THE BENEFITS AND COSTS OF THE
EXPORT-IMPORT BANK LOAN SUBSIDY PROGRAM

The Congress of the United States
Congressional Budget Office
March 1981
PREFACE

The recently proposed cuts in the budget of the Export-Import Bank of the United States represent a substantial change in a program that has been a feature of public policy for nearly fifty years. This report, undertaken at the request of the Subcommittee on International Trade, Investment, and Monetary Policy of the House Committee on Banking, Finance, and Urban Affairs, considers the costs of and benefits from the operation of the Export-Import Bank. It is a preliminary version of a report that is undergoing final review and that will be available later this spring. In keeping with CBO's mandate to provide objective and nonpartisan analysis, this paper offers no recommendations.

The report was prepared by Heywood Fleisig and Catharine Hill under the general supervision of David S.C. Chu and Robert F. Hale. The authors gratefully acknowledge the comments of Rita Seymour, Emery Simon, and Nancy Swope. Nancy Brooks and Janet Stafford prepared the manuscript for publication.

Alice M. Rivlin
Director

March 1981
# CONTENTS

<table>
<thead>
<tr>
<th>Summary</th>
<th>Chapter I. Introduction</th>
<th>Chapter II. What Is the Cost of the Eximbank Credit Subsidy Program?</th>
<th>Chapter III. Do Eximbank Loans Produce Benefits by Increasing Employment?</th>
<th>Chapter IV. Do Eximbank Loans Produce Benefits When They Match Foreign Subsidized Credit Programs?</th>
</tr>
</thead>
<tbody>
<tr>
<td>vi</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>7</td>
</tr>
</tbody>
</table>

## Chapter I. Introduction

**WHAT IS THE COST OF THE EXIMBANK CREDIT SUBSIDY PROGRAM?**

The Export Subsidy Equals the Difference Between Eximbank's Rate and the Rate Charged in the Private Market for the Same Credit...

The Subsidy Amounts to $200 Million to $900 Million Annually.

## Chapter II. Do Eximbank Loans Produce Benefits by Increasing Employment?

When There is Full Employment, Subsidizing Exports Will Increase Inflation and Raise Exports at the Expense of Non-Subsidized Production...

When There is Unemployment, An Export Subsidy Could Increase Total Employment...

Export Subsidies Could Support Chronically Depressed Areas...

Export Subsidies Do Not Vary Over the Business Cycle...

## Chapter IV. Do Eximbank Loans Produce Benefits When They Match Foreign Subsidized Credit Programs?

If a Foreign Government Permanently Subsidizes an Export, the Income of U.S. Citizens as a Group Falls When the U.S. Government Matches the Subsidy...
## Contents (Continued)

<table>
<thead>
<tr>
<th>CHAPTER V.</th>
<th>DO EXIMBANK LOANS PRODUCE BENEFITS WHEN PRIVATE MARKET LOANS ARE NOT AVAILABLE?</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the Foreign Government Subsidy is Temporary, It May Be in the Interest of the United States to Match the Subsidy</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>If Domestic Producers Lose Sales Because of Foreign Export Credits, Common Views of Fairness Might Dictate Matching the Foreign Subsidies</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>If Equity Motivates These Loans, Eximbank Should Lend Only Where Other Countries Are Subsidizing</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>It May Be Advantageous for the United States to Match Foreign Subsidies as a Way of Bringing Pressure on Countries That Refuse to Curb Such Practices</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHAPTER VI.</th>
<th>DO EXIMBANK LOANS PRODUCE BENEFITS BY APPRECIATING THE DOLLAR EXCHANGE RATE?</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>When Private Market Loans Are Absent, Market Imperfections May be Obstructing Socially Desirable Loans</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>When the Absence of Private Market Loans Is Not Produced by Market Imperfection, An Eximbank Loan, Even at &quot;Market Rates,&quot; Is a Subsidized Loan</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Subsidizing Export Credit May Not Increase the Total Value of Exports</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Even If Total Export Revenue Increases, An Export Subsidy May Not Produce Dollar Exchange Rate Appreciation</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Dollar Exchange Rate Appreciation Is Not Always Desirable</td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>
Dollar Exchange Rate Appreciation Reduces Sales by Other Export and Import-Competing Industries. 16

CHAPTER VII. DO EXIMBANK LOANS PRODUCE BENEFITS AS A DIRECT RESULT OF THE RISE IN EXPORTS? 17

Higher U.S. Productivity Growth Can Raise Exports, But Subsidizing Exports Does Not Raise U.S. Productivity. 17
Higher U.S. Savings Rates Can Increase Net Exports, But Subsidizing U.S. Exports Will Not Raise Total National Savings. 17

CHAPTER VIII. DO EXIMBANK LOANS PRODUCE BENEFITS BY FURTHERING FOREIGN POLICY OR NATIONAL SECURITY OBJECTIVES? 19

Eximbank Loans Are Sometimes Made to Companies Directly Involved In National Security. 19
Eximbank Loans Do Not Typically Follow the Pattern of Foreign Aid Disbursements. 20
Export Credit on Occasion Might Be An Important Foreign Policy Tool. 20

CHAPTER IX. HOW ARE THE COSTS AND BENEFITS DISTRIBUTED? 22

Non-Exporters Within the United States Pay the Subsidy Either by Paying Higher Domestic Interest Rates or by Borrowing More at the World Market Rate from Foreigners. 22
Part of the Subsidy Is Received by Domestic Exporters in the Form of Higher Profits. 22
CONTENTS (Continued)

Part of the Subsidy is Received By Foreign Purchasers in the Form of Lower Interest Rates Than They Otherwise Would Have Paid . . . . . . . . 23
Part of the Subsidy Is Absorbed in the Inefficient Employment of Resources . . . . 23

APPENDIX A. ESTIMATING THE ANNUAL COSTS OF EXIMBANK LOAN SUBSIDIES . . . . . . . . 24

TABLES

TABLE 1. DISTRIBUTION OF U.S. ECONOMIC ASSISTANCE AND EXIMBANK LOANS, BY REGION, FISCAL YEARS 1962-1979 . . . . . . . . 21

TABLE A-1. ESTIMATION OF THE EXIMBANK LOAN SUBSIDIES . . . . . . . . . . . . . . . . 25
SUMMARY

The Export-Import Bank of the United States (Eximbank) has outstanding about $13.6 billion in subsidized loans. The Administration has recently proposed curtailling the rate of new lending by about 12 percent from previously planned levels. This report examines the costs of and benefits from the operation of Eximbank. It finds that U.S. citizens who are not beneficiaries of the program pay additional interest costs of between $200 million and $900 million annually (at current program levels and interest rates). The report is unable to document any offsetting gains in economic efficiency or in achieving foreign policy objectives from the program as it currently operates; it finds that payments by non-beneficiaries are largely redistributed to U.S. exporters, foreign importers, and banks, with the remainder absorbed in efficiency losses from misdirection of resources.

THE COST TO THE UNITED STATES OF EXIMBANK OPERATIONS

The Eximbank delivers a subsidy equal to the difference between the rate it charges and the rate that would be charged to those same borrowers in the private market. When Eximbank lends to an exporter, the federal government must borrow to supply the funds. This borrowing either crowds out some other domestic borrower through higher domestic interest rates, or forces some borrower into the international market to borrow at the world market rate. In the latter case, the Eximbank receives the lower subsidized interest payment from the foreign importer, while non-subsidized U.S. citizens pay the higher world market interest rate to other foreign lenders. The interest rate subsidy will be divided between foreign importers, who pay lower interest rates, and the subsidized U.S. exporters, who may charge higher prices. But unless there is some offsetting gain in efficiency, an issue addressed below, non-subsidized U.S. citizens must always lose from the operation of this program. Since there will always be some net transfer to foreigners, or some loss from the inefficient shift of resources out of areas where they were being profitably used before the subsidy, without an offsetting gain in economic efficiency, the losses to U.S. citizens must exceed the gains to the industries being subsidized: the United States as a whole must lose from the program. That the Eximbank has run at an
apparent profit when the cost of federally supplied credit is subtracted from its loan proceeds fails to take account of the costs to other U.S. citizens. The Eximbank has shown a profit on its books; it cannot be shown to run a profit when the costs of all citizens are taken into account.

BENEFITS TO THE UNITED STATES FROM EXIMBANK OPERATIONS

Are There Benefits From Raising Employment?

When there is general unemployment, subsidizing export credit could increase total employment. But the subsidy will increase some exports relative both to other exports and to other economic activities, while monetary and fiscal policies would have more neutral expansionary effects. Export promotion loans could aim at stimulating depressed areas or industries, but this is not presently an important criterion in making loans.

When the economy is at full employment, subsidized loans to exporters will increase employment in export industries, but this increase will occur at the expense of non-subsidized industries: the subsidy to one industry appears on other industries' books as increased costs and decreased profits.

Finally, Eximbank loans are made at all levels of aggregate business activity, so while some loans might reduce unemployment, others are made at times when they will probably aggravate inflation.

Are There Benefits From Matching Foreign Subsidized Credit?

U.S. citizens as a group do not gain economically from matching foreign credit subsidies to a foreign industry, because the cost of shifting resources out of that activity in the United States is only incurred once, while the matching subsidy would be permanent. If it is expected that the foreign subsidy will be temporary, then U.S. matching might be justified on the grounds that it prevented an inefficient switch of resources first out of and then back into that activity.

U.S. citizens, however, might wish to match foreign credit subsidies because they might view them as a particularly unfair commercial hazard that they do not wish fellow citizens to undergo. In such cases, lending policy might aim at the cheapest
way of achieving the desired standard of fairness, which would confine Eximbank lending to those U.S. exporters directly facing such competition.

Or, Eximbank matching of foreign subsidized loans might be a temporary device used to induce an otherwise recalcitrant foreign government to enter into international agreements to limit the scope of such subsidized lending. In such cases, the most effective and least costly program might offer subsidized loans to exporters only when they compete with the products of that country.

Are There Benefits From Lending Where Private Market Loans Are Not Available?

Sometimes imperfect capital markets prevent the granting of loans that would be desirable on economic grounds; at other times, non-economic objectives make subsidies necessary for the private market to lend a socially desirable amount.

But the mere absence of a loan offer from the private market at terms desired by the borrower does not prove that capital markets are imperfect. Many borrowers are too risky or too small to finance their credit needs in bond markets and must instead go to banks; some borrowers are so risky that even banks will not lend them the amounts they desire. When Eximbank makes a loan that private lenders will not make for these reasons, it grants a subsidy equal to the difference between the rate it charges and the rate the private borrower would have paid in the private market. Where the risk is so great that the loan would not have been made at all, the subsidy rises to include the expected loss on the loan from the chance of default.

Are There Gains From Producing Exchange Rate Appreciation?

The effect of Eximbank loans on the exchange rate is unclear. When the loan raises U.S. exports above the level they might otherwise have reached, it will also later reduce the inflow of interest payments below the level they would otherwise have been. The exchange rate, under these circumstances, may first rise above and then fall below the level it otherwise would have attained.

Moreover, assessing whether exchange rate appreciation produces any social benefit depends on present and expected
macroeconomic conditions. Sometimes dollar appreciation helps achieve U.S. economic policy goals; sometimes it does not.

Finally, when subsidized lending does produce exchange rate appreciation, the advantage to the industry receiving the subsidy will be partly offset by reduced competitiveness in other export and import-competing industries such as high-technology equipment, agriculture, automobiles, steel, textiles, and footwear.

Are There Benefits Directly Arising From the Increased Exports?

Nor does any economic gain to the United States follow directly from the subsidized rise in exports. Exports can increase because of a rise in productivity, but a subsidized increase in exports will not itself raise productivity. Similarly, a rise in the savings rate can increase net exports; a subsidized rise in net exports, however, will typically not produce an increase in savings, but rather will channel savings into foreign investment at the expense of domestic investment.

Are There Benefits From Furthering Foreign Policy or National Security Objectives?

Eximbank loans could produce benefits by maintaining defense-related capacity relatively inexpensively. But export subsidies are the preferred policy tool only where they maintain capacity at a relatively low cost; it is not clear that subsidizing the export of commercial airframe capacity is a relatively cheap way to maintain military airframe capacity, or that subsidizing the export of entire nuclear generating plants is the cheapest way of maintaining capacity in naval reactors.

Eximbank loans also serve some foreign aid function, by transferring the interest rate savings to the borrowing country. But many of these loans are made to European countries, and the remaining loans are not distributed in the same geographic pattern as the existing foreign aid package.

Finally, export loans may be an important foreign policy tool, as the original circumstances of Eximbank's founding attest. But if that is its purpose, then control over loans might be placed more directly under those responsible for foreign economic and political policies.
CHAPTER I. INTRODUCTION

In light of recently proposed substantial cuts in the budget of the Export-Import Bank of the United States (Eximbank), particular attention has focused on the benefits and costs that arise from the bank's program of direct subsidized loans for promoting exports.

Chapter II of this report estimates the cost to the United States of Eximbank's subsidy program. Chapter III examines whether Eximbank loans produce benefits by increasing employment. Chapter IV discusses the possible benefits that might arise from U.S. matching of foreign subsidized credits. Chapter V treats possible benefits that arise when private market loans are not available to finance exports. Chapter VI assesses whether subsidized loans increase the total value of exports and produce exchange rate appreciation and, if so, whether exchange rate appreciation is a benefit. Chapter VII discusses whether benefits from the subsidized loan program might arise as a direct consequence of a rise in the level of exports. Chapter VIII examines whether Eximbank lending furthers national security or foreign policy objectives. Finally, Chapter IX discusses the distribution of the costs and benefits of the subsidy program among various groups in the United States, and between U.S. citizens and foreigners.
CHAPTER II. WHAT IS THE COST OF THE EXIMBANK CREDIT SUBSIDY PROGRAM?

Summary

The export subsidy is equal to the difference between the rate charged by Eximbank and the rate charged by private lenders for comparable credit. Depending on the credit alternatives actually available to Eximbank borrowers, CBO estimates that the subsidy ranges between $200 million and $900 million annually. This cost is borne by non-subsidized U.S. citizens in the following ways: ultimately some private U.S. citizen may borrow in the world market to replace, at world market rates, the credit that Eximbank extends at the subsidized rate to the foreign importer; or, domestic credit costs rise until enough domestic investment projects are foregone to provide the resources now shifted to the foreign importer.

Other U.S. citizens would be unaware that the Eximbank loan had produced these costs, as the links are transmitted impersonally through a huge credit market. But the costs are, nonetheless, there. So, while Eximbank has in the past earned interest revenues in excess of the rate paid to the Federal Financing Bank, it does not actually operate at a profit when the costs of all U.S. citizens are included.

THE EXPORT SUBSIDY EQUALS THE DIFFERENCE BETWEEN EXIMBANK'S RATE AND THE RATE CHARGED IN THE PRIVATE MARKET FOR THE SAME CREDIT

Exporters pay a higher rate for their loans than does the U.S. government for several reasons:

- Export credit is tailored to the individual transaction—a retail transaction—with a low volume and a high overhead; U.S. government debt is marketed in large volumes in standardized units and maturities.

- Export credit, because it is individually tailored, tends to be more difficult to resell—less liquid—than is government debt, where liquid markets exist at most maturities.
Only the U.S. government can absolutely guarantee the payment of its bonds: that is, it alone can absolutely guarantee the conversion of Treasury bonds into Federal Reserve Notes, which are legal tender and must be accepted in payment for debts in the United States. No private debtor can make the same guarantee about his private debt; lenders will always require some independent assurance that the borrower is able to acquire the legal tender with which to pay the debt.

When Eximbank finances an export, the physical nature of the loan has not changed; it retains the high-risk, custom-tailored properties it had before the subsidized loan was made. But the amount of private credit available at the private market rate will be reduced as a consequence of the federal borrowing to finance the export loan. Either the total volume of domestic credit remains unchanged, in which case all domestic rates rise and some private investors are crowded out until resources are freed to provide the funds for the government loan, or domestic rates remain unchanged, forcing some domestic investors to obtain higher-cost loans from foreigners. In that case, Eximbank serves as an intermediary between the subsidized exporter and the world credit market; it lends to the exporter but takes an action that ultimately results in some U.S. citizen borrowing at the market interest rate.

A simple example may illustrate this more clearly. Suppose Eximbank extends a $1 million loan to a foreign importer, charging a rate of 7 percent when the market rate is 14 percent. Eximbank borrows the $1 million from the Federal Financing Bank, which, in turn, borrows $1 million by selling a Treasury instrument in the capital market. Since an additional $1 million in government bonds have been sold, some private market borrower will not receive the funds he would have received prior to the Eximbank transaction. One possible outcome is that, since demand for credit exceeds supply at the old interest rate of 14 percent, the interest rate will rise until credit demand has fallen by $1 million. Or, the private market borrowers may go into the international money market and borrow $1 million from a foreign lender at 14 percent. In either case, the United States, collectively, gives up 14 percent in order to extend the loan at 7 percent.

THE SUBSIDY AMOUNTS TO $200 MILLION TO $900 MILLION ANNUALLY

The actual size of the subsidy depends upon the rates Eximbank borrowers would actually have paid in the private credit
markets. At one extreme, if Eximbank borrowers were excellent credit risks, they might have qualified to sell Aaa bonds in capital markets. Under those circumstances, they could have fixed their borrowing cost in the year of the loan, and the subsidy would amount to about $200 million over the entire portfolio.

At the other extreme, if Eximbank borrowers were less good credit risks who could only get short-term loans in a market like the Eurocurrency market, paying some premium over the wholesale bank rate, they would have floating rate loans whose interest cost fluctuated each year. Under those circumstances, the entire $13.5 billion Eximbank portfolio would change its yield each year and would have cost over 14 percent in 1980. Since the actual average yield on those loans in that year was about 7.3 percent, the subsidy amounted to over $900 million. 1/

1/ Appendix A discusses details of the estimating procedure.
Summary

Export subsidies can increase employment in export industries, but when the economy is already at full employment, the rise in employment in the subsidized export industry results in a drop in employment elsewhere; there can be no net employment gain. When there is general unemployment, an export subsidy could increase total employment, but so could monetary and fiscal policy. Export subsidies might sometimes usefully be aimed at supporting employment in chronically depressed industries or regions, as a means of easing the costs involved in the reallocation of resources; but such criteria are not now important in making loans. As general tools to regulate the economy, monetary and fiscal policy may be superior to export subsidies.

WHEN THERE IS FULL EMPLOYMENT, SUBSIDIZING EXPORTS WILL INCREASE INFLATION AND RAISE EXPORTS AT THE EXPENSE OF NON-SUBSIDIZED PRODUCTION

Since total employment will not increase, and the resource shift may aggravate inflation, some other justification for increasing production of the export good at the expense of other goods is required.

WHEN THERE IS UNEMPLOYMENT, AN EXPORT SUBSIDY COULD INCREASE TOTAL EMPLOYMENT

The export subsidy increases production of the export relative to other domestically produced goods and increases the relative cost of the good to domestic consumers. Unless factors other than a general increase in employment prompt use of the subsidies, other policies—such as monetary and fiscal policies—could increase employment and output more neutrally.
EXPORT SUBSIDIES COULD SUPPORT CHRONICALLY DEPRESSED AREAS

Although such criteria are not now considered in granting Eximbank loans, export subsidies could be used to support employment in chronically depressed industries or regions. The cost of the subsidy could be considered an alternative to unemployment payments if it is clear that, in the absence of the subsidy, the unemployed labor in a particular industry or region would not be employed elsewhere. But pursuing such a policy over a long period would incur increasing losses to the United States by extending the period of time during which resources were used inefficiently.

EXPORT SUBSIDIES DO NOT VARY OVER THE BUSINESS CYCLE

If export credits do not vary over the business cycle, they will contribute both to overheating the economy and to increasing employment. Since export credits are extended over periods of time that are longer than any one stage of the cycle, and future cycles cannot be perfectly foreseen, it would be difficult to use export credits for stabilization purposes. These rigidities enhance the desirability of alternative policies to deal with unemployment and inflation.
CHAPTER IV. DO EXIMBANK LOANS PRODUCE BENEFITS WHEN THEY MATCH FOREIGN SUBSIDIZED CREDIT PROGRAMS?

Summary

The income of U.S. citizens as a group falls when the United States matches a foreign subsidized export program. These citizens may, nonetheless, approve of the subsidy because they might believe that damage to U.S. citizens inflicted by deliberate trading practices of foreign governments is unfair. In such cases, if policies aim at finding the least costly way of attaining the "fair" outcome, Eximbank loans would be given only to firms facing subsidized credit. Or subsidized Eximbank credit might be used to bring pressure on countries that refuse to curb their own subsidized lending through an international agreement.


If a foreign government permanently subsidizes an export product, the U.S. reaction that will yield the largest income to U.S. citizens as a group is to allow the foreign producer to supply the good. In this way, the United States can earn larger quantities of foreign exchange and import more goods by reallocating domestic resources from the production of the foreign subsidized good to the next most productive sector. The receipts from the sales of these next-best exports will be only marginally lower than those from the more efficient exports (if no subsidy were required), and the subsidy to foreigners will no longer be necessary. Therefore, the United States will receive more foreign goods in exchange for its exports by switching production to the non-subsidized sector. In competing in third markets, U.S. matching of the subsidy reduces U.S. citizens' income and raises real income in the country buying the export. (This may occasionally serve a foreign aid purpose, as is discussed in a later chapter.)

While neither workers nor equipment can be reallocated without costs, such costs are incurred only once--when the
reallocation takes place. Matching permanent foreign subsidies, in contrast, is not a one-time cost. Whenever the subsidy is matched, a cost will be involved. Therefore, even though the reallocation of domestic resources will not be costless, the costs involved are likely to be less than those implied by a permanent subsidy.

IF THE FOREIGN GOVERNMENT SUBSIDY IS TEMPORARY, IT MAY BE IN THE INTEREST OF THE UNITED STATES TO MATCH THE SUBSIDY

If it is known that the foreign country's subsidy is only temporary, then it may be in the United States' interest to compete. Whether the United States benefits from matching a temporary subsidy depends on whether the costs of subsidized competing in the short run are outweighed by the benefits of avoiding the costs of shifting U.S. production factors first out and then back into the export market.

IF DOMESTIC PRODUCERS LOSE SALES BECAUSE OF FOREIGN EXPORT CREDITS, COMMON VIEWS OF FAIRNESS MIGHT DICTATE MATCHING THE FOREIGN SUBSIDIES

Foreign credit subsidies hurt U.S. producers of goods that compete directly with the subsidized goods: neither workers nor equipment can be reallocated without cost, so U.S. citizens lose income and wealth. These risks are quite similar to those undertaken by other groups of industrialists and workers who face weather changes, technical changes in foreign countries, changes in the types of goods that people demand, input price changes, and competitive pressure on firms in one state by firms in other states that grant them subsidies and tax exemptions. Nonetheless, when a foreign government makes a conscious decision aimed largely and necessarily at damaging a U.S. exporter in favor of a foreign exporter, many people will believe this commercial misfortune is more inequitable than the others described above. In this case, the United States may be willing to sacrifice some efficiency to attain a more equitable outcome. The total costs of the subsidy must, of course, be weighed against the equity considerations.

IF EQUITY MOTIVATES THESE LOANS, EXIMBANK SHOULD LEND ONLY WHERE OTHER COUNTRIES ARE SUBSIDIZING

If the subsidy is not necessary to make U.S. exports competitive, the subsidy has no economic return. Export subsidies,
therefore, must be considered on a case-by-case basis. French subsidies to exports not competitive with U.S. exports do not justify U.S. subsidies to exports not competitive with those of France. Such a policy would only be warranted if the United States were attempting to raise its total exports relative to those of France, but, as is discussed below, such policies are without foundation.

**IT MAY BE ADVANTAGEOUS FOR THE UNITED STATES TO MATCH FOREIGN SUBSIDIES AS A WAY OF BRINGING PRESSURE ON COUNTRIES THAT REFUSE TO CURB SUCH PRACTICES**

If the countries compete for the same export market by subsidizing export credits, they lower the cost to importers. This represents a gift to the importer, represented either as a lower price for the same volume of exports or a larger volume of exports for a higher price. Since this benefits consumers at the expense of producers, the exporters would make themselves best off, as a group, if they agreed not to subsidize competitively. In this case, an enforceable agreement is in all exporters' joint interest.

The Arrangement on Guidelines for Officially Supported Export Credits, which went into effect in April 1978 and superseded an earlier agreement, represented partial progress in the direction of limiting competitive subsidization. The Arrangement specified minimum cash payments, minimum interest rates, and maximum maturities for officially supported export credits. Because the minimum interest rates specified in the Arrangement are fixed and the same for credit denominated in different currencies, the degree of credit subsidization allowed by the Arrangement varies both over time and across countries. As market rates increase over time, the fixed minimum interest rate allowable involves a greater subsidy. Similarly, countries with higher market interest rates can offer larger subsidies than countries with low market rates.

U.S. export credit subsidies could be used to compete only against exports of those countries who refused to sign an agreement that limited the practices of granting export credit subsidies. Under such arrangements, Eximbank's lending practices would be coordinated with the actions of U.S. government negotiators. Eximbank would match the subsidies of the non-agreement country, but only of that country. Indeed, Eximbank's activities could be extended to bring greater pressure to bear on the non-
agreement country by granting subsidized credit to U.S. exporters facing competition from that country, even where the government of the non-agreement country had not subsidized credit for that particular product.
CHAPTER V. DO EXIMBANK LOANS PRODUCE BENEFITS WHEN PRIVATE MARKET LOANS ARE NOT AVAILABLE?

Summary

Imperfect capital markets can create situations where private lenders do not make loans that are in the U.S. economic interest. But the simple unavailability of a loan does not prove the existence of a capital market imperfection: higher risk and credit volume demands prevent many borrowers from obtaining loans in the form they most prefer. For example, a small retail store typically could not sell a bond at the Aaa corporate bond rate, but would instead have to borrow from a bank. The market is not imperfect; rather greater risk and smaller credit volume demands lead lenders to offer better terms to Aaa-rated corporations than to small retailers.

When Eximbank makes a loan that is otherwise not available at the market rate in a market that is not imperfect, it has actually granted a subsidy equal to the difference between Eximbank's rate and the higher interest rate at which credit would ultimately be available. If credit is, in fact, not available from any lender and the market is not imperfect, private lenders must regard the loan as too risky at any plausible interest rate. Eximbank then essentially grants an even larger subsidy that is equal to the amount of risk it absorbs.

WHEN PRIVATE MARKET LOANS ARE ABSENT, MARKET IMPERFECTIONS MAY BE OBSTRUCTING SOCIALLY DESIRABLE LOANS

Sometimes, the absence of private market credit may indicate a market imperfection that prevents the gains from trade from being fully realized. In such a case, the government can increase the efficient use of society's resources by providing the credit and thereby correcting the market deficiency.

One such plausible example was the original impetus to the formation of Eximbank. Eximbank was originally set up during President Franklin Roosevelt's administration to finance trade with the Soviet Union. The Administration viewed opening
diplomatic relations with the Soviet Union as an important political objective. At the same time, it wished to end the constricting effects on trade of the 1931 Hawley Smoot Tariff and to use export promotion to raise domestic employment. During the depression, these were all important policy objectives. The Soviet Union, unlike many other countries, was agreeable to increasing imports during the depression.

But the private market was unlikely to finance such trade: the lack of diplomatic recognition had slowed the development of commercial ties; and unofficial State Department policy, and later the Johnson Debt Default Act, attempted to block loans to countries like the Soviet Union that had defaulted on war debts. Much evidence, then, supported the view that the private market would have lent insufficiently to secure side effects that were then considered desirable on political and economic grounds.

Similarly, after World War II, when the level of private lending to Europe was viewed as insufficient to prevent economic and consequent political disorder that would seriously compromise the NATO alliance, the Eximbank was one of the institutions used to channel government money to Europe.

WHEN THE ABSENCE OF PRIVATE MARKET LOANS IS NOT PRODUCED BY MARKET IMPERFECTION, AN EXIMBANK LOAN, EVEN AT "MARKET RATES," IS A SUBSIDIZED LOAN

The absence of private market loans does not prove that the market is imperfect. Some less developed countries, for example, cannot float bonds in the bond market. There are many reasons for this, but they all ultimately revolve around the absence of the kind of creditworthiness and volume of credit demand that makes floating a bond issue worthwhile. Many domestic U.S. corporations cannot raise funds by selling bonds; no individual borrower has been known to sell bonds in order to raise funds.

Most less developed countries will raise their funds by borrowing from banks in the Eurodollar market or in national banking markets. Their loans will typically have interest rates that float at a predetermined number of points (hundredths of a percentage point) over a benchmark interest rate like the prime rate or the London Interbank Borrowing Rate (LIBOR). When the Eximbank lends to such a borrower at, say, the Aaa corporate bond rate, it grants that country a subsidy equal to the difference
between the actual retail rate they would have been charged, because of their greater risk, and the rate charged by Eximbank.

Where a foreign borrower cannot even get bank credit, because of the condition of the country or of the borrower within the country, then the risk attached to the loan is even greater than is represented even by the retail rates typically charged to these countries. The subsidy granted by Eximbank is greater because it is taking a much larger risk.

When the private sector responds to risky loans by charging higher rates or by, ultimately, refusing to make them at all, it is not necessarily the case that a market imperfection exists. And when Eximbank makes a loan at lower than market rates in those circumstances, it cannot raise total income (or increase efficiency) if it has not really solved a market imperfection. Therefore, it is only redistributing income, always away from nonexporting U.S. citizens, but in whose favor—domestic exporters, domestic banks, or foreigners—is unclear and will be discussed below.
CHAPTER VI. DO EXIMBANK LOANS PRODUCE BENEFITS BY APPRECIATING THE DOLLAR EXCHANGE RATE?

Summary

Where the interest rate subsidy is small and the subsidized loan produces a large increase in the total value of exports, an export credit subsidy program may produce dollar exchange rate appreciation. But where the interest rate subsidy is large and the loan does not produce a much larger increase in exports, the subsidy will at first increase the trade balance and produce dollar appreciation. But after the merchandise shipments are complete, the U.S. receipt of interest payment on the subsidized loan will fall short of U.S. payments on foreign loans made by U.S. citizens who were originally crowded out of the U.S. capital market. The net drain on interest payments will reduce the current account; once the merchandise shipments are complete, therefore, the subsidized loan may produce a current account deficit and exchange rate depreciation.

But whether exchange rate appreciation produces any benefits for the United States depends on the state of the macroeconomy and the best direction for macroeconomic policy; sometimes exchange rate depreciation may be more desirable. Moreover, if the exchange rate does appreciate, the sales of subsidized exports may rise, but foreign competitive pressure will increase for non-subsidized exports, such as high-technology equipment and agricultural goods, and for non-subsidized domestically produced goods that compete with imports, such as automobiles, steel, textiles, and footwear.

SUBSIDIZING EXPORT CREDIT MAY NOT INCREASE THE TOTAL VALUE OF EXPORTS

If foreign demand is relatively sensitive to cost, then subsidized export credit can lead to a large increase in export sales without reducing export prices; under such circumstances, export revenues will rise. But if foreign demand is not sensitive to cost, and where U.S. producers compete but as a group already dominate the world market, then total U.S. sales will not
increase: foreign importers will pay the same total for the goods and a lower interest rate. Finally, where a single U.S. producer dominates the world market, the export credit subsidy will increase demand; the U.S. producer will respond by charging a higher price, raising total export revenues.

EVEN IF TOTAL EXPORT REVENUE INCREASES, AN EXPORT SUBSIDY MAY NOT PRODUCE DOLLAR EXCHANGE RATE APPRECIATION

Export credit subsidies will be more likely to produce exchange rate appreciation when the credit subsidy substantially increases the volume of sales, and when the required U.S. loan and the interest subsidy are small. Depending on the relative sizes of these effects, the exchange rate may depreciate or appreciate in the short run.

Suppose, hypothetically, that the United States sells $100 million in exports with $100 million in Eximbank financing; assume that the exports would not have been made otherwise and that Eximbank charges 7 percent at the same time that the market rate is 14 percent. While the merchandise is being shipped, the trade balance rises by $100 million.

But the $100 million loan to the exporter was one that, by assumption, would not otherwise have been made. The Federal Financing Bank lends to Eximbank, but must itself borrow the $100 million in the U.S. capital market that it would otherwise not have borrowed. One possible response of U.S. domestic borrowers, now crowded out of the domestic market, is to borrow in Europe at the 14 percent market interest rate. In this case, the outflow in capital account from the Eximbank loan is offset by the inflow on private account, with no net effect on the exchange rate. But, in subsequent years, U.S. citizens as a group will be receiving interest payments on the export loan at 7 percent, but paying interest to foreigners at the rate of 14 percent per year. There is an annual net outflow of funds, shown on the current account, of $7 million.

In the first year, therefore, the trade balance (and the current account) will rise by $100 million, producing upward pressure on the exchange rate. In subsequent years, though, once the merchandise is shipped and for the duration of the loan, there is a drop in the current account of $7 million annually. This decline in the demand for dollars will depreciate the exchange rate.
Many possible situations can be imagined, of course, but they underscore the uncertain effect that a rise in the trade balance, secured by subsidized lending, will have on the exchange rate.

**DOLLAR EXCHANGE RATE APPRECIATION IS NOT ALWAYS DESIRABLE**

Even where subsidized loans produce dollar appreciation, such appreciation is not always desirable. If the economy as a whole was near full employment, inflation was becoming more serious, and export and import-competing domestic industries were seen as being in good condition, exchange rate appreciation over and above that warranted by credit conditions might move the economy closer to macroeconomic targets of reducing inflation at the expense of the export and import-competing sectors. But if recession was particularly centered in import-competing sectors, and inflation was not viewed as the most important issue, exchange rate appreciation might be undesirable. Questions about the desirability of exchange rate appreciation can never be answered without reference to present and anticipated macroeconomic conditions.

**DOLLAR EXCHANGE RATE APPRECIATION REDuces SALES BY OTHER EXPORT AND IMPORT-COMPETING INDUSTRIES**

Where the subsidized loan program is successful in producing dollar appreciation, the gain to the exporter obtaining the subsidized loan will be offset by losses elsewhere. Dollar exchange rate appreciation raises U.S. export prices in foreign markets, reducing sales of non-subsidized exports, such as high-technology and agricultural products. At the same time, exchange rate appreciation will lower foreign prices in the United States, increasing the competitive pressure of imports on such import-competing industries as automobiles, steel, textiles, and footwear.
CHAPTER VII. DO EXIMBANK LOANS PRODUCE BENEFITS AS A DIRECT RESULT OF THE RISE IN EXPORTS?

Summary

A rise in exports can reflect an increase in productivity or in savings, but the rise in exports does not produce superior economic performance; subsidizing exports, therefore, typically will not raise the level of economic performance. Increasing exports through subsidies, therefore, must be justified in terms of some externality associated with increased exports.

HIGHER U.S. PRODUCTIVITY GROWTH CAN RAISE EXPORTS, BUT SUBSIDIZING EXPORTS DOES NOT RAISE U.S. PRODUCTIVITY

U.S. exports may increase because productivity rises in the export industries. If the exchange rate does not change, exporters will either supply more exports at the old price, undersell their competitors, or deliver a higher quality product at the same price. The rise in productivity would be a clear benefit for the United States: U.S. citizens would produce more output with the same factor inputs; for a given effort, income after taxes would rise. But the rise in exports only reflects these gains, it does not produce them.

HIGHER U.S. SAVINGS RATES CAN INCREASE NET EXPORTS, BUT SUBSIDIZING U.S. EXPORTS WILL NOT RAISE TOTAL NATIONAL SAVINGS

A rise in savings will reduce the consumption of imported goods and free up more goods to be exported; a rise in the savings rate produces a rise in the current account surplus. When the U.S. current account is in surplus, U.S. citizens are accumulating capital in foreign countries. Such accumulation passes on a larger total capital stock to future generations of U.S. citizens. Unlike a technological improvement, the future generation's consumption gain is partly offset by the current generation's loss; but so long as this shift is freely undertaken, there is no reason to undo the savings decision with public policy.
But when there is full employment and net exports are raised by subsidizing exports, net exports can only rise at the expense of some domestic activity. Since there is already full employment, GNP and disposable income will not change. One possible outcome is that domestic consumption and domestic government expenditure do not change, so that the rise in exports, equivalent to a rise in foreign investment, occurs at the expense of domestic investment. There is no net increase in capital passed on to future generations, but rather future generations get capital located in foreign countries rather than within the United States. There are no obvious advantages to U.S. citizens as a group from such a shift.
CHAPTER VIII. DO EXIMBANK LOANS PRODUCE BENEFITS BY FURTHERING FOREIGN POLICY OR NATIONAL SECURITY OBJECTIVES?

Summary

Eximbank loans are sometimes made to industries which the United States has a national defense interest in maintaining, but it is not clear that export subsidies are a cost-effective way to achieve that national security end. Eximbank loans may also transfer resources to importers in a way similar to giving foreign aid; but many Eximbank loans finance trade with Europe and the remaining loans are distributed quite unlike the national destination of foreign aid funds. It is, therefore, uncertain whether this is an extension of foreign aid desired by either the Congress or the Administration. Finally, Eximbank loans can be used, as they were intended at the founding of the institution, as a responsive policy tool for a specific administration foreign policy purpose. For this end, however, the control over lending by foreign economic and political policymakers might be made more direct.

EXIMBANK LOANS ARE SOMETIMES MADE TO COMPANIES DIRECTLY INVOLVED IN NATIONAL SECURITY

It is possible that the United States might wish to preserve an industrial activity within the United States on national security grounds and that a relatively inexpensive way of doing that would be to subsidize the exports of that industry.

One of the largest single types of Eximbank lending, however, is not justified by such an argument. Subsidized loans for aircraft are made for civilian aircraft that are not used by the military. Different companies make military airframes and when sales of those planes are financed by the government, they are financed with loans from different programs.

This would not deny that there might be secondary national defense benefits that would accrue from having a larger pool of skilled aircraft designers and manufacturers. A similar argument might be made in favor of subsidizing nuclear power plant exports. But in considering the entire budget, the value of such secondary
benefits must be weighed against the presently envisioned sacrifice of programs whose primary benefit is seen as furthering these ends.

Finally, it must be shown that an export credit subsidy is a relatively inexpensive way to achieve this end. If maintaining a core of trained technicians and capacity in naval nuclear generating units is an important national defense objective, then a standing annual order for such devices might be cheaper than subsidizing the export of entire nuclear power plants.

EXIMBANK LOANS DO NOT TYPICALLY FOLLOW THE PATTERN OF FOREIGN AID DISBURSEMENTS

Eximbank loans might be seen as providing some foreign aid function, where U.S. policymakers perceived the transfer away from U.S. citizens and toward foreigners as furthering some foreign aid objective.

As Table 1 shows, however, Eximbank loans are more concentrated in Europe than is foreign aid, and do not bear much relation to the pattern of foreign aid disbursements in areas outside Europe. Eximbank loans are not distributed in the way that the Congress and the Administration have jointly agreed to distribute the existing block of foreign assistance. It might be, of course, that an addition to foreign aid would be voted by the Congress and the Administration in exactly the way it is spent by the Eximbank; but, on the other hand, it might not be. For this reason, it is difficult to ascribe any benefit to the foreign aid characteristics of Eximbank loans.

EXPORT CREDIT ON OCCASION MIGHT BE AN IMPORTANT FOREIGN POLICY TOOL

On occasion, the granting of export credit might be a tool that could be valuable as a foreign policy device if the Administration were able to move quickly, and the Congress might vote to leave some such authority to the administration. Such a use is illustrated by the original objective of the Eximbank, loans to the Soviet Union, and the use of Eximbank credit after World War II to assist in European recovery; but if this is the intended use of Eximbank credit, then there would be some merit in abstaining from lending until such opportunities arose and in strengthening the oversight of foreign policymakers over Eximbank's lending procedures.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Near East and South Asia</td>
<td>38.2</td>
<td>11.4</td>
<td>63.5</td>
<td>2.8</td>
<td>59.5</td>
<td>2.3</td>
<td>63.8</td>
<td>8.9</td>
</tr>
<tr>
<td>Latin America</td>
<td>19.4</td>
<td>22.0</td>
<td>9.3</td>
<td>21.1</td>
<td>8.9</td>
<td>32.9</td>
<td>11.1</td>
<td>15.0</td>
</tr>
<tr>
<td>East Asia</td>
<td>28.7</td>
<td>20.6</td>
<td>9.0</td>
<td>33.2</td>
<td>8.7</td>
<td>38.8</td>
<td>8.7</td>
<td>40.1</td>
</tr>
<tr>
<td>Africa</td>
<td>10.3</td>
<td>5.6</td>
<td>11.1</td>
<td>19.8</td>
<td>13.9</td>
<td>19.1</td>
<td>14.8</td>
<td>16.2</td>
</tr>
<tr>
<td>Europe</td>
<td>2.1</td>
<td>32.6</td>
<td>4.1</td>
<td>21.5</td>
<td>9.0</td>
<td>5.9</td>
<td>1.5</td>
<td>18.7</td>
</tr>
<tr>
<td>Canada</td>
<td>0.0</td>
<td>1.8</td>
<td>0.0</td>
<td>0.1</td>
<td>0.0</td>
<td>0.8</td>
<td>0.0</td>
<td>0.3</td>
</tr>
<tr>
<td>Oceania</td>
<td>1.3</td>
<td>6.0</td>
<td>3.0</td>
<td>1.4</td>
<td>0.1</td>
<td>0.3</td>
<td>0.2</td>
<td>0.8</td>
</tr>
<tr>
<td>Total a/</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>


a/ Detail may not add to totals due to rounding.
CHAPTER IX. HOW ARE THE COSTS AND BENEFITS DISTRIBUTED?

Summary

The cost of the subsidy is borne at first by domestic borrowers who, after the Eximbank loan, either pay more for credit or make payments to foreigners for loans that they previously would have secured from other domestic residents.

The benefits from the subsidy are distributed to domestic U.S. exporters, to foreign importers, and absorbed in cost increases from the inefficient use of resources:

- Domestic exporters gain by making larger profits, either through higher profits or larger sales volumes, than they would have in the absence of the subsidized loans.

- Foreign importers gain at the expense of all U.S. citizens taken together by making lower interest payments than they would have made without the subsidized loan.

- Part of the subsidy is absorbed in the inefficient use of resources, lost to both U.S. citizens and foreigners alike.

NON-EXPORTERS WITHIN THE UNITED STATES PAY THE SUBSIDY EITHER BY PAYING HIGHER DOMESTIC INTEREST RATES OR BY BORROWING MORE AT THE WORLD MARKET RATE FROM FOREIGNERS

In the first round of the credit subsidy, domestic borrowers pay more for credit than would otherwise be the case, or they pay more interest to foreigners. In the case of firms that are able to pass on higher costs to their customers, the higher borrowing costs may be shifted on to the consumers of those goods in the form of higher relative prices than they would otherwise pay.

PART OF THE SUBSIDY IS RECEIVED BY DOMESTIC EXPORTERS IN THE FORM OF HIGHER PROFITS

In some cases, the loan subsidy to the exporter permits the exporter to charge a higher price than would otherwise have been
the case. In this case, the exporter's profits rise above the level that would have existed without the subsidized loan. There is a redistribution of income to U.S. exporters and away from U.S. non-exporters, but there is no net loss to the United States from this part of the transfer.

PART OF THE SUBSIDY IS RECEIVED BY FOREIGN PURCHASERS IN THE FORM OF LOWER INTEREST RATES THAN THEY OTHERWISE WOULD HAVE PAID

Unless foreign demand is very unresponsive to price changes, part of the subsidy will be passed along to the foreign buyer in order to induce him to purchase a larger amount. This part of the subsidy is a net loss to U.S. citizens and a net gain to foreigners.

PART OF THE SUBSIDY IS ABSORBED IN THE INEFFECTIVE EMPLOYMENT OF RESOURCES

To the extent that the volume of exports rises above what it would have been without the credit subsidy, resources must have been drawn from uses where they were relatively more efficiently employed before the subsidy. The subsidy then redirects resources from a more efficient use to a less efficient use, reducing overall efficiency. The drop in efficiency absorbs part of the subsidy, representing a loss to both U.S. citizens and foreigners.
APPENDIX A. ESTIMATING THE ANNUAL COSTS OF EXIMBANK LOAN SUBSIDIES

Summary

The annual value of the subsidy can only be calculated when the rate that would have been charged in the market to each borrower is known. But each borrower has different characteristics, so the total subsidy can only be roughly estimated.

This appendix estimates that the true subsidy probably falls somewhere between $200 million and $900 million per year at current interest rates and current funding levels.

LOW ESTIMATE OF THE VALUE OF THE SUBSIDY: ASSUME THAT EXIMBANK BORROWERS COULD HAVE SOLD Aaa CORPORATE BONDS

Only the best of Eximbank's borrowers could have borrowed at the U.S. Aaa corporate bond rate. Assuming that all borrowers from Eximbank could have borrowed at that rate and obtained fixed-rate loans over the life of their repayment period would produce a relatively low value for the subsidy.

Table A-1 shows the direct loan authorized and the weighted average interest rate charged on that loan. The Aaa interest rate is also shown. The amount saved annually by Eximbank borrowers---the subsidy---is also shown in the table. The total subsidy on Eximbank's entire loan portfolio is the sum of the subsidies on the debt still outstanding from each year. The subsidy is approximated by assuming that one-half of these loans are outstanding, providing the lower estimate of the value of the subsidy for 1980 at $200 million.

HIGH ESTIMATE OF THE VALUE OF THE SUBSIDY: ASSUME THAT BORROWERS WOULD HAVE BORROWED AT RATES FLOATING WITH THE EUROCURRENCY RATE

This estimate assumes that borrowers are not creditworthy enough to secure fixed-interest loans by selling bonds. It assumes instead they borrow at rates that follow the Eurocurrency
### TABLE A-1. ESTIMATION OF THE EXIMBANK LOAN SUBSIDIES

<table>
<thead>
<tr>
<th>Weighted Average Interest Rate on Direct Loans</th>
<th>Direct Loan Authorizations (billions of dollars)</th>
<th>Aaa Corporate Bond Yield</th>
<th>Estimated Subsidy (millions of dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>6.0</td>
<td>2.3</td>
<td>7.39</td>
</tr>
<tr>
<td>1972</td>
<td>6.0</td>
<td>2.2</td>
<td>7.21</td>
</tr>
<tr>
<td>1973</td>
<td>6.0</td>
<td>2.9</td>
<td>7.44</td>
</tr>
<tr>
<td>1974</td>
<td>6.38</td>
<td>4.3</td>
<td>8.57</td>
</tr>
<tr>
<td>1975</td>
<td>7.9</td>
<td>2.3</td>
<td>8.83</td>
</tr>
<tr>
<td>1976</td>
<td>8.42</td>
<td>2.1</td>
<td>8.43</td>
</tr>
<tr>
<td>1977</td>
<td>8.5</td>
<td>0.8</td>
<td>8.02</td>
</tr>
<tr>
<td>1978</td>
<td>8.38</td>
<td>2.9</td>
<td>8.73</td>
</tr>
<tr>
<td>1979</td>
<td>8.28</td>
<td>4.3</td>
<td>9.63</td>
</tr>
<tr>
<td>1980</td>
<td>8.44</td>
<td>3.6</td>
<td>11.94</td>
</tr>
<tr>
<td>Total</td>
<td>27.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SOURCES:** Weighted average interest rate on direct loans and direct loan authorizations were supplied by Eximbank staff. The Aaa corporate bond yield was taken from Federal Reserve Board, Annual Statistical Digest and Federal Reserve Bulletin, various issues.

rates. In 1980, on a portfolio of $13.8 billion, Eximbank earned a return of 7.31 percent. 1/ But the average interest rate on Euromarket loans for that year was 14.0 percent. 2/ The subsidy by this measure was 6.69 percent on $13.8 billion, or $923 million.

---

1/ Data supplied by Eximbank staff.