Federal Reserve Bank of Cleveland

The Exchange Stabilization Fund: How It Works

By William P. Osterberg and James B. Thomson

The increased turmoil in international financial markets, starting with the Asian crises of 1997, has led to calls for financial assistance from the wealthier nations. In December 1997, the United States announced a $5 billion commitment toward an international package of financial assistance for South Korea. Two months earlier the United States pledged $3 billion for assistance to Indonesia. In both instances, the Exchange Stabilization Fund (ESF) was to be involved.

Established by Congress in 1934 to help stabilize the international value of the dollar, the ESF received little public attention until it was used in the provision of financial assistance to Mexico in the wake of the peso crisis of 1995. Indeed, greater scrutiny may have been inevitable given the ESF's expansion beyond its original mandate.[1] Despite the recent attention, the full range of ESF activities and the actual amount of available ESF resources are not well understood. This impedes an informed public discussion of ESF operations.

A major goal of this *Economic Commentary* is to facilitate accurate assessments of the amount of resources available to the ESF. First, in order to understand the uses of ESF resources, we provide an overview of ESF operations. Second, we examine the ESF balance sheet to show how "total assets" is a poor measure of the resources available to the ESF for one of its major activities, foreign-exchange intervention. Third, we discuss how any measure of ESF resources must take account of warehousing and swap lines. Finally, we suggest a better procedure for assessing the amount of resources available to the ESF.

An Overview of the ESF

The ESF began operations on April 27, 1934, with capital of $2 billion. Initially, $1.8 billion of the ESF's reserves were maintained in the Treasury's gold account. The remaining $200 million was deposited in a special account at the Federal Reserve Bank of New York as the working balance for investing in gold and foreign exchange.[2] The working fund of the ESF has expanded over time, reaching as high as $42 billion in mid-1995.[3] As documented by Schwartz (1997), most of the growth in ESF assets has occurred since 1960 and has comprised increases in foreign exchange and securities. As of June 30, 1998, almost 60 percent of the asset total had been financed by cumulative net income, mainly reflecting interest earnings and capital gains on foreign currencies.

The Gold Reserve Act of 1934 excluded the ESF from the congressional appropriations process and explicitly authorized it to operate without congressional oversight and accountability. In other words, Congress gave exclusive control of the ESF to the executive branch. All decisions regarding the ESF are made by the Secretary of the Treasury, subject to the approval of the President.

Legislative changes in the late 1970s reduced somewhat the secrecy under which the ESF operates and made it more accountable to the Congress. For instance, since 1979 the administrative expenses of the ESF have been subject to the budget process. Moreover, a 1977 amendment to Section 10 of the Gold Reserve Act provides that:

Increasingly controversial, the Exchange Stabilization Fund is used to influence the international value of the U.S. dollar and to provide aid to foreign countries. The debate surrounding the Fund will become more informed, suggest the authors, when observers understand how to calculate the total amount of resources available to the Fund. This *Economic Commentary* explains how the ESF's balance sheet figures must be adjusted to produce an accurate account of those resources.

"... a loan or credit to a foreign entity or government of a foreign country may be made for more than 6 months in a 12-month period only if the President gives Congress a written statement that unique or emergency circumstances require the loan or credit be for more than 6 months (31 U.S.C. 5302(b))."

Finally, 1978 legislation requires the Treasury to provide monthly statements of ESF activities to the House and Senate Banking Committees. Nevertheless, none of these legislative changes has reduced the discretion of the Treasury Secretary in operating the ESF. All of his decisions are final and not subject to approval by the Congress.

The Size of the ESF

A common misperception about the ESF is that its size is adequately measured by the "total assets" number reported on the ESF balance sheet, published quarterly in

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the *Treasury Bulletin* (see table 1).[4] This might seem to be a reasonable presumption since the ESF cannot unilaterally issue debt in financial markets. However, several important aspects of ESF operations are not apparent from its balance sheet. In particular, since many ESF operations use dollar assets, any limitation on the conversion of nondollar assets to dollar assets is relevant to an assessment of available ESF resources.

Intervention, the purchase or sale of foreign currencies to influence the international value of the dollar, is a major use of ESF resources (see box, opposite). The other is the provision of financial assistance to foreign countries. Whenever the ESF sells foreign currency, it produces a crediting of the ESF's (nonmarketable) U.S. government security account with the Treasury, which is equivalent to "dollar" cash assets. When purchasing foreign currency, the ESF first obtains dollar balances—possibly by selling some of its Treasury securities to the Treasury (with the Federal Reserve [hereafter, the Fed] acting as agent). The subsequent purchase of foreign exchange with dollars leaves the ESF with a lower level of Treasury securities but an offsetting increase in "foreign exchange and securities."

Thus the relevant measure of resources available for ESF interventions depends on whether foreign exchange is being bought or sold. Dollar assets are needed to buy foreign-currency-denominated assets. On the other hand, purchases of dollars are financed from international reserves, which include official holdings of gold, foreign government securities or deposits at foreign central banks, the reserve position in the International Monetary Fund (IMF), and special drawing rights (SDRs).[5]

ESF accounting for SDRs provides another example of why total assets is a poor measure of available resources. The SDR is an international reserve asset created by the IMF (under the First Amendment to its Articles of Agreement) to supplement existing reserve assets. The value of an SDR is determined by reference to a basket of currencies of the five largest industrial-economy member countries of the IMF. Pursuant to the Special Drawing Rights Act of 1968, SDRs allocated to the United States or otherwise acquired by the United States are resources of the ESF.

TABLE 1 ESF BALANCE SHEET, JUNE 30, 1998

Assets	($ millions)	Liabilities and capital	($ millions)
Held with U.S. Treasury:		Current liabilities:	
U.S. government securities	15,691	Accounts payable	223
Special drawing rights (SDRs)	10,001	Total current liabilities	223
Foreign exchange and securities:		Other liabilities:	
German marks	5,898	SDR certificates	9,200
Japanese yen	8,018	SDR allocations	6,524
Accounts receivable	119	Total other liabilities	15,724
		Capital:	
		Capital account	200
		Net income gain (+) or loss (–)	23,581
		Total capital	23,781
Total Assets	39,727	Total liabilities and capital	39,727[a]

a. The column sum does not equal this number because of rounding error.
SOURCE: U.S. Department of the Treasury, *Treasury Bulletin,* December 1998, p. 108.

There are three SDR entries on the ESF balance sheet (see table 1). The SDR asset entry and the SDR liability entry, "SDR allocations," pertain to ESF linkages to the IMF. The allocations represent the current value of the provisions of SDRs by the IMF to the U.S. Treasury, which were transferred to the account of the ESF.[6] The SDR asset entry reflects the dollar value of SDR allocations to the United States plus interest earnings, valuation changes, and sales and acquisitions of SDRs from other IMF participants.

The third entry, "SDR certificates," equals the portion of the SDR assets which has already been "used." As noted earlier, all SDRs owned by the U.S. government must be held by the ESF. In other words, the ESF cannot engage in transactions with either the U.S. Treasury or the Fed that would result in a reduction in the ESF's SDR holdings. Thus, in order to convert SDRs to dollar-denominated assets, the ESF issues a claim on its SDR assets to the Fed—SDR certificates—in a process called *monetization.*[7] While this does not decrease the SDR asset entry on the balance sheet of the ESF, it does increase the certificate number by the amount of the monetization. By law, the certificate entry cannot exceed the SDR asset entry. However, up to the limit imposed by the SDR asset total, monetization increases the size of the balance sheet, since the certificate amount increases dollar for dollar with the eventual purchase of assets (for example, foreign-currency-denominated government securities).[8]

Since the monetization process increases the total asset number while decreasing the amount of SDRs available to be monetized, the certificate total must be subtracted from total assets to arrive at an estimate of the ESF's available resources. Thus, although total assets of the ESF on June 30, 1998, were $39.7 billion dollars, a slightly more accurate measure of available dollars would be $30.4 billion. This is the sum of the nonmonetized portion of the SDR total ($10 billion SDRs minus $9.2 billion SDR certificates), the entry for U.S. government securities with the Treasury ($15.7 billion), and the dollar value of the German mark and Japanese yen items ($13.9 billion).

Off-Balance-Sheet Financing

Congress limited the ability of the ESF to issue liabilities on its own and thus, perhaps intentionally, limited the ESF to financing new interventions through the sale of assets, a practice known as asset management. However, beyond the uses of SDRs and securities as described above the ESF can obtain additional dollar resources by moving foreign-denominated assets off-balance sheet through an arrangement with the Federal Reserve System. Thus, the $30.4 billion on-balance sheet asset number is still a flawed measure of the dollar assets available to the ESF.

The first problem is that, once the Treasury securities ("dollars") are exhausted, the ESF cannot use its German mark assets or Japanese yen assets to purchase additional mark or yen items, respectively, without first converting them into dollar-denominated assets. This conversion of the ESF's foreign currency portfolio into dollar-denominated assets requires an off-balance-sheet financing arrangement with the Fed, referred to as warehousing.

THE FED AND THE ESF IN FOREIGN-EXCHANGE INTERVENTION

Since the ESF's inception, the Federal Reserve Bank of New York has been the officially designated agent for the ESF in intervention operations. In 1962, the Federal Reserve System's Federal Open Market Committee (FOMC) authorized open-market transactions in foreign currencies for the account of the Fed, and since then, the Federal Reserve Bank of New York has acted as agent for both the Fed and the ESF in such transactions. Starting in 1978, the ESF and the Fed have almost always intervened jointly.

Although the decision to intervene is usually made jointly by the Treasury and the Fed, it falls primarily under the Treasury's purview. While the two entities routinely intervene in the same direction and amounts for their individual accounts, formal independence is maintained. In other words, the Treasury can instruct the Fed to intervene on behalf of the ESF but it cannot force the Fed to intervene for the Fed's own account.[a]

a. One exception to this would be a declared national emergency. See also Owen F. Humpage, "Institutional Aspects of U.S. Intervention," *Economic Review,* Federal Reserve Bank of Cleveland, vol. 20, no. 1 (Quarter 1 1994), pp. 2–19.

Warehousing is a swap transaction in which the Fed buys foreign exchange from the ESF in a spot transaction and sells it back with a forward transaction —that is, the ESF agrees to exchange dollar assets for foreign exchange on the date the forward transaction comes due. The ESF balance sheet would thus record a decline in "foreign exchange and securities" but an increase in the "U.S. government securities" total, which could be used to purchase foreign currency or implement dollar loans to foreign countries (the forward transaction would not appear). In other words, the Fed warehousing arrangement allows the ESF to take a leveraged position in foreign assets that is not reflected on the ESF's balance sheet.

Two factors complicate the ESF's ability to use the Fed warehouse. First, the size of the warehouse is determined by FOMC deliberations. Although the size of the warehouse was increased to $20 billion to help finance the Mexican financial assistance package in 1995, it is currently limited to $5 billion with no balances currently outstanding. Second, although the currencies currently eligible for the warehouse are indicated in the Authorization for Foreign Currency Operations, they are not necessarily the same as the currencies that the ESF needs to exchange.[9]

Since about 1978, warehousing has been controversial. Goodfriend (1994) argues currency-warehousing agreements between the ESF and the Fed provide the ESF with additional funding that circumvents the congressional appropriations process and statutory limits on Federal borrowing.[10]

The second problem with the on-balance-sheet asset measure of ESF resources is that it ignores swap lines. Swap lines, formally called reciprocal currency arrangements, are credit lines between governments (or central banks) stipulating terms which, usually for a short period of time, allow either country to borrow the other's currency.[11] The mechanics of drawing down a swap line are similar to that of warehousing—offsetting spot market and forward market transactions—except that our swap lines do not provide us with dollar assets directly but rather provide dollar assets for the other country. As in the warehousing arrangement, the forward market transaction does not appear on the balance sheet until the expiration of the swap line.[12] Drawings might be renewed once routinely, but statutes require that the executive branch report subsequent renewals to Congress. Both the Fed and the ESF maintain swap lines the sizes of which are indicated in the quarterly summary of ESF and Fed foreign exchange operations published in the *Federal Reserve Bulletin.* As of March 31, 1999, the only authorized ESF swap line was with the Bank of Mexico for $3 billion.[13]

Finally, any measure of ESF resources available for intervention needs to take account of any stated commitments by the U.S. Treasury to provide financial assistance to foreign governments via the ESF. For instance, the commitments that had been made to Korea and Indonesia would have reduced the total resources available for intervention as reflected on the June 30 balance sheet by $8 billion.[14]

Summary

The Exchange Stabilization Fund, under the U.S. Treasury, is now routinely involved in efforts to stabilize currencies and to provide financial support to foreign countries. However, the amount of resources available to the ESF and its range of activities are perhaps not well understood by many observers. In this *Economic Commentary* we correct the misperception that "total assets" is a good measure of available ESF resources.

First, "total assets" ignores the fact that the monetization of SDRs does not decrease the SDR asset entry even though the total amount of monetization is limited by the SDR asset number. Consequently, total assets must be reduced by the outstanding amount of monetization, measured by the SDR certificate number. Second, estimates of resources available to the ESF for intervention must take into account the warehousing arrangement with the Fed. The current limit on the size of the warehouse is relevant to whether the foreign-currency-denominated assets could be converted into dollars for use in purchasing foreign assets. Third, outstanding swaps and any existing commitments of ESF funds should be reflected in estimated ESF resources. An understanding of these points is a prerequisite to an informed debate regarding any change in ESF funding.

Footnotes

1. See Anna J. Schwartz, "From Obscurity to Notoriety: A Biography of the Exchange Stabilization Fund," *Journal of Money, Credit, and Banking,* vol. 29, no. 2 (May 1997), pp. 135–53; Walker F. Todd, "Disorderly Markets: The Law, History, and Economics of the Exchange Stabilization Fund and U.S. Foreign Exchange Market Intervention," *Research in Financial Services Public and Private Policy,* vol. 4 (1992), pp. 111–79; and C. Randall Henning, "The Exchange Stabilization Fund: Slush Money or War Chest?" Institute for International Economics, Washington, D.C., 1999.

2. Although originally authorized to deal in both gold and foreign exchange, the ESF has tended to deal primarily in foreign exchange and, to some extent, in the securities of sovereign nations (including U.S. government securities).

3. See Schwartz (footnote 1), pp. 136–7.

4. For example, a December 4, 1997, article discussing the proposed rescue plan for South Korea states that "the U.S. money, if needed, would come from the Exchange Stabilization Fund…. The fund contained $40 billion as of the end of March…." See "South Korea, IMF Finalize $55 Billion Bailout Plan," *Los Angeles Times,* p. D1.

5. The U.S. drew on its IMF quota in 1964– 66, 1968, 1970–72, and 1978 for amounts totaling $6.5 billion. Treasury securities denominated in foreign currencies were issued in 1962–74 ("Roosa" bonds) and in 1978–79 ("Carter" bonds) for $11.1 billion. See Schwartz (footnote 1), pp.143–4.

6. These IMF provisions of SDRs to the U.S. Treasury occurred in four separate actions between 1970 and 1981.

7. The last big cash-in, or conversion of, SDRs was in the third quarter of 1995 to fund part of the financial assistance offered to Mexico.

8. The conversion of SDRs first augments the asset-side entry for U.S. government securities. This entry, plus "foreign exchange and (foreign government) securities" more directly permits the funding of ESF activities such as the purchase and sale of foreign currencies. For example, U.S. government securities can be used to purchase foreign currency as part of an effort to depress the international value of the dollar. This would then add to the foreign exchange total, which is largely held in the form of foreign currency government securities, rather than cash.

9. The authorization is published annually in Annual Report of the Board of Governors of the Federal Reserve System. See also Owen F. Humpage, "Institutional Aspects of U.S. - Intervention," *Economic Review,* Federal Reserve Bank of Cleveland, vol. 30, no. 1 (Quarter 1 1994), p. 5.

10. See Marvin Goodfriend, "Why We Need an 'Accord' for Federal Reserve Credit Policy: A Note," *Journal of Money, Credit and Banking,* vol. 26 (August 1994, Pt. 2), pp. 572–80.

11. See Humpage (footnote 9), pp.7–8, for further details on the accounting associated with swap lines.

12. Because a forward transaction commits the ESF to exchange foreign currency for dollars at a fixed price in the future, the true exposure of the ESF to foreign-exchange risk is not reflected on its balance sheet.

13. In the last quarter of 1998, Federal Reserve System swap lines were reduced from $32.4 billion to $5 billion ($2 billion with the Bank of Canada and $3 billion with the Bank of Mexico), and the ESF eliminated its swap line with the German Bundesbank. There are no outstanding swaps for either agency. Reasons stated for the reductions included history of disuse, formation of the European Central Bank, and the existence of other arrangements for monetary cooperation.

14. The commitments to Korea and Indonesia and also to Thailand have since been rendered inoperative. However, as of June 1999, the ESF still provides backstop to the Bank of International Settlements' $7.5 billion dollar support package for Brazil.

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