Chicago Fed Letter

The U.S. trade deficit: Is the sky really falling?

After a lapse of some years, the U.S. trade deficit is in the headlines again. In January 1995, the deficit in goods trade increased to a nearrecord \$16.9 billion before backing off to \$14.2 billion in February. In 1994, the annual excess of goods imports over exports was a record \$166.6 billion, over \$7 billion more than the previous 1987 record. A record positive balance on trade in services of \$60.0 billion tempered the size of the overall deficit; nonetheless, the overall deficit on international transactions (including unilateral transfers and investment income payments) stood at \$155.7 billion in 1994, the second largest since 1987 and up sharply from the 1993 deficit of \$103.4 billion.

Is the sky really falling, or are there no worries? Most recent commentary on the subject has implied the former that a trade deficit is a problem. Many people believe that foreign capital inflows ("foreigners buying up the United States") are also a problem. In fact, neither is necessarily the case. Trade deficits or surpluses are neither inherently good or bad. The same is true for net inflows of foreign capital or net outflows of U.S. capital. This article puts trade deficits into sharper focus by sketching the economic framework within which international trade takes place.1

Current accounts and capital accounts

The relationship between *current account transactions* and *capital account transactions* is one of the more confusing aspects of international trade. The current account is made up of international trade in goods and services, net income from foreigners on

U.S. investment abroad, payments to foreigners derived from foreign investment in the U.S., and unilateral transfers. The capital account reflects net acquisition or sale of financial and direct investment assets by U.S. or foreign parties.

An "individual" (private, corporate, or governmental entity) with committable funds faces a number of alternatives. It may 1) purchase goods and services domestically or 2) from abroad, 3) invest the funds in real or financial assets domestically or 4) abroad, or 5) some combination of the above. The choice of alternatives will depend on the individual's assessment of numerous factors, including relative cost, expected return, risk preference, and a broad range of utility preferences including time preference. Because time preference is particularly important in shaping the balance between a country's capital account and current account, I will spotlight that factor in the examples that follow.

The transactions

Consider a situation in which a foreign buyer purchases goods from a U.S. exporter. In the transaction, the foreign buyer gives up funds and receives goods. That seems simple enough, but what has really happened? The foreign buyer has exchanged funds (a general claim against future resources) for a specific and current real resource (goods). On the other side of the transaction, the U.S. exporter has given up real resources (goods) in return for funds, which represent a general claim against the future resources of the foreign country. In sum, there has been a transfer of current real resources from the U.S. to the foreign country in exchange for a U.S. claim

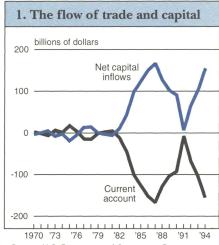
on future real resources of the foreign country. A U.S. import from a foreign seller reverses the transaction.

If a country's goods trade is in balance during a specified period, residents of that country have exchanged real resources of equal value. Over any given period, however, only an unusual set of circumstances would produce such a result. Rather, a country's goods trade would normally be expected to be in "surplus" (sold more abroad than purchased from abroad—i.e., acquired net claims on the future production of foreigners) or "deficit" (sold less abroad than purchased from abroad—i.e., assumed net liabilities against future domestic production in favor of foreigners). A similar example could be constructed for trade in services. Again, only rare circumstances would result in a zero balance between services exports and imports.

The examples above essentially assume instantaneous offsetting transactions. However, as noted, a zero balance at any given time is highly unlikely. Thus we expect a positive or negative balance on the goods transactions, and an offsetting capital account flow that finances them. Indeed, implicit in unbalanced trade transactions are offsetting capital account transactions (see figure 1). In reality, then, the trade balance and the capital account balance are two sides of the same coin. To claim that one causes the other to some degree misrepresents the underlying process.

The process

When trade transactions do not balance, a net capital inflow or outflow takes place. If there is a net import of goods, i.e., a trade deficit, then by definition there are fewer funds re-



Source: U.S. Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts database, various years.

ceived from exports than funds paid for imports. That difference must be financed (borrowed) from abroad. In this sense, a negative balance in trade must be financed by an infusion of funds from abroad through the capital account. This would seem to suggest that trade flows drive the capital accounts. But capital account transactions may take numerous forms not intentionally related to trade transactions. Recognizing the various forms of capital transactions helps place in perspective the interrelationship between the trade and the capital accounts.

Thus emerges a second basis for capital flows: investment. Taking investment into consideration, one might conclude that capital flows drive the trade balance. Such capital transactions could include the acquisition or liquidation of bank deposits, purchase or sale of stocks or other private securities, direct investment purchases or sales of plant and equipment, and the purchase or sale of government obligations. Emerging from this trade flow/capital flow relationship is a framework of factors that determines the underlying "market clearing mechanism."

Underlying factors determining trade balances and capital flows

During any given period, a constellation of economic factors such as economic growth, prices, interest rates,

exchange rates, productivity, and government policy interact such that a country may be a net importer of real resources (and an importer of capital), a net exporter of real resources, or in balance. Residents of the net importing (current-accountdeficit) country should understand that as a result of their country's net real imports, the foreign exporter is acquiring claims against the net importer's future output. The goods importer is in effect exporting claims against its future real production. It follows that when these claims are called, the former net importer becomes a net exporter; those future goods exported represent output that cannot be utilized in its home market.

Looked at from the other side of the coin, the above situation may be described as follows: Consider a constellation of economic factors such that in the aggregate, residents of one country prefer to forgo current consumption or domestic investment in favor of saving abroad (acquiring future claims on the real resources of a second country). Thus they "import" foreign government securities or possibly the ownership of foreign factories, rather than goods. If any of that constellation of economic factors change (e.g., relative interest rates, exchange rates, demographics, trade policies, or security holders' views about the economic stability of the country whose securities are being exported), the change will feed into the time preference function of the securities importers. With an appropriate change in the relative mix of economic factors between countries, residents of the securities-importing country will choose to convert those future claims on foreign production (e.g., their holdings of securities issued abroad) into claims on current foreign production. Thus an adjustment between the capital and current accounts may occur. Likewise, the time preferences of those who were formerly net importers of real resources may change as they look forward to an environment in which the net acquisition of claims on future foreign production (positive net exports) appears preferable to the net import of real resources.

Now consider an example of a capital account transaction. A U.S. entity borrows funds by selling a security. After evaluating the options, a foreign entity decides to acquire the security as the best use of its available funds. The U.S.-originated security, in effect, is exported and becomes a claim by a foreigner against the future production of the U.S. issuer. In this capital transaction, the foreign buyer/importer has exchanged funds that represent a general claim against future real resources at home for a claim against the future real resources of the U.S. The foreigner has only changed the location of its claim against the future. As far as the U.S. is concerned, the sale (export) of the security represents an obligation to transfer real resources from the U.S. to the foreign country at some time in the future.

An important difference between the current account and the capital account is the timing of the transfer of real resources. In effect, it is the interaction of the two accounts that facilitates different time preferences between countries with respect to the intercountry transfer of real resources. That is, in the aggregate, a country may elect for a time to consume more and attract more investment than it could currently produce domestically, if it pursues an appropriate set of policies vis-à-vis foreign countries. This can be accomplished only if in the aggregate, foreigners are willing to currently consume less and invest more abroad in anticipation of reversing that pattern at some later date.

In perspective

The critical economic issue from the perspective of the capital-importing country is, how is the imported (borrowed) capital to be used in the domestic economy? This same basic question faces any borrower of funds. In the simplest terms from a consumer's perspective, borrowed funds are used to increase current consumption at the expense of future consumption. In business, however, borrowed funds used to invest in improved productivity and increased output can be



serviced and paid back in the future out of the resulting increase in income, with a balance remaining that contributes to a net real increase in income to the borrower. Thus current as well as future consumption may be increased. But if the borrowed funds are used to finance current consumption or nonproductive endeavors, the borrower will have to service and pay off the debt by cutting into its unenhanced future earnings or its capital base.

Clearly, a net inflow of capital (a trade deficit) is not inherently undesirable. Indeed, it may result in an increase not only in the current level of living, but also in the future level of living for residents of the capital-importing country. Certainly imported capital has been instrumental in building the U.S. economy. The key issue is, to what use is today's imported capital directed? This question is no less valid in 1995 than it was in 1985. Unfortunately, the answer remains pretty much the same, that is, not very clear.

Net foreign investment in the U.S. (capital inflows) continues to be an important source for meeting the U.S. aggregate demand for investment funds.² Since 1973, net foreign investment in the U.S. has registered an inflow in every year except 1977, 1978, and 1991. Net foreign investment inflows as a share of demand for investment funds peaked in 1987 at around 19% (see figure 2). The net foreign investment inflow share of

domestic investment dropped sharply in the late 1980s, and by 1991 there was a marginal net outflow of funds (net U.S. investment abroad). Since then, however, net foreign investment in the U.S. and the share of investment funds demand provided by net foreign investment has increased again. During 1994, net foreign investment rose to more than 12% of domestic investment demand.

Is net foreign investment financing productive activity? Without question, a substantial portion of it is. But if net foreign investment at the margin is used to finance nonproductive government deficits or nonproductive private spending, the productive impact of net foreign investment is weakened. Whether and to what extent this is happening is an open question. Further complicating the issue is the fungibility of domestic versus foreign investment funds.

Should the U.S. be trying to reverse the current account/capital account relationship? This is a deceptively simple question with no simple answer. However, if the present relationship between the current account and the capital account were reversed, the domestic economy would look quite different than it now does. In fact, at recent and current levels of economic output and private and government "investment," and given the composition of monetary, fiscal, trade, and administrative policies in place in the U.S. and abroad, the U.S. economy requires net foreign capital inflows and, in turn, a trade deficit. When an economy is structured such that, for better or for worse, it requires net capital imports, it makes little sense to complain too loudly about trade deficits. The two are inextricably related. A change in that relationship would require larger current exports of real resources than current imports of real resources. If other things stayed the same, this would result in a lower level of living domestically than otherwise would be the case.

So was Chicken Little right? No, the sky is not falling. But to assert that there are no worries overstates the

case. There is basis for concern if borrowed foreign capital has been used to finance nonproductive endeavors, public or private. To ignore this aspect of the trade flow/capital flow relationship risks placing additional pressures on unenhanced future output when foreign creditors take their gains in real product.

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¹This article draws in some detail on Jack Hervey, "The internationalization of Uncle Sam," *Economic Perspectives*, May/June 1986, pp. 3–14. Given the current state of debate about the trade deficit, this discussion seems as timely now as it was in the mid-1980s.

²For this article, a measure of the demand for such "investment" funds is drawn from the National Income and Product Accounts database—the sum of 1) private gross domestic investment and 2) the excess of government expenditures over receipts (federal, state, and local). Net foreign investment is the sum of net exports, net receipts of factor income from foreigners and payments of factor income to foreigners, and net transfer payments.

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ISSN 0895-0164

Tracking Midwest manufacturing activity Motor vehicle production (millions, seasonally adj. annual rate) 8 Manufacturing output indexes (1987=100)Mar Month ago Year ago 142.9 MMI 142.6 131.1 ΙP 124.4 124.5 118.0 Cars Motor vehicle production (millions, seasonally adj. annual rate) Month ago Year ago Mar. Light trucks 7.2 7 1 6.9 Cars Light trucks 5.6 52 5.6 Purchasing managers' surveys: net % reporting production growth April Month ago MW 60.2 57 9 73.9 U.S. 55.3 53.6 63.2 Note: Dotted lines are estimated production from auto producers. 1994 1995

Domestic light vehicle production strengthened in the first quarter on a seasonally adjusted basis. Car production rose to its highest quarterly level since the first quarter of 1989, and light truck output flattened out at high levels. New light vehicle sales reportedly weakened in recent months, however, and domestic vehicle output is currently scheduled to fall back somewhat in the second quarter.

Some special factors played an important role in dampening auto sales in early 1995, including income tax effects, redesigns of popular models, lower incentives, and higher interest rates on auto loans.

Sources: The Midwest Manufacturing Index (MMI) is a composite index of 15 industries, based on monthly hours worked and kilowatt hours. IP represents the Federal Reserve Board industrial production index for the U.S. manufacturing sector. Autos and light trucks are measured in annualized units, using seasonal adjustments developed by the Board. The purchasing managers' survey data for the Midwest are weighted averages of the seasonally adjusted production components from the Chicago, Detroit, and Milwaukee Purchasing Managers' Association surveys, with assistance from Bishop Associates, Comerica, and the University of Wisconsin–Milwaukee.

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