Part Three: The Balance of Payments, Foreign Exchange Markets, and Exchange Rates

Chapter 13
Balance of Payments

"Nothing, however, can be more absurd than this whole doctrine of the balance of trade, upon which, not only these restraints, but almost all the other regulations of commerce are founded."

Adam Smith, Wealth of Nations, Book IV, Chapter III.

I. Chapter Outline

II. Chapter Summary and Review

The **balance of payments** is a summary of all of the trade and financial transactions between a country and its trading partners over some period of time. Distinguishing between a purely domestic transaction and an international transaction, however, can occasionally be difficult. For example, is a branch of the U.S.-based Sears store in Mexico City exporting when it sells goods to residents of Mexico City? Is the sale of a book in Cambridge, MA to a visitor from Mexico City an export? For balance of payments purposes, an entity is classified as domestic or foreign according to its normal and customary residence or location. According to this definition, the Sears branch in Mexico is Mexican, despite being a branch of a

U.S. based entity, and its sales are not counted as U.S. exports. The visitor from Mexico, who normally lives in Mexico, is a foreigner and the sale of the book in Cambridge, MA is an export, although such sales may be difficult to capture in the balance of payments statistics.

If the United States exports goods, then buyers in other countries will have to deliver dollars to the United States. Foreigners can acquire those dollars in a number of ways. One way is to earn them by selling goods to the United States (exporting to the US), which are imports of the United States. Here, the outflow and inflow of dollars due to the movement of goods are equal. Another possibility is that foreigners can sell U.S. assets they have acquired in the past. In this case the outflow (from the U.S.) of dollars from the sale of the asset matches the inflow of dollars due to U.S. exports. Another possibility is to borrow U.S. funds. In this case the outflow due to foreign borrowing matches the inflow of dollars due to the export.

The point is that every international transaction has a matching inflow and outflow. If foreigners buy goods from the United States the US dollars used to buy the goods come from somewhere, so there must be an outflow of dollars to foreigners in order to fund the inflow of dollars to buy the goods. If U.S. citizens import goods, then there must be an inflow of foreign currency in order for an outflow to take place to buy the imports.

This matching of inflows and outflows for every international transaction means that every entry recording an inflow (outflow) in the balance of payments has an accompanying entry that records an outflow (inflow). This is the nature of **double-entry bookkeeping**. Transactions that give rise to an inflow are recorded as **credit transactions** and carry a "+" sign. Transactions that give rise to an outflow are recorded as **debit transactions** and carry a "-" sign.

Exports give rise to an inflow of funds so an export of a good or service is recorded as a credit. Imports produce an outflow of funds so an import of a good or service will be recorded as a debit. When financial assets are bought or sold, there is a flow of financial capital, which is recorded as a **financial outflow** or a **financial inflow**. A financial inflow for the U.S. occurs whenever a foreigner buys assets in the U.S., or when a U.S. citizen liquidates a foreign asset. A financial outflow occurs when a U.S. citizen buys a foreign asset, or when a foreigner sells a U.S. asset.

Consider a few examples. In each example, the recording of the transaction is viewed from the U.S. balance of payments perspective.

Example 1: A U.S. exporter sells $1,000 in goods to a UK firm that pays for the

goods by liquidating a U.S. Treasury Bill. The export gives rise to an inflow and is recorded as a debit, while the sale of the U.S. Treasury bill by foreigners means an outflow of funds and is recorded as a debit. The transaction is shown in Table 1.

Table 1

	Credit (+)	Debit (-)
Exports	$1,000	
Financial Outflow		$1,000

Example 2: A U.S. exporter sells $1,000 of goods to a UK firm that pays for the goods by buying dollars from its bank in London. The export, as in Example 1, is a credit. The bank in London, by selling its dollars, is liquidating its holdings of U.S. assets (dollars), and so is considered an outflow from the U.S. The entry in this example is identical to that of Example 1.

Example 3: A U.S. importer buys $5,000 of wine from a French exporter, paying for the wine by borrowing francs in Paris. The imports of wine produce an outflow of funds that is recorded as a debit. The borrowing of francs in Paris is a financial inflow to the U.S. and is recorded as a credit. The lender in Paris is lending to the U.S. importer. The transaction is shown in Table 2.

Table 2

	Credit (+)	Debit (-)
Imports		$5,000
Financial Inflow	$5,000	

Example 4: A German bank buys a $10,000 U.S. Treasury bill and pays by liquidating its deposit account at a U.S. bank. The purchase of the U.S. Treasury bill is a financial inflow for the U.S. and is recorded as a credit. The liquidation of the U.S. bank account by the German bank is a financial outflow and is recorded as a debit. In this case, both sides of the transaction are recorded on the financial capital account, shown in Table 3.

Table 3

	Credit (+)	Debit (-)
Financial Outflow		$10,000
Financial Inflow	$10,000	

Example 5: A migrant worker sends $250 in US currency to her family in Mexico.

International gifts like these are called **unilateral transfers**. This transfer gives rise to an outflow and the receipt of funds in Mexico means someone in Mexico now holds dollars. The holding of dollars is a claim on the United States and so is a financial inflow. The transaction is shown in Table 4. (If the dollars are converted to pesos at a bank in Mexico, then the ownership of the claim on the U.S. changes; otherwise the transfer is identical.)

Table 4

	Credit (+)	Debit (-)
Unilateral Transfers		$250
Financial Inflow	$250	

Here is the crucial point for understanding the balance of payments concepts: although the actual balance of payments is quite complex and includes millions of entries, double-entry bookkeeping means that the sum of all credits (+) must equal the sum of all debits (-). ***The balance of payments always balances. In this respect, there is never a balance of payments deficit or surplus. It is only meaningful to speak of deficits or surpluses for subsets of the balance of payments.***

The balance of debits and credits for exports and imports of goods is a subset called the **balance of trade**, or the **merchandise trade balance**. The balance of debits and credits for exports and imports of goods **and** services is called the **balance of trade in goods and services**. If a balance is calculated for the total position in goods and services, net investment income and unilateral transfers, then that balance is the balance on **current account**. All current account items are those that affect the source or disposition of current income. (There is also a capital account that is typically too small to warrant discussion. The *International Economics* text briefly describes these transactions.)

The items left after the current account balance are called **financial account** items. These items include the net flow of stocks, bonds, and the purchase of foreign companies. ***Note that because the entire balance of payments must balance, a deficit on current account means a surplus on financial account, and vice versa***. (It's important to mention that the term "financial account" is relatively new. This account was formerly called "capital account." The term capital account now refers to other items, typically very small, as mentioned above.)

There is, however, a meaningful sense in which a nation's balance of payments can be in surplus or deficit. The items in the current account and most of

those in the financial account are privately motivated; they are motivated by something other than the state of balance of payments. These items are called **autonomous transactions** because they are autonomous from, or not motivated by, the state of the balance of payments. There can be a balance of payments deficit or surplus for these autonomous transactions, as with any subset of the balance payments. If all of the autonomous transactions produce a deficit, it means that there is an autonomous outflow without a corresponding autonomous inflow. In light of the above discussion about double-entry bookkeeping, how can this happen? It can happen if the autonomous outflow is offset by an financial inflow produced by government through its **official reserve account**, the balance of which is called the **official settlements balance**. Official reserve transactions are transactions recorded in the financial account and are called **accommodating transactions** because they allow (accommodate) a mismatch of credits and debits from autonomous transactions. If government refrains from reserve (accommodating) transactions, then autonomous transactions must net to zero because total inflows must equal total outflows.

The financial account of the U.S. balance of payments shows the yearly (and quarterly) ***changes*** in U.S. financial assets held abroad and foreign financial assets held in the United States. The **international investment position** shows the sum total of all those past changes. If, for example, there were a *net* financial inflow of $1,000 into a country (*net* lending by foreigners) for all twenty years of its existence, then the country would owe a total of $20,000 to foreigners (abstracting from any accumulated interest). The $20,000 debt would be the international investment position of the country.

Beginning in the early to mid-1980s, the United States began to run large current account deficits, which implies large financial account surpluses (official reserve movements being small). Financial account surpluses mean that the United States is borrowing from other countries. These large financial account surpluses were responsible for turning the United States from a creditor nation to a debtor nation by the late 1980s.

III. Questions

1. Record the following U.S. balance of payments transactions, using entries like those shown in Tables 1-4 of this chapter's Summary and Review above.

a) The U.S. exports $500 of computers to France, with payment in dollars to take

place in three months

b) The U.S. imports $400 of goods from the U.K., making immediate payment by buying pounds from a U.K. bank

c) You travel to the U.K. for a holiday and spend $300

d) The U.S. gives aid of $200 to a developing country

e) A U.S. citizen buys $100 of stock (a long-term asset) in Belgium and pays with Euros. The Euros are purchased from a U.S. bank that reduces its holdings of Euros and increases its holdings of dollars

f) A U.K. citizen buys a $50 short-term U.S. Treasury bill. The U.K. citizen buys the dollars from a U.S. bank

2. a) Using the transactions you recorded in Question 1, fill in the U.S. balance of payments table below. Note that a number of the transactions you recorded in Question 1 involved numerous short-term financial flows; it's useful to net all the short-term financial capital debits and credits into one number.

U.S. Balance of Payments

Account	Credit (+)	Debit (-)
Merchandise Exports Merchandise Imports Tourist Services Unilateral Transfers Long-Term Financial Flows Short-Term Financial Flows		
Balance		

b) Calculate the U.S. balance of trade in this example.

c) Calculate the U.S. balance of trade in goods and services in this example.

d) Calculate the U.S. balance on current account in this example.

e) Calculate the U.S. balance on financial account in this example.

f) Is the entire U.S. balance of payments in the above table in deficit or surplus?

3. a) In what sense is it meaningless to speak of a balance of payments surplus or deficit?

b) In what sense is it meaningful to speak of a balance of payments surplus or deficit?

4. By how much will the international investment position of the United States change as a result of the transactions you recorded in Questions 1 and 2?

5. a) How has the U.S. balance of payments and its international investment position changed beginning in the mid-1980s?

b) What are the benefits associated with the change in the U.S. international investment position you described in part a?

c) What are some possible costs of the change in the U.S. international investment position you described in part a?