Many generalizations sound simple enough—for example, "strong is good, weak is bad"—but they can be confusing when talking about money. This booklet explores how the U.S. dollar and foreign currencies affect each other and how their interaction affects the individual and the economy. The booklet contains the following sections: "Understanding Foreign Exchange"; "The Value of Currency"; "The 4X Market"; "Price Determined by Supply and Demand"; "Effects on an Economy"; "A Different Lesson from the '90s"; and "Stable Dollar." Contains a list of additional readings. Included with the booklet is a teaching guide that contains content questions and answers and activity suggestions. (BT)
Strong Dollar
Weak Dollar

Foreign exchange rates and the U.S. economy

- How does the dollar's value in other countries help or hinder the U.S. economy?
- How can the value of the dollar be both good and bad for Americans at the same time?
- What causes the dollar's value in other countries to change?
- Where is the international currency market and how does it operate?
*Strong Dollar, Weak Dollar* is one of a series of essays adapted from articles in *On Reserve*, a newsletter for economic educators published by the Federal Reserve Bank of Chicago. The original article was written by Keith Feiler and revised by Tim Schilling.

For additional copies of this essay—or for information about other Federal Reserve publications on money and banking, the financial system, the economy, consumer credit, and other related topics—contact:

**Public Information Center**  
**Federal Reserve Bank of Chicago**  
P.O. Box 834  
Chicago, IL 60690-0834  
Tel. (312) 322-5111
Strong is good. Weak is bad. These generalizations sound simple enough, but they can be confusing when talking about money. Is a “strong” U.S. dollar always good? Is a “weak” dollar always bad? This publication explores how the U.S. dollar and foreign currencies affect each other and how their interaction affects you and the economy.

Understanding Foreign Exchange

The terms strong and weak, rising and falling, strengthening and weakening are relative terms in the world of foreign exchange (sometimes referred to as forex). Rising and falling, strengthening and weakening all indicate a relative change in position from a previous level. When the dollar is “strengthening,” its value is rising in relation to one or more other currencies. A strong dollar will buy more units of a foreign currency than previously. A weak dollar will buy less. One result of a stronger dollar is that the prices of foreign goods and services drop for U.S. consumers. This may allow Americans to take the long-postponed vacation to some foreign destination, or buy a flashy foreign sports car that used to be too expensive.

U.S. consumers benefit from a strong dollar, but U.S. exporters are hurt. A strong dollar means that U.S. goods and services are more expensive for foreign consumers who, as a result, tend to buy fewer U.S. products. Because it takes more of a foreign currency to purchase strong dollars, any product priced in dollars is more expensive overseas.

A weak dollar also hurts some people and benefits others. When the value of the dollar falls or weakens in relation to another currency, prices of goods and services from that country rise for U.S. consumers. Because it now takes more dollars to purchase the same amount of foreign currency to buy goods and services, U.S. consumers and U.S. companies that import products have reduced purchasing power.
At the same time, a weak dollar means prices for U.S. products fall in foreign markets, benefiting U.S. exporters and foreign consumers. With a weak dollar, it takes fewer units of foreign currency to buy the right amount of dollars to purchase U.S. goods. As a result, consumers in other countries can buy U.S. products with less money.

Ideally, the dollar and all nations’ currencies should be valued at a level that is neither too high nor too low. Such a level would help sustain long-term economic growth and stability both here and abroad. However, this ideal is difficult to reach since many factors affect the value of a nation’s money. Some of the factors are complex, but many are quite simple.

The Value of a Currency

The value of a currency can be viewed from a domestic as well as an international perspective. Domestically, we use measures such as the Consumer Price Index (CPI) to measure changes in the purchasing power of the dollar over time. When the CPI increases, we say that the dollar is buying less — the value or purchasing strength of the dollar is going down. If the CPI is relatively stable, we say that the value of the dollar is stable. For some products with falling prices, we can even say that the purchasing power of the dollar is increasing.

<table>
<thead>
<tr>
<th>Strengthening Dollar</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Advantages</strong></td>
</tr>
<tr>
<td>• Consumer sees lower prices on foreign products/services</td>
</tr>
<tr>
<td>• Lower prices on foreign products/services help keep inflation low</td>
</tr>
<tr>
<td>• U.S. consumers benefit when they travel to foreign countries</td>
</tr>
<tr>
<td>• U.S. investors can purchase foreign stocks/bonds at “lower” prices</td>
</tr>
<tr>
<td><strong>Disadvantages</strong></td>
</tr>
<tr>
<td>• U.S. firms find it harder to compete in foreign markets</td>
</tr>
<tr>
<td>• U.S. firms must compete with lower priced foreign goods</td>
</tr>
<tr>
<td>• Foreign tourists find it more expensive to visit U.S.</td>
</tr>
<tr>
<td>• More difficult for foreign investors to provide capital to U.S. in times of heavy U.S. borrowing</td>
</tr>
</tbody>
</table>
Weakening Dollar

Advantages

- U.S. firms find it easier to sell goods in foreign markets
- U.S. firms find less competitive pressure to keep prices low
- More foreign tourists can afford to visit the U.S.
- U.S. capital markets become more attractive to foreign investors

Disadvantages

- Consumers face higher prices on foreign products/services
- Higher prices on foreign products contribute to higher cost-of-living
- U.S. consumers find traveling abroad more costly
- Harder for U.S. firms and investors to expand into foreign markets

Even though the dollar may be stable domestically, the value of the dollar could be rising or falling as measured by another country’s currency. In those cases, a currency is a commodity. It is something that has a price and is bought and sold in order to be used. The medium of exchange used to purchase this commodity is the currency of another country. The dollar, in that perspective, is purchased by foreign citizens who will, in turn, use it to purchase U.S. goods and services or dollar-denominated assets such as Treasury securities, corporate or municipal bonds, or stock.

Almost every international exchange of goods and services requires the exchange of one currency for another. Less frequently, some countries will barter goods, or settle payments in gold. But most international transactions involve foreign exchange. The individual, firm or government of another country that wants to buy U.S. products needs dollars.

This is because the dollar is legal tender in this country and all transactions tend to be denominated in dollars.

The dollar, of course, is not the only currency that is bought and sold, but it is among the most popular. Other important currencies include the Japanese yen and the German deutschmark (sometimes referred to as the d-mark).

An interesting aspect of foreign exchange is that a currency may be strengthening but still may not be strong relative to its historical position. For example, if the dollar were to rise from 85 yen to the dollar to 88 yen, it is strengthening. However, because the dollar historically is worth more than 100 yen, it is still not “strong.” Likewise, a dollar that falls to 175 yen from 185 yen is weakening, but certainly not weak by historical comparison.
The 4X Market

In most cases, the buying and selling of currencies takes place in the forex market. The currencies of most advanced and many developing economies are traded in this market. The forex market does not involve sending large loads of currency from one country to another. Typically it involves electronic balances. Dollar-denominated balances in computers in the U.S. or other countries are traded for computer-housed balances around the world that are denominated in yen, pounds, Swiss francs, d-marks, or any of dozens of other commonly traded monies. In short, when "currency" is traded, paper and metal are not the usual media of exchange. Foreign exchange exists mainly in the world of cyberspace.

Two is better than one

It is often possible to see two different national currencies accepted in one country. In some foreign countries, the U.S. dollar is the "currency of choice" because individuals have misgivings about the soundness of the domestic currency.

In other cases, accepting two currencies depends on location. For example, in areas near the Canadian border, U.S. currency is sometimes fully acceptable in Canadian establishments and Canadian currency is used (often at the official exchange rate) in U.S. establishments. But generally speaking, these areas tend to be small and in close proximity to the borders. Usually the decision to accept a foreign currency is made by local establishments as a convenience to border-crossing tourists.

Not all currencies are traded on forex markets. Currencies that are not traded are avoided for reasons ranging from political instability to economic uncertainty. Sometimes a country's currency is not exchanged for the simple reason that the country produces very few products of interest to other countries.

Unlike the commodities or stock markets, the forex market has no central trading floor where buyers and sellers meet. Most of the trades are completed by commercial banks and forex dealers in the U.S. and abroad using telephones and computers.

The forex market operates worldwide, 24 hours a day. Traders in Australia and the Far East begin trading in Hong Kong, Singapore, Tokyo, and Sydney at about the time most workers in San Francisco are going home for supper the previous evening. As the business day in the Far East closes, trading in Middle Eastern financial centers has been going
on for a couple of hours, and the trading day in Europe is just beginning. By the time the New York business day gets going in full force, it is almost time for early afternoon tea in London. Some of the large U.S. banks and brokerage houses have an early shift to minimize the time difference of 5 to 6 hours with Europe. To complete the circle, West Coast financial institutions extend "normal banking hours" so they can trade with New York or Europe on one side, and with Hong Kong, Singapore, or Tokyo on the other.

In each case, financial institutions, corporations, or even interested individuals buy and sell money. They use one currency to purchase another. In many cases, they are buying money as part of doing business in the country that issues that currency. But in other cases, firms individuals may buy one currency in one market to sell it in another and profit from the difference in price. This speculating on price differences is called arbitrage. In an age of virtually instant communication, this is especially challenging because the differences in price may last only a few seconds.

The forex market is distinguished here from the forex futures market, which has several trading floors, principally the International Monetary Market, a division of the Chicago Mercantile Exchange. The futures market in forex was developed to help reduce risk for international firms and financial institutions. The market was designed to "guarantee" exchange rates at a future date in order to facilitate international transactions. Prior to the development of forex futures, there could be a significant amount of risk in entering into a contract with firms in other countries. One of the largest sources of risk was the inability to guarantee the relative value of the currencies involved at the date of delivery.
The forex market is essentially governed by the law of supply and demand and is generally not regulated by any government or coalition of governments. This is true in the U.S., where participation in the forex market is not regulated. The prices set for each country’s money is determined by the desire of those trading to acquire more of it or to hold less of it. Each individual acts in the belief that he or she will benefit from the transaction.

According to the law of supply, as prices rise for a given item (in this case money) the quantity of the item that is supplied will increase; conversely, as the price falls, the quantity provided will fall. The law of demand states that as the price for an item rises, the quantity demanded will fall. As the price for an item falls, the quantity demanded will rise. It is the interaction of these basic forces that results in the movement of currency prices in the forex market.

For example, if French investors saw an investment opportunity in the U.S., they might be willing to pay more francs in order to get dollars to invest in the U.S. If the dollar moved from five francs per dollar to six francs per dollar, the dollar “strengthened against the franc.” In other words, a dollar could buy more francs. We could also state the same movement in francs. In the example above, the franc would move from 20¢ per franc to approximately 16¢ per franc. The franc “weakened against the dollar” because a franc could buy fewer dollars.

How do changes in a currency’s value affect a country’s domestic economy? To show the effects, we can look at the U.S. economy during the early 1980s when the dollar was quite strong in relation to other currencies. Dollars were in high demand for a number of reasons. Among these was the desire of foreign citizens to buy U.S. financial securities such as Treasury notes and bonds, corporate bonds, and other U.S. assets.
Many sectors of the U.S. economy were borrowing heavily during the early '80s. Government, corporations, and individuals were all increasing their reliance on credit. This created strong demand for money to lend to borrowers. Typically, money saved by consumers is used to help meet such demand. Unfortunately, savings rates in the U.S. were very low. Consequently, the money for U.S. borrowing had to come from somewhere. Funds from abroad helped to meet the demand. This rise in demand increased the price (interest rates) of dollars. This, in turn, made it more attractive for foreign investors to hold dollars.

At the same time, the Federal Reserve acted to curtail inflation. The Fed restricted the growth of the money supply to lower the high levels of inflation of the late '70s and early '80s, an action that contributed to higher interest rates.

All of these trends combined to make interest rates high for investors and borrowers. Various nations found these rates of return attractive. The relatively high interest rates at the time enabled investors to earn better returns than could be found in their own financial markets. The increased demand for U.S. investments helped to make the dollar stronger. In addition to attractive rates, foreigners were eager to invest in the United States because this country was, and still is, seen as a comparatively stable society, a safe haven where investments are secure.

Factors Contributing to a Strong Currency

- Higher interest rates in home country than abroad
- Lower rates of inflation
- A domestic trade surplus relative to other countries
- A large, consistent government deficit crowding out domestic borrowing
- Political or military unrest in other countries
- A strong domestic financial market
- Strong domestic economy/weaker foreign economies
- No record of default on government debt
- Sound monetary policy aimed at price stability

The decisions of citizens to invest in another country can have a significant effect on their domestic economy. In the case of the U.S. in the 1980s, the desire for dollar-denominated assets helped finance the U.S. government's large budget deficit and supplied funds to private credit markets. According to the laws of supply and demand, an increased supply of funds — in this case funds provided by other countries — tends to lower the price of those funds. The price of funds is the interest rate. The increase in the supply of funds extended by foreign investors helped finance the budget deficit and helped keep interest rates below what they would have been without foreign capital.
Some were surprised that interest rates were not lower in the early 1980s, given the increased supply. But during this time period, government borrowing exerted strong upward pressure on interest rates. The increased flow of dollars at least kept rates from rising as high as they would have otherwise.

The rising demand for dollar-denominated assets also had a negative effect on the U.S. economy. The stronger dollar increased the attractiveness of foreign goods in the U.S. Many price-conscious U.S. consumers responded by purchasing more imports and fewer domestic goods. This did help keep inflation under control. But at the same time, U.S. exports were more expensive to foreigners who tended to buy fewer U.S. goods. As a result, the trade deficit widened as U.S. exports decreased and U.S. imports increased.

When a currency becomes too strong or too weak, it tends to distort international competition. As we have seen, the strong dollar of the early 1980s distorted the competitiveness of U.S. producers in relation to foreign producers. Even though foreign producers may not have used their resources as efficiently as their U.S. counterparts, they still might have been able to sell their products at lower prices than U.S. goods.

Many U.S. companies were able to respond to this increased competition by streamlining their processes and increasing productivity. In the long term these changes benefit these companies and the U.S. economy. However, some producers were unable to make sufficient adjustments and found that their products could not compete in either U.S. or international markets. It has been estimated that as a result of the strong dollar during the early 1980s, over one million U.S. workers were displaced.

In reaction, many of those hurt by foreign imports called for government assistance to limit foreign competition. This assistance came in the form of tariffs, quotas, subsidies and embargoes. This sentiment of protectionism is potentially one of the most harmful outgrowths of changes in the relative strengths of currencies. If one government passes laws setting up protective barriers, other countries would likely retaliate with protective measures of their own. International trade would slow, and people in all nations would then lose the benefits of better quality, lower prices, and a broader selection of products.

Factors Contributing to a Weak Currency

- Lower interest rates in home country than abroad
- Higher rates of inflation
- A domestic trade deficit relative to other countries
- A consistent government surplus
- Relative political/military stability in other countries
- A collapsing domestic financial market
- Weak domestic economy/stronger foreign economies
- Frequent or recent default on government debt
- Monetary policy that frequently changes objectives
Bretton Woods and Fixed Rates

If shifts in exchange rates can cause problems, why not fix rates between countries? Under a fixed-rate system, a dollar would always be worth the same amount of pounds, lira, yen or d-marks. This idea is not new. Through most of the modern era the world was on a fixed-rate system. The most recent version is referred to as the Bretton Woods System.

In 1947, the industrialized countries of the world met in Bretton Woods, New Hampshire, to discuss the state of the international economy in the post-WW II era. The heart of the discussion evolved around a plan to fix the rate of exchange for all foreign currencies to the U.S. dollar. The dollar would, in turn, be tied to gold for purposes of international settlement at a set price. This meant that a pound, lira, yen, etc., would always yield a fixed number of dollars. And an ounce of gold would always cost a set number of dollars.

The hope was that the U.S. dollar would provide stability for international trade. This stability would, in turn, translate to a solid base upon which the war-torn economies of Europe and Asia could rebuild. One disadvantage of this system was that participating nations would need to take actions that would affect their domestic economy — such as increasing or decreasing the money supply — in order to maintain their exchange rate.

The Bretton Woods Agreement, as it came to be called, started to unravel in the early 1960s. The U.S. had enjoyed a period of prosperity for most of the period since the end of World War II. Because the U.S. dollar was not convertible to gold domestically, but was considered "as good as gold" internationally, the growing U.S. economy (and money supply) meant that excess dollars easily found their way overseas.

But, in order to maintain the value of their currencies relative to the dollar, other countries had to expand their money supplies just as quickly in order to maintain the agreed upon ratios of foreign currencies to dollars. This increase in foreign currencies introduced higher inflation to those nations. The U.S. was, in essence, exporting inflation.

By the late 1960s, the now resurging countries of Europe and Asia recognized one of the sources of their inflation problems. They were reluctant to increase their domestic money supply to keep pace with the U.S., so they began to return excess dollars, demanding gold in payment at the agreed-upon rate of exchange. This led to an outflow of gold from the U.S. Eventually the U.S. holdings of gold became dangerously low. By 1971, President Nixon was forced to close the "gold window" by no longer exchanging dollars for gold at the agreed-upon rate. Since that time, exchange rates have been allowed to "float," with rates determined by the supply of and demand for currencies.
A Different Lesson from the ’90s

The U.S. faced a different situation during the mid-1990s. The reason a currency weakens may not have much to do with problems in that country’s economy. Sometimes, a currency weakens simply because of external factors.

During the autumn of 1995, the U.S. dollar began to weaken significantly against both the Japanese yen and the German d-mark. The U.S. economy had recovered from the 1990-91 recession and experienced solid growth. But in late 1995 some felt that economic growth was slowing down. When the dollar began to fall, this increased investors’ and consumers’ concern about the strength of the recovery. There were even calls for the Treasury to direct the Federal Reserve to buy dollars and sell yen and d-marks in an attempt to strengthen the dollar and reinvigorate the economy.

However, the dollar was not falling because the U.S. economy was weak. Rather, the rising value of the other currencies reflected improving economic conditions within those countries. In Germany, the continued reunification of East and West, while presenting problems, was viewed as an opportunity to reach a large population that previously had not had access to Western goods and services. High interest rates in the reunified Germany were also an attraction to investors.

A different scenario was unfolding in Japan. Despite low interest rates, deflation was actually making “real” Japanese interest rates fairly attractive. Real interest rates are usually calculated by subtracting the rate of inflation from the interest rate quoted.
The high interest rate attracted U.S. investors.

DM = $$$

Thus, a 4 percent interest rate in an economy with 3 percent inflation converts to a real rate of interest of only 1 percent (4 percent - 3 percent = 1 percent). Negative inflation (commonly called deflation) essentially adds that rate to the market interest rate. An interest rate of 2 percent in an economy with 3 percent deflation yields a real rate of interest of 5 percent.

Thus, the reason the dollar "weakened" during the fall of 1995 had less to do with weakness in the U.S. economy than with positive opportunities in the economies of Germany and Japan.

Stable Dollar

A strong currency can have both a positive and a negative impact on a nation's economy. The same holds true for a weak currency. Currencies that are too strong or too weak not only affect individual economies, but tend to distort international trade and economic and political decisions worldwide. This is compounded by the fact that individual consumers can benefit from changes in the value of a currency, while producers in the same country are hurt. But the value of a currency alone does not dictate trade flows. Many other factors are involved, such as the quality of the product. Nevertheless, changes in currency values can have a dramatic effect. Ideally, currency values should be relatively stable and at a level that can sustain long-term economic growth both here and abroad.
Additional Readings

To order these materials, contact the address or phone numbers listed below. Or you can contact the Federal Reserve’s Public Information Center, P.O. Box 834, Chicago, IL 60690-0834, phone 312-322-5111, fax 312-322-5515, or on the Internet at http://www.frbchi.org.

**Basics of Foreign Trade and Exchange**
Public Affairs Department
Federal Reserve Bank of New York
33 Liberty
New York, NY, 10045
http://www.ny.frb.org

**The Story of Foreign Trade and Exchange**
Public Affairs Department
Federal Reserve Bank of New York
33 Liberty
New York, NY, 10045
http://www.ny.frb.org

**What is the Balance of Payments**
Public Affairs Department
Federal Reserve Bank of Boston
600 Atlantic Avenue
Boston, MA 02106-2076
http://www.bos.frb.org

**A Regional Export-Weighted Dollar: A Different Way of Looking at Exchange Rate Changes**
Public Affairs Department
Federal Reserve Bank of Chicago
P.O. Box 834
Chicago, IL 60690-0834
http://www.frbchi.org

**On Reserve #38**
*Exchanging the Flow of Trade*
Public Affairs Department
Federal Reserve Bank of Chicago
P.O. Box 834
Chicago, IL 60690-0834
http://www.frbchi.org

Suggested Classroom Activities
Teachers interested in activities on foreign exchange are encouraged to visit the education page of the Federal Reserve Bank of Chicago’s website at http://www.frbchi.org and go to the education page.
Strong Dollar Weak Dollar

Classroom Questions for Strong Dollar Weak Dollar

- Economics/History questions & activities
- Answers to content questions
- Strong Dollar/Weak Dollar Booklet (on-line version)
  http://www.frbchi.org/pubs-speech/publications/booklets/strong_dollar/strong_dollar.html
- Ordering Information

Economics and/or History

Content Questions & Activities

1. Discuss what happens to the buying power of U.S. consumers when the dollar is strong and when it is weak. (page 3)

2. Is a tourist from a foreign country most likely to visit the U.S. when the dollar is strong or weak? Explain your decision. (page 3)

3. What is the CPI, and what does it measure? (page 4)

4. Explain how the dollar could be both a currency, like it is in the U.S., and a commodity, like it could be in a foreign country? (page 5)

5. Explain how the concept of price changes in terms of supply and demand. (page 8)

6. There were several consequences of the strong dollar during the early 1980's. List one of the consequences and discuss the impact on the U.S. (page 10)

7. How is gold associated with Bretton Woods and fixed rates? (page 11)

8. What do you see as one possible cause for the weaker dollar in the 1990's? (page 12)
Application Questions & Activities

1. Have students write in a journal what they feel would be the impact of nations becoming protectionist in nature. In other words, what happens when a country attempts to "defend" their currency from foreign competition?

2. Have students investigate the strength of the dollar today by researching on the Internet, or at a library, to discover what the exchange rate is. Invite interested students to present their findings to the class and speculate on why it is at its current level.

3. Assign students to interview three people that were working either during the 1980's or early 1990's to find out what life was like in the work force or in the economy during these periods.

Answers to content questions

1. A strong dollar means that U.S. consumers will pay less for goods and services from other countries. A weak dollar means that U.S. consumers will pay more for goods and services from other countries.

2. A tourist would most likely travel to the U.S. when the dollar is weak compared to their currency because the prices of U.S. goods and services would be less for them. On the other hand, when the dollar is stronger, then it is more beneficial for the U.S. consumer to travel abroad because the prices of foreign goods and services drop for the U.S. consumer.

3. Consumer Price Index - it measures the purchasing power of the dollar in terms of standard basket of goods and services.

4. A currency can be something that has a price and is bought and sold. This is an example of it being a commodity. Other times the dollar is bought in order to purchase U.S. goods and services.

5. Answers should state that according to the law of supply, as prices rise, the quantity of the item that is supplied would increase. As price falls, the quantity provided will fall. The law of demand states that as the price for an item rises, the quantity demanded will fall, and vice versa.

6. Answers will vary. Main points that could be addressed would include the expanding trade deficit, which decreased U.S. exports and increased U.S. imports; the strong dollar that distorted the competitiveness of U.S. producers in relation to foreign producers; the displacement of many U.S. workers.
7. The purpose was to have fixed international settlement price and a fixed-rate system that tied an ounce of gold to a set number of dollars and tied other currencies to the dollar at fixed rates.

8. The U.S. economy was not so much to blame as is the fact that other currencies reflected improving economic conditions within those countries.

**Ordering Information**

Strong Dollar Weak Dollar: Foreign Exchange Rates and the U.S. Economy is available free from the Federal Reserve Bank of Chicago. It can be ordered on-line using our on-line order form, or by contacting our Publications Department at

- on-line order form: http://www.frbchi.org/pubs-speech/publications/print_order_script.html
- e-mail: publications.chi@chi.frb.org
- mail: Publications Coordinator
  Public Information Center
  Federal Reserve Bank of Chicago
  P.O. Box 834
  230 South LaSalle Street
  Chicago, Illinois 60690-0834
- telephone: 312/322-5111
- fax: 312/322-5515
NOTICE

Reproduction Basis

☐ This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

☒ This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").

EFF-089 (3/2000)