For release on delivery
3:15 PM EST
March 1, 1980

The Recycling Problem Revisited

Remarks by

Paul A. Volcker

Chairman, Board of Governors of the Federal Reserve System

before the

Graduate School of Business Administration

New york University

March 1, 1980

In 1973 we were rudely awakened to the fact that one of the main pillars of the world's economic structure, low-cost energy from petroleum, was under attack. The supply of such energy was no longer secure, and its price was rocketed upward by the decisions of the OPEC cartel. In the past year we have been reminded again that the supply of oil is insecure and that we have not yet created the conditions under which its price can reasonably be expected to be stabilized. Once more we are confronted by an escalation of inflation rates, a slowing of world economic activity, and the problem of dealing with the financial consequences of a huge OPEC surplus (probably on the order of $110 billion this year) and magnified deficits for oil-consuming countries.

My remarks today are largely focussed on the adjustments required by those financial flows--the so-called recycling problem. I believe it would be useful to look back over the period since that first upheaval in 1973 to see what we have learned about dealing with this problem, and to appraise the position we are in today in the light of that experience.

First, we need to be as clear as possible about what the term "recycling" means. What has happened is that OPEC has in effect levied a tax on oil-consuming countries. After spending some of the revenues for imports of goods and services, they put the surplus into foreign assets that they find attractive. In the aggregate this process appears to be automatic; the countries in surplus have no alternative to the purchase of claims on other countries. The rub is that the types and locations of the claims are chosen by the oil producers and most of the countries that pay the oil tax don't attract any OPEC investments directly. These countries--or entities in these countries--have to go out in the international market and borrow to cover their deficits.

For these borrowing countries recycling is not automatic at all. It is an eventually painful process of piling up debts just to cover the higher cost of the same quantity of imported oil--debts that allow their economies to keep going but do not, in the absence of other adjustments, create new productive capabilities out of which the debts can be serviced in the years ahead.

Countries that attract OPEC investments--mainly the stronger industrial countries--wind up in effect as financial intermediaries. They or private institutions in these countries take on any risks involved, for which they are presumably paid through lending margins charged. Some of this intermediation takes the form of increased bilateral and multilateral official financing, but most of the increased financing required in the 1970's came from U.S. and foreign commercial banks that, in turn, added to their short-term liabilities to members of OPEC. This pattern of recycling, carried to excess, may generate cumulative stresses. I will come back to this aspect later.

THE 1973-74 OIL SHOCK

What have we observed in the years after 1973 and what lessons have we learned? In the first place, the oil shock of 1973-74 came at a time of unsustainable worldwide demand pressures, an acute inflation problem (even apart from the escalation of oil prices), widespread speculation on commodities, and a build-up of inventories. Moreover, the international monetary system was going through an uneasy transition from the apparent stability of the Bretton Woods framework to a set of arrangements on which agreement had not yet been reached.

The effect of the jump in oil prices--from $1.80 per barrel in June 1973 to $9.50 in June 1974--on this fragile situation was devastating. Economic activity slumped severely in 1974 and 1975, especially in the United States. In fact GNP growth rates never recovered to the average rate of over 5 percent achieved in industrial countries in the 1963-73 period. Inflation rates rose from an already high average 8 percent rate in industrial countries in 1973 to the double-digit range in 1974. Inflation rates also did not subsequently decline to the 4-5 percent range of 1963-73. The OPEC surplus jumped from $8 billion in 1973 to $70 billion in 1974, while the OECD current-account balance shifted from plus $10 billion to minus $27 billion, and the non-oil developing countries saw their deficit rise from $7 billion to $24 billion. (See Table 1.)

RESPONSES TO THE 1973-74 OIL SHOCK

Reactions at the time reflected several immediate concerns. On the energy front, in the United States the temporary embargo of oil shipments by Arab states spawned instant analyses, grand plans, but little in the way of effective actions; Project Independence floundered. On a multilateral basis, the International Energy Agency was organized, also largely with the aim of building some protection against interruptions of petroleum supplies by stockpiling and developing plans for sharing supplies in an emergency. But the difficulties of organizing the IEA seemed to exhaust the energies of the participants. Planning was started on measures for conserving energy and developing alternative energy sources. Another proposal at the time was to attempt to work out some sort of coordinated intergovernmental approach to OPEC to attempt to stabilize prices and production levels. However, these efforts failed to produce significant results.

On the financial front, we can all recall, on the one hand, the consternation that was expressed at the idea that massive OPEC deposits would descend on the international banking system creating an unmanageable flood of liquidity, while, on the other hand, many believed that countries facing enlarged deficits would be unable to obtain the massive new credits they would need to finance them. Yet, lo and behold, the money was recycled with limited official involvement.

In retrospect, it seems to me that the actions set in motion in 1973-74 have accomplished rather little in dealing with the fundamentals of these problems aside from the effects of higher oil prices on oil consumption. Moreover, after that first shock, the pressure for adjustment to a world of a higher relative price of energy seemed to ease, as the real price of oil declined about 8 percent from mid-1974 to early 1977 and another 10 percent by the end of 1978. OPEC supply was restored to close to the 1973 level and new supplies came on stream from the North Sea, Alaska, and, recently, Mexico. The rate of increase in energy demand relative to GNP growth dropped sharply in the industrial countries--probably mainly in response to higher prices rather than because of specific conservation measures.

Declining External Imbalances

Rising OPEC imports coupled with the declining real price of oil produced a fairly rapid reduction in the OPEC surplus. In fact, the OPEC surplus faded away much faster than many observers in 1974 thought possible. After the 1974 bulge, the surplus was in the $30-40 billion range in the 1975-77 period and dropped to less than $10 billion in 1978. The peak pressure on the external balance of the non-oil developing countries was in 1975, when they had a combined deficit of $32 billion. In the 1976-78 period, their annual deficits averaged $20 billion--about 2-1/2 percent of their GNP and close to the average relationship prevailing before 1973. Industrial countries' current account balances in the aggregate tended to vary with the cyclical situation--improving in 1975, registering moderate deficits in 1976 and 1977, and then moving into surplus in 1978.

Within the OECD total, however, the U.S. position deteriorated sharply with the cyclical upturn after 1975. Large U.S. trade and current account deficits in 1977 and 1978 helped to generate persistent downward pressure on the dollar in exchange markets through most of both years.

As the OPEC surplus declined, and the combined deficit of the non-oil developing countries stabilized, the financial stresses associated with the recycling problem seemed to ease. It also turned out that the international banking system was far more elastic than had been thought. The net size of the Euro-currency market, through which much of the intermediation takes place, grew from $160 billion in 1973 to $485 billion at the end of 1978. (It is now about $600 billion.) The developing countries on the whole fared surprisingly well. Their international currency reserves rose about $50 billion between the end of 1973 and the end of 1979; their growth rate averaged a respectable 5-1/4 percent per year; and several of them (Korea and Brazil, for example) made major progress in shifting their economies to a modern industrial base.

One of the important stabilizing factors since 1973 has been the enhanced role of the IMF. The resources of the Fund were expanded specifically to deal with the immediate impact of the oil price increase by the creation of a special Oil Facility in 1974, which provided medium-term financing of $8 billion, part of which was borrowed from OPEC members. In addition, other credit facilities of the Fund were liberalized. However, drawings on the IMF dropped off markedly after 1976, especially by non-oil developing countries. As the combined deficit of the non-oil developing countries declined, the demand for IMF financing declined.

Role of Banks

Lending by commercial banks, especially American banks, was the key factor in smoothing the adjustment of the developing countries to the 1973-74 oil shock. Between 1973 and the end of last year, credits to this group of countries by all commercial banks rose from about $30 billion to about $150 billion. (See Table 2.) U.S. banks accounted for a little over half of the amount outstanding at the beginning of the period, but now account for less than 40 percent. U.S. banks resisted further rapid expansion of their exposure to these borrowers after 1977, partly because they monitored their country exposure more carefully, and partly because of declining lending spreads as some foreign banks began to compete more aggressively for these loans.

We can get a broad perspective of the significance of banks' lending to the non-oil developing countries by aggregating the relevant data over the 1974-79 period. (See Table 3.) In that period the current account deficits of these countries, after deducting grant aid they received, totalled

$155 billion; as I have mentioned they also increased their international reserves by about $50 billion over the period. Commercial bank credit, net, supplied about $125 billion of the financing required; the difference, roughly $80 billion, was contributed mainly by Government credits, net funds supplied by multinational institutions, a fairly steady but relatively small stream of private direct investment, non-bank supplier credits, and some recourse to international bond markets. Although comparable data are not readily available for the period before 1973, it is evident from information on bank claims in 1974 that banks played a much smaller relative role in financing deficits of developing countries before 1973.

The increased involvement of banks in international lending after 1973 was a source of some concern to authorities in the banks' home countries. And steps were taken to try to meet such concerns. U.S. bank supervisors developed a program for assessing the country risk exposure of American banks. This process is based on the principle of diversification of lending. It relies on management of individual banks to make the decisions regarding any particular credit, but seeks to focus the attention of bank managements on exposures in individual countries that are large in relation to the capital of the bank or in relation to the experience of other lenders.

As a companion to this program, the Federal Reserve and other U.S. supervisors have expanded and refined the data that are collected on the international exposure of our banks, and have participated with other countries in the compilation and publication of data on lending by major banks throughout the world. Both the data and supervisory practices regarding country risk exposure have been improved in a number of countries abroad, as well as in the United States. Banks are more aware now than ever before about the facts and the risks involved in international lending.

Some countries got into credit difficulties over this period. In a number of cases countries have had to seek rescheduling of their debts to avoid imminent default, and it would not be hard to list some current problem cases. Nevertheless, U.S. banks so far have been able to point to a lower average loss experience on foreign credits than the average experience on domestic credits.

Moreover, as I have mentioned, U.S. banks have slowed their lending to LDCs in the past few years. Using data for the major U.S. banks that account for a large part of total lending to these countries, we find that the ratio of claims on developing countries to total assets on the books of U.S. banks peaked at about 9 percent in 1976 and 1977, and is now probably slightly below that level. A comparable ratio for large foreign banks is somewhat lower but has been rising as those banks moved aggressively to increase their foreign lending. When the ratios are computed including claims on East European countries the ratio for foreign banks is quite close to that for U.S. banks. (See Chart.) From December 1977 to June 1979, the exposure of U.S. banks to non-oil developing countries also declined somewhat relative to capital. The averages, however, include a number of banks with larger exposures, both to the aggregate of the developing countries and to particular countries. (See Table 4.)

Disposition of the OPEC Surpluses

To round out the financial recycling picture, we can take a look at how the OPEC countries invested their surpluses. (See Table 5.) Those surpluses, after deducting about $4 billion per year of grants to selected countries, cumulated to $240 billion in the 1974-79 period. Of the major pieces that we can identify, with some estimates for 1979, about $50 billion came directly to the United States--mainly into bank deposits or into purchases of Treasury and other securities, plus a minor amount in direct investments; $95 billion went into banks in the Euro-currency market--of which 60-65 percent was in dollars; about \$9 billion into loans to international lending institutions such as the IMF and IBRD; and \$10 billion into assets in the United Kingdom other than Euro-currency deposits. That leaves a residual of some \$75 billion that has not been identified as foreign official holdings of OPEC. This was invested in ways that our statistics do not pick up, including much of what may have accrued to the private sector in those countries. Our partial information on the 1979 OPEC surplus does not indicate a major shift in the types of assets acquired, though a smaller percentage seems to have been lodged directly in the United States.

The Adjustment Process

Over this whole period, an overhanging question for oil-consuming countries has been to evaluate the appropriate mix between financing the deficits corresponding to the OPEC surpluses, or making some real adjustment to reduce the deficits.

Essentially this is a question of how best to share among countries and regions, and over time, the real burden of the higher relative price of oil received by the oil-exporting countries--the real counterpart to the tax.

An important aspect of this question is the mix of adjustment and financing that is appropriate for the non-oil developing countries. I have already discussed the financing side of their deficits. On the adjustment side, taken together they made a considerable effort. Between 1973 and 1978 their current account deficit rose by $19 billion, and that included a $16 billion increase in the oil bill of the countries that are net oil importers and an $8 billion increase in interest payments. Thus, their deficit on other trade and service transactions had, if anything, been reduced a little in nominal terms by 1978.

The performance was more impessive viewed in the context of the economic environment, their own growing economies and price changes. The growth rate of borrowing countries was fairly strong, while growth rates in their markets in industrial countries were slow. Their import prices (apart from oil) rose at least as fast as their export prices. Consequently, they apparently succeeded as a group in compressing their real non-oil trade deficit considerably. Several of these countries have become significant exporters of manufactured products. If we urge them to make real adjustments rather than borrow excessively in the years ahead, they, in turn, will expect us to keep our markets open to their goods. Indeed, in 1974, great concern was expressed about a possible increase in protectionism. There was some increase, but the record--aided in part by the OECD Trade Pledge--was remarkably clean.

Among the industrial countries, the issue of adjustment versus financing takes on a somewhat different aspect. If the industrial countries all try hard to improve their trade balances, while the OPEC surplus is largely unaffected by such actions, the only outlet would be even larger deficits for the developing countries. (I am ignoring, for simplicity, the situation of Eastern Europe and other world areas.)

The traditional notion is that a successful industrial country ought to have a current account surplus. According to this view, as each of these countries records a deficit, it should launch efforts to return to surplus. I am not against surpluses, but it seems obvious that while efforts to reduce the OPEC surplus are sensible, efforts to push off the corresponding OECD deficit from one country to another will ultimately be frustrated. We may not be able to form a concrete view of what an acceptable deficit for a particular industrial country may be in these circumstances, but we have to avoid the view that only surpluses are acceptable because some countries will have to be in deficit. In the case of the United States, it seems to me clear that our current account deficit--aided by OPEC and our own rapid expansion--was too large for too long. We have just seen a remarkable shift in the current account pattern within the industrial countries. The combined German and Japanese current account balances shifted from a surplus of over $25 billion in 1978 to a deficit of over $13 billion in 1979, while the U.S. current account balance shifted in the opposite direction--from a deficit of $14 billion in 1978 to near balance in 1979. While the precise "equilibrium" pattern cannot be precisely identified, it is clear we cannot make long-run progress collectively if we are forced to repeat the 1977-78 cycle of large U.S. current account deficits <u>and</u> a quick reversion to surpluses in other major OECD countries.

Summing up the responses to the oil shock of 1973-74, we have seen only very partial approaches to solving the longer-run energy problem. We have not restored consistent forward momentum in world economic activity. We managed to reduce inflation rates only briefly; the rate of U.S. consumer price inflation was 5.8 percent in 1976 and has steadily increased since then; the average rate of consumer price increase in the major foreign industrial countries reached a low of 6.3 percent in 1978. Inflation rates spurted again last year, contributing to the OPEC price increases and slower growth rates toward the end of the year. We have seen some adjustment by the developing countries, but their growing debts are a burden to them and a matter of concern for the exposure of commercial banks. In a sense, we muddled through the post-1973 period without really dealing effectively with the problems, and we lost some of the sense of urgency for doing so because no disasters occurred.

THE CURRENT SITUATION

We come now to 1979, when developments in Iran early in the year exposed again our vulnerability to even small changes in oil supply. Our oil import prices rocketed once more--by about $12 a barrel, or 87 percent, between the end of 1978 and the end of 1979--and another $5 a barrel has been added in early 1980.

In the current cyclical situation the world economy is somewhat less vulnerable to an exogenous shock than it was in the 1973 boom. Growth rates are steadier, though slower than many countries would like, and productive capacity generally is not under strain. We have not seen a general speculative buildup of inventories. Though the absolute dollar size of the recent oil price increases is about double the 1973-74 increase, in the perspective of today's economics, the impact is broadly comparable; scaling the increase in oil import bills by GNP reveals that on average the rise is similar to that in 1973-74. On the financing side, the IMF is better equipped to provide medium-term financing, and commercial banks have gained considerable experience in dealing with capital flows on a scale that would have seemed almost unimaginable just seven years ago. The developing countries as a group have managed to add considerably to their reserves, and part of that increase provides a cushion against any temporary financing problems. Against these positive factors, however, are others that point to a very difficult path ahead.

A basic concern is that it has proven to be extremely difficult for oil-importing countries to set in motion the energy policies and programs that would give them some reasonable leeway from dependence on continued high levels of oil production by OPEC. It is true that we and other major industrial countries have cut our oil consumption relative to our total economic output by a significant amount. From 1973 to 1979 real GNP rose 17 percent in the major industrial countries, while oil consumption rose 4 percent; in contrast, from 1967 to 1973, oil consumption rose significantly faster than real GNP. Although recently some downward pressure on oil prices in the spot market has developed, in the period ahead the oil-importing countries have no other choice but to strive to remove the pressure of demand on available oil supplies in order to reduce the upward pressure on oil prices. Such pressure arises to a considerable extent from a scramble to add to inventories in the face of our uncertain supply situation. If we do not achieve a better balance between demand and supply, we can expect a continued rise in the real price of oil.

Even if we are more successful in containing oil price increases in the future than we have been recently, we must anticipate that the OPEC surplus will not recede quickly from its 1980 rate, as it did after 1974. One factor in this prospect is that, unlike the experience after the earlier episode, the OPEC countries, having built up their imports at a rapid pace after 1973, are less likely to begin another import spurt. A second factor is the rising flow of income to OPEC countries on their mounting foreign assets. I should emphasize that in 1974 most observers also had difficulty in seeing how the OPEC surplus could decrease rapidly, unless OPEC itself fell apart. Nevertheless, we must weigh seriously the possibility that the impact of this second major episode of increases in oil prices will not soon lose its sting.

If the OPEC surplus is stubborn, the recycling problem will also be stubborn. Last year, when the OPEC surplus zoomed by more than $50 billion, the deficit of the developing countries rose by some $15 billion to close to $40 billion. Most of the additional financing required seems to have come from larger credits from private sources and a slowdown in reserve accumulations--though reserves of developing countries as a group did continue to rise. Net new credits from commercial banks probably totalled more than $30 billion--considerably more than the rise in net bank lending to these countries in 1977 and 1978.

This year the deficit of the developing countries is expected to rise by another $20 billion to about $60 billion. There is some scope for financing the higher deficit by drawing down reserves rather than accumulating them, and also by making use of the resources of the IMF. But unless net new financing by banks is available on about the 1979 scale, the developing countries will either have to reduce their reserves substantially, or make a large unanticipated cut in their non-oil imports, implying a reduction in their growth rates. If they cut imports sharply, the United States and other industrial countries will feel the economic effects.

I believe it is especially important under the circumstances for the IMF to play a strong role. The Fund has considerable financial resources--about $23 billion of immediately available funds as well as its holdings of gold. Fund resources have been replenished in the past few years, in part, by net repayments of post-1973 borrowings by developing and other countries and, in part, by an increase in IMF quotas in 1978 and the establishment of the Supplementary Financing Facility in 1979. At this time U.S. participation in a further increase in Fund quotas is under consideration by Congress. In my view, this strengthening of the financial resources of the Fund is an essential element in preparing for the strains that may come in the years immediately ahead. The role of the Fund is important not only because that institution has sizable financial resources, but mainly because through the good offices of the IMF there is a better chance to achieve the right mix between adjustment and financing.

Although there is still some leeway, it seems to me, for reasonable increases in bank lending to these countries, one potential danger in the recycling process that we must avoid as far as possible is the overloading of the commercial banking system. Ratios of loans to capital or assets, which have tended to decline a bit for American banks as a group recently, do not suggest a near-term problem. But that is only part of a picture that must include evaluation of the condition of borrowers generally, and still more important, individually.

One measure of the exposure of developing countries in the aggregate is the fraction of their exports needed to meet interest and amortization payments of their medium and longer-term external public debt. This ratio has risen from about 9 percent in 1973 to about 17-1/2 percent in 1979. Much of the rise reflects increased amortization payments in 1978 and 1979. The rise in interest payments has been more gradual. (See Table 6.) Such debt service ratios are not always a good measure of real debt burdens. That burden has not risen as rapidly as it might have over recent years for several reasons, including one that has been particularly disturbing: rapid inflation. But this is an unsustainable process. Countries cannot expect stability to be restored externally or internally by counting on inflation to reduce the real values of their debts.

The average debt burden is not at all representative of a number of countries that have borrowed heavily in private capital markets. The number of countries with arrearage problems and rescheduling needs has increased since 1975. In many cases, however, these difficulties can be traced to poor management of the economies of individual countries rather than to high debt burdens. On the whole, the record since 1973 has shown that outright defaults by borrowing countries are virtually non-existent. Publicized rescheduling of private credits has involved only a limited number of countries and has not involved severe losses. Of course there have always been reschedulings and other adjustments arranged between banks and their customers that do not come to public attention. However, the essential point is that the system must remain strong and flexible enough that problems of individual countries can be worked out without leading to generalized problems.

The impression I get from the data that I have reviewed is that the recycling process has not yet pushed exposures of either borrowers or lenders to an unreasonable or unsustainable point, in the aggregate, especially for American banks whose share in total bank lending to non-oil developing countries in recent years has declined and whose share of claims on these countries in total assets has also declined. But problem cases exist now and will no doubt continue to show up. This is where I see the IMF as a most helpful participant in the recycling process.

What is desirable is that when authorities in borrowing countries see trouble ahead they consult with the IMF promptly to develop a program that will maintain their status as creditworthy borrowers. Moreover, it would be helpful if commercial banks, when they recognize that a liquidity problem is developing, would urge the country concerned to seek the advice of the Fund, as well as the Fund's assistance in working out a smooth transition to a more viable rate of external financing. The commercial banks should also structure their lending policies so as to support the Fund's role in the adjustment process.

It is broadly accepted that developing countries, in general, will be importers of capital--what we have to guard against is the danger that easy access to external financing will result in wasting the borrowed funds and lead to fiscal and monetary policies that generate explosive inflations. In this connection, lenders can be expected to demand higher spreads in their lending. We saw from late 1977 to mid-1979 a dramatic reduction in spreads on loans to non-oil developing countries. (See Table 7.) Higher spreads and shorter maturities may well be necessary to induce lenders to assume the greater economic and political risks in lending in the current environment.

Though we have been concerned with the financial integrity of U.S. banks in urging them to be prudent in their foreign lending, we also believe such a posture is consistent with the long-run best interests of the borrowers. I believe we could live with the recycling situation as it is today for a period of time, though it would be foolish not to expect some hard cases to emerge. But, I also believe that our capacity to deal with this problem as time passes could increasingly be stretched close to the limit. In that light, borrowing countries should lose no time in developing policies to maintain their credit worthiness. And it seems to me lenders and borrowers alike--that is the great bulk of the world--have the strongest kind of self-interest in actions to avoid appreciable further increases in oil prices at a time when adjustment and financing capabilities already will be increasingly stretched.

I cannot leave this subject without commenting on the enormous problems of economic management in the United States, and in every oil-consuming country, that have been aggravated by pressures on world oil markets. Even without the difficulties caused by recent pricing and production decision, we would have needed to accommodate a vast change in the way we use and produce energy. The continued upward pressure on our price level that comes from higher oil prices is extraordinarily difficult to contain. The result is that we have to push harder against inflation than ever before and risk damage to economic activity here and abroad.

At the same time, we must expect the domestic cost of energy to rise--realistically, that must be a significant part of the way we restore balance in our energy sector. And, unless we restore that balance, we will not be able to extricate ourselves from the uncertainty and instabilities associated with repeated cycles of ever higher oil prices, higher OPEC surpluses, and higher deficits of oil-importing countries. The recycling process has worked smoothly to date--the real process of adjustment less so. Let us not delude ourselves: financial flows cannot fill indefinitely a gap that must be covered by conservation, production, and new forms of energy. Our past success in recycling--and the role it can play today--must not lead us to stretch that process to the breaking point.

* * * * * *

Table 1

Regional Current Account Balances

(Balances on Goods, Services, Private and Official Transfers; billions of dollars)

	1973	1974	1975	1976	1977	1978	1979[e]
OECD	10.1	-27.1	-0.4	-18.2	-24.8	10.9	-32
OPEC	8.0	70.0	31.0	37.0	30.0	7.0	65
Non-oil Developing Countries 1/	-7.1	-24.4	-31.9	-20.2	-14.3	-25.7	-39
Other 2/	-3.5	-9.5	-18.0	-13.0	-8.5	-9.5	-11
Statistical Discrepancy 3/	-7.5	-9.0	19.3	14.4	17.6	17.3	17

1/ Principally IMF members not included in OECD or OPEC.
2/ Principally Sino-Soviet area and East European countries.
3/ The sign of the discrepancy is such that when added to the sum of the individual regional current accounts the total is zero; e.g., a positive discrepancy offsets a global current account deficit.

e = estimate.

Table 2

Total Bank Claims on Non-Oil Developing Countries and Eastern Europe
(billions of dollars)

	December 1974[e]	December 1975	December 1976	December 1977 1/	December 1978 2/	September 1979
Claims on Non-Oil Developing Countries						
U.S. Banks	23.8	33.4	41.7	47.7	49.4	55.4
Non-U.S. Banks	20.0	29.6	39.2	51.1	72.3	91.8
Subtotal	43.8	63.0	80.9	98.8	121.7	147.2
Claims on E. European Countries						
U.S. Banks	3.0	3.7	5.2	6.5	6.9	7.3
Non-U.S. Banks	11.9	19.7	25.8	35.6	46.2	52.3
Subtotal	14.9	23.4	31.0	42.1	53.1	59.6
Total Claims						
U.S. Banks	26.8	37.1	46.9	54.2	56.3	62.7
Non-U.S. Banks	31.9	49.3	65.0	86.7	118.5	144.1
Total	58.7	86.4	111.9	140.9	174.8	206.8

Sources: BIS Quarterly data on banks claims and Federal Reserve and Treasury Banking data.
1/ Beginning December 1977, banks in Austria, Denmark, and Ireland began reporting to BIS.
2/ Beginning December 1978, excludes customers claims of domestic offices of U.S. banks.
e Partly estimated.

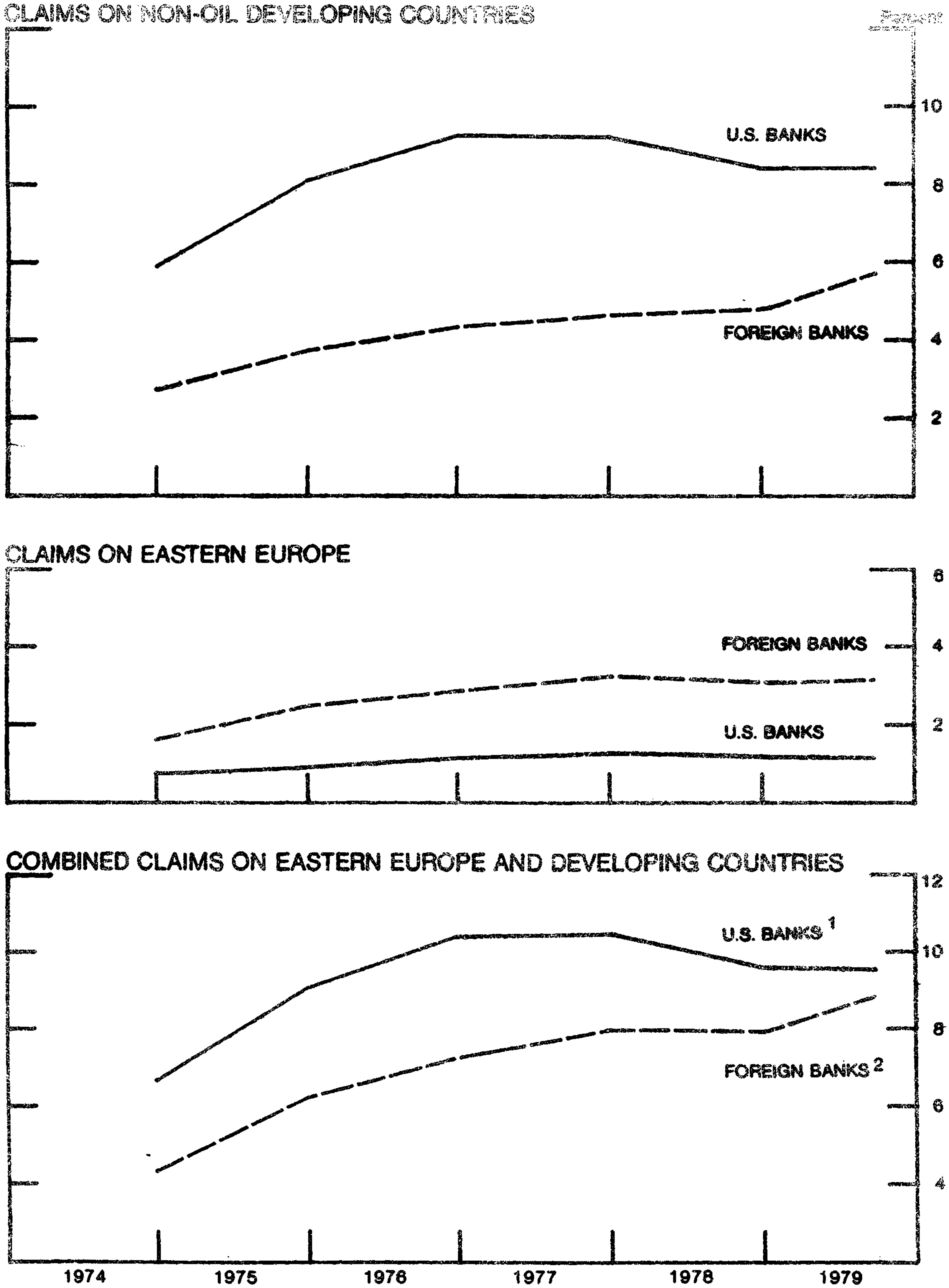
Table 3

Financing of the Deficits of Non-Oil Developing Countries
(billions of dollars)

	1973	1974	1975	1976	1977	1978	1979[e]
Current Account Deficit	-6	-24	-32	-20	-14	-26	-39
Net Long-Term Borrowing from Official Sources			11	9	11	12	14
Net Borrowing from Banks	9	16	19	18	18	23	32
Other Net Capital Inflows	1	4	3	4	-3	3	1
Equals: Reserve Increase	8	3	1	11	12	13	8

e Partly estimated.

Bank Claims as Percent of Assets



1. Computed for the 24 largest U.S. banks that account for five-sixths of lending to developing countries.

2. Computed for 34 large foreign banks.

Table 4

Exposure Relative to Capital for Groups of U.S. Banks 1/
(Percent)

Country	December 1977: All U.S. Banks 2/ (1)	December 1977: Nine Largest Banks (2)	December 1977: Next Fifteen (3)	December 1977: All Others 3/ (4)	June 1979: All U.S. Banks 2/ (5)	June 1979: Nine Largest Banks (6)	June 1979: Next Fifteen (7)	June 1979: All Others 3/ (8)
Non-oil Developing	115	156	105	61	112	161	109	
Argentina	6	9	5	3	7	10	7	
Brazil	30	40	28	16	28	39	28	
Mexico	28	32	29	21	21	27	23	
Philippines	5	7	6	2	6	10	7	
South Korea	8	12	6	4	11	17	10	
Taiwan	7	10	6	3	7	10	7	
Subtotal (6 countries)	84	110	80	49	80	113	82	
Eastern Europe	18	25	16	9	15	21	15	[illegible]
Combined Total	133	181	121	70	117	182	124	60

1/ Exposure after reallocating claims from country of obligor to country of guarantor. Capital defined as equity, subordinated debt, and loan-loss reserves.
2/ All 128 U.S. banks completing the Country Exposure Report.
3/ Remaining 104 U.S. banks completing Country Exposure Report.

Table 5

Estimated Disposition of OPEC Surpluses
(Billions of dollars)

	1974	1975	1976	1977	1978	1979e
Estimated Current Account Surplus	70	31	37	30		65
Investments						
In the United States	12	10	12			
In the United Kingdom	8	*/	-1	-	*/	
In the Eurocurrency Market 1/	22	8	13	12	3	38
In international financial institutions	4	4	2	*/	*/	-1
Subtotal	46	22	26	22	4	46
Unidentified investments (net)	24		11			19

e Estimate
*/ Less than $0.5 billion.
1/ Including minor amounts of domestic currency banks deposits outside the United States and United Kingdom.

Table 6

Debt Service Obligations of Non-Oil Developing Countries
on Medium and Long-Term Public Debt
(billions of dollars)

	1974	1975	1976	1977	1978	1979 [e]
Debt Service [1/]	8.7	10.6	12.9	17.2	27.0	33.0
Interest payments	3.1	4.2	5.1	6.3	8.9	12.5
Amortization	5.5	6.3	7.8	10.9	18.1	20.4
Merchandise Exports	96.3	92.0	113.1	134.9	152.4	189.0
Ratios:						
Debt Service/Exports	9.0	11.5	11.4	12.7	17.7	17.5
Interest payments/Exports	3.2	4.6	4.5	4.7	5.9	6.6

e Estimate.
1/ IBRD reports

Table 7

Spreads and Maturities on Syndicated Bank Loans to Non-Oil Developing Countries and Eastern Europe

Date		Average Spread 1/		Average Maturity 2/	
		Non-oil Developing	Eastern Europe	Non-oil Developing	Eastern Europe
1973:	Q_4	1.17	.59	10.8	8.8
1974:	Q_4	1.46	3/	7.5	3/
1975:	Q_4	1.82	1.49	5.4	5.5
1976:	Q_4	1.90	1.33	5.1	5.5
1977:	Q_4	1.76	1.16	7.3	6.0
1978:	Q_4	1.04	.75	9.8	6.7
1979:	Q_1	.94	.89	9.9	7.3
	Q_2	.79	.78	9.0	6.8
	Q_3	.80	.78	10.1	7.2
	Q_4p	.91	.63	8.4	8.8

1/ Unweighted data on spreads in basis points on syndicated bank loans to nine developing and four Eastern European Countries.
2/ Average maturity from date of credit agreement to date of final repayment.
3/ No credits granted.

Source: International Bank for Reconstruction and Development.