

# Chapter 3

## The Balance of Payments

### ■ Learning Objectives

1. Explore the fundamentals of balance of payments accounting, how nations measure their own levels of international economic activity and cross-border payments
2. Examine the two fundamental accounts of balance of payments—the current account and financial account
3. Describe how changes in the balance of payments impact key macroeconomic rates—interest rates and exchange rates
4. Consider how international trade is altered by exchange rate changes
5. Explore the evolution of capital mobility and the conditions that sometimes lead to crisis

### ■ Chapter Outline

- I. Fundamentals of BOP Accounting
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  - B. The BOP as a Flow Statement
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  - C. BOP Accounting
- II. The Accounts of the Balance of Payments
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- H. Breaking the Rules: China's Twin Surpluses
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  - B. The BOP and Interest Rates
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- IV. Trade Balances and Exchange Rates
  - A. Trade and Devaluation
  - B. The J-Curve Adjustment Path
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    - 3. Fixed Exchange Rates (1944–1973)
    - 4. Floating Exchange Rates (1973–1997)
    - 5. The Emerging Era (1997–Present)
  - C. Capital Controls
  - D. Globalization of Capital Flows

## ■ Questions

1. **Balance of Payments Defined.** What is the balance of payments?

The measurement of all international economic transactions between the residents of a country and foreign residents is called the balance of payments (BOP).

2. **BOP Data.** What institution provides the primary source of similar statistics for balance of payments and economic performance worldwide?

The primary source of similar statistics for balance of payments and economic performance worldwide is the International Monetary Fund, *Balance of Payments Statistics*.

3. **Importance of BOP.** Business managers and investors need BOP data to anticipate changes in host country economic policies that might be driven by BOP events. From the perspective of business managers and investors list three specific signals that a country's BOP data can provide.

- The BOP is an important indicator of pressure on a country's foreign exchange rate, and thus on the potential for a firm trading with or investing in that country to experience foreign exchange gains or losses. Changes in the BOP may predict the imposition or removal of foreign exchange controls.
- Changes in a country's BOP may signal the imposition or removal of controls over payment of dividends and interest, license fees, royalty fees, or other cash disbursements to foreign firms or investors.
- The BOP helps to forecast a country's market potential, especially in the short run. A country experiencing a serious trade deficit is not likely to expand imports as it would if running a surplus. It may, however, welcome investments that increase its exports.

4. **Flow Statement.** What does it mean to describe the balance of payments as a flow statement?

The BOP is often misunderstood because many people infer from its name that it is a *balance sheet*, whereas in fact it is a *cash flow statement*. By recording all international transactions over a period such as a year, the BOP tracks the continuing flows of purchases and payments between a country and all other countries. It does not add up the value of all assets and liabilities of a country on a specific date like a balance sheet does for an individual firm.

5. **Economic Activity.** What are the two main types of economic activity measured by a country's BOP?

- Current transactions having cash flows completed within one year, such as for the import or export of goods and services.
- Capital and financial transactions, in which investors acquire ownership of a foreign asset, such as a company, or a portfolio investment, such as bonds or shares of common stock.

6. **Balance.** Why does the BOP always “balance”?

The algebraic sum of all flows accounted for in the current account and the capital and financial accounts should, in theory, equal changes in a country’s monetary reserves. Because data for the balance of payments is collected on a single entry basis and some data is missed, the equalization usually does not occur. The imbalance is plugged by an entry called “errors and omissions” which makes the accounts balance.

7. **BOP Accounting.** If the BOP were viewed as an accounting statement, would it be a balance sheet of the country’s wealth, an income statement of the country’s earnings, or a funds flow statement of money into and out of the country?

A country’s balance of payments is similar to a corporation’s funds flow statement in that the balance of payments records events that cause the receipt (earnings) and disbursement (expenditures) into and out of the country.

8. **Current Account.** What are the main component accounts of the current account? Give one debit and one credit example for each component account for the United States.

The main components and possible examples are as follows:

*Trade in goods:*

Debit: U.S. firm purchases German machine tools.

Credit: Singapore Air Lines buys a Boeing jet.

*Trade in services:*

Debit: An American takes a cruise on a Dutch cruise line.

Credit: A Brazilian tourist agency places an ad in *The New York Times*.

*Income payments and receipts:*

Debit: The U.S. subsidiary of a Taiwanese computer manufacturer pays dividends to its parent.

Credit: A British company pays the salary of its executive stationed in New York.

*Unilateral current transactions.*

Debit: The U.S.-based International Rescue Committee pays for an American working on the Afghan border.

Credit: A Spanish company pays tuition for an employee to study for an MBA in the United States.

9. **Real Versus Financial Assets.** What is the difference between a real asset and a financial asset?

Real assets are goods (merchandise) and useful services. Financial assets are financial claims, such as shares of stock or bonds.

10. **Direct versus Portfolio Investments.** What is the difference between a direct foreign investment and a portfolio foreign investment? Give an example of each. Which type of investment is a multinational industrial company more likely to make?

A direct investment is made with the intent that the investor will have a degree of control over the asset acquired. Typical examples are the building of a factory in a foreign country by the subsidiary of a multinational enterprise or the acquisition of more than 10% of the voting shares of a foreign corporation. A portfolio investment is the purchase of less than 10% of the voting shares of a foreign corporation or the purchase of debt instruments. Multinational enterprises are more likely to engage in direct foreign investment than in portfolio investment.

11. **Net International Investment Position.** What is a country's *net international investment position* and how does it differ from the balance of payments?

The *net international investment position* (NIIP) of a country is an annual measure of the assets owned abroad by its citizens, its companies, and its government, less the assets owned by foreigners public and private in their country. Whereas a country's balance of payments is often described as a country's *international cash flow statement*, the NIIP may be interpreted as the country's *international balance sheet*. NIIP is a country's stock of foreign assets minus its stock of foreign liabilities.

12. **The Financial Account.** What are the primary sub-components of the financial account? Analytically, what would cause net deficits or surpluses in these individual components?

The main components and possible examples are as follows:

*Direct investment.*

Debit: Ford Motor Company builds a factory in Australia.

Credit: Ford Motor Company sells its factory in Britain to British investors.

*Portfolio investment.*

Debit: An American buys shares of stock of a European food chain on the Frankfurt Stock Exchange.

Credit: The government of Korea buys U.S. treasury bills to hold as part of its foreign exchange reserves.

*Net financial derivatives.*

Debit: A U.S. firm purchases a financial derivative like a currency swap in London

Credit: A U.S. firm sells a financial derivatives like a forward contract on the dollar versus the pound to a London buyer

*Other investment.*

Debit: A U.S. firm deposits \$1 million in a bank balance in London.

Credit: A U.S. firm generates an account receivable for exports to Canada.

13. **Classifying Transactions.** Classify each of the following as a transaction reported in a sub-component of the current account or the capital and financial accounts of the two countries involved:
- A U.S. food chain imports wine from Chile. Debit to U.S. goods part of current account, credit to Chilean goods part of current account.
  - A U.S. resident purchases a euro-denominated bond from a German company. Debit to U.S. portfolio part of financial account; credit to German portfolio of financial account.
  - Singaporean parents pay for their daughter to study at a U.S. university. Credit to U.S. current transfers in current account; debit to Singapore current transfers in current account.
  - A U.S. university gives a tuition grant to a foreign student from Singapore. If the student is already in the United States, no entry will appear in the balance of payments because payment is between U.S. residents. (A student already in the United States becomes a resident for balance of payments purposes.)
  - A British Company imports Spanish oranges, paying with Eurodollars on deposit in London. A debit to the goods part of Britain's current account; a credit to the goods part of Spain's current account.
  - The Spanish orchard deposits half the proceeds in a Eurodollar account in London. No recording in the U.S. balance of payments, as the transaction was between foreigners

- using dollars already deposited abroad. A debit to the income receipts/payments of the British current account; a credit to the income receipts/payments of the Spanish current account.
- g. A London-based insurance company buys U.S. corporate bonds for its investment portfolio. A debit to the portfolio investment section of the British financial accounts; a credit to the portfolio investment section of the U.S. balance of payments.
  - h. An American multinational enterprise buys insurance from a London insurance broker. A debit to the services part of the U.S. current account; a credit to the services part of the British current account.
  - I. A London insurance firm pays for losses incurred in the United States because of an international terrorist attack. A debit to the services part of the British current account; a credit to the services part of the U.S. current account.
  - j. Cathay Pacific Airlines buys jet fuel at Los Angeles International Airport so it can fly the return segment of a flight back to Hong Kong. Hong Kong keeps its balance of payments separate from those of the People's Republic of China. Hence a debit to the goods part of Hong Kong's current account; a credit to the goods part of the U.S. current account.
  - k. A California-based mutual fund buys shares of stock on the Tokyo and London stock exchanges. A debit to the portfolio investment section of the U.S. financial account; a credit to the portfolio investment section of the Japanese and British financial accounts.
  - l. The U.S. army buys food for its troops in South Asia from local vendors. A debit to the goods part of the U.S. current account; a credit to the goods part of the Thai current account.
  - m. A Yale graduate gets a job with the International Committee of the Red Cross working in Bosnia and is paid in Swiss francs. A debit to the income part of the Swiss current account; a credit to the income part of the Bosnia current account. This assumes the Yale graduate spends her earnings within Bosnia; should she deposit the sum in the United States, then the credit would be to the income part of the U.S. current account.
  - n. The Russian government hires a Norwegian salvage firm to raise a sunken submarine. A debit to the service part of Russia's current account; a credit to the service part of the Netherlands's current account.
  - o. A Colombian drug cartel smuggles cocaine into the United States, receives a suitcase of cash, and flies back to Colombia with that cash. This would not get captured in the goods part of the U.S. or the Colombian current accounts. Assuming the cash was "laundered" appropriately, from the point of view of the smugglers, bank accounts in

the United States or somewhere else (probably not Colombia, possibly Switzerland) would be credited. This imbalance would end up in the errors and omissions part of the U.S. balance of payments.

- p. The U.S. government pays the salary of a Foreign Service Officer working in the U.S. embassy in Beirut. Diplomats serving in a foreign country are regarded as residents of their home country, so this payment would not be recorded in any balance of payments accounts. If or when the diplomat spent the money in Beirut, at that time a debit should be incurred in the goods or services part of the U.S. current account and a contrary entry in the Lebanon balance of payments. It is doubtful that the goods or services transaction would get reported or recorded, although on a net basis changes in bank balances would reflect half of the transaction.
  - q. A Norwegian shipping firm pays U.S. dollars to the Egyptian government for passage of a ship through the Suez Canal. If the Norwegian firm paid with dollar balances held in the United States and the Suez Canal Authority of Egypt redeposited the proceeds in the United States, no entry would appear in the U.S. balance of payments. Norway would debit a purchase of services, and Egypt would credit a sale of services.
  - r. A German automobile firm pays the salary of its executive working for a subsidiary in Detroit. Germany would record a debit in the income payments/receipts in its current account; the U.S. would record a credit in the income payments/receipts in its current account.
  - s. An American tourist pays for a hotel in Paris with his American Express card. A debit would be recorded in the services part of the U.S. current account; a credit would be recorded in the services part of the French current account.
  - t. A French tourist from the provinces pays for a hotel in Paris with his American Express card. A French resident most likely has a French-issued credit card, issued by the French subsidiary of American Express. In this instance, no entry would appear in either country's balance of payments. If, later, the French subsidiary of American Express paid a dividend back to the U.S., that would be recorded in the income part of the current accounts.
  - u. A U.S. professor goes abroad for a year on a Fulbright grant. The current transfers section of the U.S. current account would be debited for the salary paid to a foreign resident. (Even though an American, the professor is a foreign resident during the time he lives abroad.) The current transfers section of the host country's current account would be credited.
14. **The Balance.** What are the main summary statements of the balance of payments accounts and what do they measure?



- The *balance on goods* (also called the *balance of trade*) measures the balance on imports and exports of merchandise.
- The *balance on current account* expands the balance on goods to include receipts and expenses for services, income flows, and unilateral transfers.
- The *basic balance* measures all of the international transactions (current, capital, and financial) that come about because of market forces, that is, the balance resulting from all decisions made for private motives. (This includes international operating expenses of the government.)
- The *overall balance* (also called the *official settlements balance*) is the total change in a country's foreign exchange reserves caused by the basic balance plus any governmental action to influence foreign exchange reserves.

15. **Twin Surpluses.** Why is China's twin surpluses—a surplus in both the current and financial accounts—considered unusual?

China's surpluses in both the current and financial accounts—termed the twin surplus in the business press—is highly unusual. Ordinarily, countries experiencing large current account deficits fund these deficits through equally large surpluses in the financial account, and vice versa.

China has experienced a massive current account surplus and a sometimes sizable financial account surplus simultaneously. This is rare and an indicator of just how exceptional the growth of the Chinese economy has been. Although current account surpluses of this magnitude would ordinarily create a financial account deficit, the positive prospects of the Chinese economy have drawn such massive capital inflows into China in recent years that the financial account too is in surplus.

16. **Capital Mobility—United States.** The U.S. dollar has maintained or increased its value over the past 20 years despite running a gradually increasing current account deficit. Why has this phenomenon occurred?

The U.S. dollar has maintained or increased its value over the past 20 years despite running a gradually increasing current account deficit because the current account deficit has been more than offset by an inflow of dollars on capital and financial accounts.

17. **Capital Mobility—Brazil.** Brazil has experienced periodic depreciation of its currency over the past 20 years despite occasionally running a current account surplus. Why has this phenomenon occurred?

Brazil has experienced periodic depreciation of its currency because of speculative flights of capital out of Brazil in response to political or economic shocks, including periods of hyperinflation.

18. **BOP Transactions.** Identify the correct BOP account for each of the following transactions.

- a. A German based pension fund buys U.S. government 30-year bonds for its investment portfolio.

Financial account: portfolio investment liabilities

- b. Scandinavian Airlines System (SAS) buys jet fuel at Newark Airport for its flight to Copenhagen.

Current account: Goods: Exports FOB

- c. Hong Kong students pay tuition to the University of California, Berkeley.

Current account: Services: credit

- d. The U.S. Air Force buys food in South Korea to supply its air crews.

Current account: Goods: Imports

- e. A Japanese auto company pays the salaries of its executives working for its U.S. subsidiaries.

Current account: Services: credit

- f. A U.S. tourist pays for a restaurant meal in Bangkok.

Current account: Services: debit

- g. A Colombian citizen smuggles cocaine into the United States, receives cash, and smuggles the dollars back into Colombia.

Unrecorded but should be a current account item.

- h. A U.K. corporation purchases a euro-denominated bond from an Italian MNE.

Does not enter the U.S. balance of payments

19. **BOP and Exchange Rates.** What is the relationship between the balance of payments and a fixed or floating exchange rate regime?

20. **Fixed Exchange Rate System.** Under a fixed exchange rate system, the government bears the responsibility to ensure that the BOP is near zero. If the sum of the current and capital accounts do not approximate zero, the government is expected to intervene in the foreign exchange market by buying or selling official foreign exchange reserves. If the sum of the

first two accounts is greater than zero, a surplus demand for the domestic currency exists in the world. To preserve the fixed exchange rate, the government must then intervene in the foreign exchange market and sell domestic currency for foreign currencies or gold in order to bring the BOP back to near zero.

21. **Floating Exchange Rate System.** Under a floating exchange rate system, the government of a country has no responsibility to peg its foreign exchange rate. The fact that the current and capital account balances do not sum to zero will automatically—in theory—alter the exchange rate in the direction necessary to obtain a BOP near zero. For example, a country running a sizable current account deficit and a capital and financial accounts balance of zero will have a net BOP deficit. An excess supply of the domestic currency will appear on world markets. Like all goods in excess supply, the market will rid itself of the imbalance by lowering the price. Thus, the domestic currency will fall in value, and the BOP will move back toward zero.

22. **J-Curve Dynamics.** What is the J-Curve adjustment path?

A country's trade balance may change, as a result of an exchange rate change, in the shape of a flattened "j." International economic analysis characterizes the trade balance adjustment process as occurring in three stages: (1) the currency contract period; (2) the pass-through period; and (3) the quantity adjustment period. Assuming that the trade balance is already in deficit prior to the devaluation, a devaluation may actually result in the trade balance first worsening before improving as a result of the three distinct commercial periods.

23. **Evolution of Capital Mobility.** Has capital mobility improved steadily over the past 50 years?

The magnitude of capital movements globally has increased dramatically over the past 50 years. Capital inflows and outflows for major industrial countries now dwarf the transaction values of current account activities. These massive capital movements, if allowed to move without restriction, may cause increasing instability in economies, however, like that of Iceland in recent years. So to ask if "capital mobility has improved" is a bit of tricky question; capital mobility has definitely increased, if that is what is meant by "improved."

24. **Restrictions on Capital Mobility.** What factors seem to play a role in a government's choice to restrict capital mobility?

There is a spectrum of motivations for capital controls, with most associated with either insulating the domestic monetary and financial economy from outside markets or political motivations over ownership and access interests. Capital controls are just as likely to occur

over capital inflows as they are over capital outflows. Although there is a tendency for a negative connotation to accompany capital controls (possibly the bias of the word “control” itself), the impossible trinity requires that capital flows be controlled if a country wishes to maintain a fixed exchange rate and an independent monetary policy.

25. **Capital Controls.** Which do most countries control, capital inflows or capital outflows? Why?

Although the fear of major government policy makers is often the flight of capital, capital outflows, massive capital inflows are often considered potentially more disruptive if not managed correctly. As a result, most countries are slow and careful to deregulate capital inflows, allowing them more control over what kinds of capital over what periods of time enter the country. If regulated on entry, they are typically easier to regulate than on exit.

26. **Globalization and Capital Mobility.** How does capital mobility typically differ between industrialized countries and emerging market countries?

Emerging market countries, by definition, have relatively small and undeveloped financial systems and sectors. Outside of some potential foreign direct investment opportunities, they offer few choices for capital to flow in of substance. Industrialized countries, however, typically have large and sophisticated financial sectors that offer a multitude of financial investment options and assets, which on occasion may attract large capital inflows (and in other periods, may suffer large capital outflows).