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# Introducing the Exchange Stabilization Fund, 1934–1961

#### 3.1 Introduction

The first formal US institution designed to conduct official intervention in the foreign exchange market dates from 1934. In earlier years, as the preceding chapter has shown, makeshift arrangements for intervention prevailed. Why the Exchange Stabilization Fund (ESF) was created and how it performed in the period ending in 1961 are the subject of this chapter. After thriving in the prewar years from 1934 to 1939, little opportunity for intervention arose thereafter through the closing years of this period, so it is a natural dividing point in ESF history. The change in the fund's operations occurred as a result of the Federal Reserve's decision in 1962 to become its partner in official intervention. A subsequent chapter takes up the evolution of the fund thereafter.

## 3.2 Background

We first provide some information about the background to the legislation that established the ESF. The chronology of action with respect to gold by the Roosevelt administration begins on 6 March 1933. On that date a banking holiday was declared by proclamation of the president. Banks were prohibited from paying out or exporting gold. Government offices were prohibited from paying out gold except under license. On 9 March the Emergency Banking Act extended authority to regulate transactions in gold, silver, and foreign exchange. On 10 March, by executive order, the export of gold was prohibited except under regulations or license. On 5 April, gold and gold certificates were required by executive order to be surrendered. On

19 April, for the purpose of supporting the dollar in the foreign exchange market, the issuance of licenses to export gold from the United States was suspended. On 20 April, by executive order, the authority of the secretary of the Treasury to issue licenses to export or earmark gold was defined. On 5 June, by a joint resolution of Congress, so-called gold clauses in many government and private obligations, requiring payment either in gold or in a nominal amount of currency equal to the value of a specified weight of gold, were declared invalid in all public or private contracts, past or future. On 29 August, by executive order, the sale of domestic newly mined gold was authorized to industry at home and abroad. On 25 October, by executive order, the Reconstruction Finance Corporation (RFC) was authorized to acquire newly mined domestic gold. On 30 January 1934, the Gold Reserve Act transferred title to all gold of the Federal Reserve System to the United States, established the Exchange Stabilization Fund (ESF), and provided that the weight of the gold dollar should be fixed at no more than 60 percent of its existing weight.

It was at the president's initiative, not that of Congress, that the legislation establishing the ESF was shaped. Within a few days of his request, Congress complied, speeding the process whereby each House acted. The president revealed a motive for the creation of the new fund by proclamation the day after the enactment.

As is well known, the Roosevelt administration took office in March 1933 with the express intention to permit the dollar to depreciate in terms of foreign currencies as a means of achieving a rise in domestic prices. To further this aim, it initiated a gold purchase program to increase both the number of ounces and the price per ounce of the US gold stock. Had gold clauses been honored to protect lenders against currency depreciation, the gold purchase program could not have been implemented, since the lenders would have multiplied the nominal obligations of the federal government and private borrowers for interest and principal of debt by the ratio of the new price of gold to the old price. Accordingly, the abrogation of gold clauses by congressional resolution seemed to eliminate this problem. As we shall see at a later point, the lawsuits challenging the resolution roiled the foreign exchange value of the dollar until the Supreme Court ruled in its favor in February 1935. The gold purchase program thus went forward in September 1933, when the Treasury agreed to buy gold at an official gold price to be fixed daily, and in October, when the RFC was enlisted to buy newly mined domestic gold, and the Federal Reserve Banks to buy gold abroad at a purchase price that was raised almost daily.

The period of a variable price of gold came to an end on 31 January 1934, when the president, under the authority of the Gold Reserve Act passed the day before, specified a fixed buying and selling price of \$35 an ounce for gold (formerly \$20.67), thereby devaluing the gold dollar to 59.06 percent of its

former weight. Since the Act authorized the president to fix the weight of the gold dollar at any level between 50 and 60 percent of its prior legal weight, the devaluation in January 1934 thus did not fully exhaust the president's authority to lower the gold weight of the dollar and increase the buying and selling price of an ounce of gold. The exercise of this residual authority to devalue was proposed in 1937 as a measure to combat the recession that began that year. The proposal was never adopted.

On 31 January, regulations were also issued governing transactions in gold, and authorizing purchase of certain types of gold at the rate of \$35 per ounce less one quarter of 1 percent. The secretary of the Treasury, in addition, announced that he would sell gold for export to foreign central banks whenever our exchange rate with gold standard currencies reached the gold export point.

## 3.2.1 US Gold Accounts before the Gold Reserve Act Changes

Before the enactment of the Gold Reserve Act, the US monetary gold stock of \$4.2 billion was held in the Treasury, at Federal Reserve banks, and in circulation. The Treasury's gold holdings were liabilities of its general fund for the gold redemption fund against Federal Reserve notes, for gold held against Federal Reserve Bank notes and National Bank notes, and liabilities of the Treasury's gold account. The monetary gold stock was valued at \$20.67 an ounce. The Treasury and the Reconstruction Finance Corporation (RFC) also held gold purchased at more than \$20.67 an ounce in three phases under the New Deal gold purchase program. The first phase lasted from 8 September to 24 October 1933, during which the Treasury bought newly mined gold at the Mints and Assay Offices for sale to licensed purchasers for nonmonetary purposes and for sale to foreign purchasers. The sale was at world prices. The second phase began on 25 October when the RFC purchased gold at home and abroad at \$31.36 per fine ounce and at higher prices on subsequent days until 1 December when the price paid was \$34.01. The gold was bought by the Guaranty Trust Company in Paris and London either from the Bank of France or the Bank of England or in the open market at prices set by the Federal Reserve Bank of New York (FRBNY), fiscal agent for the RFC. The RFC bought the gold from the Guaranty Trust with its own notes payable in gold. On 23 November 1933 Guaranty Trust was instructed to transfer the gold it had purchased from its Paris and London offices to the Bank of France and the Bank of England. The third phase ran from December until the end of January.

On 1 February 1934, the Treasury took over the RFC gold. That day the gold purchase program was transferred from the RFC to the Treasury, which was authorized to issue \$250 million US bonds dated 16 January 1934 maturing 18 April 1934, to pay for purchases of gold coin. The reason the bond proceeds had to be used to purchase coin rather than gold bars was that the Treasury's legal authority to buy gold at more than \$20.67 an ounce

was limited to coins, as stipulated by the Civil War Act of 17 March 1862. This was accomplished by an arrangement with Guaranty Trust to exchange gold coin at the Assay Office in New York for gold bullion abroad at \$20.67 an ounce and the repurchase of the gold coin at prices the Treasury fixed.

This was the situation before the Gold Reserve Act was passed. The Act made a momentous change in Treasury operations. The bookkeeping accounts that before 1934 showed how the Treasury kept track of the gold it held had to be replaced by a new set of accounts showing its liability for the gold transferred to it by the provisions of the Act.

On 30 January 1934 the Treasury took title to all the gold the Federal Reserve System owned in exchange for inconvertible gold certificates specifying that there was gold on deposit in the Treasury payable to the bearer. (Previously a \$20 gold certificate stated that twenty dollars in gold coin payable to the bearer was on deposit in the Treasury.) The gold transferred from the Federal Reserve System was listed in the Treasury daily statement as gold certificate fund (Federal Reserve Board). The gold that the Treasury general fund held in custody for the redemption of Federal Reserve notes was transferred to the Treasury's gold account, and the liability was listed as redemption fund (Federal Reserve notes). A separate liability for the Gold reserve (US notes) was also listed, as was the liability for gold in the general fund.

The Treasury also was the recipient of gold coin, gold bullion, and gold certificates that individuals, partnerships, and corporations were required by executive order to deliver. They were paid in dollars at face value for the amounts they transferred.

## 3.2.2 Gold as of 31 January 1934

On 31 January, the reduction of the gold content of the dollar went into effect. The Treasury took over the gold from the RFC and revalued it at \$35 an ounce along with the gold it itself had acquired under the gold purchase program, as well as the gold in the Treasurer's gold account. The final result increased the value of the gold from \$4.2 billion to \$7.0 billion, for a profit of \$2.8 billion.

The contents of the act with respect to the ESF that the president desired Congress to pass, as described in the message by him delivered to Congress on 15 January, included the following paragraph (*Board* February 1934, 62–63):

That we may be further prepared to bring some greater degree of stability to foreign exchange rates in the interests of our people, there should be added to the present power of the Secretary of the Treasury to buy and sell gold at home and abroad, express power to deal in foreign exchange as such. As a part of this power, I suggest that, out of the profits from any devaluation, there should be set up a fund of \$2,000,000,000 for such

purchases and sales of gold, foreign exchange, and Government securities as the regulation of the currency, the maintenance of the credit of the Government and the general welfare of the United States may require.

In response to the president's message, a bill (H.R. 6976) was introduced in the House and passed the next day, referred to the Committee on Coinage, Weights, and Measures, which held public hearings, and reported the bill to the House with amendments on 18 January (Report no. 202). A minority report (Report no. 202, pt. 2) was presented on 19 January. House Resolution 6976 was passed 20 January, and sent to the Senate on 22 January. A similar bill was introduced in the Senate, referred to the Committee on Banking and Currency, which held hearings. The House bill was reported to the Senate (Report no. 201) with amendments, and the Senate passed the bill 27 January. The House agreed to the Senate amendments. The act (PL 87, 73d Cong.) was signed by the president 30 January 1934 (idem. 72–73).

The president's proclamation the next day fixed the weight of the gold dollar at 15 5/21 grains nine tenths fine (formerly 25.8 grains nine tenths fine), and justified the change as follows:

Whereas, I find upon investigation, that the foreign commerce of the United States is adversely affected by reason of the depreciation in the value of the currencies of other governments in relation to the present standard value of gold . . . . and . . . Whereas, I find, from my investigation, that, in order to stabilize domestic prices and to protect the foreign commerce against the adverse effect of depreciated foreign currencies, it is necessary to fix the weight of the gold dollar at 15 5/21, grains nine tenths fine. (idem. 69)

There was only one major foreign currency in 1934 that did not have a fixed foreign exchange rate relative to the dollar—the British pound. Britain suspended the gold standard in September 1931, and decided to use foreign exchange policy to control sterling exchange. The Bank of England formed an exchange committee when it suspended, intervening in close association with the Treasury. It had a dollar exchange account with limited resources, and determined that a new government account with larger resources was desirable. Thus the Exchange Equalisation Account (EEA) came into existence on 24 June and officially began operations on 1 July 1932. The bank transferred its foreign exchange holdings to the account. The announced purpose of the EEA was to stabilize sterling exchange rates, not to determine their level. But in its operations it clearly sought to influence their level. A motive for establishing the ESF was US suspicion that the EEA was created to keep sterling from appreciating relative to the dollar. To make depreciation of the dollar that devaluation had achieved effective, the administration concluded required establishment of a fund comparable to the one the British had.

Roosevelt's comments in the proclamation on currency depreciation by other governments referred to the EEA. We note at a later point that the two funds differed in some crucial features, although they shared a common purpose.

## 3.2.3 ESF Legislation

Section 10 of the Gold Reserve Act, providing for the ESF, reads as follows:

- SEC. 10. (a) For the purpose of stabilizing the exchange value of the dollar, the Secretary of the Treasury, with the approval of the President, directly or through such agencies as he may designate, is authorized, for the account of the fund established in this section, to deal in gold and foreign exchange and such other instruments of credit and securities as he may deem necessary to carry out the purpose of this section. An annual audit of such fund shall be made and a report thereof submitted to the President.
- (b) To enable the Secretary of the Treasury to carry out the provisions of this section there is hereby appropriated, out of the receipts which are directed to be covered into the Treasury under section 7 hereof, the sum of \$2,000,000,000, which sum when available shall be deposited with the Treasurer of the United States in a stabilization fund (hereinafter called the "fund") under the exclusive control of the Secretary of the Treasury, with the approval of the President, whose decisions shall be final and not subject to review by any other officer of the United States. The fund shall be available for expenditure, under the direction of the Secretary of the Treasury and in his discretion, for any purpose in connection with carrying out the provisions of this section, including the investment and reinvestment in direct obligations of the United States of any portions of the fund which the Secretary of the Treasury, with the approval of the President, may from time to time determine are not currently required for stabilizing the exchange value of the dollar. The proceeds of all sales and investments and all earnings and interest accruing under the operations of this section shall be paid into the fund and shall be available for the purposes of the fund.
- (c) All the powers conferred by this section shall expire two years after the date of enactment of this Act, unless the President shall sooner declare the existing emergency ended and the operation of the stabilization fund terminated; but the President may extend such period for not more than one additional year after such date by proclamation recognizing the continuance of such emergency. (idem. 65–66)

The sunset provision for the ESF was not part of the president's message requesting the legislation. It was an insertion in the reports by the House and Senate committees on their respective bills that appeared in the final version of the act. The sunset provision, however, did not take effect. In 1936 the

president renewed the ESF for one year by proclamation. From 1937 on, Congress renewed the fund every two years until it was made permanent by the Bretton Woods Agreement Act of 1945.

## 3.2.4 Establishing the ESF

On 17 March 1934 \$2 billion of the profit appropriated under the Gold Reserve Act for the establishment of the ESF was made available to the secretary of the Treasury by a check issued by the treasurer of the United States, and on 27 April the ESF was formally set up. The \$2 billion was divided into three parts: an account of \$100 million with the FRBNY, a disbursing account of \$100 million, and an inactive deposit of \$1.8 billion, both with the treasurer. The setup effectively provided secrecy for the ESF's transactions. Its dollar assets were divided between "Deposits of Government Officers, Postmasters, Clerks of Courts, etc. in the General Fund" and "Other Deposits" at the FRBNY—through which many other transactions were reported—and the gold, silver, or government securities that it might acquire would not appear in published statements until it made public its own balance sheet.

## 3.3 What the Fund's Design Was Intended to Accomplish

Based on the background information, we can now describe the salient features of the ESF. Foremost among these was that it was intentionally excluded from the congressional appropriation process once its initial capitalization was in place. It was to be self-financing, and was not required to seek congressional funding for its operations. The virtue of the self-financing arrangement was that it contributed to the secrecy of ESF actions, since the fund did not have to justify its expenditures during annual appeals to Congress for appropriations.

The fund was conceived to operate in secrecy under the exclusive control of the president, "whose decisions shall be final and not subject to review by any other officer of the United States." The intention was to cloak foreign exchange market intervention.

The secrecy promoted two objectives. One was to conceal from the public and Congress the exchange rates at which foreign currencies were bought and sold, particularly if they involved losses. A second objective was to permit the Treasury, if it so desired, to conceal information about any other operations the ESF might undertake.

No change has occurred in the status of the secretary of the Treasury's decisions as final, with approval of the president, and not subject to review. In more recent years, Congress has required the president to give it information about ESF transactions, but the constitutionality of the ESF has not been challenged. The ESF in its original design as a creature of the executive branch, immune to legislative oversight, despite later modifica-

tions, breaches the separation of powers. It is hard to believe that a fund with similar powers would win legislative approval currently. As shown in section 3.2 above, the legislation in 1934 was initiated by the administration, Congress largely rubber-stamping what was put before it. Ordinary citizens have no standing to mount a challenge to the constitutionality of the ESF, and seventy-odd years after its creation, it is unlikely to happen.<sup>2</sup>

## 3.3.1 Comparing the ESF and EEA

The ESF and EEA shared a common purpose: to ward off appreciation of its national currency relative to the rival currency. The operations of both the American and British stabilization funds were intended to be conducted in secrecy. The EEA was described as "an anonymous and secret body whose actions are not open to continuous scrutiny and criticism" (Hall 1935, 81). The House of Commons did not know and could not be told what the EEA was doing (Drummond 1981, 188). Of course, each fund would have liked to know what the other's intentions and actions were. However, the adversarial attitude of the funds, as we note below, did not last beyond the initial months after the ESF's establishment.

One respect in which the two funds differed was their financing. To operate the EEA, Parliament appropriated £175 million in Treasury bills, an amount that in later years was sizably increased (Sayers 1976, 427, 487–88). The ESF was programmed to be self-financing.

# 3.3.2 Problem for Empirical Research of ESF Secrecy

An empirical study is seriously limited when the agency under investigation chooses to maintain secrecy about its operations. This situation applies to the ESF with respect to intervention before 1962. For post-1962 developments, however, our study is much better situated, since the Federal Reserve System has given us the data on Treasury and Federal Reserve intervention activities, even if not the full documentary record.

Accordingly, the content of this chapter is essentially based on the information that the authorities have chosen to reveal. The published primary sources are the reports of the Treasury Department on the ESF, and of the Federal Reserve. The Treasury Department has more information than it has made available to the market and, with one exception, which we describe below, to scholars. Another source that includes some indirect references to ESF operations among a host of other topics is available in the microfilm of documents that Treasury Secretary Morgenthau deposited in the FDR Library in Hyde Park, New York. The microfilm, in 60 reels, covers the period 1934–45. The material in the FDR Library contains transcripts of every telephone conversation that the secretary held with Treasury representatives at US embassies abroad; every meeting with Treasury staff, representatives of other departments, or visiting foreign officials; and of particular interest, telephone conversations with George Harrison, governor,

later president of the FRBNY, and with the manager of the foreign exchange desk at the bank, to whom the secretary conveyed instructions regarding purchases and sales. We refer to these documents as the Morgenthau Papers. They are not Morgenthau's diaries, the title the FDR Library assigns to the microfilm collection. The diaries are separate from the Morgenthau Papers.

The microfilm does not contain copies of the original documents with instructions related to specific intervention measures, so it does not explain why the archives of the Treasury Department in College Park, Maryland, that we examined, are woefully lacking in such documentary information on ESF foreign exchange intervention.

The main source we have drawn on, based on ESF documents from 1934 to 1939, is an unpublished 200-page study by W. A. Brown, Jr., written in 1942. Our efforts to learn how he was allowed to have access to Treasury files that are generally closed to nonofficial users long after the date of their creation have been fruitless. Brown listed what needed to be checked in his manuscript and left blank pages for charts. He did not resume work on the manuscript. Despite its unfinished form, it has added to our knowledge.

In the main, Brown simply reported without his own comment or interpretation the intervention actions taken by the Treasury and the ESF as recorded in the documents to which he had access. In a few other sources to which we refer, the authors may reflect on the relationships between the dollar and other currencies during 1934–39 but with no information on the factual record of intervention.

Brown was the author of the two-volume *The International Gold Standard Reinterpreted 1914–1934*, published in 1940 by the National Bureau of Economic Research, as well as of the chapter on exchange stabilization funds (chapter VI) in the 1944 League of Nations study, *International Currency Experience*, of which Ragnar Nurkse was the main author. We also make use of Brown's reflections on the ESF in his chapter in the League of Nations work.

#### 3.4 Core Mission of the ESF

The statute authorized the ESF to deal in gold and foreign exchange. As Brown (League of Nations 1944, 160), however, observed, "Since an Exchange Fund is a large collection of assets in official hands, it may be used for many purposes not directly connected with exchange stabilization." He then noted examples of the type of operations in which the ESF engaged that were unrelated to its core mission. We discuss these examples in section 3.5. Here we deal with what we know about ESF foreign exchange market intervention.

The ESF could support the dollar exchange rate by exporting gold and acquiring foreign exchange for resale for dollars. It could support other currencies by buying foreign exchange and importing gold.

The period between the date of the Gold Reserve Act and 27 April, when the ESF began operations, and 5 September, when it first intervened in the foreign exchange market, afforded the Treasury the time to invent the details of the way the new agency would function. It also had to put into effect the framework of the new monetary system centralizing gold in the Treasury that the Gold Reserve Act set up. Accordingly, the Treasury issued regulations affecting gold market participants and foreign central banks and communicated its wishes to the FRBNY, which was its designated fiscal agent as well as that of the RFC, but had not yet been named the fiscal agent of the ESF. The main regulation the Treasury imposed was that in order to obtain gold from the Treasury, the only legal source, it would issue a license to qualifying applicants, mainly commercial banks whose customers needed gold. Even the FRBNY required a license.

The Morgenthau Papers contain no statement expressing the Treasury's views on the gold standard either before sterling began to float against the dollar and other currencies or after the dollar was devalued. We know, however, from the Treasury's announcement on 31 January 1934 that it would sell gold to foreign central banks whenever US exchange rates with gold standard currencies reached the gold export point and that the Treasury was familiar with a crucial feature of the gold standard—old style or new—the gold export and import points that defined the range within which exchange rates could fluctuate. It was the responsibility of a monetary authority in a gold standard regime to keep the level of exchange rates of their national currency within boundaries set between the fixed gold import and the fixed gold export points. In 1934 the only currencies with such fixed points were the French franc, the currencies of the gold bloc countries, and the US dollar. Sterling, by contrast, had no mint parity from which to calculate import and export points. As we shall see, transactions in both gold and foreign exchange kept a currency that was on the gold standard and one that floated within a given range. A floating currency's value oscillated between a high and a low value. The spread was not fixed as was the distance between the gold points, but the spreads were comparable. Operating within the gold points or between high and low values of a floating currency used the same techniques. At the gold export point and at the peak floating rate value, the monetary authority bought gold to counter appreciation. How did that work? In order to buy gold, say, from the United States, it had to buy dollars, thereby lowering the relative foreign exchange rate of the national currency. At the gold import point and at the low floating rate value, it sold gold, which it might have held as reserves, or borrowed, to strengthen its currency. In selling gold, say, to the US Treasury and receiving dollars in payment, a foreign monetary authority could buy its own currency, thereby strengthening it.

In addition to gold operations, another channel that was used to reduce fluctuations in the exchange value of a currency was the purchase and sale of that currency to bolster or to rein in its value. The monetary authority was not the sole participant in gold minimizing exchange rate fluctuations. Commercial banks were active in seeking profitable arbitrage opportunities and also in transferring funds. Each involved buying gold in one country and shipping it across the Atlantic to be sold in another country. When it was cheaper to transfer funds from one country to another by shipping gold than by buying and selling foreign exchange, the gold transaction was obviously preferred.<sup>4</sup>

What was different in the way intervention was conducted before the dollar was devalued was that the FRBNY was the central institution, and market participants were unregulated. After devaluation, the Treasury was the central institution and it regulated market participants by limiting their operations to those it licensed.

The Treasury was very much aware of one difference between the post-1934 international monetary order and its predecessor. The earlier gold standard was a central bank responsibility. The Treasury sought to make finance ministers the responsible officials for stabilizing exchange rates. Central banks in the Treasury's view were privately owned institutions that did not operate in their countries' interests. It was not until 25 September 1936, when the Tripartite Agreement was announced, that the Treasury was able to impose its views on other countries. Central banks were to be demoted to fiscal agency status, executing instructions that finance ministers issued. Stabilization funds established by the terms of the new arrangement had the resources to intervene in the foreign exchange market.

In a broader context, the Treasury view of the difference between the earlier gold standard and the fractured one in which it would participate from April 1934 until the Tripartite was formed was too limited. The big difference was the change in the role of short-term capital flows. They were highly stabilizing earlier because the commitment to back national currencies with gold at a fixed rate of exchange gave investors confidence to move funds to whatever destination promised the best return. Short-term interest rates rose modestly to encourage capital inflows. Outflows were not disruptive. In the 1930s short-term capital movements often were generated by political uncertainty, fiscal improvidence, and revolving ineffective governments. Capital flight from the unstable country to the relatively more stable one weakened exchange rates in the former and strengthened exchange rates in the other, with harmful effects in both. When temporary improvements occurred in the political situation of the country that suffered capital flight, it might experience a return flow of that capital, again impacting the country that had provided a temporary abode. The Treasury was cognizant of these short-term capital flows when they occurred, but we know of no discussion by its staff of their relation to the way the gold standard operated.

We now turn to the details of Treasury intervention, first in support of the French franc, and then in a more adversarial role with respect to sterling. The Treasury was less concerned with the gold bloc currencies, but we also

report measures affecting them. We cover the pre-Tripartite period and then the different arrangements that followed.

## 3.4.1 Dollar-Franc Rate Intervention before the Tripartite Agreement

Even before the ESF had engaged in its first intervention, the FRBNY had been authorized by a 23 March letter from the Treasury secretary to acquire gold bullion for sale directly or through intermediaries to foreign central banks that bought gold at a fixed price. The sales were authorized when exchange rates were below the gold export point from New York. A letter of 15 August expanded the bank's authority to acquire gold from the Treasury at any time for sale by it to such central banks to replace exchange previously sold at a rate at or above the gold export point. The FRBNY was thus permitted to help foreign central banks in gold standard countries prevent their exchange rates from actually reaching the gold export point.

It is useful to preface this section on US intervention in the French franc exchange rate with facts about the French economy. In the second half of 1933 recovery was under way in the world economy, but France began to experience a deepening depression. Earlier, it had been insulated against the worldwide economic decline by its massive gold reserves. However, by 1933, the situation in France had changed. The government budget was in deficit, as it had been since 1931. To preserve the parity of the franc, it was believed necessary to lower prices and control the budget deficit.

Predating the grant of authority to the FRBNY to sell gold to gold standard countries in the last quarter of 1933, the Bank of France regarded with equanimity domestic and foreign gold withdrawals, given the size of the reserves—amounting to 55 billion francs (\$216 million)—that it had accumulated since 1928. In January 1934, however, publicity about the Stavisky scandal—a municipal bond scandal in Bayonne—in which ministers of the radical government of Camille Chautemps were implicated, became a parliamentary crisis. At the end of January, Edouard Daladier replaced Chautemps as premier. After street riots and an attempt to attack the Chamber of Deputies, Daladier was forced to resign on 6 February. He was replaced by Gaston Doumergue as the head of a government of National Union. The aim of that government was to restore public order after the riots, not to balance the budget.

By the end of January 1934, the gold outflow amounted to 195 million francs (Mouré 1991, 146). Clement Moret, governor of the Bank of France, believed the US devaluation of the gold content of the dollar on 31 January accounted for the French gold loss. He waited until 6 February to raise the discount rate by 1/2 percent to 3 percent. He opposed tighter monetary policy because it would harm the Treasury in issuing bills and *bons* (national defense bonds).

The Treasury's situation worsened as the Stavisky scandal unfolded. It had to discount expected receipts of a medium-term bond issue in late January at

the main Paris banks. To make payments, it had to rely on sales of Treasury bills only at higher interest rates than it was content to pay. The three largest Paris banks refused a request in early March to buy Treasury bills in the amount of 1,500 million francs because their deposits had been depleted by withdrawals, and the Bank of France would not rediscount Treasury bills. The bank, however, agreed to buy more Treasury bonds, if necessary. The Treasury, however, was fortunate to obtain a loan of 1,350 million francs from a Dutch bank, and in April its situation eased. By decrees that month, budget expenditures were reduced through cuts in civil service employment, salaries, and pensions. The finance minister attempted to reduce interest rates to stimulate recovery, and asked the Bank of France to reduce the discount rate. Moret was uncooperative and refused to do so until the rate on Treasury bills was further lowered.

At the end of May 1934, the Bank of France lowered the discount rate to its former value at 2 1/2 percent, where it remained for the next year. The bank was wary of open market purchases that other central banks engaged in. In the bank's view, they were inflationary and the cause of the world depression. A central bank's proper role was to be passive, leaving it to the credit market to approach the discount window if it needed liquidity. Traditionally, the Bank of France was opposed to a varying discount rate. It believed the discount rate should be stable.

The letter of 15 August 1934 from the Treasury to the FRBNY (referred to in the first paragraph of section 3.4.1) was sent on a day when the Paris telegraph transfer rate on New York was above the gold export point. On that day the FRBNY acquired 38.5 thousand ounces of gold (\$1.28 million) from the Treasury. It sold \$1 million to Guaranty Trust for shipment to the Bank of France to replace 15 million francs that the bank had sold at a rate above the gold export point (Brown 1942, 23–24).<sup>6</sup> The balance was sold to Bankers Trust Company for shipment to the National Bank of Belgium. Shipments of gold to the Bank of France continued on 25 August and on later dates up to 4 September and also to the Bank of the Netherlands.

Thus the Treasury was in a position to intervene during the weeks before arrangements for the ESF to take over intervention operations were completed. We have no information from a French source on the reason gold was wanted at the Bank of France in August and September. We know that the bank's gold reserves had increased from 76 billion francs in the spring of 1934 to 82 billion in September (Mouré 1991, 171). The minister of finance then urged Moret to lower the rate on discounts and advances to reduce gold imports and stimulate the economy. Moret answered that a lower interest rate would have little influence on gold imports, but would lower bank profits and invite speculation. The gold inflow, he held, testified to the strength of the franc. It also provided the occasion for the first ESF intervention.

The first intervention by the ESF on 5 September 1934 occurred the day after the FRBNY was appointed by a Treasury letter to deal in foreign

exchange for the account of the ESF for present or future delivery. The letter noted that the kinds and rates of exchange to be dealt in within designated times and at designated places, and the maximum amounts to be bought or sold would be prescribed by the Treasury, which would provide the FRBNY the dollars and foreign exchange to implement authorized contracts. The agents employed by the FRBNY were to be paid a commission of 1/8 of one cent per French franc and one-half of 1 cent per Dutch guilder and Belgian franc on purchases and sales made through them. The commission was to be added to the customary charges made by brokers, both outlays to be paid by the Treasury. Chase National Bank, National City Bank, Guaranty Trust, and Bankers Trust were among the appointed agents.

The circumstance that impelled the large-scale intervention by the ESF on 5 September was the strength of the franc relative to the dollar and relative to sterling (from mid-August on). Gold from the London market moved to Paris, not to New York. The market believed that a further devaluation of the dollar or a substantial US inflation was likely, and that sterling depreciation would accompany the dollar's movement. Speculators sold dollars.

At this time the French government was legally obliged to reduce its outstanding French Treasury bills to limit this means of borrowing, and French banks were moving funds from London to add to their balances at the Bank of France. Because there was a demand for sterling to pay for US Treasury purchases of silver under the Silver Purchase Act, sterling was stronger in New York than in Paris. It was profitable to sell sterling for dollars, dollars for francs, and francs for sterling, further weakening the dollar relative to the franc. On several days the dollar-franc rate rose above the gold export point from New York to Paris, and gold exports to France from the United States followed. ESF intervention halted this movement.

On 5 September the ESF acquired 134.4 million spot francs by selling 140.0 million francs three months forward against spot. It sold 85.2 million of the spot francs plus 3.7 million francs three months forward. Guaranty Trust as the FRBNY agent executed these transactions, forcing the dollar-franc rate below the gold export point. Brown (1942, 47) is aware of problems with his description of the intervention. It seems to state that a forward sale of francs for dollars on 5 September financed the purchase that same day of spot francs. The ESF, however, could not have collected the dollars from the forward sale until three months later. In a footnote Brown writes, "If the order in which the individual transactions could be safely assumed to be the order in which the specific authorizations appear in the files, an account could be given of the details of this ('trapping' of the short interest) maneuver." The order of the transactions is thus not clear from the files that Brown examined.

It is possible that what might have occurred was a swap, whereby the ESF bought 134.4 million francs with dollars spot from the Bank of France, and entered an agreement to sell them forward again to the Bank of France at

a known exchange rate. The ESF then used the francs to intervene with the market, selling 85.2 million spot and 1.2 million forward. The fund ended with a net uncovered forward position of \$6 million equivalent francs. From 5 to 25 September it sold spot francs at a price above the dollar-franc parity but below the gold export point to Paris. The dollar strengthened in Paris during 22–28 September and the ESF was able to buy spot francs at a profitable rate to cover its forward position. Brown (1942, 50) credits the ESF with imposing a check on an outward movement of gold to Paris because of purely temporary causes, thus contributing to stability in the dollar-franc rate. Shipments of gold in both directions were avoided and as a by-product, the ESF had a profit of \$335 thousand.

There is no mention in the Treasury's 1934 annual report of either the franc intervention conducted first under the Treasury's and then under the ESF's auspices. The information comes from Brown's unpublished manuscript based on documents in files he was able to consult, we believe, at the FRBNY.

The Doumergue government fell in November 1934, when the fiscal condition was much improved. Pierre-Etienne Flandin replaced that government, hoping that cheap money would bring economic recovery and bigger government receipts to balance the budget. In January 1935 the minister of finance dismissed Moret and appointed Jean Tannery as governor of the Bank of France. The minister's efforts to obtain greater accommodation at the bank under Tannery than under Moret were disappointed. The bank's regents, while agreeing to accept short-term government securities, so restricted the amounts and terms that the effect on credit conditions for the French treasury was negligible. Instead the bank resumed indirect advances to the state by discounting Treasury bills for commercial banks in its commercial portfolio.

Weakening of the franc in January 1935 was occasioned by uncertainty about the outcome of the case before the Supreme Court on the constitutionality of the Congressional resolution abrogating the gold clause in all public and private contracts. The dollar-franc rate fell from 6.59 cents to 6.47, which under normal conditions would have made gold imports highly profitable. The market was concerned, however, that an unfavorable decision resulting in a downward revision of the price of gold would impose losses while gold was in transit to Paris. Foreign currencies were dumped to buy dollars that would be expected to appreciate.

From 15 to 28 January the ESF intervened to support the franc. On 15 January the FRBNY was authorized to buy 28.25 million francs at New York market price, but not over 6.58 3/4 cents. The Bank of France was immediately to convert the francs to gold to be held under earmark for the FRBNY as an ESF fiscal agent. The next day the FRBNY instructed the Bank of France to buy \$4 million worth of francs in Paris at 6.57 1/4 cents to be converted into gold and also held under earmark. On the same day, the

FRBNY made a second authorization for the purchase of \$5 million worth of francs by the Bank of France at 6.59 cents or better. The ESF was in the market daily from 17 to 28 January in amounts from \$5 million to \$3 million per day as a seller of dollars for francs at any rate up to 6.59 cents. During that period the ESF spent \$38.1 million for francs bought in New York and dollar sales to buy francs in Paris (Brown 1942, 65).

Between 24 January and 14 February the Treasury imported the gold acquired in the Paris market by the sale of dollars. By 4 February \$4 million of this gold had reached the United States and had been sold by the ESF to the treasurer and credited to its special account at the FRBNY. The gold acquired by the initial purchase of francs in New York may have been transferred to the Bank of England (Brown 1942, 57). (We discuss ESF support of sterling in section 3.4.2 below.)

Despite the ESF's intervention, the franc rate, nevertheless, remained below the gold export point to New York until 11 February. On that day in a Treasury press release that also appeared in the 1935 Annual Report (Exhibit 40, 235), Secretary Morgenthau stated:

- 1. Since January 14th banks and dealers in foreign exchange and gold have practically stopped buying and selling gold, within gold import and export points—which means that the International Gold Standard as between foreign countries and the United States has ceased its automatic operation.
- 2. Thanks to the foresight of 73rd Congress, we have a Stabilization Fund.
- 3. When we saw that the external value of the dollar was rapidly going out of control, we put the Stabilization Fund to work on a moment's notice, with the result that for the past four weeks we have successfully managed the value of the dollar in terms of foreign currencies. The country can go about its business with *assurance* that we are prepared to manage the external value of the dollar as long as it may be necessary.

Seventy years after it was issued, the statement strikes a fatuous note. It revealed nothing of what the ESF and the Treasury were actually doing.

On 18 February the decision of the Supreme Court upholding the abrogation of the gold clause ended the scare that a reduction in the \$35 dollar gold price was possible. Immediately following the decision, the ESF briefly continued supporting the franc, buying 15 1/2 million francs for \$1 million in New York, Paris, and London, but shortly reversed itself in response to a stronger franc. It sold 3.5 million francs in New York at 6.64 cents. It had an open position in francs that had to be liquidated. On 6 March the Treasury authorized the FRBNY to transfer \$11 million in gold held under earmark at the Bank of England for sale to the Bank of France. On 6 March the franc proceeds were sold by the ESF at 6.68 1/2 cents. The ESF then withdrew from the franc market until 18 May 1935, when pronounced weakness of the franc again developed.

In the meantime, in March 1935, a crisis developed for gold bloc countries, each of which had an overvalued currency. Belgium, a member of the gold bloc that had endured the greatest deflation, was the first driven to devalue. Of the group, Belgium was the most export-oriented, with trade focused on the sterling area, so it was the hardest hit by sterling depreciation in the first three months of 1935. Gold losses zoomed, a banking crisis occurred, and Belgium appealed to France for help on trade, which quotas France imposed in 1931 impeded, but without success. The Belgian government resigned on 18 March. A new government on 25 March devalued the Belgian franc five days later. Efforts to strengthen trade with gold-bloc countries were unacceptable to France, holding that commercial relations with non-gold-bloc countries were more important.

The French franc's weakness in May 1935 was produced by political agitation for its devaluation, unsolved budget difficulties, and loss of gold by the Bank of France. The French government that was formed in November 1934 led by Pierre-Etienne Flandin, as noted above, sought economic growth as a way to avoid devaluation. He was unable, however, to win emergency powers to deal with the budget deficit, and instead increased short-term government borrowing. Confidence in the franc fell, and a flight from the currency that ensued led to a heavy loss of gold reserves in May and June.

The US Treasury determined once more to use the ESF to support the French franc in the following manner. By telephone, it arranged for the FRBNY to buy up to \$5 million in gold to be earmarked at the Bank of France in the name of the FRBNY, guaranteed for export under all circumstances. Unlike other examples of earmarking guarantees, which were provided not only by the central bank but also by the government, in this case the French government guarantee was not required. The Bank of France was authorized to sell dollars for francs at 6.58 or better up to \$5 million. The sale of the dollars provided francs to the Bank of France, which was authorized to earmark the equivalent gold for the FRBNY.

The authorization was good for each day from 18 to 23 May. However, no transactions occurred under the authorizations, and the Bank of France continued to lose gold. So on 23 May it raised the discount rate from 2 1/2 percent to 3 percent. As a result, the franc-dollar rate did not fall below the gold export point of 6.58 cents. American official support of the market did not arise until the rate had fallen below the export point.

Whereas US intervention in support of the franc in January 1935 was unilateral, in May the ESF offered a cooperative arrangement with the Bank of France, which could exercise discretion subject to limits to the rate and total amount. On 24 May the FRBNY altered the form in which assistance was offered to the Bank of France, while renewing the bank's authority to sell \$5 million for francs at 6.56 cents or better. Two conditions were set. One required the bank, if it sold dollars, to advance the franc equivalent value as of 25 May and convert the francs into gold to be earmarked in the FRBNY

name on 25 May, guaranteed free for export to the FRB by the first available steamer. The FRBNY, on receipt of cable advice of the amount of dollar sale and conversion of francs into gold earmarked in its name, would give the Bank of France credit on its books for the value of such dollars on 25 May.

The FRB also offered to buy up to \$5 million in gold earmarked at the bank to be shipped to the US Assay Office in New York by the first available direct steamer, settlement to be provided by the Treasury. On receipt of advice that the gold had been earmarked, the FRB would credit the bank with dollars to dispose of as it wished. The dollars this offer extended to the bank enabled it to purchase francs at a rate of its choice, and it immediately accepted the offer.

The ESF then bought \$5 million in gold from the bank. The offer was renewed and the ESF bought another \$5 million in gold. No improvement was registered in the exchange market. To halt gold losses, beginning 23 May, the Bank of France raised the discount rate in steps from 2 1/2 percent until 28 May, when it raised the discount rate to 6 percent.

The ESF again came to the rescue. The FRBNY on 27 May offered to buy \$25 million in gold on 28 May on the same terms as earlier. The amount was bought in two tenders on 27 and 28 May. On 31 May the ESF bought \$33.8 million in gold of the \$150 million purchase from the Bank of France that the Treasury authorized.

In the last week of May the Flandin government asked for powers to raise taxes and cut public spending that it had previously shunned. Parliament denied the government the powers it sought. Flandin's government then fell and for three days the franc rose above the gold export point. The successor coalition government had no better success in obtaining deflationary powers and also fell. It was succeeded on 7 June by the Pierre Laval government, which obtained the emergency powers that eluded its predecessors. The Treasury then renewed its offer to have the ESF buy gold from the Bank of France for the balance of the \$150 million.

By 17 June \$68.8 million in gold the ESF had purchased had been imported and sold to the treasurer. The fund's assets at this date were predominantly in dollars.

Laval replaced Flandin's expansionary policies with deflationary measures, reducing all types of public spending. In addition, nominal debts were reduced by decree. The budget deficit, however, was not eliminated. Government debt then ballooned, and the Bank of France continued to lose gold. From 16 to 23 November 1935, the ESF offered to buy up to \$25 million in gold from the Bank of France, but the offer was not accepted.

Laval was forced to resign in January 1936. The Popular Front government of left-wing parties led by Leon Blum then took office and adopted the Flandin dash for growth program while hoping to preserve convertibility. No salvation was possible for the Popular Front with the two irreconcilable policies.<sup>7</sup>

French governments since 1931 sought economic recovery, preservation of the franc's parity, and elimination of budget deficits. To achieve the latter, it was believed to be necessary to raise taxes and cut expenditures, but parliament declined to approve deflationary measures, and even when implemented by decree, they were contradicted by agricultural subsidies and price supports. Governments resorted to borrowing as revenues declined. Interest rates rose and confidence fell.

The renewal of the French financial crisis in June 1936 was marked by a drain of gold from the Bank of France to the United States. Gold losses persisted through September. Popular discontent with deflation mounted. France finally had to confront the prospect of devaluation, which it had firmly rejected in the years since the franc's parity was established in 1928. It had come to believe that it was not the franc that was out of line, but the dollar and sterling that were out of line with the franc. The reality could no longer be denied.

The reversal of course by the decision to devalue, however, was an embarrassment for French policymakers. To explain the new tactic to the French public, it was convenient for them to portray acquiescence to the devaluation by the Americans and the British as international stabilization (Mouré 1991, 257).

Foreign observers of the deterioration of the French economy in 1936 were positive that devaluation was the proper measure to alleviate the problem. Their assessment that devaluation was the correct policy to deal with French deflation agreed with their approval both of the British departure from the gold standard in 1931 and the US decision in 1933 to raise the price of gold in order to reflate. What was different in the case of France was that the French public believed their politicians' sworn determination never to devalue. Hence political difficulties delayed and obfuscated the devaluation imperative.

The chronic French financial problem was temporarily solved by the Tripartite Agreement adopted on 25 September by the United States, Britain, and France to allow the French to devalue the franc with no retaliation by the others. On 26 September the government agreed to back suspension of the gold standard by the Bank of France.

We discuss the changes in international exchange rate policy as a result of the Tripartite Agreement in section 3.4.4. Here we simply note that the Americans and British believed that the alternatives for them, had they not proceeded as they did, were far worse. France might have adopted exchange controls or allowed the franc to depreciate or to devalue it unilaterally, so they chose the path of cooperation. Given that the franc was misaligned, it is not obvious to us that the Americans and British would have been worse off had the French devalued the franc unilaterally, and there had been no Tripartite Agreement.

## 3.4.2 Dollar-Sterling Rate Intervention before the Tripartite Agreement

The initial aim of the ESF was to defend the dollar against competitive exchange depreciation, in particular movements in sterling that the United States regarded with suspicion. The United States was willing to buy and sell gold at a fixed price but only for currencies convertible into gold at a fixed price. Since sterling was not convertible into gold at a fixed price, the ESF in principle would not sell gold in London for which it would be paid in inconvertible sterling. It did not sell gold to the EEA from April 1934, when the ESF was established, until October 1936, when agreement was reached among the Tripartite principals for reciprocity with respect to sales of gold to each other (League of Nations 1944, 158). For that period the EEA in turn did not deal in dollar exchange. The Treasury, however, had no objection to buying gold either from the Bank of England or the London gold market.

Brown (League of Nations 1944, 147) refers to this "non-intercourse between the British Fund and the American Treasury." Exceptions to the nonintercourse rule, as we shall see, were American initiatives. The British for their part did not seek rapprochement with the Americans. No regular channel of communication with respect to foreign exchange moves during this interval existed between the United States and Britain. The documents from the Bank of England archives, dealing with US intervention in the British gold market in 1935, however, demonstrate that informal contacts between the FRBNY and the bank were commonplace.<sup>8</sup> The documents also intimate that Secretary Morgenthau sought to establish a link with the representative of the British Treasury in Washington, DC.<sup>9</sup>

The Treasury was wary of a high price for gold fixed unilaterally by the EEA and a consequent depreciation of sterling in terms of dollars. Yet the price of gold in London was basically determined by the dollar-sterling rate and the fixed buying price for gold with which the Treasury operated. The influence on the London price of gold was transmitted indirectly through the stable franc-dollar rate that gold standard arrangements were responsible for (League of Nations 1944, 147).

The EEA for its part could not manage the sterling rate with operations in New York, but it could achieve its ends through operations in francs. To prevent an appreciation of sterling, it would buy francs that it sold immediately for gold from the Bank of France. In the opposite case, if the EEA wanted to stem excessive sterling depreciation, it could sell gold to the Bank of France for francs to support sterling. Since the dollar-franc rate was kept within narrow margins by gold standard arrangements, arbitrage between London, Paris, and New York tended to make the sterling-dollar rate a reflection of the sterling-franc rate (Clarke 1977, 6). Had France, like the United States, chosen to deal only with countries on the gold standard, the EEA could not

have stabilized sterling by operating on the exchange market; it would have had to operate on the gold market.

Apart from the Treasury's refusal to sell gold to the Bank of England, it was under no obligation to intervene in the exchange market to narrow the range of the fluctuations in the dollar-sterling exchange rate, but it did have an obligation to support the parity of the dollar-franc exchange rate. Whenever the franc exchange rate rose to the gold export point, the Treasury would release gold to France or any other gold standard country under the same circumstances. Whenever the franc exchange rate fell to the gold import point, the Bank of France would release gold to the United States. The upper and lower gold points differed by 1 percent.

In practice, however, both the market and the US Treasury treated sterling just as it treated the franc. The franc exchange rate fluctuated within the spread between the fixed gold export point and the fixed gold import point. The dollar-sterling exchange rate fluctuated between a shifting high market value and a shifting low market value of the dollar-sterling exchange rate. Whenever sterling rose to a peak value, the market and the Treasury sold sterling. Gold would also move to London. Whenever sterling fell to its low values, the Treasury bought sterling and gold in London. It was in the interest of the United States to keep sterling within its market boundaries.

Britain's economic situation at the time the ESF began to intervene in sterling can be briefly described. By abandoning the gold standard in September 1931, it gained the flexibility to lower interest rates (after a delay) in June 1932, expand high-powered money and yet augment its reserves, with the result that its exports grew, unemployment declined, and national income rose in each year from 1933 to the outbreak of the war.<sup>10</sup>

On 15 January 1935, when the market was roiled by worry that the Supreme Court might rule that the abrogation of the gold clause was unconstitutional and both the franc and sterling were weak, the ESF bought francs in Paris, and also bought 14,300 ounces of gold in London at \$34.60 per ounce, and an additional 30,100 ounces at \$35.65 the next day. For the next 10 days the sterling rate moved between \$4.875 and \$4.882, but on 24 January, the ESF resumed buying gold in London. On 26 January, when the sterling rate fell to \$4.86, it bought sterling in New York at \$4.8510 and sold \$5 million for sterling in London on 28 January, despite the fact that sterling was not convertible. The sterling purchases were accompanied by further gold purchases in London: \$1.54 million during 15–21 January, \$9.95 million the following week, and \$16.83 million during 28 January–4 February. 11

Presumably, the motive for supporting sterling was to prevent a fall in US trade receipts that might result from cheaper sterling prices for goods than dollar prices.

During the three weeks that the ESF actively entered the exchange market, it had spent \$21 million for gold in London, sold \$36 million for francs and gold in Paris, and bought \$14 million in sterling. The ESF paid for these

outlays by drawing on both its checking account with the treasurer and the secretary's account with the FRBNY. It replenished the account with the treasurer by selling Treasury notes from its assets, and the account at the FRBNY by selling gold it acquired in Paris from the sale of dollars and that it subsequently imported. These inflows to the two accounts were supplemented by imports of gold from London that roughly matched its purchases in January and February. The gold was sold to the treasurer to build up the ESF's dollar balances.

During the period of intervention from 16 January to 18 February, the ESF's outlay in support of sterling totaled \$85.8 million (Brown 1942, 65). After the Supreme Court decision on 18 February upholding the abrogation of the gold clause, sterling strengthened, and the fund sold \$2.81 million in sterling in New York at \$4.8842. An open position in sterling remained to be liquidated, but intervention was at an end.

The ESF disposed of some sterling between 4 and 25 March for the purchase of silver under the Silver Purchase Program (see section 3.5) for which the Treasury reimbursed it in dollars. Beginning 4 April, it sold sterling in New York directly for dollars, continuing to do so daily from 8 to 17 April. It then withdrew from the market.

The ESF reentered the market as a seller of sterling when sterling rose to \$4.88 1/2 on 10 May. The position of sterling reflected the movement of funds from Paris to London as the franc's exchange rate deteriorated. (This was the period when French governments had only brief tenures as their efforts to control budget deficits failed.) The ESF sold sterling daily in large amounts from 10 to 20 May at rates that rose steadily to \$4.91 5/8. The ESF also took advantage of the strength of sterling from 27 to 31 May to sell 225,600 ounces of gold it held at the Bank of England at \$34.98, transferring the proceeds first to Guaranty Trust Company, and then to the secretary's account at the FRBNY. The price at which the gold was sold was lower than the price at which the ESF would sell gold to gold standard central banks—\$35 plus 1/4 per ounce—but even below the official gold value of the dollar (Brown 1942, 73).

The advantage of selling sterling when its proceeds in dollars were high is obvious, as is also the advantage of selling gold for sterling at a high price. It does not, however, explain sales of gold for dollars at less than the official price. We do not know the reason the ESF did so. The gold that was sold was held at the Bank of England and probably was acquired by London gold market brokers. Were supply conditions in that market such that ESF sales were possible only at the reported low price? In May 1935 gold was deserting Paris for London, as noted above, likely destined for the Bank of England. If the conjecture about the London gold market is not valid, the ESF transaction remains an enigma. In any event, the ESF must have desired the dollar proceeds that the gold sales provided for its FRBNY account.

On the instruction of the US Treasury, President George Harrison of the

FRBNY on 15 November telephoned Montagu Norman to discuss "the possibility of the Federal Reserve Bank bidding for gold in the London market at a price slightly above that offered by commercial banks, such gold to be earmarked at the Bank of England for account of the Federal Reserve Bank and the attendant expenses of shipment of gold to New York to be thus avoided. Such gold would subsequently be sold to the Bank of England or some other central bank, or repatriated to New York as circumstances might dictate. He said that the price at which the commercial banks can buy gold is \$34.76 per ounce and he would propose that the Federal Reserve Bank should offer such price between that figure and \$34.77 as might be necessary to secure the gold" (Bank of England archive, note of a telephone conversation). Norman told Harrison that the bank would gladly act for the FRBNY in the matter.

To anticipate details of the plan that Harrison outlined, the Treasury's objective in buying gold in London that the FRBNY, as its agent was furthering, was not to accumulate gold there, but to offer arbitrageurs in that market (who would sell the gold) a price per ounce that would match or exceed the amount they could collect by selling the gold to the US Assay Office in New York, so there would be nothing to gain from shipping gold to New York. The gold would remain in London. The Treasury's objective was to deter gold shipments to New York. The stated reason was to reduce unnecessary gold movements in and out of the United States. In 1935 the motive would not have been to moderate growth of the monetary base produced by massive gold inflows to the United States in response to the rise in the price to \$35 an ounce. At that time, growth of the monetary base was still desired to raise the price level. It was not until December 1936 that the Treasury first began sterilizing gold inflows.

The problem the FRBNY encountered was that the Bank of England did not agree with the price per ounce of gold that the former believed would elicit sales. How did that happen?

H. A. Siepmann (adviser to the Bank of England and member of the committee of Treasury), in a comment on Harrison's proposal, on 15 November wrote to E. M. Harvey, the deputy governor, that theoretically a shipper of gold to New York would collect \$34.7722 per ounce. If the bank bid \$34.77 per ounce for gold in London for the account of the FRBNY, normally an arbitrageur would accept this price instead of shipping gold to New York. However, at the moment there was a freight war in the North Atlantic and a small "premium" on forward dollars that would affect the amount a shipper would collect in New York. To retain gold in London, it would be advisable to bid up to \$34.77 1/2 per ounce. This arrangement would allow the FRB to sell the bank gold at a reasonable price when it needed sterling to pay for silver. It was likely that Rothschilds (the brokers who managed the London gold market) would not cover the whole gold market (some gold arrived in

London that was not disposed of in the gold market), so the bank would need to undertake special arrangements (Archives of the Bank of England).

The price at which Harrison suggested that the Bank of England buy gold for the US Treasury—\$34.77 per ounce of gold—was based on a calculation of the London-New York shipping parity.

The London-New York shipping parity was the price for gold (which varied daily) bought with sterling in the London market at which it would be profitable, at the ruling sterling-dollar exchange rate, to ship gold to New York, when sold for the statutory \$35 per ounce, less the expense incurred in London for brokerage, packing, insurance, freight, and interest, and the expense in New York for handling charge, assaying, and the US commission of 1/4 percent (Waight 1939, 88–90).<sup>12</sup>

The shipping parity could be reached if the sterling-dollar rate was unchanged, provided there was a fall in the London price of gold, or the dollar appreciated in terms of sterling while the London price of gold was unchanged, or by a combination of a fall in the London price of gold and decline in the sterling-dollar exchange rate.

The EEA regulated the sterling price of gold. It was able to determine by how much the sterling price of gold exceeded the London-New York shipping parity (the "premium") or by how much it fell short of the parity (the "discount"). (A premium raised the dollar expense incurred in shipping gold; a discount lowered the dollar expense.) The EEA monopoly over supply and demand in the gold market enabled it to decide whether it was profitable for arbitrageurs to buy and ship gold to New York, and whether the sterling-dollar exchange rate rose or fell, the main reason for the EEA's establishment (Waight 1939, 25). It was possible for the FRBNY and the Bank of England to arrive at different figures for the shipping parity and the sterling equivalent price of an ounce of gold.

Commercial banks normally took advantage of arbitrage opportunities by shipping gold to New York. The "discount" on the sterling price that made shipments of gold to New York profitable could not be sizable. If it were, demand for gold for shipment would increase, and the EEA would have had the option to cut off sales of gold and eliminate the "discount." However, gold arbitrage for the exporting country increased the demand for sterling, and for the importing country, it increased the supply of dollars on offer. The EEA might have desired the consequent improvement in the sterling-dollar exchange rate.

Following Harrison's 15 November 1935 telephone conversation with Montagu Norman, internal memoranda by Bank of England officials commented on the substance of Harrison's proposal (Bank of England archives). In appendix 1, we summarize some of the documents that discuss the proposal and subsequently its implementation. British Treasury officials also reviewed Bank of England memoranda.

A confirmation of the motive for the Harrison proposal is provided by a telegram (no. 379) to the Bank of England from Sir Ronald Lindsay (British Ambassador to the United States) on 17 November, reporting a conversation of Secretary Morgenthau with T. Bewley, British Treasury representative in Washington. Morgenthau referred to Harrison's proposal as a plan "which would do something towards reducing pressure on gold flow to" the United States.

Cable (no. 283/35) from Harrison to Deputy Governor E. M. Harvey on 19 November, changed the proposal from a possibility to an actuality. It requested the bank to buy on or before 23 November for the FRBNY as fiscal agent of the United States up to 700,000 fine troy ounces refined gold bars at not more than \$34.77 per fine troy ounce exclusive of brokerage, and to earmark the purchase in the bank's vaults in the FRB name. The US Treasury would deposit to the bank's account at the FRB the dollar equivalent of the cost of the gold as of the date purchased and earmarked in accordance with the cable. 13

In a note of a telephone conversation between the deputy governor and Harrison, 19 November (before the cable was sent), Harrison suggested that the bank should sell sufficient dollars to provide the sterling necessary for any gold purchased. The deputy governor stated the theoretical result to a shipment of gold, according to the bank's exchange department (as explained by Siepmann in his communication to the deputy governor), and the department thought it would be necessary for the bank to be given discretion to pay somewhat more than \$34.77. Harrison put the dollar amount that would be attractive to the arbitrageur at about \$34.76, but said his figure would be checked.

Despite Bank of England's doubts that the American price was high enough to obtain gold from sellers in London, sales at that price were made. Between 27 November and 6 December some 37,000 ounces of gold was purchased under the standing offer and held by the fund under earmark at the Bank of England until sold in London on 26 January 1936. The fund then reentered the sterling market.

At the beginning of January 1936 the ESF had sold a small remaining sterling balance at \$4.93. By the end of that month, the sterling rate approached \$5.00, when it began to sell sterling one month forward to check the appreciation. Between 24 January and 27 February the ESF sold forward in New York \$14.4 million in sterling, most of the sales at just over \$5 and the bulk for end-of-February delivery. To cover this position the Fund purchased spot beginning on 14 February both in New York and London from \$4.97 3/4 to \$4.99 3/4. At the end of February it sold additional sterling forward for end-of-March delivery, so that its net forward position on 2 March was \$8.2 million. The March position closed at gradually declining rates to \$4.99. A still smaller forward position taken at the end of April was carried forward to the end of May at \$4.93 1/2 and the whole of the May position was closed out

by the purchase of sterling for delivery 29 May at rates from \$4.95 to \$4.97. On 8 May the ESF retired from the sterling market until 26 September, the day following the announcement of the Tripartite Agreement.

Retirement from the sterling market did not preclude operations in the gold market. On 29 March 1936 the Treasury renewed its standing offer to buy up to 700,000 ounces of gold in London at \$34.77 per ounce at the New York shipping parity. According to Siepmann, writing to Sproul on 2 May 1936, there were three sales (apparently on 28 and 30 April and 2 May). Siepmann does not mention the number of ounces that were acquired. The Treasury offer to buy was repeated until 16 May when the amount was reduced to 500,000 ounces, and again repeated until 8 August when the amount was further reduced to 350,000 ounces. The offer was maintained at that amount until 26 September. For the first time since 19 December 1935 the offer became effective from 28 April to 22 October 1936 at \$34.77 per ounce. (There is no reference in the documents to the amounts bought between 6 and 19 December 1935, nor between 2 May and 22 October 1936.) The total amount the ESF paid for the gold it bought in 1936 was \$13.8 million, all of which was held under earmark at the Bank of England.

Did the US Treasury regard the outcome of the standing offer as effective in deflecting gold shipments to New York? We have seen no evidence that would answer the question. Sproul apparently was skeptical. He wrote to Siepmann, "This little business of ours is not of itself of great importance" (handwritten, 20 April 1936, archives, Bank of England).

The Bank of England continued to buy gold for the Treasury under the Tripartite Agreement whenever the price was operative until the war, but no longer was the justification to bar shipments across the Atlantic. The gold purchases were shipped to New York and sold by the ESF to the Treasury. Gold flows were not, however, limited to movements westward. Gold was also sold by the Treasury to European nations.

In June 1936, when the Popular Front took office in France, not only was French adherence to a fixed gold standard dollar-franc rate threatened, the US regulatory policy to sell gold at \$35 plus 1/4 to central banks of countries on the gold standard also appeared to be shaken. On 8 June the secretary of the Treasury obtained authority from the president to sell gold through the ESF to all or any foreign governments or central banks as he might deem advantageous to the public interest. The authority concerning the sale of gold did not refer to the Bank of England in particular but Brown (1942, 112) reports that an ESF principal conveyed the information to him orally that the change in gold policy that the president authorized was intended for the sake of gold sales to England.

Why did the Treasury want to change its original regulation on enactment of the 1934 Gold Reserve Act that it would sell gold only to gold standard countries? That excluded England. The Treasury obtained FDR's permission to change the regulation in order to authorize it to sell gold to any

country or central bank. By 1936 the United States and Secretary Morgenthau in particular had a political motive to support democracies in view of mounting concern about the German military threat. The explanation for the change in the regulation is that it enabled the Treasury to sell gold to any democracy whether or not it adhered to the gold standard.

The following arrangements were made in view of a prospective sale of gold to the Bank of England. The FRBNY was authorized on 8 June by the secretary to acquire up to \$51 million of gold from that which the New York Assay Office acquired from abroad between 8 and 16 June. Payment was to be made at the usual price of \$35 per ounce less 1/4 less mint charges, the FRB to pay to the consignee \$34.9125 per ounce, and the Assay Office to be credited as a miscellaneous receipt of the Treasury .0875 per ounce. The Assay Office was to hold the gold imported in a special account subject to the order of the FRBNY, the gold to be in bars equivalent to the gold imported. The Assay Office was instructed to waive its bar charges, so the mint charges would cover only minting and refining costs.

The advantage of ESF taking gold coming from abroad upon arrival was that it prevented the gold from appearing among Treasury assets as an addition to the monetary gold stock. Accordingly, when the ESF disposed of the gold to the Bank of England the transaction would not reduce the gold stock and the operations of the ESF would not be revealed to the public.

Under this arrangement the ESF acquired \$48.6 million in gold by 22 June. The amount grew to \$50.3 million by 13 July. On that day the total amount held by the ESF was \$59.1 million. Under a further authorization on 15 September for the ESF to acquire an additional \$51 million in gold from gold received from abroad at the Assay Office, from 15 September to 12 October 1936, when the Tripartite Agreement became operative, \$29.6 million had been obtained. On that day the total gold held by the ESF was \$93.7 million.

The transfer of this gold to the Bank of England, however, did not take place. The gold that the ESF had been accumulating since June 1936 was part of a plan to forge an Anglo-American understanding. The plan was finally developed in the course of the negotiations in September that assured France that Britain and the United States would not retaliate to a French devaluation. The original US policy of 1934 that excluded the Bank of England from buying gold in the United States because England was not on the gold standard was superseded by the provisions of the Tripartite Agreement, which we discuss in section 3.4.4.

Brown's account of ESF intervention at various dates to weaken or strengthen sterling would obviously have greater value if we had access to a parallel account from the British perspective of the American operations. To a limited extent, our access to Bank of England archives dealing with British reaction to the Treasury standing offer to the Bank of England to buy gold for it serves this purpose. We do not have EEA data as the counterparty to

ESF data. Howson's (1980) study of the operations of the EEA, 1932–39, unfortunately contains no information on particular transactions the agency conducted and no references to EEA reactions to ESF actions that affected the sterling rate. We are well aware that our report on intervention by the ESF vis-à-vis the pound is consequently one-sided.

## 3.4.3 ESF Exchange Rate Policy with Respect to Minor Currencies

Even after the ESF came into existence, the FRBNY continued its familiar practice of earmarking gold abroad against an advance of dollars in New York or by the purchase of gold abroad against immediate payment in dollars. Thus in November 1934 it had an arrangement, made on the initiative of the National Bank of Belgium, to advance dollars to it against gold earmarked in its name in Brussels, guaranteed free for export under all circumstances and to be shipped by the first available steamer to New York. On arrival in New York the gold was sold to the US treasurer at the price of \$35 per ounce less 1/4. The term of the dollar advance was reckoned from the moment of earmarking up to the delivery of the gold. Interest was charged at the FRBNY discount rate. The limit of the advance was set at \$25 million. The arrangement was not activated even when Belgium devalued the Belgian franc by 28 percent on 31 March 1935.

On 10 April, the Netherlands Bank inquired of the FRBNY whether it would be willing to advance dollars against gold earmarked in Amsterdam for the account of the FRB. The latter discussed the request with the secretary of the Treasury. The Netherlands Bank was advised that, when it wanted dollars, the Treasury would buy up to \$10 million in gold for immediate payment in dollars. The gold was to be earmarked in the vaults of the Netherlands Bank in the name of the FRBNY and shipped to the US Assay Office in New York on the first available steamer at the former's expense and risk. The gold was to be guaranteed by the Dutch government to be free for export under any circumstances and to be settled for on the basis of the Assay Office's findings at \$35 per ounce less 1/4.

The Netherlands Bank consented to the proposed arrangement, interpreting the first available steamer to mean the first available Dutch steamer in regular service with the United States. It then obtained the guarantee of the Dutch minister of finance. On 17 April it notified the United States of its formal acceptance of the arrangement, indicating that it would avail itself of the facility only in the case of erratic exchange movements above the gold export point.

Brown (1942, 76) comments that, whereas the FRBNY-National Bank of Belgium understanding was an informal type of intercentral bank cooperation, by requiring a guarantee from the Dutch government that the gold would be free for export under all circumstances, Morgenthau changed the character of the arrangement to an agreement between governments.

Both the earlier intercentral bank cooperation set up and the later arrange-

ment involving governments seemed to be similar in not specifying a date of termination. It turned out, however, that the Netherlands Bank was not the recipient of a standing facility available at any time up to the amount specified. On 4 September 1935 the FRBNY proposed that the 10–11 April arrangement with the Bank of Netherlands should terminate at the end of December. On 2 December the Netherlands Bank asked for an extension of one year. The request was refused on 7 January 1936. On instructions from the Treasury, the FRBNY advised the Netherlands Bank to cable when it needed dollars, and that the request would be given prompt attention. The latter responded that it would wish to sell dollars in case erratic movements of the dollar rate should occur, which could happen suddenly. Intervention would be delayed and ineffective if it first had to make an arrangement with the FRBNY. The Netherlands Bank therefore asked to obtain the facility for half a year or even three months on the understanding that a renewal would be granted. The answer to this appeal that the FRBNY gave on the Treasury's instruction was that there was no obvious need at this time for the arrangement, as there had been in April of the past year. Then it appeared that the free movement of gold at the gold export point might be interrupted by the hesitancy of commercial banks to assume the risk involved. Steamer facilities or insurance coverage at times and in amounts necessary to take care of a large shipment were then in doubt. Since then any necessary gold shipments had been made in the normal manner. Unless conditions arose that prevent commercial banks from conducting these transactions in the normal way, the Treasury did not consider it expedient to grant the Netherlands Bank its request.

The arrangement with the Netherlands Bank was not renewed until the end of May 1936 when the guilder was weak following the Popular Front victory in the French elections of 26 April and 3 May 1936. Early in May, Dutch funds began to move to London and New York. The Treasury this time did not wait for the Dutch to ask for the facility for support of the guilder. On 26 May it instructed the FRBNY to cable the Netherlands Bank that to aid in the prevention of erratic exchange fluctuations, the secretary of the Treasury was willing for the Netherlands Bank to draw on the FRBNY on or before 2 June up to \$10 million against an equivalent amount of gold earmarked in Amsterdam at \$34.77 per ounce, the gold to be guaranteed free for export under any circumstances. The Treasury offered to make the dollars immediately available on receipt of a cable from the Netherlands Bank signifying its agreement. The FRBNY was informed that the ESF would carry out this transaction.

The Netherlands Bank accepted the terms of the Treasury offer but on 26 May, when the guilder dropped below the gold export point from Amsterdam to New York, it cabled that it would not need the facility immediately and asked for an extension beyond 2 June. The extension was granted until 6 June and extended weekly until 11 July. The Netherlands Bank then in-

formed the FRBNY that, if a longer extension was not possible, it would give up the arrangement on the understanding that it might ask for a renewal at any time. The Treasury agreed and the arrangement then lapsed until 26 September, the day Holland suspended the gold standard. Three weekly renewals from 28 September to 17 October were then negotiated. The arrangement that the Netherlands Bank never actually used became obsolete on 24 November when the Dutch adhered to the Tripartite Agreement.

## 3.4.4 Tripartite Agreement

This section is in two parts. The first one describes the formation of the Tripartite system of foreign exchange market intervention. The second part tracks exchange rates between the dollar and the currency of each of the other members of the system from September–October 1936 until the outbreak of the war in August 1939.

## Ground Rules of the Agreement

After protracted negotiations over a period of months conducted by Secretary Morgenthau (through intermediaries in Washington and Paris) with British Chancellor of the Exchequer Neville Chamberlain and French Minister of Finance Vincent Auriol, to draft a common declaration, the British, French, and Americans finally agreed on a text that each country issued on 25 September 1936, pledging to cooperate in stabilizing international economic relations. <sup>14</sup> The agreement was between governments, not central banks, although central banks were clearly crucial in fixing the technical arrangements.

These government statements of intent became effective in October and November with a series of bilateral agreements. A new international gold settlements system was thereupon established including sterling, the French franc, the dollar, the belga, the Swiss franc, and the guilder. No change, however, had been made in the official gold policy of the Treasury of 31 January 1934, according to which the Treasury would sell gold for export only to central banks of countries on the gold standard when their exchange rates reached the gold export point of their currencies. This was so, even though the secretary of the Treasury had obtained the president's approval on 8 June 1936 for the sale of gold by the ESF to all central banks. The official gold policy would not allow the Treasury to sell gold to the French, Swiss, and Dutch after their devaluations, or to the British and the Dutch, since neither country was on the gold standard, and the French and Swiss had no fixed gold parities from which to calculate the gold export points. The EEA could not buy foreign exchange that was inconvertible into gold at a fixed price, so for the time being it could not operate in either the continental or American foreign exchange markets.

To deal with this problem the secretary of the Treasury sent a letter to the president on 27 September requesting authority to purchase gold through

the ESF by the use of dollars, foreign exchange or other obligations, currency or securities, from all or any foreign governments, foreign central banks, or the Bank for International Settlements. The president approved the request the same day.<sup>15</sup>

Accordingly, the secretary of the Treasury on 27 September announced that, in addition to certain countries designated in the 31 January 1934 statement from whom the Treasury would buy gold and to whom it would sell gold for export, it would thereafter, on twenty-four hours notice, "also sell gold for immediate export to, or earmark for the account of, the exchange equalization or stabilization funds of those countries whose funds likewise are offering to sell gold to the United States, provided such offerings of gold are at such rates and upon such terms and conditions as the Secretary may deem most advantageous to the public interest" (Board of Governors 1922, 852). On 13 October a press release informed the world that the Treasury under new regulations would exchange gold for dollars and dollars for gold at a fixed rate with any country that gave reciprocal facilities to the United States. It also noted that the British government would provide facilities in London to the United States for the exchange of sterling for gold and gold for sterling, as would the Bank of France in Paris for the exchange of francs for gold and gold for francs. A later statement (23 November) also included "treasuries or any fiscal agencies" of foreign countries guaranteeing reciprocal transactions in gold (idem. [12]: 940).

On 1 October French legislation authorized devaluation of the franc between 25.19 and 34.35 percent of the old gold parity. The Bank of France was authorized to revalue its gold stock at the upper end of these limits. The law also authorized the creation of an exchange stabilization fund, to which 10 billion of the 17 billion franc devaluation profit was assigned.

Following the French announcement, the British and Americans stated their support for the French decision. The Swiss franc was also devalued. The Netherlands Bank did not devalue the guilder but allowed it to depreciate 20 percent in dollars and maintained it at that level. <sup>16</sup> Greece, Latvia, Turkey, Italy, and Czechoslovakia also made currency changes. The Belgians, who, as noted above, had devalued the Belgian franc by 28 percent on 31 March 1935 and renamed it the belga, returned to the gold standard at the lower parity in March 1936. After the 13 October announcement, they declared their willingness to take part in consultations with other governments and institutions of the Tripartite system. On 21 November the Swiss and Dutch governments accepted the principles of the Tripartite Agreement.

In addition, the powers of the FRBNY under the monetary policy of 31 January 1934 were modified to conform to the arrangements under the Tripartite Agreement. As fiscal agent of the ESF, the FRBNY negotiated the details of the operation of the Tripartite Agreement with the Bank of England and the Bank of France, as follows. Each central bank would convert into gold the balances in its own currency accumulated each day by the

other central bank as a result of its foreign exchange dealings, and release from earmark the gold that would match the obligations incurred by the foreign central bank.

The central banks also agreed to notify each other each day of transactions as a result of which gold was to be earmarked or released. Since the gold value of the franc fluctuated within stipulated limits and there was no official gold price at all for sterling, both the Bank of France and the Bank of England agreed to quote buying and selling prices for gold to the FRBNY that would hold for each day for the settlement of transactions. Only the United States had a fixed buying price for an ounce of gold: \$35 less one quarter of 1 percent handling charge. These arrangements were subject to modification or cancellation by either party on twenty-four hour notice.

At a press conference on 13 October 1936, Morgenthau remarked that as he saw it, "we are not returning to the old gold standard, we are not seeking stabilization, merely stabilizing foreign exchange rates. Nor do we seek a stability that is fixed in amount or perpetual in duration. The needs of foreign trade and commerce are met, although exchange rates vary, if the fluctuation is not too wide, and even such stability need be sought only for the relatively short period of time, or when the needs of foreign forward commitment in foreign trade are customarily made" (Morgenthau Papers, reel 11, book 39, 175). Morgenthau's intent clearly was to disavow any resemblance to the "old" gold standard of the Tripartite system.

The details of the new system follow. Two separate accounts were instituted by the three central banks, one for currency, and one for gold through which the transactions of the stabilization funds would be recorded. The sterling and franc accounts opened for the FRBNY at the Bank of England and the Bank of France were labeled no. 3 accounts. The gold accounts were labeled account B (Brown 1942, 131). At a later point in his unpublished study, Brown (1942, 170) introduces two additional accounts: no. 2, apparently covering sterling transactions that were not part of the Tripartite control system, and account A, gold bought under the ESF's standing authority at London-New York shipping parity and held under earmark. Brown does not explain the reason for establishing two sets of accounts for sterling, one set as part of the Tripartite control system, the other set separate from the Tripartite control system. It appears, based on a discussion in Sayers (1976), noted below, that the second set was useful for transactions undertaken on behalf of central banks that were not members of the Tripartite system and their customers.

The second set of accounts was needed because London was involved in transactions, as we shall see, unrelated to the Tripartite system. The fact that the sterling exchange rate floated was irrelevant.

Upon the completion of these arrangements, on 13 October the Treasury named Britain and France as countries complying with the conditions of Tripartite participation. By the middle of November similar understandings

were reached between the Belgian, Swiss, and Dutch treasuries and the US Treasury, and on 24 November these countries were named by the Treasury as complying with those conditions.

The conditions the Belgian and Swiss National Banks agreed to, to sell gold to and buy gold from the FRBNY for delivery in Brussels and Berne, respectively, were identical except for each country's buying and selling prices. These were fixed prices that each agreed to, as were the US Treasury's buying and selling prices. As a result, these agreements stabilized the belga-dollar and Swiss franc-dollar rates as they would have been in a gold standard system except that the gold points were wide apart and the agreements were for twenty-four hours. The stabilizing mechanism was official gold transactions and not private gold arbitrage.

Since the Dutch stabilization fund had no legal requirement to buy or sell gold within fixed limits, the agreement with the Netherlands Bank was like that with the Bank of France. The bank agreed to consult with the FRBNY as to the amounts of dollars to be purchased or sold in Amsterdam, the amounts of guilders to be purchased or sold in New York, and the rates at which purchases or sales of the currencies would be made. Any dollars acquired by the Dutch stabilization fund would be converted into gold by the FRBNY at the rate of \$35 per ounce fine plus 1/4 of 1 percent handling charges, and any guilders acquired for the account of the FRBNY as fiscal agent of the United States would be converted by the Dutch fund into gold at \$35 per ounce fine less 1/4 of 1 percent handling charge. The gold that was acquired would be earmarked for the account of the owner in the country of the other partner and at the request of the owner, shipped to the country of the owner by the first available steamer of his country, the cost of shipment including insurance, melting charges, and any loss in weight through melting to be borne by the Dutch stabilization fund.

All three banks were advised to establish accounts of the same sort as those set up at the Bank of England and Bank of France.

The three countries that joined the Tripartite Agreement in November 1936 were former gold bloc countries. No similar success in attracting sterling area members was on record.<sup>18</sup>

Reciprocity in gold dealings was a key condition of the Tripartite Agreement. The US Treasury, however, had a complicated system of gold regulations, according to which foreign governments and central banks were confronted with six different procedures for gold transactions in this country, depending on which US agency was involved in the purchase or sale, and whether a special license was required.

The restrictions in force on the transfer of gold earmarked at the FRBNY for the account of other Tripartite members and the BIS seemed inconsistent with reciprocity, since such transfers were freely allowed by central banks of other country members of the Tripartite group. On 27 January 1937 the Treasury yielded to the general opposition to its procedures in this matter,

and agreed to the free transfer of earmarked gold between members of the Tripartite group. The FRBNY on 22 March was given the necessary authority to make transfers of gold earmarks in accordance with this change.

One further clarification of the Tripartite Agreement, in response to a query by a member, was that stabilization operations within the twenty-four hour provision excluded from the scope of the Agreement open positions in the currencies of other members.

Meltzer (2003, 544) sees two basic flaws in the agreement. One was the emphasis on cooperation as if it were an alternative to exchange rate adjustment, when the problem in the mid-thirties was misalignment of exchange rates and prices. A second flaw was the failure of the agreement to distinguish between nominal and real exchange rate adjustment. The discussions that preceded it overlooked the crucial fact that fixing nominal exchange rates meant that price changes would be the channel through which adjustment would have to occur. Meltzer shows that the real dollar-sterling and dollar-franc exchange rates in October 1936 did not correct the misalignment beginning in 1929. <sup>19</sup>

We now report on the gold and foreign exchange operations of the ESF under the Tripartite Agreement until the outbreak of the war.

#### Fourth Quarter 1936

Following the French devaluation, sterling declined from \$5.03 in September 1936 to \$4.89 in October (monthly averages of daily quotations for cable transfers of funds) (Board of Governors, December 1936, 1028). During this interval, the ESF provided some support for sterling. It bought \$2.25 million at rates from \$4.96 to \$4.89 1/2. Under the standing order it bought \$1 million in gold at \$34.77. On 12 October it held \$10.83 million in sterling and \$13.76 million in gold under earmark at the Bank of England. The motive for the sterling and gold purchases during the initial Tripartite experience was to keep sterling within a narrow band around \$4.89. We learn from Sayers that the EEA operated "to funnel dollars to continental buyers" (Sayers 1976, 488). By 1936–37, fluctuations in exchange rates had "retreated" in all ordinary weeks "almost to the range of the old gold points." The ESF was not a passive observer of a less volatile dollar-sterling exchange rate; it was actively engaged in maintaining that stability.

After that date the principal means the ESF used to stabilize the foreign exchanges was earmarked gold or gold released from earmark under the twenty-four hour rule. These transactions were recorded in the new control accounts established with each participating central bank on behalf of their respective governments or exchange funds. The ESF, however, did not take open positions in foreign currencies as it previously had sometimes done in francs and sterling.

The way the ESF operated in the new system was that its purchase of sterling was credited to its no. 3 account at the Bank of England, and then

immediately debited as the sterling was converted into gold by the bank and earmarked in account B. Sterling could also be held in a no. 2 account which was separate from the Tripartite control system. Sterling sold by the ESF was charged to its no. 2 account, and replenished by the release of gold under earmark at the bank.

The ESF held a long position in sterling when the Tripartite system took effect. It kept this sterling in the no. 2 account at the bank until 2 December, when 2 million pounds was invested by the bank for the ESF at 7/16 percent and appeared in a "Money Employed" account. The rate of interest fluctuated with the changes in short-term interest rates in London. Most of the ESF'S open sterling position that was held in the no. 2 account was transferred to the "Money Employed" account. The balance in the no. 2 account varied from trifling on 25 January 1937 to \$64,000 on 12 July 1937, when the "Money Employed" account was zero.<sup>20</sup>

The ESF made active use of the no. 3 sterling account until the outbreak of the war.<sup>21</sup>

From October 1936 to June 1937 the new system of exchange rates remained as stable as it would have been under the international gold standard, except for the effect of the franc's second devaluation in June to the lower limit set by the law of 1 October 1936. As Meltzer (2003, 543) points out, lauding stability of exchange rates as a virtue of the agreement misses its central problem: real exchange rates were not stable, as differences in price levels and economic policies in the member countries attest. France pursued policies that raised prices, necessitating devaluation. The policies were inconsistent with the agreement.

During this period the ESF bought sterling for conversion into gold in account B at the Bank of England at the price the bank quoted to it daily.

For account A earmark it also bought gold at \$34.77, increasing its standing offer on 30 October from 700,000 to 2.859 million ounces, subsequently reduced in two steps to 1.450 million ounces on 23 November. This amount was regularly renewed until 29 October 1937, when it lapsed. The bank requested renewal of the original order of purchases up to 700,000 ounces in March 1938. These purchases were motivated by the relation between the London gold price and the sterling-dollar rate, and not by the level of the sterling-dollar rate. By 30 November gold in account A peaked at \$72.55 million. The purchases continued after a Treasury decision to sell gold acquired in account B as a stabilization operation.

The circumstance that prompted the Treasury's decision was an appreciation in sterling that appeared to reflect badly on the Tripartite's stabilization mechanism.<sup>22</sup> So the decision was made for the ESF to sell some of its gold in London. The sales from account B occurred on 23–25 November and 8 December 1936, continuing through 8–12 March 1937. The sterling proceeds were credited to account no. 2 at the Bank of England. The gold sales helped to limit fluctuations in the sterling-dollar rate for the duration of the Tripartite Agreement.

Why did gold sales for sterling by the ESF in London limit sterling appreciation? According to Johnson (1939,154), the sterling-dollar relationship depended on (a) the US gold price, (b) the London gold price, and (c) the pound-dollar exchange rate. Before 1933, the first two were fixed. The third was the only variable, and its movements were restricted to the gold points. Gold movements occurred only when the rate moved beyond those points. From 1934 on, not one, but two variables existed: the London gold price was not fixed, but was established by the London world gold market, based on demand and supply. The relation of the fluctuating London gold price to the fixed US gold price of \$35 per ounce reflected the third variable, the pound-dollar rate. The London gold price and the pound-dollar rate tended to move together. A change in either one could initiate gold movements. Equilibrium in gold movements could be established at any level of the pound-dollar rate. Thus a fall in the London gold price (say, because the EEA reduced its gold purchases) could lead simultaneously to a flow of gold to New York and a weakening of the dollar exchange rate. The dollar weakened in Johnson's explanation because he focused on the period of gold sterilization by the Treasury (December 1936–April 1938) . The Treasury then paid for gold by borrowing instead of using the cash balances it could create by depositing gold certificates at the Reserve banks that increased its cash and Reserve bank deposits. The dollar weakened during the period of gold sterilization because Treasury indebtedness rose. The United States was the largest official gold buyer with a fixed price, so the entire current supply of gold in the London gold market flowed to the United States unless there were other buyers on the London market, and the London price of gold in relation to the dollar exchange rate was maintained from sources other than American buying. The only other significant buyer was the EEA, which was under no necessity to do so. The EEA had reason to share the burden of absorbing the flow of gold to London with the United States because otherwise the dollar would weaken in terms of the pound as a result of American arbitrage buying made profitable by the fall in the London gold price.

The Treasury's actions to limit sterling appreciation began with sales of gold it held in London, with the sterling proceeds credited to account no. 2 at the Bank of England. By increasing the supply of gold in the London market, its sales of gold there reduced the London price of gold, which lowered the pound-dollar rate.

Tripartite members also were involved in transactions with nonparticipating central banks. In November 1936 the ESF and EEA collaborated to enable Argentina to pay off a loan in New York without disturbing the foreign exchange market. The Central Bank of Argentina cabled the FRBNY that it would sell sterling in New York and buy dollars in London to cover in part its requirement. On 19 November the ESF bought 200,000 pounds worth of sterling at \$4.88 7/8 from the Central Bank of Argentina, most of which it converted into gold. On 23 November it sold in the market from its

no. 2 account 175,000 pounds of sterling that it obtained by the release of gold from earmark.

There were many buyers of sterling on that day in London and no apparent offers, and the presumption was that the sterling rate would therefore run up. The ESF, however, could supply sterling by release of gold from earmark at the price the EEA quoted to the fund daily each morning.

The ESF bought another 1 1/2 million pounds of sterling on 25 November from the Argentine central bank at \$4.895 that was credited to the no. 3 account. A little less than half this amount was sold at the same rate and the balance was converted into gold.

On 8 December \$2 million in gold was released of which the ESF sold about \$404,000 that day at \$4.91. The next day it bought \$450,000 at \$4.90, which it converted into gold. On 28 December it sold 165,000 pounds sterling for account no. 2 and bought 100,000 pounds the next day for conversion into gold. These were routine interventions to steady the markets.

# First Quarter 1937

In January 1937 Argentina had to negotiate substantial transfers of funds. From 19 to 21 January the ESF bought from the Central Bank 2 million pounds for delivery on the twenty-sixth.<sup>23</sup> It immediately sold 950,000 pounds to the market in small lots and 400,000 pounds to the Bank of England from its "Money Employed" account, which it later replenished.

The ESF was a net purchaser of sterling in the market amounting to \$1,600,000, and gold under earmark in its account B increased by that amount. From 7 January to 1 February it bought \$15 million to pay for gold at \$34.77 an ounce. Sterling, however, remained weak and it bought \$14 million in small lots from 27 January to 5 March at rates from \$4.89 to \$4.87. These purchases were converted into gold. In the last two weeks of February and the first week of March, it bought \$10 1/5 million in gold in continued support of sterling.

The ESF four days later switched to sales of sterling at \$4.88 to \$4.88 4/8 in the amount of \$6.6 million, which was available in part from a release of gold from earmark and a withdrawal of \$2 million from the "Money Employed" account. On 10 March it repurchased \$1.055 million sterling which it converted into gold. On 12 March, however, it released \$867,000 in gold from its earmarked account B and sold the sterling equivalent in the market.

The ESF continued to sell sterling to the market in March, 250,000 pounds by reducing the "Money Employed" account and an additional 2 million pounds bought from the Central Bank of Argentina for delivery 25 March. Of the latter amount it sold \$1.740 million to the Bank of England. Sales up to 29 March exceeded the sterling bought from the Argentine bank. The "Money Employed" account rather than the release of gold made up the difference. By the end of March sterling reached \$4.89 and \$34.77 was no longer an effective price for the purchase of gold in the London bullion market.

To summarize the ESF's activities in the sterling market from 13 October 1936, when the sterling-dollar rate was just over \$4.89, to 30 March 1937, when it was at the same level, the low and high between the two dates ranged only from \$4.87 3/4 to \$4.91 3/4, a stability that the fund's operations assisted. By 29 March 1937 it held \$59.5 million in account B and \$1.043 million in account A at the Bank of England. The "Money Employed" account had been reduced from \$9.83 million on 7 December, the opening date, to \$6 million on 29 March. In December 1936 the ESF imported \$20 million in gold from its A account, which it sold to the Treasury in early January 1937, and imported to the United States all the rest of the gold in account A for its own use.

We next report on the transactions the ESF conducted with the Bank of France and the Netherlands Bank during the period 13 October 1936 and 29 March 1937. On the initial date it sold on behalf of the Bank of France 3.2 million francs in New York at 4.66 1/2 cents per franc. It converted the proceeds into gold earmarked for the Bank of France at the FRBNY.

On 21 October the fund bought 1 million francs at 4.647 cents, bringing its deposit with the Bank of France to \$6,000. On 21 October it bought 35 kilos of gold in Paris at 24.056 francs per kilo for earmark in its account B with the Bank of France. At approximately the same prices the ESF on 9 December bought an additional 1 million francs and 45 kilos of gold. It had no further dealings in francs until after the second French devaluation. On 8 November 1937 it sold 82 kilos of gold in Paris at 33.074 francs per kilo and 2.74 million francs at 3.41 1/4 cents, getting rid of its balance in francs and gold holding at the Bank of France.

The cessation of ESF operations in France did not preclude operations on behalf of the Bank of France in New York during the period of stability following the first French devaluation. The fund sold gold from its own holdings to the bank at \$35 plus 1/4 for immediate export or to be held under earmark and bought gold at \$35 less 1/4 that the bank delivered from gold earmarked at the FRBNY. The bank placed the gold bought from the fund under earmark at the FRBNY. However, the bank was a net seller of gold under the Tripartite Agreement in the last quarter of 1936. Brown (1942, 179) comments that there does not appear to have been "strong pressure on the franc in any direction" during the period.

The Netherlands Bank arranged on 17 December with the FRBNY to have dollars up to the equivalent of 10 million guilders in exchange for gold to be placed under earmark. The ESF sold gold daily in small amounts to the Netherlands Bank from 21 December 1936 to 10 February 1937 in response to the bank's wish. The Netherlands Bank bought gold in New York on its own on 15 February. On 31 December 1936 it increased its request to 25 million guilders for conversion into dollars. Purchase of dollars and gold served to prevent a rise in the Dutch currency.

Not only the guilder but also the Swiss franc and the dollar were strong currencies at this time.<sup>24</sup> The movement of gold to all of these countries

made domestic credit overly expansionary. The flow of \$500 million of gold to the United States during the last five months of 1936 led the Treasury on 22 December to announce that it would sterilize further gold imports to segregate the monetary base from their effect.<sup>25</sup> Instead, on and after 23 December the US treasurer showed as inactive gold in the general fund all gold received daily. Until April 1938, the Treasury paid for the gold it bought by borrowing rather than by using the cash balances it could create by depositing gold certificates at the Reserve banks that increased its cash and Reserve bank deposits. Instead, the gold sterilization program increased the Treasury's indebtedness.

## Second Quarter 1937

During the second quarter of 1937 several participating Tripartite countries experienced disturbances to their currencies; in addition, two nonmember countries shipped large quantities of gold that member countries had to absorb.

The franc was weak throughout the quarter. The ESF bought francs in the New York market for the account of the Bank of France. It bought 25.6 million francs at rates between 4.45 and 4.46 cents per franc from 9 to 26 June. At the end of June, 9 million of these francs were sold at 4.46. The franc rate, however, at the lower limit fixed by the 1 October 1936 Devaluation Law was unsustainable. The Blum government fell in June, as French industry languished under the costs social legislation had imposed. The new government devalued the franc by 15 percent but vowed to keep the franc within the range 3.80 to 3.96 cents. The French agreed to announce a daily buying and selling rate for gold. The ESF thereupon was notified by the Bank of France when it desired francs to be bought and sold for its account in the New York market. During the quarter, the Bank of France was a net seller to the ESF in its gold transactions under the Tripartite Agreement.

The dollar-belga exchange rate was subject to disturbance as the rate rose above the gold export point from Brussels to New York. For this reason the National Bank of Belgium inquired whether the FRBNY would buy gold from it. The latter agreed to buy up to \$10 million in Belgium at \$35 less 1/4 less mint charges, the gold to be shipped by an American vessel guaranteed free for export. Belgium did not act on this offer until 5 June. The ESF then bought a series of shipments of gold in Belgium amounting to \$5.227 million for sale to the general treasurer.

The Netherlands Bank, which had been a seller of gold in small amounts to the ESF in April 1937, became a substantial buyer in June. However, its net sales of gold during the second quarter amounting to \$17.8 million, were second only in amount to that acquired from the Bank of England.

Early in April gold shipments to the United States, large in relation to exchange transactions, began to arrive from Russia and Japan. The Russian gold, apparently new production, was imported on a dollar basis by New

York banks that had Russian accounts or were of Russian origin. Who the actual seller was is not known. By 11 April \$25 million had arrived, Russian balances having increased by that amount.

At the same time large gold shipments were en route from Japan; the Japanese advised the Treasury about this through diplomatic channels. Inquiries were made about the purpose of the shipments, amounting to a total of 250 million yen. The agent of the Bank of Japan told Allan Sproul, president of the FRBNY, that the reason for sending gold was to settle international accounts. The answer did not set aside American doubts that they had been told the truth.

The great gold inflows, which were almost entirely placed in the inactive account, led to the rumor in April that the Treasury would lower its buying price to discourage further shipments. Enormous gold flows to the United States from all quarters generated rumors in April 1937 that to reduce the gold inflow, the United States would lower the buying price of gold. As a result the market shifted from holding assets in gold to holding currency assets. The appreciation of sterling proceeded to a level that the market believed would not persist. Consequently, the discount on sterling for future delivery rose. A better return could be realized by London banks placing funds in New York and buying future sterling back at a discount than could be made by lending the same funds in the London open market. The weakening dollar in turn stimulated a flow of funds and gold to the United States. British authorities could have prevented the gold scare and undue gold movements to the United States by being prepared to buy an unlimited amount of gold at the London-American shipping parity.

The rumor sparked a discount from New York shipping parity in the London price of gold that lasted until June when the discount was 7 1/2 percent.<sup>27</sup>

Sterling was strong in the second quarter, rising to \$4.94 on 30 April, but the relationship of the sterling-dollar rate to the London market price of gold made the ESF's standing offer of \$34.77 per ounce again effective. At this price it bought \$23 million in gold, placed under earmark in account A at the Bank of England. This gold was imported and sold to the General Treasurer.

The fallout from the rumor of a reduction in the Treasury's buying price for gold caused serious difficulties. Gold flowed strongly to London, so the EEA had to absorb large amounts. If it acquired enough gold from the London bullion market that otherwise would move to the United States, it might have pushed the London gold price back to New York shipping parity. But that would have meant that sterling would lose dollar support, which kept the sterling-dollar rate at prevailing levels.

The British instead did not forgo the opportunity provided by the ESF's standing offer to buy gold from them at \$34.77 per ounce. The British sold \$63 million in June. On 24 June the ESF began to buy sterling for conversion into gold in the London bullion market. The sterling purchases at \$4.93

to \$4.94 amounting to nearly £1 million were entered into the fund's no. 3 account at the Bank of England, but the gold that was bought with the sterling apparently was purchased in the market, and not from the Bank of England at its daily quoted price under the Tripartite Agreement.

The ESF purchase of gold from the Bank of England, part for account A and part for account B, as well as from the London market, made only a partial offset to the sizable gold inflow to England in the first half of 1937. On 28 June the EEA received £200 million in additional Treasury bills to enable it to continue gold purchases.<sup>28</sup>

The ESF imported the greater part of the gold it had accumulated abroad under earmark, much of which it sold to the general treasurer. In general the ESF would buy gold only from members of the Tripartite Agreement. Exceptions occurred, however, when a non-Tripartite member wanted to sell gold on a Saturday when the Assay Office was closed, or when the FRBNY received instructions late in the day to make delivery to the Assay Office.

Foreign gold markings at the FRBNY, which had sharply declined while rumors were current of a likely reduction in the US Treasury buying price, resumed once the rumors were stamped out.

## Third Quarter 1937

During the third quarter of 1937 the ESF conducted routine operations in several currencies of Tripartite members. Its purchases and sales of francs for the account of the Bank of France did not overcome the underlying market trend of franc weakness. The franc rate tended to fall during each transaction over the three-month period.

On 13 July the Netherlands Bank instructed the FRBNY to sell 1.225 million guilders in New York for its account at 55.07 and two smaller orders at 55.22 and 55.30. There were no further operations through the ESF until 24 September, when the bank sold 1.936 million guilders at 55.30, which was the gold export point from New York. At this rate the ESF carried out sales starting 1 October and ending in the fourth quarter on 3 November.

To support the belga the National Bank of Belgium sold gold, and on three dates in June and July renewed the arrangement of the preceding April with the ESF for it to purchase up to \$10 million in gold in Belgium. The FRBNY, however, inquired why gold bars could not be imported at \$35 per ounce less mint charges less 1/4 percent, since the gold market had become practically normal. The Belgian central bank replied that the rumors of a dollar revaluation had not died down in Europe. Therefore arbitrageurs declined to sell gold to the US Treasury for dollars when the rate would permit it once the gold export point had been reached. As a result the central bank had to supply dollars to the market through the arrangement with the ESF. The reply convinced the Americans. The ESF between 16 July and 3 August bought \$29.479 million in gold in Brussels that it imported for sale to the general treasurer.

Sterling, on the other hand, needed no support. The dollar-sterling rate in August 1937 was over \$4.98 and never below \$4.95. At these rates the ESF sold sterling and released gold from earmark at the Bank of England at selected dates from 9 July through 1 October, all within the Tripartite framework. A special sterling transaction on 12 August involved the ESF in the purchase of £300,000 from its no. 2 account at the Bank of England for sale to the Central Bank of China. It also sold \$30 million in gold to the Central Bank that it acquired from the inactive gold account that the general treasurer sold.

In addition mostly in September, the ESF added to its account A gold at the Bank of England at \$34.77 per ounce, at this price \$64 million in total. On 9 September it made a £45,000 purchase of sterling for conversion into gold in the bullion market.

As was usual, the ESF sold to the general treasurer the gold accumulated abroad that it gradually imported. Nevertheless, on 4 October, ESF assets totaled \$175 million in gold and its dollar balance was only \$7 million.

#### Fourth Quarter 1937

The ESF's asset structure during the following quarter was transformed. By the end of 1937, the fund held only \$30 million in unpledged gold and a dollar balance of \$129 million. A number of factors contributed to this result. The Treasury for one gave up some of the gold in the inactive account. In response to the Federal Reserve's request in September, the Treasury released \$300 million in gold from the inactive gold account in its general fund to its working balance at the FRBNY in which it deposited gold certificates. In addition, \$44 million of the fund's gold was not available since it served as collateral for Chinese yuan that it had purchased from the Central Bank of China (see section 3.5).

In addition, in November the United States began to export gold, for a reason discussed below. Under these circumstances in October the FRBNY was instructed by the ESF to sell in London from its A account all the gold held under earmark at the Bank of England at \$34.79 per ounce. Then gold from account B was sold still at that price until 8 November when the sale was made at \$35.09 per ounce. On 22 November the only gold under earmark at the Bank of England was \$3.4 million in account B. The 82 kilos in account B at the Bank of France were sold as well.

During the last quarter of 1937 the dollar came under attack. A large-scale withdrawal of foreign short-term balances from the United States occurred as rumors, opposite to those that spread in the second quarter, that this time foresaw further devaluation of the dollar as a possible measure to counter the cyclical downturn that began in May. This was feasible because the devaluation in January 1934 still left the president with authority to increase the purchase price of gold and lower the gold weight of the dollar (see section 3.2 above).<sup>29</sup>

The downward movement of the franc for the time being was halted and sterling was strong in New York. The London gold price rose enough for a premium to appear over the New York shipping parity.

The ESF was also a seller of gold: \$1.5 million to the Bank of England at dates in October and November to obtain sterling that the fund sold at \$4.95–96; again to the Bank of England, \$4.6 million in gold on a dollar basis (\$35 less 1/4), which it took from its own holdings in New York. From 11 October to 6 December, it sold gold almost daily to the Bank of France on a dollar basis in the amount of \$60.5 million, with delivery in New York. At this time the ESF withdrew the 82 kilos of gold that it held in account B at the Bank of France.

Despite the drain of dollars from the Bank of France, the exchange rate of the franc was stationary at 3.35 cents. The bank operated in the New York market as both seller and buyer of francs in small amounts.

After small purchases in October and November, the Netherlands Bank became a purchaser on 2 December of 1.425 million ounces (\$49,875,000) of gold from the ESF. The Swiss National Bank bought \$27,978,000 in gold on 6 and 9 November and \$79.8 million on 20 December. The selling price was \$35 per ounce less 1/4.

To meet the demands on the ESF by foreign central banks for gold and to provide it with gold for support of the dollar, the FRBNY was instructed to purchase for the ESF's account all incoming gold received at the Assay Office in New York beginning 27 October at the flat rate of \$35 per ounce. Japan was the source of the gold inflow, so the San Francisco Mint was requested to send telegraphic advice to the FRB of gold received from Japan to be paid for at the Assay Office in New York. The instruction was broadened on 4 November to include gold purchased daily at all US Mints and Assay Offices. The FRB was to be informed how much to purchase from the New York Assay Office for the account of the ESF. The payment was to be charged to the secretary's special account and credited to the treasurer's general account with the FRB—a wash. The FRB was not required in this case to pay the Treasury through the gold certificate fund. In this way the ESF during the last quarter of 1937 acquired \$170 million in gold but it was not enough to match its foreign sales. As noted above, at year end the ESF was mainly a dollar fund.

# First Quarter 1938

By 14 February 1938 the ESF gold assets amounted to \$48.4 million compared to a total of \$30 million at the close of 1937. Its acquisitions included gold bought from the inactive account, and gold bought from Mexico and the Bank of France. The next day the ESF sold to the general treasurer all the gold it had bought since the end of 1937 with the exception of the \$5 million bought from the inactive account to replace gold sold for export on 2 January.

On 15 February the ESF bought an additional \$9 million from the inactive account to replace sales of that amount to Mexico (see section 3.5). Except for the forgoing transactions with Mexico and the Bank of France the ESF did not operate in the foreign exchange market while the program for the desterilization of the inactive gold account was set beginning 1 January (it was completed 19 April). No sterling transactions were executed. However, the ESF continued to buy and sell francs for the Bank of France from 10 January to 15 February. The transactions were at declining prices, portending the end of the Bonnet franc.<sup>30</sup> The Daladier franc replaced it in May.<sup>31</sup> The deliberate weakening of the franc below its market level made it difficult for the EEA, which lost gold and foreign exchange, to hold the sterling-dollar rate at about \$4.98. Sayers (1976, 562) notes, "the Americans were ready to complain at any depreciation of sterling."

Transactions involving the ESF during the six-week period from 14 February on behalf of the Bank of France were devoted to the support of the franc. Purchases totaled \$6.8 million francs, sales only \$150,000, with the rate declining from 3.29 1/16 to 3.02 1/2 cents. The bank was a net buyer of over \$3 million in gold.

The ESF sold \$20.55 million in gold to the Swiss National Bank from 17 to 20 February, and \$0.975 million on two dates in February and March to the Swedish National Bank.

On 14 February the ESF made its transaction in sterling that month, selling £455,000 at 5.02 1/2, which it obtained by the release of earmarked gold in account B at the Bank of England.

The outbreak of the Czech crisis in March affected the foreign exchange market. On 15 March, when sterling fell to \$4.96, the Bank of England cabled the FRBNY to renew its offer of November 1935 to buy up to 700,000 ounces of gold at \$34.77 per ounce. The ESF renewed the offer on 17 March for 1,400,000 ounces, but on 28 March reduced it to 700,000 ounces, where it remained until the Munich Pact on 29 September.

Before 21 March the ESF under this authority bought \$26 million in gold earmarked in account A at the Bank of England. The ESF also bought sterling in New York for conversion into gold in the London market. It bought £1.179 million at \$4.96 5/8 on 16 March and £812,000 at \$4.95 1/2 on 18 March as well as small amounts on 21 and 25 March. Sterling recovered and the ESF thereupon sold £561,000 at \$4.96 1/8 on 19 March. The gold was immediately exported to the United States except for small balances left in both account A and B at the Bank of England. No further transactions in sterling were executed until 11 April when a new series of sales at \$4.97 7/16 began.

There was little change in the ESF's gold account from its dealings with foreign governments and central banks.<sup>32</sup> It continued to buy from the general treasurer the equivalent of gold imports into the United States and bought by the US Mints and Assay Offices. By 31 March net purchases

amounted to \$28 million. Thereafter until the outbreak of the war, the ESF bought no more gold from the general treasurer. This change in part was a consequence of the 14 April end of the sterilization policy, with the transfer of the gold in the inactive account to the working fund of the Treasury and then deposited in the Federal Reserve gold certificate fund.<sup>33</sup>

#### Second Quarter 1938

Until 1 August ESF transactions were exclusively with the Bank of England and the Bank of France. Sterling and the franc were both firm in April. From 12 to 27 April the ESF sold 28.750 million francs and bought 5.1 million francs for the account of the Bank of France at rates generally above 3.11 1/2 cents. The rate then fell and by 5 May, despite further support in New York, was down to 2.29 cents.<sup>34</sup> The French then again devalued to 175 francs to the pound and 2.8 cents per franc (Meltzer 2003, 543). The real exchange rate was 3.6 cents per franc, 12 percent lower than in October 1936.

During this quarter transactions by the ESF with the Bank of England were on a small scale. The ESF bought £1 million sterling from the Swedish National Bank for conversion into gold on 21 May. The only other sterling transactions were sales in April and June at rates from \$4.97 to \$5.01. The sterling for these sales was obtained by release of gold from account A, all gold in account B having been imported. On 14 June the ESF bought \$5 million in gold in London that was immediately imported. This was its last purchase from the Bank of England at the sterling-gold price quoted to it daily until the war began.

## Third Quarter 1938

The Bank of France actively supported the franc in New York throughout August and September. Through the ESF it bought 321 million francs. It made a few small sales on 4 September. The condition of the franc during the summer was in fact robust, thanks to a record tourist season. The franc-sterling rate was fairly stable not only through September but through the rest of 1938 (Sayers 1976, vol. 2, 562). The stability of the franc in terms of sterling meant that sterling was depreciating somewhat in terms of the dollar. American concern centered on sterling depreciation, which, it was believed, would also bring down the franc.

In July the ESF bought a small amount of gold from the Bank of England at \$34.77. In August it reentered the sterling market in New York for conversion into gold in the bullion market. By August political tension in Europe led to a capital movement to the United States. The ESF then bought sterling in New York in support of the pound. From 2 to 30 August it bought 974,000 pounds at rates from \$4.90 1/8 to \$4.86 1/16 for conversion into gold in the bullion market.

The Bank of England realized that the flight of funds from London to New York would continue so there was no rate at which a sterling peg could be maintained. Its policy therefore was not to resist pressure on the rate to fall somewhat, but to push the rate up a little whenever pressure diminished. For this reason, in June and up to 23 July the EEA lost £10 million of its reserves , and sterling lost 3 cents falling from \$4.95 to \$4.92 (Sayers 1976, vol. 2, 563). During the next 4 weeks, EEA lost £21½ million and the rate fell to \$4.88, and in the 4 weeks to 17 September, the decline was £75 million and \$4.80 for the rate.

The demands by Hitler for the union of predominantly German districts in Czechoslovakia with Germany intensified pressure on sterling. By 20 September the ESF bought an additional £7.567 million in New York at rates that declined to \$4.73 3/8. Nearly half of this amount was bought on 9 and 13 September at the height of the crisis. The morning of the Munich Pact, 28 September, the rate fell to \$4.60, but by the afternoon, a rebound began, the rate rising above \$4.80 in the first few days of October. It did not last, as we note in the narrative of the final quarter of 1938.

The ESF also bought gold from the Bank of England under its standing offer at \$34.77 per ounce until it reached 4.2 million ounces from 12 to 17 September. The price was gradually reduced from 15 September, falling to \$34.60 by 28 September, reflecting higher war risk insurance rates. Total gold purchases from the beginning of August until 26 September reached \$237 million, the amount earmarked in account A.

During this quarter the ESF bought gold from other central banks as well: \$7.460 million from the Bank of France, \$33.306 million from the Netherlands Bank, and \$5.628 million from the Swiss Bank. On instructions from the Treasury, the FRBNY advised the Netherlands Bank that it would be a good idea to earmark gold against dollars that could be sold to support the guilder. A \$25 million limit was set, the gold to be held for the account of the ESF pending shipment to the United States.

The ESF had acquired more gold than it could pay for. Its purchases also taxed the capacity of the shipping companies and of the insurance companies. To facilitate the import of the gold, the ESF began to use foreign ships and to insure a part of the gold under the government's self-insurance arrangement. In September it sold gold to the Treasury in large amounts, but the instructions issued to the FRBNY to import gold specified that the Treasury was aware that the FRB would insure against marine risk only for a portion of the value of the shipment at rates the government proposed, and that risks of war, strike, riot, or civil commotions were uninsurable. The FRBNY was told to record the shipment under the Government Losses in Shipment Act for the amount not privately insured.

Four shipments of gold from the Bank of England's account A to the United States were by US naval vessels. Another solution to the problem was tried. On 8 September the FRBNY was instructed to sell to the general fund of the Treasury at a flat \$35 per ounce gold originally purchased for the ESF. Such gold was to be held by the FRB in a special custody account. In

addition, some of the gold transferred by the ESF to the treasurer was placed in a special custody account for the US treasurer. In this way, although the ESF on 25 September was credited with gold assets of \$391 million, it had a liability of about half that amount that was owed to the treasurer.

# Fourth Quarter 1938

Sales of gold to the US treasurer by the ESF extended to 21 November from the preceding quarter. On that date for the first time there was a substantial reduction in its gold holdings.

In October the Netherlands Bank sold \$16.188 million in gold to the ESF and the Swiss bank sold a little more than half that amount.

The ESF bought \$172.350 million in gold in New York from the Bank of England in October from gold earmarked for the bank at the FRBNY. From 14 to 21 November a further \$42.284 million in gold was bought in this way. On 5 December the price per ounce of gold was set at \$34.7625. On 28 December the ESF bought \$25 million in gold from the Bank of England's earmark at the FRBNY.

Heavy purchases of sterling continued in October at rates between \$4.73 and \$4.80, the sterling for conversion into gold. On 21 November for the first time sterling fell below \$4.70, and at the end of that month the rate was \$4.62.<sup>35</sup> The ESF continued to buy at declining rates. Total sterling purchases from 22 November to early January amounted to \$20 million.

The Bank of England took advantage of a transitory opportunity in December to produce a scramble for sterling that enabled it to hold the sterling rate stable at \$4.65, with only a small loss of reserves by the EEA. The occasion was the expiration of three-months contracts for forward sales of sterling, entered into in London during the Munich crisis, especially in the middle of September, by many foreign banks and others. The contracts for delivery of sterling for which dollars would be paid fell due in December. The bank estimated the short position in the exchange market at £70–80. To execute its plot, the bank informed the American authorities of what was afoot and seven of the big banks, who agreed not to use any of their own funds in the forward market. The squeeze worked, but it was only temporary. In January, with no change in the international political situation, the drain of reserves from the EEA and pressure on sterling resumed (Sayers 1976, vol. 1, 363–64).

On 3 December the ESF bought \$8 million in gold from the Bank of France. From 5 December onward the bank became a steady buyer of gold from the ESF in small amounts.

#### First Quarter 1939

Until this quarter British authorities did not seek to restrict ordinary business. They managed foreign exchange rates by trading in the market as buyers and sellers of gold and exchange. By 1938 they knew that war was imminent and that ordinary operations suitable for peacetime would no longer be useful.

In preparation for the actual outbreak of war, in January the British adopted a four-part program to be implemented when needed. To resist pressure against sterling, the following measures were planned: (a) a complete embargo on foreign lending; (b) a complete embargo on forward gold operations; (c) supervision of exchange transactions; and (d) transfer of gold from the Bank of England to the EEA.

In the meantime, in this quarter, despite a heavy movement of hoarded gold from London to New York, the bank was able to hold the sterling rate between \$4.65 1/2 and \$4.69, with not much loss of EEA reserves. In March, however, when Prague was occupied, and as the political situation worsened, so did the loss of reserves.

In January the Bank of England began to support sterling actively in the New York market. It instructed the FRBNY to purchase sterling with gold released from earmark at the FRB. Beginning 11 January, it bought sterling regularly in New York for the account of the bank at just over \$4.67 and from 16 March, \$4.68 1/8. The bank acquired dollars for the purchase by releasing gold from earmark at the FRBNY, and by ESF purchase of gold in London from the bank in accordance with its standing offer. In February the ESF bought gold from the Bank of England at \$34.7625 per ounce. It also bought gold from the bank's New York holding on a large scale and in March, in addition to these purchases, it bought sterling in New York amounting to £1.731 million on behalf of the Bank of England.

From January until 24 August, when support was withdrawn, the sterling rate was pegged at \$4.68.

The ESF purchased sterling in the amount of £877,000 at \$4.67 3/16 on 9 January for its own account after selling on 5 and 6 January £170,000 in gold from gold released from its account B at the Bank of England.

On 3 January, the ESF bought \$25.893 million in gold from the Bank of France, for delivery to the Assay Office and sale to the general treasurer at \$35 per ounce. The Bank of France made no further sales of gold to the ESF before the war. It became a steady buyer of gold from the ESF in small amounts from 5 December 1938. For long periods it was almost a daily purchaser. In all, the Bank of France bought back nearly \$8 million of the gold it had sold to the ESF in December 1938 and January 1939. In trading operations in francs in New York through the ESF, it bought 44.15 million and sold 22.985 million at rates ranging from 3.61 7/8 to 2.53 7/8 cents. It also made one purchase of 13.25 million francs for the Bank of France

On 30 January the ESF bought gold from the Netherlands Bank, and continued to do so until by 22 March; the purchases amounted to \$40.885 million, of which part was for sale to the Treasury.

In March the ESF bought gold, first \$20 million from the Swiss National Bank from its earmark in New York, and then \$40.471 million. On 30 March

Paris and London offered Swiss francs in New York with no buyers and the ESF stepped in and bought 250,000 Swiss francs at 22.42 cents, advising the Swiss National Bank through the FRBNY to convert the francs into gold for shipment at an early date. The bank informed the FRB that it would not welcome intervention without instructions from it. The bank offered to buy the francs from the FRB rather than converting them to gold, and the francs were sold at the purchase price. The FRB advised the bank that in the future it would be guided by its wishes, but reserved the right to intervene under the Tripartite if unexpected developments made action compelling. This was the ESF's only intervention in the Swiss franc market.

The ESF also bought belgas for conversion into gold in Brussels in the month from 3 March. In total 15 million belgas at 16.43 cents were earmarked for the ESF's account.

The Bank of France, however, continued its gold purchases from the ESF, buying in the first quarter over \$93 million. The ESF's operations in New York for the bank were limited to the purchase of 28.25 million francs in the last two weeks of March.

ESF operations in the first quarter, except for gold purchases from the Bank of England in London, transactions either with the Bank of Belgium or the Bank of France, and the single transaction in Swiss francs, were confined to New York. The procedure by which gold bought from foreign central banks was placed in ESF's custody and then sold to the treasurer lost importance. Only \$18 million was transferred to the treasurer from the ESF's gold during this interval.

## 3 April to 31 July 1939

The ESF bought £9 million in gold for the account of the Bank of England in New York at \$4.68 1/8, mostly in April. It bought 15 million francs in April and 13.75 million in June at 2.65 cents for the account of the Bank of France. It bought 6.19 million guilders for the account of the Netherlands Bank at 53.08 cents. Between 10 and 28 April the ESF bought \$135 million in gold from the Bank of England (\$95 million in London \$40 million in New York); \$20 million from the Swiss National Bank; \$15 million each from the Netherlands and the Belgium banks. During this period of pressure on the franc the Bank of France sold gold to the ESF, but became a large purchaser (\$57 million) during the following three months.

The Bank of England sterling peg at \$4.68 held, but gold losses of the EEA mounted. The bank considered lowering the peg to \$4.50, but decided that the reduction would not stem the losses and might suggest that reserves were near exhaustion (Sayers 1976, 566–67).

## The War Crisis, August–September 1939

One difference between the summer of 1914 and the summer of 1939 was that until the assassination of the heir to the Austrian throne on 29 June,

there had been no war fears, whereas in 1939, people had been living with the specter of war from the time Hitler revealed his plans to dominate Europe. There were no plans on hand in 1914 to deal with a war crisis. They were improvised to meet the collapse of international credit. In 1939, authorities could adapt the measures that were useful in 1914 to the existing circumstances. A basic difference between the preludes to the two wars was that in 1914 the gold standard was intact in the core Allied countries, whereas in 1939, the international monetary system was a pale shadow of its former incarnation; exchange stabilization funds of each of the adherents to the Tripartite Agreement were intervening in foreign exchange markets.

On 1 August the ESF reentered the sterling market as a purchaser in New York of £7.432 million on behalf of the Bank of England and continued to buy until 24 August. It also bought \$185.24 million in gold from the bank in New York. In addition, it bought \$88.095 million in gold in London at \$34.76 per ounce, increasing its standing offer from 700,000 to 2,100,000 ounces for the period 21 to 26 August. On 23 August gold under earmark for the ESF was shown in account A at the Bank of England, and was immediately imported.

The sterling transactions on 24 August, which were used to buy over 2 million ounces of gold (over \$71 million), were the last at \$4.64 1/8. The pegged \$4.68 rate did not hold, and EEA gold losses were huge. The British then decided to remove the peg from sterling and let it depreciate. On 25 August the Bank of England cabled the FRBNY that it would not give gold dealing prices. And on 6 September the Treasury was informed of the transfer of the Bank of England's gold to the EEA. On 12 September the ESF was authorized to sell £8,000 sterling at the wartime rate of \$4.03 5/8. On that day the Bank of England transferred the balance of £1,676 held by the bank in the FRBNY account 3 to account no. 2, closing the control account under the Tripartite Agreement.

The Bank of France continued to buy gold from the ESF in small amounts until 8 September. On 23–24 August it instructed the fund to buy 8.2 million francs for its account at 2.65 cents, but reversed its position once sterling was allowed to depreciate. It became a seller of francs in New York at rates that declined to 2.31 cents on 6 September. On 8–9 September the last of these transactions were sales for the account of the bank of 3.1 million francs at from 2.27 1/4 to 2.28 5/8 cents. On 8 September the ESF bought francs for its own account for the first time in two years. It instructed the FRB to buy 3.7 million francs at 2.25 3/8 cents, to transfer them to the Bank of France to be converted into gold along with the small balance in its no. 3 account, and to place the gold under earmark. The ESF's control account B was also closed.

On 9 September the FRBNY did not receive the daily cable from the Bank of France fixing the French gold price. The Treasury was informed when it phoned Paris that French monetary policy was under review. The secretary

of the Treasury was advised that the French government had set up a system of exchange control.

On 31 August the National Bank of Belgium repurchased about one-third of the \$6.861 million in gold which it had just sold to the ESF. At the same time the ESF sold substantial amounts of gold to non-European countries: \$949 million to the Royal Thai Treasury, \$2 million to the State Bank of the USSR, and \$11 million to the Central Bank of Argentina.

This concludes Brown's (1942) report on ESF foreign exchange market intervention up to the eve of the outbreak of the Second World War. Free exchange markets were replaced by various measures of exchange control. Convertibility of the dollar and foreign currencies ended.

In retrospect, of the ESF's foreign exchange market intervention activities over the entire period ending 1961, the years 1934–39 were the zenith of its exercise of the mandate it was established to fulfill.

## 3.4.5 ESF Intervention Activity, 1940–1961

During the war the ESF held Swiss francs and balances in foreign currencies at depositories abroad. It made the Swiss francs "available for government and humanitarian purposes," according to the Treasury's statement (Treasury 1945, *Annual Report*, 95). Little official intervention by the ESF occurred in the years after the war ended. Most foreign currencies were not convertible. In addition, the US stock of gold reserves was ample, the US balance of payments was in surplus, and there was an excess demand by the world for dollars.

The US Bretton Woods Agreement Act (PL 171,79th Cong.) of 31 July 1945 made a great change with long-term effects on ESF operations. Before that date, the ESF may not have had access to the bulk of the funds that the Gold Reserve Act had set aside for it, but they were a prospective resource. After that date, ESF resources were permanently limited.

That change was the consequence of the provision in section 7 of the agreement that amended the Gold Reserve Act. The amendment directed the secretary of the Treasury to use \$1.8 billion of the ESF capital (shown on the balance sheet as cash in the form of gold held by the US treasurer) to pay part of the \$2,750 million US subscription to the IMF.

By June 1946, the United States had paid \$275,000 of its subscription (Treasury 1946, *Annual Report*, 83). It completed payment of its subscription on 26 February 1947, in the form of \$687.5 million in gold, \$280.5 million in cash, the remaining \$1,782 million in nonnegotiable noninterest-bearing notes, payable on demand in dollars when needed by the IMF (Treasury 1947, *Annual Report*, 48).

From 1946 until 1961 the ESF held no foreign exchange of the industrialized countries. A role for an exchange stabilization fund would seem to have been obviated, since the IMF was in place to manage exchange rates, but the ESF regarded the IMF as needing its support.

The conditions that prevailed when the war ended were markedly different from the mid-1950s on. The economies of Western European nations had recovered, world trade had grown, and demand for US goods and services and dollars to pay for them became less pronounced. By 1958 the currencies of most of these countries achieved convertibility on current account.

Speculation against the dollar arose as the balance of payments weakened and rumors of dollar devaluation spread. Sterling was also under pressure. At the same time the exchange values of the currencies of Germany, the Netherlands, and Switzerland, (the countries in surplus), were rising above par as private holders of dollars and sterling sold them for Deutsche marks (D-marks), guilders, and Swiss francs.

By January 1961, when the Kennedy administration took office, the US balance of payments as measured by outflows of gold and dollars to countries in surplus had substantially deteriorated. The loss of gold to foreigners in that month was seen as an expression of a lack of confidence in the administration's commitment to a dollar convertible into gold at a fixed price. The twin goals became to eliminate the balance-of-payments deficit and to check speculation against the dollar. The first goal was elusive. To achieve the second goal the Treasury wanted to be in the same position as other countries that influenced the exchange value of their currencies. That required resources to buy and sell other currencies or, in official parlance, sales and purchases of dollars.

To that end the ESF began to operate directly in the foreign exchange market. By June 1961 it had bought spot \$25.4 million sterling and \$20.1 million D-marks, and \$65 million Swiss francs to counter threats against the dollar.

In March 1961, after revaluations of the D-mark and the Dutch guilder, the ESF made forward sales of D-marks to drive down the forward premium on the mark (discount on the dollar). The Treasury's forward mark commitments were liquidated by early December; it used marks it had acquired in April 1961 from a German debt repayment to the United States to settle in part forward contracts that were maturing in the fall of 1961.

There were similar forward operations by the Treasury in Swiss francs and Dutch guilders to bring down the premium on these currencies. As a response to the rise in the exchange value of the Italian lira in 1961 to its upper limit against the dollar, the Treasury took over forward lire contracts from the Italian foreign exchange office and drew on a \$250 million line of credit in lire it obtained by issuing three-month certificates of indebtedness to support spot and forward operations in lire. As a result dollar accumulations in Italy were lessened.

Even these limited operations strained the resources of the ESF. In June 1961 it had \$200 million in capital plus \$136 million in net earnings accumulated over its twenty-seven-year life. Average annual net earnings approximated \$5 million, from income on gold bullion sales, gold and exchange transactions, and interest on its government securities portfolio. To finance

its foreign exchange purchases of roughly \$100 million in 1961, the ESF had reduced its account at the FRBNY by \$91 million and sold US government securities (Schwartz 1997, 144).

The Treasury's immediate aim was to find ways to supplement ESF foreign currency balances. It did so, first by persuading the G10 countries to create a facility that would expand the IMF's ability to lend. The IMF held only about \$1.5 billion in currencies other than dollars. The new facility, established in December 1961, was the General Arrangements to Borrow (GAB), which provided the IMF with a \$6 billion line of credit from central banks of countries with balance of payments in surplus to assist countries with balance of payments in deficit, in particular, the United States. The US quota in the IMF was nearly \$6 billion. The IMF held far less in convertible currency assets, so the United States could not draw enough from the IMF to meet its reserve needs. The GAB was intended to serve as a supplementary source of liquidity for the United States. The IMF would sell to the United States for dollars foreign convertible currencies borrowed from other countries. These currencies would enable the United States to buy up dollars offered in the market and to redeem dollars foreign central banks did not want to hold, thus maintaining US monetary gold reserves.

The Treasury next persuaded the Federal Reserve to serve as its partner in exchange market intervention. So began the second period of ESF intervention operation (see chap. 4).

#### 3.5 ESF Nonintervention Activities

The ESF has been used by the Treasury for at least three purposes not directly related to the stabilization of the exchange value of the dollar. The chief activity of the ESF other than dollar exchange stabilization has been extending loans to governments of political importance to US national interests (section 3.5.1). A second use of the ESF during the period covered by this chapter was the purchase of silver in connection with the Silver Purchase Act of 19 June 1934 (PL 438, 73rd Cong.) that directed the secretary of the Treasury to purchase silver at home and abroad until the market price reached \$1.29+ an ounce, or until the monetary value of the silver stock held by the Treasury reached one-third of the monetary value of the gold stock (section 3.5.2). A third use of the ESF was related to the statutory authorization to deal in government securities with assets that it did not need for exchange stabilization (section 3.5.3).

#### 3.5.1 ESF as Lender

There was no explicit authority in section 10 of the Gold Reserve Act for the president or secretary of the Treasury to make a loan to a foreign country instead of intervening in its currency or debt instruments. Nevertheless, the ESF has lent dollars to low-income countries, clearly a form of foreign aid.<sup>36</sup>

Before 1961 ten Latin American countries at one time or another had loans, often with renewals. The countries in this group were Argentina, Bolivia, Brazil, Chile, Cuba, Ecuador, Mexico, Nicaragua, Paraguay, and Peru.

Mexico had the longest record of loan agreements with the ESF. The first one was extended in January 1936 with stringent conditions. The FRBNY was instructed by the Treasury to advance \$5 million to the Banco de Mexico against the purchase by the ESF of an equivalent amount of Mexican pesos (see Bordo and Schwartz 2001). The Mexican bank agreed to repurchase the pesos in dollars on the demand of the US Treasury at any time at the rate at which they had been acquired. The Mexican bank also agreed to deposit silver collateral. Brown (1942, 98ff.) gives the text of the letter of the agreement that the FRBNY sent the Mexican bank, noting that the Mexican agreement was the model for later ESF loans.<sup>37</sup> The bank paid 3 percent interest on the peso deposit on its books credited to the FRBNY, and the FRBNY credited the bank with a dollar amount equal to the amount in pesos at the then prevailing exchange rate. The collateral was silver held for the account of the bank under earmark, one half at the FRBNY, the other half at the FRB of San Francisco. Pledged as security for the performance of the agreement, the silver was the dollar equivalent of the pesos the United States purchased. The agreement continued in effect until 1 February 1936 and from month to month thereafter, but was to be discontinued if the FRBNY advised the bank on or before the fifteenth day of any month. The bank repurchased the pesos under the terms of the agreement in May and June 1936. A somewhat similar arrangement with Mexico was reached in January 1938; subsequent loans to Mexico were made in November 1941, July 1945, July 1947, June 1949, July 1951, July 1953, and January 1958. Loans to Mexico after 1961 were just as frequent as in the earlier period.

An agreement identical in all important respects with the Mexican agreement was concluded on 25 May 1936 for the purchase of Chinese yuan against dollars secured by silver collateral. The arrangements which the FRBNY made with the Central Bank of China provided for the purchase of up to \$20 million of Chinese yuan. The collateral the Central Bank provided was to bear the same proportion to 50,000 ounces of silver as the amount of dollars used in the purchase of yuan bore to \$20 million. The dollars provided by the ESF were to be credited to the Central Bank of China in a special account at the FRBNY. A requirement was added that the yuan credited to the FRBNY as fiscal agent and interest should be repurchased at the same rate of exchange at which the yuan earning the interest had been bought. The silver pledged as collateral was not to be set aside as in the Mexican agreement from silver already under earmark by the FRBNY, but was to be held by the Central Bank of China in depositaries in New York or San Francisco, designated by the Treasury for the account of the FRBNY as fiscal agent or to be placed onboard a US steamer in Shanghai consigned

to the FRBNY at such depositaries. The agreement detailed the shipping and insurance provisions.

As in the Mexican agreement, in the event of failure on the part of the Central Bank of China to repurchase the yuan including interest, the FRB was safeguarded in taking over the collateral from any loss as a result of the failure. The Chinese agreement differed from the Mexican one in that the Central Bank of China had to arrange to have the collateral converted into silver bars for delivery in New York. Any purchase of yuan by the FRBNY as fiscal agent was subject to prior fulfillment by the Central Bank of China of the pledge of collateral.

The termination date of the agreement was 15 December 1936; notice of a desired renewal had to reach the FRBNY thirty days before.

The first Chinese agreement did not take effect. The ESF listed on its balance sheet of 3 August a liability to the Central Bank of China of \$138,000, and from 14 September to 19 October of \$312,000. There is no explanation accompanying the balance sheet of the reason a liability to China is listed, although China did not take up the loan the ESF offered.

During World War II the scope of ESF loans was broadened to include provision of dollars to countries deemed worthy of such assistance for their importance in the war effort. In Europe, only Iceland had a loan agreement, but the ESF provided the USSR with dollars in exchange for gold. In Asia the 1936 loan agreement with China for yuan with silver collateral was repeated in April 1941, but again not used. The ESF had wartime agreements with India, Iran, and Egypt to sell gold in exchange for local currencies for use by US personnel stationed there. It provided Liberia with US currency when it converted its monetary system from British coins.

During the postwar years ESF loan programs were combined with IMF standby arrangements, Export-Import Bank (EXIM Bank) foreign currency credits, and assistance from the International Cooperation Administration and the Agency for International Development that was established in 1961. These overlapping authorities represented different executive departments including commerce and state. The ESF contribution to these credit packages was small. One advantage of combining the ESF loan with others was that the latter often provided the less developed country (LDC) recipient with the means to repay the ESF.

#### 3.5.2 The ESF in the Silver Market

Neither section 9 or 10 of the Gold Reserve Act mentions silver as one of the items the secretary of the Treasury is authorized to deal in. The Treasury, however, wanted to dispose of gold the FRBNY held under earmark at the Bank of England to acquire silver instead. For this reason on 24 April 1934, Secretary Morgenthau inquired of US Attorney General Cummings whether he was empowered to do so. Treasury Attorney General Oliphant supported a broad interpretation of the secretary's powers. Cummings'

opinion was broad enough to cover not only ESF purchase of silver with the proceeds of gold sold abroad and to sell the silver so acquired, but also to authorize its purchase of additional silver with the secretary's special account at the FRBNY.

The ESF thus became a useful means for carrying out some of the purposes of the Silver Purchase Act of 19 June 1934, and the original plan of exchanging gold held in London for silver was adapted to the requirements of the Silver Purchase Act. It was enacted because of the political clout of senators from western states who represented silver mining interests. The price deflation of 1929–33 created a political movement in the United States to buy silver and raise its price in order to check deflation. Key Pittman of Nevada was chairman of the Senate Foreign Relations Committee. Roosevelt needed Pittman's support to repeal the arms embargo act. The quid pro quo was Roosevelt's promise to get the Silver Purchase Act passed.

Before the ESF was actually in operation on 27 April, and before the legislation was signed on 19 June, the Treasury made the necessary fiscal arrangements. It sent instructions to the FRBNY (a) to purchase spot silver in London in amounts and at prices to be specified from time to time; (b) to sell as much of the \$44.6 million in gold held abroad under earmark for the Treasury to make these purchases; (c) to select silver depositories in London and pay the cost of transportation into the United States when so directed by the Treasury; (d) to deposit, as fiscal agent of the United States, sterling balances accruing from the sale of gold, not immediately needed to purchase silver, in London banks designated as depositories of the United States.<sup>38</sup>

Instructions were then extended to cover the purchase of spot silver in New York. The FRBNY and its agents were authorized to advance sums needed to cover the cost of silver in New York, at current rates of interest, and to reimburse themselves from the proceeds of sales of gold sold in London at the market rate of exchange. The Treasury also authorized the purchase of forward as well as spot silver in carrying out the exchange of silver for gold.

The fiscal agency and depository arrangements were made to take care of the sale of gold for silver, but were further expanded as the US silver purchase program got underway. On 5 June, just before the enactment of the Silver Purchase law, the secretary authorized the FRBNY as fiscal agent to purchase silver not only with the proceeds of gold sold abroad but also with the ESF's dollar assets in the secretary's special account at the FRBNY.

On 26 October the secretary authorized the FRBNY to purchase silver in markets other than New York and London, and to pay a commission of 2 cents per ounce on such silver. The bank was instructed to write to agents it selected to carry out silver purchases under various letters of authority.<sup>39</sup>

The ESF at the end of 1934 was able to buy spot or forward silver in any market through the FRB or its agents, the Guaranty Trust Company, Chase Bank, and National City Bank, and to deposit this silver in any one

of fourteen depositories, seven in London, seven in New York. No specific arrangements, however, were in place for disposing of silver in the market and no banks had been appointed to carry out such sales.

Only part of the gold held abroad by the ESF was actually disposed of for silver. The balance of ESF gold remained under earmark at the Bank of England, and the silver bought with the proceeds of the gold that had been sold was in various depositories. Proceeds of gold sales were not used for the purchase of 67 million ounces of silver at an average cost of 44.8 cents, in accordance with the secretary's instructions, but were paid for instead by debits to his special account at the FRBNY. In June the silver was imported into the United States and held by the Assay Office in a special account for the secretary.

The ESF's gold and silver assets were unchanged between 16 June and 22 October 1934. From 26 October, however, the ESF began buying silver abroad and its sale to the US treasurer under the Silver Purchase Act. In addition, the Mint was authorized to sell to the Treasurer at 50.01 cents an ounce, 50 million of the 67 million ounces held in the name of the ESF. <sup>40</sup> The proceeds were credited to the ESF's checking account with the treasurer. The remaining 17 million ounces were transferred to the ESF which sold them directly to the treasurer.

The transactions involving ESF sale of gold, purchase of silver abroad, and sale of silver to the treasurer at 50.01 cents per ounce were followed by a series of ESF purchases of silver in London under the Silver Purchase Act, held in London for short periods, sold to the treasurer, and replaced by fresh purchases.

During February 1935, when the ESF was supporting sterling by purchases of both sterling and gold (and without drawing on its sterling balances), it also bought under the Silver Purchase Act 7.2 million ounces of silver at about 24 pence an ounce through the agents of the FRBNY. The silver was imported into the United States and sold to the treasurer.

In addition, the ESF bought silver in London with sterling. This was the equivalent of a transfer of sterling by the ESF to the treasurer for the purchase of silver under the Silver Purchase Act. From 19 February to 4 March 1935, the ESF through its agents bought 1.4 million ounces of silver in London at about 25 pence per ounce. From 18 February to 10 June 1935 it also transferred \$3.63 million in sterling to the treasurer for the purchase of silver under the Silver Purchase Act.

In the week of 4 March the ESF took delivery of 2 million ounces of silver from the Central Bank of China. This was part of a purchase of 10 million ounces at about 54 cents an ounce that the Chase National Bank had negotiated for the ESF in November 1934 for delivery to the Chase branch in Shanghai. Because of delivery problems, a schedule of partial deliveries in March, April, and May 1935 was set. Under this arrangement the Central Bank could elect to make delivery in London subject to a small reduction in

the price it was paid and it did so, with deliveries early in March and early in May. By the end of May, 7.25 million ounces had been delivered, and the balance postponed to September and November 1935.

In all, the ESF conducted four operations in silver in the eight months following the passage of the Silver Purchase Act: (a) between 17 December 1934 and 2 January 1935, it bought 10 million ounces in London on a dollar basis ranging from 53.08 to 54.75 per ounce; (b) it bought 10 million ounces from the Central Bank of China at just over 54 cents per ounce; (c) it bought melted down old silver piastres in Saigon, Indochina; (d) it bought in London on a sterling basis, while supporting sterling, 7.2 million ounces at prices just under 25 pence per ounce.

In the course of the four ESF purchases the price per ounce of silver rose from 45 cents in June 1934 close to 55 cents a year later.

After 18 February 1935 the world price of silver rose rapidly as speculators entered the market in the expectation that the ESF would purchase at increasing prices. As market prices rose, the Treasury purchase price of 64.5 cents per ounce of newly mined domestic silver was clearly out of line. On 10 April the domestic price at which the United States bought silver was raised to 71.1 cents by presidential proclamation. By 26 April the world price reached 81 cents. The domestic price again was raised, this time to 77.57 cents.

The world price in London in fact was a price that the Treasury alone set as it was the only buyer. When it stopped buying, the price fell. It did not completely withdraw from the market on 26 April but bought moderate amounts of silver through 17 June. Through 9 May it bought on a sterling basis in London by which date it was left with only enough sterling balances to pay for silver purchased in Saigon. Thereafter ESF purchases in London were on a dollar basis at prices that declined from 74.47 to 72.36 per ounce. Its total acquisition in the two and a half months from 29 April was 9 million ounces. This silver was regularly imported to the United States and sold to the treasurer. On 9 July through its agents the ESF bought 350,000 ounces at 67.21 cents per ounce.

In the middle of July 1935 the ESF began accumulating large hoards of silver for its own custody, the purchases in New York at slightly over 65 cents per ounce becoming virtually its exclusive business. It also sold sterling to the Treasury that it had acquired at from \$4.96 to \$4.98 for purchases under the Silver Purchase Act. From 8 July to 5 December it bought sterling in London for the purchase of about 170 million ounces for its own account. It transferred sterling to the Treasury for the purchase of 28 million more ounces. By September 1935 the ESF held about 126 million ounces.

From 16 July to 10 August 1935 the ESF pegged the silver price at 30 3/16 pence, equivalent at a sterling rate of \$4.96 1/4 or 67.33 cents per ounce. The ESF was almost a daily buyer at this price, acquiring 45 million ounces at a cost of \$30 million. The FRBNY as the ESF's fiscal agent was given

the option in executing these purchases of charging the secretary's special account in dollars or its account with the Bank of England in sterling. The ESF therefore was in the market for sterling and for silver while the designated agents were in the market as well for sterling to pay for silver in London.

At the fixed pence price for silver, great amounts of silver were offered by China in particular from 7 to 10 August. On 12 August the ESF lowered the pence price slightly and on 15 August pegged it at 19 pence per ounce. In the four days from 12 to 15 August the ESF bought 43.75 million ounces at a cost of \$25.275 million. The ESF also bought £473.6 million, which it transferred to the treasurer for silver purchases on 12–14 August. This sterling support raised its rate to \$4.98 1/4.

For the rest of August sterling remained at about \$4.98, and the pegged London price of silver at 29 pence. The dollar price of silver the ESF bought, which ranged between 65 to 64.9 cents per ounce, was steady until 5 December.

From 15 July to 9 September the ESF bought 136 million ounces, of which only 16 million ounces had been sold to the treasurer. Of the 120 million, 90 million ounces were held in London. Thereafter silver purchases were on a smaller scale, but silver imported from abroad and sold to the treasurer exceeded purchases.

Silver bought after 10 September was priced at 29 3/16 to 15/16 pence and on 11 October the ESF began to buy silver regularly at a pegged 29 15/16 pence price. The ESF bought sterling at \$4.91 1/2 to \$4.94 for the treasurer to buy silver in London at the pegged price. From 30 October to 6 December the FRBNY was instructed regularly to purchase and transfer to the treasurer sufficient sterling to pay for a specified number of ounces of silver, in all, 12.27 million ounces. The ESF bought 29.275 million ounces through the FRBNY agents for its own account at the pegged price. Its London holdings were all imported by 23 December and sold to the treasurer. By the end of the year, however, the ESF acquired substantial amounts by purchases in China.

In addition to support of the silver market in London, as indicated above, the ESF also acquired silver in the Far East. The first one was the purchase in November 1934 of 10 million ounces from the Central Bank of China at about 54 cents an ounce. The second one was the purchase in May 1935 of 4.66 million ounces of demonetized Indo-Chinese piastres in Saigon, Indochina. The Banque de Paris et des Pays Bas, as agent for the French Indo-Chinese government in Saigon, submitted the offer to sell to the Bankers Trust Company in New York. The piastres were to be delivered onboard the American steamer *Golden Dragon* scheduled to sail for San Francisco on 3 June. On that date the ESF paid for the purchase from its sterling balance in London. We alluded above to the difficulties the Central Bank of China experienced in delivering the 10 million ounces the ESF had purchased, as

well as 25 million ounces directly bought by the Treasury. The Central Bank on 24 May offered to deliver the silver to the Chase Bank in Shanghai but not to export it. The Treasury notified the Chase Bank on 22 July that, if it regarded the arrangement as safe, the Treasury would accept the undelivered silver in Shanghai in monthly lots of 500,000 ounces. It also inquired whether the arrangement would lead Chinese officials to express less hostility to the US silver purchase program. The proposed arrangement, however, was not adopted. On 30 September 1935, 2 million ounces of the arrears of the direct Treasury purchase was delivered in London and delivery of 2 million ounces still owed to the ESF was extended to 30 November 1935.

A third ESF Asian purchase was made on 22 August 1935 of 286.9 thousand ounces in Bombay in bar form known as "broken bill smelters." Priced at 24 3/4 pence and shipped to the United States on the American steamer *President Adams*, the cost was paid in sterling from the fund's account at the Bank of England.

China's abandonment of the silver standard in November 1935 led to a changed silver purchase policy of direct purchases by the Treasury wherever available: the entire Mexican 1935 silver production of 76 million ounces at the current New York price; a bid for 25 million ounces to the Central Bank of China freight on board (FOB) American steamer in Shanghai not later than 11 February 1936 at 65.17 cents. The bank could not supply all the silver in fine bars, so the Treasury made a lower bid for bars of lesser fineness shipped to San Francisco but not via Suez or New York. The terms were accepted and another 25 million ounces was bought. The silver was shipped in January 1936.

On 5 December 1935 the ESF discontinued silver purchases at 65 cents per ounce. The London market found no bidders for 25 million ounces on offer. By 20 December the price fell to 51.75 cents in New York and 48.29 in London. The ESF bought 1.25 million ounces in London in January 1936 at prices in the 44–45 cent range. The silver was sold to the treasurer. On 19 October the ESF through its agents bought 2.458 million ounces in the range of 43–44 cents per ounce. Thereafter the ESF operated on a small scale in the silver market. The major ESF silver transactions in 1936 involved use of silver as collateral for its loans to Mexico and China.

The silver purchase program accomplished neither objective of the Silver Purchase Act. It did not achieve a market price equal to the monetary value of \$1.29+ or a 1:3 ratio of the monetary stocks of silver to gold. In June 1963 the Act was repealed.

## 3.5.3 The ESF in the Government Securities Market

Section 10 of the Gold Reserve Act authorized the ESF to use the part of its assets not needed for exchange market intervention to deal in direct obligations of the US government. The proceeds of sales and investments and all earnings and interest were to be paid to the fund for its use. This

authorization made it possible for the ESF to influence the state of the government bond market as well as monetary policy if it engaged in openmarket operations. These considerations are quite apart from the matter of whether intervention in the foreign exchanges had an impact on the domestic credit structure.

With respect to the power of the Treasury to conduct open-market operations in government bonds through the ESF, Secretary Morgenthau in hearings before the Senate Committee on Banking and Currency in June 1941 held that the power should not be lodged exclusively with the Federal Reserve but there was no conflict between the Treasury and the Federal Reserve. But he explicitly stated that the ESF bought and held government securities only as earning assets (US Senate 1941, 20–21). Initially, the ESF bought government bonds from other government agencies that sought to sell them. Shortly after its establishment the ESF bought \$19.5 million of 2 percent consols (held to secure the notes of insolvent national banks) from the comptroller of the currency. The ESF drew on its account with the treasurer to pay for the purchase. On 18 May 1934 the FRBNY for the ESF bought \$10 million Treasury bonds issued to secure the circulation of insolvent banks. This purchase was paid for by drawing on the secretary's special account with the FRBNY.

On 21 and 22 May the ESF bought \$5 million treasuries in the open market through the FRBNY. On 23 May the secretary bought directly for the ESF \$2.815 million of various Treasury issues offered by the Farm Credit Association. In total between 18 and 23 May \$13 million in Treasury bonds were kept off the market by ESF purchases from government agencies. In addition, through the FRBNY the fund bought \$5 million in the market. These transactions may account for the comment by Brown (League of Nations 1944, 160), "It is probable that it did on at least one occasion offer support to the government bond market."

By the end of 1934 the ESF had bought \$44.5 million par value of government securities, all but \$5 million from other government agencies. On 11 January 1935 the FRBNY was instructed to sell all the securities held by the ESF except for 2 percent consols and Panama Canal bonds. The Treasury bond market then was firm and the ESF made a profit on the sale. ESF government securities assets from 1934 to 1961 ranged between \$10 and \$60 million.<sup>43</sup>

#### 3.6 Conclusion

The ESF is an arm of the Treasury Department. Sometimes during the ESF's formative years the Treasury chose to conduct the varied operations it was responsible for through its singular agency, and other times reserved for itself the execution of similar operations. What determined the decision is not obvious to us.

The chapter covered many aspects of the ESF from its establishment, its similarities to and differences from the British EEA, the ESF mission, intervention before and after the Tripartite Agreement, ESF nonintervention activities as a lender to mainly Third World foreign governments, as the purchaser of silver at home and abroad in fulfillment of the June 1934 Silver Purchase Act, and as an investor in the government securities market.

We limit our attention in this concluding section to official foreign exchange market activities, the central concern of this book, whether conducted by the ESF or the Treasury, covering three related topics: (a) What were the objectives of US policymakers in a world divided between a floating exchange rate for sterling, controlled exchanges in central European countries, and a rear guard of gold standard adherents? Whose interests were promoted by US forays into the foreign exchange market? (section 3.6.1); (b) Why were exchange rates emphasized as the means of achieving expanded trade rather than policies to remove barriers to trade? (section 3.6.2); (c) What was US monetary policy during the period covered by chapter 3, and did intervention affect monetary policy? (section 3.6.3)

# 3.6.1 Objectives of Intervention and Were They Successful?

The initial motive for intervention was to imitate the British invention of its EEA, believed by the Roosevelt administration to be depressing the exchange value of sterling at the expense of American foreign trade. By contrast, the attitude to currencies of gold standard countries was supportive, selling them gold and buying their currencies when weak, providing them with dollars when needed.

Suspicion that Britain was an adversary with respect to exchange rate policy probably persisted even when the Treasury in 1935 first persuaded the Bank of England to buy gold on its behalf in the London gold market at a price the Treasury set, an arrangement that was renewed until the outbreak of the Second World War. The price did not vary in the intervening years until war risks forced changes. Originally the Treasury believed the price it set would produce a profit to arbitrageurs equivalent to what shipping the gold to New York and selling it there would have yielded, and hence obviated the need for them to ship gold. Eventually, the standing order by the Treasury to the Bank of England to buy gold on its behalf had less to do with checking the profit incentive of arbitrageurs to ship gold to New York. Instead, it became the means for the orderly transfer of gold to the Treasury from the London entrepot for the enlarged output of international gold mines. The gold would in any case have poured into the Treasury since it offered a fixed price of \$35 an ounce to all sellers, including gold hoarders (who sought a safe haven as war neared). But for the standing offer, the market, not the Treasury would have determined the rate of inflow.

Neither before nor after the Tripartite Agreement was the fact of misalignment of currencies recognized. No effort was made in all the flurry of intervention to address the fundamental exchange rate problem, revealed by differences in domestic government spending, taxes, labor market policies, inflation, and monetary policy. The Tripartite Agreement was not a solution since it simply preserved the preexisting misalignment despite devaluations of the gold bloc currencies. Intervention by the ESF and each of the countries the ESF dealt with, even if it alleviated an immediate problem, did not contribute to improved economic or trade stability.

# 3.6.2 If Expanded Trade Was Sought, Why Not Trade Liberalization rather than Exchange Rate Forays?

If expanded foreign trade was an objective of exchange rate policy, it would be useful to know whether it had such an effect and, whether or not it did, the response of foreign trade to the contemporaneous reduction in trade barriers. Unfortunately, there are no quantitative measures of the contribution of either factor.

The United States was the target of higher foreign trade barriers imposed by countries worldwide experiencing the depression from 1929 to 1933, possibly in retaliation for the Smoot-Hawley Tariff. In March 1934, to increase American exports and also imports, the president asked Congress to pass legislation authorizing him to reduce US tariffs in trade agreements not requiring congressional approval. The result was the Reciprocal Trade Agreements Act passed as an amendment to the Smoot-Hawley Tariff Act. Congress also endorsed unconditional most favored nation clauses that automatically extended to other countries a tariff reduction negotiated with one country. By 1936 trade agreements had been reached with three countries only: Canada (the largest of America's trading partners), France, and the Netherlands. Britain, at first, was cool to the idea of a trade agreement. Since its exports to the United States constituted just 6 percent of its total exports, although it was America's second largest trading partner, Britain saw no advantage in signing an agreement until war loomed, when it reconsidered. It was finally signed in 1938, but lasted only until August 1939, when Britain declared war. Irwin (1997) reported that the agreements made only a modest contribution to trade recovery during 1934–39, although trade may have shifted to the few countries with trade agreements. Net exports in any case had a minor effect on real economic growth. So if boosting foreign trade was the driving force behind both trade liberalization and intervention, one must conclude that neither served that purpose.

# 3.6.3 US Monetary and Intervention Policies

We have found no evidence that the issue of the relation of intervention policy to monetary policy was raised before or after the ESF was established. This statement also applies to the subsequent Bretton Woods period predating the Federal Reserve's decision to intervene on its own account. When the Treasury inaugurated the program of gold sterilization in December 1936 to

offset the increase in the monetary base that its gold purchases produced, it did so without recognition of the fact that intervention purchases of foreign currencies increased the base, and sales of foreign currencies reduced it. Central banks engaged in foreign exchange market intervention since the demise of Bretton Woods routinely sterilize their operations. The growth of the monetary base before December 1936, thanks to gold and silver purchases and intervention, was welcomed by the Treasury for raising the price level. To sterilize this effect would have been deemed obtuse.

United States monetary policy following the Great Depression was marked by Federal Reserve passivity from 1933 to 1941, during which it kept its bond portfolio unchanged. It was gold purchases by the Treasury, as already noted, that was correlated with movements in the monetary base. Relative to the size of gold inflows, the amounts of purchases and sales of foreign currencies by the ESF and Treasury were minor.

From 1941 to 1947 the Federal Reserve pegged the price of government securities, maintaining a pattern of rates of different maturities by buying or selling any amounts offered or demanded at these rates. The only difference in 1946–47 was that the short-term rate was raised slightly with no change in long-term rates.

In 1951 the Federal Reserve was released by the Federal Reserve—Treasury Accord from its commitment to peg government bond prices, but it was not until 1953 that it actually did so, largely in response to an inflationary threat unleashed by the Korean War. The introduction of the Bretton Woods system in 1946 did not influence domestic monetary policy in the United States. That changed in 1961 at the conclusion of the period covered by this chapter.