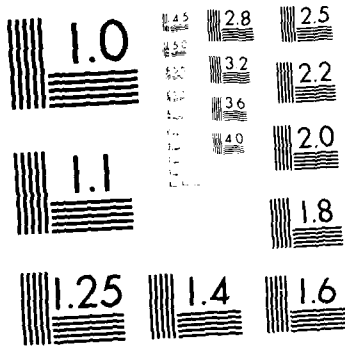


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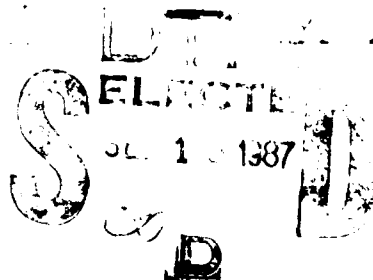
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Toward a Profile of Soviet Behavior in International Financial Markets

C. R. Neu, John Lund



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This Report uses publicly available, unclassified information as background for an effort to describe the nature of and motivations for Soviet international hard-currency financial transactions. These include all Soviet dealings with the industrialized world outside the Soviet bloc and most Soviet dealings with developing countries. The authors attempt to determine how much, with whom, how, and why the Soviets deal in international financial markets. In addition, they have aimed to assess the value of future research into Soviet financial dealings. The Report (1) provides an overview of the Soviet hard-currency balance sheet; (2) assesses the completeness of current reporting on Soviet debts; (3) discusses Soviet assets; (4) examines the style of Soviet operations in international financial markets; and (5) outlines possible directions for future research.

R-3524-USDP

Toward a Profile of Soviet Behavior in International Financial Markets

C. R. Neu, John Lund

August 1987

Prepared for the
Office of the Under Secretary of Defense
for Policy

RAND

Approved for public release; distribution unlimited.

PREFACE

This report represents a first effort at describing the nature of and motivations for Soviet international hard-currency financial transactions. It is based on publicly available, unclassified information and on interviews with financial market participants and observers. In preparing this report, the authors had no access to classified or proprietary information collected by government agencies, central banks, or regulatory authorities.

Soviet international financial dealings have not been extensively studied before, and this study is only a first step toward a full analysis of these dealings. Clearly, much more could be done in this area, exploiting open-source, classified, and proprietary information. In addition to cataloguing what is readily known and knowable about Soviet financial dealings, this report aims at identifying promising avenues for future research.

This research was carried out for the office of the Under Secretary of Defense for Policy under the National Defense Research Institute, RAND's Federally Funded Research and Development Center supported by the Office of the Secretary of Defense. It is part of RAND's research program on international economic policy.

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SUMMARY

Because the Soviet Union is a centrally planned economy, Soviet transactions in international hard-currency financial markets reflect, at least to some extent, the goals and motivations of high-level Soviet policymakers. These transactions also reflect the state of the Soviet economy and perhaps the views of the leadership about current and future economic and political developments. An understanding of Soviet international financial transactions may thus provide insights into the perceptions and the plans of Soviet policymakers.

Perhaps more important, an understanding of the Soviet financial situation is essential to an assessment of the long-term prospects for Soviet economic growth or of Soviet capabilities to support client states. A clear view of Soviet financial possibilities may be particularly valuable in the current environment, when debate over a number of policy questions facing the United States and the Western alliance centers on the ability of the Soviet Union to engage in long-term competition with the West.

The Soviet need for hard currencies suggests a possible lever for Western governments in dealing with the Soviet Union. It is not clear, however, how this lever might be used—if it can be used at all. A better understanding of Soviet needs for hard currencies and the channels through which the Soviet Union can obtain hard currencies may suggest new approaches to Western relations with the Soviet Union. Alternatively, it may suggest that attempting to use financial pressure to influence Soviet behavior is unwise—still a valuable insight.

Unfortunately, Western understanding of Soviet international transactions is far from comprehensive. The Soviet Union publishes almost no information on its financial activities, and Western analysts must rely on less than perfect information supplied by Western counterparts to Soviet transactions. These analysts see only parts of Soviet financial activity, and the parts they see do not always fit well together.

THE SOVIET HARD-CURRENCY BALANCE SHEET

The most frequently cited estimates of Soviet hard-currency debt come from a cooperative effort by the Bank for International Settlements (BIS) and the Organization for Economic Cooperation and Development (OECD). The BIS provides estimates of Soviet assets

and liabilities *vis-à-vis* Western banks. The OECD provides estimates of lending to the Soviet Union by the official trade financing agencies of Western governments. According to BIS/OECD estimates, Soviet gross hard-currency debt was \$31.4 billion at the end of 1985. At that time, the Soviet Union held deposits totaling some \$13.1 billion in Western banks, and its net hard-currency debt was some \$18.4 billion.

The U.S. Central Intelligence Agency (CIA) also publishes annual estimates of Soviet debt. These estimates differ somewhat from the BIS/OECD figures, placing gross Soviet hard-currency debt at \$26.4 billion and net debt at \$14.4 billion at the end of 1985.

The Soviet Union enjoys a good "name" in international credit markets, and few countries are able to borrow from Western banks on more favorable terms. The Soviet Union maintains large balances of hard-currency funds on deposit in Western banks. On a number of occasions, the Soviet Union seems to have borrowed hard-currency funds for no reason other than to add to its hard-currency deposits.

The Soviet Union makes heavy use of loans and loan guarantees extended by the official export credit agencies of various Western countries. The U.S. official export credit agency, the Export-Import Bank, has not lent or guaranteed loans to the Soviet Union since 1977. Similar agencies in other Western countries still do both, however. At the end of the third quarter of 1986, 44 percent of the gross Soviet hard-currency debt was held or guaranteed by Western governments. The amount of direct credit outstanding to the Soviet Union from Western governments has declined in recent years, but the Soviet Union seems to have encountered no difficulty in replacing official credit with private bank credit.

HOW MUCH DOES THE SOVIET UNION REALLY OWE?

It is generally recognized that neither the BIS/OECD nor the CIA estimates of Soviet debt are really complete. Some Soviet assets and liabilities are missed in compiling these estimates. There is disagreement, however, over the potential volume of "hidden" lending from the West to the Soviet Union. Most observers believe that "hidden" lending is minimal and that the BIS/OECD figures represent an essentially correct picture of Soviet indebtedness.

Some observers have suggested, however, that the five Soviet-controlled banks operating in the West may facilitate "hidden" lending to the Soviet Union. These banks, it is said, raise funds in the West and then forward these funds to the Soviet Union in such a way as to exploit gaps in the reporting arrangements that form the basis for BIS

estimates of Soviet debt. The alleged result is a potentially serious underestimate of Soviet indebtedness.

The mechanisms identified by proponents of this view are plausible. Funds forwarded to the Soviet Union in the manner described would escape BIS reporting arrangements. Examination of the published financial statements of the Soviet-controlled banks suggests, however, that the volume of "hidden" flows to the Soviet Union through these banks cannot be very large. The banks involved are just too small. Moreover, if the Soviet Union were really intent on hiding large volumes of lending from Western observers, other channels—not involving Soviet-controlled banks—are available.

One potentially interesting new channel for Soviet borrowing is the Euronote market. The Soviet Union has recently reached a settlement with the Bank of England in a financial dispute dating from the Soviet overthrow of the czarist government. This settlement is widely regarded as having cleared the way for a Soviet issue of Euronotes in the London market, and market observers expect a note issue within the year. This first issue will almost certainly be experimental and on a small scale. If it is successful, the Soviet Union may follow it with larger issues. Note issues may not be captured by present reporting requirements, and our ability to monitor Soviet borrowing may decline. A better focus for concern over the adequacy of current efforts to monitor Soviet borrowing might be on whether these arrangements can or should be adopted to cover Soviet use of new debt instruments such as Euronotes.

THE SOVIET CAPITAL ACCOUNT AND MISSING SOVIET ASSETS

An initial examination of the Soviet hard-currency balance of payments does not suggest that the Soviet Union is borrowing large amounts of unreported funds from the West. Indeed, the problem is just the reverse. At first glance, it is difficult to understand what the Soviet Union does with the funds that it clearly does borrow. This puzzling situation arises because Western analysts regularly see only a part of the Soviet hard-currency balance of payments. To reconcile what is known about Soviet hard-currency borrowing with what is known about the Soviet uses of hard-currency funds, we must conclude either that estimates of the Soviet hard-currency current account position are incorrect or that some Soviet hard-currency financial assets are "missing"—not observed by Western analysts.

The most likely candidates for such "missing" assets are loans from the Soviet Union to its Third-World client states. Available financial data are sufficient to estimate the size of these "missing" assets for 1983 and for following years. Independent estimates of Soviet military and economic aid to Third-World countries—based on trade data—have been compiled by RAND for the years up through 1983. It is significant that the two 1983 estimates of Soviet assistance to Third-World countries—one based on financial data and the other on trade data—are very similar.

This tends to confirm the validity of both estimates. Inasmuch as they were arrived at by quite different methods, it is unlikely that exactly compensating errors would have been made in both. This result suggests that current estimates of Soviet hard-currency assets and liabilities provide a fairly accurate overall picture of the Soviet hard-currency balance sheet. Observed Soviet borrowing seems to be just adequate to meet what we believe to be Soviet needs for hard currency.

THE STYLE OF SOVIET INTERNATIONAL FINANCIAL OPERATIONS

In international credit markets, Soviet financial managers are perceived as very hard bargainers, seeking and often getting very good loan terms. We encountered some suggestions, however, that the Soviet Union may sometimes be willing to pay somewhat larger loan initiation fees (fees not usually made public) in return for attractive (and publicly announced) interest rates and maturities.

In money markets, the Soviet style is very conservative. There is no evidence that the Soviet Union holds significant hard-currency assets in any form other than deposits in Western banks. Almost all of these deposits have maturities shorter than one year, and some estimates have it that 40 percent of Soviet hard-currency funds are on overnight deposit.

The size of these hard-currency deposits is somewhat puzzling. They far exceed what would be required for trade settlements, and it costs the Soviet Union something to maintain these deposits at the same time that it has large debts outstanding. The Soviet Union earns a lower rate of interest on its deposits than it generally pays on its loans. One explanation for these large deposit balances is that they are viewed by Soviet financial managers as doing double duty, providing a hedge against both economic and political uncertainty. Political developments could cut off Soviet access to Western credit markets.

and prudent management of Soviet finances may require "stockpiling" of hard currencies in excess of current needs to be prepared should access to Western credit markets be interrupted.

In contrast to Soviet behavior in money markets, Soviet behavior in foreign exchange markets is active and aggressive. Soviet foreign exchange traders sometimes transact in very large lots, and these transactions occasionally move foreign exchange markets. The transactions are well beyond what would be required for settling Soviet trade accounts, and the prevailing market view is that Soviet currency traders are "operating a foreign exchange franchise"—they are staking out an independent position for themselves as major market players. This reduces Soviet dependence on other foreign exchange market participants and allows the Soviet Union a somewhat greater degree of privacy in its foreign exchange transactions.

The Soviet Union is also a major player in commodities futures markets, and Soviet-controlled entities have from time to time taken flutters (and absorbed losses) in foreign real estate markets. We also encountered rumors of curious Soviet transactions in gold markets.

PROSPECTS FOR FUTURE RESEARCH

The research reported here illustrates some of the value of regular monitoring and analysis of Soviet financial activities. Financial data provide early reliable indications of changes in Soviet international economic relations. They also provide valuable confirmation of estimates derived from other data of important aspects of the Soviet economy. Systematic analysis of Soviet financial activities also allows periodic assessments of how well financial monitoring systems are capturing flows of hard-currency funds to and from the Soviet Union. A better understanding of Soviet financial activity today may constitute a useful element of a "baseline" characterization of Soviet economic behavior, assisting in the recognition and interpretation of future changes in Soviet international and domestic economic policies. This research in addition demonstrates that readily available, open-source information is sufficient to draw at least a general profile of Soviet international financial activity. This information may be used to draw policy-relevant conclusions.

Much yet remains to be done, however. A particularly promising objective for further research is a better understanding of the style of Soviet international financial transactions: the channels most frequently used, the kinds of transactions engaged in, and the motivations behind the transactions. Some of the data necessary to make progress

in this direction exist in open sources that have not yet been fully exploited. A systematic review of the financial press for recent years, for example, may turn up interesting bits of "market talk." Interviews with the bankers and market participants who deal most frequently with the Soviet Union—reportedly to be found principally in Frankfurt, Rome, and Vienna—promise to flesh out current understanding of Soviet operating procedures. And careful correlation of information on cross-border banking activities published by Western central banks might allow some analysis of the geographical disposition of Soviet controlled assets and the sources of Soviet borrowing.

Considerably more information about Soviet financial transactions is collected by national authorities in Western countries and by international agencies than is made public. This information reflects particular transactions and the position of individual banks and countries *vis-à-vis* the Soviet Union. This information is (quite justifiably) closely held. Sometimes it is not even shared among agencies of the same government. If access to this sensitive information could be arranged for analysts, it would probably permit new insights into Soviet financial practice. A further round of research might begin to explore the nature of these sensitive data and the terms under which the data might be made available to appropriate persons for analysis.

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I. INTRODUCTION

Soviet dealings in international financial markets pose a puzzle for Western analysts. The Soviet Union publishes no statistics on financial transactions with foreigners. What we know about Soviet international financial transactions comes almost entirely from the Western counterparties to these transactions. But none of these counterparties is in a position to see the whole of Soviet transactions. Efforts mounted by Western governments and financial authorities to monitor financial transactions with the Soviet Union are by no means comprehensive. We see only parts of the Soviet financial picture, and these parts do not always fit well together.

In the absence of comprehensive and detailed information about Soviet financial dealings with the West, extreme views of Soviet financial circumstances and capabilities sometimes emerge. The Soviet Union is sometimes depicted as a powerful and effective manipulator of international financial markets, making use of secrecy and a widespread intelligence network to beat the capitalist West at its own game. At other times, the Soviet Union is characterized as being on the brink of financial collapse, borrowing heavily from the West to support a faltering domestic economy and an increasingly expensive foreign empire, and highly vulnerable to interruptions in the flow of foreign capital. Most observers accept that neither of these extreme views provides a useful summary of the Soviet financial situation. An accurate and comprehensive understanding of the methods of and motivations for Soviet international financial transactions continues to elude us.

This kind of understanding could be useful to Western policymakers and analysts. The Soviet Union is a centrally planned economy. External financial transactions must to some extent reflect the views of high-level Soviet policymakers—about the state of the Soviet economy, about the goals and requirements of Soviet policies, and about economic and political developments that may affect Soviet access to international financial markets. An increase in Soviet borrowing from the West, for example, might provide the first indication that Soviet planners are expecting a shortfall in hard-currency earnings (perhaps because of a decline in Soviet oil production) or a rise in import needs (maybe because of a disappointing harvest). Soviet financial transactions with the West may also reflect the state of economic relations between the Soviet Union and its client states. As we illustrate later in

this report, a careful review of Soviet hard-currency transactions can provide an indirect indication of the volume of Soviet assistance to client states. Because financial data are available much sooner than the data necessary to estimate the volume of this assistance directly, financial data may provide the earliest indications of changing levels of Soviet support for the constituent parts of the Soviet empire.

Of even greater value to Western policymakers may be the insights that an understanding of Soviet financial transactions allow into the possibilities open to the Soviet Union. Hard-currency resources are essential to the Soviet Union. Food must be imported. So must a large share of the capital goods necessary if the Soviet economy is to continue to grow. Often, these imports must be paid for with hard currencies. Support of Soviet client states also requires hard currency—to pay for their imports and, in some cases, to pay the interest on their outstanding hard-currency debts. A part of the Soviet hard-currency requirement can be earned through exports—primarily exports of oil and gold. The rest must be borrowed. Any long-term assessment of the prospects for Soviet economic growth or of Soviet capabilities to support its client states must include an assessment of Soviet abilities to raise hard-currency funds. This assessment will require a clear understanding of how, when, from whom, on what terms, and why the Soviet Union may borrow and how, where, in what form, and why the Soviet Union holds hard-currency assets. In short, it will require an understanding of Soviet international financial behavior. This kind of assessment is particularly critical in the current environment, as policy debates in the United States and throughout the Western alliance center increasingly on the ability of the Soviet Union to engage in long-term competition with the West.

The Soviet need for hard currencies also suggests a possible lever for Western governments in dealing with the Soviet Union. By influencing Soviet access to Western financial markets or the terms of this access, Western governments may be able to influence Soviet behavior. But the use of the financial lever is by no means straightforward. Western efforts to use financial market regulation or manipulation to encourage particular kinds of behavior even on the part of domestic economic interests sometimes bring surprising and unwanted consequences. Trying to influence Soviet behavior is considerably more complex, and ill-considered attempts may be counterproductive. Using the financial resources of the West successfully to influence Soviet behavior—if it is possible at all—will require a thorough understanding of just what it is that the Soviet Union needs hard-currency resources for and the channels that are open to the Soviet Union for acquiring these resources.

The current state of knowledge about Soviet financial transactions is inadequate to support any of the above aims. There seems, therefore, to be an *a priori* case for research into Soviet financial behavior—even if this research finally shows that it is devilishly difficult to reach useful conclusions on the basis of observed Soviet financial dealings. For years, it has been common practice for Western analysts to scrutinize a variety of Soviet activities (military exercises, for example) in hopes of better understanding Soviet goals, motivations, and capabilities. Perhaps scrutiny of Soviet international financial activities will prove no less useful.

PURPOSE AND SCOPE

The research reported here has had two main objectives. The first has been to compile the beginnings of a profile of Soviet behavior in international financial markets: How much, with whom, how, and why do the Soviets deal in international financial markets? We have attempted to catalogue what is known and knowable about Soviet financial behavior and to note the major gaps in available information. We have also reported speculations on the whys and the hows of Soviet finance, along with evidence that confirms or rebuts these speculations. In some cases, this evidence is not conclusive. Where we cannot offer definitive answers, we have attempted at least to clarify the questions.

We have also reported a number of anecdotes and rumors about Soviet financial behavior. The anecdotes may or may not be representative, and the rumors may or may not be true. The secrecy surrounding financial transactions in general and Soviet financial transactions in particular is such, however, that anecdote and rumor constitute an important part of what we know (or what we think we may know) about Soviet behavior. It seems worthwhile to report rumors and anecdotes, if for no other reason because they may suggest fruitful avenues of future research. At best, anecdotes and rumors give insight into the meaning of Soviet financial transactions. At worst, they are thought-provoking.

The second objective of this research has been to assess the value of future research into Soviet financial dealings. We believe that this report provides examples of how analysis of Soviet financial activities can provide insights that are useful in formulating U.S. policy. But even if one accepts that a better understanding of Soviet financial behavior would be useful, questions arise about how much further research is in fact possible. Information on Soviet financial transactions is generally very closely held both by the Soviets and by the

Western counterparties to these transactions. Data that are collected by Western governments and central banks are often regarded as extremely sensitive and are not always shared even among different agencies within the same government. An important aim in our work has been to assess how far toward a useful understanding of Soviet financial behavior information from open sources takes one and what might be gained from access to more sensitive information.

The research reported here is of a preliminary and exploratory nature. In pursuing this research, we have followed a general strategy of gathering information from readily available sources. If this preliminary treatment of Soviet finances suggests that further research is justified (and we will argue that it does), more comprehensive efforts to collect information will be appropriate in later phases of research, when issues and research approaches have been more fully specified.

Clearly, much more extensive information gathering is possible. A careful scouring of the financial press, for example, for anecdotes and "market talk" related to Soviet transactions will likely yield insights into the whys and hows of Soviet finance. Some anecdotes and examples of market talk have come our way, and we report these. We have not, however, undertaken a systematic search of the financial press. Similarly, many knowledgeable observers of Soviet financial affairs are to be found in Europe. In this research, however, we have restricted ourselves to some twenty interviews with government officials, bankers, and other observers of international financial markets in Washington, New York, and London. Finally, we have restricted ourselves to publicly available information. Financial authorities in all Western countries have access to data regarding transactions with the Soviet Union that are not routinely made public. Western intelligence agencies presumably also gather information relevant to Soviet financial dealings. In the course of this research, we have interviewed officials with access to privileged information, but we have not sought this information ourselves.

In this work we have turned our attention to the "hard-currency" financial activities of the Soviet Union—activities that involve the borrowing, placement, payment, or receipt by the Soviet Union of "hard" or Western currencies. Included among these hard-currency transactions are essentially all Soviet dealings with the industrialized world outside the Soviet bloc¹ and most Soviet dealings with developing countries. We are not concerned with Soviet transactions with other

¹Among Western industrialized countries, only Finland has any ruble-based transactions with the Soviet Union.

members of the Council for Mutual Economic Assistance (CMEA).² Most of these transactions are carried out in so-called convertible rubles, a currency that is not, despite its name, convertible into Western currencies.

OUTLINE OF THE REPORT

Section II of this report provides an overview of the Soviet hard-currency balance sheet. It offers estimates of the gross and net indebtedness of the Soviet Union to Western creditors, and describes the sources from which these estimates are drawn. It also characterizes Soviet hard-currency assets and liabilities, detailing the terms of Soviet borrowings and the disposition of visible Soviet assets. Section III assesses the completeness of current reporting on Soviet debts. In particular, this section addresses (and casts some doubt on) recent suggestions that commonly accepted estimates of Soviet debt may be seriously understated. Section IV is concerned with the asset side of the Soviet international balance sheet. At first glance, reported Soviet borrowing seems to be excessive in light of available estimates of the Soviet hard-currency current account position. This section offers a tentative identification of apparently "missing" Soviet financial assets. Observed Soviet borrowing from the West is shown to be consistent with recent estimates of the costs to the Soviet Union of maintaining its international empire. Because estimates of net Soviet financial transactions and estimates of the costs of the Soviet empire are derived from entirely different sources, this consistency offers some encouragement that both estimates are at least roughly correct. Section V deals with the style of Soviet operations in international financial markets. Section VI discusses possible directions for future research.

²The members of the CMEA are the Soviet Union, the German Democratic Republic, Poland, Rumania, Hungary, Czechoslovakia, Bulgaria, Cuba, Vietnam, and Mongolia.

II. THE SOVIET HARD-CURRENCY BALANCE SHEET

A convenient starting point for a survey of Soviet international financial activity is a review of what is known about Soviet hard-currency debts and hard-currency assets.

SOVIET HARD-CURRENCY DEBT

Table 1 shows two often cited estimates of the gross and net hard-currency debt of the Soviet Union at the end of 1985. (At the time of writing, complete estimates for 1986 are not available. All indications are, however, that Soviet gross and net debt rose sharply during 1986.) The first is the product of a cooperative effort by the Bank for International Settlements (BIS) and the Organization for Economic Cooperation and Development (OECD). The second is the published estimate of Soviet hard-currency debt by the U.S. Central Intelligence Agency (CIA). These estimates reflect the most comprehensive efforts at collecting primary data on Soviet hard-currency assets and liabilities. Other estimates of Soviet debt are computed, but they generally reflect adjustments of one sort or another made to the estimates reported in Table 1.¹

Two things are immediately obvious from these debt estimates. The first is that the Soviet Union is not among the world's largest borrowers. In terms of gross debt, Brazil, Mexico, Korea, Argentina, India, and Indonesia all surpass the Soviet Union. In terms of net debt, numerous other countries are bigger international debtors, including (according to the U.S. Commerce Department) the United States.² The second important observation is that the Soviet Union's gross debt is much larger than its net debt. The Soviet Union maintains extensive hard-currency asset holdings.

Some of the difference between the BIS/OECD and CIA estimates is due to the inclusion in the BIS/OECD estimates of hard-currency assets and liabilities of the two multinational banks operated by the Council for Mutual Economic Assistance (CMEA). These banks are the International Bank for Economic Cooperation (IBEC) and the International Investment Bank (IIB). Conversations with CIA analysts suggest that adjusting the CIA estimates to take these assets and liabilities into account will not eliminate the differences in the two estimates. These analysts report that they cannot explain the remaining differences.

¹"International Investment Position of the United States," *Survey of Current Business*, June 1986, pp. 26-35.

Table 1

TWO ESTIMATES OF SOVIET HARD CURRENCY DEBT AT YEAR END, 1985
(Billions of U.S. dollars)

BIS/OECD ^a	
Gross liabilities to Western banks	22.7
Claims on Western banks	13.1
Net debt to Western banks	9.7
Liabilities to official export credit agencies	8.8
Net debt	18.4
CIA	
Commercial debt	18.3
Government backed debt	8.1
Gross debt	26.4
Assets in Western banks	12.0
Net debt	14.4

SOURCES: *International Banking and Financial Market Developments*, Bank for International Settlements, Basel, January 1987; *Statistics on External Indebtedness, Bank and Trade-Related, Non Bank External Claims on Individual Borrowing Countries and Territories at End-June 1986*, Organization for Economic Cooperation and Development, Paris, and Bank for International Settlements, Basel, January 1987; *Handbook of Economic Statistics, 1986*, United States Central Intelligence Agency, Washington, D.C., September 1986.

^aIncluding assets and liabilities of CMEA banks

The CIA does not make public the methodology by which it arrives at its estimates of Soviet debts. The BIS/OECD methodology is extensively documented, however, and we therefore turn to a more detailed description of the Soviet hard-currency balance sheet as it is reflected in BIS/OECD figures.

THE SOVIET BALANCE SHEET *VIS-À-VIS* WESTERN BANKS

The BIS has compiled quarterly figures on the claims (e.g., loans outstanding) and liabilities (e.g., deposits taken) of Western banks *vis-à-vis* most countries in the world since the end of 1977. (The BIS has also compiled annual figures for earlier years.) Bank claims on and liabilities to the Soviet Union are included in this quarterly compilation. Data on international lending and deposit taking are reported by banks to their respective central banks. These central banks then forward the information to the BIS, where it is aggregated to produce figures reflecting the overall position of the Western banking system to borrowers and depositors in particular countries. All data collected by the BIS come from banks; no information is collected from borrowers or depositors. All bank claims on and liabilities to foreigners are supposed to be included in the BIS statistics, and all banks within the so-called BIS reporting area are required to supply information. The BIS reporting area includes nearly all important financial centers in the free world.³ The most important banks that do not report to the BIS are those located in some Arab countries.

BIS reporting arrangements are not perfect. Some Soviet assets and liabilities *vis-à-vis* Western banks are undoubtedly missed in this accounting. (For more on the gaps in BIS reporting arrangements, see Sec. III.) BIS figures are, however, considered to be reliable, not least because they are based on reports from central banks, which have legal authority to audit the books of banks in their respective countries. Certainly, the BIS provides the most comprehensive publicly available accounting of Soviet dealings with Western banks.

Table 2 shows Soviet assets and liabilities *vis-à-vis* banks in the BIS reporting area as compiled by the BIS. Figure 1 shows the same information.

The table and the figure show little that is surprising. Both Soviet assets and Soviet liabilities have grown unevenly over the period covered by the BIS statistics. Soviet net debt increased sharply in 1981 as borrowing increased and assets were liquidated to finance large grain imports. With better harvests and reduced import requirements, the Soviet Union rebuilt its asset holdings in subsequent years. By the second quarter of 1986, Soviet net debt to Western banks had again reached the levels recorded in 1981, as the Soviet Union borrowed heavily to make up for a sharp decline in oil export revenues.

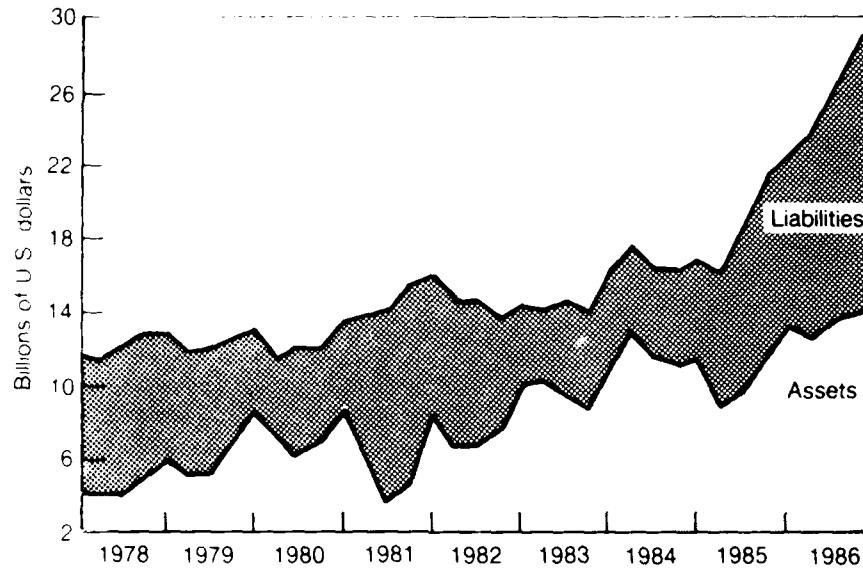
³The BIS reporting area includes the United States, Japan, Canada, Australia, New Zealand, all of Western Europe, and the major "offshore" financial centers, the Bahamas, Bahrain, the Cayman Islands, Hong Kong, the Netherlands Antilles, Singapore, and Panama. (In Panama, only branches of U.S. banks report.)

Table 2
SOVIET ASSETS AND LIABILITIES VIS-À-VIS BIS REPORTING BANKS
 (Billions of U.S. dollars, at quarter end)

Year	Quarter	Assets	Liabilities	Net
1974	IV	3.3	3.6	-0.3
1975	IV	3.1	7.9	-4.8
1976	IV	3.7	10.4	-6.7
1977	IV	4.3	11.6	-7.3
1978	I	4.3	11.4	-7.1
	II	4.1	12.2	-8.1
	III	4.8	12.8	-8.0
	IV	5.9	12.8	-6.9
1979	I	5.2	11.8	-6.6
	II	5.2	12.0	-6.8
	III	6.9	12.6	-5.7
	IV	8.6	12.9	-4.3
1980	I	7.11	11.49	-4.38
	II	6.17	12.06	-5.89
	III	6.91	12.09	-5.19
	IV	8.57	13.39	-4.82
1981	I	5.52	13.91	-8.39
	II	3.62	14.14	-10.53
	III	4.51	15.38	-10.87
	IV	8.45	15.88	-7.43
1982	I	6.58	14.53	-7.95
	II	6.70	14.59	-7.89
	III	7.47	13.71	-6.24
	IV	10.03	14.21	-4.18
1983	I	10.11	14.08	-3.97
	II	9.48	14.46	-4.99
	III	8.53	13.89	-5.36
	IV	9.65	16.22	-6.57
	IV*	10.92	16.22	-5.30
1984	I	12.85	17.50	-4.65
	II	11.50	16.26	-4.76
	III	11.11	16.14	-5.03
	IV	11.34	16.64	-5.30
1985	I	8.78	16.03	-7.15
	II	9.57	18.89	-9.32
	III	11.11	21.17	-10.07
	IV	13.06	22.73	-9.66
1986	I	12.57	23.26	-10.69
	II	13.43	26.28	-12.86
	III	13.75	28.51	-14.76
	IV	14.77	29.55	-14.78

SOURCE: Bank for International Settlements.

*In the fourth quarter of 1983, BIS reporting was expanded to include additional banks. This figure and all subsequent ones reflect the new wider reporting area.



SOURCE: Bank for International Settlements

Fig. 1. Soviet assets and liabilities according to BIS reporting banks

It is interesting to note that Soviet assets have not again been drawn down to the levels seen in 1981. At that time, there was much comment in the financial press about the allegedly precarious financial position of the Soviet Union. The debt problems of Poland and Romania were attracting widespread attention, and the decline in visible Soviet assets raised questions about Soviet creditworthiness. As a result, Soviet access to international credit markets suffered and the terms on which the Soviet Union could borrow in international financial markets stiffened considerably.

In the years since 1981, the Soviet Union seems to have made a concerted effort to rebuild its hard-currency assets. This appears to be partly a public relations effort aimed (successfully, as we shall see) at reassuring international financial markets that the Soviet Union is indeed creditworthy. Partly, it serves as a kind of insurance against the humiliation suffered by Poland and Romania when those countries were forced to reschedule their hard-currency loans. Since 1981 there have been a number of occasions when it seems that the Soviet Union has borrowed primarily for the purpose of adding to its hard-currency

assets. Perhaps the clearest example of this is found in the rapid growth of both assets and liabilities in the last three quarters of 1985. With the prospects for oil revenues looking bleak, the Soviet Union was nonetheless able to borrow on fairly attractive terms. The Soviet Union took advantage of the attractive terms offered to build up assets that might subsequently be required to cover a further decline in oil revenues. And during 1986, Soviet borrowing has been large enough to allow further additions to Soviet hard-currency asset holdings.

The figures reported in Table 2 and Figure 1 distort the patterns of Soviet borrowing in an important respect. The figures are all reported in U.S. dollar equivalents, whereas large shares of both Soviet assets and Soviet liabilities are denominated in currencies other than dollars. As a result, the dollar value of Soviet assets and liabilities may change because of changes in exchange rates, even if there is no change in the underlying asset or liability accounts. During 1985 and 1986, the dollar declined in value relative to other major currencies, and consequently the dollar-equivalent value of both sides of the Soviet balance sheet increased. The rise in both gross and net debt shown as occurring during 1985 and 1986 is, therefore, somewhat overstated.

The Nature of Soviet Assets and Liabilities

The Soviet assets reported in the BIS statistics are all in the form of Soviet claims on BIS-reporting banks. Discussions with bankers and other observers of Soviet financial activities suggest that these assets are almost exclusively short-term deposits in Western banks. Apparently, it is rare for these deposits to have maturities longer than six months, and a large fraction is probably very short term. (We heard one estimate that 40 percent of Soviet deposits were overnight deposits.) These bank deposits are typically held in the name of the Soviet Foreign Trade Bank (Vneshtorgbank), although some accounts are in the name of the State Bank (Gosbank) or the two CMEA banks.

Missing from the BIS accounting are Soviet claims on non-banks in the West. In concept, these unreported assets could include government or corporate bonds, trade-related advances to foreign importers of Soviet goods, or equity shares in Western firms. We will return in Sec. IV to a discussion of Soviet hard-currency assets other than deposits in BIS reporting banks. It suffices here to say here that few observers believe that the Soviet Union has substantial claims on residents of the BIS reporting countries other than the bank deposits reported to the BIS. Also missing from the BIS accounting are Soviet deposits in banks outside the BIS reporting area.

The liabilities of the Soviet Union to Western banks are of three principal types: medium-term syndicated loans, short-term trade credits, and interbank credit. Syndicated loans are medium-term loans (usually with maturities of five to eight years) extended jointly by groups or syndications of Western banks. Often, these loans are made to finance specific imports or imports associated with a particular project, such as the construction of a pipeline or a major industrial plant.⁴ Typically, these are floating-rate loans, with interest rates adjusted every six months and maintained at a fixed spread above some reference interest rate. The usual reference rate for this and for most international lending is the six-month London interbank offer rate (LIBOR), the rate that major banks pay on large deposits from other banks.

Short-term trade financing extended by banks is usually of a few months maturity and is always associated with specific trade transactions. In extending these credits, a Western bank essentially pays a Western exporter for goods shipped to the Soviet Union. The bank then has a claim on the Soviet Foreign Trade Bank for the value of the shipment. The Western bank will receive payment, with interest, some months later, when the goods arrive in the Soviet Union. Such arrangements are typical in all international trade, not just trade between Western countries and the Soviet Union. What distinguishes trade financing with the Soviet Union is that all Western bank claims are on the Soviet Foreign Trade Bank, rather than on a variety of private banks and importing firms, as is typical in trade among Western countries.⁵ Rather than negotiating a new trade credit for each commercial transaction, the Soviet Foreign Trade Bank has established a number of revolving trade financing facilities with syndicates of Western banks. These facilities provide standing lines of credit to be used for specified types of trade transactions. The credit lines are drawn on and repaid as required to finance imports, as long as the total balance outstanding remains below the maximum credit limit. The credits carry adjustable interest rates, similar to those for syndicated loans.

⁴This linkage to particular trade transactions may be more a formality than a reality. Money, of course, is fungible, and hard-currency funds borrowed to finance essential imports will free other funds (from export earnings, say) for whatever purposes Soviet authorities may desire. Thus, even when lending is tied to specific trade transactions, what activities are actually being financed at the margin necessarily remain ambiguous.

As of January 1987, some Soviet enterprises are allowed to maintain foreign-currency accounts. This could eventually lead to direct credits from Western banks to particular Soviet enterprises. At the time of this writing, no such credits have been made public.

Interbank lines of credit typically provide very-short-term credit from Western banks to the Soviet Foreign Trade Bank. The credits are in the form of very-short-term deposits by Western banks in the Soviet Foreign Trade Bank and are intended principally as working balances to facilitate payments between Western and Soviet banks. The interest rates paid on these interbank deposits fluctuate, and are generally close to LIBOR. The Soviet Foreign Trade Bank has negotiated maximum interbank lines with its Western correspondent banks (in 1985, it claimed to have correspondent relationships with some 300 Western banks)⁶ and draws on these lines as necessary in its day-to-day operations. Credit advanced through interbank lines is not tied to a particular trade transaction. Neither the maximum size of these lines nor the extent to which they are drawn is publicly reported (although the credits are included in the claims on the Soviet Union reported by banks to the BIS). Most observers believe, however, that outstanding credit to the Soviet Union through short-term interbank deposits at any particular time is a relatively small part of the total debt of the Soviet Union.

From time to time, Western banks have made bilateral or "club" loans to Vneshtorgbank. These are private transactions between Vneshtorgbank and a Western bank, and the terms of the loans are not made public. Such interbank loans are supposed to be reported, however, to central banks and eventually to the BIS.

Missing from Soviet liabilities reported by the BIS are credits extended to the Soviet Union by non-banks and by banks outside the BIS reporting area. The most important source of non-bank credit to the Soviet Union is lending by the official export credit agencies of Western countries. These credits are reported to the OECD, and we will discuss them below. Most observers believe that credits to the Soviet Union from private non-bank entities in the West are rare. Such credits would most likely take the form of supplier credits—short-term credits to finance exports to the Soviet Union. But banks and official agencies are generally ready to offer this kind of financing, and there is therefore little need for Western exporters to do so.

There have been stories (never officially confirmed) of Soviet borrowing from banks outside the BIS reporting area—primarily Arab banks. The extent of such borrowing in the past and currently is unknown. Most observers seem to believe that it was once substantial but that it is now much reduced, if for no other reason because of the decreasing hard-currency surpluses to be disposed of by the oil-producing countries of the Middle East.

⁶ Yuri Ivanov, "The 60th Anniversary of the Bank for Foreign Trade (Vneshtorgbank) of the USSR," *Foreign Trade*, September 1985, pp. 8-14.

The Terms of Soviet Borrowing

Table 3 shows the terms on which the Soviets have been able to borrow from Western banks in recent years. The terms reported in the table are for publicized syndicated credits. They do not include unpublicized credits extended by individual banks or credits guaranteed by agencies of Western governments. During the early 1980s, the spreads available to the Soviet Union increased and maturities shortened. This reflected both financial market concerns about the creditworthiness of a number of Eastern European debtors and concerns over the safety of international lending in general, as Mexican and Brazilian debt problems attracted considerable attention.

Since 1984, however, the Soviet Union has been able to arrange financing on very favorable terms. Today, in fact, the Soviet Union has one of the better "names" in international lending circles, and is offered better terms than many sovereign borrowers. Table 4 shows the terms of recent loans to other sovereign borrowers. Western banks have lately offered even better terms than indicated in Table 3. In October 1986, Banque Nationale de Paris managed a \$300 million

Table 3

TERMS OF SOVIET BORROWING
(Publicly reported syndicated credits)

Year	Average Spread (percentage points above LIBOR)	Average Maturity (years)
1976	1.03	5.00
1977	1.09	6.75
1978	0.73	8.50
1979	0.57	7.85
1980	(a)	(a)
1981	0.56	4.75
1982	0.62	5.25
1983	0.92	5.38
1984	0.63	6.50
1985	0.25	8.00
1986	0.25	8.00

SOURCES: 1976-1984, *Euro-
money*, November 1984, p. 18; 1985,
*Euro-
money*, February 1986, p. 16;
1986, *Euro-
money*, July 1986, p. 183.

^aNo credits negotiated in 1980.

syndicated loan at only one-eighth of a percentage point over LIBOR for the first five years of the loan. And in March 1987, the First National Bank of Chicago managed another \$200 million syndicated loan, this for eight years, also at one-eighth of a percentage point over LIBOR.

The Soviet Union is able to attract such fine terms principally because its net debt is seen as relatively small compared with its export earning potential and because of its strong hard-currency asset position. When defending the terms that they offer the Soviet Union, bankers also point to the flawless performance of Vneshtorgbank in servicing previous loans. Recent declines in oil prices and declining Soviet oil export volumes have reduced Soviet export earning potential, but as yet there seems to have been no significant deterioration in Soviet standing in international credit markets. Indeed, recent Soviet loan syndications have been oversubscribed by Western banks. Soviet financial managers seem to recognize the possibility that they may face less favorable credit terms in the future. Thus, they borrowed heavily at the favorable terms available in 1985 and 1986 in order to build hard-currency reserves.

Banks also typically charge fees for originating loans. Whereas it is common for spreads, maturities, and principal repayment schedules for international loans to be made public, fees are usually kept confidential. Conversations with bankers suggest that Soviet financial managers are tough bargainers, demanding and often getting attractive fee arrangements.⁷ Some observers have suggested, however, that the Soviet Union places such importance on public recognition of its status as a first-class credit risk that it may on some occasions be willing to pay somewhat higher fees in private in exchange for attractive spreads and maturities than are publicly announced. Unfortunately, firm evidence on the loan fees paid by the Soviet Union is not available.

The Currency Composition of the Soviet Balance Sheet

In May 1986, the BIS published for the first time estimates of changes in bank claims and liabilities adjusted to correct for changes in exchange rates. By comparing adjusted and unadjusted estimates of bank claims and liabilities *vis-à-vis* the Soviet Union, it is possible to estimate at least roughly the fraction of Soviet claims and liabilities denominated in dollars.

During 1985, the dollar depreciated by similar amounts against most other major currencies. Table 5 shows the percentage changes in the

⁷The flavor of these conversations is captured in comments on Vneshtorgbank's negotiating style reported in "Inside the Soviet Debt Machine," *EuroMoney*, January 1987, pp. 46-54.

Table 4

TERMS OF RECENT CREDITS TO SOVEREIGN BORROWERS

Select Publicized Credits Negotiated in 1986 and Early 1987		
Borrower	Interest Rate Spread ^a	Maturity (years)
Sweden	1/10	8 1/2
Portugal	1/10 1/8	years 1 to 5 years 6 to 8
Thailand	1/8	10
Belgium	1/8	7
Canada	1/8 (first tranche) 1/4 (second tranche)	8
Iceland	3/16 1/4	years 1 to 6 years 7 to 10
Bulgaria	1/4	7
Hungary	1/4 3/8	years 1 to 4 years 5 to 8
Oman	3/8	8
Qatar	3/8	6
Brazil	3/8	4
Malaysia	3/8 1/2	years 1 to 6 years 7 to 10
Algeria	5/8	8
Tunisia	5/8	5
China	5/8 3/4	years 1 to 6 years 7 to 12
Indonesia	5/8 3/4	years 1 to 6 years 7 to 8
Greece	3/4	5
Mexico	13/16	12
Pakistan	1	5
Turkey	1 1/4	7
Barbados	1 1/4	7
Argentina	1 3/8	12
Yemen	1 1/2	3

SOURCE: *Euromoney*, various issues^aPercentage points above LIBOR.

dollar's value from the end of 1984 to the end of 1985 *vis-à-vis* the five currencies other than the dollar in which Soviet assets or liabilities are likely to be denominated. We can place bounds on the fraction of Soviet assets and liabilities denominated in dollars in 1985 by first assuming that all non-dollar assets and liabilities were denominated in Swiss francs, the currency that appreciated least against the dollar. We then calculate what fraction of all Soviet assets and liabilities would have had to be denominated in Swiss francs to produce the observed combination of adjusted and unadjusted changes in the Soviet balance sheet *vis-à-vis* Western banks. We repeat this process assuming that all non-dollar assets and liabilities were denominated in deutschemarks, the currency that appreciated most against the dollar in 1985. These computations suggest that 36 to 43 percent of Soviet deposits in Western banks were denominated in dollars and that 19 to 29 percent of all Soviet liabilities to Western banks were denominated in dollars.

It is perhaps not surprising that the dollar plays a fairly small part in Soviet borrowing. The Soviets generally do not have to pay for imports with dollars, and there is consequently no strong incentive for them to borrow dollars. The United States and Canada (usually thought of as the "dollar zone") account for only a bit more than a quarter of Soviet imports from Western developed countries. The greater importance of the dollar in Soviet hard-currency deposits may reflect the breadth and depth of dollar financial markets relative to those of other currencies, factors that make dollar holdings attractive to most financial managers.

Table 5

CHANGES IN THE VALUE OF THE DOLLAR
(Relative to selected currencies,
end 1984 to end 1985)

Currency	Change in Value of Dollar, %
Yen	-25.2
Deutschemark	-27.9
Sterling	24.9
French Franc	26.9
Swiss Franc	24.5

These estimates of the dollar component of Soviet liabilities are at variance with estimates made shortly before the appearance of BIS statistics adjusted for exchange rate changes. Wharton Econometric Forecasting Associates, for example, recently estimated that 65 percent of Soviet liabilities were dollar denominated.⁸

The Role of U.S. Banks in Soviet International Finance

U.S. banks are neither large lenders to the Soviet Union nor large takers of Soviet deposits. Table 6 shows the claims and liabilities of U.S. banks and of all Western banks *vis-à-vis* the Soviet Union in recent years. On both sides of the balance sheet, U.S. banks are very

Table 6

U.S. BANK LENDING TO AND DEPOSIT TAKING FROM
THE SOVIET UNION
(Millions of U.S. dollars)

Date	Lending	
	U.S. Banks' Own Claims on USSR	Claims of All BIS Reporting Banks on USSR
December 1982	263	14,211
December 1983	192	16,222
December 1984	142	16,649
December 1985	130	22,726
September 1986	462	28,497

Date	Deposit Taking	
	U.S. Banks' Liabilities to USSR ^a	Liabilities of All BIS Reporting Banks to USSR
December 1982	59	10,027
December 1983	65	10,924
December 1984	79	11,343
December 1985	105	13,062
September 1986	84	13,765

SOURCE: Federal Reserve Board

^aIncludes foreign branches and subsidiaries, own liabilities, and custody accounts

⁸CPE Outlook for Foreign Trade and Finance, Vol. 1, No. 2, Wharton Forecasting Associates, June 1986

small players. This suggests that, without cooperation from Japan and the European countries that account for the bulk of lending to and deposit taking from the Soviet Union, any U.S. effort to control the flow of financing to the Soviet Union through the activities of U.S. banks is likely to have little effect.

Although the balance sheets of U.S. banks do not show large claims on or liabilities to the Soviet Union, U.S. banks occasionally take an active role in arranging loans to the Soviet Union. Late in 1985, for example, the First National Bank of Chicago was one of eight lead managers for a \$200 million dollar loan to the Soviet Foreign Trade Bank. In early 1987, First Chicago led another \$200 million syndication for Vneshtorgbank. The lead managers of a syndication handle much of the negotiation and the paperwork for a loan, and for this effort they collect fees from the borrower. The funds for the loan, however, are usually provided by a large number of banks who participate in the syndicate. The exposure of any single lead manager is usually a small fraction of the total value of the loan.

OFFICIAL AND OFFICIALLY GUARANTEED LENDING TO THE SOVIET UNION

Most industrialized countries have created institutions through which their governments provide support for credit extended to foreign purchasers of their exported goods. This support is sometimes in the form of direct loans by government agencies to foreign purchasers. Interest rates on these official loans are sometimes below the interest rates the importer could negotiate on a loan from a private lender. Official support of export credits can also be in the form of government guarantees that a private lender will be repaid if he lends money to finance exports. In these cases, a private lender might offer a lower interest rate than he would if the loan were not guaranteed.

Since 1974, the U.S. export credit agency, the Export-Import Bank, has neither made loans nor guaranteed private loans to the Soviet Union, although the official export credit agencies of other Western countries continue to make and to guarantee loans to the Soviet Union. These official and officially guaranteed loans constitute a major source of financing for the Soviet Union.

Since the end of 1982, the Organization for Economic Cooperation and Development (OECD) has published semiannual reports of official and officially guaranteed trade-related credit extended by OECD

member countries to many countries, including the Soviet Union.¹ Table 7 shows the amounts of credits to the Soviet Union outstanding in the past several years.

The most striking feature of the information in Table 7 is the percentage of Soviet gross debt that is accounted for by official or officially guaranteed loans. Direct official credit outstanding to the Soviet Union has declined during the period for which records are available. Officially guaranteed bank lending has increased somewhat, however, and at the end of 1985 nearly a half of the gross Soviet hard-currency debt was held or guaranteed by Western governments.

The Soviet Union seems to have encountered no serious difficulties in compensating for the decline in official and officially guaranteed

Table 7

OFFICIAL AND OFFICIALLY GUARANTEED CREDIT TO THE SOVIET UNION
(Billions of U.S. dollars at end of semester)

Semester	Trade-Related Official Claims	Officially Guaranteed Bank Claims	Total Official and Officially Guaranteed Credits	Percentage of Soviet Gross Debt Held or Guaranteed by Western Governments
1982:II	12.0	5.6	17.6	62
1983:I	11.8	5.8	17.7	62
1983:II	10.2	4.9	15.1	56
1984:I	9.4	6.1	15.5	59
1984:II	8.5	5.7	14.2	55
1985:I	8.2	5.7	14.0	51
1985:II	8.8	6.4	15.2	48
1986:I	8.4	7.1	15.5	44

SOURCE: *Statistics on External Indebtedness: Bank and Trade-Related Non-Bank External Claims on Individual Borrowing Countries and Territories*, BIS, Basle, and OECD, Paris, various issues.

¹Essentially all of the Western industrialized nations are members of the OECD. The 24 OECD members are Australia, Austria, Belgium, Canada, Denmark, Finland, France, the Federal Republic of Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. Twenty-two of these countries report their official and officially guaranteed trade credits to the OECD. The two countries that do not are Iceland and Turkey.

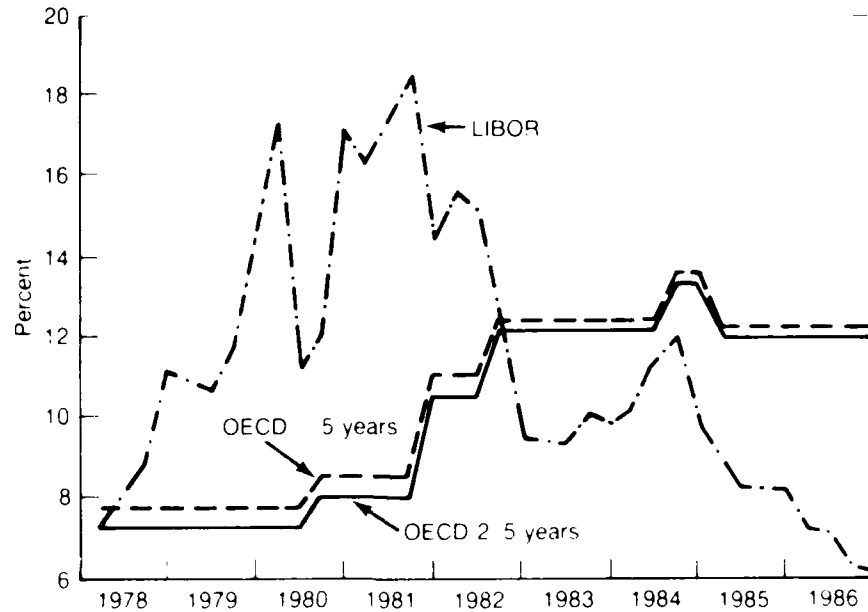
credits since the end of 1982. While official and officially guaranteed credit declined \$2.4 billion, unguaranteed bank credit rose \$8.4 billion. Nevertheless, one might reasonably wonder how receptive the Soviet Union would find private credit markets if official loans and guarantees were withdrawn wholesale.

The decline in direct official lending may reflect changing policies of Western export financing agencies. More likely it reflects the fact that the Soviet Union no longer finds official loans as attractive as it once did. In 1978, the OECD member countries agreed on what is formally known as the Arrangement on Guidelines for Officially Supported Export Credits. Less formally, it is known as the OECD "Gentlemen's Agreement."¹⁰ The agreement was intended to limit what was seen as counterproductive competition among the various official export credit agencies in offering attractive financing to encourage their own country's exports. The agreement specifies minimum interest rates, allowable maturities, downpayment requirements, and grace periods for official trade related lending. This is a "gentlemen's agreement" in the sense that no enforcement mechanisms are provided. Indeed, the agreement does not actually prohibit loans that do not meet the agreed-upon guidelines. It merely requires a country about to make such a loan to notify other parties to the agreement.

For the purposes of the agreement, borrowing countries are grouped into three categories on the basis of per capita income. Official export credit agencies are permitted to offer finer terms to poorer countries than to richer ones. The Soviet Union had been assigned originally to Category II for purposes of the Gentlemen's Agreement. In 1982, however, at the urging of the United States, the Soviet Union was reclassified as a Category I (relatively rich) country.

Figure 2 shows the OECD Gentlemen's Agreement rates that have applied to official trade related lending to the Soviet Union since the inception of the agreement in 1978. Since late 1981, these lending rates have become markedly less attractive. Also shown in Fig. 2 is the three-month eurodollar or LIBOR rate. This rate (or the six month LIBOR, usually a bit higher) forms the basis for most private bank lending to the Soviet Union. As we noted in Table 3, since 1982 the Soviet Union has been able to borrow from private banks for less than one percentage point above LIBOR. (Currently, the spread is only one-eighth of a point.) Thus, since early 1983 borrowing from private banks at commercial rates has been cheaper for the Soviet Union than

¹⁰ For a discussion of this agreement, see Dana E. Keegan and Peter H. Pedler, *How to Attract Nations: Exporting the Government's Advantage* (New York: The RAND Corporation, N-270-USD, December 1980).



SOURCES: Quarter averages. International Monetary Fund. OECD rates. Daniel F. Kohler and Peter H. Reuter, *Honor Among Nations: Enforcing the Gentlemen's Agreement on Export Credits*. The RAND Corporation, N-2536-USDP, December 1986, p. 11.

Fig. 2 Three month LIBOR and OECD "consensus" rates

borrowing at the Gentlemen's Agreement rates, and the Soviet Union seems quite understandably to have shifted away from official lenders in favor of private lenders. Table 2 above documents a rise in Soviet net debt to banks since 1982 which has more than offset the decline in Soviet debt to official creditors.

Official export credit agencies of the OECD countries do not always abide by the terms of the Gentlemen's Agreement, and loans may have been made to the Soviet Union at lower than the stipulated rates. For the most part, though, the terms of official lending to the Soviet Union have become harsher since 1981.

Figure 2 also suggests a possible motivation for the large deposits in Western banks maintained by the Soviet Union, at least before 1983 and perhaps into 1985. Soviet deposits in Western banks generally

earn interest at a rate approximately equal to the LIBOR rate shown in the figure. (This is true for dollar-denominated deposits. Deposit rates for other currencies are higher or lower, but have followed the same general pattern as dollar rates since 1978.) From 1978 through 1982, it was a money-making proposition for Soviet financial managers to borrow from Western official export credit agencies to finance imports and to deposit hard-currency funds that would have been used to pay for the imports in the absence of the loans in a Western bank. Soviet financial managers could earn more on their deposits than they were paying on their loans, and this simple arbitrage operation would have been profitable. Opportunities for this kind of arbitrage may have persisted into 1985, when interest rates on short-term deposits finally fell below the rates that the Soviet Union would have been paying on medium-term loans extended by official export credit agencies in 1980 and 1981.

III. HOW MUCH DOES DOES THE SOVIET UNION REALLY OWE?

The past year has seen an unusual amount of public discussion of Soviet financial relations with the West. At the center of the discussion have been newspaper articles, a lecture, and journal articles by Roger Robinson.¹ In these writings, Robinson correctly points out that the willingness of the West to make loans to the Soviet Union untied to specific projects or imports provides a source of finance that the Soviets can use for whatever purposes they wish—purposes that may not be consistent with Western interests. Few would argue this point.

More controversy has surrounded Robinson's contention that available statistics may seriously understate both the gross and the net debt of the Soviet Union. In this section, we will review Robinson's contention and the available evidence. We will argue that the mechanism identified by Robinson by which financial flows to the Soviet Union might be hidden from Western reporting arrangements, while plausible, is not, in fact, adequate for large flows of funds. In the next section, we will argue that current estimates of financial flows from the West to the Soviet Union seem to be reasonably accurate and that available evidence does not seem to support Robinson's suggestion that significant amounts of outstanding credit to the Soviet Union are missed by current reporting arrangements. We note, however, that new financial techniques may in the future open important gaps in Western monitoring of the Soviet financial situation.

SOVIET-CONTROLLED BANKS IN THE WEST

Central to Robinson's argument are the activities of five Western banks that are fully owned by the Soviet Union. Table 8 lists these banks and provides recent estimates of their total assets. The table also lists a sixth Soviet-controlled bank, Wozchod Handelsbank in Zurich, that was recently closed after suffering heavy losses.

¹ Roger W. Robinson, Jr., "Financing the Soviet Union," *Wall Street Journal*, March 17, 1980; "Moscow's Shell Game," *Washington Post*, June 22, 1980; "East West Trade and National Security," Heritage Lecture #30, The Heritage Foundation, Washington, D.C., February, 1980; "Soviet Cash and Western Banks," *The National Interest*, Summer 1980, pp. 34-44; and "Western Security and East West Finance," *National Security Review*, December 1980.

Table 8

SOVIET CONTROLLED BANKS IN THE WEST

Moscow Narodny Bank, Ltd London Established: 1919 Assets: \$3.2 billion (end 1985) Branches: Beirut (1963) Singapore (1971)	Banque Commerciale pour L'Europe du Nord S.A. (Eurobank) Paris Established: 1921 Assets: \$5.4 billion (end 1985)
Ost-West Handelsbank AG Frankfurt Established: 1971 Assets: \$688 million (end 1984)	Banque Unie Est-Ouest S.A. Luxembourg Established: 1974 Assets: \$441 million (end 1984)
Donau-Bank AG Vienna Established: 1974 Assets: \$426 million (end 1984)	
<i>and formerly</i>	
Wozchod Handelsbank AG Zurich Established: 1966 Liquidated in 1985 following large losses. Reopened as a branch of Soviet Foreign Trade Bank (Vneshtorgbank)	

These banks are all incorporated and licensed and they all operate in accordance with banking regulations of their host countries. For all legal and regulatory purposes Moscow Narodny Bank, Ltd. is, for example, a British bank. What distinguishes Moscow Narodny from other British banks is that it is fully owned by a consortium of Soviet entities. Prominent in this consortium are the State Bank of the USSR (Gosbank) and the Soviet Foreign Trade Bank (Vneshtorgbank). Soviet-controlled banks in the West specialize in financing East-West trade, but they are also active participants in local wholesale money markets and foreign exchange markets.

For the purposes of BIS reporting, these banks are considered Western banks. A deposit by, say, a British bank in Eurobank in Paris is counted by the BIS as a claim by a British bank on a French bank. In the BIS reporting scheme, this transaction is no different from a deposit by a British bank in Banque Nationale de Paris. But just as the Soviet-controlled banks are considered Western banks in their borrowing or deposit taking, they are considered Western banks in their

lending or deposit placing. If Eurobank relends the funds deposited by the British bank to the Soviet Foreign Trade Bank (a common transaction for Eurobank), the transaction will be reflected in Eurobank's quarterly report to the French central bank on its foreign exposure. This report is subsequently passed along to the BIS, where an exposure by a French bank to the Soviet Union is registered.

Discussions with bankers and with observers of international financial markets revealed the nearly unanimous view that the Soviet-controlled banks in the West report their international transactions honestly to the relevant national authorities. These banks, it is felt, are highly visible symbols of full participation by the Soviet Union in world financial markets and of market recognition of the Soviet Union as a full participant. As such, their value to the Soviet Union is too great to be risked for whatever advantages might be gained from hiding a few transactions from national authorities. Further, incomplete or inaccurate reporting is widely regarded as difficult and risky. The general view is that any attempt at false reporting by these banks would likely be found out, causing considerable embarrassment for the Soviet Union.

GAPS IN BIS REPORTING ARRANGEMENTS

This does not mean that all Western lending to the Soviet Union is in fact reported to the BIS. There are three potential gaps in BIS reporting:

1. Lending by banks that do not report to the BIS. The most important of the nonreporting banks are located in the oil-producing countries of the Middle East. Smaller banks in other Third-World countries would also be capable of lending to the Soviet Union, but in smaller volumes. Some lending from Third-World banks to CMEA countries, although not necessarily to the Soviet Union, has gone on in the recent past. When balance sheet details for Brazilian banks became public as a result of Brazilian debt servicing difficulties, for example, the banks were seen to have made loans to Poland.
2. Lending across the inter-German border. The Federal Republic of Germany does not recognize the German Democratic Republic as a separate nation. German financial authorities do not, therefore, recognize loans by West German banks to East German entities as constituting foreign exposure. Thus, a deposit by a West German bank in an East German bank that may in turn be on-lent to Vneshtorgbank will not appear in BIS reports on international lending.

3. Lending by non-banks. Only banks report to the BIS. Lending to the Soviet Union by non-banks will not be captured by BIS reporting mechanisms.

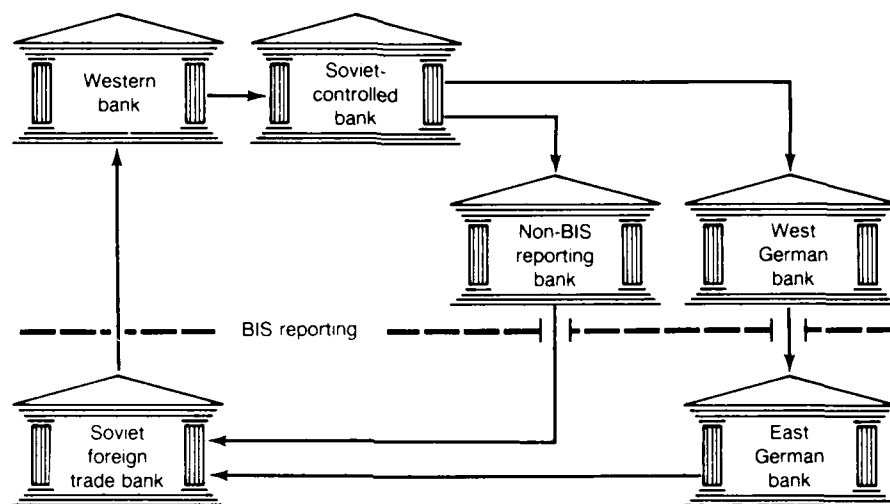
In suggesting that the size of the Soviet hard-currency debt may be understated by BIS figures—that funds may be moving unseen from Western banks to Vneshtorgbank—Robinson has focused on the first two of these gaps in BIS reporting arrangements. Figure 3 offers a schematic view of the process by which he suggests Soviet borrowing might be hidden.² A Western bank places a deposit with a Soviet-controlled bank. The Soviet-controlled bank in turn places the deposit with a cooperative bank in a country whose financial authorities do not report to the BIS. (There are no banks openly controlled by the Soviet Union outside the BIS reporting area.) This bank on-lends the money to the Soviet Foreign Trade Bank, which then redeposits the money in a Western bank. The Soviet liability to the West will not be reported to the BIS, whereas the Soviet claim on a Western bank will. The result will be an underestimate of Soviet debt and an inflation of Soviet hard-currency deposits.

Alternatively, the Soviet-controlled bank could deposit the funds in a West German bank, from which the funds would be transferred to an East German bank, thus avoiding BIS reporting. The East German bank would then pass the funds along to Vneshtorgbank, from whence they would be redeposited in the West. The result in this case would be the same: larger Soviet claims on the West and an underestimate of Soviet debt.

SOME NUMBERS

Although the mechanism suggested by Robinson is plausible, available evidence suggests that only small amounts of debt could be hidden in this way. In mid-1986, Moscow Narodny Bank, Ltd. floated a Euro-note issue. In the prospectus, Moscow Narodny disclosed details about the geographical distribution of its asset portfolio that had not previously been public. According to the prospectus, at the end of 1985 53 percent of the bank's exposure was to the Soviet Union, 21 percent was to other socialist countries, and 25 percent was to the rest of the world. (This distribution of exposure is, by the way, entirely consistent with Moscow Narodny's stated primary mission of financing East West trade.) At the end of 1985, Moscow Narodny's total assets were £ 2.2

²This figure is adapted from "Moscow's Shell Game," *Washington Post*, June 22, 1986.



Adapted from Roger W. Robinson, Jr., *The Washington Post*, June 22, 1986.

Fig. 3—Gaps in BIS reporting arrangements

billion or about \$3.2 billion. With Moscow Narodny acknowledging that three-quarters of its assets were accounted for by direct lending to the Soviet Union and to other socialist countries, only some \$800 million could possibly have been dedicated to hidden lending to the Soviet Union. In actuality, much less than \$800 million would be available for these purposes, because Moscow Narodny must maintain working balances in a number of Western banks to facilitate its routine payments and currency trading operations. Thus, Moscow Narodny could account for something well less than \$800 million in hidden lending to the Soviet Union. Further, this \$800 million represents a *stock* of financing, not a *flow* of new financing. We do not know the geographical distribution of Moscow Narodny's assets in earlier years, but if it were similar to what was reported for 1985, the possible flow of hidden lending to the Soviet Union would be restricted in any year to something well less than one quarter of the bank's total asset growth—a small number in comparison with the visible financial flows to the Soviet Union.

Unfortunately, similar data are not available for Eurobank, the other large Soviet-controlled bank in the West. Even here, though, the

potential for hidden lending to the Soviet Union seems limited. Eurobank's 1985 annual report lists time deposits in other banks and financial institutions of 13.8 billion French francs (about \$1.8 billion). Any hidden lending to the Soviet Union through the channels identified by Robinson would presumably have to be included in this amount. As was the case with Moscow Narodny, some of these interbank deposits must have been in the form of routine operating balances in Western banks. Some of the funds are also accounted for by direct deposits in Soviet or Eastern European banks and duly reported to the Bank of France and thence to the BIS. The remainder of the funds, presumably considerably less than \$1.8 billion, would be available for hidden lending to the Soviet Union. Once again, this is a stock, not a flow. The likelihood that significant hidden capital flows from the West to the Soviet Union are being funneled through Eurobank therefore seems small.

We do not have detailed balance sheet information on the remaining three Soviet-controlled banks in the West. A glance at Table 8, however, will suggest that the three remaining banks are simply not big enough to manage large stocks (to say nothing of flows) of hidden financing to the Soviet Union.

All of this is not to argue that current Western financial monitoring practices record all loans to the Soviet Union. They do not. The point here is that Robinson's focus on the activities of Soviet-controlled banks in the West is probably misplaced. The relevant parts of the balance sheets of these banks simply do not appear to be big enough to manage large unrecorded financial flows. New policies aimed at monitoring or controlling the activities of the five Soviet controlled Western banks are likely to have little impact.

Perhaps more to the point, there is nothing in the way of hiding capital flows to the Soviet Union that could not be done by any so-inclined Western bank just as well as by a Soviet-controlled bank. The mechanisms postulated by Robinson depend on the cooperation of non-Soviet-controlled banks anyway. If there are Western banks that are willing to cooperate in such schemes, one might wonder why Soviet-controlled banks would be involved at all. Why not rely entirely on cooperating non-Soviet banks and keep Soviet-controlled banks safe from any possible accusation that they are engaged in efforts to subvert the reporting requirements of their host countries?

WHAT WE MIGHT BE MISSING

If the Soviet-controlled banks in the West are not the most appropriate focus for concern over hidden Soviet liabilities, where should we be looking? One possibility is banks and governments that do not report their activities to the BIS or the OECD. It is widely rumored, for example, that some Middle East oil-producing states have in the past made substantial loans to the Soviet Union. These loans would not have been recorded in the BIS or OECD statistics, and no publicly available evidence either confirms or denies their past or present existence. The prevailing view seems to be that these loans have by now been repaid. As the financial surpluses of oil-producing countries decline, the likelihood that more such loans will be made is probably declining as well, although the possibility remains that such lending is taking place.

Another potential problem would arise if the Soviets began to borrow actively from private non-bank entities in the West. So far, there is no evidence that the Soviet Union has done such borrowing, although this may soon change—the Soviet Union is expected to come to market soon with a bond or note issue.

In July 1986, the Soviet Union agreed with British authorities to a settlement of outstanding financial claims dating back to the 1917 revolution. At issue were czarist bonds that the Soviet government had refused to honor and claims by Britons for compensation for property allegedly seized during the revolution. For its part, the Soviet Union sought the return of czarist financial assets held in London since the revolution.³ Previously, the Bank of England had refused permission for debt issues by the Soviet government (although Moscow Narodny Bank made two such issues), usually citing the unresolved disputes. Press accounts and interviews with financial market observers suggest that, as a result of the recent agreement, permission for a Soviet issue in the London market will now be granted.

In recent months, a steady stream of merchant banking organizations have reportedly approached Soviet financial authorities with proposals for structuring and managing a debt issue, and informed opinion has it that a Soviet issue is not far off. Matters have proceeded sufficiently far that in some financial circles the identity of the London merchant banking firm that will manage the Soviet issue is thought to be known.

³For further details, see Craig Forman, "Soviets, British Reach Accord on Czarist Debt," *Wall Street Journal*, July 16, 1986.

A bond or note issue¹ would be attractive to the Soviet Union principally because it is likely to reduce borrowing costs. The Soviet Union is now paying 12.5 to 25 basis points above LIBOR for its bank credit. Some bankers estimate that the Soviet Union will probably pay something like 5 basis points above LIBOR on a floating-rate note issue. (Hungary, the only Eastern Bloc country to have floated a note issue in Western markets, is reportedly paying 10 to 14 basis points above LIBOR.) A successful issue would also have public relations value for the Soviet Union. By issuing notes in the West, the Soviet Union would demonstrate its status as a first-class participant in international credit markets.

A third advantage of a debt issue is that it might make it easier for the Soviet Union to keep its hard-currency borrowings confidential. The arrangement that eventually emerges is expected to be a revolving facility for the issuance of short-term (six months is the most commonly mentioned maturity) floating-rate notes. These notes could be issued or redeemed as needed as long as the total amount outstanding remains below some specified limit. At the outset, the notes are likely to be held mostly by banks; they may be a bit too exotic for other portfolios. (Hungarian notes are for the most part held by banks.) While held by banks, these notes should be included in the exposure to the Soviet Union reported to the BIS. If Soviet notes become widely accepted and are held by nonbank entities, they may no longer be captured in BIS reporting. This is not likely to pose a serious problem for some years, inasmuch as the amount of credit available through note issues will be limited at first. If the initial issue is successful others are likely to follow, and eventually Western ability to monitor Soviet borrowing may suffer.

In the next section, we present evidence that suggests that current estimates of Soviet assets and liabilities are reasonably close to correct. At any rate, the estimates seem to be consistent with what we know about Soviet uses of hard-currency funds. This may not remain true in the future, however, suggesting that the most appropriate focus for concern about our ability to monitor Soviet borrowing may not be the activities of Soviet-controlled banks. It would perhaps be better to ask whether current monitoring arrangements can or should be expanded to capture the use by the Soviet Union of a broader range of financial instruments.

¹The words "bond" and "note" are sometimes used interchangeably in the financial press. The technical difference is that bonds are generally issued within a specified time period whereas notes can be issued continuously. Further, bonds can typically be traded in secondary markets, whereas notes are usually nonnegotiable. It is generally expected that the Soviets will issue notes.

WHAT COUNTS AS SOVIET DEBT?

Robinson has also suggested that conventional accountings of Soviet debt, such as those presented in Table 1, give a misleading picture—at least for some purposes—of the true state of Soviet finances because they do not include the debts of the five Soviet-controlled banks located in the West. Robinson is correct in noting that lending to these banks is not counted by either the BIS or the CIA as lending to the Soviet Union. Whether our understanding of Soviet finances would be improved by including the liabilities of these banks, however, is less clear.

There is, of course, no single “correct” way to view the debts of these banks. There are arguments both for and against counting these debts as “Soviet” debts, and which is the more useful approach will depend on the purposes for which an account of the Soviet financial position is being drawn up.

The principal reason for not counting the debts of the Soviet-controlled banks as Soviet debt is that the Soviet Union has no legal responsibility for them. Moscow Narodny Bank, for example, is a British corporation. In the event of a default, the bank's assets could be seized, and the bank's shareholders (principally Vneshtorgbank and Gosbank) would presumably lose their investment. But the bank's creditors would have no claim against the Soviet Union or the Soviet financial institutions that own Moscow Narodny. Indeed, because Moscow Narodny is for all legal purposes a British bank, it would have access in a crisis to the “lender of last resort” facilities of the Bank of England. In strictly legal terms, the failure of Moscow Narodny would impose heavier burdens on British than on Soviet authorities.⁵ Thus, if we are seeking a measure of the hard-currency liabilities of the Soviet nation, there seems no justification for including the debts of Soviet-controlled banks in the West.

The argument for including the debts of the Soviet-controlled banks in our accounting of Soviet debt is two-fold. First, even though the Soviet Union may have no legal responsibility for the debts of these banks, there is a strong presumption that the Soviet Union would bail out the banks rather than suffer the embarrassment associated with their default. This is what happened in the case of Wozchod Handelsbank in 1985. Thus, the Soviet Union may recognize the debts of these banks as Soviet debts even if Western accountants do not.

⁵The situation is different for the reconstituted Wozchod Handelsbank, which is no longer an independent entity but a branch of Vneshtorgbank. In the event of future losses by Wozchod, Vneshtorgbank is fully liable. BIS accounting of Soviet borrowing recognizes this distinction.

Second, and much more to the point, the assets of Soviet-controlled banks are available for whatever purposes Soviet authorities may direct.⁶ If in compiling an account of Soviet borrowing we seek a measure of the hard-currency funds advanced by the West that could be used at the discretion of Soviet authorities, it may make sense to include the debts of Soviet-controlled banks.

It would be incorrect, however, to increase conventional estimates of gross Soviet debt by the full amount of the liabilities of the Soviet-controlled banks. One of the important functions of these banks is to gather deposits from Western sources and on-lend the funds to the Soviet Union. (We saw above, for example, that at the end of 1985, 53 percent of Moscow Narodny's lending was to the Soviet Union.) These loans have already been counted as Western bank loans to the Soviet Union, and should not be counted again. Unfortunately, the amounts that the Soviet-controlled banks on-lend to the Soviet Union are not routinely made public. (The information about Moscow Narodny came about because of a one-time special reporting requirement.) Thus, there is no dependable way to correct for the possible double counting of Soviet borrowing if the debts of the Soviet-controlled banks are included in the total.

On the other side of this issue, one might ask whether it is really correct to count, as the BIS does, the debts of the two CMEA banks (IBEC and IIB) as Soviet debts. The Soviet Union does, of course, have the dominant voice in managing these banks, and it is perhaps not unrealistic to believe that the Soviet Union would make good on the obligations of the banks in a pinch. But technically, these are supranational entities, analogous in some ways to the World Bank in the West. We do not consider World Bank debt to be U.S. debt—even though the United States has considerable influence in setting World Bank policy and *might* bail out the World Bank in a crisis. Perhaps we should not consider IBEC and IIB debt to be Soviet debt. Indeed, the CIA does not.

⁶Soviet authorities do not have complete freedom of action. All countries place some restrictions on the disposition of bank assets—limiting, for example, the amount that can be lent to a single borrower.

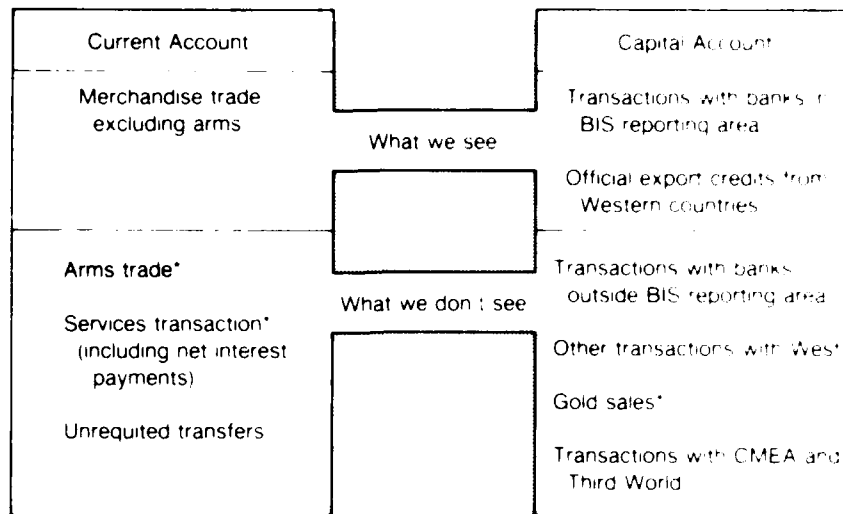
IV. THE SOVIET CAPITAL ACCOUNT AND "MISSING" SOVIET ASSETS

In Sec. III, we concerned ourselves primarily with the sources of hard-currency funds for the Soviet Union. In this section, we will look at the uses to which the Soviet Union puts its hard-currency resources. In the last section, we considered the possibility that the Soviet Union might be borrowing more than we think. In this section, we will ask what the Soviet Union does with the funds that we know it does borrow. In some ways, the disposition of Soviet hard-currency resources is more puzzling than the sources of these funds. Casual observation does not suggest that the Soviet Union either needs or is making use of large hidden inflows of hard currencies. The problem, in fact, is just the reverse. At first glance, it is difficult to figure out what the Soviet Union does with all the funds it does borrow.

A brief review of what we know and do not know about the Soviet hard-currency balance of payments is helpful in explaining the apparent inconsistency between Soviet borrowing and Soviet needs for hard currencies. Figure 4 offers a schematic summary of the known and unknown elements of the Soviet hard-currency current and capital accounts. The items in the upper part of the figure are relatively well known. On current account, the Soviet Union reports merchandise imports and exports *vis-à-vis* the West. Sales of arms are not, however, clearly reported. Sometimes arms transactions are reported, disguised as other types of transactions. Sometimes they are simply not reported. On the capital account, we have reasonably good estimates of Soviet transactions with banks in the BIS reporting area and of official export credits extended to the Soviet Union by OECD governments.

The lower portion of Fig. 4 shows those components of the current and capital accounts that we know less well. Estimates of some of these components are published regularly by the CIA.¹ This is true of arms sales and services transactions. CIA estimates of the Soviet hard-currency current account exclude, however, unrequited transfers—military and economic aid to non-CMEA countries. There are no regular public estimates of Soviet transactions with banks outside the BIS reporting area. Neither are regular estimates made of Soviet borrowing from private nonbank entities in the West or the

¹For these estimates, see *Handbook of Economic Statistics*, U.S. Central Intelligence Agency, various years.



*Estimates published by CIA

Fig. 4 Soviet hard-currency balance of payments

acquisition by the Soviet Union of Western financial assets other than bank deposits. Nor do we have regular estimates of Soviet hard-currency lending to other CMEA countries or to third-world nations. Finally, the Soviet Union publishes no figures on its substantial gold sales, traditionally considered a part of the capital account. The CIA, however, does publish regular estimates of Soviet gold sales.

The basic fact of balance of payments accounting is that the current account and the capital account balances must by definition be equal to each other, but with opposite signs. A current account deficit must be exactly balanced by a capital account surplus. Put another way, a current account deficit must be exactly financed by an inflow of capital from abroad. This inflow can come about through lending or direct investment by foreigners. In the case of the Soviet Union, a current account deficit would have to be offset by Western lending to the Soviet Union. Conversely, a current account surplus necessarily gives rise to an outflow of capital—lending to the rest of the world or the purchase of foreign financial assets.

Table 9 presents the basic puzzle of the Soviet balance of payments. The table shows the CIA estimate of the Soviet hard-currency current

Table 9

"MISSING" SOVIET ASSETS
(Billions of U.S. dollars)

	1983	1984	1985
(1) CIA estimate of Soviet hard currency current account balance ^a	5.4	5.5	2.6
(2) Change in net Soviet debt as reported by BIS reporting banks ^b	2.6	0.1	2.7
(3) Change in Soviet debt to non banks ^c	1.2	0.0	0.9
(4) Total net new borrowing (2) + (3)	1.4	1.0	1.8
(5) Growth in "missing" assets (1) + (4)	6.8	4.4	4.5

^aExcluding "errors and omissions," including gold sales.

^bAdjusted for exchange rate changes. 1984 and 1985 adjustments are from the BIS, 1983 adjustment by the authors.

^cAs reported by OECD, adjusted for exchange rate changes, assuming same currency composition as BIS reported liabilities.

account balance, excluding what the CIA calls "errors and omissions,"² but including CIA estimates of Soviet gold sales. The next three lines show the components and the total of net new Soviet borrowing as reported by the BIS and the OECD, adjusted for changes in exchange rates. The inconsistency is this: In 1983, 1984, and 1985 the Soviet Union seems to have had a surplus on current account. Yet in 1983 and 1985, BIS and OECD figures show the Soviet Union to be a net borrower from the West. In 1984, it was a net lender or repayer to the West, but not of sufficient size to balance the apparent current account surplus.

²According to the CIA's *Handbook of Economic Statistics*, errors and omissions include "hard currency assistance to and trade with Communist countries, credits to the LDCs under military and economic aid programs, credits to developed Western countries to finance sales of oil and other commodities, as well as errors and omissions in other line items of the accounts."

POSSIBILITIES FOR "MISSING" ASSETS

There are two ways out of this inconsistency. The first is that our estimates of the Soviet hard-currency current account could be wrong, that Soviet imports from the West were higher or Soviet exports to the West were lower than we think. This might be the case, for example, if the Soviet Union were advancing large sums to pay for clandestine activities abroad. To the extent that payments for such activities are disguised as ordinary commercial transactions, however, they are presumably reflected in the current account figures in the first row of Table 9 and would not explain the apparent discrepancy between observed current account and observed capital account. These disguised payments would have been observed; we would simply have misunderstood their purpose. To explain a part of the apparent discrepancy, payments would have to be entirely hidden. Such payments are no doubt made. It seems doubtful, though, that completely hidden payments could amount to billions of dollars a year. Movements of such large quantities of funds would likely attract attention and be questioned. It seems much more likely that whatever funds are advanced to finance clandestine operations are disguised as some other type of transaction and therefore--at least in theory--included in the estimated current account transactions.

The second and perhaps more probable explanation for the apparent inconsistency in the Soviet balance of payments is that the parts of the Soviet capital account that we do not see contain significant net lending to the West, hard-currency transfers to other CMEA countries, or the acquisition of Western financial assets not reported by the BIS. Put another way, there may be significant growth of Soviet holdings of hard-currency assets in the unseen parts of the Soviet hard-currency capital account. This "missing" asset growth (or the size of the error in the estimate of the Soviet hard-currency current account balance) is the sum of the reported current account balance and total observed net new borrowing. This figure is shown in the last line of Table 9. Note that for the years shown in the table "missing" asset growth was larger than identified net borrowing by the Soviet Union: The financial flows that are missing in our estimates of the Soviet hard-currency balance of payments are considerably larger than the net financial flows we are able to identify.

What is the nature of these "missing" assets? There are four basic possibilities:

- *Hard-currency advances to other CMEA countries.* During 1980 and 1981, the Soviet Union and the CMEA banks advanced significant hard-currency funds to Poland and Romania to assist

these countries during their foreign payments crises.³ Most observers believe, however, that this was one-time assistance and has been discontinued. If this is the case, such advances would not account for the "missing" Soviet assets in 1983, 1984, or 1985.⁴

- *Purchases of hard-currency assets other than bank deposits.* It is conceivable that some part of these "missing" assets could be accounted for by Soviet purchases of Western financial instruments that do not show up in BIS reporting. Almost any sort of financial asset other than bank deposits would be suitable for this purpose. Bonds issued by Western governments or corporations are perhaps the most likely candidates, but equities or direct ownership of real assets are also possibilities. There is, however, no evidence that the Soviet Union has made such investments in any sizable amounts. The unanimous view of the bankers and other observers of international financial markets that we talked to was that they had never heard of large-scale Soviet purchases of assets other than bank deposits and that they were confident that they would hear about any substantial Soviet activity of this sort. Moreover, Soviet lack of interest in these markets is apparently not for lack of trying on the part of Western financial operators. We heard a number of times that a steady stream of Western financial concerns had approached Soviet financial authorities with proposals for Soviet purchases of other assets, all apparently unsuccessfully.
- *Deposits in non-BIS-reporting banks.* Another possibility is that the Soviets have made large deposits in banks that do not report to the BIS. This is generally thought to be unlikely because there are few banks outside the BIS reporting area that are large enough to absorb substantial Soviet deposits. Such deposits are not impossible, however. A recent article in the *Financial Times*, for example, noted an unexpected and unexplained rise of some \$300 million in Indian hard-currency reserves.⁵ There is no evidence, direct or otherwise, that this rise in reserves reflects Soviet hard-currency deposits in Indian

Elizabeth Ann Goldstein, "Soviet Economic Assistance to Poland, 1980-1981," *Soviet Economy in the 1980s: Problems and Prospects*, Part 2, Congress of the United States, Joint Economic Committee, December 31, 1982, pp. 556-569.

³In 1983 rumors did circulate in financial circles that the Soviet Union was making hard currency loans to East Germany. These rumors were prompted by unexpected strength in the East German hard currency asset position reported by the BIS.

⁵K. K. Sharma, "Currency Reserves: Top India's Forecast," *The Financial Times*, July 27, 1986.

banks. It is clear that *somebody* placed unexpectedly large hard-currency deposits in Indian banks at the end of the 1985-1986 fiscal year. Since India is outside the BIS reporting area, no information is publicly available to indicate the ownership of the new deposits.

- *Assistance to Third-World client states.* The most likely explanation for the "missing" Soviet assets is that they represent assistance to Soviet client states in the Third World. Sometimes this assistance takes the form of direct grants. In other instances, the assistance is in the form of loans. In these latter cases, it is apparently rare that hard-currency funds are actually advanced to the recipient. Rather, the Soviet Union agrees to postponements of payment for merchandise exports already supplied. Direct aid payments do not strictly constitute Soviet assets; these transactions should properly be included under unrequited transfers in the Soviet hard-currency current account. Neither may it be entirely appropriate to consider formal loans to these client states as true Soviet assets inasmuch as the likelihood that the loans will ever be repaid is probably small.⁷ Both kinds of transactions, however, are excluded from the parts of the Soviet balance of payments that are regularly available to or estimated by Western analysts. *These transactions could account for a part of apparently excessive Soviet borrowing.*

FINDING THE "MISSING" ASSETS

To summarize the preceding discussion, the most likely possibilities for "hidden" Soviet assets are loans and direct aid to Soviet client states in the Third World. Table 10 shows recent RAND estimates of Soviet loans and aid in 1983.⁸

⁷This may be applying too strict a standard. U.S. balance of payments accounting recognizes U.S. bank loans to a number of developing countries as assets, despite considerable doubt as to whether the loans will ever be repaid.

⁸At first glance, it may not be obvious why the table includes both ruble and dollar loans to non-CMEA countries. As we have noted, Soviet loans to Third World countries generally do not involve actual advances of cash. Rather, they reflect Soviet exports to these countries that are not paid for. These unpaid for exports are included in the estimates of total Soviet exports and are therefore included in the CIA estimates of the overall Soviet hard-currency current account. Current and capital account estimates can be balanced only if assets corresponding to these unpaid for exports are recorded on the capital account. In some cases, this asset may be a formal undertaking from the Third World country to pay the Soviet Union a specified amount of hard currency sometime in the future. In other cases, the specified future payment may be in rubles. In yet other cases, there may be no formal document at all; the unpaid for goods are simply a grant.

Table 10

FINDING THE "MISSING" SOVIET ASSETS: LOANS
AND AID TO NON-CMEA COUNTRIES, 1983
(Billions of U.S. dollars)

Hard-currency loans ^a	1.0
Ruble loans ^a	0.8
Military aid ^b	3.6
Economic aid ^b	1.5
Total	6.9

^aFrom "Soviet Trade and Credit Subsidies, 1981-1983," unpublished document by Keith Crane, The RAND Corporation.

^bFrom Charles Wolt, Jr., K. W. Crane, K. C. Yeh, S. Anderson, and E. D. Brunner, *The Costs and Benefits of the Soviet Empire, 1981-1983*, The RAND Corporation, R-3419-NA, August 1986.

These estimates were made completely independently of the estimates of "missing" Soviet assets shown in Table 9. The methods used in making the two sets of estimates were completely different and relied on different data. The striking result is that for 1983, the two estimates agree almost perfectly. The value of "missing" Soviet asset growth derived from balance of payments data is \$6.8 billion, and the estimate of Soviet loans and aid to Third World client states is \$6.9 billion.

The almost exact correspondence of these two figures is, of course, largely a matter of coincidence. The fact that the two figures are roughly similar, however, has a number of important implications. First, since the estimates were arrived at by very different approaches, they tend to confirm each other. Errors in both estimates are certainly possible, but it seems unlikely that large errors in the same direction and of the same size would affect both estimates. Second, the estimates suggest that, at least for 1983, current reporting arrangements provided a fairly complete and accurate picture of the overall Soviet

For our purposes, it does not matter which of these is actually the case. An unpaid-for export is counted as a hard-currency export, and an associated asset must be recorded on the capital account. It does not matter whether the payment that was not received was denominated in dollars or rubles, or not specified at all. Thus, we include both ruble and hard-currency loans in our accounting.

balance sheet. All of the known Soviet borrowing from the West can be accounted for, with none left over.

Unfortunately, similar comparisons cannot at present be made for other years. The OECD began reporting outstanding credits to the Soviet Union from official export credit agencies only at the end of 1982, and thus it is impossible to use balance of payments data to estimate the size of "missing" assets for years before 1983. Similarly, at the time of this writing the data necessary to estimate Soviet loans and aid to Third-World countries for years after 1983 are not yet available. Such estimates will be made in the future, and it will be possible to compare the results of the two methods then. For the present, we can only note that for the one year in which comparison is possible, the two approaches produce remarkably similar estimates of Soviet loans and aid to the Third World.

This exercise suggests an important advantage of analysis based on financial data. Because financial data are available fairly quickly, it is possible to make nearly current estimates of loans and aid to Soviet client states. Table 9 contains estimates through 1985. Relying on bilateral trade data to make such estimates is a much slower process. More current estimates of assistance are not yet possible. If further comparisons show that the financial data allow a good approximation of these loan and aid flows, then use of the financial data will permit much more timely monitoring of Soviet support for client states.

V. THE STYLE OF SOVIET INTERNATIONAL FINANCIAL OPERATIONS

A useful understanding of Soviet international financial operations requires more than just an accounting of the sources and uses of Soviet hard-currency funds. In particular, we need an understanding of the style of Soviet international financial operations: how and why Soviet financial managers behave as they do. This kind of understanding should help in interpreting the elements of Soviet financial behavior that we are able to observe. It may also help us to observe more of this behavior. The more we know about the preferred modes of Soviet financial operations, the better we will know where to look for useful information.

In this section, we outline what we have been able to learn about Soviet financial style. Much of the content is drawn from interviews with Western bankers who have dealt with the Soviet Union, and consequently the discussion is decidedly anecdotal. We believe, however, that we have been able to compile at least the beginnings of a description of Soviet financial methods and motivations.

CREDIT MARKETS

The observers of international financial markets that we spoke with were unanimous in the view that Soviet financial managers are very hard bargainers on the terms of loans to the Soviet Union. The Soviet Union has enjoyed good access to international financial markets since the early 1970s, and Soviet financial managers have not been shy in demanding good terms for hard-currency financing. The Soviets seem to take considerable pride in their ability to borrow funds at fine spreads, and they reportedly will work tirelessly to maintain or to improve these spreads. When funds are readily available on good terms, the Soviet Union seems prepared to borrow heavily, even if it has no immediate need for funds. The Soviets took advantage of attractive terms in 1985, for example, to borrow heavily, using the proceeds of this borrowing principally to increase their deposits in western banks. (See Fig. 1.)

Soviet financial managers have shown a preference for coming repeatedly to the credit markets to borrow moderate amounts—usually the equivalent of a few hundred million dollars at a time—rather than

arranging so-called "jumbo" credits less frequently.¹ This allows the Soviet Union to maintain a more or less regular presence in world credit markets, and as a result Soviet borrowing attracts relatively little attention—a situation that is doubtless attractive to Soviet financial managers.

Soviet financial managers seem to prefer to avoid negotiable credit instruments. Such instruments can be traded in secondary markets, and the price of Soviet debt in these markets would provide a regular index of market sentiment regarding Soviet economic prospects. Uncontrollable movements in the price of Soviet debt could prove embarrassing on occasion.

Trade finance presents Soviet managers with a particular problem in this regard. Trade bills are routinely traded in a secondary market—the so-called *a forfait* market. Since 1980, however, Vneshtorgbank has insisted that all Soviet trade bills include a preemption clause allowing Vneshtorgbank ten days before any forfaiting deal is signed to decide whether to buy back the paper itself. Reportedly, Vneshtorgbank makes heavy use of these preemption clauses, effectively controlling the price of Soviet paper on the *a forfait* market.

MONEY MARKETS

Soviet behavior in international money markets is uniformly regarded as extremely conservative. We encountered no reports of the Soviet Union's holding significant volumes of any type of Western financial assets other than deposits in Western banks, and there was a near-universal presumption that large-scale purchases of other types of assets could not possibly be concealed. By all accounts, Soviet deposits in Western banks have very short maturities, almost all less than one year. Most seem to have maturities of less than six months, and we heard one estimate that 40 percent of Soviet deposits were overnight deposits. Apparently, the Soviet decision to hold hard-currency assets in the form of fairly low-yield bank deposits is not for lack of efforts by Western financial institutions to interest Soviet financial managers in other higher-yield assets. From a number of sources, we heard stories of a regular parade through Moscow of Western marketers of a wide variety of financial instruments. There is no indication that these salesmen have met with any success.

¹The largest-ever Vneshtorgbank borrowing was in May 1986—DM 1.2 billion (about \$540 million at prevailing exchange rates) in a syndicated loan managed by Dresdner Bank.

Soviet financial managers are not active players in international money markets. They do not generally move funds from institution to institution nor do they change the maturity structure of their portfolio frequently. Rather, they seem to place short-term time deposits in selected Western banks, rolling over the deposits when they mature.

The most striking thing about Soviet money market operations is the sheer size of Soviet deposits in western banks. Table 11 shows official reserve holdings (excluding gold) of a number of developing and industrialized countries. The table also shows Soviet deposits in Western banks.² All amounts are shown in terms of months of import cover—how many months of merchandise imports (at the average rate for each year) could be financed by reserves. On the face of matters,

Table 11
OFFICIAL RESERVE HOLDINGS FOR SELECTED COUNTRIES
(Excluding gold)

Country	Months of Import Cover					
	1980	1981	1982	1983	1984	1985
Australia	0.9	0.8	2.9	5.0	3.4	2.7
Brazil	2.8	3.3	2.2	3.1	9.1	8.9
Canada	0.6	0.6	0.6	0.6	0.4	0.4
Finland	1.4	1.3	1.4	1.2	2.7	3.4
France	2.4	2.2	1.7	2.3	2.4	3.0
Germany	3.1	3.2	3.5	3.3	3.1	3.4
Greece	1.5	1.4	1.0	1.1	1.2	1.0
Italy	2.8	2.7	2.0	3.0	3.0	2.0
Japan	2.1	2.4	2.1	2.3	2.3	2.5
Korea	1.6	1.2	1.4	1.1	1.1	1.1
Portugal	1.0	0.7	0.6	0.6	0.8	2.2
Spain	4.2	4.0	2.9	3.0	5.0	4.5
Sweden	1.2	1.5	1.5	1.9	1.7	1.5
Turkey	1.6	1.2	1.5	1.7	1.4	1.3
U.K.	2.1	1.8	1.5	1.4	1.1	1.4
USSR	5.0	4.2	4.8	5.0	4.9	6.7

SOURCES: Soviet Union - Bank for International Settlements.
Other countries - International Monetary Fund.

The intent in Table 11 is to provide a comparison of the foreign-currency funds that are at the disposal of national financial authorities. Private entities of most of the other countries listed in the table maintain additional foreign currency bank balances. These balances are generally not available for use by financial authorities. In the Soviet Union, however, all foreign currency balances are controlled by the government.

one might have expected the Soviet Union to require fewer reserves than at least some other countries. For countries with convertible currencies, reserves are sometimes required for intervention in foreign exchange markets. The Soviet Union, of course, needs no reserves for these purposes. The table suggests that the high level of Soviet hard-currency holdings is not necessary simply for trade settlements. Most of the countries shown in the table manage their import transactions with much lower reserve levels. Only Spain and in recent years Brazil hold reserves approaching those of the Soviet Union.

Neither do these balances reflect, at least in later years, arbitrage operations by the Soviet Union. We noted in Sec. II that before 1982, the Soviet Union could borrow at subsidized rates from official trade financing agencies in the West and redeposit the funds in Western banks at higher interest rates. Given these opportunities, Soviet financial managers may have maintained higher deposits in Western banks than were necessary for trade purposes, preferring to finance imports by taking low-interest-rate loans rather than by liquidating relatively high-yielding deposits. A few particularly long-term official loans extended at the low interest rates allowed under the terms of the OECD "Gentlemen's Agreement" before 1982 may still be outstanding. (See Fig. 2.) But since 1982, Soviet opportunities for arbitrage probably have been few, and it seems unlikely that arbitrage operations account for any significant share of Soviet hard-currency balances. Today the Soviet Union must pay more for its borrowings than it can earn on its deposits. Maintaining large hard-currency reserves and large loan balances at the same time is therefore costing the Soviet Union something.

Large Soviet deposits do not reflect demands by Western banks for compensating deposit balances as a condition for lending to the Soviet Union. Compensating balances are no longer a regular requirement in international lending, and apparently they have not been required of the Soviets in recent years.

Some have suggested that large Soviet holdings of foreign currency reflect inefficient, decentralized cash management in the Soviet Union. Rather than being a unified pot of funds, this argument goes, Soviet deposits reflect the holdings of numerous ministries, bureaus, and trading organizations. Without an efficient internal market, excess funds held by one entity cannot be made available for the temporary use of another entity. The result is higher overall balances as each financial entity seeks to hold reserves adequate for its own needs.

The official story is that the Soviet state maintains a monopoly in international financial dealings. Bankers who deal with the Soviets report that almost all deposits in Western banks are held in the name

of the Soviet Foreign Trade Bank. These bankers also report that, in their experience, a few officials seem to exercise complete control over all Soviet deposits. It is, of course, possible that different agencies maintain claims to separate pots of hard currency within the overall structure of Vneshtorgbank and that a few Vneshtorgbank officials manage the separate pots. Explanations of Soviet behavior based on bureaucratic rigidity and inefficiency often have an *a priori* plausibility. There is no direct evidence, however, to support the idea that the bureaucratic character of the Soviet Union explains large Soviet hard-currency deposits.

A more likely explanation for why the Soviet Union holds larger foreign-currency reserves than most other countries is that Soviet reserves must serve double duty. For all countries, foreign-currency reserves provide a hedge against economic uncertainty. They provide a store of international purchasing power that can be drawn on in the event of an unexpected shortfall in export revenues or an unforeseen rise in import requirements. For the Soviet Union, however, hard-currency reserves also provide a measure of protection against political uncertainty. Political developments may someday impede Soviet access to international credit markets, and it would therefore seem prudent for Soviet financial authorities to "stockpile" hard currencies against the day when they cannot be easily raised.

By way of contrast, notice that no country listed in Table 11 has maintained lower reserves than Canada. Canada, with confidence in its access to international financial markets and to International Monetary Fund (IMF) credit, has a longstanding policy of maintaining foreign-currency credit lines with domestic and foreign banks rather than maintaining actual foreign-currency reserves. If a need for foreign currencies should arise, the government simply draws on the lines of credit. Soviet foreign currency holdings may be further inflated because the Soviet Union, not a member of the IMF, does not have access to Fund credit, as do all the other countries listed in Table 11.

Another motivation for large Soviet hard-currency balances may be a Soviet desire to be seen as obviously creditworthy. By maintaining large and highly visible hard-currency deposits, the Soviet Union can reassure lenders that debt servicing difficulties are unlikely. This improves the Soviet bargaining position when dealing with potential lenders and emphasizes Soviet independence from any particular Western lender. This same motivation may explain the large foreign-currency holdings of Brazil, the only country listed in the table whose reserves exceed those of the Soviet Union. Since its debt crisis in 1982, Brazil has made good progress at reestablishing its credit-

worthiness in international markets. Large foreign exchange holdings may assist in this regard.

FOREIGN EXCHANGE MARKETS

Soviet behavior in foreign exchange markets contrasts sharply with Soviet behavior in money markets. Western financial market observers are unanimous in reporting that the Soviet Union is an active and aggressive presence in both the spot and forward foreign exchange markets. Soviet traders undertake transactions as large as \$50 or \$100 million at a time and are widely reported to move foreign exchange markets with their dealing from time to time.

Soviet dealing in the foreign exchange markets seems far to exceed what would be required for the simple settlement of trade accounts. It appears that Soviet currency traders go out of their way—in financial market jargon—"to operate their franchise." That is, these traders are sufficiently active to establish themselves as independent forces in the currency markets, with their own views about where currencies are headed, and with the ability and the willingness to make markets in most major currencies. Recently, a senior Vneshtorgbank official noted that "the Bank for Foreign Trade tries to keep a permanent presence in the international [currency] markets. We try to quote all our international correspondent banks all currencies and all maturities."¹ The advantage in such behavior is that the Soviets can now buy and sell currencies at attractive prices on their own account. By operating their own franchise, Soviet financial managers can also minimize their dependence on traders in other institutions. In this way they cut the costs of their own dealing and gain a certain amount of privacy in their transactions.

Soviet interest in foreign exchange markets became evident in the early 1970s, when the breakdown of fixed exchange rates in the West opened the way for large-scale currency trading. Early on, a currency trading team was established at Moscow Narodny Bank, Ltd., in London. Mostly non-Soviets with trading experience with other London banks, this team helped to train Soviet traders who came to London and then went back to Moscow to trade for the Vneshtorgbank. Today, apparently, the bulk of Soviet foreign exchange transactions is

¹Yuri N. Kondratuk, deputy general manager, correspondent banking relations, foreign exchange, and money market operations, quoted in "Inside the Soviet Debt Machine," *Eurromoney*, January 1987, pp. 46-54.

managed from Moscow. Moscow Narodny is no longer the major currency trading center for the Soviet Union.⁴

The Soviet tendency to centralize foreign exchange trading in Moscow has been emphasized recently by the closure of Wozchod Handelsbank in Zurich. This Soviet-controlled Swiss bank suffered heavy losses during 1984 as a result of foreign exchange and precious metals trading. No official report of the size of the losses incurred has been issued, but published estimates have gone as high as \$350 million.⁵ The bank's chief dealer (a Swiss national) was sacked in November 1984, and in March 1985 the bank announced that it would cease operation as an independent entity and be replaced by a Zurich branch of the Soviet Foreign Trade Bank. Presumably, all dealings of the newly reconstituted entity will be directed from Moscow. Although Wozchod's chief dealer was fired for allegedly exceeding his authority, a number of observers with whom we spoke found it hard to believe that losses as large as those suffered by Wozchod could have been incurred without the Soviet shareholders of Wozchod having at least some idea what was going on. To these observers, this is additional indirect evidence that the Soviet Union is willing to play an aggressive role in foreign exchange markets--and that an aggressive posture can sometimes result in substantial losses.

Despite the losses at Wozchod, there continue to be rumors in the financial community that Soviet foreign exchange traders are highly successful. When pressed, observers subscribing to this view usually offer the explanation that Soviet currency traders are able to exploit information collected by Soviet intelligence services. This seems unlikely. It is, of course, possible that Soviet intelligence has penetrated Western central banks or finance ministries. The principal value of this penetration, if it in fact has occurred, must lie, however, in the long-term insights that it may allow into the policies and the opportunities of Western governments. It is hard to believe that Soviet sources within Western financial agencies would be compromised—as they might be if Soviet financial managers traded regularly on information from these sources--simply to make a quick killing in the foreign currency markets.

There is no direct evidence on how successful Soviet traders actually are in the foreign exchange markets. The indirect evidence that is available suggests that in at least one area Soviet financial managers have not done well at anticipating exchange rate movements. In May

⁴See, for example, Nicholas Travers, "Moscow Narodny Looks for New Openings," *The Banker*, August 1985, pp. 36-39.

⁵"Soviet Bank Won't Prosecute Employees," *Wall Street Journal*, March 5, 1985, p. 34.

1986, the Bank for International Settlements published for the first time estimates of changes in the assets and liabilities of Western banks *vis-a-vis* individual countries both in dollar terms and adjusted for changes in exchange rates. These estimates were provided for the years 1984 and 1985. By comparing the dollar changes in assets and liabilities with the adjusted estimates, it is possible to make at least a rough assessment of whether the currency composition of a particular country's assets and liabilities *vis-à-vis* Western banks resulted in foreign exchange gains. The 1984/1985 period is convenient for this sort of comparison. The dollar generally rose during 1984 and generally fell during 1985. Thus, the chances of large gains or losses over the entire period that are the result of nothing more than a fortunate or unfortunate choice of currencies at the beginning of the period are minimized. A country that enjoyed foreign exchange gains in both 1984 and 1985 had to adjust the dollar component of either its assets or its liabilities sometime during these two years.

The Soviet Union suffered foreign exchange losses in both years. In 1984, the loss was very small—only \$87 million on assets of \$11.3 billion and liabilities of \$16.6 billion. In 1985, however, the foreign exchange loss on Soviet debt and deposit balances with Western banks was \$1.5 billion. Apparently, the dollar figured more prominently in Soviet assets than in Soviet liabilities. As the dollar declined in 1985, the Soviet Union lost heavily.

The currency composition of a country's assets and liabilities is not determined solely by forecasts of exchange rate movements. The nature of the country's trade will also play an important role. A country whose imports come primarily from countries in the so-called deutschemark bloc, for example, might be expected to hold a higher proportion of its liquid assets in deutschemarks than would a country that imports primarily from, say, dollar bloc countries. Table 12 shows net gains or losses on assets and liabilities *vis-a-vis* commercial banks due to exchange rate movements during 1984 and 1985, as reflected in BIS data, for a number of countries. The countries in Table 12 were chosen because they share some important characteristic with the Soviet Union. Norway and Saudi Arabia are like the Soviet Union in that their principal exports are petroleum products. Sweden and Finland are similar to the Soviet Union in that their imports are heavily from countries whose currencies are closely tied to the deutschemark. Hungary and the GDR are, of course, other members of the CMEA.

Of all of these countries, the Soviet Union suffered the largest losses. Only Saudi Arabia, among the countries shown, gained over the entire period. None of these countries, not even Saudi Arabia, showed gains in both years. The fact remains that none of these countries lost

Table 12

GAINS AND LOSSES DUE TO EXCHANGE RATE CHANGES^a
 (For selected countries during 1984 and 1985,
 in billions of dollars)

Country	Net Gain	Assets ^b	Liabilities ^b
Finland	-0.582	5.115	10.606
Norway	-0.119	5.548	10.953
Sweden	-0.525	4.530	16.041
Saudi Arabia	+0.803	48.055	10.026
GDR	-0.197	4.536	8.309
Hungary	-0.157	1.543	6.932
Soviet Union	-1.601	11.343	16.640

SOURCE: Bank for International Settlements.

^aGains and losses on assets and liabilities vis-à-vis Western banks.

^bAt end of 1984.

as heavily as did the Soviet Union, even if one takes into account the differing sizes of their portfolios.

One should not make too much of these figures. They show only one aspect of Soviet international financial dealings. We know nothing of the gains and losses experienced by Soviet currency traders in their day-to-day transactions in the spot and forward foreign exchange markets. The figures do suggest, however, that assertions of highly successful Soviet foreign exchange dealing should not be accepted uncritically.

OTHER MARKETS

In the course of our inquiries, we heard stories about Soviet activity in other markets. For the most part, these stories are more suggestive of directions for future research than they are the basis of firm conclusions about how the Soviets operate in international markets.

Apparently, the Soviets are very active in commodity futures markets. Rumors of highly successful Soviet trading abound here, as they do with regard to foreign exchange markets. Unfortunately, at this stage we have no way of assessing the validity of the rumors.

Soviet-controlled entities have taken occasional flutters in real estate markets. We know of these mostly through highly publicized

losses. The Singapore branch of Moscow Narodny Bank, for example, is reported to have lost heavily in local real estate in the late 1970s.

Finally, we heard some rumors of very curious gold trading by the Soviet Union in the early 1980s. At the time, it was alleged that the Soviets were buying South African gold. The supposed motive was to support the world price of gold, a major hard-currency export of the Soviet Union, at a time when the prospects for Soviet export earnings and thus Soviet creditworthiness were being questioned in international markets.

All of these are tantalizing stories that may bear further looking into.

VI. PROSPECTS FOR FUTURE RESEARCH

One of our aims in undertaking this research was to assess the value and the feasibility of further research into Soviet financial behavior. In this concluding section, we consider why we should seek a better understanding of Soviet financial behavior, of how much it is possible to know about Soviet financial transactions, and what might constitute useful next research steps.

WHY SHOULD WE CARE?

Analysis of Soviet financial transactions offers Western policymakers a number of benefits.

Financial data provide some of the earliest reliable indications of developments in the Soviet economy. The information on Soviet assets and liabilities *vis-a-vis* Western banks reported by the BIS is a case in point. This information is reported quarterly with a lag of only about four months. Moreover, the information comes not from the Soviet Union, but from Western counterparties to Soviet transactions. Changes in Soviet net debt can be the first indication of changes in Soviet international economic relations—weakening exports, growing import needs, changed levels of support for client states are examples. Aggregate financial data will not always identify what exactly has changed, but these data can alert analysts and policymakers that something is going on.

Direct data on Soviet international economic relations are not always available on such a timely basis. The Soviet Union does publish quarterly trade figures with a lag of a few months. But these figures are not always readily usable by Western analysts. They are, for example, in rubles and thus not directly convertible into meaningful hard-currency terms. Neither are the data complete; arms sales, for example, are often missing or hidden. Additional months go by while these figures are adjusted and published by the *Central Intelligence Agency* and before counterpart trade statistics from other countries are available for corroboration.

The advantages of using financial data for some kinds of analysis were demonstrated in Sec. IV. Using financial data, we were able to estimate at least the rough magnitude of Soviet aid and credit to Third-World client states. Estimates of this assistance for the year 1985 using financial data were completed by August of 1986. At that

time, the most current direct estimates of this kind of assistance—estimates that relied on trade information—were for the year 1983.¹ By using financial data to make indirect estimates, we were able to offer evidence that the downward trend in Soviet assistance to Third-World client states that had been noted in trade-based estimates for earlier years had continued in 1984 and 1985. This observation will probably not be possible on the basis of trade data until the summer of 1987.

Analysis of financial transactions also provides a check on other estimates of Soviet economic activities. In Sec. IV, for example, we showed that earlier estimates of Soviet assistance to client states are consistent with available financial data. Given the difficulties inherent in estimating many aspects of Soviet economic behavior, it is comforting to have a method for independent confirmation.

Systematic analysis of Soviet financial transactions has given us confidence that current financial reporting arrangements are in fact providing reasonable estimates of Soviet borrowing and indebtedness. As the Soviet Union enters new financial markets, current reporting arrangements may become inadequate. Without regular and systematic analysis of the entire Soviet capital account, we may not recognize a failure of these arrangements. The result could be a misunderstanding of the overall financial situation of the Soviet Union.

Understanding the Soviet financial situation has become increasingly important as debates over U.S. national security policy have focused on the ability of the Soviet Union to sustain heavy outlays for defense and to support client states while modernizing its domestic economy. Clearly, imports from the West and Western credit to finance these imports are important elements of Soviet economic growth development. An informed debate on the ability of the Soviet Union to compete economically with the United States in the long run should include a realistic assessment of the availability of and Soviet needs for hard-currency funds. Regular analysis of Soviet international financial transactions is part of such an assessment.

Careful monitoring of Soviet financial transactions may be particularly valuable now. Evidence is accumulating that Soviet economic relations may be about to change in important ways. Recent declines in the price of oil, for example, have seriously weakened Soviet hard-currency export earnings. Without sharply increased borrowing from the West, the Soviet Union will be forced to reduce its imports or slow its assistance to client states. As noted in Sec. III, the Soviet Union seems ready to raise hard-currency funds through the issue of new

¹See C. Wolt, Jr., K. W. Crane, K. C. Yen, S. Andersson, and E. L. Jorgensen, *Costs and Benefits of the Soviet Empire, 1981-1985* (The RAND Corporation, Santa Monica, CA, August 1986).

sorts of debt instruments. The Soviet Union has recently sought (and been denied) observer status at the next round of multilateral trade negotiations. Unsubstantiated rumors persist that the Soviet Union will soon seek membership in the International Monetary Fund and the World Bank. And recent changes in Soviet financial policies have opened the door for a variety of new Soviet entities to become active in international financial markets. If Soviet economic ties to the West do in fact change in important ways, a clear understanding of the nature and the meaning of these changes will depend on our having established some understanding of the old set of relationships. A better understanding of current Soviet financial practices would be a valuable part of this baseline. Achieving this understanding requires research now, while bankers and other financial market players who have dealt with the Soviets in the current regime are still available and memories fresh.

Perhaps the most tantalizing goal in studying Soviet financial behavior is that somehow an understanding of this behavior will lead to an ability to monitor particular types of Soviet transactions, which may in turn provide timely warning of important changes in Soviet policies or circumstances. Although this goal is beyond reach today, it will not necessarily remain so. The nature of Soviet hard-currency financial transactions is such that in almost all cases some Western counterparty has full knowledge of the transaction. Under certain circumstances these details are reported to Western financial authorities. Even when they are not, the need for communication between Soviet financial managers and Western financial agents offers opportunities for Western intelligence services to monitor Soviet actions.

Neither the imposition of more stringent reporting requirements on Western financial institutions nor clandestine monitoring of communications between these institutions and their Soviet clients is to be undertaken lightly. Indeed, actions of either sort could turn out to be counterproductive. The point here is that in certain circumstances either type of action might be considered. More detailed reporting or monitoring could be carried out only on a limited basis. Without a good understanding of how and why the Soviet Union operates in international financial markets, there would be little basis for targeting these activities or for interpreting the resulting data.

HOW MUCH CAN WE KNOW?

Even if it is granted that a better understanding of Soviet financial behavior would be valuable, questions still remain as to whether

sufficient information is available to support further research in this area. The Soviets, after all, do not conduct their financial affairs in public.

We believe that the research reported here demonstrates that available open-source information can be quite useful in drawing a profile of Soviet financial behavior. Published data seem to provide a fairly comprehensive picture of the Soviet hard-currency balance sheet. Perhaps more important, we have demonstrated that conversations with bankers and other financial market participants can produce useful information about the style and substance of Soviet financial transactions. Even if no other information is available, periodic review of Soviet activities through published information and interviews should prove beneficial.

More information is available, however. As we noted in the introduction to this report, our research reflects a limited effort at gathering information. At least three sources of readily available information about Soviet finances remain to be tapped. The first is the financial press. We have made no systematic effort to review the financial press for "market talk" about Soviet transactions. We have cited a few interesting items that have come to our attention. It seems to us likely that a thorough search of the financial press over the past few years would produce a substantial volume of new hypotheses, opinions, and anecdotes that would in turn provide the basis for further systematic research.

The second untapped source of information is interviews with financial market participants outside the United States. We were fortunate in the course of this work to be able to discuss Soviet financial practices with a number of knowledgeable observers in Washington, New York, and London. We learned much from these conversations. But we were repeatedly told that if we wanted to talk to the people "who really deal with the Soviets" we would have to go to Europe. The real centers of Soviet financial activity are Frankfurt, Rome, and Vienna, and the Westerners who know Soviet finances the best are to be found in those cities. Our experience in this preliminary investigation suggests that, if financial market participants are approached on the right terms and with due attention to establishing the researchers' credentials, these participants are in fact willing to discuss their perceptions of Soviet finance.

The third source of additional information is publications of Western central banks. Most of these institutions provide some data on the foreign exposure and cross-border activities of their resident banks. Careful correlation of these reports may clarify which countries' banks are most important in Soviet borrowing and deposit

placement. The reports may also reflect movements of Soviet assets from one country to another and allow analysis of why these movements may have taken place.

In addition to open-source information, a considerable volume of sensitive and therefore unpublished data is collected. The BIS and the OECD publish only highly aggregated data. Both organizations, however, make more detailed information available to cooperating government agencies. Similarly, central banks and national financial regulatory agencies collect detailed information on the foreign assets and liabilities (including those *vis-à-vis* the Soviet Union) of banks under their jurisdiction. These agencies publish only highly aggregated figures, but detailed data are apparently maintained. National agencies with responsibility for foreign trade and investment routinely survey firms within their purview to gather information on international capital flows. Finally, one must presume that national intelligence services collect at least some information relevant to Soviet financial transactions.

But these sensitive data are very closely held. Preliminary inquiries indicate, for example, that some of these data are not shared even among different agencies within the U.S. government. Given the proprietary nature of much of this information, it is not surprising that this is so. A number of agencies rely on voluntary compliance by financial institutions for routine statistical collections. Such compliance is no doubt encouraged by agency assurances that reported data will be kept strictly confidential. Whether access to these data can be arranged for analysts—from within the government or from outside organizations—remains to be seen. Sharing of sensitive information among Western governments will be even more difficult. The point here is that considerably more detailed information on Soviet financial transactions has been collected than is generally available to analysts, even government analysts. If some way can be found for arranging access to these data while still preserving necessary confidentiality, new insights into Soviet behavior may result.

FUTURE RESEARCH

The Next Objective

The work reported here demonstrates, we think, that currently available data and our understanding of Soviet financial behavior are sufficient to establish at least the general outlines of the Soviet hard-currency balance sheet. We seem to have a pretty good idea of how

much the Soviet Union has borrowed from the West and what, in general terms, is done with the proceeds of this borrowing.

Our understanding is much less complete, however, when we come to the particular channels and methods of Soviet financial transactions. What banks in what countries are the most important counterparties for Soviet transactions? What considerations are most important to Soviet financial managers in placing deposits? Are significant amounts of credit extended to the Soviet Union other than through publicized bank syndications? Who within the Soviet hierarchy really directs the management of hard-currency resources, and what are the principal objectives of this management? What is the term structure of Soviet assets and liabilities? Is the Soviet Union likely to enter new financial markets? Will we in fact see a Euronote issue in the near future? If so, what form will it take? Are the Soviets likely to follow up a successful note issue with an aggressive campaign of non-bank borrowing? If so, how can we monitor Soviet borrowing in the future? Today, Soviet hard-currency assets seem to be held almost solely in the form of short-term bank deposits. Is this likely to change? If so, how will we detect the change? Why would a change of this sort appeal to the Soviet Union?

If these questions can be answered at all, they will be answered only with a better understanding of the details and the style of Soviet financial operations. We suggest that the objective for the next round of research into Soviet financial behavior should be to achieve this fuller understanding.

Next Steps

The next steps toward a better understanding of the style of Soviet financial operations have been suggested above. We note them here explicitly.

1. Systematically review the financial press for the last few years, seeking comments, anecdotes, and speculations about Soviet financial transactions. This review should turn up indications of which markets the Soviets deal in, the nature of their transactions, and their most frequent counterparties.
2. Survey information on Soviet transactions made available by foreign central banks and finance ministries. Although we are unsure at this stage just what can be learned by combining published information from a number of Western countries, it seems unwise not to exploit all available open-source information.

3. Seek interviews with foreign bankers and financial market observers. We were repeatedly told that the Western financial market participants with the most detailed knowledge of Soviet finances are to be found in Europe—in particular, in Frankfurt, Rome, and Vienna. An understanding of Soviet financial methods and motivations will necessarily be based heavily on the views of people who have directly dealt with the Soviet Union. We should seek out such people.
4. Initiate efforts to gain access to sensitive financial information. Much more detailed information about Soviet financial transactions exists than is available in open sources. Gaining access to this information will not be easy. It is important to begin the process of identifying potentially useful information, discovering what about it is sensitive, and on what terms analysts might have access to it.

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