

## 1.3: Exchange Rate Regimes, Trade Balances, and Investment Positions

### Learning Objective

1. Learn current values for several important international macroeconomic indicators from a selected set of countries, including the trade balance, the international investment position, and exchange rate systems.

Countries interact with each other in two important ways: trade and investment. Trade encompasses the export and import of goods and services. Investment involves the borrowing and lending of money and the foreign ownership of property and stock within a country. The most important international macroeconomic variables, then, are the trade balance, which measures the difference between the total value of exports and the total value of imports, and the exchange rate, which measures the number of units of one currency that exchanges for one unit of another currency.

### Exchange Rate Regimes

Because countries use different national currencies, international trade and investment requires an exchange of currency. To buy something in another country, one must first exchange one's national currency for another. Governments must decide not only how to issue its currency but how international transactions will be conducted. For example, under a traditional gold standard, a country sets a price for gold (say \$20 per ounce) and then issues currency such that the amount in circulation is equivalent to the value of gold held in reserve. In this way, money is "backed" by gold because individuals are allowed to convert currency to gold on demand.

Today's currencies are not backed by gold; instead most countries have a central bank that issues an amount of currency that will be adequate to maintain a vibrant growing economy with low inflation and low unemployment. A central bank's ability to achieve these goals is often limited, especially in turbulent economic times, and this makes monetary policy contentious in most countries.

One of the decisions a country must make with respect to its currency is whether to fix its exchange value and try to maintain it for an extended period, or whether to allow its value to float or fluctuate according to market conditions. Throughout history, **fixed exchange rates** have been the norm, especially because of the long period that countries maintained a gold standard (with currency *fixed* to gold) and because of the fixed exchange rate system (called the Bretton Woods system) after World War II. However, since 1973, when the Bretton Woods system collapsed, countries have pursued a variety of different exchange rate mechanisms.

The International Monetary Fund (IMF), created to monitor and assist countries with international payments problems, maintains a list of country currency regimes. The list displays a wide variety of systems currently being used. The continuing existence of so much variety demonstrates that the key question, "Which is the most suitable currency system?" remains largely unanswered. Different countries have chosen differently. Later, this course will explain what is necessary to maintain a fixed exchange rate or **floating exchange rate** system and what are some of the pros and cons of each regime. For now, though, it is useful to recognize the varieties of regimes around the world.

Figure 1.3.1: Table 1.4 Exchange Rate Regimes. Source: International Monetary Fund, De Facto Classification of Exchange Rate Regimes and Monetary Policy Framework, 2008.

Country/Region	Regime
Euro Area	Single currency within: floating externally
United States	Float
China	Crawling peg
Japan	Float
India	Managed float
Russia	Fixed to composite
Brazil	Float
South Korea	Float
Indonesia	Managed float

Country/Region	Regime
Spain	Euro zone; fixed in the European Union; float externally
South Africa	Float
Estonia	Currency board

Table 1.4 shows the selected set of countries followed by a currency regime. Notice that many currencies—including the U.S. dollar, the Japanese yen, the Brazilian real, the South Korean won, and the South African rand—are independently floating, meaning that their exchange values are determined in the private market on the basis of supply and demand. Because supply and demand for currencies fluctuate over time, so do the exchange values, which is why the system is called *floating*.

Note that India and Indonesia are classified as “managed floating.” This means that the countries’ central banks will sometimes allow the currency to float freely, but at other times will nudge the exchange rate in one direction or another.

China is listed as maintaining a crawling peg, which means that the currency is essentially fixed except that the Chinese central bank is allowing its currency to appreciate slowly with respect to the U.S. dollar. In other words, the fixed rate itself is gradually but unpredictably adjusted.

Estonia is listed as having a currency board. This is a method of maintaining a fixed exchange rate by essentially eliminating the central bank in favor of a currency board that is mandated by law to follow procedures that will automatically keep its currency fixed in value.

Russia is listed as fixing to a composite currency. This means that instead of fixing to one other currency, such as the U.S. dollar or the euro, Russia fixes to a basket of currencies, also called a composite currency. The most common currency basket to fix to is the Special Drawing Rights (SDR), a composite currency issued by the IMF used for central bank transactions.

Finally, sixteen countries in the European Union are currently members of the euro area. Within this area, the countries have retired their own national currencies in favor of using a single currency, the euro. When all countries circulate the same currency, it is the ultimate in fixity, meaning they have fixed exchange rates among themselves because there is no need to exchange. However, with respect to other external currencies, like the U.S. dollar or the Japanese yen, the euro is allowed to float freely.

## Trade Balances and International Investment Positions

One of the most widely monitored international statistics is a country’s trade balance. If the value of total exports from a country exceeds total imports, we say a country has a **trade surplus**. However, if total imports exceed total exports, then the country has a **trade deficit**. Of course, if exports equal imports, then the country has balanced trade.

The terminology is unfortunate because it conveys a negative connotation to trade deficits, a positive connotation to trade surpluses, and perhaps an ideal connotation to trade balance. Later in the text, we will explain if or when these connotations are accurate and when they are inaccurate. Suffice it to say, for now, that sometimes trade deficits can be positive, trade surpluses can be negative, and trade balance could be immaterial.

Regardless, it is popular to decry large deficits as being a sign of danger for an economy, to hail large surpluses as a sign of strength and dominance, and to long for the fairness and justice that would arise if only the country could achieve balanced trade. What could be helpful at an early stage, before delving into the arguments and explanations, is to know how large the countries’ trade deficits and surpluses are. A list of trade balances as a percentage of GDP for a selected set of countries is provided in Table 1.5.

It is important to recognize that when a country runs a trade deficit, residents of the country purchase a larger amount of foreign products than foreign residents purchase from them. Those extra purchases are financed by the sale of domestic assets to foreigners. The asset sales may consist of property or businesses (a.k.a. investment), or it may involve the sale of IOUs (borrowing). In the former case, foreign investments entitle foreign owners to a stream of profits in the future. In the latter case, foreign loans entitle foreigners to a future repayment of principal and interest. In this way, trade and international investment are linked.

Because of these future profit takings and loan repayments, we say that a country with a deficit is becoming a debtor country. On the other hand, anytime a country runs a trade surplus, it is the domestic country that receives future profit and is owed repayments. In this case, we say a country running trade surpluses is becoming a creditor country. Nonetheless, trade deficits or surpluses only represent the debts or credits extended over a one-year period. If trade deficits continue year after year, then the total external debt



There is an oft-quoted idiom used to describe this problem that goes, “If you owe me \$100, *you* have a problem, but if you owe me a million dollars, then *I* have a problem.” Consequently, international creditor countries may be in jeopardy if their credits exceed 30, 40, or 50 percent of GDP.

Note from the data that the United States is running a trade deficit of 3.1 percent of GDP, which is down markedly from about 6 percent a few years prior. The United States has also been running a trade deficit for more than the past thirty years and as a result has amassed a debt to the rest of the world larger than any other country, totaling about \$3.4 trillion or almost 25 percent of U.S. GDP. As such, the U.S. is referred to as the largest debtor nation in the world.

In stark contrast, during the past twenty-five or more years Japan has been running persistent trade surpluses. As a result, it has amassed over \$2.4 trillion of credits to the rest of the world or just over 50 percent of its GDP. It is by far the largest creditor country in the world. Close behind Japan is China, running trade surpluses for more than the past ten years and amassing over \$1.5 trillion of credits to other countries. That makes up 35 percent of its GDP and makes China a close second to Japan as a major creditor country. One other important creditor country is Russia, with over \$250 billion in credits outstanding or about 15 percent of its GDP.

Note that all three creditor nations are also running trade surpluses, meaning they are expending their creditor position by becoming even bigger lenders.

Like the United States, many other countries have been running persistent deficits over time and have amassed large international debts. The most sizeable are for Spain and Estonia, both over 80 percent of their GDPs. Note that Spain continues to run a trade deficit that will add to its international debt whereas Estonia is now running a trade surplus that means it is in the process of repaying its debt. South Korea and Indonesia are following a similar path as Estonia. In contrast, the Euro area, South Africa, and to a lesser degree Brazil and India are following the same path as the United States—running trade deficits that will add to their international debt.

#### Key takeaways

- Exchange rates and trade balances are two of the most widely tracked international macroeconomic indicators used to discern the health of an economy.
- Different countries pursue different exchange rate regimes, choosing variations of floating and fixed systems.
- The United States, as the largest national economy in the world, is a good reference point for comparing international macroeconomic data.
  - The United States maintains an independently floating exchange rate, meaning that its value is determined on the private market.
  - The United States trade deficit is currently at 3.1 percent of GDP. This is down from 6 percent recently but is one of a string of deficits spanning over thirty years.
  - The U.S. international investment position stands at almost 25 percent of GDP, which by virtue of the U.S. economy size, makes the United States the largest debtor nation in the world.
- Several other noteworthy statistics are presented in this section:
  - China maintains a crawling peg fixed exchange rate.
  - Russia fixes its currency to a composite currency while Estonia uses a currency board to maintain a fixed exchange rate.
  - Japan is the largest creditor country in the world, followed closely by China and more distantly by Russia.
  - Spain and Estonia are examples of countries that have serious international debt concerns, with external debts greater than 80 percent of their GDPs.

#### Exercises

1. **Jeopardy Questions.** As in the popular television game show, you are given an answer to a question and you must respond with the question. For example, if the answer is “a tax on imports,” then the correct question is “What is a tariff?”
  - The de facto exchange rate regime implemented in China in 2008.
  - The de facto exchange rate regime implemented in the United States in 2008.
  - The de facto exchange rate regime implemented in Indonesia in 2008.
  - The de facto exchange rate regime implemented in Estonia in 2008.
  - The name for the exchange rate regime in which a fixed exchange rate is adjusted gradually and unpredictably.

- The name for the exchange rate regime in which the exchange rate value is determined by supply and demand for currencies in the private marketplace.
  - The term for the measure of the total value of foreign assets held by domestic residents minus the total value of domestic assets held by foreigners.
  - This country was the largest creditor country in the world as of 2008.
2. Use the information in Table 1.1 and Table 1.5 to calculate the dollar values of the trade balance and the international investment position for Japan, China, Russia, South Korea, and Indonesia.

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