PAGE ONE Economics®

TEACHER EDITION

Page One Economics® is an informative accessible essay on timely economic issues. The Teacher Edition provides the essay; student questions with answers; and additional lesson ideas for classroom, extra credit, or make-up assignments.

The Student Edition includes the essay and student questions; https://research.stlouisfed.org/publications/page1-econ/2016-11-01/international-trade_SE.pdf.

National Common Core State Standards (see page 8)

November 2016

International Trade: Making Sense of the Trade Deficit

Scott A. Wolla, Ph.D., Senior Economic Education Specialist

PAGE ONE Economics®

International Trade: Making Sense of the Trade Deficit

Scott A. Wolla, Ph.D., Senior Economic Education Specialist

GLOSSARY

Asset: A resource with economic value that an individual, corporation, or country owns with the expectation that it will provide future income.

Balance of trade: The difference in value between a country's exports and imports.

Balance of payments: A summary of all the transactions involving goods and services and investment that all individuals, firms, and the government of one nation makes with all of those in all other nations in a given time period.

Budget deficit: Government expenditures exceed revenues.

Capital and financial account: The section of a nation's balance of payments that records debt forgiveness by and to foreigners and foreign purchases of assets in the United States and U.S. purchases of assets abroad.

Current account: The section of a nation's balance of payments that records its exports and imports of goods and services, its net investment income, and its net transfers.

Financial asset: A contract that states the conditions under which one party (a person or institution) promises to pay another party cash at some point in the future.

Physical capital: Goods that have been produced and are used to produce other goods and services. They are used over and over again in the production process. Also called capital goods and capital resources.

Real asset: A tangible item that has intrinsic value due to its substance and properties.

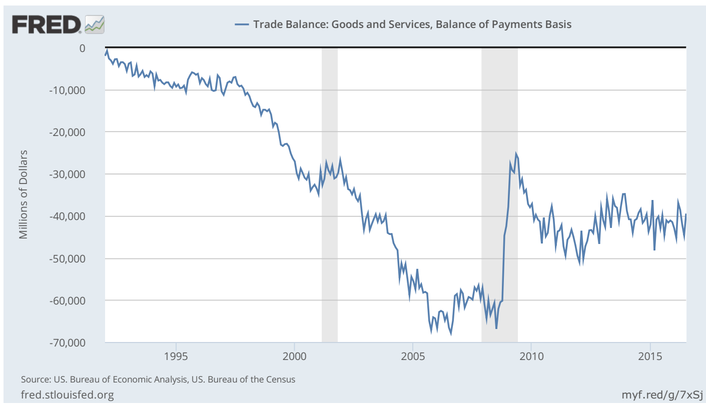
Trade deficit: The difference that results when the value of a country's imports exceeds the value of its exports.

Trade surplus: The difference that results when the value of a country's exports exceeds the value of its imports.

Transfer: A one-way payment for which no money, good, or service is given or exchanged.

> "I think there is a clear winner for the most misunderstood economics statistic, and it's the balance of trade."
> —Timothy Taylor, Managing editor of the *Journal of Economic Perspectives*

International trade is important to our economy, and its importance has increased as countries have become more interconnected. But international trade is not without controversy. Many people are alarmed when they hear the United States has a trade deficit. In fact, the U.S. trade deficit for 2015 was $531.5 billion, which was a $23.2 billion increase over 2014.[1] Why the concern? Because people usually equate a deficit with failure and a surplus with success. Specifically, they may think that a deficit means U.S. trade policy is flawed and the Unite States is losing jobs to other nations. The trade deficit, however, is more a function of national saving and investment decisions than of the fairness of international trade or the success of U.S. firms.



NOTE: The goods and services deficit in July 2016 was $39.5 billion.

SOURCE: FRED®, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/BOPGSTB; accessed October 3, 2016.

Tracking Trade

International trade includes all of the buying and selling of goods, services, and assets between persons, businesses, and governments in one country with persons, businesses, and governments in other countries. All of the individual transactions are added together to create national trade statistics.

To understand what causes a trade deficit, it is essential to understand a bit about the accounting of international trade. All of a country's transactions with the world are summarized in what is called its balance of payments. If we simplify a bit, all of the transactions in the balance of payments can be classified into one of two subaccounts:

1) The **current account**: The largest part of this account is the country's trade in goods and services with all other countries. When net exports are positive (when exports exceed imports), the country has a **trade surplus**. When net exports are negative (when imports exceed exports), the country has a **trade deficit**.

2) The **capital and financial account**: This account includes all of the country's trade in assets with all other countries. There are two types of assets: **real assets** and **financial assets**. Investment in real assets, for example, might include foreign investment in a factory in the United States or U.S. investment in a foreign factory. Financial assets include stocks, corporate bonds, and U.S. government bonds. People invest in real and financial assets with the aim of "making money"—they hope to earn interest, dividends, profits, and/or capital gains in the future. When foreign investors buy more U.S. assets than Americans buy foreign assets, there is a surplus on the capital and financial account. That is, there is a net inflow of funds on the capital and financial account. When Americans buy more foreign assets than foreigners buy U.S. assets, there is a deficit on the capital and financial account. That is, there is a net outflow of funds on the capital and financial account.

The Balancing Act

The balance of payments must balance—a deficit in one of the accounts must be offset by a surplus in the other account. So, when the current account is added to the capital and financial account, it equals zero. You see, dollars that leave the U.S. to buy foreign goods, services, or assets find their way back to the U.S. economy to purchase U.S. goods, services, and assets.

Current Account + Capital and Financial Account = 0

For example, suppose a U.S. firm buys $10 million (in U.S. dollars) of Chinese goods to sell to American consumers. This transaction is recorded on the current account as –$10 million (a negative number) because the money is paid to the Chinese firm. If there were no other transactions, the United States would have a $10 million deficit on the current account. But the Chinese firm now has $10 million to spend. How they spend that money will determine on which account the transaction is recorded. If they purchase U.S. goods and services, the transaction will be recorded on the current account; if they invest in U.S. real or financial assets, the transaction will be recorded on the capital account. So it could go something like this:

Case 1: The Chinese firm spends the $10 million on U.S. goods and services. In this case, it is counted as a U.S. export and recorded on the current account as $10 million (a positive number). This transaction offsets the $10 million in imports on the current account and results in balanced trade. (See the boxed insert on page 3.)

Case 2: The Chinese firm invests $10 million in U.S. assets. In this case, the firm has decided to **save** the money (not spend on current consumption) by investing it in the United States. This $10 million investment in assets is recorded as $10 million on the capital and financial account and creates a surplus for the United States on that account. (See the boxed insert on page 3.) The surplus on the capital and financial account exactly offsets the deficit on the current account, but the trade deficit remains.[2]

Focusing on the trade deficit—and thus primarily on goods and services—can be misleading because it ignores the larger balance of payments. Investment in U.S. assets should be considered as well. The U.S. economy benefits from both types of transactions: The foreign purchase of U.S. goods and services generates revenue for American firms and employment for workers. Foreign investment in real and financial assets allow firms to expand; and foreign investment in U.S. government bonds helps to finance the national debt. So, going back to our example, whether the $10 million that was spent on imports returns as current spending to purchase goods and services or as investment in real or financial assets (which

Case 1: Balance of Payments				
Current Account		Capital and Financial Account		
($10M exports – $10M imports)	+	0	=	0
Result = Balanced Trade				

Case 2: Balance of Payments				
Current Account		Capital and Financial Account		
–$10M imports	+	$10M U.S. financial assets	=	0
Result = Trade Deficit				

NOTE: M, million.

In both Case 1 and Case 2, the balance of payments is balanced because when the current account is added to the capital and finance account, the sum is zero. For Case 2, however, in spite of balanced payments, there is a trade deficit.

leaves a $10 million trade deficit), the transaction benefits the U.S. economy.[3]

What Causes a Trade Deficit?

It is tempting to blame the trade deficit on factors that might influence international trade. Some have suggested the current trade deficit is a result of U.S. firms producing inferior goods that are not competitive in the global economy. Others have suggested that trade policy is flawed, implying that U.S. firms are the victims of unfair foreign competition. Finally, some suggest currency manipulation by foreign countries has put U.S. exporters at a disadvantage. Economists, however, attribute the trade deficit to national saving and investment decisions. Trade and exchange rate policies can affect these decisions but not as much as people might think. In practice, they have a minor influence.

The Role of National Saving and Investment

A growing economy requires investment in (i) physical capital (real assets) to increase worker productivity and (ii) stocks and bonds (financial assets) to finance business expansion. In addition, governments often borrow to finance **budget deficits** by issuing government bonds. In a closed economy (an economy that doesn't interact with any other economies), investment can occur only to the extent that the firms and citizens in that economy save. Imagine an economy that needs $100 million of investment to maintain its current level of economic growth. In a closed economy, citizens and firms would have to save $100 million, which would be invested in capital to produce more in the future. That is, after paying taxes and spending on their current consumption, the country would need $100 million to invest in real and financial assets. If less saving occurred, however, the amount available to invest would shrink by that amount. Thus, in a closed economy, domestic saving is equal to domestic investment.

Of course, the U.S. economy is an open economy, which means it trades with other countries. That trading includes goods and services *and* assets. In this way, the total level of U.S. investment can exceed the savings of U.S. citizens—the difference is made up by foreigners investing in the United States. So, for example, $100 million of U.S. investment might include $50 million of domestic investment and $50 million of foreign investment. In the United States, the current account deficit (the trade deficit) is offset by the financial and capital account surplus, which is made possible by a net inflow of foreign investment. This is what allows total domestic investment to be greater than domestic saving. Of course, when the U.S. borrows money (by selling corporate or government bonds), or sells claims on future output (by selling assets), it is trading off more consumption today for less consumption in the future.

Because international trade includes more than goods and services, when economists are asked about the trade deficit, they often discuss national saving and investment rather than only imports of goods and services. By definition, if Americans saved more (by spending less), the trade deficit would be smaller. While Americans save little (relatively speaking), foreign savers have found the United States an attractive place to invest. Former Federal Reserve Chair Ben Bernanke attributed the trade deficit to a "global savings glut" in which foreigners with excess savings are drawn to invest in U.S. assets because the U.S. economy offers appealing investment opportunities.[4] As such, the low American saving rate, and the inflow of foreign investment seeking opportunity, has pushed up the trade deficit.

Conclusion

In general, the United States imports more goods and services than it exports, resulting in a trade deficit, which is the biggest part of the current account. People often assume that a surplus is good and a deficit is bad, but it is not that simple. The net outflow of funds on the goods and services side of the ledger (the current account) is offset by the net inflow of funds on the assets side of the ledger (the financial and capital account). Because the two accounts must offset each other (as a matter of accounting), if Americans saved more, the trade deficit would be smaller. As such, the U.S. trade deficit says more about U.S. national and global saving than trade policy. ■

Notes

[1] U.S. Census Bureau. "Annual Trade Highlights." Accessed September 28, 2016; https://www.census.gov/foreign-trade/statistics/highlights/annual.html.

[2] It is common to equate the current account balance and the balance of trade, although they are not exactly synonyms.

[3] Economists debate the potential effects of running trade deficits over long periods, but in the short-run the transactions provide benefits.

[4] Bernanke, Ben S. "The Global Saving Glut and the U.S. Current Account Deficit." Presented at the Virginia Association of Economists, Richmond, VA, April 14, 2005; http://www.federalreserve.gov/boarddocs/speeches/2005/200503102/.

Page One Economics® and *Page One Economics®: Focus on Finance* provide informative, accessible essays on current events in economics and personal finance as well as accompanying teacher editions and lesson plans for middle school and high school/college. The essays and lesson plans are published January through May and September through December.

Please visit our website and archives http://research.stlouisfed.org/pageone-economics/ for more information and resources.

Name_______________________________________ **Period**________

Federal Reserve Bank of St. Louis *Page One Economics®*:

"International Trade: Making Sense of the Trade Deficit"

After reading the article, answer the following questions:

1. Explain the difference between the current account and the capital and financial account in the balance of payments.

2. What is a trade deficit?

3. Assume a U.S. firm buys (imports) $5 million (in U.S. dollars) of foreign goods. That transaction by itself increases the trade deficit by $5 million. But, the $5 million will flow back to the United States to purchase either (i) U.S. goods and services or (ii) U.S. assets.
   - How does the way the $5 million comes back to the United States determine whether there will be balanced trade or a trade deficit?
   - How does the U.S. economy benefit from either transaction (the foreign purchase of U.S. goods and services [exports] or the purchase of U.S. assets)?

4. How does the "global savings glut" help explain the trade deficit?

Teacher's Guide

Federal Reserve Bank of St. Louis *Page One Economics*®:

"International Trade: Making Sense of the Trade Deficit"

After reading the article, answer the following questions:

1. Explain the difference between the current account and the capital and financial account in the balance of payments.

   The current account includes all of the country's trade in goods and services with all other countries. The capital and financial account includes all of the country's trade in assets with all other countries.

   Teacher note: *The glossary provides a more precise description of the transactions included in the current and capital and finance accounts.*

2. What is a trade deficit?

   When the value of a country's imports exceeds the value of its exports there is a trade deficit.

3. Assume a U.S. firm buys (imports) $5 million (in U.S. dollars) of foreign goods. That transaction by itself increases the trade deficit by $5 million. But, the $5 million will flow back to the United States to purchase either (i) U.S. goods and services or (ii) U.S. assets.

   - How does the way the $5 million comes back to the United States determine whether there will be balanced trade or a trade deficit?

     If the money were used to purchase U.S. goods and services, it would be recorded on the current account, which would offset the trade deficit and result in balanced trade. If the money were used to purchase U.S. assets, it would be recorded on the capital and current account and the trade deficit would remain.

   - How does the U.S. economy benefit from either transaction (the foreign purchase of U.S. goods and services [exports] or the purchase of U.S. assets)?

     The foreign purchase of U.S. goods and services generates revenue for American firms and employment for workers. Foreign investment in real and financial assets allows firms to expand; and foreign investment in U.S. government bonds helps to finance the national debt.

4. How does the "global savings glut" help explain the trade deficit.?

   Foreigners with excess savings are drawn to invest in U.S. assets because the U.S. economy offers appealing investment opportunities. This inflow of funds to purchase U.S. assets increases the surplus on the capital and financial account and the deficit on the current account.

For Further Discussion

Econ Lowdown® of the Federal Reserve Bank of St. Louis provides numerous economic education resources for teachers to use with their students. These include lesson plans, videos, online modules, interactive whiteboard lessons, and podcasts. These free resources are available at https://www.stlouisfed.org/education.

Use the resources listed below from Econ Lowdown to help teach about international trade.

To register your students for one or more of our online courses, on the Econ Lowdown website (linked above), click the "TEACHERS" button to create or access your account and visit the Instructor Management Panel.

Online Course: Comparative Advantage

In this course, you will meet Jack of All Trades, a most awesome superhero. In all tasks, Jack can do everything better and faster (he has absolute advantage), but does that mean he must do everything while the rest of the people stand around helplessly? Find out if justice is served when a formerly idle citizen, Andy, wades through the depths of opportunity cost and the benefits of comparative advantage.

https://www.stlouisfed.org/education/comparative-advantage-online-course-for-teachers-and-students

Online Course: Currency Crusaders

Jack of All Trades and his best bud, Andy, are traveling the world by cape, having a coffee at each stop. Andy learns that purchasing those coffees using the currencies of their host countries presents a minor complication—the relative value of currencies around the world can change and make those coffees more expensive or less expensive. How does that happen? Stay tuned and you'll learn how economic conditions affect exchange rates...and the price of coffee everywhere.

https://www.stlouisfed.org/education/currency-crusaders-online-course-for-teachers-and-students

"Is a Strong Dollar Better than a Weak Dollar?" (*Page One Economics* Classroom Edition)

"Strong" is usually preferred over "weak." But for the value of a country's currency, it's not that simple. "Strong" isn't always better, and "weak" isn't always worse. Learn more about foreign exchange rates in this essay with accompanying classroom materials.

https://www.stlouisfed.org/education/page-one-economics-classroom-edition/is-a-strong-dollar-better-than-a-weak-dollar

"The Global Economy, It's a Small World After All" (*Page One Economics* Classroom Edition)

To understand why people trade, suppose you were limited to consuming only items you could find within walking distance of your house. Or, perhaps even worse, only items you could produce yourself. For most of us, this restriction would severely diminish the variety of goods and services we enjoy on a daily basis. Learn more about the benefits of trade and comparative advantage in the essay with accompanying classroom materials.

https://www.stlouisfed.org/education/page-one-economics-classroom-edition/the-global-economy-its-a-small-world-after-all

econlowdown®
click. teach. engage.

National Standards

Common Core State Standards

Grades 6-12 Literacy in History/Social Studies, Science, and Technical Subjects

- **Key Ideas and Details**

  RH.11-12.1: Cite specific textual evidence to support analysis of primary and secondary sources, connecting insights gained from specific details to an understanding of the text as a whole.

  RH.11-12.2: Determine the central ideas or information of a primary or secondary source; provide an accurate summary that makes clear the relationships among the key details and ideas.

- **Integration of Knowledge and Ideas**

  RH.11-12.7: Integrate and evaluate multiple sources of information presented in diverse formats and media (e.g., visually, quantitatively, as well as in words) in order to address a question or solve a problem.

- **Research to Build and Present Knowledge**

  WHST.11-12.7: Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation.

Grades 6-12 Reading Standards for Informational Text

- **Key Ideas and Details**

  RI.9-10.2: Determine a central idea of a text and analyze its development over the course of the text, including how it emerges and is shaped and refined by specific details; provide an objective summary of the text.

  RI.11-12.1: Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text, including determining where the text leaves matters uncertain.

National Standards for Financial Literacy

Standard 5: Trade
Voluntary exchange occurs only when all participating parties expect to gain. This is true for trade among individuals or organizations within a nation, and among individuals or organizations in different nations.

- **Benchmarks: Grade 8**

  5. Imports are foreign goods and services that are purchased from sellers in other nations.
  6. Exports are domestic goods and services that are sold to buyers in other nations.

- **Benchmark: Grade 12**

  1. Imports are paid for by exports, savings or borrowing.

Standard 18: Economic Fluctuations
Fluctuations in a nation's overall levels of income, employment, and prices are determined by the interaction of spending and production decisions made by all households, firms, government agencies, and others in the economy. Recessions occur when overall levels of income and employment decline.

- **Benchmarks: Grade 8**

  3. Net exports equal the value of exports (goods and services sold to other countries) minus the value of imports (goods and services bought from other countries). Net exports can be either positive (trade surplus) or negative (trade deficit).