Role of International Trade

by Sophia

WHAT'S COVERED

This tutorial will cover the role of international trade, focusing on the impact it has on the current and capital accounts, as well as economic growth.

Our discussion breaks down as follows:

1. Measuring Economic Activity: National Income Accounting
    a. Output
    b. Income
    c. Trade Deficits
2. Balance of Payments
    a. Current Account
    b. Capital Account
3. Trade Deficits and Currency
4. International Trade and Economic Growth

1. Measuring Economic Activity: National Income Accounting

After the Great Depression, economists realized they needed a better way to keep track of the United States economy. Even though it is normal to go through fluctuations of growth and contraction, they wanted a better way to predict when a major depression was coming and to measure economic growth over time.

The answer was to calculate GDP, or gross domestic product, a term you should be quite familiar with at this point. Thus, they developed national income accounting.

BIG IDEA

National income accounting calculates GDP, which attempts to measure all economic activity in a country in a year.

So, to look at overall economic activity, we can consider two aspects:

- All output in the economy
- All income in the economy.

1a. Output

Let's start by discussing output.

When we find output, we use the following equation. This is because when things are produced, the output can wither by consumed, invested, purchased by the government, or exported to other nations.

FORMULA TO KNOW

Output

$$Y = C + I + G + X$$

$where:$

$C = Consumer\ purchases$

$I = Investment\ in\ capital\ (generally\ by\ businesses)$

$G = Government\ purchases$

$X = Exports$

1b. Income

Now let's consider the other aspect, income. When income is earned, what can be done with it?

Well, it can either be consumed, saved, paid in taxes, or paid to other nations for imports.

FORMULA TO KNOW

Input

$$Y = C + S + T + M$$

$where:$

$C = Consumer\ purchases$

$S = Savings$

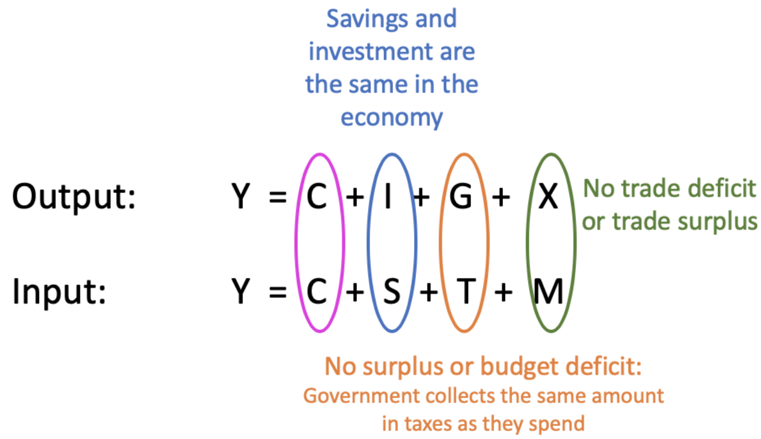
$T = Taxes$

$M = Imports$

So, if we compare these two, we know that clearly, consumption is consumption, and we have already covered how savings and investment are the same in the economy.

However, when would G equal T? Well, G would equal T when the government collects exactly in taxes what they spend. This means they are neither running a surplus nor budget deficit.

In this case, it means that X would have to equal M, that exports would equal imports, with no trade deficit or trade surplus.



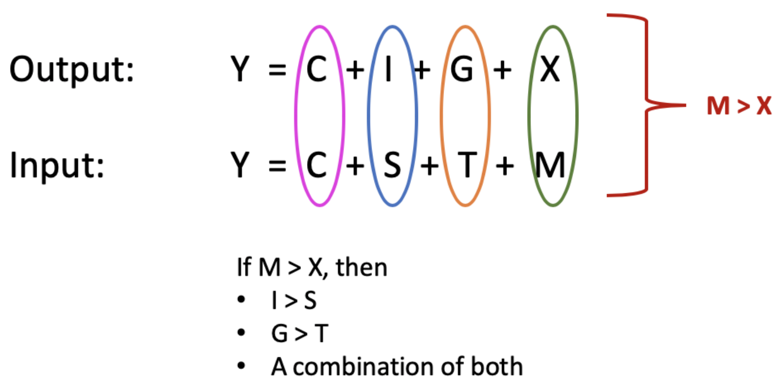
1c. Trade Deficits

However, X does not usually equal M. Typically we run a trade **deficit**. In other words, we are importing more than we're exporting: M > X.

This is called a trade deficit or current account deficit (which we will cover shortly). A deficit refers to shortages that result from spending in excess of revenue.

It this is the case, then, it means one of the following:

- Investment is greater than savings: $I > S$
- Government expenditures are greater than taxes collected: $G > T$
- A combination of both



TERM TO KNOW

Deficit

Shortages that result from spending in excess of revenue

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2. Balance of Payments

One way to measure the economic impact of international trade is to measure the **balance of payments**, which involves comparing our demand and supply of foreign exchange.

Balance of payments is defined as a record of all monetary transactions that flow across a country's border, and its two major components are the current account and the capital account.

TERM TO KNOW

Balance of Payments

A record of all monetary transactions that flow across a country's border; two major components are the current account and the capital account

2a. Current Account

The **current account** represents the sum of all recorded transactions, including traded goods, services, income, and net transfer payments.

HINT

The current account is the sum of our balance of trade.

It shows how much a nation has spent on foreign goods, services, income, and transfer payments compared to how much it has earned on all of those things.

So we previously saw, a trade deficit means that we are running a current account deficit because we are spending more money on these items that we are trading than we are receiving. We are importing more than we are exporting.

TERM TO KNOW

Current Account

Represents the sum of all recorded transactions including traded goods, services, income, and net transfer payments

2b. Capital Account

However, every transaction in the current account is going to be offset by a recorded transaction in the **capital account**, which captures investment and financing flows, not the actual physical flow of goods and services. Inflows in the capital account have an appreciating impact on a given currency, while outflows have the opposite, or depreciating, impact.

This compares a nation's ownership of foreign assets and foreign ownership of that nation's assets.

EXAMPLE Examples would include the purchase or construction of machinery, buildings, and plants in other nations, or investment in foreign nation shares and bonds.

BIG IDEA

When foreigners invest in our country, it means we run a surplus in our capital account. When our citizens invest in foreign nations, it means we run a deficit in our capital account.

Circling back to the issue of a trade deficit, when our imports are greater than our exports, you may recall that this is a current account deficit.

However, what this means is now more United States currency is being used to purchase items from foreigners than other currencies are being used to purchase U.S. goods.

This excess currency has to be used, and it will be used by foreigners to invest in the U.S., both in private investments and in public U.S. Treasury securities.

This results in a capital account surplus, summarized in this chart:

Trade Deficit	
Current Account	**Capital Account**
U.S. has spent more than they have made on good and services, so they have a DEFICIT in the current account.	Foreigners are investing in U.S. capital/securities with extra U.S. currency from the trade situation, so the U.S. has a SURPLUS in the capital account.

BIG IDEA

Basically, the current and capital account sum to zero. If this were a trade surplus, it would be the opposite situation. In a trade surplus, there would be a surplus in the current account but a deficit in the capital account.

TERMS TO KNOW

Capital Account

Captures investment and financing flows; inflows have an appreciating impact on a given currency; outflows have the opposite, or depreciating, impact

3. Trade Deficits and Currency

A current account deficit, or trade deficit, will cause a nation's currency to depreciate or get weaker over time.

If we are running a trade deficit, this means that our nation's currency is being supplied to purchase these things from other nations, which weakens our currency. Once our currency is weaker, Americans do not want to buy foreign products as much, so the imports decrease.

Now, as soon as our currency is weaker, foreigners will want to purchase more U.S. goods and exports increase. The end result is that the current account deficit tends to disappear because of the impact on our currency.

4. International Trade and Economic Growth

Let's wrap up today's lesson by discussing the impact of international trade on economic growth.

BIG IDEA

A main idea of macroeconomics is that when two countries trade, both nations are better off and are able to achieve greater economic growth, due to comparative advantage and gains from trade.

Trading with other nations allows a country to focus on those goods and services for which they enjoy a comparative advantage due to their own particular resources, workforce skill level, or education.

The country, then, can trade for other goods and services for which *other* nations enjoy the comparative advantage in producing. (Note, other tutorials cover actual examples in greater detail).

When both countries specialize in what they enjoy a comparative advantage in, and trade, they are both better off than before.

Because international trade can increase production efficiency, it can actually increase the rate of economic growth--which is a good thing.

However, keep in mind, we have also learned that trade deficits and fiscal deficits cause a need to borrow money, and when nations borrow money, it leads to foreign purchases of Treasury bonds.

The interest from those bonds is then paid to foreigners and must be subtracted from GDP.

Therefore, while international trade can contribute to economic growth, in this aspect, the interest paid to foreigners can have a negative impact.

HINT

As a general note, any interest paid to Americans does not tend to impact GDP much. It can affect income equality or inequality, etc., but it does not tend to have much of an impact on GDP.

SUMMARY

Today we learned about **national income accounting**, developed to calculate GDP, which attempts to **measure all economic activity** in a country in a year. In order to look at overall economic activity, we can consider all **output** or all **income** in the economy. We defined the **balance of payments**, which is composed of the **current account** and **capital account**.

We learned about the impact of **trade deficits** on the current account, capital account, and **currency**. Finally, we explored how **international trade** can impact **economic growth**.

Source: Adapted from Sophia instructor Kate Eskra.

TERMS TO KNOW

Balance of Payments

A record of all monetary transactions that flow across a country's border; two major components are the current account and the capital account.

Capital Account

Captures investment and financing flows; inflows have an appreciating impact on a given currency; outflows have the opposite, or depreciating, impact.

Current Account

Represents the sum of all recorded transactions including traded goods, services, income, and net transfer payments.

Deficit

Shortages that result from spending in excess of revenue.