

BALANCING THE FEDERAL BUDGET AND  
U.S. INTERNATIONAL TRADE DEFICITS

M. A. Akhtar

**Federal Reserve Bank of New York  
Research Paper No. 9638**

December 1996

This paper is being circulated for purposes of discussion and comment only. The contents should be regarded as preliminary and not for citation or quotation without permission of the author. The views expressed are those of the author and do not necessarily reflect those of the Federal Reserve Bank of New York of the Federal Reserve System.

Single copies are available on request to:

**Public Information Department  
Federal Reserve Bank of New York  
New York, NY 10045**

December 1996

**BALANCING THE FEDERAL BUDGET  
AND U.S. INTERNATIONAL TRADE DEFICITS**

M. A. Akhtar\*  
Federal Reserve Bank of New York

\* The views expressed are those of the author and do not necessarily reflect those of the Federal Reserve Bank of New York or the Federal Reserve System. I am grateful to Howard Howe, Richard Peach and Charles Steindel for helpful comments and discussions.

## ABSTRACT

### Balancing the Federal Budget and U.S. International Trade Deficits

Eliminating the federal budget deficit, even assuming a correspondingly higher national rate, is likely to yield only a modest reduction in the U.S. international trade deficit. Balancing the federal budget will help improve the trade balance through the effects of lower levels of aggregate demand. But it will almost certainly not cause a large switch of U.S. and foreign demand from goods produced abroad to goods produced in the United States. Such a shift of demand toward U.S. goods is necessary to close the trade gap, and will be difficult to accomplish in the face of the trade competition between the U.S. and low-wage, export-oriented economies, and high international capital mobility.

**Balancing the Federal Budget and**  
**U. S. International Trade Deficits\***

The Administration and the Congress have agreed to enact legislation that would eliminate the federal budget deficit by year 2002. Underlying that agreement is the broadly shared view among economists and policymakers that eliminating the federal deficit would yield wide-ranging economic benefits to the U.S. economy, including lower interest rates and higher real economic growth.

One of the important presumed benefits of eliminating the federal deficit is the possible favorable effect on the U.S. international trade position. Indeed, the popular mainstream view implies that balancing the federal budget would eliminate much of the U.S. trade (current account) deficit provided that the economy's overall saving increases dollar-for-dollar in response to changes in the budget.

The mainstream view holds that the main fundamental cause of the persistent U.S. trade deficit is that national saving--the sum of private saving and public sector deficits or dissaving--

---

\* The views expressed are those of the author and do not necessarily reflect those of the Federal Reserve Bank of New York or the Federal Reserve System. I am grateful to Howard Howe, Richard Peach and Charles Steindel for helpful comments and discussions.

dropped sharply in the early and mid-1980s, and has remained low thereafter (see, for example, Krugman, 1994). Part of the fall in national saving was attributable to the decline in private (household) saving, while the remainder reflected higher federal deficits. Thus, with unchanged private saving, the implication is that eliminating the federal deficit will raise national saving proportionately, and should be more or less fully reflected in a lower current account deficit, ceteris paribus. Judging from recent levels of the two deficits, this is tantamount to eliminating the current account deficit (Table 1).

I think this is an overly optimistic view. As important as balancing the federal budget is for a variety of reasons, its benefits for the trade deficit are likely to be quite modest, even granting the strong, unrealistic assumption of dollar-for-dollar increases in national saving. It will almost certainly not come even close to eliminating the trade deficit. This note makes a case for this less optimistic view.

#### Effects of Balancing the Budget on Trade Deficits

The U.S. trade deficit can be reduced through one or more of the following channels: (1) a reduction in the level of U.S. domestic demand, a fraction of which would be presumably translated into ~~lower demand for imports~~; (2) a switch of U.S. demand from imports (goods produced abroad) to U.S. produced goods; (3) a switch of foreign demand from foreign goods to U.S. goods; and (4) an increase in domestic demand abroad, a fraction

of which would be presumably translated into higher demand for U.S. exports (U.S. produced goods).

Eliminating the federal deficit has no consequences for domestic demand in foreign countries, but it can affect the other three channels. The most obvious and definitive effect of eliminating the federal deficit will be to reduce the level of U.S. aggregate demand significantly, although the extent of decline is far from clear. The actual reduction in demand will no doubt be smaller than would be implied by the size of the deficit since part of the demand decline will be offset by changes in private saving and spending behavior resulting from lower actual or prospective deficits<sup>1</sup>. Whatever the size of actual reduction in U.S. demand, only a small fraction of it can be expected to pass through directly to U.S. imports, given the dollar exchange rate and relative U.S./foreign prices. With imports accounting for only about 12-13 percent of total supply of goods and services in the U.S. market, a roughly similar proportion of the demand decline may be borne by imports.

---

<sup>1</sup> Higher taxes and/or lower government spending needed to reduce federal deficits may reduce private saving to some extent. Moreover, lower federal deficits and the associated higher national saving ~~will tend to induce lower~~ real interest rates, with favorable consequences for private investment decisions and possibly unfavorable consequences for private saving. Also, with no prospective deferred deficits to be financed, "Ricardian households" (if there are any) will presumably lower their apparent savings--the extent of fall in their true savings will depend on the extent to which the reduction in federal deficit is financed by lower public spending as opposed to higher taxes.

Eliminating the federal deficit is likely to have only minor, if any, effects on switching U.S. and foreign demand from goods produced abroad to U.S. produced goods. Given overall income and demand levels, U.S. and foreign demand can be switched from foreign goods to U.S. produced goods by making U.S. goods more attractive relative to foreign goods. This involves either enhancing the price (cost) competitiveness of U.S. goods, or using trade policy measures--import tariffs and/or quotas and export promotion incentives--to shift demand away from imports toward U.S. goods.

About the only way that balancing the federal budget can increase the U.S. price competitiveness, at least in the medium term, is by lowering the dollar exchange rate. Many analysts do feel that lower long-term interest rates resulting from the deficit elimination plan may cause some decline in the dollar exchange rate, but any such decline is not expected to be large, and, at best, will lead to only a modest switch of demand to U.S. goods. On the other hand, it is entirely possible that, by building confidence in the long-term health of the U.S. economy, the improvement in the federal budget will prove beneficial for the dollar.

Thus, the main effect of eliminating the federal deficit on the U.S. trade position will be through a reduction in the level of U.S. demand. Since only a small fraction of the demand decline will fall on the supply of foreign goods in the U.S., the

improvement in the trade deficit is likely to be fairly modest. Balancing the federal budget is likely to have, at best, only modest effects on the trade deficit through the price competitiveness channel.<sup>2</sup>

### Fundamental Causes of the Trade Deficit

The mainstream view of fundamental macroeconomic causes of the trade deficit is grounded in the national income accounts identity which equates the trade balance or the export-import gap (X-M) to the national saving-investment gap (S-I), where national saving (S) consists of private saving (Sp) and public saving (Sg), or in the case of the U.S., public dissaving:

$$X - M = S - I = Sp + Sg - I \quad (1)$$

This identity, by itself, carries no message about the direction of causation or the importance of any particular variable in determining the trade balance. According to another important national income accounts identity, the export-import gap is also equal to the national spending-output gap, which tells a somewhat different, though not unrelated, story about the trade deficit.

Moreover, combining the national income accounts with the balance of payments accounts yields yet another identity which says that the saving-investment gap is equal to the net international capital inflows--the gap between U.S. capital outflows and foreign capital inflows. While these identities

---

<sup>2</sup> In the very long run, eliminating the federal deficit also may accelerate U.S. productivity growth which could help improve the trade balance through increases in the national saving rate and the price competitiveness.



have no causal significance, they do highlight different underlying aspects of the trade balance, which is a general equilibrium phenomenon, that is, it is jointly determined by many important variables in the international economy.

But U.S. macroeconomic developments in the 1980s were clearly consistent with a strong presumption that causation in equation (1) ran from national saving to the export-import gap.<sup>3</sup> Unprecedentedly large federal deficits associated with major policy shifts, together with a significant drop in household saving, led to historically low national saving. And the bulk of the decline in national saving was reflected in the trade deficit.

The decline in national saving was translated into the trade deficit partly through increased U.S. demand for foreign goods that resulted from higher federal deficits and lower household saving. But there also was a large switch of U.S. and foreign demand from U.S. produced goods to goods produced abroad. The switch reflected a variety of factors, including a major appreciation of the dollar in the first half of the 1980s, that greatly reduced the attractiveness of U.S. goods relative to foreign goods. While the dollar's movements were partly related to the decline in U.S. national saving, other factors bearing on the U.S. competitiveness, discussed below, were not.

---

<sup>3</sup> In fact, there is now a widespread consensus among researchers on this issue. See, for example, Akhtar (1989, 1995), Cline (1989), Helkie and Hooper (1988), Hooper and Mann (1989) and Krugman (1994).

Overall, narrowly viewed macroeconomic fundamentals in terms of rising federal deficits and declining private saving do not offer an adequate explanation for the rise and persistence of the U.S. trade deficit.<sup>4</sup> In particular, they are unable to account for the switch of U.S. and foreign demand from U.S. produced goods to goods produced abroad.

#### Fundamentals for Switching Demand to U.S. Goods

Two broad sets of forces were instrumental in switching U.S. and foreign demand from U.S. goods to foreign goods.<sup>5</sup> First, ongoing trade liberalization trends and growing integration of U.S. and foreign markets have greatly increased the trade competition between the U.S. and low-wage (labor cost), outward-oriented foreign economies. While the U.S. has shared the gains from the rapid expansion of world trade and output, the increasing trade competition with low-wage economies has reduced competitiveness of U.S. produced goods in international markets. As a consequence, U.S. imports from low-wage economies increased rapidly, while U.S. exports to those economies did not do nearly as well owing to the lack of price competitiveness. The share of U.S. trade in capital goods, for example, claimed by the newly

---

<sup>4</sup> Even broadly defined macroeconomic fundamentals--shifts in U.S. and foreign monetary and fiscal policies--cannot explain at least one-third of the increases in the current account deficit and the dollar during the first half of the 1980s (see Hooper and Mann, 1989). The contribution of U.S. fiscal policy alone to the appreciation of the dollar through 1985 was substantially less than two-thirds (see Akhtar, 1995, and Helkie and Hooper, 1988).

<sup>5</sup> These two forces and their consequences for the U.S. trade deficit are examined in detail in Akhtar (1995).

industrialized Asian economies--Hong Kong, Singapore, South Korea and Taiwan--and China increased substantially during the 1980s and the early 1990s, with the rise in U.S. imports from those countries greatly outstripping the rise in U.S. exports to them.

Second, increased integration of U.S. financial markets with major foreign financial markets has enabled the U.S. to finance the trade gap with private capital flows from abroad (i.e. foreign private saving). Indeed, many economists have argued that increased capital flows to the U.S. attracted by expected high rates of return and other considerations help to explain the bulk of the dollar appreciation in the first half of the 1980s. They also account for the fact that the huge rise in federal deficits and the decline in private saving failed to crowd out investment. High capital mobility--resulting from market liberalization and innovation together with developments in communications technology--made it possible for private saving from abroad to finance the U.S. trade gap, shifting the adjustment burden away from investment toward the external sector. This process necessitated a switch of U.S. and foreign demand from U.S. goods to foreign goods.

These two broad sets of forces also have played a major role in the persistence of the U.S. trade deficit. Over time, the trade competition between the U.S. and low-wage economies has intensified and broadened as more and more developing countries have moved toward greater trade liberalization, and integration of their markets with U.S. and other industrial country markets.

By allowing outward-oriented, low-wage economies to take advantage of greater international mobility of capital and technology, and their own pool of cheap and increasingly more educated labor force, these trends have enabled those economies to become effective international competitors in a broad range of products.

Shifts in production facilities from the U.S. to low-wage economies have magnified the adverse effect of the expanded trade competition on U.S. trade balances. Over the last fifteen years or so, significantly reduced international capital controls, in combination with new technologies and enhanced domestic and international market competition, have encouraged many U.S. exporting firms and their industrial country competitors to seek out places with lower production costs to establish production facilities. The move, at least in part, has represented a shift of domestic production-related operations to low-cost developing economies. Such shifts in production, including transfers of technology to foreign affiliates of U.S. firms, tend to reduce U.S. exports by displacing exports of U.S. parents or other U.S. firms. Increased production abroad also may tend to induce higher U.S. imports.

While the continuing trade deficits have been driven, to a considerable extent, by the heightened trade competition with low-wage economies, they could not have been sustained without high capital mobility, which has enabled the U.S. to avoid crowding out of domestic investment through inflows of foreign

private capital. Without such inflows, U.S. interest rates would have experienced persistent upward pressures, on average, causing wide-spread adverse effects in the economy. In those circumstances, some sort of adjustment in the trade deficit would have been unavoidable. Failing appropriate policy changes, automatic market forces might well have eliminated the international deficit but only at the cost of huge disruptions, or possibly a crisis, in the economy. Alternately, under pressures from exchange and financial market "crises" and demands for increased protection of domestic industries, economic policies would have been obliged to reduce the federal budget deficit to a much greater extent and in a more timely fashion.

Looking to the future, the two broad influences discussed here do not augur well for a switch back of U.S. and foreign demand from goods produced abroad to U.S. goods. In the medium-term, the weight of trade competition is likely to shift U.S. imports further toward low-wage economies, with potential adverse implications for the U.S. trade balance.<sup>6</sup> Foreign private financing of the continuing large U.S. current account deficits may well prove more problematical in the future than it has been until now. In that case, the exchange value of the dollar may

---

<sup>6</sup> Note that, as economic development in the low-wage economies proceeds, the competitive pressures on U.S. trade may ease because some of the previously low-wage countries move up on the wage scale and, more generally, because higher incomes in those economies will generate greater demand for U.S. goods and services. But past experience suggests that wages and incomes in developing economies are likely to rise rather gradually so that benefits for the U.S. trade balance are likely to be relatively small, if any, over the medium term.

decline substantially, resulting in a significant switch of U.S. demand from foreign goods to U.S. goods. On present expectations, however, foreign private financing of the U.S. trade deficit appears to be quite sustainable, at least over the medium-term.<sup>7</sup>

### The Dollar and U.S. Price Competitiveness

Aside from trade policy measures--which cannot be used to any significant extent on a unilateral basis--the price or cost competitiveness is the main vehicle for switching demand to U.S. produced goods. With price stability or very low/stable inflation at home, the nominal dollar exchange rate is the only factor that policymakers can influence to induce changes in the price competitiveness; they can't do much to alter production costs abroad. At the current dollar exchange rate, U.S. goods are generally viewed as competitive with goods produced in other industrial countries, but not with those produced in East Asia and many other low-wage economies elsewhere.

Presumably, there is a low enough value of the dollar that would allow a sufficient amount of demand to be switched from foreign goods to U.S. goods so as to balance the U.S. trade position. But we don't know what that dollar value is, at least not with any confidence. ~~And even if such a value were known at a point in time, it obviously would not stay put at that level over time.~~

---

<sup>7</sup> See Krugman (1994) and Akhtar (1995) for a discussion of this view.

Nonetheless, a back of the envelope exercise may be helpful in emphasizing that the amount of dollar depreciation required to balance the U.S. trade position is truly enormous, almost unimaginable. If we use a rough rule of thumb that an "exogenous" 10 percent depreciation of the dollar would improve the U.S. trade balance by about \$20-25 billion after three years, the implied dollar depreciation to eliminate the estimated 1996 trade deficit of about \$150 billion by year 2000 is around 60-75 percent.<sup>8</sup> Before a dollar decline of this size could actually occur, however, the economy would plunge into a huge, unprecedented crisis.

As noted earlier, it is not clear whether balancing the federal budget would necessarily cause the dollar exchange rate to depreciate. But even if a dollar decline does occur, it is likely to be modest, or at least it won't be substantial enough to yield a large shift of U.S. and foreign demand away from goods produced abroad toward U.S. produced goods.

In the medium-term, it may well be impossible to make U.S. produced goods more attractive relative to goods produced in low-wage economies. Using the dollar exchange rate alone is not feasible even to bridge the average price/cost competitiveness gap with the rest of the world, much less the gap with the low-wage economies. Selective trade policy measures may help a bit but the room to maneuver in that area is quite small. The fact

---

<sup>8</sup> The rule of thumb used here is broadly consistent with estimates from the standard international trade models.

of the matter is that structural factors bearing on production costs--low wages, tax rates etc.--offer a significant advantage to developing economies relative to the U.S., and are likely to change only gradually over time.

### Conclusion

Eliminating the federal deficit, even assuming a correspondingly higher rate of national saving, is expected to make only a modest dent in our international trade deficit. In the medium term, the bulk of the trade deficit is likely to persist regardless of the federal deficit. The main reason for this result is that balancing the federal budget, by itself, will almost certainly not cause a large switch of U.S. and foreign demand from goods produced abroad to goods produced in the United States--a switch that is necessary to bring about a major improvement in the trade balance. Switching demand to U.S. produced goods would require making U.S. goods more attractive or competitive relative to foreign goods, and depends greatly on factors beyond traditional macroeconomic fundamentals. The two key factors in this respect are the trade competition between the U.S. and low-wage, export-oriented economies, and high international capital mobility.



## References

- Akhtar, M.A. "Adjustment of U.S. External Imbalances." Seventy-Fourth (1988) Annual Report, Federal Reserve Bank of New York, April 1989.
- Akhtar, M.A. "Perspectives on U.S. External Deficits." Federal Reserve Bank of New York Research Paper, No. 9505, April 1995.
- Cline, William R. External Adjustment and the World Economy. Washington, D.C.: Institute of International Economics, 1989.
- Congressional Budget Office (CBO). The Economic and Budget Outlook. Washington, D.C., August 1996.
- Helkie, William H. and Hooper, Peter. "An Empirical Analysis of the External Deficit, 1980-86," in Ralph C. Bryant, et al, eds., External Deficits and the Dollar: The Pit and the Pendulum. Washington, D.C.: Brookings Institution, 1988.
- Hooper, Peter and Mann, Catherine L. "The Emergence and Persistence of U.S. External Imbalance, 1980-87." Princeton Studies in International Finance, No. 65, October 1989.
- International Monetary Fund (IMF). World Economic Outlook. Washington, D.C., October 1996.
- Krugman, Paul R. The Age of Diminished Expectations: The U.S. Economy in the 1990s. Cambridge, Mass.: MIT Press, 1994.

Table 1

Federal Budget and International Trade Deficits

	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>Average 1997-2002</u>
<b>Federal Budget Deficits<sup>a</sup></b>						
Billions of Dollars	255	203	164	107	169 <sup>b</sup>	189 <sup>b</sup>
Percent of GDP	3.9	3.0	2.3	1.4	2.1	
<b>Current Account Deficits<sup>c</sup></b>						
Billions of Dollars	100	148	148	150 <sup>d</sup>	150 <sup>d</sup>	
Percent of GDP	1.5	2.1	2.0	2.0	1.9	

---

<sup>a</sup> Fiscal year

<sup>b</sup> Congressional Budget Office baseline, or current policy-based estimates (CBO, 1996).

<sup>c</sup> Calendar year

<sup>d</sup> International Monetary Fund projections (IMF, 1996).