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POLICY BRIEF

24-13 Mistaken Identities Make for Bad Trade Policy

Maurice Obstfeld

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Maurice Obstfeld is the C. Fred Bergsten Senior Fellow at the Peterson Institute for International Economics. He is the Class of 1958 Professor of Economics emeritus at the University of California, Berkeley, where he taught between 1991 and 2023.

Election season debates over trade policy have brought renewed attention to the United States' longstanding deficit in foreign trade. Critics from both the right and left sides of the political spectrum, including former president Donald Trump and his allies, hold the trade deficit responsible for a range of alleged ills, among them, slower US economic growth, fewer jobs, the decline in manufacturing, and a transfer of American wealth to foreign owners.

Trump supporters' ideas to reduce US trade deficits, such as far-reaching taxes on international transactions or forced dollar devaluation, rest on particular theories of why the deficits have arisen and persisted. These theories often have little basis other than macroeconomic accounting identities—relationships that are always true, by definition, and that therefore are consistent with a range of economic outcomes. Macroeconomic identities are necessary truths because they reflect the same mundane reality captured by double-entry bookkeeping: Every economic transaction has two parties, the buyer and the seller, and when the seller parts with the item being purchased, he or she receives a payment from the buyer. Such tautological relationships by themselves, however, cannot pinpoint the effects or causes of trade deficits.

For example, many trade skeptics invoke the accounting identity that national output equals domestic spending plus the trade balance to conclude that imports inevitably subtract from total economic output and jobs. But a higher US trade deficit need not mean fewer American jobs. Instead, it usually reflects strong demand that fuels growth of domestic employment along with imports. And the reverse holds true: The trade gap typically shrinks during recessions when Americans lose jobs and reduce their spending, including on imports.

Despite the empirical evidence to the contrary, many people still solemnly invoke macroeconomic identities to support their pet theories of trade deficits

and the policies they think will curb them. Their reasoning generally misdiagnoses deficits and proceeds from a simplistic view of how the economy actually works. As a result, their policy proposals are likely to inflict substantial collateral damage while not even assuring balanced trade or more manufacturing jobs.

The intellectual sleight of hand is not new: As Paul Krugman put it over a decade ago, "Accounting identities are important; in fact, they're the law. But they should inform your stories about how people behave, not act as a substitute for behavioral analysis." Apparently, few have listened. The abuse of identities continues, while becoming increasingly dangerous in a world where countries are more willing to throw multilateral cooperation aside in pursuit of national advantage.

I focus on the two most commonly abused macroeconomic identities: the *national income and product identity*, to infer the *effects* of trade deficits, and the *balance-of-payments identity*, to infer the *causes* of deficits.

ABUSE OF THE NATIONAL INCOME AND PRODUCT IDENTITY

The national income and product (NIP) identity is often the basis of claims that a trade deficit—an excess of import spending over export earnings—causes reduced economic growth and job losses. The identity reflects that a nation's total production output (gross domestic product, or GDP) must be consumed by households, invested by businesses, purchased by the government, or exported abroad.

GDP = consumption + investment + government purchases + net exports.

The last term on the right is *net* exports (export receipts *minus* import expenditures), the balance of trade. It is included because some parts of national consumption, investment, and government purchases are imported from abroad, and these components (which add up to total imports) must therefore be subtracted from the right-hand side above to make the identity a true representation of how GDP is allocated among its possible uses. The preceding relationship is an identity because every product within GDP that is sold on the market is purchased for some use: double-entry bookkeeping.

The claim that trade deficits (negative levels of net exports) cost production and jobs follows immediately from a superficial application of the NIP identity. Suppose net exports fall further, causing the trade deficit to grow, but nothing else on the right-hand side changes. Then the identity implies that GDP must be lower by the same amount. This opens a faulty line of reasoning through which bigger trade deficits are necessarily a drag on output and employment.

A recent example of specious reasoning comes from the manufacturing lobbying group Coalition for a Prosperous America, which writes that, "The U.S. trade deficit reduces U.S. GDP by sending dollars spent by American consumers and businesses to foreign producers, stimulating foreign economies rather than our own." Identical reasoning underlies Trump's view that America is losing from trade while foreigners gain. Trump adviser Peter Navarro wrote in 2017 that "Reducing a trade deficit through tough, smart negotiations is a way to increase net exports—and boost the rate of economic growth," and he reaffirms this claim more recently in a chapter of the right-leaning Heritage Foundation's Project

2025 "policy agenda." The left-leaning Economic Policy Institute also directly attributes the losses of manufacturing jobs and factories to US trade deficits.

Advocates of this approach generally measure the "job loss due to the trade deficit" by supposing that when the trade deficit rises, the economy is buying imports that otherwise would have been produced domestically. Thus, they claim, the increase in the deficit is a direct drag on domestic output and jobs. The prediction that implicitly underlies their calculations, however, is that if imports fall by some amount (for example), an equal amount of consumption or investment demand will automatically be redirected toward domestic products, leaving the sum of total consumption and investment spending unchanged. In terms of the NIP identity, they argue that net exports on the right-hand side will rise without any accompanying changes in the other right-hand side quantities, necessarily leading to higher GDP in precisely the amount of the trade balance improvement.

The flaw in this argument is that the trade deficit rarely if ever changes without some accompanying movement in consumption, investment, or government spending—and the way in which the trade balance interacts with other economic activity depends critically on *why* it is changing. The driver of the change is all important. If a domestic consumption or investment collapse leads to lower import demand and an improved trade balance, for example, it is almost certain that demand for domestic goods will also fall, with the net outcome of a fall in GDP.

In the data, GDP has a statistical tendency to fall when the trade deficit shrinks. For example, the trade gap typically narrows during US recessions, reflecting the drop in demand for imports. This regularity follows from yet another identity that is closely related to the NIP identity: The trade balance surplus is closely tied to the difference between national saving and domestic investment. Why is that the case? If we are exporting more to foreigners than we import from them, our national saving will be flowing, not only into more domestic machines, structures, and R&D, but also into foreign assets—the IOUs that foreigners give us in exchange for the portion of our goods they do not pay for through their exports to us. Similarly, a trade deficit must be covered by exporting IOUs—that is, incurring liabilities to foreigners—which means that we are saving less than what our economy invests. But short-term rises in saving and falls in investment, both of which reduce our trade deficit or increase our surplus, tend not to be associated with a booming economy—quite the reverse. For that reason, across most major industrial economies, the trade balance is usually somewhat *countercyclical*, with trade deficits rising during booms and falling during downturns.

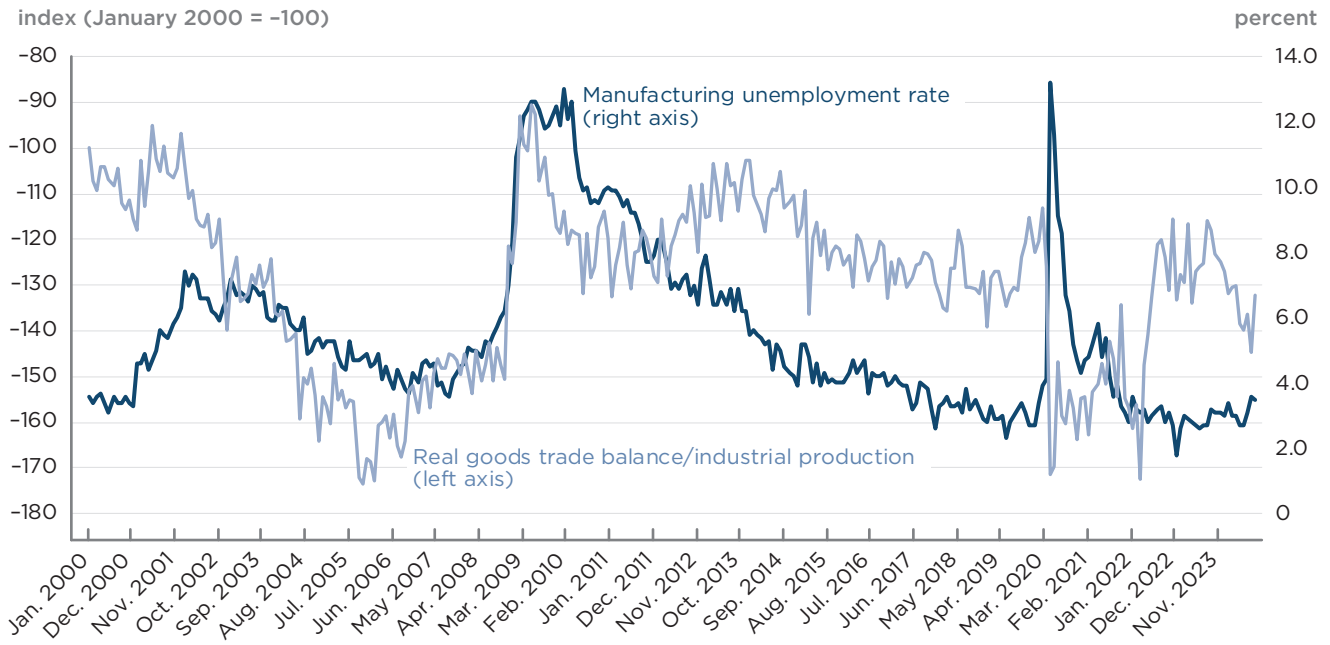
This pattern is clear for the United States, as figure 1 shows. One could look at alternative versions of this chart, all with a similar message.[1] This one shows the relationship between unemployment in the US manufacturing sector and the real US trade balance in goods in monthly data since 2000, with the trade balance scaled by industrial production. There is no tendency for unemployment to rise when the trade deficit rises, except over a few relatively brief periods. Instead, the correlation between the trade balance and unemployment is positive, such that manufacturing unemployment usually falls in sync with the goods trade balance.

Reasoning that ignores the economic equilibrium relationships that generate a given trade balance can give very misleading policy conclusions. It may seem

1 For example, see box 7.3 in this chapter from the 2015 *Economic Report of the President*.

Figure 1

The US manufacturing unemployment rate tends to fall when the US goods trade balance becomes more negative



Note: The real goods trade balance is defined as the nominal balance divided by the producer price index for manufacturing.

Source: US Census Bureau and Bureau of Economic Analysis via Federal Reserve Economic Data (FRED).

self-evident that a general protective tariff on imports, such as Trump has proposed, will make them more expensive, thereby dampening import demand and improving the balance of trade. But by moving the balance of payments toward surplus, the tariff will lead the domestic currency to appreciate in the foreign exchange market, making imports cheaper, exports more expensive for foreign buyers, and offsetting much the tariff's effects on the trade balance. The ending position may be one where the tariff's main effect is to distort the allocation of resources, reducing real output below potential.

The currency appreciation is consistent with the reality that to produce at home more of the goods that we previously imported, especially for an economy at full employment, we would need to divert resources currently employed in producing export goods. Thus, exports would fall along with imports. Empirically, quarterly changes in the ratios to GDP of imports and exports are highly correlated.

As misleading as it is to link trade deficits mechanically to jobs or output for the aggregate economy, it is even worse to infer in a similar manner the job or output losses from bilateral deficits with individual countries. If a smaller trade deficit with China is associated with bigger trade deficits with Vietnam and Mexico, there may be no effect on overall imports from a smaller deficit with China.

Trade deficits, whether aggregate or bilateral, do not necessarily translate into job and income losses—and certainly not into easily quantifiable ones.

ABUSE OF THE BALANCE-OF-PAYMENTS IDENTITY

Superficial assertions based on the balance-of-payments (BOP) identity lead to particular mischief because they link the hot-button topics of the trade balance, global financial flows, foreign exchange intervention, and the United States' unique position as the issuer of the world's premier reserve and vehicle currency. Commentators invoke the BOP identity to argue falsely that foreign financial inflows into the United States, whether private or official flows, are the root cause of US trade deficits. They then go on to suggest the remedy of taxing those inflows, often with little appreciation of the broader implications of this type of financial tariff.

However, the BOP identity cannot, by itself, justify these conclusions. It captures instead a pedestrian truism: When an American resident sells something to a foreign resident and receives a corresponding dollar (or euro, or yen) payment in return, then the American must somehow use or store that payment. Of course, the same principle applies to foreign residents who buy things from the United States or from elsewhere.

More specifically, the things countries trade with each other can be divided into two broad categories: goods and services or assets (that is, different types of financial instruments). Within the BOP statistics, the *current account* records net trade in goods and services (exports less imports) and the *financial account* net trade in assets such as stocks and bonds (our net purchases of assets located abroad less foreign net purchases of assets located in the United States).[2]

When I, resident in America, sell a widget to Japan, and get paid with a yen deposit in Tokyo, the US current account balance rises by the widget's value (to reflect the additional item exported) and the US financial account also rises by the widget's value (to reflect my receipt of a foreign asset, a yen deposit in Japan, in payment). The increase in the current account must equal the increase in the financial account. That is just double-entry bookkeeping in action—it has no implications about the causes or effects of either transaction. What if the Japanese buyer pays me instead with dollars from a New York bank deposit? The financial account still rises by the same amount, because if foreigners sell assets located in the United States, these are negative foreign purchases and have the same effect on our *net* indebtedness to foreigners as positive purchases of foreign assets by us.

If the principle that goods sold equal assets received holds for every single transaction between us and the rest of the world, however, then we can add these up and conclude that:

Current account balance = financial account balance.

2 In June 2014, the US Bureau of Economic Analysis (BEA) completed the transition to a new system of BOP reporting that tracks a "capital account" in addition to the current and financial accounts. According to the BEA, "The capital account records capital transfers, such as debt forgiveness, and transactions in nonproduced nonfinancial assets." The latter category includes, for example, intangible assets such as brand names. As the US capital account is generally quite small and of limited macroeconomic significance, I will ignore it for expository purposes. The pre-2014 BOP presentation methodology called what is now the financial account the capital account, which is why many writers (myself included at times) continue to use the time-honored legacy term "capital flows" when they mean "financial flows." Others label as a "capital account surplus" what BEA's current terminology would call a "negative financial account balance." The current account balance equals the trade balance plus net international asset income plus net transfers from abroad (such as workers' remittances). Most of the latter two categories represent net payments for the services of capital and labor working abroad—which is why I conceptualize them as "service exports."

This is the BOP identity in its simplest form.

The preceding identity is true as a matter of definition. It has no implications about the drivers of its components or the effects of policies, other than delimiting possible outcomes to those satisfying the identity—which is a bit like saying that we will not contemplate outcomes that require suspension of the laws of arithmetic. Nonetheless, it has proven too tempting for some policy analysts to deduce extremely strong behavioral predictions from the BOP identity. Of course, those predictions are logically *possible* outcomes—they do not obviously violate the laws of arithmetic, either—but the BOP identity itself provides no support for their being *likely* outcomes, or being anywhere near the *quantitative* ballpark that widely accepted principles of economic behavior would imply.

One influential writer who has inferred far-reaching truths from the BOP identity is Michael Pettis. In a 2024 paper, he concludes from the identity that

> U.S. trade deficits cannot decline as long as surplus economies can continue to acquire assets in the United States with the proceeds of their surpluses. The United States, in other words, has no choice but to run deficits to balance the surpluses of the rest of the world.

He goes on to suggest that the United States shield itself from foreign financial inflows by taxing them, thereby also reducing its current account deficit (an idea I have criticized).

While it is true that a surge in foreign demand for dollar assets would strengthen the dollar and thereby induce to some degree a wider US trade deficit, the notion that America has "no choice" but to run bigger deficits in this situation is incorrect. The United States could take any number of actions to mitigate this outcome, including trimming its federal budget deficit while loosening monetary policy if needed to support domestic full employment.[3]

Some contend that the dollar's position as the leading international currency leads to a unique and ongoing global demand for dollar assets that can be satisfied only if the United States imports more than it exports, financing its current account deficit by issuing the US securities that the world wishes to hold. But the BOP identity need not imply this. To see why, recall that the US financial account balance equals US residents' net purchases of assets located abroad *minus* foreign residents' net purchases of assets located in the United States (much as the trade balance equals exports minus imports). Rewrite the BOP identity, then, as

Current account balance = US net purchases of foreign assets – foreign net purchases of US assets.

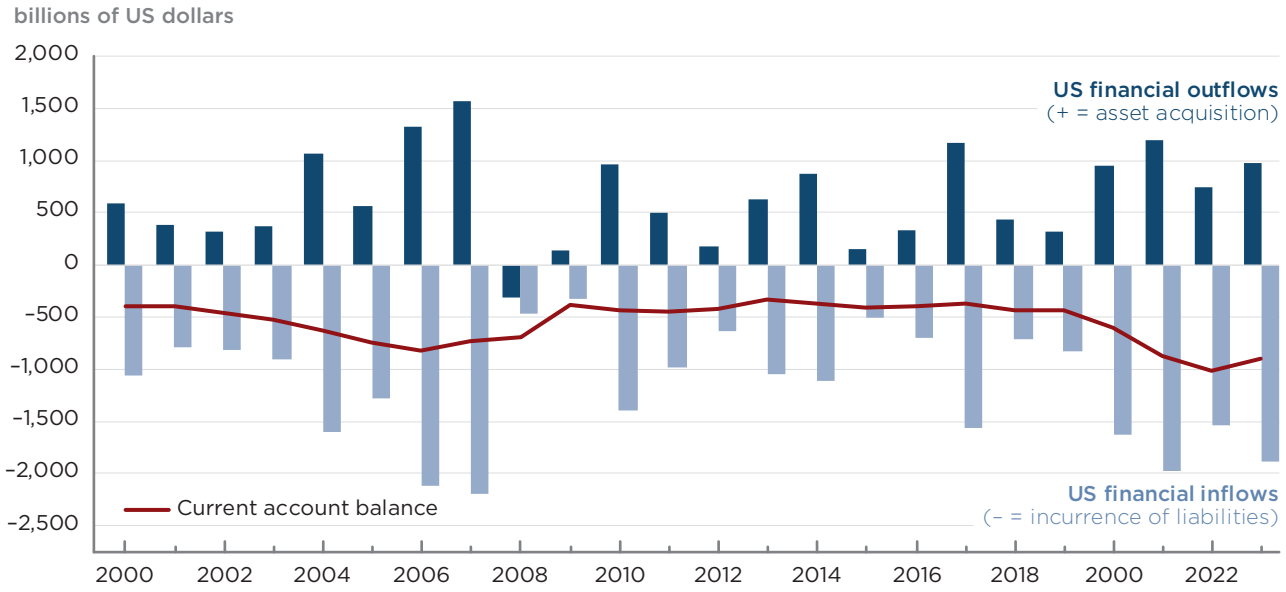
In principle, US and foreign residents may have good reasons simply to *swap assets*—perhaps foreign investors value the safety and liquidity of the dollar, while US investors seek higher returns abroad.[4] If this is the case, US residents

3 The Coalition for a Prosperous America makes the remarkable argument that because (as they claim) trade deficits lead to job losses, the governments of trade deficit countries are induced to run fiscal deficits to stabilize their economies; i.e., trade deficits cause government deficits, not the reverse.

4 In the 1960s, the economist Charles P. Kindleberger advanced this famous interpretation of the US balance of payments.

Figure 2

Gross US financial outflows and inflows are much larger than their difference, the current account balance



Source: US Bureau of Economic Analysis, US International Transactions.

could satisfy foreigners' appetite for dollar assets while purchasing from them an equal value in foreign-currency stocks and bonds, without a change in the current account.

The preceding is not a hypothetical scenario. Figure 2 graphs separately the massive volumes of gross US financial outflows and inflows, the two terms on the preceding identity's right-hand side. The magnitudes of these flows swamp the much more modest current account balance, which equals their difference, the net financial outflow. Who is to say that an increased foreign demand for US assets cannot be satisfied by an equal desire of US investors to hold more foreign assets, without any new net borrowing by the United States? US residents hold copious foreign-currency securities abroad. This reflects that countries can enjoy mutual gains from trade not just when they trade goods and services but when they diversify by exchanging assets.

Despite being the issuer of the world's second most important reserve and anchor currency, the euro area has managed current account surpluses in most quarters since early 2012, the most prolonged exception being the quarters of commodity price shocks following Russia's February 2022 invasion of Ukraine. Why does the euro area have the "choice" to run a surplus in the face of Asian financial outflows, but not America? Appropriate American macroeconomic policies could alter not only the US position but the global equilibrium, inducing changes in foreign saving and investment consistent with a balanced US current account. But politicians in Washington have no appetite to rein in the federal budget.

THE BOP IDENTITY AND CENTRAL BANK FOREIGN EXCHANGE INTERVENTION

The BOP identity continues to apply when central banks buy and sell foreign currencies, such as in foreign exchange market interventions. Central banks will then be involved as participants in financial account transactions. But nothing fundamental changes, nor does the BOP identity suddenly become anything more than the mundane accounting truism it is. That has not stopped some analysts from using it to make strong yet unfounded predictions. The issue is especially relevant for the United States, as its currency is the one most often on one side of any foreign exchange intervention.

Central banks, whose foreign exchange reserves are major-currency assets held in the issuing countries, regularly enter the markets trading reserves for their own currencies. In such cases, two offsetting financial flows occur in the immediate short run to leave the financial account unchanged when a central bank intervenes: If the Bank of Japan, say, buys dollars with its own currency (the yen), then there is a corresponding financial outflow from Japan (Bank of Japan acquires a claim on the United States), but simultaneously an equal financial inflow because the dollars' seller has equally more yen claims on Japan. (Double-entry bookkeeping again.) In other words, the Bank of Japan purchases net assets abroad, but this transaction is exactly offset by the net purchase of Japanese assets by the foreigners who accept payment from the Bank of Japan, leaving the financial account unchanged. The first of these is a reserve transaction carried out by a central bank, the second a nonreserve transaction by a foreign party. We can conceptually distinguish the two categories of transaction in the BOP identity without affecting its validity, to conclude that:

Current account balance = nonreserve financial balance + reserve financial balance.

An easy way to understand this form of the identity is to realize that if a country has a current account surplus (exports exceed imports), then foreigners must be paying the country for the difference with assets. As a result, someone within its borders—the only two possibilities are a non–central bank entity or the central bank—must acquire those assets. The United States is unusual in that it holds minuscule amounts of foreign reserves and intervenes rarely in foreign exchange markets, yet its currency is the world's main reserve currency. Nonetheless, the last form of the BOP identity still applies—after all, if it did not, it could not be an identity. For the United States, the reserve financial balance captures primarily foreign central banks' dollar transactions, not Federal Reserve transactions in foreign currencies, and therefore is negative when foreign central banks buy dollars (because the United States incurs additional liabilities to foreigners when foreign central banks buy assets located there). The United States can finance a net export deficit, for example, by borrowing either from foreign non–central banks or from foreign central banks. And if the United States has a net export surplus, foreigners' purchases of US exports in excess of their exports to the United States need to be financed either by central banks abroad reducing their US claims (thereby losing foreign exchange reserves) or by a net increase in US residents' net claims on foreign non–central bank residents.

One prominent abuse of the BOP identity is to predict the impact of foreign exchange intervention by US trade partners. If the Bank of Japan intervenes in

the foreign exchange market by buying dollar assets and selling yen—an action it might take if it wished to resist a rise in the yen against the dollar—then Japan's *reserve financial balance* in the BOP identity must rise by the amount of its intervention. The identity then implies that to balance this increase, some combination of two other BOP changes must happen: (1) a rise in Japan's current account balance, and (2) and a fall in its nonreserve financial balance. Without the benefit of economic behavioral analysis we cannot tell the size (or indeed, sign) of either change; all we know is that the two balancing changes must add up to the amount of Japanese official intervention.

Moreover, from the *United States'* perspective, Japan's official dollar purchase represents an equal *fall* in the US reserve financial balance. Again, some combination of two things must happen: (1) a fall in the US current account balance and (2) a rise in the US nonreserve financial balance. And again, without more information there is no way to know the sign or size of either of these changes. All we know is that they must add up to the fall in the US reserve financial balance due to the Bank of Japan purchase of dollar assets.

Notwithstanding the inherent uncertainty, Michael Pettis has claimed to know with certainty the effects on both countries' balance of payments:

> If foreign governments intervene in their currencies and accumulate U.S. dollars, they push down the value of their currency and will run current-account surpluses exactly equal to their net purchases.... The reverse is true as well: Because its trade partners are accumulating dollars, the United States must run the corresponding current-account deficit, which means that total demand must exceed total production. In this case, it is a tautology that Americans are consuming beyond their means.

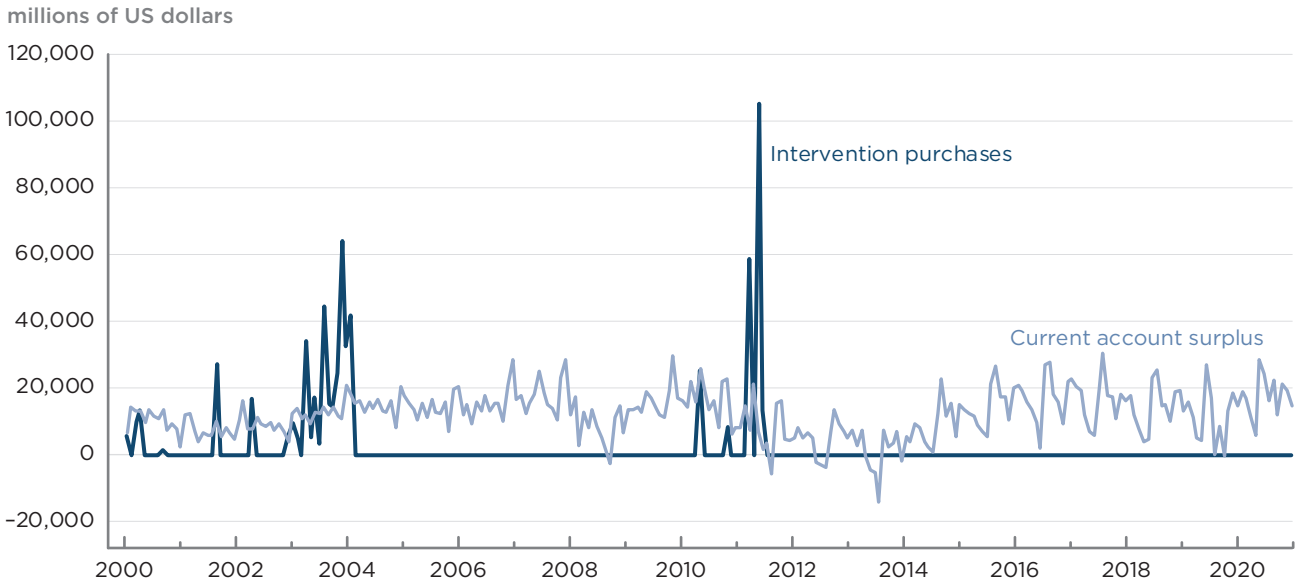
But the only tautology regarding the United States' response is the one I described above: The US financial inflow resulting from Japan's intervention purchase of dollars must be offset by some combination of a higher US current account deficit and a higher US financial outflow—not only by a change in the US current account. And a corresponding tautology for Japan follows from its BOP identity. The assertion that a Bank of Japan intervention purchase of dollars raises Japan's current account surplus and increases America's current account deficit by identical amounts equal to the intervention is definitely *not* tautological, and far from true in practice.

The intervention may lead the yen to depreciate, inducing a somewhat bigger Japanese current account surplus. The intervention certainly will not yield an equal fall in the US current account balance. Instead, the counterpart deficits to Japan's higher surplus will be spread among a range of trading partners (notwithstanding the Bank of Japan's choice to intervene in dollars rather than some other major currency). The reason is simple: When the Bank of Japan buys dollars and sells yen in the foreign exchange market, the yen depreciates against *all* foreign currencies, not just the dollar.

Even a cursory look at the data demonstrates that Japan's current account balance does not improve one-for-one with its intervention purchases of dollars, as figure 3 shows. The correlation between the two series is very close to zero. Japan intervenes only intermittently, but we can also see in figure 4 the data for a country that intervenes more regularly, Korea. As in the case of Japan, the correlation between intervention purchases and the current account balances

Figure 3

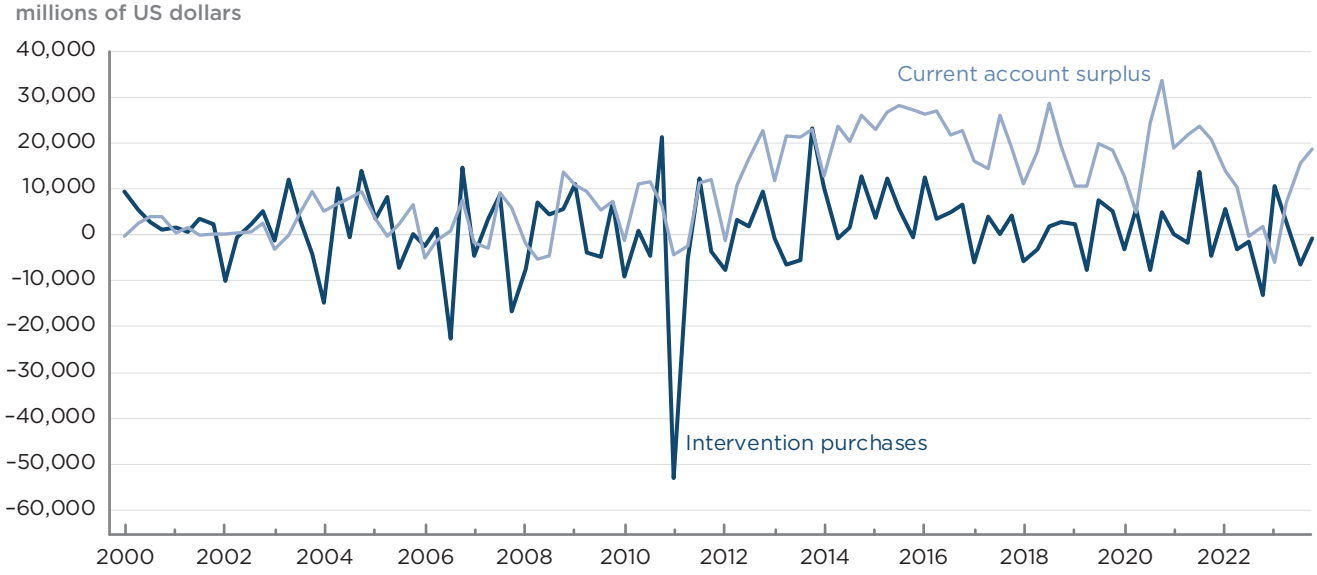
Bank of Japan intervention purchases of foreign exchange are uncorrelated with its current account balance



Source: Monthly intervention data from the Adler-Chang-Mano-Shao intervention dataset, https://sites.google.com/site/ruimano/data/fx-intervention-dataset; current account data in yen from CEIC, converted to dollars using dollar/yen monthly exchange rates from Board of Governors of the Federal Reserve System via Federal Reserve Economic Data (FRED).

Figure 4

Bank of Korea intervention purchases of foreign exchange are only mildly correlated with its current account balance



Source: Monthly intervention data from the Adler-Chang-Mano-Shao intervention dataset, https://sites.google.com/site/ruimano/data/fx-intervention-dataset; current account data from CEIC.

is far from perfect, but in the Korean case it is mildly positive, with a correlation coefficient of 0.25 since 2000.

Arguments like Pettis's are seductive because they seem superficially to be built on inexorable accounting truths. If the Bank of Japan buys $1 billion, is Japan as a nation not acquiring $1 billion more claims on the United States, and is the latter not simultaneously borrowing $1 billion more from Japan? And if so, does the BOP identity not imply that Japan's current account surplus and America's current account deficit are both $1 billion higher? We can now see what is wrong with this chain of reasoning. The first question makes no distinction between *gross* claims and *net* claims, and so the answer to the second is "Not necessarily."

CONCLUSION

Alarmist views of the US foreign trade deficit can be found across the political spectrum, but the loudest lamentations today come from the right, where there is active planning within former president Trump's economic team for policies they believe will reduce the deficit. As set out by his US Trade Representative Robert Lighthizer in a 2023 book, possible approaches include requiring importers to obtain import licenses from exporters—a scheme reminiscent of exchange control regimes used in poor developing countries and in Central Europe in the 1930s—taxes on capital inflows, and Lighthizer's preferred method, tariffs. Also in the air are policies to devalue the dollar.

These misguided policies would all be damaging, while not even assuring the desired economic outcomes. They are motivated by mistaken beliefs, often supported by a naïve use of economic accounting identities, that trade deficits harm employment and growth or are imposed by foreign countries seeking to strip the United States of its wealth.

Two key macroeconomic identities, the national income and product identity and the balance-of-payments identity, have been widely abused as justifications for radical policies to balance US trade. The identities describe relationships that necessarily hold among macro variables, but without the further input of behavioral reasoning, they cannot yield valid predictions or constructive policy conclusions.

Trade deficits entail intertemporal tradeoffs between present and future consumption; they may be benign but may instead be driven by policy or market imperfections, such as unsustainable government budget deficits or unstable finance. And when a country has a large foreign debt, as the United States does, trade deficits likely cannot continue forever. Identity-based reasoning in the face of these problems is especially dangerous because it disguises the collateral damage that superficial fixes may inflict. It is much better to identify and directly correct the distortions that cause excessive trade deficits to emerge and persist.

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