International Trade and Aggregate Demand

by Sophia

WHAT'S COVERED

This tutorial will cover the topic of international trade and its impact on aggregate demand, including how changes in exchange rates can impact GDP in a country.

Our discussion breaks down as follows:

1. International Trade
    a. Components of Aggregate Demand
    b. Impact on Aggregate Demand
2. Exchange Rates and Aggregate Demand
3. Impact of China's Pegged Currency

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1. International Trade

International trade basically means the flow of goods and services, as well as capital, among countries. It has been taking place throughout history, so this is nothing new.

However, what *is* new is that more and more every decade, its importance increases, with the following effects:

- Political effects
- Social effects
- Economic effects

Clearly, in this economics tutorial, we will be mainly discussing the economic effects, focusing on how trade and exchange rates can affect conditions in the countries involved.

1a. Components of Aggregate Demand

As a reminder, **imports** are goods and services brought into a country and produced by foreign nationals. **Exports** are goods and services sold and transported outside a country of origin to a foreign country.

Let's revisit our equation for finding aggregate demand, which is a combination of the following components:

FORMULA TO KNOW

Aggregate Demand

$$AD = C + I + G + (X - M)$$

$where:$

$C = Consumer\ purchases$

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

$G = Government\ purchases$

$X - M = Exports\ minus\ Imports = Net\ Exports$

TERMS TO KNOW

Imports

Goods and services brought in to a country and produced by foreign nationals

Exports

Goods and services sold and transported outside a country of origin to a foreign country

1b. Impact on Aggregate Demand

Today we will focus on net exports, which are exports minus imports (X - M).

- If exports increase, aggregate demand is going to increase and shift to the right.
- If exports decrease, then aggregate demand will decrease and shift to the left.

HINT

Remember, an increase in aggregate demand increases a country's GDP. A decrease in aggregate demand decreases a nation's GDP.

BIG IDEA

What is happening in one country's economy can definitely impact other nations' economies. An event occurring in one country is not just an isolated event anymore.

EXAMPLE When the United States is in a recession, this can have an impact throughout the entire world. When the U.S. is in a recession, U.S. consumers are buying less of everything, including imports. Any country that relies on our demand will see a decrease in their aggregate demand. For instance, Japan would be exporting fewer cars to us when the U.S. is in a recession.

2. Exchange Rates and Aggregate Demand

Now let's discuss the effect of exchange rates, because this is a bit more technical, starting with another big idea.

BIG IDEA

Changes in exchange rates can impact a nation's exports and imports, affecting aggregate demand and overall economic conditions.

As a reminder, an **exchange rate** is simply the cost of one country's currency relative to another's.

So, why do exchange rates matter? Well, how strong or weak our currency is relative to other currencies can impact, first of all, how much Americans want to purchase foreign goods or imports. It can also impact how much foreigners want to purchase our goods or exports.

EXAMPLE If the United States dollar depreciates or becomes weaker relative to the euro, this will have two effects. First of all, now American products become cheaper to attain because our currency is weaker relative to the euro. At the same time, it is now more expensive for us to get European products.

Now, the overall impact this will have is an increase in our exporting because our goods are now cheaper for others to attain. Our exports, and therefore our aggregate demand, could go up, which could also increase our GDP.

At the same time, Europe's exports and aggregate demand could fall.

TERM TO KNOW

Exchange Rates

The cost of one country's currency relative to another's

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3. Impact of China's Pegged Currency

So, if a nation wants to encourage a lot of exports, can they actually *try* to have a weak currency?

Well, China, until recently, actually provides a good example of this, so let's walk through it.

China's currency is the Yuan or Renminbi, which we will abbreviate as the RMB. Instead of allowing their currency's value to be determined by global supply and demand, they decided to peg its value against the U.S. dollar in the 1980s when they wanted to begin trading.

This action deals with a difference between a **floating** currency and a **pegged currency**, which is a mechanism for exchange rate pricing.

A floating rate moves with market forces, meaning supply and demand.

A pegged rate, which is what we are talking about with China, is a maintained value of a currency, where the value is maintained by a central banking of foreign exchange regulating body, and it is typically defined in a range.

So, this is exactly what China did. China kept its currency very weak relative to the United States dollar to entice Americans to purchase Chinese goods.

EXAMPLE When China kept its currency very weak, that meant that Americans could exchange U.S. dollars for a lot of RMB.

This also discouraged exports of U.S. goods to China because it was expensive to exchange RMB for U.S. dollars.

The result was that United States exports to China have been roughly about one-third of Chinese exports to the United States. This is a huge trade surplus for China and a huge trade deficit for the United States.

So, shouldn't the demand for the RMB increase, because the U.S. is buying a lot of Chinese goods? Well, usually this would appreciate their currency, making it stronger.

However, with a pegged currency, the Chinese central bank was keeping the RMB undervalued through expansionary monetary policies, supplying more to maintain the peg.

HINT

Remember, when you have expansionary monetary policies, you are supplying more--and any time there is a greater supply of something, it weakens the value of it.

This is what they did to maintain the peg, which could be good for China and bad for the United States; thus, it was called a controversial policy.

Advantages for China

- It allowed their economic growth to take off by significantly increasing their aggregate demand, and in turn, GDP and employment.
- It encouraged foreign investment in China.

Disadvantages for U.S.

- United States manufacturers argued that it is impossible to compete with artificially cheap Chinese goods, because of this weakened currency.

Advantages for U.S.

- It has provided cheaper goods for U.S. consumers--a way for us to get things that would have been more expensive otherwise.
- It has provided cheaper input prices for manufacturers who purchase from China.
- It may have actually increased the standard of living in our country since U.S. consumers purchased almost all of these goods.

TERM TO KNOW

Float/Peg

A mechanism for exchange rate pricing; a floating rate moves with market forces; a pegged rate is a maintained value of a currency where the value is maintained by a central banking of foreign exchange regulating body and is typically defined in a range.

SUMMARY

Today we learned how **international trade** can **impact aggregate demand** because exports and imports are a **component of aggregate demand**. We also learned that changes in **exchange rates** can also impact **aggregate demand** and GDP in a country, as a weaker currency can encourage exports but discourage imports. Lastly, we examined the controversial **impact of China's pegged currency**, with China being an example of a country who maintained that pegged currency for a while to help them achieve economic growth.

Source: Adapted from Sophia instructor Kate Eskra.

TERMS TO KNOW

Exchange Rates
The cost of one country's currency relative to another's.

Exports
Goods and services sold and transported outside a country of origin to a foreign country.

Float/Peg
A mechanism for exchange rate pricing; a floating rate moves with market forces; a pegged rate is a maintained value of a currency where the value is maintained by a central banking of foreign exchange regulating body and is typically defined in a range.

Imports
Goods and services brought in to a country and produced by foreign nationals.