

# Economics

THE INTERNATIONAL TRADE AND CAPITAL FLOWS

# Ch.23

# OUTLINE

- 23.1: Measuring Trade Balances
- 23.2: Trade Balances in Historical and International Context
- 23.3: Trade Balances and Flows of Financial Capital
- 23.4: The National Saving and Investment Identity
- 23.5: The Pros and Cons of Trade Deficits and Surpluses
- 23.6: The Difference between Level of Trade and the Trade Balance

# A World of Money

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- We are all part of the global financial system, which includes many different currencies.

(Credit: modification of "Money from around the world" by Images Money/Flickr, CC BY 2.0)



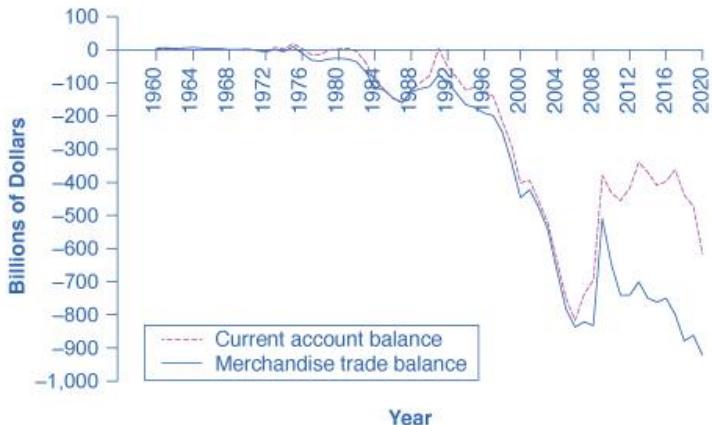
# 23.1

## Measuring Trade Balances

- **Balance of trade** (or **trade balance**) - the gap, if any, between a nation's exports and imports.
- In high-income economies, including the U.S., goods comprise less than half of a country's total production, while services comprise more than half.

# Merchandise Trade Balance vs. Current Account Balance

- **Merchandise trade balance** - the balance of trade looking only at goods.
- **Current account balance** - a broad measure of the balance of trade that includes trade in goods and services, as well as international flows of income and foreign aid.
- **Unilateral transfers** - payments that government, private charities, or individuals make in which they send money abroad without receiving any direct good or service.



(a) The current account and merchandise trade balance in nominal dollars



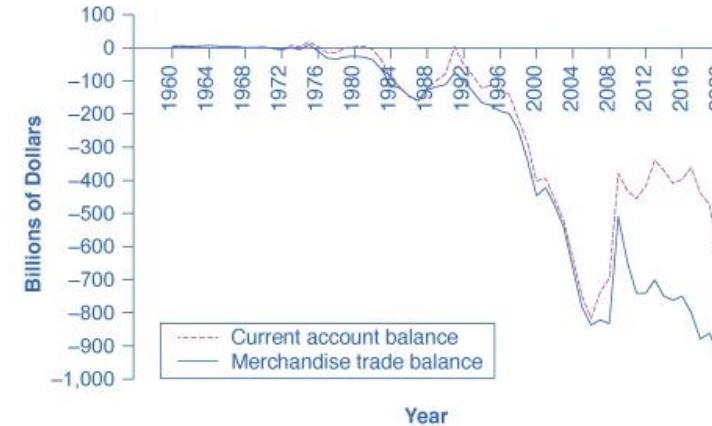
(b) The current account and merchandise trade balance as a percentage of GDP

## 23.2 Trade Balances in Historical and International Context

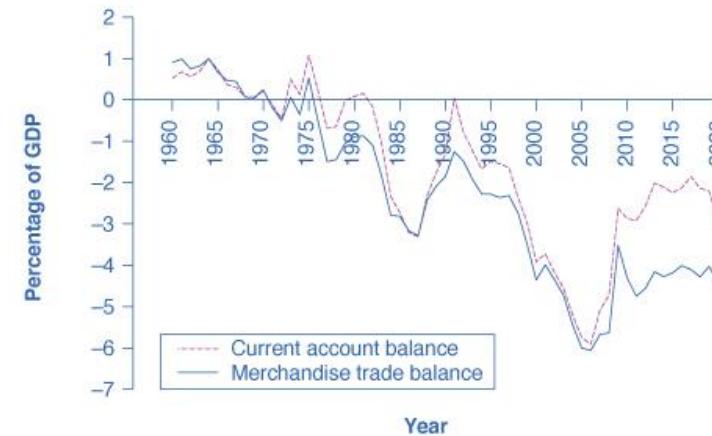
- Graph (a), shows the current account balance and the merchandise trade balance in billions of dollars from 1960 to 2020.
- If the lines are above zero dollars, the United States was running a positive trade balance and current account balance.
- If the lines fall below zero dollars, the United States is running a trade deficit and a deficit in its current account balance.

## 23.2 Trade Balances in Historical and International Context, Continued

- Graph (b) shows the same items - trade balance and current account balance - in relationship to the size of the U.S. economy, or GDP, from 1960 to 2020.



(a) The current account and merchandise trade balance in nominal dollars



(b) The current account and merchandise trade balance as a percentage of GDP

# A Measure of an Economy's Globalization

- **Exports of goods and services as a percentage of GDP** - the dollar value of exports divided by the dollar value of a country's GDP.

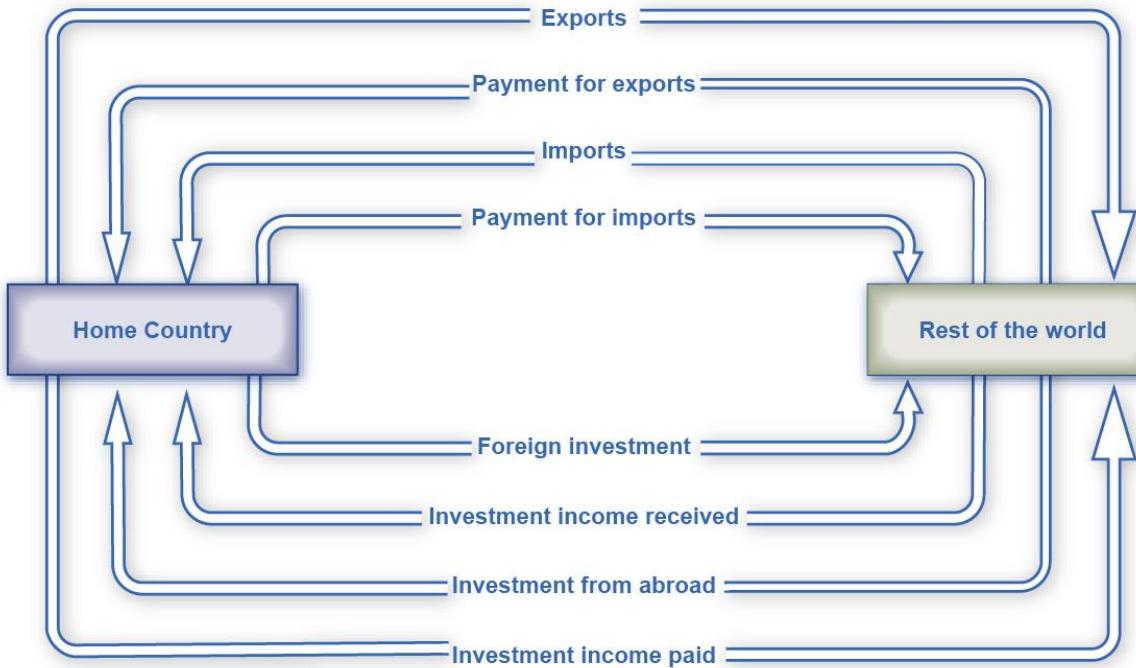


## 23.3 Trade Balances and Flows of Financial Capital

- **Financial capital** - the international flows of money that facilitates trade and investment.
- The connection between trade balances and international flows of financial capital is so close that economists sometimes describe the balance of trade as the balance of payments.
- Each category of the current account balance involves a corresponding flow of payments between a given country and the rest of the world economy.



# Flow of Investment Goods and Capital



- Each element of the current account balance involves a flow of financial payments between countries.
- The top line shows exports of goods and services leaving the home country.
- The second line shows the money that the home country receives for those exports.
- The third line shows imports that the home country receives.
- The fourth line shows the payments that the home country sent abroad in exchange for these imports.

# The Balance of Trade as the Balance of Payments

- A current account deficit means that the country is a net borrower from abroad.
- Conversely, a positive current account balance means a country is a net lender to the rest of the world.
- An inflow and outflow of foreign capital does not necessarily refer to a debt that governments owe to other governments (although government debt may be part of the picture).
- These international flows of financial capital refer to all of the ways in which private investors in one country may invest in another country.
  - Buying real estate
  - Buying companies
  - Financial investments like stocks and bonds

## 23.4 The National Saving and Investment Identity

- **National saving and investment identity** - the total of private savings and public savings (a government budget surplus).

*Supply of financial capital = Demand for financial capital*

$$S + (M - X) = I + (G - T)$$

- $S$ : saving by individuals and firms
- $(M - X)$ : Imports – Exports = Trade Deficit
- $I$ : private sector Investment
- $G$ : Government spending
- $T$ : taxes collected

# The National Saving and Investment Identity, Continued

$$S + (M - X) = I + (G - T)$$

- If  $G > T$ , then the government would be a demander of financial capital.
- If  $T > G$ , then the government would contribute as a supplier of financial capital.

# Domestic Saving and Investment Determine the Trade Balance

- The connection of domestic saving and investment to the trade balance explains why economists view the balance of trade as a fundamentally macroeconomic phenomenon.
- In the case of a trade deficit, the national saving and investment identity can be rewritten as:
  - Trade deficit = Domestic investment – Private domestic saving – Government (or public) savings
$$(M - X) = I - S - (T - G)$$
- The only way that domestic investment can exceed domestic saving is if capital is flowing into a country from abroad.

# Domestic Saving and Investment Determine the Trade Balance, Continued

- In the case of a trade surplus, the national saving and investment identity can be rewritten as:
  - Trade surplus = Private domestic saving + Public saving – Domestic investment
$$(X - M) = S + (T - G) - I$$
  - Domestic savings (both private and public) is higher than domestic investment.
  - That extra financial capital will be invested abroad.

Domestic Investment	-	Private Domestic Savings	-	Public Domestic Savings	=	Trade Deficit
I	-	S	-	(T - G)	=	(M - X)
Up		No change		No change		Then M - X must rise
No change		Up		No change		Then M - X must fall
No change		No change		Down		Then M - X must rise

# Exploring Trade Balances One Factor at a Time

- The national saving and investment identity also provides a framework for thinking about what will cause trade deficits to rise or fall.
- Domestic investment – Private domestic savings – Public domestic savings = Trade deficit

$$I - S - (T - G) = (M - X)$$

# Short-Term Movements in the Business Cycle and the Trade Balance

- In the short run, whether an economy is in a recession or on the upswing can affect trade imbalances.
- A recession tends to make a trade deficit smaller, or a trade surplus larger.
- While a period of strong economic growth tends to make a trade deficit larger, or a trade surplus smaller.
  - However, these are not hard-and-fast rules.



# 23.5 The Pros and Cons of Trade Deficits and Surpluses

- For countries, there is no economic merit in a policy of abstaining from participation in financial capital markets.
- It can make economic sense for a national economy to borrow from abroad, as long as it wisely invests the money in ways that will tend to raise the nation's economic growth over time.
  - Examples: U.S. in mid-1800s and South Korea in 1970s.
- A borrower nation can find itself in trouble if it does not invest the incoming funds from abroad in a way that leads to increased productivity.
  - Examples: Mexico, Brazil, and some African nations in the 1970s and 1980s.

## 23.6 The Difference between Level of Trade and the Trade Balance

- A country's level of trade tells how much of its production it exports.
  - Separate term than the balance of trade.
  - Measured as the percent of exports out of GDP.
- Three factors strongly influence a nation's level of trade:
  - the size of its economy,
  - its geographic location,
  - its history of trade.
- Discussion Question: Do you think the following countries have a low or high level of trade?
  - Sweden
  - United States
  - Japan

# Final Thoughts about Trade Balances

- Trade deficits can be a good or a bad sign for an economy, and trade surpluses can be a good or a bad sign also.
- Even a trade balance of zero - which just means that a nation is neither a net borrower nor lender in the international economy - can be either a good or bad sign.
- The fundamental economic question is not whether a nation's economy is borrowing or lending at all, but whether the particular borrowing or lending in the particular economic conditions of that country makes sense.

Credits: Greenlaw, S. A., Shapiro, D., & MacDonald, D. (2022). *Principles of economics* (3rd ed.). OpenStax. <https://openstax.org/books/principles-economics-3e>