

Macroeconomics

Topic 10: “Explain why the merchandise trade deficit is offset by capital flows and investment in debtor countries.”

Reference: Gregory Mankiw’s *Principles of Macroeconomics*, 2nd edition, Chapter 17.

The Merchandise Trade Deficit

The U.S. trade balance has been in a deficit position since the 1970s. This means that the total value of imported goods has been greater than the total value of exported goods. This means the U.S. is a “debtor” nation, running a merchandise trade deficit. However, the merchandise trade deficit refers only to imports and exports of goods and services. It shows that imports are greater than exports, hence the “deficit.” But, think about it for a minute, why does the world keep giving us goods, without getting goods from us in return? Is this a good deal or what? Well, clearly, this can’t be the whole story.

What is happening is that the people from whom we buy goods abroad are taking our dollars investing in the U.S. economy. They may buy U.S. government debt (securities issued by the U.S. government to finance past federal budget deficits) or other assets in the U.S. For example, they may invest in U.S. companies.

Net foreign investment

Net foreign investment equals the amount that foreigners invest in the U.S. (their purchase of assets here) minus the amount that U.S. residents invest abroad (U.S. residents’ purchase of assets in other countries). Net foreign investment generally equals net exports.

For example, if you and your neighbors want to buy jackets made in Mexico, a local wholesaler trades dollars for Mexican currency, the peso, and buys the jackets. The person or bank that traded the pesos for dollars must have a plan for those dollars. One possibility is that the person plans to buy something in the U.S.; U.S. exports would rise. Another possibility is that the person plans to invest in the United States (lend money to someone here or actually invest in the U.S. economy, perhaps purchasing stock or buying a company).

If the first option is chosen, exports will rise with imports and there will not be a merchandise trade deficit. However, if the second option holds, there will be a merchandise trade deficit (exports will be less than imports). And, if the “extra” dollars are used by foreigners to invest in the U.S., then net foreign investment (the difference between U.S. investments abroad and the investments of foreign residents in the U.S.) will be negative, equal to the merchandise trade deficit (the value of exports minus imports – referred to as “net exports”).

Net exports equal net foreign investment. In other words:

Exports – Imports = U.S. Investments Abroad – Foreign Investments in the U.S.

If dollars leave the U.S. to buy foreign goods and they are not used, in turn, to buy goods in the U.S., then they must be used for some other purpose, and that is often direct investment in the U.S. economy.

Here is one way to think about it. The total value of all final products produced in a year in the United States is called the Gross Domestic Product or GDP. The total value of final goods produced in the United States equals the total value of what is purchased. These purchases can be broken down into several components:

- Consumption Expenditures (C)
- Investment Expenditures (I)
- Government Spending (G)
- Net Exports (Exports – Imports) (NX)

Exports are part of domestic production. Imported goods are produced abroad. Because imports are included in measures of consumption, investment and government expenditures -- yet they are produced abroad – imports must be subtracted out. This can be written:

$$Y = C + I + G + NX$$

Or alternatively:

$$Y - C - G = I + NX$$

If the economy is closed to international investment, there will be no imports or exports. In this case, domestic saving (S) will tend to equal domestic investment (I) in equilibrium. The interest rate will adjust until the quantity supplied of loanable funds (by those who save) is equal to the quantity demanded of loanable funds (by those who want to invest).

But, in an open economy, investments move across countries. If foreign individuals, from whom we purchase goods, decide to use the dollars they earn to invest in the U.S. economy, then NX will be negative and an equal amount of funds will be invested in the U.S. by foreign individuals and firms. Foreigners who hold our dollars will directly invest in the United States. Mathematically, $S - NX = I$ (remember, NX is negative when imports are greater than exports, so “minus NX” is a positive number).

Alternatively, we can write:

$$S - I = NX$$

If $I > S$, this means that $NX < 0$; in other words funds are flowing into the U.S. from abroad. (We must be borrowing from the rest of the world.)

If $I < S$, this means that $NX > 0$; in other words, U.S. savings are flowing out of the U.S. for investment abroad.

One more time: If imports are greater than exports, NX will be negative. Dollars will be in the hands of individuals in foreign countries who do not want to buy goods and services from us but, instead, plan to invest in our economy.

A merchandise trade deficit (imports greater than exports) means that net foreign investment is negative as well (more funds are invested in the U.S. than we invest abroad). The dollars that are traded to pay for our imports come back in the form of investments in the U.S. by foreign individuals or companies. We buy goods and services from them, they “buy” investments here.

Is this good or bad? Economists would say “resources are going to their highest valued use.” However, if you are an exporter in the U.S., you won’t like it!

Overall, foreign investment has a positive effect on economic activity in the U.S. When investment in the U.S. rises, the rate of capital growth increases (factories are built or remodeled). Investments in the U.S. economy also spur research and development, which leads to innovation and technological advances. Increases in the physical capital stock and advances in technology increase the productivity of U.S. labor and other resources, pushing up the market value of workers, thereby increasing domestic incomes and wealth overall.

So, don’t get confused when you see a large trade imbalance. All you see, when you look at the trade balance, is the merchandise side, not the financial side of trade.

The Government’s Budget Deficit and the Trade Deficit

As you probably know, the U.S. experiences a budget deficit when the government wants to spend more than it receives in the form of tax revenues. To fund this deficit, the U.S. Treasury borrows money. Some of the funds may come from investors in other countries. They may want to hold U.S. denominated assets (such as U.S. Government Securities, which the U.S. government uses to finance the federal debt). Here is the story: If U.S. government borrowing pushes up the interest rate in the U.S. (an increase in the demand for loanable funds puts upward pressure on the interest rate), the higher real return will attract foreign funds. If this pulls dollars held by foreigners away from purchasing our exports, the federal budget deficit will be accompanied by a merchandise trade deficit, imports will be greater than exports. When this occurs, the two deficits have been referred to as “twin deficits.” U.S. producers of exported goods are worse off. Why? Dollars that might be used to buy exports are used, instead, to purchase assets in the United States.

This relationship between the two deficits (budget and trade) depends on whether borrowing by the U.S. Treasury alters the real interest rate (the return on lending) in the

U.S. Empirically, it is hard to detect, some studies suggest increased federal borrowing pushes up interest rates in the U.S., others don't find this result. Arguably, the increased borrowing is so small relative to all borrowing in the country that it does not affect the market.

In other words, the U.S. Treasury may be a “price taker” in the loanable funds market (taking the market interest rate as given). If so, the “twin” deficits are unrelated. Only if the budget deficit leads to higher domestic interest rates can we say that budget deficits affect the magnitude of the merchandise trade deficit.