion will also shift the AA curve to the left and down. The nominal exchange rate appreciates, i.e.  $E$  decreases.



Page Ref: 468-471

Difficulty: Moderate

5) In the short-run, a temporary increase in money supply

- A) shifts the DD curve to the right, increases output and appreciates the currency.
- B) shifts the AA curve to the left, increases output and depreciates the currency.
- C) shifts the AA curve to the left, decreases output and depreciates the currency.
- D) shifts the AA curve to the left, increases output and appreciates the currency.
- E) shifts the AA curve to the right, increases output and depreciates the currency.

Answer: E

Page Ref: 468-471

Difficulty: Easy

6) In the short-run, a tax increase

- A) shifts the DD curve to the right, increases output and appreciates the currency.
- B) shifts the AA curve to the left, increases output and depreciates the currency.
- C) shifts the AA curve to the left, decreases output and depreciates the currency.
- D) shifts the AA curve to the left, increases output and appreciates the currency.
- E) shifts the DD curve to the left, decreases output and depreciates the currency.

Answer: E

Page Ref: 468-471

Difficulty: Easy

## 17.8 Inflation Bias and Other Problems of Policy Formulation

1) What is inflation bias? What measures have governments taken to avoid it?

Answer: Inflation bias is caused when a government is expected to use policy tools to create an economic expansion (such as before an election). Because it is expected, wages and therefore prices are increased. If the government did not pursue the expansionary policy then, there would be a recession! Inflation is increased without the advantage of an increase in output.

Making the central bank independent of the political government is one answer to avoid inflation bias.

Page Ref: 471-472

Difficulty: Moderate

2) Explain and give some examples of governmental policy problems.

Answer: Steady nominal prices give government the power to raise output when it is low. It can also cause them to create a tool that can be used for an economic boom. An example is just before an election. The temptation can be a problem when workers and companies expect it in advance. This will cause a rise in wage demand and prices in the expected expansionary policies. An inflation bias causing high inflation but no average gains in output is also a problem. Others are the difficulty in showing the sources or time of economic changes, and time lags in implementing policies. Impact on the government budget by fiscal policy also causes problems by the way of a tax cut; increase in spending may lead to a government budget deficit that must sooner or later be closed by a fiscal reversal. Policy problem that seem to act quickly have actually a lag time with varying lengths.

Page Ref: 471-472

Difficulty: Moderate

## 17.9 Permanent Shifts in Monetary and Fiscal Policy

1) If the economy starts in long-run equilibrium, a permanent fiscal expansion will cause

A) an increase in exchange rate, E.

B) a decrease in exchange rate, E.

C) an increase in output, Y.

D) a decrease in output, Y.

E) shifting of the AA curve up and to the right.

Answer: B

Page Ref: 472-477

Difficulty: Easy

2) In long-run equilibrium after a permanent money-supply increase there follows:

A) an increase in exchange rate, E.

B) a decrease in exchange rate, E.

C) an increase in output, Y.

D) a decrease in output, Y.

E) an unchanged exchange rate, E.

Answer: A

Page Ref: 472-477

Difficulty: Easy

3) Which one of the following statements is the MOST accurate?

A) Over time, the inflationary pressure that follows a temporary money supply expansion pushes the price level to its long-run value and returns the economy to full employment.

B) Over time, the inflationary pressure that follows a permanent money supply expansion pushes the price level to its long-run value and returns the economy to full employment.

C) Over time, the inflationary pressure that follows a temporary money supply expansion pushes the price level to its long-run value, but leaves the economy in a state of artificially low employment.

D) Over time, the inflationary pressure that follows a permanent money supply expansion pushes the price level to its long-run value, but leaves the economy in a state of artificially low employment.

E) Over time, the inflationary pressure that follows a permanent money supply expansion pushes the price level beyond its long-run value and lower the level of employment.

Answer: B

Page Ref: 472-477

Difficulty: Easy

4) Using the DD-AA framework, which one of the following statements is the MOST accurate?

A) Only monetary policy can bring the economy to full employment.

B) Only fiscal policy can bring the economy to full employment.

C) Only both monetary and fiscal policies can bring the economy to full employment.

D) Both policies are capable of bringing the economy to full employment and low inflation.

E) Monetary policy by itself or fiscal policy by itself can bring the economy to full employment.

Answer: E

Page Ref: 472-477

Difficulty: Easy

5) Which one of the following statements is the MOST accurate?

A) A permanent increase in the money supply cannot have any short-run effects.

B) A permanent increase in taxes cannot have any short-run effects.

C) A permanent decrease in the money supply cannot have short-run effects.

D) A permanent decrease in taxes cannot have short-run effects.

E) A permanent increase in money demand can be offset with a permanent increase in the money supply of equal magnitude.

Answer: E

Page Ref: 472-477

Difficulty: Easy

6) A permanent increase in the domestic money supply

A) must ultimately lead to a proportional decrease in E, and, therefore, the expected future exchange rate must rise proportionally.

B) must ultimately lead to a proportional decrease in E, and, therefore, the expected future exchange rate must decrease proportionally.

C) must ultimately lead to a proportional rise in E, and, therefore, the expected future exchange rate must rise proportionally.

D) must ultimately lead to a proportional rise in E, and, therefore, the expected future exchange rate must rise more than proportionally.

E) must ultimately lead to a proportional rise in E, and, therefore, the expected future exchange rate must rise less than proportionally.

Answer: C

Page Ref: 472-477

Difficulty: Easy

7) In the short run, a permanent increase in the domestic money supply causes

A) a greater upward shift in the DD curve than that caused by an equal, but transitory, increase.

B) a greater downward shift in the AA curve than that caused by an equal, but transitory, increase.

C) an smaller upward shift in the AA curve than that caused by an equal, but transitory, increase.

D) a smaller downward shift in the AA curve than that caused by an equal, but transitory, increase.

E) a greater upward shift in the AA curve than that caused by an equal, but transitory, increase.

Answer: E

Page Ref: 472-477

Difficulty: Easy

8) In the short run, a permanent increase in the domestic money supply

A) has stronger effects on the exchange rate and output than an equal temporary increase.

B) has stronger effects only on the exchange rate but not on output than an equal temporary increase.

C) has weaker effects on the exchange rate and output than an equal temporary increase.

D) has stronger effects on output, but lower effect the exchange rate than an equal temporary increase.

E) has weaker effects only on the exchange rate than an equal temporary increase.

Answer: A

Page Ref: 472-477

Difficulty: Easy

9) A permanent fiscal expansion

A) shifts the DD and the AA schedules to the right, increasing output.

B) shifts the DD and the AA schedules to the right, decreasing output.

C) shifts the DD to the right and the AA schedule to the left, leaving output the same.

D) shifts the DD to the left and the AA schedule to the left, decreasing output.

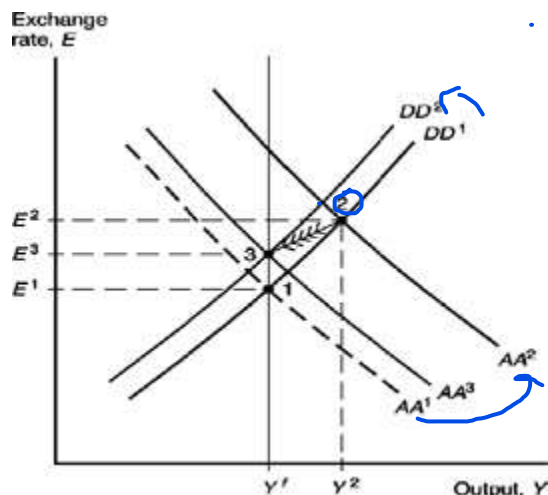
E) shifts the DD and the AA schedules to the left, leaving output the same.

Answer: C

Page Ref: 472-477

Difficulty: Easy

10) Explain the following figure:



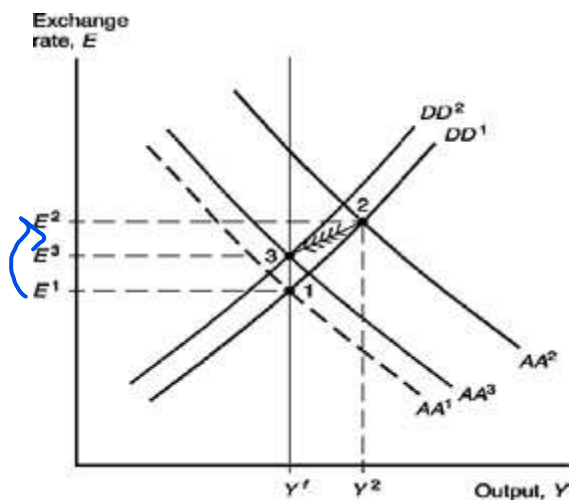
Answer: The figure depicts the effect of a permanent increase in the money supply starting from full employment equilibrium. After the initial increase in the money supply and the move of the AA curve to the right from  $AA^1$  to  $AA^2$ , a steadily increasing price level shifts the AA and the DD schedules to the left until a new long-run equilibrium is reached. Note that point 3 is above point 1, because  $E^e$  is permanently higher after a permanent increase in the money supply. The expected exchange rate,  $E^e$ , has risen by the same percentage as  $M^s$ . Notice that along the adjustment path between the initial short-run equilibrium (point 2) and the long-run equilibrium (point 3) the domestic currency actually appreciates (from  $E^2$  to  $E^3$ ) following its initial sharp depreciation (from  $E^1$  to  $E^2$ ).

Page Ref: 472-477

Difficulty: Moderate

11) Using the DD-AA framework, show the phenomenon of overshooting. Use a figure to explain when it is taking place.

Answer: The figure below shows the phenomenon of overshooting. A permanent increase in the money supply starting from full employment equilibrium will shift the AA curve to the right from  $AA^1$  to  $AA^2$ . Now, a steadily increasing price level shifts the AA and the DD schedules to the left until a new long-run equilibrium is reached. Note that point 3 is above point 1, because  $E^e$  is permanently higher after a permanent increase in the money supply. The expected exchange rate,  $E^e$ , has risen by the same percentage as  $M^s$ . Notice that along the adjustment path between the initial short-run equilibrium (point 2) and the long-run equilibrium (point 3) the domestic currency actually appreciates (from  $E^2$  to  $E^3$ ) following its initial sharp depreciation (from  $E^1$  to  $E^2$ ). This exchange rate behavior is an example of overshooting, in which the exchange rate's initial response to some change is greater than its long-run response.



Page Ref: 472-477

Difficulty: Moderate

12) Demonstrate how a permanent fiscal expansion will not increase output in the long run.

Answer: (1) E on Y-axis, Y on X-axis

(2) DD shifts right

(3) temporary equilibrium where E lower and Y increased

(4) permanent increase in demand caused by increase in G causes currency to appreciate: AA shifts left

(5) therefore Y returns to original levels, E decreases even more

RESULT of permanent fiscal expansion: currency appreciation, output does not change. This effect is called "crowding out."

Page Ref: 472-477

Difficulty: Moderate

13) Show the effects of a permanent increase in the money supply.

Answer:

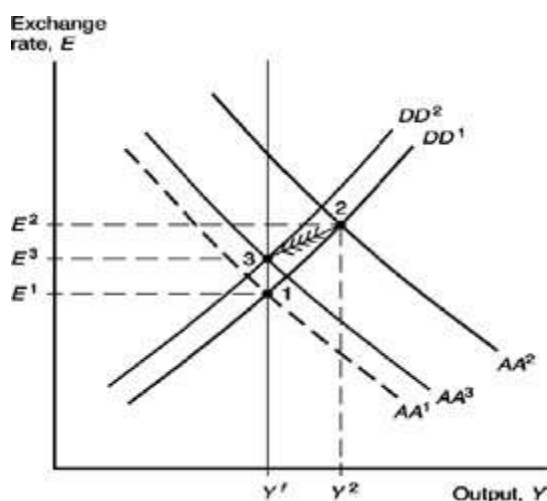
- (1) AA-shifts right-increase in  $Y$  and  $E$  both higher than if money supply change was temporary rising price level makes  $AD$  decrease,  $DD$  shifts left
- (2) rising prices also reduce real money supply, so  $AA$  shifts left (although not all the way back to original position)
- (3)  $AA$  and  $DD$  reach short run equilibrium at an  $E$  that is higher than initially, but lower than the short run effects of the shift.
- (4) Output returns to initial level because higher prices reversed the effect of the initial depreciation on Aggregate Demand.

Page Ref: 472-477

Difficulty: Moderate

14) Using the DD model, explain what happens to out put when Government demands increase. Use a figure to explain when it is taking place.

Answer: The figure below shows the  $G_1$  to  $G_2$  raises output at every level of the exchange rate. The change shifts the  $DD$  to the right. Which in turns increases output to  $Y_2$ .



Page Ref: 472-477

Difficulty: Easy

## 17.10 Macroeconomic Policies and the Current Account

1) Which of the following is TRUE of the current account balance?

- A) Monetary expansion has no effect on the current account balance.
- B) Monetary expansion decreases the current account balance.
- C) Fiscal expansion increases the current account balance.
- D) Fiscal expansion has no effect on the current account balance.
- E) Monetary expansion increases the current account balance.

Answer: E

Page Ref: 477-478

Difficulty: Easy



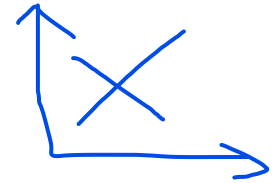
2) In the short run

- A) monetary expansion causes the CA to increase & fiscal expansion causes the CA to decrease.  
B) monetary expansion causes the CA to decrease & fiscal expansion causes the CA to decrease.  
C) monetary expansion causes the CA to increase & fiscal expansion causes the CA to increase.  
D) monetary expansion causes the CA to decrease & fiscal expansion causes the CA to increase.  
E) monetary expansion causes the CA to increase & the effects of fiscal expansion are ambiguous.

Answer: A

Page Ref: 477-478

Difficulty: Easy



3) Which statement best describes the current account balance in the short run?

- A) Monetary expansion lowers the current account balance.  
B) Monetary expansion keeps the current account balance the same.  
C) Fiscal expansion increases the current account balance.  
D) Fiscal expansion keeps the current account balance the same.  
E) Monetary expansion increases the current account balance.

Answer: E

Page Ref: 477-478

Difficulty: Easy

#### 17.11 Gradual Trade Flow Adjustment and Current Account Dynamics

1) According to historical data, what is the effect of a sharp change in the current account on the exchange rate (both in the short and long run)?

- A) At first, home currency will depreciate as CA balance falls, but over time, currency will begin to depreciate.  
B) At first, home currency will appreciate as CA balance falls, but over time, currency will begin to depreciate.  
C) At first, home currency will appreciate as CA balance rises, but over time, currency will begin to depreciate.  
D) At first, home currency will depreciate as CA balance falls, but over time, currency will begin to appreciate.  
E) At first, home currency will appreciate as CA balance falls, but over time, currency will begin to appreciate.

Answer: B

Page Ref: 478-481

Difficulty: Easy

2) Which two time periods did the U.S. begin to experience a sharp increase in Current Account deficits?

- A) 1981, mid-1990s
- B) 1971, mid-1990s
- C) 1961, mid-1990s
- D) 1971, mid-1980s
- E) 1985, mid-1990s

Answer: A

Page Ref: 478-481

Difficulty: Easy

3) The J-curve illustrates which of the following?

- A) the effects of depreciation on the home country's economy
- B) the immediate increase in current account caused by a currency depreciation
- C) the gradual adjustment of home prices to a currency depreciation
- D) the short-term effects of depreciation on the current account
- E) the Keynesian view of international trade dynamics

Answer: D

Page Ref: 478-481

Difficulty: Easy

4) The percent by which import prices rise when the home currency depreciates by 1% is the degree of

- A) pass-forward from exchange rates to import prices.
- B) pass-through from exchange rates to import prices.
- C) pass-on from exchange rates to import prices.
- D) roll-forward from exchange rates to import prices.
- E) pass-beyond from exchange rates to import prices.

Answer: B

Page Ref: 478-481

Difficulty: Easy

5) In practice, many U.S. import prices tend to rise by only around

- A) 1/4 of a typical dollar depreciation over the following year.
- B) 1/3 of a typical dollar depreciation over the following year.
- C) 1/2 of a typical dollar depreciation over the following year.
- D) 2/3 of a typical dollar depreciation over the following year.
- E) 2/5 of a typical dollar depreciation over the following year.

Answer: C

Page Ref: 478-481

Difficulty: Easy

6) Describe what is a J Curve?

Answer: The time lag with which real currency depreciation improves the current account. The current account is measured in terms of domestic output, and can drop quickly right after real currency depreciation because most import and export orders are placed several months in advance. In the first few months after the depreciation, export and import volumes therefore may reflect buying decisions that were made on the basis of the old real exchange rate.

Page Ref: 478-481

Difficulty: Moderate

## 17.12 The Liquidity Trap

1) If a country's nominal interest rate is zero, then

A) the country's economy is in a liquidity trap.

B) exchange rates with other countries are likely to decline.

C) exchange rates with other countries are likely to increase.

D) monetary policy is likely to be very effective in stimulating the economy.

E) the country's economy has achieved monetary equilibrium.

Answer: A

Page Ref: 481-485

Difficulty: Moderate

2) When an economy is in a liquidity trap

A) monetary policy cannot be used to influence the exchange rate.

B) monetary policy can be used to drive interest rates down, but not to drive them up.

C) there is an excess demand for bonds.

D) people and institutions avoid holding cash balances.

E) it can escape only by introducing a hard, or illiquid, currency.

Answer: A

Page Ref: 481-485

Difficulty: Moderate

3) Which of the following is an example of an "unconventional monetary policy" by a central bank?

A) The purchase of specific categories of assets with new money.

B) The sale of long-term government bonds for foreign exchange.

C) the purchase of long-term government bonds using foreign exchange.

D) raising reserve requirements by commercial banks.

E) selling gold reserves.

Answer: A

Page Ref: 481-485

Difficulty: Moderate

4) If an economy is in a liquidity trap, then the nominal interest rate is \_\_\_\_\_ and the only effective policy that can be used to stimulate the economy is \_\_\_\_\_.

- A) zero or negative; expansionary fiscal policy
- B) zero or negative; expansionary monetary policy
- C) high and rising; contractionary monetary policy
- D) high and rising; expansionary monetary policy
- E) high and rising; expansionary fiscal policy

Answer: A

Page Ref: 481-485

Difficulty: Moderate

### 17.13 Appendix 1 to Chapter 17: Intertemporal Trade and Consumption Demand

1) An intertemporal budget constraint

- A) requires the present value of consumption to be equal to the present value of production.
- B) requires total spending in each period to be equal to total consumption in each period.
- C) does not take into account the ability to borrow or loan goods domestically.
- D) categorizes income into permanent and temporary income.
- E) limits consumption to the amount produced in each time period.

Answer: A

Page Ref: 490-491

Difficulty: Easy

2) If consumers experience an increase in lifetime income, current spending will \_\_\_\_\_, current saving will \_\_\_\_\_, and future spending will \_\_\_\_\_.

- A) increase; increase; increase
- B) increase; decrease; decrease
- C) increase; decrease; increase
- D) increase; increase; decrease
- E) decrease; increase; increase

Answer: A

Page Ref: 490-491

Difficulty: Easy

3) If consumers experience a decrease in lifetime income, current spending will \_\_\_\_\_, current saving will \_\_\_\_\_, and future spending will \_\_\_\_\_.

- A) decrease; decrease; decrease
- B) increase; decrease; decrease
- C) increase; decrease; increase
- D) increase; increase; decrease
- E) decrease; increase; increase

Answer: A

Page Ref: 490-491

Difficulty: Easy

17.14 Appendix 2 to Chapter 17: The Marshall-Lerner Condition and Empirical Estimates of Trade Elasticities

1) One implication of an empirical investigation of the Marshall-Lerner condition is that, in the \_\_\_\_\_, a real \_\_\_\_\_ in a nation's currency is likely to \_\_\_\_\_ the country's current account balance.

- A) long-run; depreciation; improve
- B) short-run; depreciation; improve
- C) long-run; appreciation; improve
- D) short-run; appreciation; improve
- E) short-run but not the long-run; appreciation; improve

Answer: A

Page Ref: 492-494

Difficulty: Easy

2) The Marshall-Lerner condition holds that a country's current account balance will \_\_\_\_\_ in response to a real \_\_\_\_\_ in a nation's currency if \_\_\_\_\_.

- A) improve; depreciation; sum of the price elasticities of export and import demand exceeds 1
- B) worsen; depreciation; sum of the price elasticities of export and import demand exceeds 1
- C) improve; appreciation; sum of the price elasticities of export and import demand exceeds 1
- D) improve; appreciation; sum of the price elasticities of export and import demand exceeds 0
- E) worsen; depreciation; sum of the price elasticities of export and import demand exceeds 0

Answer: A

Page Ref: 492-494

Difficulty: Moderate

3) A real depreciation of a nation's currency gives rise to the \_\_\_\_\_ effect and the \_\_\_\_\_ effect on the current account.

- A) volume; value
- B) depletion; expansion
- C) surplus; deficit
- D) output; trade
- E) price; profit

Answer: A

Page Ref: 492-494

Difficulty: Easy

- 4) The Marshall-Lerner Condition states that, all else equal
- A) nominal appreciation improves the current account if export and import volumes are sufficiently elastic with respect to the real exchange rate.
  - B) real depreciation improves the current account if export and import volumes are sufficiently inelastic with respect to the real exchange rate.
  - C) real appreciation improves the current account if export and import volumes are sufficiently elastic with respect to the real exchange rate.
  - D) real depreciation improves the current account if export and import volumes are sufficiently elastic with respect to the real exchange rate.
  - E) the sum of import and export elasticities must be equal to one in order for depreciation to occur.

Answer: D

Page Ref: 492-494

Difficulty: Easy

**International Economics, 10e (Krugman/Obstfeld/Melitz)**  
**Chapter 18 (7) Fixed Exchange Rates and Foreign Exchange Intervention**

**18.1 Why Study Fixed Exchange Rates?**

1) Central banks often intervene in currency markets. This activity is called  
A) managed floating.

- B) fixing exchange rates.
- C) currency warfare.
- D) super-pegging.
- E) flexible floating.

Answer: A

Page Ref: 495-497

Difficulty: Easy

2) Why is it important to understand fixed exchange rates in the modern global economy?

Answer: Fixed rates continue to be important for four reasons:

- 1. Managed floating: Central banks intervene in foreign exchange markets.
- 2. Regional currency arrangements: Some countries peg their currency to another currency.
- 3. Developing countries and countries in transition: These countries often attempt to peg their currency to another currency.
- 4. Lessons of the past: Fixed exchange rates could have a resurgence.

Page Ref: 495-497

Difficulty: Moderate

3) Which of the following is an example of a regional currency arrangement?

- A) exchange rate union
- B) currency cartel associations
- C) free-trade zones
- D) most-favored nation status
- E) agreement on commercial trade

Answer: A

Page Ref: 495-497

Difficulty: Easy

4) Industrialized countries typically \_\_\_\_\_ their floating exchange rates. Developing countries often \_\_\_\_\_ their floating exchange rates.

- A) manage; peg
- B) peg; manage
- C) allow markets to determine; fix
- D) fix; manage
- E) fix; allow markets to determine

Answer: A

Page Ref: 495-497

Difficulty: Easy

## 18.2 Central Bank Intervention and the Money Supply

1) A central bank's international reserves consists of its holdings of

- A) gold.
- B) silver and gold.
- C) foreign assets and gold.
- D) domestic assets and precious metals.
- E) foreign and domestic currency holdings.

Answer: C

Page Ref: 497-501

Difficulty: Easy

2) The liabilities side of a central bank's accounts consists of

- A) deposits held by private banks.
- B) currency in circulation.
- C) deposits held by private banks and currency in circulation.
- D) deposits held by foreign banks, domestic assets, and currency in circulation.
- E) foreign assets and domestic assets.

Answer: C

Page Ref: 497-501

Difficulty: Easy

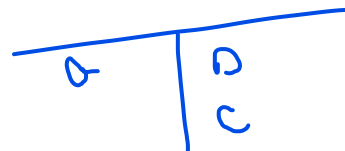
3) Which one of the following statements is most correct?

- A) Any central bank purchase of assets *automatically* results in an increase in the domestic money supply, while any central bank sale of assets *automatically* causes the money supply to decline.
- B) Any central bank purchase of assets results in an increase in the domestic money supply, while any central bank sale of assets causes the money supply to decline.
- C) Any central bank purchase of assets *automatically* results in a decrease in the domestic money supply, while any central bank sale of assets *automatically* causes the money supply to decline.
- D) Any central bank purchase of assets *automatically* results in a decrease in the domestic money supply, while any central bank sale of assets *automatically* causes the money supply to increase.
- E) Any central bank purchase of assets *automatically* results in an increase in the domestic money supply, while any central bank sale of assets does not necessarily affect the money supply.

Answer: A

Page Ref: 497-501

Difficulty: Easy





4) Which one of the following statements is the most correct?

A) If central banks are not sterilizing and the home country has a balance of payments surplus, any associated increase in the home central bank's foreign asset implies an increased home money supply.

B) If central banks are not sterilizing and the home country has a balance of payments surplus, any associated increase in the home central bank's foreign asset implies a decreased home money supply.

C) If central banks are not sterilizing and the home country has a balance of payments surplus, any associated increase in the home central bank's foreign asset implies an increased home money demand.

D) If central banks are not sterilizing and the home country has a balance of payments surplus, any associated decrease in the home central bank's foreign asset implies an increased home money supply.

E) If central banks are not sterilizing and the home country has a balance of payments shortage, any associated decrease in the home central bank's foreign asset implies an increased home money supply.

Answer: A

Page Ref: 497-501

Difficulty: Easy

5) Which one of the following statements is most correct?

A) If central banks are not sterilizing and the home country has a balance of payments surplus, any associated increase in a foreign central bank's claims on the home country implies a decreased foreign money supply.

B) If central banks are not sterilizing and the home country has a balance of payments surplus, any associated decrease in a foreign central bank's claims on the home country implies a decreased foreign money demand.

C) If central banks are not sterilizing and the home country has a balance of payments surplus, any associated decrease in a foreign central bank's claims on the home country implies a decreased foreign money supply.

D) If central banks are not sterilizing and the home country has a balance of payments shortage, any associated decrease in a foreign central bank's claims on the home country implies a decreased foreign money supply.

E) If central banks are not sterilizing and the home country has a balance of payments shortage, any associated decrease in a foreign central bank's claims on the home country implies an increased domestic money supply.

Answer: C

Page Ref: 497-501

Difficulty: Easy

6) A balance sheet for the central bank of Pecunia is shown below:

Central Bank Balance Sheet

Assets		Liabilities	
Foreign assets	\$1,000	Deposits held by private banks	\$500
Domestic assets	\$1,500	Currency in circulation	\$2,000

Please write the new balance sheet if the bank sells \$100 worth of foreign bonds for domestic currency.

Answer: Central Bank Balance Sheet

Assets		Liabilities	
Foreign assets	\$900	Deposits held by private banks	\$500
Domestic assets	\$1,500	Currency in circulation	\$1,900

Page Ref: 497-501

Difficulty: Easy

7) A balance sheet for the central bank of Pecunia is shown below:

Central Bank Balance Sheet

Assets		Liabilities	
Foreign assets	\$1,000	Deposits held by private banks	\$500
Domestic assets	\$1,500	Currency in circulation	\$2,000

Please write the new balance sheet if the bank purchased \$100 in foreign bonds by writing a check on itself.

Answer: Central Bank Balance Sheet

Assets		Liabilities	
Foreign assets	\$1,100	Deposits held by private banks	\$600
Domestic assets	\$1,500	Currency in circulation	\$2,000

Page Ref: 497-501

Difficulty: Moderate

8) A balance sheet for the central bank of Pecunia is shown below:

Central Bank Balance Sheet

Assets		Liabilities	
Foreign assets	\$1,000	Deposits held by private banks	\$500
Domestic assets	\$1,500	Currency in circulation	\$2,000

Please write the new balance sheet if the bank makes a sterilized transaction by selling \$100 of foreign assets for domestic currency and then purchasing \$100 of domestic assets by writing a check on itself.

Answer: Central Bank Balance Sheet

Assets		Liabilities	
Foreign assets	\$900	Deposits held by private banks	\$600
Domestic assets	\$1,600	Currency in circulation	\$1,900

Page Ref: 497-501

Difficulty: Moderate

9) Please define and give an example of sterilized foreign exchange intervention.

Answer: Sterilized foreign exchange intervention occurs when a central bank carries out equal foreign and domestic asset transactions in opposite directions to nullify the impact on the domestic money supply. An example is a central bank purchasing \$100 of domestic assets but selling \$100 of foreign bonds.

Page Ref: 497-501

Difficulty: Moderate

10) If the central bank does not purchase foreign assets when output increases but instead holds the money stock constant, can it still keep the exchange rate fixed at  $E^0$ ? Please explain.

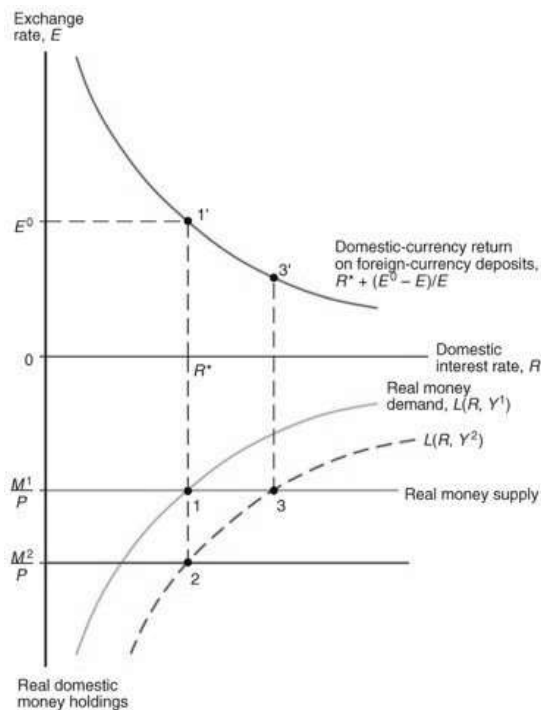
Answer: No, the rise in output leads to an excess demand for money. If the central bank does not increase supply to meet this demand, the domestic interest rate would rise above the foreign rate,  $R^*$ . This higher rate of return (and given expectations in the foreign exchange market) would cause the exchange rate to fall below  $E^0$ .

Page Ref: 497-501

Difficulty: Difficult

11) If the central bank does not purchase foreign assets when output increases but instead holds the money stock constant, can it still keep the exchange rate fixed at  $E^0$ ? Please explain with the aid of a figure.

Answer:



No, the rise in output leads to an excess demand for money. If the central bank does not increase supply to meet this demand, the domestic interest rate would rise above the foreign rate,  $R^*$ . This higher rate of return (and given expectations in the foreign exchange market) would cause the exchange rate to fall below  $E^0$ .

Page Ref: 497-501

Difficulty: Moderate

### 18.3 How the Central Bank Fixes the Exchange Rate

1) A system of managed floating exchange rates is

A) a system in which governments may attempt to moderate exchange rate movements without keeping exchange rates rigidly fixed.

B) a system in which governments use flexible exchange rates.

C) a system in which governments are forbidden from attempt to moderate exchange rate movements without keeping exchange rates rigidly fixed.

D) a system in which governments need to reach a prior agreement among them before they may attempt to moderate exchange rate movements without keeping exchange rates rigidly fixed.

E) a system in which governments use extensive fiscal policy to discourage exchange rate movements.

Answer: A

Page Ref: 501-504

Difficulty: Easy

2) Under fixed exchange rate, in general

- A) the domestic and foreign interest rates are equal,  $R = R^*$ .
- B)  $R = R^* + (E^e - E)/E$ .
- C) the foreign and domestic interest rates are unequal.
- D) the expected rate of domestic currency depreciation is high.
- E) the expected rate of currency depreciation is one.

Answer: A

Page Ref: 501-504

Difficulty: Easy

3) Under fixed exchange rate, in general which one of the following statements is the MOST accurate?

- A) The following condition should hold for domestic money market equilibrium:  $M^s/P = L(R^*, Y)$ .
- B) The following condition should hold for domestic money market equilibrium:  $M^d/P = L(R^*, Y)$ .
- C) The following condition should hold for domestic money market equilibrium:  $M^s = L(R^*, Y)$ .
- D) The following condition should hold for domestic money market equilibrium:  $P = L(R^*, Y)$ .
- E) The following condition should hold for domestic money market equilibrium:  $R^*M^d/P = L(Y)$ .

Answer: A

Page Ref: 501-504

Difficulty: Easy

4) Which one of the following statements is the MOST accurate?

- A) Under a fixed exchange rate, central bank monetary tools are powerless to affect the economy's money supply.
- B) Under a flexible exchange rate, central bank monetary tools are powerless to affect the economy's money supply or its output.
- C) Under a fixed exchange rate, fiscal policy tools are powerless to affect the economy's money supply or its output.
- D) Under a fixed exchange rate, central bank monetary tools are powerless to affect the economy's money supply or its output.
- E) Under a dirty float exchange rate, central bank monetary tools are powerless to affect the economy's money supply or its output.

Answer: D

Page Ref: 501-504

Difficulty: Easy

5) What is the expected dollar rate of return on dollar deposits if today's exchange rate is \$1.10 per euro, next year's expected exchange rate is \$1.165 per euro, the dollar interest rate is 10%, and the euro interest rate is 5%?

- A) 10%
- B) 11%
- C) -1%
- D) 0%
- E) 5%

Answer: A

Page Ref: 501-504

Difficulty: Easy

6) What are the factors affecting the demand for foreign currency?

Answer: Three factors affect the demand for foreign currency. They are expected return, risk, and liquidity.

Page Ref: 501-504

Difficulty: Moderate

7) Explain risk and liquidity of assets.

Answer: Risk is the variability an asset contributes to a savers' wealth. An asset's real return can be unpredictable and savers dislike this uncertainty if the return fluctuates widely. Liquidity refers to the ease with which an asset can be sold or exchanged for goods. Cash is the most liquid of assets because it is always acceptable at face value as payment for goods or other assets. Thus, savers consider an asset's liquidity and its expected return and risk in deciding how much of it to hold.

Page Ref: 501-504

Difficulty: Moderate

#### 18.4 Stabilization Policies with a Fixed Exchange Rate

1) By fixing the exchange rate, the central bank gives up its ability to

- A) adjust taxes.
- B) increase government spending.
- C) influence the economy through fiscal policy.
- D) depreciate the domestic currency.
- E) influence the economy through monetary policy.

Answer: E

Page Ref: 504-509

Difficulty: Easy

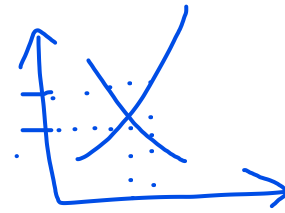
2) Fiscal expansion under fixed exchange rates will have what temporary effect?

- A) the money supply will decrease.
- B) output will decrease.
- C) the exchange rate will increase.
- D) the exchange rate will decrease.**
- E) there will be no effect.

Answer: D

Page Ref: 504-509

Difficulty: Easy



3) When a country's currency is devalued

- A) output decreases.
- B) output increases and the money supply decreases.
- C) the money supply decreases.
- D) output decreases and the money supply increases.
- E) both the output and the money supply increases.**

Answer: E

Page Ref: 504-509

Difficulty: Easy

4) Under fixed rates, which one of the following statements is the MOST accurate?

- A) Monetary policy can affect only output.
- B) Monetary policy can affect only employment.
- C) Monetary policy can affect only international reserves.**
- D) Monetary policy can not affect international reserves.
- E) Monetary policy can only affect money supply.

Answer: C

Page Ref: 504-509

Difficulty: Easy

5) Under fixed rates, which one of the following statements is the MOST accurate?

- A) Fiscal policy can affect output, employment and international reserves at the same time.**
- B) Fiscal policy can affect only employment.
- C) Fiscal policy can affect only international reserves.
- D) Fiscal policy can affect only output and employment.
- E) Fiscal employment can affect only output and international reserves.

Answer: A

Page Ref: 504-509

Difficulty: Easy

6) Which one of the following statements is the MOST accurate?

- A) Fiscal policy has the same effect on employment under fixed and flexible exchange rate regimes.
- B) Fiscal policy affects employment less under fixed than under flexible exchange rate regimes.
- C) Fiscal policy affects employment more under fixed than under flexible exchange rate regimes.
- D) Fiscal policy cannot affect employment under fixed exchange rate but does affect output under flexible exchange rate regimes.
- E) Fiscal policy can affect employment under fixed exchange rate regimes, but does not affect output under flexible exchange rate regimes.

Answer: C

Page Ref: 504-509

Difficulty: Easy

7) Which one of the following statements is the MOST accurate?

- A) Fiscal policy has the same effect on output under fixed and flexible exchange rate regimes.
- B) Fiscal policy affects output more under fixed than under flexible exchange rate regimes.
- C) Fiscal policy affects output less under fixed than under flexible exchange rate regimes.
- D) Fiscal policy cannot affect output under fixed exchange rate but does affect output under flexible exchange rate regimes.
- E) Fiscal policy can affect output under fixed exchange rate but does not affect output under flexible exchange rate regimes.

Answer: B

Page Ref: 504-509

Difficulty: Easy

8) Which one of the following statements is the MOST accurate?

- A) A *devaluation* occurs when the central bank lowers the domestic currency price of foreign currency, E, and a *revaluation* occurs when the central bank raises E.
- B) A devaluation occurs when the central bank raises the domestic currency price of foreign currency, E, and a revaluation occurs when the central bank lowers E.
- C) Devaluation occurs when the domestic currency price of foreign currency, E, raises and a revaluation occurs when E is lowered.
- D) A devaluation occurs when the central bank of the foreign country raises the domestic currency price of foreign currency, E, and a revaluation occurs when the central bank of the foreign country lowers E.
- E) A devaluation occurs when the central bank raises the foreign currency price of domestic currency, E, and a revaluation occurs when the central bank lowers E.

Answer: B

Page Ref: 504-509

Difficulty: Easy



9) Which one of the following statements is the MOST accurate?

A) Depreciation is a rise in E when the exchange rate is fixed while devaluation is a rise in E when the exchange rate floats.

B) Depreciation is a decrease in E when the exchange rate floats while devaluation is a rise in E when the exchange rate is fixed.

C) Depreciation is a rise in E when the exchange rate floats while devaluation is a rise in E when the exchange rate is fixed.

D) Depreciation is a rise in E when the exchange rate floats while devaluation is a decrease in E when the exchange rate is fixed.

E) Depreciation is a fall in E when the exchange rate is fixed while devaluation is a fall in E when the exchange rate floats.

Answer: C

Page Ref: 504-509

Difficulty: Easy

10) Which one of the following statements is the MOST accurate?

A) Appreciation is a rise in E when the exchange rate floats while revaluation is a fall in E when the exchange rate is fixed.

B) Appreciation is a fall in E when the exchange rate floats while revaluation is a fall in E when the exchange rate is fixed.

C) Appreciation is a fall in E when the exchange rate is fixed while revaluation is a fall in E when the exchange rate is flexible.

D) Appreciation is a fall in E when the exchange rate floats while revaluation is a rise in E when the exchange rate is fixed.

E) Appreciation is a rise in E when the exchange rate floats while revaluation is a rise in E when the exchange rate is fixed.

Answer: B

Page Ref: 504-509

Difficulty: Easy

11) Which one of the following statements is the MOST accurate?

A) Devaluation reflects a deliberate government decision.

B) Depreciation reflects a deliberate government decision.

C) Devaluation reflects a deliberate government decision while depreciation is an outcome of government actions and market forces acting together.

D) Depreciation reflects a deliberate government decision while devaluation is an outcome of government actions and market forces acting together.

E) Devaluation and depreciation have the same meaning and the same causes.

Answer: C

Page Ref: 504-509

Difficulty: Easy

12) Which one of the following statements is the MOST accurate?

A) Revaluation reflects an outcome of government actions and market forces acting together while appreciation reflects a deliberate government decision.

B) Revaluation reflects a deliberate government decision while appreciation is an outcome of government actions and market forces acting together.

C) Revaluation reflects a deliberate government decision while appreciation is an outcome of government actions.

D) Revaluation and appreciation have the same meaning and the same causes.

E) Appreciation reflects a deliberate government decision while revaluation is an outcome of government actions and market forces acting together.

Answer: B

Page Ref: 504-509

Difficulty: Easy

13) Under fixed exchange rates, which one of the following statements is the MOST accurate?

A) Devaluation causes a decrease in output, a decrease in official reserves, and a contraction of the money supply.

B) Devaluation causes a rise in output, a rise in official reserves, and an expansion of the money supply.

C) Devaluation causes a rise in output and a rise in official reserves.

D) Devaluation causes a rise in output and an expansion of the money supply.

E) Devaluation causes a rise in official reserves, and an expansion of the money supply.

Answer: B

Page Ref: 504-509

Difficulty: Easy

14) Under fixed exchange rates, which one of the following statements is the MOST accurate?

A) Devaluation causes a rise in output.

B) Devaluation causes a decrease in output.

C) Devaluation has no effect on output.

D) Devaluation causes a rise in output and a decrease in official reserves.

E) Devaluation causes a decrease in output and in official reserves.

Answer: A

Page Ref: 504-509

Difficulty: Easy

15) Under fixed exchange rates, which one of the following statements is the MOST accurate?

A) Devaluation causes a reduction of the money supply.

B) Devaluation has no effect on the stock of money.

C) Devaluation causes an expansion of the money supply.

D) Devaluation causes a reduction in output.

E) Devaluation causes a reduction in official reserves.

Answer: C

Page Ref: 504-509

Difficulty: Easy

16) The main reason(s) why governments sometimes chose to devalue their currencies is (are)

- A) devaluation makes domestic goods more expensive in relation to foreign goods.
- B) devaluation makes domestic services more expensive in relation to foreign services.
- C) devaluation increases foreign reserves held by the central bank.
- D) devaluation improves the current account and increases foreign reserves held by the central bank.**
- E) devaluation hurts foreign currencies.

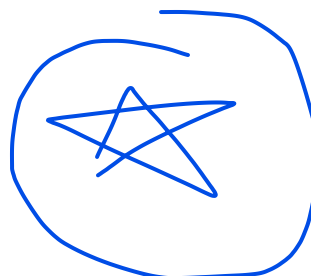
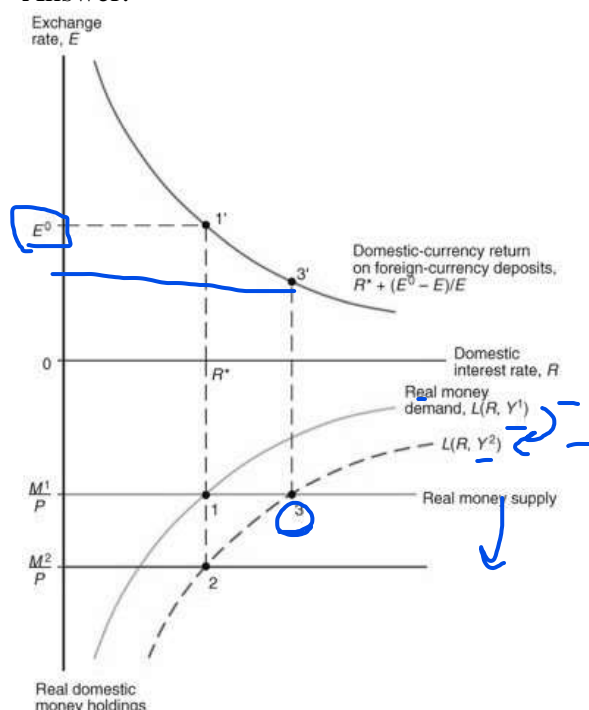
Answer: D

Page Ref: 504-509

Difficulty: Easy

17) Please draw a figure illustrating the actions the central bank must take to maintain a fixed exchange rate following an increase in output.

Answer:



A rise in output from  $Y^1$  to  $Y^2$  will increase the real money demand, so the central bank must purchase foreign assets and raise the money supply from  $M^1$  to  $M^2$ , in order to maintain a fixed exchange rate  $E^0$ .

Page Ref: 504-509

Difficulty: Difficult

## 18.5 Balance of Payments Crises and Capital Flight

1) A balance of payments crisis is best described as

A) a sharp change in interest rates sparked by a change in expectations about the level of imports.

B) a sharp change in foreign reserves sparked by a change in expectations about the future exchange rate.

C) a sharp change in interest rates sparked by a change in expectations about the level of exports.

D) a sharp change in foreign reserves sparked by a change in expectations about the level of imports.

E) a sharp change in foreign reserves sparked by a change in expectations about domestic production.

Answer: B

Page Ref: 509-511

Difficulty: Easy

2) The expectation of future devaluation causes a balance of payments crisis marked by

A) a sharp rise in reserves and a fall in the home interest rate below the world interest rate.

B) a sharp fall in reserves and an even bigger fall in the home interest rate below the world interest rate.

C) a sharp fall in reserves and a rise in the home interest rate above the world interest rate.

D) a sharp rise in reserves and an even greater rise in the home interest rate above the world interest.

E) a sharp rise in reserves and a rise in the home interest rate to the level of the world interest.

Answer: C

Page Ref: 509-511

Difficulty: Easy

3) The expectation of future revaluation causes a balance of payments crisis marked by

A) a sharp rise in reserves and a fall in the home interest rate below the world interest rate.

B) a sharp fall in reserves and an even bigger fall in the home interest rate below the world interest rate.

C) a sharp fall in reserves and a rise in the home interest rate above the world interest rate.

D) a sharp rise in reserves and an even greater rise in the home interest rate above the world interest.

E) a sharp fall in reserves and an unchanged home interest rate.

Answer: A

Page Ref: 509-511

Difficulty: Easy

- 4) Capital flight  
A) increases reserves.  
B) is never associated with the expectation of devaluation.  
C) may undo expected devaluation.  
D) reduces losses during a devaluation scare.  
E) decreases reserves and may induce devaluation.

Answer: E

Page Ref: 509-511

Difficulty: Easy

- 5) Currency crises may result from  
A) central bank balance sheets with higher liabilities than assets.  
B) political upheaval leading to lowering exports.  
C) a reconfiguration of central bank balance sheets.  
D) speculative attacks on the currency or central banks purchasing excessive amounts of government bonds.  
E) depreciation of foreign reserves.

Answer: D

Page Ref: 509-511

Difficulty: Easy

- 6) Which of the following best describes a deliberate government decision to lower the exchange rate, E?  
A) appreciation  
B) depreciation  
C) revaluation  
D) devaluation  
E) accumulation

Answer: C

Page Ref: 509-511

Difficulty: Easy

- 7) Please discuss the difference between the terms devaluation and depreciation.

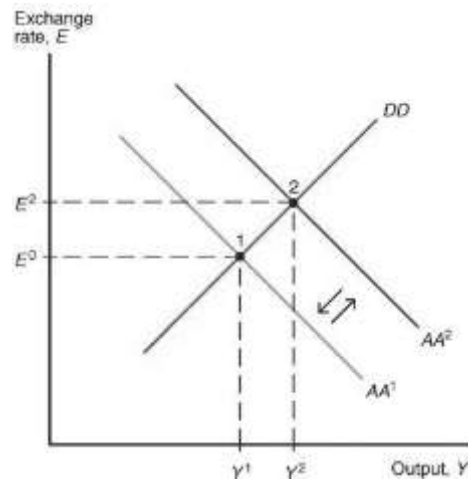
Answer: Depreciation is a rise in the exchange rate E when the exchange rate floats, while devaluation is a rise in E when the exchange rate is fixed. Devaluation reflects a deliberate government decision, while depreciation is an outcome of government actions and market forces ("the invisible hand") acting together.

Page Ref: 509-511

Difficulty: Moderate

8) Use a figure to illustrate the ineffectiveness of monetary policy to spur on an economy under a fixed exchange rate.

Answer:



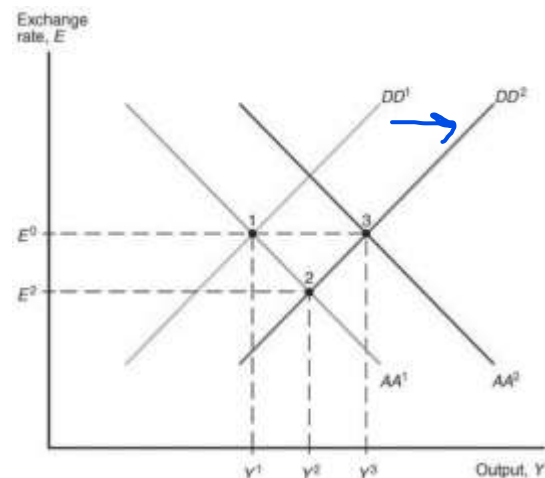
The initial equilibrium rests at point 1. If the central bank wishes to use monetary policy to increase output from  $Y^1$  to  $Y^2$ , then they might buy domestic assets and shift the AA curve outward. However, the central bank must maintain a fixed exchange rate  $E^0$ , so would have to sell foreign assets for domestic currency, returning the economy to point 1.

Page Ref: 509-511

Difficulty: Difficult

9) Use a figure to explain the potential effectiveness of fiscal policy to spur on the economy under a fixed exchange rate.

Answer:



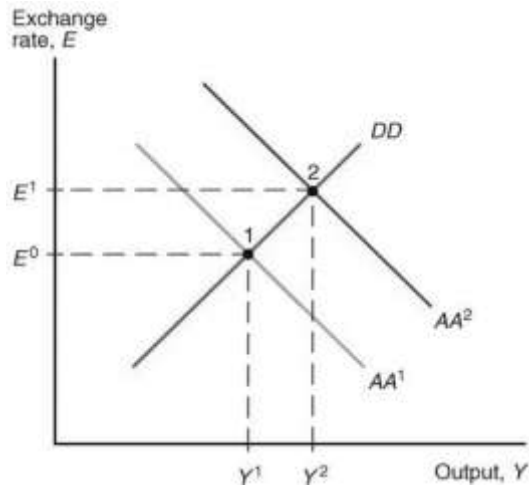
With an aim toward increasing output, the government could use fiscal policy to shift the DD curve outward. The central bank will have to take steps to maintain a fixed exchange rate  $E^0$ , among the options is buying foreign assets with money, to shift the AA schedule outward until the equilibrium at point 3 is reached.

Page Ref: 509-511

Difficulty: Difficult

10) Define devaluation and use a figure to show the effect of a currency devaluation on the economy.

Answer:



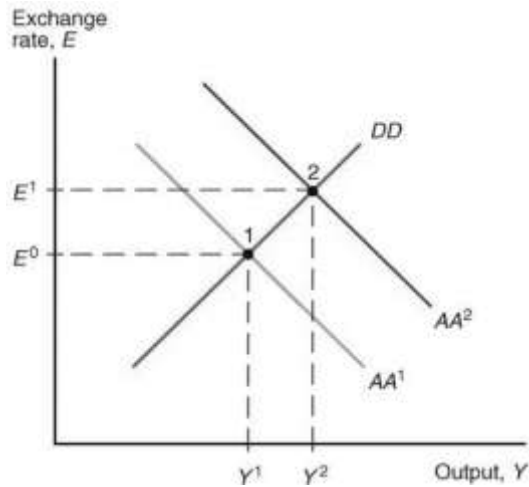
A devaluation occurs when the central bank raises the domestic currency price of foreign currency. In the figure, the domestic currency is devalued from  $E^0$  to  $E^1$ . Since nothing in the  $DD$  schedule has changed, the new equilibrium at point 2 must be reached by an expansion of the money supply ( $AA$  curve shifts outward). Notice also that output has increased from  $Y^1$  to  $Y^2$ .

Page Ref: 509-511

Difficulty: Difficult

11) Please use a figure to discuss whether or not a devaluation under a fixed exchange rate has the same long-run effect as a proportional increase in the money supply under a floating rate.

Answer:



A currency devaluation shifts the AA schedule outward from equilibrium point 1 to equilibrium point 2. The devaluation does not change long-run demand or supply conditions in the output market. Thus, the increase in the long-run price level will exactly offset the increase in exchange rate. Thus, a devaluation is neutral in the long run and this is the exact same scenario as for an increase in the money supply under a floating exchange rate.

Page Ref: 509-511

Difficulty: Difficult

## 18.6 Managed Floating and Sterilized Intervention

1) Imperfect asset substitutability assumes

- A) the returns on foreign and domestic currency bonds are identical.
- B) the returns on foreign and domestic currency are unrelated.
- C) the risks of holding foreign and domestic currency are identical.
- D) the risks of holding foreign and domestic currency are unrelated to returns.
- E) the returns on foreign and domestic currency differ and are influenced by risk.

Answer: E

Page Ref: 512-517

Difficulty: Easy



2) The global financial crisis of 2007-2008 resulted in a(n) \_\_\_\_\_ of the Swiss franc as foreign currency flowed \_\_\_\_\_ the country. As result, Swiss products became \_\_\_\_\_ competitive in world markets.

- A) depreciation; out of; more
- B) depreciation; into; more
- C) appreciation; out of; less
- D) depreciation; out of; less
- E) appreciation; into; less

Answer: E

Page Ref: 512-517

Difficulty: Easy

3) The global financial crisis of 2007-2008 resulted in a(n) \_\_\_\_\_ of the Swiss franc. In 2011, the Swiss central bank intervened in order to cause a(n) \_\_\_\_\_ of the franc.

- A) appreciation; appreciation
- B) depreciation; depreciation
- C) appreciation; revaluation
- D) depreciation; appreciation
- E) appreciation; depreciation

Answer: E

Page Ref: 512-517

Difficulty: Easy

4) Perfect asset substitutability is the assumption that

- A) the foreign exchange market is in equilibrium only when expected returns on domestic assets are greater than returns on foreign currency bonds.
- B) the foreign exchange market is in equilibrium only when expected returns on foreign currency bonds are greater than returns on domestic assets.
- C) the foreign exchange market is in equilibrium only when expected returns on all assets are negative.
- D) the foreign exchange market is in equilibrium only when expected returns on domestic assets are equal to returns on foreign currency bonds.
- E) the foreign exchange market is in equilibrium only when domestic assets are risk-free.

Answer: D

Page Ref: 512-517

Difficulty: Easy

5) Imperfect asset substitutability exists

- A) when it is possible for the expected returns on two assets to be different.
- B) when the expected returns on two assets are the same.
- C) only when one asset is foreign and the other is domestic.
- D) when there is risk in the foreign exchange market.
- E) when assets are liquid.

Answer: D

Page Ref: 512-517

Difficulty: Easy

6) The interest parity condition can be written as

A)  $R = R^* - (E^e - E)/E$ .

B)  $R = R^* + (E^e - E)/E$ .

C)  $R = R^2 - (E^e - E)/E$ .

D)  $R = R^*/(E^e - E)$ .

E)  $R = R^* + (E^e + E)/E$ .

Answer: B

Page Ref: 512-517

Difficulty: Easy

7) When domestic and foreign currency bonds are imperfect substitutes, the domestic interest rate ( $R$ ) can be written as

A)  $R = R^* - (E^e - E)/E + \rho$ .

B)  $R = R^* - (E^e - E)/E$ .

C)  $R = R^* + (E^e - E)/E - \rho$ .

D)  $R = R^* - (E^e + E)/E + \rho$ .

E)  $R = R^* - (E^e - E)\rho$ .

Answer: C

Page Ref: 512-517

Difficulty: Easy

8) In the interest rate parity condition with imperfect substitutes and a risk premium of  $\rho$

A) an increased stock of domestic government debt will raise the difference between the expected returns on domestic and foreign currency bonds.

B) a decreased stock of domestic government debt will raise the difference between the expected returns on domestic and foreign currency bonds.

C) an increased stock of domestic government debt will reduce the difference between the expected returns on domestic and foreign currency bonds.

D) an increased stock of domestic government debt will have no effect on the difference between the expected returns on domestic and foreign currency bonds.

E) a decreased stock of domestic government debt will have no effect on the difference between the expected returns on domestic and foreign currency bonds.

Answer: A

Page Ref: 512-517

Difficulty: Easy

9) The signaling effect of foreign exchange intervention

A) never has any effect on exchange rates.

B) can alter the market's view of exchange rates independent from the stance of monetary and fiscal policies.

C) cannot cause an immediate exchange rate change when bonds denominated in different currencies are perfect substitutes.

D) never leads to actual changes in monetary or fiscal policy.

E) can alter the market's view of future monetary policies and cause an immediate exchange rate change.

Answer: E

Page Ref: 512-517

Difficulty: Easy

10) Please describe in detail a self-fulfilling currency crisis.

Answer: Consider an economy in which domestic commercial banks' liabilities are mainly short-term deposits, and in which many of the banks' loans to businesses are likely to go unpaid in the event of a recession. If the market suspects there will be devaluation, interest rates will rise, banks' borrowing costs go up, and a banks' assets have lower value if a recession hits. To prevent financial collapse, the central bank will lend money to banks and no longer be able to keep the exchange rate from rising. Thus, the emergence of devaluation expectations eventually leads to a devaluation of currency (self-fulfilling).

Page Ref: 512-517

Difficulty: Moderate

11) Describe the effect of the 2008-2009 global financial crisis on the Swiss franc and the central bank's efforts to respond to the resulting problems.

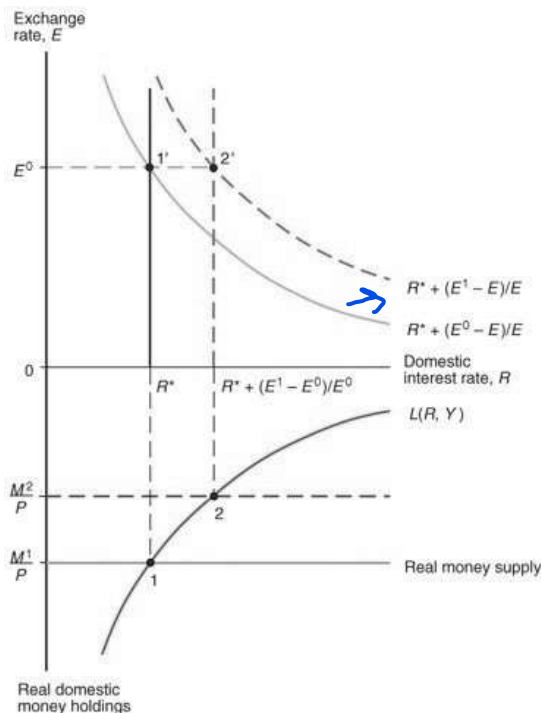
Answer: The 2008-2009 global financial crisis resulted in appreciation of the franc as currency traders purchased the franc as a safe haven currency. The Swiss economy consequently suffered as its products became less competitive with imports. The Swiss responded by committing to currency intervention designed to control appreciation of the franc and restore the country's competitiveness in global markets.

Page Ref: 512-517

Difficulty: Moderate

12) Use a figure to explain how a balance of payments crisis and its hand in capital flight.

Answer:



Suppose the foreign exchange market expects the government to devalue the currency in the future and adopt a new fixed exchange rate  $E^1 > E^0$ . This leads to a rightward shift in the curve that measures the expected domestic currency return on foreign currency deposits. Since the exchange rate remains fixed at  $E^0$ , the domestic interest rate must rise to  $R^* + (E^1 - E^0)/E^0$ . The central bank must sell foreign reserves and shrink the money supply in response. This reserve loss accompanying a devaluation scare is labeled capital flight.

Page Ref: 512-517

Difficulty: Difficult

## 18.7 Reserve Currencies in the World Monetary System

1) Briefly describe two systems for fixing the exchange rates of all currencies against each other and the time periods in which they were used.

Answer: The first is to single out one country's currency as the reserve currency. The other countries hold this reserve currency and fix their interest rate to it by standing ready to exchange domestic currency for the reserve currency. The U.S. dollar was the reserve currency from 1945 to 1973. The second is the gold standard in which central banks peg the prices of their currencies in terms of gold and hold gold as official international reserves. This was used between 1870 and 1914.

Page Ref: 518-519

Difficulty: Difficult

2) This question concerns the mechanism of a reserve currency standard.

Two countries, X and Y, have two currencies, x and y, fixed to the reserve currency, the U.S. dollar. Suppose the exchange rate between x and the U.S. dollar is 3x per dollar. Suppose the exchange rate between y and the U.S. dollar is 5y per dollar. Explain (using numbers) the mechanism if the x-y exchange rate was 0.5 x per y.

Answer: At this exchange rate, an investor can make an arbitrage profit by selling \$100 to the central bank of X (receiving 300 x), then selling your 300 x to the foreign exchange market for  $300 \text{ x} / (0.5 \text{ x per y}) = 600 \text{ y}$ , then buying U.S. dollars in the amount of \$120 from the central bank of Y. Thus the foreign exchange market will bid the x-y exchange rate up to 0.6 x per y.

Page Ref: 518-519

Difficulty: Difficult

3) This question concerns the mechanism of a reserve currency standard.

Two countries, X and Y, have two currencies, x and y, fixed to the reserve currency, the U.S. dollar. Suppose the exchange rate between x and the U.S. dollar is 3x per dollar. Suppose the exchange rate between y and the U.S. dollar is 5y per dollar. Explain (using numbers) the mechanism if the x-y exchange rate was 0.8 x per y.

Answer: At this exchange rate, an investor can make an arbitrage profit by selling \$100 to the central bank of Y (receiving 500 y), then selling this 500 y to the foreign exchange market for  $500 \text{ y} / (0.8 \text{ x per y}) = 400 \text{ x}$ , then buying \$133.33 U.S. dollars from the central bank of X with this 400 x. Thus the foreign exchange market will bid the x-y exchange rate down to 0.6.

Page Ref: 518-519

Difficulty: Difficult

4) Explain how a country whose currency is the reserve currency can use monetary policy for macroeconomic stabilization. In particular, explain the result if that country doubled its domestic money supply.

Answer: The immediate result of the doubling of the money supply in the reserve currency's country will be able to increase the exchange rate between the reserve currency and all other currencies. However, all other countries must fix their exchange rate to the reserve currency, so they will purchase the reserve currency and hold it as official international reserves (thus increase their own money supply) until the exchange rate has returned to normal. Thus, the reserve country has the power to affect its own economy and all other countries must adjust in response.

Page Ref: 518-519

Difficulty: Moderate

## 18.8 The Gold Standard

1) From 1837 and up until the Civil War, the United States adhered to a

- A) gold standard.
- B) silver standard.
- C) bimetallic standard.

D) bronze standard.

E) copper standard.

Answer: C

Page Ref: 520-526

Difficulty: Easy

2) From the Civil War up to 1914, the United States adhered to a

- A) gold standard.
- B) silver standard.
- C) bimetallic standard.

D) bronze standard.

E) copper standard.

Answer: A

Page Ref: 520-526

Difficulty: Easy

3) Assuming perfect asset substitutability, can sterilized intervention by the central bank be effective? Please discuss.

Answer: No, a sterilized foreign exchange intervention by the central bank leaves the domestic money supply unchanged. Under floating exchange rates, a change in the interest rate is needed to affect the exchange rate, but the interest rate won't change if the money supply does not. Under a fixed exchange rate, an expansive policy needs to be offset by an increase in the domestic money supply. To avoid inflation, the central bank sterilizes this increase in the money supply by selling domestic assets. However, with a fixed exchange rate, this means buying foreign assets. If foreign assets are perfect substitutes for domestic assets, this sterilization is not effective.

Page Ref: 520-526

Difficulty: Moderate

4) Does the signalling effect of foreign exchange intervention support or refute the claim that assets cannot be perfect substitutes if sterilized intervention is going to have any effect? Please explain.

Answer: The signalling effect refutes the claim. Even with the assumption of perfect asset substitutability, if the market is unsure of the future direction of policy, then sterilized intervention can fix a market's expectations about the exchange rate in the future. From post discussion, a change in the expected exchange rate will lead to a change in the exchange rate today.

Page Ref: 520-526

Difficulty: Moderate

5) Briefly discuss the main advantage of the bimetallic standard over the gold standard.

Answer: The advantage of bimetallism was that it might reduce the price level instability resulting from the use of gold alone. Were gold to become scarce and expensive, cheaper and relatively abundant silver would become the predominant form of money, thereby mitigating the deflation that a pure gold standard would imply.

Page Ref: 520-526

Difficulty: Moderate

6) List the drawbacks of the gold standard.

Answer:

1. Undesirable constraints on the use of monetary policy to fight unemployment.
2. A stable overall price level is achieved only if the relative price of gold and all other goods and services is stable.
3. A central bank cannot increase holdings of international reserves as its economy grows unless new gold is discovered.
4. Unfair advantage to gold-producing nations.

Page Ref: 520-526

Difficulty: Moderate

7) Describe the mechanism which would take place if the Bank of England decides to increase its money supply by purchasing domestic assets under the gold standard.

Answer: The increase in Britain's money supply would push interest rates down and make foreign currency assets more attractive than domestic ones. Holders of pound deposits will attempt to sell them for foreign deposits. To accomplish this, they sell pound deposits to the Bank of England for gold and then use this gold to purchase foreign deposits. England loses foreign reserves since it is selling gold and foreign countries are gaining reserves. Equilibrium is re-established after Britain's money supply has fallen enough to force the British interest rate up until it is equally as attractive as the interest rate on foreign currency.

Page Ref: 520-526

Difficulty: Difficult

8) Please briefly describe what is meant by a gold exchange standard.

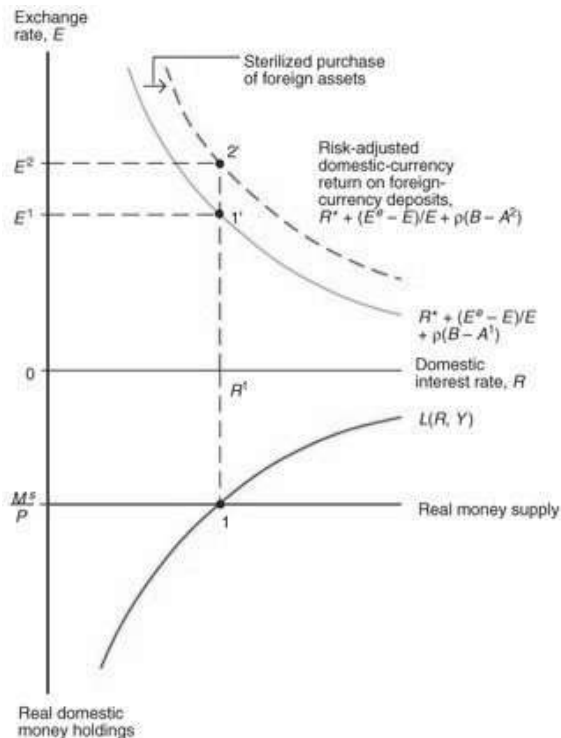
Answer: Under a gold exchange standard, central banks' reserves consist of gold and currencies whose price in terms of gold are fixed, and each central bank fixes its exchange rate to a currency with a fixed gold price. The post-WWII currency system was supposed to be a gold exchange standard with the U.S. responsible for fixing the price of gold at \$35 per ounce.

Page Ref: 520-526

Difficulty: Moderate

9) Use a figure to show the effect of a sterilized central bank purchase of foreign assets under the imperfect asset substitutability assumption.

Answer:



The interest parity condition is given by

$$R = R^* + (E^2 - E)/E + \rho(B - A)$$

Suppose that the domestic assets of the central bank fall from  $A_1$  to  $A_2$  through a sterilized purchase of foreign assets. Then the risk-adjusted return increases and the exchange rate increases.

Page Ref: 520-526

Difficulty: Difficult

10) Assume that initially, the risk premium,  $\rho = 0$  and that the domestic and foreign interest rates are given by  $R = .06$ ,  $R^* = .05$ . Suppose that the risk premium depends linearly on the difference between domestic government debt,  $B$ , and domestic assets of the central bank,  $A$ , i.e.,

$$\rho = \rho_0(B - A)$$

Find the new domestic interest rate if a sterilized purchase of foreign assets adjusts  $A$  s.t.

(a)  $B - A = -.01/\rho_0$

(b)  $B - A = .01/\rho_0$

(c)  $B - A = .03/\rho_0$

Answer: (a)  $R = .05 + .01 + (-.01) = .05$

(b)  $R = .05 + .01 + (.01) = .07$

(c)  $R = .05 + .01 + (.03) = .09$

Page Ref: 520-526

Difficulty: Moderate



11) Assume that initially, the risk premium,  $\rho = 0$  and that the domestic and foreign interest rates are given by  $R = .06$ ,  $R^* = .05$ . Suppose that the risk premium depends linearly on the difference between domestic government debt,  $B$ , and domestic assets of the central bank,  $A$ , i.e.,

$$\rho = q(B - A)$$

How much will the central bank have to reduce domestic assets  $A$  s.t. the domestic interest rate will increase by (a) 1% (b) 4%?

Answer: (a)  $\rho = .01 = q_0(B - [A_0 - \Delta A])$

$$\Delta A = \frac{.01}{q_0} - (B - A_0)$$

(b)  $\rho = .04 = q_0(B - [A_0 - \Delta A])$

$$\Delta A = \frac{.04}{q_0} - (B - A_0)$$

Page Ref: 520-526

Difficulty: Moderate

12) Under the gold standard, if the dollar price of gold is pegged at \$35 per ounce and the euro price of gold is pegged at 12 euro per ounce, what is the dollar/euro exchange rate?

Answer: The dollar/euro exchange rate must be constant and equal to

$$(\$35 \text{ per ounce}) / (12 \text{ euro per ounce}) = \$2.92 \text{ per euro.}$$

Page Ref: 520-526

Difficulty: Moderate

13) Under the gold standard, if the dollar price of gold is pegged at \$35 per ounce and the dollar/euro exchange rate is set at \$2.40 per euro, what must the euro price of gold be pegged at?

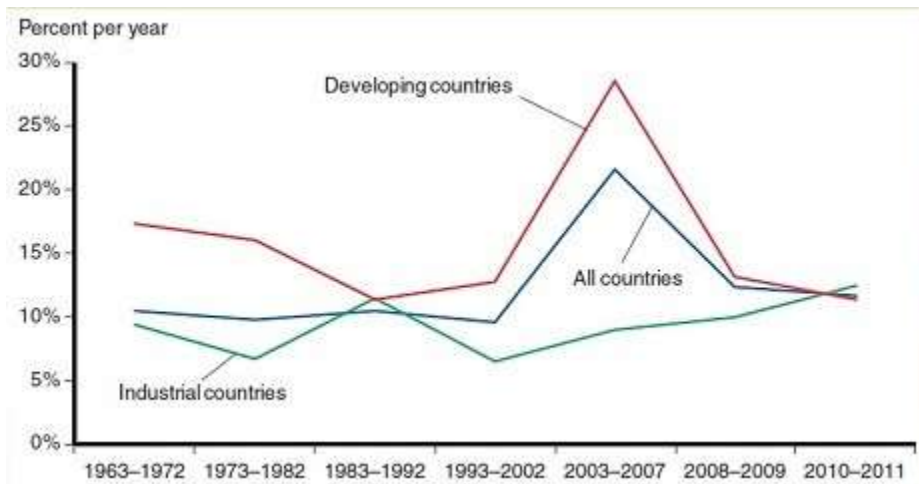
Answer: The euro price of gold is constant and equal to

$$(\$35 \text{ per ounce}) / (\$2.40 \text{ per euro}) = 14.58 \text{ euro per ounce.}$$

Page Ref: 520-526

Difficulty: Moderate

14) From the figure below, please provide an explanation for the large decline in the growth rate of international reserves held by developing countries in the 2008-2009 period.



Answer: The growth of global capital markets has increased the potential variability of financial flows across borders, and especially across the borders of developing countries. The sharp decline in developing country reserve growth was due to an international debt crisis from 2007-2009.

Page Ref: 520-526

Difficulty: Difficult

#### 18.9 Appendix 1 to Chapter 18: Equilibrium in the Foreign Exchange Market with Imperfect Asset Substitutability

1) If assets are imperfect substitutes, then an increase in the amount of domestic currency bonds held by the public will \_\_\_\_\_ the risk premium and \_\_\_\_\_ the amount of domestic currency bonds held by the central bank.

A) increase; leave unchanged

B) increase; decrease

C) increase; increase

D) decrease; decrease

E) leave unchanged; decrease

Answer: A

Page Ref: 532-534

Difficulty: Moderate

2) If assets are imperfect substitutes, then a decrease in the amount of domestic currency bonds held by the public will \_\_\_\_\_ the risk premium and \_\_\_\_\_ the amount of domestic currency bonds held by the central bank.

A) decrease; leave unchanged

B) increase; decrease

C) increase; increase

D) decrease; decrease

E) leave unchanged; decrease

Answer: A

Page Ref: 532-534

Difficulty: Moderate

#### 18.10 Appendix 2 to Chapter 18: The Timing of Balance of Payments Crises

1) Balance of payments crises under fixed exchange rates occur because of

A) government policies that are inconsistent with fixed exchange rates.

B) punitive currency wars.

C) global inflation and trade imbalances due to war.

D) excessive exports and imports that overload the global system.

E) monotonic expansion in global currency volume.

Answer: A

Page Ref: 535-537

Difficulty: Easy

2) A balance of payments crises under fixed exchange rates occurs when

A) a country runs out of foreign reserves.

B) a country is in a liquidity trap.

C) exports and imports expand beyond some point.

D) marginal returns on foreign exchange investments approach zero.

E) forward currency markets undergo high volatility.

Answer: A

Page Ref: 535-537

Difficulty: Easy



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International Economics (Azərbaycan Diplomatik Akademiyası)

**International Economics, 10e (Krugman/Obstfeld/Melitz)**  
**Chapter 19 (8) International Monetary Systems: An Historical Overview**

**19.1 Macroeconomic Policy Goals in an Open Economy**

- 1) A country seeking to maintain internal balance would be concerned
- A) only with attaining low levels of unemployment.
  - B) primarily with ensuring that saving is weighted more towards domestic investment than the current account.
  - C) with large fluctuations in output or prices.
  - D) with maintaining an adequate stock of gold reserves.
  - E) with stabilizing employment levels globally.

Answer: C

Page Ref: 538-547

Difficulty: Easy

- 2) By internal balance, most economists mean
- A) full employment.
  - B) price stability.
  - C) full employment and price stability.
  - D) full employment and moderate increase in prices.
  - E) full employment and high disposable income.

Answer: C

Page Ref: 538-547

Difficulty: Easy

- 3) By external balance, most economists mean
- A) avoiding excessive imbalances in international payments.
  - B) balance between exports and imports.
  - C) balance between the trade and service accounts.
  - D) what amounts to fixed exchange rates.
  - E) imbalance in internal transactions.

Answer: A

Page Ref: 538-547

Difficulty: Easy

- 4) Which one of the following statements is TRUE?
- A) Inflation but not deflation can occur even under conditions of full employment.
  - B) Deflation but not inflation can occur even under conditions of full employment.
  - C) Inflation or deflation can occur even under conditions of full employment.
  - D) Inflation can occur even under conditions of full employment only in the long run.
  - E) Inflation does not coincide with periods of high unemployment levels.

Answer: C

Page Ref: 538-547

Difficulty: Easy

5) Inflation can occur under conditions of full employment

A) only if the central bank continues to inject money into the economy and the agents' expectations of inflation are supported by the bank's activities.

B) only if the central bank continues to inject money into the economy.

C) only if the central bank continues to withdraw money from the economy.

D) only if the central bank continues to inject money into the economy and all agents expect that inflation will not occur.

E) only if the central bank fails to inject money into the economy.

Answer: A

Page Ref: 538-547

Difficulty: Easy

6) A sudden increase in the U.S. price level

A) makes those with dollar debts worse off.

B) makes those with dollar debts better off.

C) does not affect those with dollar debts.

D) makes those with foreign debts better off.

E) increases all dollar debts.

Answer: B

Page Ref: 538-547

Difficulty: Easy

7) A sudden increase in the U.S. price level

A) makes creditors in dollars better off.

B) makes creditors in dollars worse off.

C) do not affect creditors in dollars.

D) makes creditors in DM worse off.

E) makes lenders worse off.

Answer: B

Page Ref: 538-547

Difficulty: Easy

8) A sudden decrease in the U.S. price level

A) makes those with dollar debts worse off.

B) makes those with dollar debts better off.

C) do not affect those with dollar debts.

D) makes those with DM worse off.

E) makes creditors worse off.

Answer: A

Page Ref: 538-547

Difficulty: Easy

9) A sudden decrease in the U.S. price level

- A) makes creditors in dollars better off.
- B) makes creditors in dollars worse off.
- C) do not affect creditors in dollars.
- D) makes creditors in DM better off.
- E) makes those with dollar debts better off.

Answer: A

Page Ref: 538-547

Difficulty: Easy

10) A current account surplus

- A) poses a problem if domestic savings are being invested more profitably abroad than they would be at home.
- B) may pose no problem if domestic savings are being invested more profitably abroad than they would be at home.
- C) may pose no problem if domestic savings are being invested less profitably abroad than they would be at home.
- D) there is no relation between current account surplus and between savings and investment.
- E) poses a problem if domestic savings are being invested less profitably abroad than they would be at home.

Answer: B

Page Ref: 538-547

Difficulty: Easy

11) A current account deficit

- A) will not pose a problem, especially if it is accompanied by an expansionary fiscal policy.
- B) may pose no problem if the borrowed funds are channeled into productive domestic investment projects that pay for themselves with the revenue they generate in the future.
- C) may still pose a problem, even if the borrowed funds are channeled into productive domestic investment projects.
- D) There is no relation between current account surplus and between savings and investment.
- E) will pose a problem because the country is borrowing funds from the rest of the world that it won't be able to pay back later.

Answer: B

Page Ref: 538-547

Difficulty: Easy

12) Which one of the following statements is TRUE?

A) Countries with strong investment opportunities should invest little at home and channel their savings into more productive investment activity abroad.

**B) Countries with weak investment opportunities should invest little at home and channel their savings into more productive investment activity abroad.**

C) Countries with weak investment opportunities should invest more at home.

D) Countries with weak investment opportunities should invest little abroad.

E) Countries with weak investment opportunities should invest little abroad and channel their savings into more productive investment activity domestically.

Answer: B

Page Ref: 538-547

Difficulty: Easy

13) Countries with

A) strong investment opportunities should invest little at home and channel their savings into more productive investment activity abroad.

**B) strong investment opportunities should invest more at home and less abroad.**

C) weak investment opportunities should invest more at home.

D) weak investment opportunities should invest little abroad.

E) countries with productive investment should invest exclusively at home.

Answer: B

Page Ref: 538-547

Difficulty: Easy

14) Countries where investment is relatively

A) productive should be net exporters of currently available output.

B) unproductive should be net importers of currently available output.

**C) unproductive should be net exporters of currently available output.**

D) unproductive should be net exporters of future available output.

E) unproductive should focus on their internal balance.

Answer: C

Page Ref: 538-547

Difficulty: Easy

15) Countries where investment is relatively

A) productive should have current account deficits.

**B) productive should have current account surpluses.**

C) unproductive should have current account surpluses.

D) productive should balanced current account surpluses.

E) productive should have low outputs.

Answer: B

Page Ref: 538-547

Difficulty: Easy





16) Which one of the following statements is TRUE?

- A) Countries where investment is relatively productive should be net importers of current output.
- B) Countries where investment is relatively unproductive should be net importers of current output.
- C) Countries where investment is relatively productive should be net exporters of current output.
- D) Countries where investment is relatively productive should not export or import current output.
- E) Countries where investment is relatively unproductive should invest at home.

Answer: A

Page Ref: 538-547

Difficulty: Easy

17) Countries where investment is

- A) relatively unproductive should have current account deficits.
- B) relatively productive should have current account surpluses.
- C) relatively productive should have current account deficits.
- D) relatively productive should have balanced current accounts.
- E) relatively unproductive should have balanced current accounts.

Answer: C

Page Ref: 538-547

Difficulty: Easy

18) Governments prefer to avoid excessive current account surpluses because

- A) the returns to domestic savings are more difficult to tax than those on assets abroad.
- B) an addition to the home capital stock may increase domestic unemployment and therefore lead to higher national income.
- C) foreign investment in one firm may have beneficial technological spillover effects on other foreign producers that the investing firm does not capture.
- D) an addition to the home capital stock may reduce domestic unemployment and therefore lead to higher national income.
- E) domestic savings increase with more investment abroad.

Answer: D

Page Ref: 538-547

Difficulty: Easy

19) "The line distinguishing external from internal goals can be fuzzy." Discuss.

Answer: This statement is true. For example, employment target for export industries when export growth influences the ability of the economy to repay its foreign debts.

Page Ref: 538-547

Difficulty: Moderate

20) Why do governments prefer to avoid current account deficits that are too large?

Answer: A current account deficit may pose no problem if the borrowed funds are channeled into productive domestic investment projects that pay for themselves with the revenue they generate in the future. However, sometimes, large current account deficits represent temporarily high consumption resulting from misguided government policies or some other malfunctioning of the economy. Sometimes, the investment projects that draw on foreign funds may be badly planned, etc. In such cases, the government might wish to reduce the current account deficit immediately rather than face problems in repaying its foreign debt in the future.

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Difficulty: Moderate

21) Why do governments prefer to avoid excessive current account surpluses? Or, why are growing domestic claims to foreign wealth ever a problem?

Answer: For a given level of national saving, an increased current account surplus implies lower investment in domestic plant and equipment. A few reasons why: first, the returns to domestic savings may be easier to tax than those on assets abroad; second, an addition to the home capital stock may reduce domestic unemployment and therefore lead to higher national income; third, domestic investment by one firm may have beneficial technological spillover effects on other domestic producers that the investing firm does not capture. In addition, the country may in the future find itself unable to collect the money it is owed. Furthermore, countries with large surpluses can become targets for discriminatory protectionist measures by trading partners with external deficits.

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Difficulty: Moderate

22) Using an equation, explain why governments prefer to avoid excessive current account surpluses?

Answer: This follows from the national income identity,  $S = CA + I$ , which says that total domestic savings,  $S$ , is divided between foreign asset accumulation,  $CA$ , and domestic investment,  $I$ .

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Difficulty: Moderate

23) The case of New Zealand, described in the text, asks what question about the country's international debt position?

Answer: Fundamentally, the question is whether or not a country can sustain a current account deficit indefinitely. The answer is that, under certain conditions, yes it can.

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Difficulty: Moderate

24) The case of New Zealand, as described in the text, draws what simple conclusion regarding the country's international debt position?

Answer: Fundamentally, the question is whether or not a country can sustain a current account deficit indefinitely. The conclusion is that, under certain conditions, yes it can.

Page Ref: 538-547

Difficulty: Moderate

25) The case of New Zealand, described in the text, draws what technical conclusion regarding the country's international debt position?

Answer: Fundamentally, the question is whether or not a country can sustain a current account deficit indefinitely. The conclusion depends upon the country's future prospects. If net exports are expected to rise at a rate sufficient to counteract the effects of debt (including interest payments) over the relevant time period, than deficits could go on for an extended period.

Page Ref: 538-547

Difficulty: Moderate

26) The case of New Zealand, described in the text, draws what technical conclusion regarding the country's international debt position?

Answer: Fundamentally, the question is whether or not a country can sustain a current account deficit indefinitely. The conclusion depends upon the country's future prospects. If net exports are expected to rise at a rate sufficient to counteract the effects of debt (including interest payments) over the relevant time period, than deficits could go on for an extended period.

Page Ref: 538-547

Difficulty: Moderate

27) The case of New Zealand, described in the text, is concerned with the country's

A) prospects for long term growth.

**B) ability to sustain current account deficits.**

C) unproductive industrial sector and its prospects for long run growth.

D) labor productivity.

E) exchange rate volatility relative to other currencies.

Answer: B

Page Ref: 538-547

Difficulty: Easy

28) The case of New Zealand, described in the text, concludes that a country's current account deficits are not sustainable if a country's

A) prospects for long term economic growth are above its global deficit growth.

**B) ability to sustain current account deficits is questionable.**

C) unproductive industrial sectors and its prospects for long run growth.

D) labor productivity is below that of most other countries.

E) exchange rate has fallen relative to other currencies.

Answer: B

Page Ref: 538-547

Difficulty: Easy

## 19.2 Classifying Monetary Systems: The Open-Economy Monetary Trilemma

1) Which of the following is one component of the "trilemma" that is faced by policy makers in choosing monetary arrangements?

A) exchange rate stability

B) restrictions on international capital movements

C) tariffs and subsidies

D) restrictions on the migration of labor

E) global inflation

Answer: A

Page Ref: 547-548

Difficulty: Easy

2) Which of the following is one component of the "trilemma" that is faced by policy makers in choosing monetary arrangements?

A) freedom of international capital movements

B) exchange rate instability

C) tariffs and subsidies

D) restrictions on the migration of labor

E) global inflation

Answer: A

Page Ref: 547-548

Difficulty: Easy

3) Which of the following is one component of the "trilemma" that is faced by policy makers in choosing monetary arrangements?

A) monetary policy oriented towards domestic goals

B) exchange rate instability

C) tariffs and subsidies

D) restrictions on the migration of labor

E) global inflation

Answer: A

Page Ref: 547-548

Difficulty: Easy

4) What is the nature of the trilemma that is encountered when choosing monetary arrangements?

A) Only two of the three aspects of internal and external balance can be accommodated simultaneously.

B) Only three of the four aspects of internal and external balance can be accommodated simultaneously.

C) Only one of the three aspects of internal and external balance can be accommodated simultaneously.

D) Only two of the four aspects of internal and external balance can be accommodated simultaneously.

E) Only one of the four aspects of internal and external balance can be accommodated simultaneously.

Answer: A

Page Ref: 547-548

Difficulty: Easy

5) What are the components of the trilemma that is encountered when a country chooses its monetary policy and what is the meaning of the term?

Answer: The components are (1) exchange rates, (2) domestic goals, and (3) international capital movements. The monetary trilemma (a three-part dilemma) exists because only two of the three components can be influenced by monetary policy.

Page Ref: 547-548

Difficulty: Moderate

### 19.3 International Macroeconomic Policy under the Gold Standard, 1870-1914

1) Under the price-specie-flow mechanism, what happens when, say, Germany's current account surplus is greater than its non-reserve capital account deficits?

A) German loans will finance all foreign net imports.

B) Automatic drop in German domestic prices and rise in foreign prices.

C) Gold reserves will flow into Germany.

D) Gold reserves will flow out of Germany.

E) Germany will experience a deficit.

Answer: C

Page Ref: 548-553

Difficulty: Easy

2) The "rules of the game" under the gold standard can best be described as which of the following:

A) selling domestic assets in a deficit and buying assets in a surplus. ✓

B) slowing down the automatic adjustments processes inherent in the gold standard.

C) selling domestic assets in order to accumulate gold.

D) selling foreign assets in a deficit and buying foreign assets in a surplus.

E) selling domestic assets in a surplus.

Answer: A

Page Ref: 548-553

Difficulty: Easy

- 3) L. Frank Baum's classic 1900 children's book, *The Wonderful Wizard of Oz*, is
- A) an allegorical rendition of the U.S. political struggle over silver.
  - B) an allegorical rendition of the U.S. political struggle over copper.
  - C) an allegorical rendition of the U.S. political struggle over both silver and gold.
  - D) an allegorical rendition of the U.S. political struggle over indebted farmers.
  - E) an allegorical rendition of the U.S. political struggle over gold.

Answer: E

Page Ref: 548-553

Difficulty: Easy

- 4) Mercantilism held that
- A) silver alone was the mainstay of national wealth.
  - B) gold alone was the mainstay of national wealth.
  - C) silver and gold were the mainstays of national wealth.
  - D) silver and gold are not important for national wealth of a country.
  - E) labor forces were the mainstay of national wealth.

Answer: C

Page Ref: 548-553

Difficulty: Easy

- 5) The main policy goal for a country according to the mercantilists is
- A) to create a one-time deficit in the balance of payments.
  - B) to create a continuing deficit in the balance of payments.
  - C) to create a one-time surplus in the balance of payments.
  - D) to create a continuing surplus in the balance of payments.
  - E) to create specie overflows.

Answer: D

Page Ref: 548-553

Difficulty: Easy

- 6) The view of mercantilists can be summarized as follows
- A) to sell less to strangers yearly than we consume of theirs in value.
  - B) to sell more to strangers yearly than we consume of theirs in value.
  - C) to consume more of theirs in value than we sell to strangers.
  - D) to consume the same amount as theirs in value as we sell to strangers.
  - E) to sell gold and silver to strangers in exchange for services.

Answer: B

Page Ref: 548-553

Difficulty: Easy

- 7) Until the United States Civil War, The United States had a
- A) gold-based monetary standard.
  - B) silver-based monetary standard.
  - C) bimetallic monetary standard consisting of silver and gold.
  - D) bimetallic monetary standard consisting of copper and silver.
  - E) bimetallic monetary standard consisting of copper and gold.

Answer: C

Page Ref: 548-553

Difficulty: Easy

- 8) In L. Frank Baum's classic 1900 children's book, *The Wonderful Wizard of Oz*, the name "oz" is a reference to

- A) an ounce (oz.) of gold.
- B) an ounce (oz.) of silver.
- C) an ounce (oz.) of copper.
- D) an ounce (oz.) of gold or silver.
- E) an ounce (oz.) of wheat.

Answer: A

Page Ref: 548-553

Difficulty: Easy

- 9) Under the gold standard era of 1870-1914

- A) Tokyo was the center of the international monetary system.
- B) Paris was the center of the international monetary system.
- C) Berlin the center of the international monetary system.
- D) New York was the center of the international monetary system.
- E) London was the center of the international monetary system.

Answer: E

Page Ref: 548-553

Difficulty: Easy

- 10) Under the gold standard era of 1870-1914

- A) central banks tried to have sharp fluctuations in the balance of payments.
- B) central banks tried to avoid sharp fluctuations in the current account of the balance of payments.
- C) central banks tried to avoid sharp fluctuations in the trade account of the balance of payments.
- D) central banks tried to avoid sharp fluctuations in the capital account of the balance of payments.
- E) central banks tried to avoid sharp fluctuations in the balance of payments.

Answer: E

Page Ref: 548-553

Difficulty: Easy

11) A country is said to be in balance of payments equilibrium, when the sum of its current and its

A) non-reserved capital accounts equals zero.

B) reserved capital accounts equals zero.

C) non-reserved capital accounts equals to the surplus in the capital account.

D) non-reserved capital accounts equals to the deficit in the capital account.

E) non-reserved capital accounts is higher than the total capital account balance.

Answer: A

Page Ref: 548-553

Difficulty: Easy

12) Under the Gold standard, a country is said to be in balance of payments equilibrium when the current account balance is

A) financed entirely by international lending without reserve movements.

B) financed by international lending and with reserve movements.

C) equal to zero.

D) financed entirely by international lending and past gold reserves.

E) financed entirely by gold reserves.

Answer: A

Page Ref: 548-553

Difficulty: Easy

13) Explain why under the gold standard a perpetual surplus or a perpetual deficit is impossible.

Answer: Since specie inflows drive up domestic prices and restore equilibrium in the balance of payments, any surplus eventually eliminates itself. A shortage of currency leads to low domestic prices and a foreign payments surplus, and any deficit eventually eliminates itself.

Page Ref: 548-553

Difficulty: Easy

14) The price-specie-flow mechanism

A) is an automatic mechanism for assuring external balance under floating exchange rates.

B) is an automatic mechanism for assuring external balance under the gold standard.

C) is an automatic mechanism for assuring internal balance under floating exchange rates.

D) is an automatic mechanism for assuring internal balance under the gold standard.

E) is an automatic mechanism for assuring internal balance under mercantilism.

Answer: B

Page Ref: 548-553

Difficulty: Easy

15) How did the international monetary system influenced macroeconomic policy-making and performance during the gold standard era (1870-1914)?

Answer: London was the center of the international monetary system. The primary responsibility of the central bank was to preserve the official parity between its currency and gold. To maintain this price, the central bank needed an adequate stock of gold reserves. Central banks tried to avoid sharp fluctuations in the balance of payments.

Page Ref: 548-553

Difficulty: Easy



16) Under the gold standard

- A) a perpetual surplus is possible.
- B) a perpetual deficit is possible.
- C) a perpetual surplus is impossible, but a perpetual deficit is possible.
- D) a perpetual deficit is impossible, but a perpetual surplus is possible.
- E) a perpetual surplus is impossible.

Answer: E

Page Ref: 548-553

Difficulty: Easy

17) Under the gold standard

- A) a shortage of currency leads to low domestic prices and a foreign payments surplus.
- B) a shortage of currency leads to high domestic prices and a foreign payments surplus.
- C) a shortage of currency leads to low domestic prices and a foreign payments deficit.
- D) a shortage of currency leads to low domestic prices but leaves the foreign balance of payments at equilibrium.
- E) a shortage of currency leads to a perpetual surplus.

Answer: A

Page Ref: 548-553

Difficulty: Easy

18) It is claimed that L. Frank Baum's classic 1900 children's book, *The Wonderful Wizard of Oz*, is an allegorical rendition of the U.S. political struggle over gold.

Answer: This statement is true. In L. Frank Baum's classic 1900 children's book, *The Wonderful Wizard of Oz*, the name "oz" is a reference to an ounce (oz.) of gold, and the yellow brick road represents the false promise of gold. The story represents the struggle of farmers in the western US who were heavily indebted.

Page Ref: 548-553

Difficulty: Easy

19) The gold standard period was

- A) up until the first world war.
- B) between the first and second world wars.
- C) following the second world war until 1970.
- D) between 1954 and 1970.
- E) between 1814 and 1865.

Answer: A

Page Ref: 548-553

Difficulty: Easy

20) Once the United States Civil War broke out, the United States moved to a

- A) gold standard.
- B) silver standard.
- C) bimetallic monetary standard consisting of silver and gold.
- D) bimetallic monetary standard consisting of copper and gold.
- E) paper currency, called the "greenback."

Answer: E

Page Ref: 548-553

Difficulty: Easy

21) Refute the claim by mercantilists who claimed that without severe restrictions on international trade and payments, a country might find itself impoverished and without an adequate supply of circulating monetary gold as a result of balance of payments deficits.

Answer: The balance of payments would automatically regulate itself to ensure an adequate supply of money in every country.

Page Ref: 548-553

Difficulty: Moderate

#### 19.4 The Interwar Years, 1918-1939

1) A policy of "beggar-thy-neighbor" is a policy that

- A) often benefits the home country in the long run.
- B) often benefits the foreign country in the long run.
- C) often benefits foreign country in the short run.
- D) does not often benefits any country in the long run.
- E) benefits the home country's neighbors in the long run.

Answer: D

Page Ref: 553-556

Difficulty: Easy

2) The Great Depression that started in 1929 was

- A) confined only to the United States.
- B) confined only to the United States and Britain.
- C) confined only to the United States and Europe.
- D) a global phenomenon.
- E) confined only to the Americas.

Answer: D

Page Ref: 553-556

Difficulty: Easy

3) Which one of the following statements is the MOST accurate? By the year 1932, the United States

- A) and Canada alone held more than 70 percent of the world's monetary gold.
- B) and Germany alone held more than 70 percent of the world's monetary gold.
- C) and Britain alone held more than 70 percent of the world's monetary gold.
- D) Britain, and France alone held more than 70 percent of the world's monetary gold.
- E) and France alone held more than 70 percent of the world's monetary gold.

Answer: E

Page Ref: 553-556

Difficulty: Easy

4) Countries with the

- A) biggest deflations and output contractions are countries which were never on the gold standard until 1936.
- B) biggest inflations and output contractions are countries which were on the gold standard until 1936.
- C) lowest deflations and output contractions are countries which were on the gold standard until 1936.
- D) biggest deflations and output increases are countries which were on the gold standard until 1936.
- E) biggest deflations and output contractions are countries which stayed on the gold standard until 1936.

Answer: E

Page Ref: 553-556

Difficulty: Easy

5) How did the international monetary system influence macroeconomic policy-making and performance during the interwar period (1918-1939)?

Answer: Governments effectively suspended the gold standard during World War I and financed part of their massive military expenditures by printing money. Further, labor forces and productivity capacity had been reduced sharply through war losses. As a result, price levels were higher everywhere at the conclusion of the war in 1918. Of special note is the German hyperinflation that occurred when prices in Germany increased by a factor of 481.5 billion!

The United States returned to gold in 1919. In 1922, at a conference in Genoa, Italy, a group of countries including Britain, France, Italy and Japan agreed on a program of a partial gold exchange standard in which smaller countries could hold as reserves the currencies of several large countries whose own international reserves would consist entirely of gold.

In 1925, Britain returned to the gold standard by pegging the pound to gold at the prewar price. Thus, the Bank of England was therefore forced to follow contractionary monetary policies that contributed to severe unemployment and to the decline of London as the leading financial center. The world economy disintegrated into increasingly autarkic (self-sufficient) national units in the early 1930s.

Page Ref: 553-556

Difficulty: Moderate

6) Describe the effects of the Smoot-Hawley tariff imposed by the United States in 1930.

Answer: Had a damaging effect on employment abroad. The foreign response involved retaliatory trade restrictions and preferential trading arrangements among group of countries. This is an example of "beggar-thy-neighbor" policy, meaning a policy that benefits the home country only because it worsens economic conditions abroad.

Page Ref: 553-556

Difficulty: Moderate

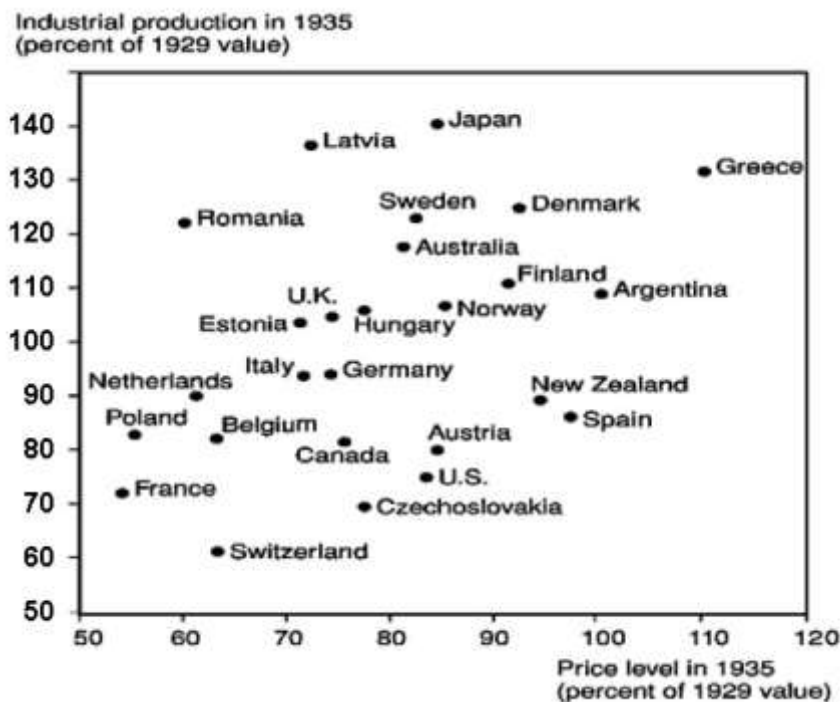
7) What explains the nearly universal scope of the Great Depression?

Answer: The international gold standard played a central role in starting, deepening, and spreading the Great Depression.

Page Ref: 553-556

Difficulty: Moderate

8) The following figure introduces the relationship between industrial production and wholesale price index changes between the years 1929-1935. What is the purpose of the following figure?



Answer: The purpose is to show that countries that left the gold standard early and adopted counter-deflationary monetary policies, such as Australia and the United Kingdom, experienced milder declines in output during the Great Depression. Countries such as France and Switzerland that stuck to the gold standard longer had greater decline in price level and output.

Page Ref: 553-556

Difficulty: Moderate

## 19.5 The Bretton Woods System and the International Monetary Fund

1) The costs of inflation have been most apparent in the post-war period in countries like

A) Argentina.

B) Belgium.

C) the United States.

D) Canada.

E) Japan.

Answer: A

Page Ref: 556-559

Difficulty: Easy

2) The costs of inflation have been most apparent in the post-war period in countries like

A) Brazil.

B) Belgium.

C) the United States.

D) Canada.

E) Japan.

Answer: A

Page Ref: 556-559

Difficulty: Easy

3) The costs of inflation have been most apparent in the post-war period in countries like

A) Serbia.

B) Belgium.

C) the United States.

D) Canada.

E) Japan.

Answer: A

Page Ref: 556-559

Difficulty: Easy

4) A convertible currency is a currency that may be freely exchanged for

A) domestic assets.

B) only silver.

C) only copper.

D) national currency.

E) foreign currencies.

Answer: E

Page Ref: 556-559

Difficulty: Easy

5) Which of the two features of the IMF Articles of Agreement helped promote flexibility in external adjustment?

- A) IMF members helped countries maintain full employment.
- B) IMF allowed countries to attain internal balance.
- C) New countries would enter the agreement if they fixed their exchange rate.
- D) IMF members contributed their currency to form a pool of resources that IMF could lend to countries in need and parities in the exchange rate against the dollar could be adjusted with agreement of IMF.
- E) IMF members argued against the use of floating exchange rates.

Answer: D

Page Ref: 556-559

Difficulty: Easy

6) The dollar of the United States became the postwar world's key currency because of all EXCEPT

- A) the early convertibility of the U.S. dollar in 1945.
- B) the special position of the dollar under the Bretton Woods system.
- C) the strength of the American economy relative to the devastated economies of Europe and Japan.
- D) central banks naturally found it advantageous to hold their international reserves in the form of interest-bearing dollar assets.
- E) the ease of transporting U.S. dollars compared with other currencies.

Answer: E

Page Ref: 556-559

Difficulty: Easy

7) A person holding dollar deposits during the devaluation of the dollar would

- A) enjoy a monetary gain.
- B) see the foreign currency value of dollar assets increase by the amount of the exchange rate change.
- C) shift their wealth into domestic investments.
- D) suffer a monetary loss and see the foreign currency value of dollar assets decrease by the amount of the exchange rate change.
- E) see no change in their investments.

Answer: D

Page Ref: 556-559

Difficulty: Easy

8) Countries with large current account surpluses might be viewed by the market as candidates for

- A) devaluation.
- B) revaluation.**
- C) bankruptcy.
- D) depreciation.
- E) investment.

Answer: B

Page Ref: 556-559

Difficulty: Easy

9) The IMF agreement forced the U.S. to exchange gold for dollars at what price?

- A) \$25/ ounce
- B) \$35/ ounce** ✓
- C) \$45/ ounce
- D) \$55/ ounce
- E) \$20/ ounce

Answer: B

Page Ref: 556-559

Difficulty: Easy

10) How did the international monetary system influence macroeconomic policy-making and performance during the post-World War II years during which exchange rates were fixed under the Bretton Woods agreement (1946-1973)?

Answer: In July 1944, representatives of 44 countries met in Bretton Woods, New Hampshire, and drafted and signed the Articles of Agreement of the International Monetary Fund (IMF) and of the World Bank. The agreement established fixed exchange rates against the U.S. dollar and an unvarying dollar price of gold-\$35 an ounce.

The dollar of the United States became the postwar world's key currency because of a few factors:

- (1) The early convertibility of the U.S. dollar in 1945
- (2) The special position of the dollar under the Bretton Woods system
- (3) The strength of the American economy relative to the devastated economies of Europe and Japan
- (4) Central banks naturally found it advantageous to hold their international reserves in the form of interest-bearing dollar assets

The Marshall Plan, a program of dollar grants from the United States to European countries, was initiated in 1948.

Most countries in Europe did not restore convertibility until the end of 1958, with Japan following in 1964.

Page Ref: 556-559

Difficulty: Easy

11) What is a convertible currency?

Answer: A convertible currency is a currency that may be freely exchanged for foreign currencies.

Page Ref: 556-559

Difficulty: Easy

12) Explain why the United States dollar became the postwar world's key currency.

Answer:

(1) The early convertibility of the U.S. dollar in 1945.

(2) The special position of the dollar under the Bretton Woods system.

(3) The strength of the American economy relative to the devastated economies of Europe and Japan.

(4) Central banks naturally found it advantageous to hold their international reserves in the form of interest-bearing dollar assets.

Page Ref: 556-559

Difficulty: Easy

13) How did the international monetary system created at Bretton Woods in 1944 allow its members to reconcile their external commitments with their internal goals of full employment and price stability?

Answer: As the world economy evolved in the years after World War II, the meaning of "external balance" changed and conflicts between internal and external goals increasingly threatened the fixed exchange rate system. The United States, the issuer of the principal reserve currency, was a major concern, leading to proposals to reform the system.

Page Ref: 556-559

Difficulty: Easy

14) Discuss the impact of the restoration of convertibility in 1958.

Answer: As foreign exchange trading expanded, financial markets in different countries became more tightly integrated, an important step towards the creation of today's worldwide foreign exchange market. With growing opportunities to move funds across borders, national interest rates became more closely linked and the speed with which policy changes might cause a country to lose or gain international reserves increased.

Page Ref: 556-559

Difficulty: Easy

15) Explain how a country with a current account deficit is a ripe candidate for currency devaluation.

Answer: If, for example, Great Britain had a current account deficit, the holders of pounds would become nervous and shift their wealth into other currencies. In order to hold the pound's exchange rate against the dollar pegged, the Bank of England would have to buy pounds and supply the foreign assets that market participants wished to hold. This resulting loss in foreign reserves, if large enough, would most likely force a devaluation by leaving the Bank of England without enough reserves to prop up the exchange rate.

Page Ref: 556-559

Difficulty: Easy



16) Explain how a country with a current account surplus is a ripe candidate for currency revaluation.

Answer: If a country like Germany had a current account surplus, it would sell its currency in the foreign exchange market in order to keep it from appreciating. The German central banks would thus find themselves swamped with official reserves, and Germany would face the problem of having its money supply grow uncontrollably, a trend that would most likely drive up the domestic price levels and upset internal balance. Revaluation of the currency would thus be a viable solution to this problem.

Page Ref: 556-559

Difficulty: Easy

## 19.6 Analyzing Policy Options for Reaching Internal and External Balance

1) When the exchange rate,  $E$ , and the foreign price level,  $P^*$ , is fixed, domestic inflation depends primarily on

A) amount of aggregate demand.

B) home price level set by IMF.

C) current account balance.

D) government tax policy.

E) foreign interest rates.

Answer: A

Page Ref: 560-564

Difficulty: Easy

2) The current account surplus is

A) an increasing function of disposable income and an increasing function of the real exchange rate.

B) a decreasing function of disposable income and a decreasing function of the real exchange rate.

C) a decreasing function of disposable income and an increasing function of the real exchange rate.

D) only a decreasing function of disposable income.

E) only an increasing function of the real exchange rate.

Answer: C

Page Ref: 560-564

Difficulty: Easy

3) Under fixed exchange rates

A) monetary policy is not an effective policy.

B) fiscal policy is not an effective policy.

C) monetary policy and fiscal policy are not effective.

D) both monetary and fiscal policies are effective.

E) monetary policy has an unpredictable effect on the domestic money supply.

Answer: A

Page Ref: 560-564

Difficulty: Easy

4) Under fixed exchange rates, domestic asset transactions by the central bank

A) can be used to alter the level of foreign reserves but not to affect the state of employment and output.

B) cannot be used to alter the level of foreign reserves but only to affect the state of employment and output.

C) can be used to alter the level of foreign reserves and to affect the state of employment and output.

D) can be used to alter the domestic money supply and the level of foreign reserves.

E) can raise output to full-employment level.

Answer: A

Page Ref: 560-564

Difficulty: Easy

5) The XX schedule shows how much

A) fiscal expansion is needed to hold the current account surplus at X as the currency is devalued by a given amount.

B) monetary expansion is needed to hold the current account surplus at X as the currency is devalued by a given amount.

C) fiscal expansion is needed to hold the current account surplus at X as the currency is evaluated by a given amount.

D) fiscal and monetary expansions are needed to hold the current account surplus at X as the currency is devalued by a given amount.

E) foreign funding is needed to hold the current account surplus at X as the currency is devalued by a given amount.

Answer: A

Page Ref: 560-564

Difficulty: Easy

6) The current account surplus

A) is a decreasing function of disposable income and an increasing function of the real exchange rate.

B) is an increasing function of disposable income and an increasing function of the real exchange rate.

C) is an increasing function of disposable income and a decreasing function of the real exchange rate.

D) is a decreasing function of disposable income and a decreasing function of the real exchange rate.

E) is an increasing function of disposable income and a decreasing function of aggregate demand.

Answer: A

Page Ref: 560-564

Difficulty: Easy

7) Fiscal expansion

- A) stimulates aggregate demand and causes output to decline.
- B) decreases aggregate demand and causes output to decline.
- C) stimulates aggregate demand and causes output to rise.
- D) decreases aggregate demand and causes output to rise.
- E) decreases government expenditures.

Answer: C

Page Ref: 560-564

Difficulty: Easy

8) A devaluation of the home currency

- A) makes foreign goods and services cheaper relative to those sold at home.
- B) makes domestic goods and services more expensive relative to those sold abroad.
- C) decreases demand and output.
- D) increases demand for domestic goods and services.
- E) increases output and makes domestic goods and services cheaper relative to those sold abroad.

Answer: E

Page Ref: 560-564

Difficulty: Easy

9) An attempt by a central bank to alter the money supply by buying or selling domestic assets

- A) will leave both domestic money supply and foreign reserves unchanged.
- B) will cause an offsetting change in aggregate demand.
- C) will lead to a rise in domestic employment and output.
- D) will lead to a decrease in domestic employment and output.
- E) will cause an offsetting change in foreign reserves and leave the domestic money supply unchanged.

Answer: E

Page Ref: 560-564

Difficulty: Easy

10) An expenditure-changing policy

- A) alters the direction of the economy's total demand for goods and services.
- B) alters the level of the economy's total demand for goods and services.
- C) has no effect on aggregate demand.
- D) is the same thing as an expenditure-switching policy.
- E) affects aggregate supply but not aggregate demand.

Answer: B

Page Ref: 560-564

Difficulty: Easy

11) The alteration of exchange rates to move the economy to internal and external balance may lead to all EXCEPT

- A) a balance of payments crisis.
- B) changes in the terms of trade.
- C) changes in the level of imports or exports.
- D) changes in interest rates.

E) a guaranteed unilateral improvement in economic wealth.

Answer: E

Page Ref: 560-564

Difficulty: Easy

12) "A monetary policy is not a policy tool under fixed exchange rates." Discuss.

Answer: True, under fixed exchange rates, domestic asset transactions by the central bank can be used to alter the level of foreign reserves but not to affect the state of employment and output.

Page Ref: 560-564

Difficulty: Moderate

13) What is the difference between an expenditure-changing policy and an expenditure-switching policy?

Answer: An expenditure-changing policy alters the *level* of the economy's total demand for goods and services. An expenditure-switching policy, on the other hand, induces an exchange rate adjustment and thus changes the *direction* of demand, shifting it between domestic output and imports.

Page Ref: 560-564

Difficulty: Moderate

14)

- (a) Assume that  $R$  denotes the domestic interest rate and  $R^*$  denotes the foreign interest rate. Under a fixed exchange rate what is the relation between  $R$  and  $R^*$
- (b) Assume  $E$  denotes the domestic currency price of the dollar for a country which is not the United States. If one wants to analyze only the short run effects of a policy, what does one assume about the Home and Foreign price levels,  $P$  and  $P^*$ , respectively.
- (c) Assume that there is no ongoing balance of payment crisis. What is this assumption really assume?
- (d) Assume a fixed exchange rate system. What does this tell you about  $E$ ?
- (e) Under the above assumptions what are the conditions for internal balance?
- (f) How is your answer to Part D above would change if  $P^*$  is unstable due to foreign inflation.
- (g) Given the definitions above, how one defines the real exchange rate?
- (h) Write the condition for internal balance.
- (i) Define the variable not defined before in Part G above.
- (j) Using the equation for internal balance derived above, given our assumptions analyze the effects of a fiscal expansion.
- (k) What would happen if the government of that country, which is not the United States under Bretton Woods, decides to devalue its currency?
- (l) What would happen if the government of that country, which is not the United States under Bretton Woods, decides to use monetary policy rather than fiscal policy?
- (m) Given all of the above, what is the relation between the exchange rate,  $E$ , and fiscal ease, i.e., an increase in  $G$  or a reduction in  $T$ ?
- (n) Assume that the economy is at internal balance. What will happen if  $G$  goes up for a given level of  $E$ ?
- (o) Assume that the economy is at internal balance. What will happen if  $G$  goes down for a given level of  $E$ ?

Answer:

- (a)  $R = R^*$
- (b) Constant prices.
- (c) That  $E^e$ , the expected exchange rate, is equal to the exchange rate today,  $E$ . In other words,  $E = E^e$ .
- (d)  $E$  is constant, i.e.,  $E = E_0$ .
- (e) Since  $P^*$  and  $E$  are fixed, the expected price is fixed; thus, no inflation is expected. Then, internal balance will require only full employment, aggregate demand equaling the full-employment level,  $Y^f$ .
- (f) In this case, full employment alone will not guarantee price stability under a fixed exchange rate.
- (g) The real exchange rate is equal to  $EP^*/P$ .
- (h)  $Y^f = C(Y^f - T) + I + G + CA(EP^*/P, Y^f - T)$
- (i)  $C$  = consumption,  $I$  = Investment,  $(Y^f - T)$  = disposable income,  $T$  = taxes.
- (j) An increase in  $G$  or a reduction in  $T$  will increase aggregate demand and will cause output to rise in the short run.
- (k) A rise in  $E$  makes domestic goods and services cheaper relative to those sold abroad and thus increases demand for output.
- (l) A monetary policy is not a policy tool under fixed exchange rates. Under fixed exchange rates, domestic asset transactions by the central bank can be used to alter the level of foreign reserves but not to affect the state of employment and output.
- (m) Negative relation.
- (n) Over-employment.
- (o) Under employment.

Page Ref: 560-564

Difficulty: Moderate

- 15) Assume that the government has a target value,  $X$ , for the current account surplus.
- (a) What is the goal of external balance?
  - (b) Assume that we are dealing with only the short run, what are the values of  $P$  and  $P^*$ ?
  - (c) Given fixed  $P$  and  $P^*$ , what would happen if  $E$  rises?
  - (d) Given  $P$  and  $P^*$ , what would happen if  $T$  decreases, i.e., an expansionary fiscal policy?
  - (e) Given  $P$  and  $P^*$ , what would happen if  $G$  increases, i.e., an expansionary fiscal policy?
  - (f) Given all of the above, what is the relation between the exchange rate,  $E$ , and fiscal ease, i.e., an increase in  $G$  or a reduction in  $T$ ?
  - (g) Assume that the economy is in external balance. What will happen if the government maintains its current account at  $X$ , but devaluates the domestic currency?
  - (h) Assume that the economy is at external balance. What will happen if the government raises  $E$ ?
  - (i) Assume that the economy is at external balance. What will happen if the government lowers  $E$ ?

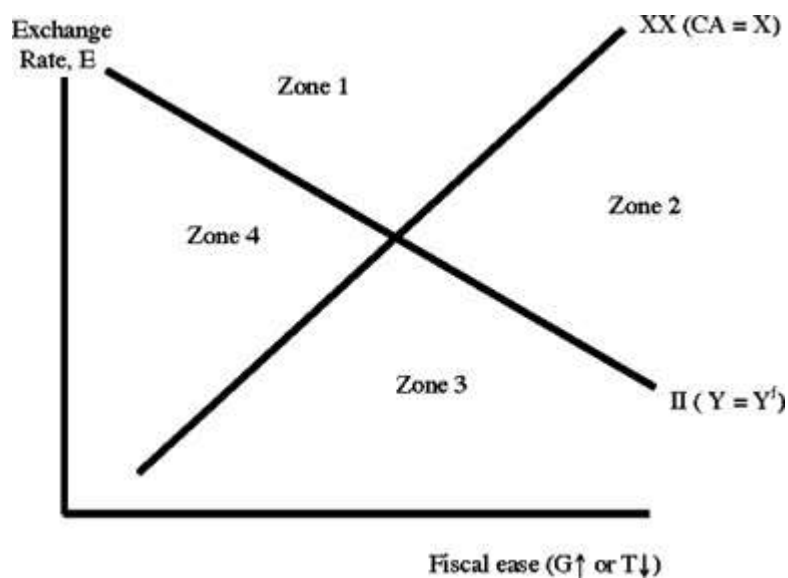
Answer:

- (a) The goal of external balance requires the government to manage fiscal policy and the exchange rate so that the following equation is satisfied:  $CA(EP^*/P, Y - T) = X$ .
- (b) Constant prices.
- (c) An increase in  $E$  makes domestic goods cheaper, thus improving the current account.
- (d) A fall in  $T$  raises output,  $Y$ . The resulting increase in output increases disposable income and thus leads to increased home spending on foreign goods, worsening the current account.
- (e) Similar to the answer above. A rise in  $G$  causes  $CA$  to fall by increasing  $Y$ .
- (f) Positive relationship.
- (g) The government raises  $E$ ; thus, either  $G$  should go up or  $T$  should go down to maintain the external balance.
- (h) An increase in  $E$  raises net exports and thus leads to a surplus in the current account higher than the target level of  $X$ . This will represent a point above the  $XX$  schedule.
- (i) A decrease in  $E$  reduces net exports and thus leads to a deficit in the current account lower than the target level of  $X$ . This will represent a point below the  $XX$  schedule.

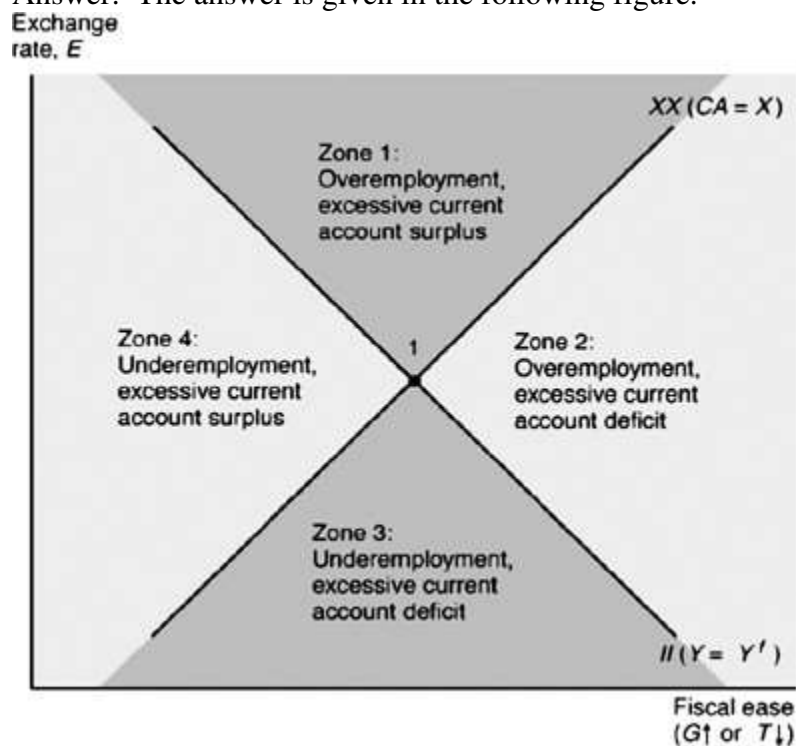
Page Ref: 560-564

Difficulty: Moderate

16) Use a figure below to describe the four zones of economic discomfort.



Answer: The answer is given in the following figure.



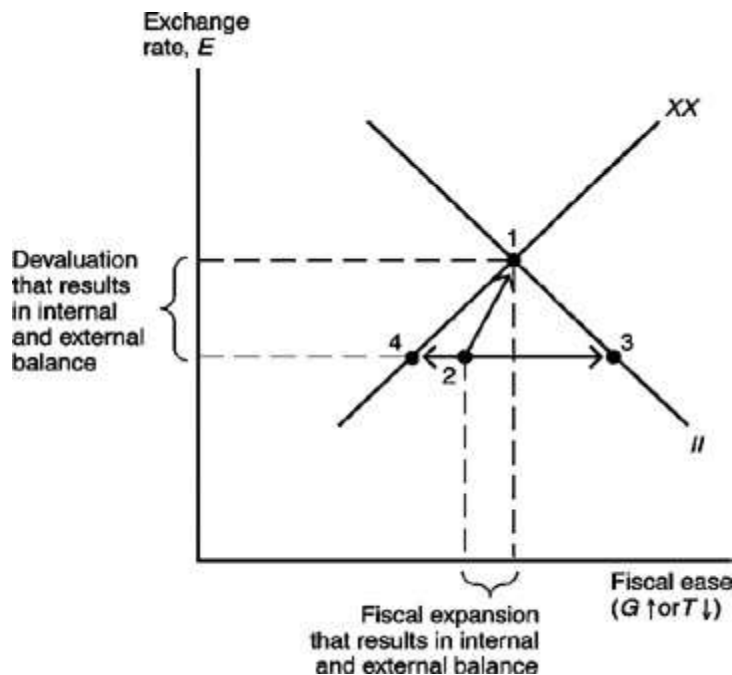
Page Ref: 560-564

Difficulty: Moderate



17) Using the II-XX framework, show using a figure that fiscal policies by themselves cannot bring the economy to both internal and external balances.

Answer: Starting at point 2, fiscal policy is shown as only horizontal movements. This means that the economy can reach either point 3 (internal balance) or point 4 (external balance) in the figure, but not both internal and external balances. Only a devaluation of the currency accompanied with an increase in fiscal ease, namely increasing government expenditures or decreasing taxes, will move the economy to both internal and external balances at point 1 in the figure.



Page Ref: 560-564

Difficulty: Moderate

## 19.7 The External Balance Problem of the United States Under Bretton Woods

1) The confidence problem of the Bretton Woods systems articulated by Robert Triffin refers to

A) the unwillingness of central banks to accumulate currency for fear of not being able to convert it to gold in case a run on the banks occurs.

B) consumer fear of stock market instability.

C) producer fear of rising wages.

D) the lack of convertibility of gold into silver.

E) low consumer spending because of balance of payment crises.

Answer: A

Page Ref: 564-568

Difficulty: Easy

- 2) A two-tier gold market like the one created during the Bretton Woods System refers to
- A) a private tier for private gold traders where the price would not be allowed to fluctuate, and an official tier for central banks where the official gold price would be allowed to fluctuate.
  - B) a private tier for private gold traders where the price would not be allowed to fluctuate, and an official tier for central banks where the official gold price would rise on a yearly basis by pre-determined increments.
  - C) a private tier for private gold traders where the price would be allowed to fluctuate, and an official tier for central banks where the official gold price would be set at \$35 an ounce.
  - D) a private tier for private gold traders where the price would be set at \$35 an ounce, and an official tier for central banks where the official gold price would be allowed to fluctuate.
  - E) a private tier for private gold traders where the price of gold would rise on a yearly basis by pre-determined increments, and an official tier for central banks where the official gold price would be set at \$35 an ounce.

Answer: C

Page Ref: 564-568

Difficulty: Easy

- 3) In order to bring about a real depreciation of the dollar, the U.S. can hope for
- A) a rise in the U.S. price level.
  - B) a fall in foreign price levels.
  - C) a rise in the dollar's nominal value in terms of foreign currencies.
  - D) a rise in foreign price levels or a fall in the dollar's nominal value in terms of foreign currencies.
  - E) increased output and full employment.

Answer: D

Page Ref: 564-568

Difficulty: Easy

- 4) The collapse of the Bretton Woods system marked
- A) the end of floating exchange rates and a move to fixed exchange rates.
  - B) marked the end of fixed exchange rates and a move to floating exchange rates.
  - C) the beginning of the gold standard.
  - D) a plunge in the price of gold.
  - E) the elimination of paper currencies.

Answer: B

Page Ref: 564-568

Difficulty: Easy

5) Which of the following statements is MOST accurate?

A) A revaluation restores internal and external balance immediately, without causing domestic inflation.

B) A devaluation restores internal and external balance immediately, without causing domestic inflation.

C) A revaluation restores internal and external balance immediately, but also causes domestic inflation.

D) A devaluation restores internal and external balance immediately, but also causes domestic inflation.

E) A devaluation restores external balance in the long run, without causing immediate domestic inflation.

Answer: A

Page Ref: 564-568

Difficulty: Easy

6) Which of the following is the MOST accurate?

A) U.S. macroeconomic policies in the late 1960s helped cause the breakdown of the Bretton Woods system by early 1973.

B) U.S. macroeconomic policies in the late 1970s helped cause the breakdown of the Bretton Woods system by early 1983.

C) U.S. macroeconomic policies in the late 1980s helped cause the breakdown of the Bretton Woods system by early 1993.

D) U.S. macroeconomic policies in the late 1950s helped cause the breakdown of the Bretton Woods system by early 1963.

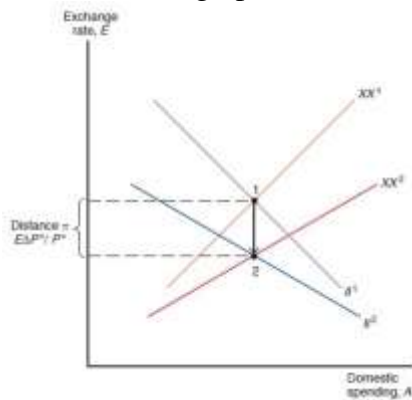
E) U.S. macroeconomic policies in the late 1960s delayed the breakdown of the Bretton Woods system to early 1973.

Answer: A

Page Ref: 564-568

Difficulty: Easy

7) Refer to the graph below, which shows the effect of \_\_\_\_\_ on the home economy.



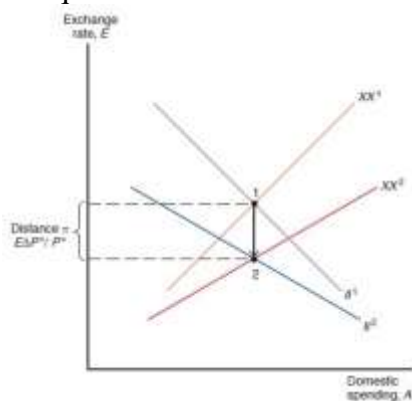
- A) foreign inflation
- B) domestic inflation
- C) foreign deflation
- D) domestic recession
- E) foreign recession

Answer: A

Page Ref: 564-568

Difficulty: Easy

8) Refer to the graph below. The movement from point 1 to point 2 is stimulated by a disequilibrium in which there is domestic \_\_\_\_\_ and \_\_\_\_\_.



- A) overemployment; trade surplus
- B) unemployment; trade surplus
- C) overemployment; trade deficit
- D) unemployment; trade deficit
- E) inflation; unemployment

Answer: A

Page Ref: 564-568

Difficulty: Easy

## 19.8 The Case for Floating Exchange Rates

1) Advocates of floating rate suggested it is favorable for economies for all of the following reasons EXCEPT

A) it discourages attack from foreign exchange speculators because of the fact that exchange rate adjustment is immediate.

B) it helps stabilize the shock effect on unemployment in case of economic changes such as fall in export demand.

C) it automatically matches the domestic inflation with ongoing foreign inflation.

D) it gives every country the opportunity to guide its own monetary conditions at home.

E) it brings the LR exchange rate to the level predicted by PPP without government policy decisions.

Answer: C

Page Ref: 568-576

Difficulty: Easy

2) Which of the following is NOT a result of a *temporary* fall in foreign demand on one country's exports under *floating* exchange rate?

A) The DD curve shifts to the left due to reduction of aggregate demand.

B) The AA curve shifts downwards due to reduction of money supply.

C) a fall in aggregate output

D) depreciation in home country's currency

E) a fall in the home interest rate

Answer: B

Page Ref: 568-576

Difficulty: Easy

3) Which of the following is NOT a result of a *permanent* fall in foreign demand on one country's exports under *floating* exchange rate?

A) The DD curve shifts to the left due to reduction of aggregate demand.

B) The AA curve shifts upwards due to the increased expected long-run exchange rate.

C) a reduction in output by a smaller degree compared to temporary fall in demand

D) depreciation in home country's currency

E) a raised level of unemployment

Answer: E

Page Ref: 568-576

Difficulty: Easy

4) Which one of the following is/are INCORRECT?

An argument against floating exchange rates is that

A) a fixed rate automatically prevents instability in the domestic money market from affecting the economy if shocks come from home domestic money market.

B) a fixed rate might become unpredictable, complicating economic planning.

C) a rise in money demand under a fixed exchange rate would have no effect on the exchange rate and output.

D) a fixed rate functions within the price-specie-flow mechanism and maintains a balance of payments equilibrium.

E) a fixed rate automatically prevents instability in the economy from output market shocks.

Answer: E

Page Ref: 568-576

Difficulty: Easy

5) If central banks were no longer obliged to intervene in currency markets to fix exchange rates, governments would be able to use monetary policy to reach

A) internal balance.

B) external balance.

C) internal and external balance.

D) internal but not external balance.

E) external but not internal balance.

Answer: C

Page Ref: 568-576

Difficulty: Easy

6) Advocates of flexible exchange rates claim that under flexible exchange rates

A) no country would be forced to import only inflation from abroad.

B) no country would be forced to import only deflation from abroad.

C) no country would be forced to import inflation and deflation from abroad.

D) flexible exchange rates are not able to halt importing inflation from abroad.

E) flexible exchange rates are not able to halt importing deflation from abroad.

Answer: C

Page Ref: 568-576

Difficulty: Easy

7) Advocates of flexible exchange rates claim that under flexible exchange rates

A) the United States would now be able to set world monetary conditions all by itself.

B) Germany would no longer be able to set world monetary conditions all by itself.

C) the United Kingdom would no longer be able to set world monetary conditions all by itself.

D) the United States would no longer be able to set world monetary conditions all by itself.

E) Germany would now be able set world monetary conditions all by itself.

Answer: D

Page Ref: 568-576

Difficulty: Easy

- 8) Advocates of flexible exchange rates claim that under flexible exchange rates
- A) the United States would no longer have the same opportunity as other countries to influence its exchange rate against foreign currencies.
  - B) the United States would have the same opportunity as other countries to influence its exchange rate against foreign currencies.
  - C) the United Kingdom would not have the same opportunity as other countries to influence its exchange rate against foreign currencies.
  - D) Germany would not have the same opportunity as other countries to influence its exchange rate against foreign currencies.
  - E) China would have the same opportunity as other countries to influence its exchange rate against foreign currencies.

Answer: B

Page Ref: 568-576

Difficulty: Easy

- 9) Some claim that the long and agonizing periods of speculation preceding exchange rate realignments would
- A) not occur under fixed exchange rate regime.
  - B) not occur under floating.
  - C) become more severe under currency board.
  - D) become less severe under floating.
  - E) be prolonged under floating.

Answer: D

Page Ref: 568-576

Difficulty: Easy

- 10) Advocates of floating rates pointed out that
- A) removal of the obligation to peg currency values would restore monetary control to central banks.
  - B) imposing of the obligation to peg currency values would restore monetary control to central banks.
  - C) removing of the obligation to peg currency values would restore fiscal control.
  - D) imposing of the obligation to peg currency values would restore fiscal control.
  - E) imposing of the obligation to peg currency would restore monetary control to the consumer.

Answer: A

Page Ref: 568-576

Difficulty: Easy

11) Advocates of flexible exchange rates claim that under flexible exchange rates, if the central bank faced unemployment

A) and thus wished to decrease its money supply, there would no longer be any legal barrier to the currency depreciation this would cause.

B) and thus wished to expand its money supply, there would no longer be any legal barrier to the currency depreciation this would cause.

C) and wished to expand its money supply, there would no longer be any legal barrier to the currency appreciation this would cause.

D) and wished to decrease its money supply, there now would be a legal barrier to the currency depreciation this would cause.

E) and wished to increase output, there would no longer be a legal barrier to the currency appreciation this would cause.

Answer: B

Page Ref: 568-576

Difficulty: Easy

12) Advocates of flexible exchange rates claim that under flexible exchange rates, a currency

A) appreciation caused by increasing the money supply would reduce unemployment by lowering the relative price of domestic products.

B) depreciation caused by increasing the money supply would increase unemployment by lowering the relative price of domestic products.

C) depreciation caused by increasing the money supply would reduce unemployment by lowering the relative price of domestic products.

D) depreciation caused by increasing the money supply would reduce unemployment by increasing the relative price of domestic products.

E) depreciation caused by decreasing the money supply would not effect unemployment, but would increase the relative price of domestic products.

Answer: C

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Difficulty: Easy

13) Advocates of flexible exchange rates claim that under flexible exchange rates, a currency

A) depreciation caused by increasing the money supply would reduce unemployment by increasing world demand for them.

B) appreciation caused by increasing the money supply would reduce unemployment by increasing world demand for them.

C) appreciation caused by decreasing the money supply would reduce unemployment by increasing world demand for them.

D) appreciation caused by increasing the money supply would increase unemployment by increasing world demand for them.

E) appreciation caused by increasing the money supply would increase unemployment by decreasing world demand for them.

Answer: A

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Difficulty: Easy



14) Advocates of flexible exchange rates claim that under flexible exchange rates, a currency  
A) depreciation caused by increasing the money supply would reduce unemployment by lowering the relative price of domestic products and increasing the world demand for them.  
B) appreciation caused by increasing the money supply would reduce unemployment by lowering the relative price of domestic products and increasing world demand for them.  
C) appreciation caused by decreasing the money supply would reduce unemployment by lowering the relative price of domestic products and increasing world demand for them.  
D) appreciation caused by increasing the money supply would increase unemployment by lowering the relative price of domestic products and increasing world demand for them.  
E) appreciation caused by increasing the money supply would increase unemployment by lowering the relative price of domestic products and by decreasing world demand for them.

Answer: A

Page Ref: 568-576

Difficulty: Easy

15) Advocates of flexible exchange rates claim that under flexible exchange rates, the central bank of

A) an *overheated* economy could cool down activity by *increasing* the money supply without worrying that undesired reserve *inflow* would undermine its stabilization effort.

B) a *cooled* economy could *cool down* activity by contracting the money supply without worrying that undesired reserve *inflow* would undermine its stabilization effort.

C) an overheated economy could cool down activity by contracting the money supply without worrying that undesired reserve *inflow* would undermine its stabilization effort.

D) an overheated economy could cool down activity by contracting the money supply without worrying that undesired reserve *outflow* would undermine its stabilization effort.

E) an overheated economy could cool down activity by decreasing employment and increasing output without worrying that this would undermine its stabilization effort.

Answer: C

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Difficulty: Easy

16) Advocates of flexible exchange rates claim that under flexible exchange rates

A) *enhanced* control over fiscal policy would allow countries to *dismantle* their distorting barriers to international payments.

B) *reduced* control over monetary policy would allow countries to *dismantle* their distorting barriers to international payments.

C) *enhanced* control over monetary policy would allow countries to *increase* their distorting barriers to international payments.

D) *enhanced* control over monetary policy would allow countries to dismantle their distorting barriers to international payments.

E) *enhanced* control over monetary policy would destabilize exchange rates.

Answer: D

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Difficulty: Easy

17) By the end of the 1960s, many countries felt that they were importing inflation from  
A) the United States.

B) Germany.

C) France.

D) Japan.

E) the United Kingdom.

Answer: A

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Difficulty: Easy

18) Which one of the following statements is TRUE?

A) By *devaluing* its currency, that is, by *lowering* the domestic currency price of foreign currency, a country *can* insulate itself completely from an inflationary increase in foreign prices.

B) By *revaluing* its currency, that is, by *increasing* the domestic currency price of foreign currency, a country can insulate itself completely from an inflationary increase in foreign prices.

C) By *revaluing* its currency, that is, by lowering the domestic currency price of foreign currency, a country *cannot* insulate itself completely from an inflationary increase in foreign prices.

D) By *revaluing* its currency, that is, by *lowering* the domestic currency price of foreign currency, a country *can* insulate itself completely from an inflationary increase in foreign prices.

E) By *revaluing* its currency, that is, by lowering the domestic currency price of foreign currency, a country *cannot* insulate itself completely from a harmful decrease in foreign prices.

Answer: D

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Difficulty: Easy

19) When all changes in the world are due to

A) fiscal policy, purchasing power parity *holds* true in *the long run*.

B) monetary policy, purchasing power parity *does not hold* true in *the long run*.

C) monetary policy, purchasing power parity *holds* true in *the long run*.

D) monetary policy, purchasing power parity *holds* true even in *the short run*.

E) fiscal and monetary policy, purchasing power parity *holds* true in *the long run*.

Answer: C

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Difficulty: Easy

20) Federal Reserve Chairman Volcker's policy to fight inflation

A) led to the 1981-1983 recession, but was ultimately successful.

B) led to the 1981-1983 recession, but did not end high inflation due to beggar-thy-neighbor effects.

C) was perfectly complemented by Reagan's decrease in fiscal spending.

D) led to the 1981-1983 recession and foretold the economic downturn in the mid-1990s.

E) led to an immediate depreciation of the dollar.

Answer: A

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Difficulty: Easy

21) Under purchasing power parity (PPP), if U.S. monetary growth leads to a long run doubling of the U.S. price level, while Germany's price level remains constant, PPP predicts that the

A) long-run DM price of the dollar will be doubled.

B) long-run DM price of the dollar will be halved.

C) long-run DM price of the dollar will remain the same.

D) short-run DM price of the dollar will be halved.

E) short-run DM price of the dollar will be doubled.

Answer: B

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Difficulty: Easy

22) Under flexible exchange rate regime, a money-induced

A) *decrease* in U.S. prices causes an *immediate appreciation* of the foreign currencies against the dollar.

B) *increase* in U.S. prices causes an *immediate appreciation* of the foreign currencies against the dollar.

C) *increase* in U.S. prices causes an *eventual appreciation* of the foreign currencies against the dollar.

D) *increase* in U.S. prices causes an *eventual depreciation* of the foreign currencies against the dollar.

E) *decrease* in U.S. prices causes no change in foreign exchange rate.

Answer: B

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Difficulty: Easy

23) Under Bretton Woods,

A) any foreign country cannot devalue its currency against the dollar in conditions of "fundamental disequilibrium."

B) any foreign country could devalue its currency against the dollar in conditions of "fundamental disequilibrium," but the system's rules did not give the United States the option of devaluing against foreign currencies.

C) any foreign country could devalue its currency against the dollar in conditions of "fundamental disequilibrium," and the system's rules did give the United States the same option of devaluing against foreign currencies.

D) the U.S. could devalue its currency against the foreign currencies in conditions of "fundamental disequilibrium."

E) any foreign country can revalue its currency against the dollar in conditions of "fundamental disequilibrium."

Answer: B

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Difficulty: Easy

24) The DD schedule shows

- A) interest rate and output pairs for which aggregate demand equals aggregate output.
- B) exchange rate and output pairs for which aggregate demand equals aggregate output.
- C) exchange rate and output pairs for which aggregate supply equals aggregate output.
- D) interest rate and output pairs for which aggregate supply equals aggregate output.
- E) exchange rate and output pairs for which aggregate demand is greater than aggregate output.

Answer: B

Page Ref: 568-576

Difficulty: Easy

25) The AA schedule shows

- A) Interest rate and output pairs at which the foreign exchange market and the domestic money market are in equilibrium.
- B) Exchange rate and output pairs at which the foreign exchange market and the domestic money market are in equilibrium.
- C) Interest rate and output pairs at which only the foreign exchange market is in equilibrium.
- D) Exchange rate and output pairs at which only the foreign exchange market is in equilibrium.
- E) Exchange rate and output pairs at which only the domestic money market are in equilibrium.

Answer: B

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Difficulty: Easy

26) Under flexible exchange rate, the response of an economy to a temporary fall in foreign demand for its exports is

- A) the currency appreciates, and output falls.
- B) the currency depreciates, and output falls.
- C) the currency depreciates, and output increases.
- D) the currency depreciates, and output remains constant.
- E) the currency appreciates, and output increases.

Answer: B

Page Ref: 568-576

Difficulty: Easy

27) Under fixed exchange rate, the response of an economy to a temporary fall in foreign demand for its exports is

- A) the currency appreciates, and output falls.
- B) the currency depreciates, and output falls.
- C) the currency remains the same, and output decreases.
- D) the currency depreciates, and output remains constant.
- E) the currency appreciates, and output remains the same.

Answer: C

Page Ref: 568-576

Difficulty: Easy

28) Comparing fixed to flexible exchange rate, the response of an economy to a temporary fall in foreign demand for its exports is

A) output actually falls less under fixed rate than under floating rate.

B) output actually falls more under fixed rate than under floating rate.

C) output actually remains the same under fixed rate than under floating rate.

D) the currency value grows in a fixed rate system and falls in a flexible system.

E) output grows in a fixed rate system and falls in a flexible system.

Answer: B

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Difficulty: Easy

29) The effects of a decrease in export demand

A) is a powerful argument in favor of fixed rates.

B) is a powerful argument in favor of flexible rates.

C) shows the difficulties in determining which exchange rate is better.

D) is a powerful argument in favor of fixed rates only in the short run.

E) is a powerful argument in favor of fixed rates only in the long run.

Answer: B

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Difficulty: Easy

30) Under the *fixed* rate regime foreign countries could hold their dollar exchange rates constant by

A) using tight monetary policy.

B) using expansionary fiscal policy.

C) negotiating with the central bank of the United States.

D) setting their domestic interest rate equal to the U.S. interest rate.

E) holding their exchange rates constantly pegged to the euro and yen.

Answer: D

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Difficulty: Easy

31) Under the *flexible* exchange rate, lowering the price of a foreign currency will

A) allow the expansion of monetary policy without causing inflation.

B) decrease the foreign country's output.

C) prevent a foreign price increase from causing deflation at home.

D) cause a home price increase to be exported to the foreign markets.

E) cause a "beggar-thy-neighbor" effect.

Answer: A

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Difficulty: Easy

32) Supporters of a floating exchange rate cited all of the following as advantages over the Bretton Woods system EXCEPT

- A) each country would be able to choose its own long run inflation rate.
- B) parity changes and speculative attacks would no longer be possible.
- C) countries would be forced to work cooperatively in deciding monetary policy.
- D) exchange rates would be set symmetrically in foreign markets rather than by government decision.
- E) governments would not need to export inflation to decrease domestic unemployment.

Answer: C

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Difficulty: Easy

33) The mechanism behind the inflation insulation provided by a floating exchange rate is

A) Purchasing Power Parity.

- B) a fixed AA curve.
- C) market speculation.
- D) tight monetary policy.
- E) symmetry.

Answer: A

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Difficulty: Easy

34) If the demand for Home exports decreased abroad, the Home fall in output would be greatest

- A) if the decrease was temporary and the exchange rate was fixed.
- B) if the decrease was temporary and the exchange rate was floating.
- C) if the decrease was permanent and the exchange rate was fixed.
- D) if the decrease was permanent and the exchange rate was floating.
- E) if the decrease was permanent and the exchange rate was high.

Answer: C

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Difficulty: Easy

35) Present the case for floating exchange rates.

Answer: (1) Monetary policy autonomy — Governments would be able to use monetary policy to reach internal and external balance. No country would be forced to import inflation and deflation from abroad.

(2) Symmetry — The United States would no longer be able to set world monetary conditions all by itself. The United States would have the same opportunity as other countries to influence its exchange rate against foreign currencies.

(3) Exchange rates as automatic stabilizers — The long and agonizing periods of speculation preceding exchange rate realignments would not occur under floating.

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Difficulty: Moderate

36) "No central bank can be indifferent to its currency's value in the foreign exchange market." Discuss.

Answer:

- despite the "Monetary Policy Autonomy" theory of the original supporters of floating exchange rates
- exchange rate's role in inflation
- prices are sticky in the short run, so foreign developments can affect real interest rates and real exchange rates at home
- don't want their exchange rate to be too volatile as it affects the demand for their domestic products
- appreciation or depreciation can cause inflation that is difficult to counter
- banks intervene on a discretionary basis so it is still necessary for them to continue to hold foreign reserves
- "dirty floats" stabilize output and price level after shocks that affect exchange rates
- empirically: after 1973 countries have continued to intervene to affect exchange rates

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Difficulty: Moderate

Foreign Home		Somewhat restrictive	Very restrictive
Somewhat restrictive		1	$\frac{8}{7}$
		1	0
Very restrictive		0	$\frac{5}{6}$
		$\frac{8}{7}$	$\frac{5}{6}$

37) Refer to the above figure. Use the DD-AA model to examine and compare the response of an economy under fixed and floating exchange rate to a temporary fall in foreign demand for its exports.

Answer: The DD curve shifts to the left. When the exchange rate floats, because the demand shift is assumed to be temporary, it does not change the long-run expected exchange rate and so does not move the asset market equilibrium schedule AA. Thus, E rises, i.e. the currency depreciates and output falls.

Under fixed exchange rate, the central bank must prevent the currency depreciation that occurs under a floating rate; thus, it buys domestic money with foreign currency, reducing the domestic money supply and shifting the AA to the left and down. E will remain constant and output will fall.

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Difficulty: Moderate



38) Refer to the above figure. Use the DD-AA model to examine and compare the response of an economy under fixed and floating exchange rate to a permanent fall in foreign demand for its exports.

Answer: The DD curve shifts to the left. Under flexible exchange rate, the expected exchange rate  $E^e$  also rises and AA shifts upward and to the right. Thus, a permanent shock causes a greater depreciation than a temporary one.

Under fixed exchange rate, the central bank must prevent the currency depreciation that occurs under a floating rate; thus, it buys domestic money with foreign currency, reducing the domestic money supply and shifting the AA to the left and down.  $E$  will remain constant and output will fall.

Under fixed exchange rate, a fall in export demand if permanent have led to a situation of "fundamental disequilibrium" calling for a devaluation of the currency or a long period of domestic unemployment as export prices fell. Uncertainty about the government's intention would have encouraged speculative capital outflows, further worsening the situation by depleting central bank reserves and contracting the domestic money supply at a time of unemployment.

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Difficulty: Moderate

39) Use the DD-AA model to compare the domestic economic response under flexible and fixed exchange rate regimes to a temporary rise in export demand from foreign countries.

Answer: Under floating rate: The DD curve shifts right. AA does not change because the temporary increase will not affect the long run expected exchange rate. Output rises and  $E$  falls (depreciates).

Under fixed rate: The DD curve shifts right. The central bank intervenes to prevent a change in the exchange rate. By selling domestic currency they expand the domestic supply and the AA curve shifts right, keeping  $E$  constant. Output however will rise due to the new equilibrium of the DD and AA curves to the right of its former location.

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Difficulty: Moderate

40) The reason that the claim that floating exchange rates result in greater economic autonomy for individual countries may not be entirely accurate is that

A) empirical research finds no supporting data.

**B) policy makers are influenced by the effect of domestic policies on the exchange rate.**

C) there is no generally satisfactory method for measuring economic autonomy.

D) it is based on the assumption of a gold standard.

E) countries that run large trade deficits must increase exports to balance trade.

Answer: B

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Difficulty: Easy



41) Under a flexible exchange rate regime, an increase in real money demand

A) moves the AA curve to the right.

B) moves the AA curve to the left.

C) leaves the AA curve unchanged.

D) moves the DD curve to the right.

E) moves the DD curve to the left.

Answer: B

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Difficulty: Easy

42) The effects of an increase in real money demand on an economy

A) is an argument against flexible exchange rates.

B) is an argument in favor of flexible exchange rates.

C) shows the difficulties in determining which exchange rate regime is better.

D) is an argument in favor of flexible exchange rates only in the short run.

E) is an argument against flexible exchange rates only in the short run.

Answer: A

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Difficulty: Easy

43) If most of the shocks that buffet the economy come from the output market shocks, then

A) fixed exchange rates are better than flexible exchange rates.

B) flexible exchange rates are better than fixed exchange rates.

C) which system is chosen is not important.

D) fixed exchange rates are better than flexible exchange rates only in the short run.

E) flexible exchange rates are better than fixed exchange rates only in the short-run.

Answer: B

Page Ref: 568-576

Difficulty: Easy

44) One should expect the forward exchange market to flourish

A) under a fixed exchange rate regime.

B) under a flexible exchange rate regime.

C) under neither fixed nor flexible exchange rate regimes.

D) under both fixed and flexible exchange rate regimes.

E) only under a gold standard.

Answer: B

Page Ref: 568-576

Difficulty: Easy

45) In the case of a domestic monetary shock, floating exchange rates

A) make the home economy less vulnerable.

**B) make the home economy more vulnerable.**

C) make the foreign economy more vulnerable.

D) would not affect the foreign economy.

E) would not affect the home economy.

Answer: B

Page Ref: 568-576

Difficulty: Easy

46) "Under floating rates, the economy is more vulnerable to shocks coming from the domestic money market." Discuss.

Answer: The statement is true. Under floating rates, a rise in real domestic money demand causes income to fall and to an appreciation of the domestic currency. If the rise in real domestic money supply is permanent, it will lead eventually to a fall in the home price level.

Under a fixed exchange rate, the change in real money demand does not affect the economy at all. To prevent the home currency from appreciating, the central bank buys foreign reserves with domestic money until the real money supply rises by an amount equal to the rise in real money demand. This intervention has the effect of preventing any change in output or the price level.

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Difficulty: Moderate

### 19.9 Macroeconomic Interdependence under a Floating Rate

1) Due to macroeconomics interdependence between large countries, the effect of a permanent monetary policy expansion by Home is as follows: Home output

**A) rises, Home's currency depreciates, and Foreign output may rise or fall.**

B) falls, Home's currency depreciates, and Foreign output may rise or fall.

C) rises, Home's currency appreciates, and Foreign output may rise or fall.

D) rises, Home's currency depreciates, and Foreign output rises.

E) falls, Home's currency appreciates, and Foreign output may rise or fall.

Answer: A

Page Ref: 576-583

Difficulty: Easy

2) Due to macroeconomics interdependence between large countries, the effect of a permanent fiscal expansion by Home is as follows: Home output

A) falls, Home's currency appreciates, Foreign output rises.

**B) rises, Home's currency appreciates, Foreign output rises.**

C) rises, Home's currency depreciates, Foreign output rises.

D) rises, Home's currency appreciates, Foreign output decreases.

E) falls, Home's currency depreciates, Foreign output rises.

Answer: B

Page Ref: 576-583

Difficulty: Easy

3) Which of the following does NOT occur if Home starts a policy of permanent fiscal expansion:

- A) Home's exchange rate increases.
- B) Foreign's interest rate rises.
- C) Home output rises.
- D) Foreign output rises.
- E) Current Account Balance increases.

Answer: E

Page Ref: 576-583

Difficulty: Easy

4) The Plaza Accord of 1985 announces that the

A) G-5 countries will intervene in the foreign exchange market to bring about a dollar appreciation.

B) G-7 countries will intervene in the foreign exchange market to bring about a dollar depreciation.

C) G-5 countries will intervene in the foreign exchange market to bring about a dollar depreciation.

D) G-7 countries will intervene in the foreign exchange market to bring about a DM depreciation.

E) G-5 countries will not intervene in the foreign exchange market unless the dollar needs to appreciate.

Answer: C

Page Ref: 576-583

Difficulty: Easy

5) Imagine a world with two large countries, Home and Foreign. Evaluate how Home's macroeconomic policies affect Foreign. Compare the small and the large country cases; consider both permanent monetary and fiscal policies.

Answer: Note that since the two countries are large, neither country can be thought of any longer as facing a fixed external interest rate or a fixed level of foreign export demand. Consider only permanent shifts.

A permanent monetary expansion by Home, in the small country's case, would lead to currency depreciation and increase in output, interest rates also falling. When the Home economy is large, the same would happen, but now the rest of the world is affected too. Because Home is facing real currency depreciation, Foreign must be experiencing a real currency appreciation. This makes foreign goods relatively expensive and thus reduces its output. However, this increases Home's output, since Home's imports will rise. Thus, it is not clear what will happen to Foreign output. Note that Foreign output can rise only if the Foreign nominal interest rate rises too and can fall only if Foreign nominal interest rate falls. This is because the foreign market equilibrium is:

$M^*/P^* = L(R^*, Y^*)$ . Because in this exercise  $M^*$  is not changing and  $P^*$  is sticky by assumption and thus fixed in the short run.

Consider now, a permanent expansionary fiscal policy in Home.

In the small country case, a permanent fiscal expansion would cause a real currency appreciation and a current account deterioration that would fully nullify any positive effect on aggregate demand. In effect, the expansionary impact of the Home fiscal ease would leak entirely abroad. This is because the counterpart of Home's lower current account balance must be higher current account balance abroad.

In the large country case, Foreign output still rises since Foreign's exports become relatively cheaper when Home's currency appreciates. In addition, now some of Foreign's increased spending increases Home exports, so Home's output actually increases along with the output of Foreign. Home's nominal interest rate must rise and Foreign's interest rate rises at the same time as well.

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Difficulty: Moderate

6) "Even under flexible exchange rate regime, governments could not be indifferent to the behavior of exchange rates and inevitably surrendered some of their policy autonomy in other areas to prevent exchange rate movements they viewed as harmful to their economies." Discuss.

Answer: True. One example is Volcker in October 1979 decreasing the U.S. money supply to halt further weakening of the dollar.

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Difficulty: Moderate

7) Which system of interest rates is theoretically worst for policy coordination among the industrial countries of the world? How has this played out since the 1980s?

Answer:

- pro-fixed rate theorists predicted that with floating rates, countries would only make policies that helped themselves at the expense of the world economy (although it has been empirically proven that in the short run policy decisions are exported, requiring the "dirty float")
- pro-floaters rebutted that the fixed rate system provided coordination only by giving the U.S. a dominant position
- during the 1980s industrial countries could have collectively reduced the effects of recession by coordinating their policies much more effectively, that is floating rates have not provided more coordination as predicted

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Difficulty: Moderate

8) Use the following table to illustrate the importance of macroeconomic policy coordination. Show that the two governments would have been happier if the two of them had adopted looser monetary policies, but given the policies that the other government did adopt, it is not in the interest of any individual government to change its course. Assume that each country wishes to get the biggest reduction in inflation rate at the lowest cost in terms of unemployment. This means that each country maximizes  $-\Delta\pi/\Delta U$ , the inflation reduction per point of increased unemployment. This means that each country maximizes  $-\Delta\pi/\Delta U$ , the inflation reduction per point of increased unemployment.

Foreign			
Home		Somewhat restrictive	Very restrictive
Somewhat restrictive		$\Delta\pi^* = -1\%$ $\Delta U^* = 1\%$	$\Delta\pi^* = -2\%$ $\Delta U^* = 1.75\%$
		$\Delta\pi = -1\%$ $\Delta U = 1\%$	$\Delta\pi = 0\%$ $\Delta U = 0.5\%$
Very restrictive		$\Delta\pi^* = 0\%$ $\Delta U^* = 0.5\%$	$\Delta\pi^* = -1.25\%$ $\Delta U^* = 1.5\%$
		$\Delta\pi = -2\%$ $\Delta U = 1.75\%$	$\Delta\pi = -1.25\%$ $\Delta U = 1.5\%$

Answer: One needs to translate the outcomes of the table above into policy payoffs. Assume that each country wishes to get the biggest reduction in inflation rate at the lowest cost in terms of unemployment. This means that each country maximizes  $-\Delta\pi/\Delta U$ , the inflation reduction per point of increased unemployment. This leads to the following table. The outcome of this game is on the lower right hand side of the table, where the two countries use very restrictive monetary policies rather than cooperating and using the better somewhat restrictive policies for both of them.

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Difficulty: Moderate

9) What are the outcomes of the following games, assuming the max-min criteria is used?

Foreign \ Home	Somewhat Restrictive	Very Restrictive
Somewhat Restrictive	$-\Delta\Pi^*/\Delta U^* = 5$ $-\Delta\Pi/\Delta U = 5$	$-\Delta\Pi^*/\Delta U^* = 8$ $-\Delta\Pi/\Delta U = 5$
Very Restrictive	$-\Delta\Pi^*/\Delta U^* = 6$ $-\Delta\Pi/\Delta U = 8$	$-\Delta\Pi^*/\Delta U^* = 4$ $-\Delta\Pi/\Delta U = 4$

Answer: There are two equilibria in this game, in which one regime uses a "somewhat restrictive" policy, while the other uses a "very restrictive" policy.

Page Ref: 576-583

Difficulty: Moderate

#### 19.10 What Has Been Learned Since 1973?

1) Since 1973 "dirty floats" have been required because

- A) PPP has not held.
- B) high inflation countries have stronger currencies than countries with low inflation.
- C) countries are not cooperating as much as original theorists predicted.
- D) in the short run, monetary and fiscal policy only affects the autonomous home economy.
- E) countries with a floating exchange rate have laissez-faire economies.

Answer: A

Page Ref: 583-586

Difficulty: Easy

2) What has been learned since 1973 with regards to the experience with floating exchange rate regime?

Answer:

(1) Monetary policy autonomy: Yes, however, floating rate did not insulate countries completely from foreign policy shock. In addition, no central bank can be indifferent to its currency's value in the foreign exchange market, thus the name "dirty float" rather than "clean float."

(2) Symmetry: No, the dollar remains an important currency; the DM and the yen have gained importance; the British pound declines in importance.

(3) The exchange rate as an automatic stabilizer: Good performance of the flexible regimes; many believe that, otherwise, major realignments of exchange rates should have taken place. However, some sectors suffered, such as agriculture.

(4) Discipline: Did countries abuse the autonomy afforded by floating rates? Inflation rates did accelerate after 1973.

(5) Destabilizing Speculation: Floating exchange rates have exhibited much more day-to-day volatility than the early advocates of floating would have predicted. However, exchange rates are assets prices and so considerable volatility is to be expected. Over the long run, they do not seem to support the notion of destabilizing speculation.

(6) International trade and investment: Critics of floating claimed that international trade and investment would suffer as a result of the increased uncertainty. This prediction was certainly wrong. The use of forward markets and other derivatives expanded dramatically. Still, some economists disagree about the benefit to international trade.

(7) Policy coordination: Floating exchange rates have not promoted policy coordination.

Page Ref: 583-586

Difficulty: Moderate

3) Economic theory and experience since 1973 indicate that, under floating exchange rates, a country's fiscal and monetary policies in the short-run and the long-run can

A) have both domestic and foreign economic impact.

B) have domestic or foreign economic impact, but not both.

C) have domestic but not foreign economic impact.

D) have foreign but not domestic economic impact.

E) have neither domestic nor foreign economic impact.

Answer: A

Page Ref: 583-586

Difficulty: Easy

4) Economic experience since 1973 indicate that, under floating exchange rates, symmetry

A) was not attained.

B) was attained almost immediately.

C) was attained over time as central banks held more U.S. dollars as a reserve currency.

D) has been difficult to measure and no consensus has emerged.

E) has been attained in foreign countries, but not domestically.

Answer: A

Page Ref: 583-586

Difficulty: Easy

- 5) Economic experience since 1973 indicate that, under floating exchange rates
- A) large and persistent departures from external balance were not prevented.
  - B) large and persistent departures from external balance were prevented.
  - C) changes in exchange rates failed to act as automatic stabilizers.
  - D) reduced monetary policy autonomy.
  - E) monetary policy autonomy was protected.

Answer: A

Page Ref: 583-586

Difficulty: Easy

#### 19.11 Are Fixed Exchange Rates Even an Option for Most Countries?

- 1) Maintaining a fixed exchange rate over the long run is today
- A) virtually impossible.
  - B) more vulnerable to speculative attacks than in the past.
  - C) preferable.
  - D) possible only in special cases such as maintaining strict capital controls.
  - E) aided by technology which allows instant movement of money between financial markets in different countries.

Answer: D

Page Ref: 586-587

Difficulty: Easy

- 2) The focus of policy in the 1990s was
- A) increasing trade.
  - B) increasing employment.
  - C) maintaining stable exchange rates.
  - D) holding down inflation and increasing domestic output.
  - E) levying beggar-thy-neighbor tariffs.

Answer: D

Page Ref: 586-587

Difficulty: Easy

- 3) "Fixed exchange rates are not even an option for most countries." Discuss.

Answer: Durable fixed exchange rate arrangements may not even be possible unless countries are willing to maintain strict controls over capital movements (as China does), or, at the other extreme, move to a shared single currency with their monetary partners (as in Europe). Even a country following prudent monetary and fiscal policies is not safe from speculative attacks on its fixed exchange rate.

Page Ref: 586-587

Difficulty: Moderate



4) "No central bank can be indifferent to its currency's value in the foreign exchange market."  
Discuss.

Answer:

- despite the "Monetary Policy Autonomy" theory of the original supporters of floating exchange rates
- exchange rate's role in inflation
- prices are sticky in the short run, so foreign developments can affect real interest rates and real exchange rates at home
- don't want their exchange rate to be too volatile as it affects the demand for their domestic products
- appreciation or depreciation can cause inflation that is difficult to counter
- banks intervene on a discretionary basis so it is still necessary for them to continue to hold foreign reserves
- "dirty floats" stabilize output and price level after shocks that affect exchange rates
- empirically: after 1973 countries have continued to intervene to affect exchange rates

Page Ref: 586-587

Difficulty: Moderate

#### 19.12 Appendix to Chapter 19: International Policy Coordination Failures

1) Coordination of economic policies among nations is a prisoner's \_\_\_\_\_ because all countries will be better off if they \_\_\_\_\_.

- A) dilemma; cooperate
- B) conundrum; cooperate
- C) sentence; compete
- D) screed; compete
- E) quandary; collude

Answer: A

Page Ref: 594-596

Difficulty: Easy

2) Coordination of economic policies among nations is a prisoner's \_\_\_\_\_ because if all countries go it alone, they will choose to \_\_\_\_\_.

- A) dilemma; compete
- B) conundrum; cooperate
- C) sentence; compete
- D) dilemma; cooperate
- E) quandary; collude

Answer: A

Page Ref: 594-596

Difficulty: Easy

3) Refer to the payoff matrix below, which \_\_\_\_\_ a prisoner's dilemma. If both countries go it alone, Home will choose Policy \_\_\_\_\_ and Foreign will choose Policy \_\_\_\_\_.

		Foreign	
		Policy A	Policy B
Home	Policy 1	4, 4	8, 3
	Policy 2	3, 5	6, 6

- A) is; 1; A
- B) is; 2; B
- C) is; 1; B
- D) is not; 2; B
- E) is not; 1; A

Answer: A

Page Ref: 594-596

Difficulty: Easy

4) Refer to the payoff matrix below, which \_\_\_\_\_ a prisoner's dilemma. If both countries cooperate, Home will choose Policy \_\_\_\_\_ and Foreign will choose Policy \_\_\_\_\_.

		Foreign	
		Policy A	Policy B
Home	Policy 1	4, 4	8, 3
	Policy 2	3, 5	6, 6

- A) is; 1; A
- B) is; 2; B
- C) is; 1; B
- D) is not; 2; B
- E) is not; 1; A

Answer: B

Page Ref: 594-596

Difficulty: Easy