

ESSAYS IN INTERNATIONAL FINANCE

No. 111, June 1975

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DEFICITS MANAGEABLE?

GERALD A. POLLACK



INTERNATIONAL FINANCE SECTION

DEPARTMENT OF ECONOMICS

PRINCETON UNIVERSITY

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Are the Oil-Payments Deficits Manageable?

The quintupling of oil prices within a period of two years has confronted oil-importing nations with a multitude of difficult political and economic problems. Paramount among these is the question whether the international payments system will be able to weather the strains involved in massive financial transfers to nations whose low absorptive capacities, in many cases, prevent them from increasing expenditures abroad in step with the explosive increase of their income. In 1974, the first full year of sharply higher oil prices, the nations of the Organization of Petroleum Exporting Countries (OPEC) enjoyed a current-account surplus with the rest of the world estimated at \$55 billion. In 1975, notwithstanding a serious recession in the industrial world, the OPEC surplus is generally expected to be almost as great. Is it realistic to expect that the oil-importing countries will be able to finance the extraordinary deficits that correspond to OPEC's surpluses? The unprecedented magnitude of the problem and the uncertainty of the outcome led one participant at the September 1974 annual meeting of the International Monetary Fund to say, according to the *New York Times*, "On Mondays, Wednesdays, and Fridays, I think we're all going to fall into some kind of chaos that I cannot exactly describe. On Tuesdays, Thursdays, and Saturdays, I think we'll get through it all right. On Sundays, I stop thinking and rest."

Financing Prospects

An assessment of the prospects for financing can start with the observation that, whatever the oil deficits are, they *will* be financed, right down to the last cent. What is more, directly or indirectly, the requisite financing will be provided entirely by the OPEC countries themselves.

Unfortunately, these observations do not resolve the problem. To say that all deficits will be financed is only to say that the balance-of-payments suit will be cut to fit the financing cloth. There can never be a deficit that is not financed. So the question is really whether, after all the forces bearing on oil have worked themselves through, the resulting deficits reflect levels of oil supply, economic activity, and real income that the various countries can live with.

Perhaps, before proceeding, it would be well to explain how we can be so sure that OPEC will exactly finance whatever oil deficits emerge. The reason is that the OPEC nations, being unable to spend all their

sharply increased foreign-exchange earnings, must necessarily accumulate assets which, by their very nature, have to remain within the money and capital markets or the industrial structure of the oil-importing countries. For example, if the OPEC countries were completely passive, their foreign investments would take the form of the currencies or demand deposits received for their oil. Since every dollar of OPEC surplus corresponds to a dollar of an importing country's deficit, and since every dollar of surplus is invested abroad somewhere, it follows that the total amount of financial recycling by OPEC nations will exactly suffice to close the collective oil-payments gap of the importing countries. The trouble with this seemingly comforting line of reasoning is, again, that OPEC investments will cover the importing countries' deficits as fully when the deficits are large (and the associated oil flows ample) as when the deficits are small (and the oil flows so inadequate that industrial production falters). Thus, recycling will always suffice to cover the collective current-account oil deficits of the importing countries, but we cannot be certain whether it will do so in a manner consistent with acceptable levels of real income in the various importing countries.

The problem of oil financing, or "petrodollars," or "recycling," as it is variously termed, has numerous roots: sharply higher prices for oil; the price inelasticity of the demand for oil, particularly in the short run; the limited absorptive capacity of a number of key oil-producing countries; and meager prospects, at least in the near term, for substantially increased energy production outside the present OPEC membership. These circumstances result in greatly increased revenues to the oil exporters, but considerably smaller increases in their imports from the rest of the world, so that the OPEC countries amass vast financial surpluses. The oil-exporting countries recognize that this process creates hardships for some of their customers, and they are prepared to join the industrial nations in providing some financial assistance. Beyond that, however, they have assumed no responsibility for the financial needs of the oil-importing countries. They give evidence of being prudent and conservative investors and have so far favored liquid assets in strong financial institutions and strong countries.

Adam Smith is remembered, among other reasons, for divining that competition, like an "invisible hand," transmutes the selfish actions of individuals into the common good. Such an "invisible hand," however, cannot be counted on in all situations. OPEC itself, for example, is not exactly the kind of competitive set-up that Adam Smith had in mind. And Keynes's *General Theory* demonstrated that individual thrift, gen-

erally regarded as a virtue, could lead to high unemployment and economic stagnation when practiced by everyone.

All this has applicability to OPEC's investment predilections. Although their investment decisions make a great deal of sense from the viewpoint of an individual engaged in prudent financial management, their decisions in aggregate could have harmful consequences. They could preclude a satisfactory recycling process, with adverse repercussions for income, output, and employment in the entire community of nations and for long-term growth prospects of the developing countries.

How might this happen? A key aspect of the recycling problem is the question of who bears the credit risks involved. The OPEC countries—not unreasonably—have exhibited a clear preference for low-risk investments. Roughly two-thirds of the \$55 billion OPEC surplus in 1974 was invested in liquid assets—one-half in bank deposits and one-sixth in government securities. Only about 5 per cent was made available as direct grants and loans to developing countries (see Table 1).

TABLE 1
ESTIMATED DISPOSITION OF OPEC SURPLUSES IN 1974
(in billions of dollars)

Bank deposits		\$27.5
Dollars in United States	\$ 4.5	
Sterling in United Kingdom	2.5	
Eurocurrencies	20.5	
Marketable government securities		9.5
United States	6.0	
United Kingdom	3.5	
Direct investments in developed countries		0.8
Portfolio and real estate investments in developed countries		1.0
Direct loans to official institutions in developed countries		6.5
Loans to international financial institutions		4.2
International Monetary Fund	2.0	
World Bank and other development banks	2.2	
Direct grants and loans to developing countries		2.5
Other		3.0
Military-assistance grants to Arab nations	1.8	
Debt repayment	0.7	
Participation payments to oil companies	0.5	
Total		\$55.0

SOURCE: Morgan Guaranty Trust Company.

In effect, the OPEC countries have placed their funds in currencies and financial institutions of their choice and left it to those institutions and other intermediaries to assume most of the credit risks associated with recycling these funds to needy oil-importing countries. The general nature of this process is indicated in Table 2, which lists the estimated current-account deficits of major industrial countries in 1974 and government actions to finance them.

TABLE 2
ESTIMATED CURRENT-ACCOUNT POSITIONS IN 1974 AND
GOVERNMENT FINANCING ACTIONS
(in billions of dollars)

	Current Account		Capital Account		
	Overall Balance	Increase (—) in Net Oil Expenditures from 1973 (c.i.f.)	OPEC Deposits, Loans, and Investments	In Private Money Markets	Known Government Borrowing Commitments From IMF, EEC, Other Governments
U.S.	-\$4.0	-\$17.8 ^a	\$11.0	\$ 0	\$ 0
Germany	8.6	— 6.7	0.5	0	— 2.0 ^b
U.K.	— 9.2	— 6.5	6.0	4.2	0
France	— 6.1	— 6.9	1.2	2.8	0
Italy	— 9.0	— 5.4	1.2	2.0	6.2
Japan	— 4.6	— 14.4	1.0	8.6 ^c	0

^a f.o.b.

^b Bundesbank loan to Italy, included in Italy's \$6.2 billion borrowings.

^c Includes \$8.5 billion of interbank borrowing which the Japanese government encouraged the commercial banks to undertake.

SOURCES: National Statistics, U.S. Commerce Department, Morgan Guaranty Trust Co.

Germany was in the strongest position, retaining a current-account surplus of nearly \$9 billion despite a \$6.7 billion increase in oil-import expenditures. Far from seeking to borrow money abroad, the German government, via the Bundesbank, provided Italy with a \$2 billion credit. The United States was in a strong position too. Although it had the largest increase in oil payments, strength in other trade and service items reduced the current-account deficit to \$4 billion, and this deficit was considerably less than some \$11 billion of capital inflows from OPEC.

The other major oil-importing nations were in less comfortable posi-

tions. The United Kingdom was able to cover its higher oil-import bill with capital inflows from OPEC, but the need to finance a large current-account deficit led the government to arrange substantial credits in the Eurocurrency market, some of which were not called upon until the early part of 1975. France, Italy, and Japan received far less capital from OPEC than was needed to finance their increased oil-import bills. Moreover, while France and Japan were able to obtain needed Eurocurrency and interbank loans, Italy's attempts to borrow in the private capital markets were only partially successful. In the face of widespread concern regarding its creditworthiness, the Italian government was obliged to resort to more than \$6 billion of borrowing from official lenders—the International Monetary Fund, the German government, and the Common Market.

Apart from this official lending to Italy, most of the intermediation has been done by the large banks of the Eurocurrency market, the United States, and Germany. Publicly announced Eurocurrency bank credits rose by \$28.0 billion in 1974, while U.S. and German banks increased their foreign loans by \$18.3 and \$8.3 billion, respectively.

As 1974 progressed, however, these private institutions were unable to maintain their early pace of intermediation. They were increasingly limited not only by considerations of borrower creditworthiness but also by other constraints of sound management. OPEC contributed to these additional constraints. The conservatism that manifested itself in risk aversion was also manifest in a strong preference for short-term, and therefore highly liquid, investments. This preference runs counter to the oil-financing needs of the importing countries, which are generally medium- to long-term. Unfortunately for the recycling process, there are limits on the degree to which a bank can build medium- and long-term loans on a foundation of short-term deposits. And, as 1974 unfolded, those limits were apparently reached in a growing number of cases.

As a result of the various constraints, the pace of new Eurocurrency bank-credit announcements slowed sharply in the second half of 1974: 71 per cent of the year's \$28.0 billion total fell in the first half, 16 per cent in the third quarter, and only 13 per cent in the fourth quarter. In the case of U.S. banks, actual loan utilizations, as distinguished from credit announcements, followed the same general pattern, except that the fourth quarter was stronger than the third. On a seasonally adjusted basis, 69 per cent of the \$18.3 billion total occurred in the first half, 10 per cent in the third quarter, and 20 per cent in the final quarter.

As 1974 drew to a close, some mitigation of emerging strains appeared likely as a result of adaptation in the private markets and in OPEC investment patterns. For example, new issues on the international bond market rose toward the end of the year, offsetting some of the concurrent slowdown in bank lending. And it seemed likely that bond issues would be further encouraged by declining interest rates and waning inflationary pressures associated with the current world recession. At the same time, OPEC governments began to place funds directly with borrowers, with bankers acting as brokers in bringing lenders and borrowers together. This is a constructive way of harnessing banking expertise without subjecting the banks to risks and strains that could slow the flow of capital. Dr. Otmar Emminger, Deputy Governor of the Bundesbank, was recently reported to have said that several billions of OPEC dollars have been placed through the brokerage services of major European and American banks since June 1974.

Although these developments were promising, they did not go far enough to assuage mounting concern about the sustainability of the oil-distorted structure of international payments. It was clear that OPEC's liquidity preference and risk aversion were so strong that, even with some flexibility on OPEC's part, much intermediation would still be necessary to recycle funds more or less in relation to the needs of individual countries. And there was growing apprehension that intermediation through the private money and capital markets would be unable to keep pace with requirements because of limits set by the credit risks involved, the need to maintain a reasonable balance between the maturities of deposits and loans, inadequate bank capitalization, and other constraints on prudent management.

It was in this setting of mounting concern that a major breakthrough occurred. Through most of 1974, the U.S. government had emphasized the overriding importance of achieving lower oil prices. American officials had steadfastly opposed proposals for new official financing arrangements, evidently because they felt (correctly) that anything that facilitated financing would tend to keep oil prices from falling. In the middle of November, however, Secretary Kissinger announced a major change in policy. In a speech in Chicago, he proposed that the OECD nations create a "solidarity" fund to serve as a financial "safety net" in coping with the balance-of-payments strains of expensive oil. He suggested that the fund be fixed at \$25 billion for 1975, with additional amounts to be subscribed later in the light of future needs.

Political considerations were important, if not overriding, in the U.S. decision to change course. Earlier, the United States had scored a no-

table success in its efforts to rebuild the Western alliance after the divisive effects of OPEC embargoes and production cutbacks. It offered to share oil supplies in periods of emergency and to set up a cooperative system for this purpose within the Organization for Economic Cooperation and Development (OECD). This was an important step toward security of supply. But most oil-importing countries remained vulnerable financially. The Kissinger proposal for a solidarity fund was designed to mitigate this vulnerability and, in particular, to do so without any reliance on financial contributions from OPEC. Since OPEC's financial surpluses would, in any event, have to be invested abroad and, as a practical matter, mainly in the OECD countries, there was no doubt about the availability of funds for the OECD countries as a group. And the United States evidently wanted OECD nations to look "within the family" for financial help, even though the credit risks would also have to be borne by the OECD governments; to shift the credit risk to OPEC could have made the weaker OECD nations beholden to OPEC for financial assistance. Thus, the Kissinger plan provided the second main foundation stone—emergency supply sharing was the first—in a grand strategy for building up mutual security in the face of OPEC pressures.

The other OECD nations, perhaps more concerned about credit risk and less averse to reliance on OPEC financing, professed little enthusiasm for the Kissinger plan. They preferred, instead, a substantial enlargement of the IMF's special oil facility, to be financed largely by borrowings directly from OPEC countries. In the end, the inevitable compromise promised a surprisingly large pool of funds. The Kissinger plan was approved, subject to parliamentary ratification, with an initial capitalization of SDR 20 billion (roughly \$25 billion), and an SDR 5 billion (about \$6 billion) expansion of the IMF's special oil facility was authorized for 1975. It was subsequently agreed that contributions to the solidarity fund, or Financial Support Fund, as it was formally titled, could be in cash or in the form of guaranties for joint loans on behalf of the fund.

These decisions will not furnish \$31 billion of financing capability in 1975. Legislative action on the Financial Support Fund may not be favorable in all cases; the outcome in the U.S. Congress is particularly uncertain. Further, even if ultimate ratification were not in doubt, inevitable delays in the process of achieving it will virtually preclude the fund from beginning its operations this year. Finally, the \$25 billion fund will be made up of contributions or guaranties by potential debtors as well as by creditors, and will therefore provide far less than \$25 billion of usable funds. Possibly only half the \$25 billion—the quotas of

the United States, Germany, Switzerland, Austria, the Netherlands, Belgium, and perhaps a few others—may actually be available for lending. Still, it would be no mean achievement to create financing capabilities totaling around \$20 billion in the face of a problem that will assuredly be large, even in 1976 and beyond.

Do these recent developments suggest that the problems of financing oil deficits are being resolved, at least for the industrial countries? There is no way to be sure. The new multilateral arrangements, once put in place, will buy time. Acute financing problems will be pushed into the future, perhaps by several years. But whether the new arrangements will suffice depends on the size of future oil-related payments deficits. On this question, widely diverging expert opinions have been expressed during the past year, reflecting not only different perceptions of the problem at any given moment, but also a general tendency toward lower estimates with the passage of time. The economists of Morgan Guaranty Trust Company were among the optimists, projecting that OPEC's collective annual surplus would turn into a deficit in 1979, after the cumulative total peaked at \$248 billion in current dollars in 1978. Dr. Otnar Emming of the Bundesbank has suggested that OPEC's current-account surplus may be eliminated by 1980, and David Rockefeller, Chairman of the Chase Manhattan Bank, is reported to agree but to believe that the cumulative surplus will peak in the range of \$300-\$350 billion. The OECD's latest projections suggest that there will be little, if any, accumulation after 1980, when the accumulation will have reached \$200-\$250 billion in 1974 dollars. This would correspond to a range of some \$325-\$400 billion in current dollars.

The U.S. Treasury Department, in a paper by Deputy Assistant Secretary Thomas D. Willett delivered in January 1975, estimated that total OPEC accumulations by 1980 would reach \$200-\$300 billion in 1974 dollars, and this would represent a wide range of approximately \$300-\$500 billion in current dollars. The Treasury did not foresee a sharp decumulation after 1980. It did say that "accumulations would be unlikely to prove substantially higher in 1985 than in 1980, and there is a good chance that the 1985 figures would even fall below the 1980 level." Subsequently, Treasury estimates were revised downward. On May 5, 1975, Assistant Secretary Charles A. Cooper testified: "Current projections are that the accumulated investable surplus of the oil exporters as a group will have peaked by the end of this decade, if not before, in the range of \$170-\$250 billion (at 1974 prices)." This would be roughly \$275-\$400 billion in current prices. The World Bank is less optimistic. Its figures still point to an immense problem, although they have been revised down from earlier projections of a cumulative sur-

plus reaching \$653 billion by 1980 and \$1,206 billion by 1985 (both in current dollars). In an article in the January 1975 issue of *Foreign Affairs*, Hollis B. Chenery, Vice President for Development Policy of the Bank, said that OPEC's cumulative surplus might reach \$300 billion in 1974 dollars by 1980, and this would be equivalent to about \$500 billion in current dollars. He also suggested that OPEC's accumulation would continue into the 1980s. Subsequently, a World Bank study circulating confidentially among governments in April 1975 reportedly estimated that the cumulative OPEC surplus would reach \$460 billion in current dollars by the end of 1980 and continue from there into new high territory. And Arthur F. Burns, Chairman of the U.S. Federal Reserve Board, has reportedly suggested that OPEC's cumulative surplus might be as large as \$500 billion by 1980.

If the course of OPEC surpluses follows the path projected by forecasts at the low end of the range, the financing problem may prove to be manageable by private intermediation, direct lending by OPEC countries, bilateral loans among the OECD nations, and official facilities of the type already in place or expected to be established in the near future. Widespread awareness of the limitations of the private system may be causing excessive pessimism regarding its ability to play an important, continuing role. The potential for private intermediation in the future may have been somewhat depleted by last year's transactions, but it is far from exhausted. Lending constraints are being eased by the decline of short-term interest rates relative to medium- and long-term rates. This provides a stimulus for OPEC depositors to shift into deposits with longer maturity and for borrowers to seek loans with shorter maturity, thereby bringing into better balance the term structures of bank liabilities and assets. And the promise of a backstop of additional official credit may induce private lenders to step up their activities even before the expansion of multilateral facilities has actually been carried out.

If the accumulation of OPEC surpluses turns out to be at the high end of the range of the projections, however, financing may not be manageable without great difficulty, if at all. To be sure, there is likely to be more "give" in the system than first appearances might suggest. For example, while creditworthiness cannot be ignored by governments, official lending is not as narrowly constrained by considerations of creditworthiness as is private lending. And there are powerful influences tending to increase the willingness of governments to lend—influences that do not apply to private lenders. These are the unpleasant political and economic consequences of refusing to lend. We are all familiar with the argument that soft loans to poor countries are not only humanitarian

but serve the national security by helping to maintain political stability and keeping communism at bay. To these considerations must now be added a potent economic argument. In the absence of official lending, market forces could push up the exchange rates of the strong oil-importing countries—those which receive OPEC funds in excess of their own financing requirements and do not lend the excess funds to countries with shortfalls. The change in exchange rates would cause the strong countries to make room in their trade balances for goods that weak countries must sell, whether the strong countries like it or not. Thus the strong countries would have to endure temporarily, at least, the pains of lower output and higher unemployment because of the problems of the weak. There are advantages to a high or rising exchange rate, but the labor unions and the Hartkes and Burkes are more likely to see the drawbacks. The appreciation of strong countries' currencies could intensify pressures for import barriers, and these would simply make a bad situation worse. Under these circumstances, the governments of strong countries might be willing to close one eye to the credit risks involved in lending and opt for lending as the best of a sorry lot of alternatives.

The OPEC countries might also be prepared to expand their direct lending when compelled to confront the economic pressures generated by acute balance-of-payments disequilibria. Some of their loans would have the character of export credits, tending to support the demand for oil and thereby helping to maintain both price and volume of production.

Thus, the more serious the balance-of-payments strains of expensive oil, the greater will be the pressures for more official recycling by OPEC countries and by oil importers favored by capital inflows. But to speak of pressures for recycling is a far cry from saying that the pressures will suffice to call forth the requisite amount of financing. If OPEC's cumulative surplus mounts to the upper end of the range of the projections cited, sufficient financing may not be forthcoming to enable the importing nations to live more or less comfortably with expensive oil.

The Adjustment Process

To the extent that financing falls short, the world's oil trade will have to shrink back to a level that the importing countries can afford. This will result from the operation of the adjustment process. Price and income effects are the primary free-market ingredients of the process, and these may be supplemented by externally oriented governmental measures such as devaluation, import restrictions, exchange controls, and export promotion. In addition, selective internal measures directly aimed

at energy production and consumption may reduce the magnitude of both the financing and adjustment problems.

Free-market forces operate on the readily understood principles that the demand for oil varies inversely with price and directly with income. Empirical studies suggest that demand is actually fairly insensitive to price but responds quite strongly to income changes. The consumption-discouraging effects of OPEC's \$10-\$11 per barrel oil price have already been taken into account in most analyses. What need to be elaborated are the adverse income effects of expensive oil and the further price increases expressed in the importing country's *own* currency that adjustment may require even if the dollar price of oil remains unchanged.

Income Effects

Let us consider first the contractionary pressures on income stemming from increased oil bills. Because of the sharp escalation of oil prices, consumers in the importing countries have to spend a larger percentage of their incomes on petroleum products, and if they spend a larger percentage on oil, less remains for spending on other things.

The principal beneficiaries of higher oil prices have been, of course, the OPEC nations. The benefits have also extended, although to a smaller degree, to other energy exporters and, to the extent that public policies in the oil-importing countries permitted prices of indigenous energy supplies to rise, domestic suppliers of energy and their "partners," government tax agencies. Spending increases by these beneficiaries will tend to offset at least part of the decline in consumer spending. Thus, some of the shortfall of spending will be offset by increased exports to the OPEC countries. But many of these countries, because of their rudimentary economies, are unable to increase their expenditures on imports in step with the explosive growth of oil revenues. Consequently, for a number of years, higher exports to the OPEC nations will offset only a portion of the greatly increased payments to them for their oil.

In the very short run, the transfer of income to energy companies, and, through taxes, to their governments could also contribute to the shortfall of spending. (If the income transfer to them is far smaller than that to OPEC, as it was in recent experience, the impact is of course correspondingly less.) The shortfall, in this instance, arises because both businesses and governments tend to adjust their current and capital expenditure programs to unforeseen revenue changes only with a time lag, whereas higher energy prices probably affect consumer spending immediately. But after a relatively short time lag, business expenditure programs are usually brought into line with revenues, and government

spending, which always tends to strain at the budgetary leash, is also likely to increase.

More generally, energy-related investments in the oil-importing countries will probably rise in response to higher oil prices and national policies designed to reduce dependence on oil imports. It is unlikely, however, that higher exports to the OPEC nations and induced increases in investment and other expenditures in the home economy will completely make up for the spending reductions caused by increased oil prices. Therefore, higher oil prices are likely to be associated in the oil-importing countries with lower demand for domestic output and a resulting tendency for income and employment to fall. Lower levels of economic activity would bring about a reduction in oil consumption, too.

If recycling worked well, the deflationary drag on output and employment in the oil-importing countries would be only a one-time, nonrecurring experience, although lagged effects might stretch that experience across several years. What matters in this regard is not so much whether a country has a large current-account deficit, but whether that deficit is increasing or decreasing in the context of an otherwise stable economic environment.

On the other hand, the drag of higher oil prices on living standards would be permanent, except in the somewhat unlikely event that increased energy prices resulted in a shift from consumption to investment that raised productivity above the trend that would otherwise have prevailed. Higher oil prices entail a continuing transfer of wealth to the oil-exporting nations. Even when full employment has been restored, the residents of the oil-importing countries will have to part with more of their output than before if they want to import the same volume of oil. In other words, although the people of the consuming countries may work as hard as ever, an hour's pay will command fewer goods and services than would have been the case if oil prices had not climbed so sharply. Rising productivity will eventually restore living standards to the same absolute level as before and, with the further passage of time, raise them still higher. But unless the rising trend of productivity is accelerated as a result of structural changes induced by high oil prices, living standards will never catch up with the level they would have reached in the absence of substantial transfers of wealth to oil-exporting nations.

Some notion of the deflationary blow of higher oil prices to output and employment in the oil-importing nations is provided by the \$50 billion deterioration in their collective current-account deficit with OPEC from 1973 to 1974. Correspondingly, OPEC's current-account surplus

rose from about \$5 billion in 1973 to \$55 billion last year. Actually, the deflationary effect was somewhat larger than the \$50 billion current-account shift would suggest, because the world recession, for which higher oil prices were partly responsible, moderated the volume of oil imports in 1974 and thereby restrained the deficit.

Ironically, the recessionary burden of last year's current-account changes fell disproportionately on the oil-importing developing countries, which could least afford it. Preliminary data and rough estimates suggest that, on top of a deterioration of approximately \$10 billion with OPEC, these nations experienced an adverse current-account shift of some \$5 billion with the OECD nations. For their part, the OECD group suffered an adverse swing of more than \$40 billion with OPEC that was reduced to a global deficit of about \$35 billion as a result of surpluses with the oil-importing developing countries and South Africa.

If the concept of a "full-employment current-account position" were applied, providing, as it were, cyclical adjustment to the data and paralleling the use of the "full-employment budget" in fiscal affairs, the oil-importing nations' hypothetical current-account deficit in 1975 might well be somewhat higher than the comparably adjusted number for 1974. If so, this would add further downward pressures to the lagged deflationary effects of the earlier shift. As actually measured, the overall current-account deficit may be somewhat smaller this year than last. This should not be construed as an expansionary development, however, since most or all of the decline would merely be a result of the recession.

Price and Exchange-Rate Effects

What about price effects, above and beyond those resulting from OPEC's initial price increases? This brings us to the role of exchange-rate movements in the adjustment process. Suppose that a country, because of balance-of-payments strains caused by higher oil-import bills, experiences a depreciating exchange rate. Unless that country is the United States, the result is likely to be a rising internal price for oil. The reason, of course, is that the world price of oil is denominated in dollars, so that when anyone devalues relative to the dollar, the local-currency price of oil rises. Thus, oil consumption would be further discouraged.

At their ministerial meeting in Libreville, Gabon, early in June, the OPEC countries reportedly agreed to shift from dollar to SDR pricing of oil; this decision, however, is not to be implemented before October 1, 1975. Once accomplished, declining values of currencies other than

the dollar would lower the dollar price of oil somewhat, because the value of the dollar would be rising in terms of the SDR, and the foreign-currency price of oil for countries with depreciating exchange rates would not rise as sharply as under dollar oil pricing.

Devaluation tends to raise the local-currency prices of all imports, not just oil, and many internal prices as well. This brings about cuts in real income, reinforcing the effects described earlier and adding to the downward pressures on oil consumption.

Can the solution be found, as some have suggested, in the workings of the flexible exchange-rate system? Indeed, to put the matter more stridently, what sense does it make to speak of unbearable balance-of-payments pressures in the context of flexible exchange rates? Wouldn't exchange-rate adjustments lead to a new equilibrium without any disruption of the payments system?

We have already noted that every dollar of OPEC surplus corresponds to a dollar of importing-country deficit and that all of OPEC's financial surpluses must be invested abroad somewhere. If each oil-importing country were able exactly to cover its increased oil-import bill with investment funds from the oil-exporting nations, the exchange-rate structure would not deviate from what it would have been had oil prices remained stable. Of course, it would be a highly unlikely coincidence if capital flows before compensatory financing by governments actually corresponded to the current-account requirements of the various nations. In practice, some would get more capital than they needed, and others less. The exchange rates of the former would tend to rise, and those of the latter to decline.

Such exchange-rate movements could, in principle, do the job unless they were to involve a dollar devaluation that led OPEC to frustrate the influence of the exchange-rate movements by imposing a compensating oil-price increase. To be sure, extremely large devaluations and correspondingly large cuts in living standards might be required for some countries. But even if those were acceptable to the countries concerned, the nature of the oil-payments problem is such that their trading partners might intervene with import barriers, export subsidies, or exchange controls to prevent currency changes from working their normal effects.

To understand why, we must go back to a key aspect of the problem posed by high oil prices. This is the limited absorptive capacity that prevents a number of the OPEC countries from increasing their spending on imports in step with the immense increases in their oil revenues. As a result, oil-importing countries, collectively, cannot hope to pay their increased oil-import bills with the proceeds of higher exports to OPEC.

The gap that remains *after* OPEC has spent to the limits of absorptive capacity is staggering, as is indicated by the estimated \$55 billion current-account deficit all oil importers jointly experienced vis-à-vis OPEC in 1974.

But what is so bad about a large current-account deficit? To put the question differently, would there be no problem if OPEC could spend all it earned? The fundamental answer is that an increase in imports that can be offset by higher exports probably entails no contractionary pressures on output and employment as a whole. Of course, importing oil on a "pay-as-you-go" basis would not be a painless alternative. Living standards are impaired when a larger portion of national output must be exported to pay for roughly the same quantity of oil as before. The "buy now, pay later" option at least delays the day of reckoning for domestic consumption. But of the alternatives—contractionary pressures on output and employment resulting from an adverse current-account shift, or living standards impaired by an adverse swing in the terms of trade—the former is probably the more difficult to bear. Thus, on balance, the problem would be more manageable if OPEC could spend all it earned than in the actual situation of limited OPEC absorptive capacity.

Even if OPEC spent all of its larger earnings, it is unlikely that each oil importer would be able to generate the precise increase in exports to OPEC needed to close its trade gap. Some would generate more and others less. But relative currency movements could smooth out these "overages" and "underages" until, in the end, each oil-importing country, in its commerce with *all* nations, had matched the increase in oil imports with higher exports. Aside from the frictional problems involved in adjusting the structure of production, there would be no contractionary pressures on output and employment for any nation concerned.

This is not the case when OPEC cannot spend all it earns and the oil-importing nations, individually and jointly, consequently face large adverse changes in their current-account positions. When a nation devalues, it "fills in" its contractionary gap by further increasing the contractionary pressures on other countries, not by skimming off the expansionary thrust in their payments positions. That is why the particular payments situation resulting from high oil prices and OPEC's limited absorptive capacity provides a relatively inauspicious setting for solutions in which exchange-rate adjustments play a dominant part. In an environment of this nature, countries might be fairly quick to adopt self-protective measures, such as import barriers.

In this context, self-protection does not necessarily mean defense

against a significant current-account deterioration brought about by the downward drift of other currencies. For many countries, such a deterioration need not be an important concomitant of exchange-rate flexibility. Rather, the self-protection might be aimed simply at mitigating adjustment problems, even within the context of a more or less steady current-account position. A hypothetical example may help to clarify this matter. Suppose that Italy, because of financing difficulties, experiences a depreciating exchange rate. By reducing the price of Italian goods to foreign buyers and raising the lira price of imports, the depreciation would tend to improve Italy's current account at the expense of other nations. But France, one of Italy's important trading partners, is itself in a vulnerable position, with large oil deficits and financing difficulties of its own. A decline of the lira might induce a weakening in France's balance of payments sufficient to cause a depreciation of the French franc vis-à-vis currencies other than the lira. This would limit the gains Italy could achieve in trade with France. At the same time, a depreciated franc would give France a competitive advantage in trade with Germany and its other partners. In the end, then, France's current account might not be much affected, any deterioration vis-à-vis Italy being more or less offset by an improvement vis-à-vis Germany and other countries.

More generally, Italy's currency weakness would be transmitted first to its immediate trading partners and then, depending on their balance-of-payments strengths or weaknesses, through them to the strong non-OPEC countries of the system—mainly Germany, the countries whose currencies are closely linked to the German mark, and the United States. Thus, a system of fully flexible exchange rates in which market forces were permitted to work out their effects would ultimately "pass the buck" to the nations best able to bear it.

But even in the unlikely event that, in our hypothetical example, France emerged without any deterioration in its current account as a result of Italy's devaluation, its economic structure would nevertheless have been subjected to strain. It would have lost exports to Italy and gained exports to Germany and others, but not of identical goods and services. In different terms, it would have encountered more import competition from Italy and less from other countries, but these losses and gains would involve different products and services. Labor and capital within France would therefore have to shift out of some industries into others, and this would entail at least some transitional unemployment and other adjustment problems. These would be heightened by the likelihood that France could not altogether escape some current-account

deterioration in the face of Italy's depreciation, and this would come on top of the far more serious deterioration caused by high oil prices.

A caveat is in order now that we have argued that economic strains engendered by high oil prices provide a relatively inhospitable climate for exchange-rate movements as major equilibrating forces: this line of thought should not be carried too far. There *have* been sizable exchange-rate movements since oil prices exploded, and these have not been nullified by countervailing actions. For example, from the beginning of October 1973, just before the oil crisis erupted, to the end of May 1975, the Italian lira dropped approximately 17 per cent on a trade-weighted basis, and the Japanese yen declined nearly 8 per cent. Moreover, 1974 and 1975 witnessed sharp ups and downs in individual exchange rates. Thus, based on quarterly averages of daily exchange rates through the first quarter of 1975, the French franc fell 5.5 per cent in the first quarter of 1974 and 4.9 per cent in the second, but snapped back by 4.8 per cent in the third, continued to rise moderately in the final quarter, gained momentum again in the first quarter of 1975, and surged 4.5 per cent between the end of March and the end of May. The dollar gained 3.8 per cent in the first quarter of 1974, lost 4.3 per cent in the second, recovered 3.3 per cent in the third, began to weaken again at year-end, and slumped 3.1 per cent in the first quarter of 1975. After fluctuating within a fairly narrow range for most of 1974, the pound sterling began a sharp decline toward the end of the year. It dropped 3.2 per cent in the final quarter, continued its descent virtually unchecked in the first quarter of 1975, and then fell precipitously by 5.9 per cent between the end of March and the end of May. The German mark rose 3.4 per cent in the second quarter of 1974 but fell back 2.9 per cent in the third. And the Japanese yen declined 3.7 per cent in the first quarter of 1974, recovered 1.9 per cent in the second, and then retreated 4.8 per cent in the third quarter. Actual exchange-rate variability, from day to day and week to week, was even greater than is suggested by changes in quarterly averages of daily rates.

Still, the permissible scope for exchange-rate adjustments may be narrower in the future than it has been in the past, since concern over inflation has been overtaken by fear of recession in the spectrum of economic priorities. When inflation is the main problem, another country's devaluation provides welcome relief from upward price pressures. But such a devaluation appears as a threat to output and employment when fears of recession predominate. Thus, caution is indicated when trying to assess the possible role of exchange-rate movements in the future. They

may entail more danger of restrictive countermeasures than the experience of 1974 would suggest.

Trade Restrictions

Trade restrictions used for balance-of-payments purposes are the stepchildren, if not the illegitimate children, of the adjustment process. In point of fact, while they may choke off a deficit, restrictions do nothing to correct its underlying causes. In this sense, they differ from the market-related adjustment techniques that rely on income, price, and exchange-rate movements. They can, however, provide quicker results in times of emergency. Tariff surcharges, for example, have been used at various times by Canada, the United Kingdom, France, and the United States.

In the aftermath of surging oil prices, Italy was the first of the major countries to resort to import barriers. As of the beginning of May 1974, importers were required to deposit 50 per cent of the value of imports other than raw materials and investment goods in six-month, interest-free accounts with the Bank of Italy. Until its termination in March 1975, this measure discouraged imports by raising their costs. Denmark also adopted measures to restrict imports in May 1974, in an attempt to improve its weak balance of payments. The Danish program, which was to be effective for 1974 only, consisted of steep increases in the indirect taxes applicable to some commodity categories with a high import content. Like Italy, Iceland adopted an import-deposit scheme for balance-of-payments reasons in May 1974. This program, however, was short-lived. In October, Iceland notified GATT that the scheme would be terminated by the end of 1974.

Concerned about the danger that trade restrictions might spread, the OECD countries committed themselves on May 30, 1974, to a "stand-still" pledge. They agreed for one year not to adopt new import restrictions or measures to stimulate exports artificially.

It is indicative of the strains within the system, however, that Australia and Finland have already introduced trade restrictions, that France has embarked on a program of export subsidies, and that Britain is also about to subsidize exports, all in violation of the spirit, if not also the letter, of their OECD pledge. In the face of recession, Australia imposed quotas on imports of autos in January 1975, and on refrigerators, washing machines, and clothes dryers in March. Quota restrictions have also been applied to imports of some textile and steel items. Finland has adopted an import-deposit scheme along the same general lines as Italy's in an effort to curb the country's serious trade deficit. And Britain announced in February 1975 that a cost-insurance program, a form of export sub-

sidy, would be implemented in June to protect exporters from some of the profit squeeze or outright loss that results when inflation raises costs while prices remain fixed under long-term contracts. This program has been justified on the grounds that British exporters need to be placed on an equal competitive footing with exporters in other nations, particularly those in France, where cost-insurance programs are already in effect. However, unlike the British plan, the French program cannot be said to contravene the standstill pledge, since it was operative long before that pledge was signed. But this argument cannot be used to justify the program of interest-rate subsidies implemented by France in July 1974 to promote exports. Under this program, interest-rate subsidies are provided on loans to companies that commit themselves to achieving an increase of 5 percentage points in the proportion of exports to total sales within a period of three years.

On May 29, 1975, twenty-three of the twenty-four OECD members renewed their standstill pledge for an additional year. Portugal, the remaining member, notified GATT on June 2 that it was imposing import surcharges for balance-of-payments reasons. The United Kingdom's renewal was made conditional on the continuing availability of financing to cover balance-of-payments deficits and on actions by economically stronger countries to expand their economies to sustain international demand, increase imports, and alleviate the problem of the deficit countries.

Interdependence of Alternatives

Not every problem has a solution, it has been said, but every situation has an outcome. Must the outcome of the oil situation be a painful process of adjustment by the industrial countries?

So far, we have discussed how far one might be able to rely on financing for a solution of the problem, and how much might have to be done by an adjustment process embracing changes in income, price, exchange rates, and possibly trade measures. The alternatives, financing and adjustment, are interdependent. When a country demonstrates the willingness and ability to adjust, it may be able to get more financing, thereby limiting the amount of adjustment necessary. Conversely and paradoxically, a country that resists adjustment may therefore be unable to borrow and be pushed further toward the adjustment alternative.

Indeed, this interdependence of alternatives illustrates the more general point that all of the forces bearing on the international payments

problem of oil are interrelated. To cite but another example, whether or not high oil prices are sustainable depends importantly on the adequacy of the financial recycling mechanism. We are dealing with a system of simultaneous equations, where solutions emerge from the interaction of variables. This is why it is so difficult to consider one variable in isolation and to speculate about the course it might take.

In the end, adjustment will always close the payments gap if its forces are permitted to run their course. The difficulty is that, while the payments problem as such may be solved, the solution could prove to be pyrrhic in human and political terms. It could conceivably entail deep cuts in living standards, high unemployment, disruption of industry and agriculture, and a great deal of political instability. To take an extreme example, mass starvation may be an effective way of trimming the demand for food to the supplies available, and in some countries this is, indeed, the direction in which market forces operate. In such circumstances, however, it is understandable that the people affected prefer political action to the operation of the "invisible hand."

The critical question, therefore, is not whether the forces of adjustment will suffice to close whatever payments gap remains after financing, but whether these forces can be made to yield results that are tolerable in terms of human welfare and acceptable in terms of political realities. The size of the balance-of-payments problem is so great that there can be no assurance as to the outcome.

Constructive Programs to Ease Adjustment Pains

Are there other ways of achieving a "soft" landing, or have we exhausted all the alternatives? Let us reconsider for a moment. Thus far, we have taken as given the size of the payments problem posed by expensive oil. To be sure, there is a wide spectrum of expert opinion about that size. But, whatever our starting estimate, we have not yet examined what could reasonably be done to reduce it by intensified measures aimed at achieving lower oil prices and import volumes. Since the onset of the problem, of course, the oil-importing countries have been attempting, with varying degrees of resolve, to conserve energy and accelerate development of new sources of supply. At best, these measures might provide a climate of market weakness that, together with diplomatic pressures, would lead to lower oil prices. Even if they failed to bring prices down, these measures would reduce import volumes and therefore import bills. Furthermore, the oil-importing countries have endeavored to reduce their monumental trade deficit with OPEC by attacking

it from the side of export expansion as well as from the side of oil-import reduction.

Since the effort devoted to each of these approaches can span a wide range of intensities, it would be difficult to say that any country is doing all that it might to reduce its oil-payments problem. But is it possible to say, at least, that everything is being done that could reasonably be expected? Perhaps it is, in the promotion of exports to the OPEC countries. Indeed, the sale of armaments to the Middle East may already have risen so high as to entail the risk that the balance-of-payments cure will be worse than the disease. In general, absorptive capacity is turning out to be higher than had commonly been assumed.

On the other hand, the oil-importing countries have been slow to embark on serious, concerted conservation efforts and to accelerate the development of new energy resources. In the case of the United States, it was only in January 1975, more than a year after the problem erupted, that the Administration proposed the nation's first integrated and specific energy program. And by early June, with Congress still divided on the basic issues, the nation had taken only the first tentative steps toward the implementation of an effective program.

All of this leaves considerable doubt as to the manageability of the oil-payments problem. And in the face of some clearly perceived dangers, responsible governments have an obligation to push still further toward fail-safe policies rather than to be content with what has already been accomplished. To be sure, the successful negotiation of the \$25 billion Financial Support Fund and \$6 billion expansion of the IMF special oil facility represents an important milestone in the evolving sense of official responsibility for backstopping the recycling process. But even if OPEC's collective surplus turns out to be at the lower end of the range of projections, it is likely that even these large sums will have to be augmented before long to meet continuing needs.

Another important area for official action is consultation and cooperation in external measures affecting oil deficits. Much can be done here to ease the pains of the adjustment process. Fortunately, the experience of the 1930s demonstrated where beggar-thy-neighbor policies can lead, while the machinery of the postwar period tied the various nations together in a web of cooperative arrangements that further militates against a recurrence of the earlier disaster. The OECD "standstill" pledge to avoid trade restrictions illustrates how far the industrial nations have already come in reducing the downside risks. But much more could be done on the upside to facilitate adjustment and minimize its toll on economic welfare. E. M. Bernstein (in "The Oil Payments Problem Con-

sidered Once Again," EMB, Ltd., Report No. 74/20, Oct. 24, 1974), for example, has recommended that individual industrial countries cooperate in establishing future targets for their aggregate current-account positions vis-à-vis OPEC, and then in allocating those aggregate targets among themselves. Unfortunately, however desirable such a program might be, experience suggests that it would be extremely difficult to implement.

A further area of great promise is international cooperation on energy policy. A significant development in this respect has been the establishment of an energy coordinating body, the International Energy Agency, that includes most of the major industrial countries. The work of this body has already resulted in the development of an emergency oil-sharing program, and progress is being made toward long-term cooperation in such areas as technology sharing, floor prices for imported oil, and joint approaches to the development of high-cost oil substitutes.

Finally, there is much that the oil-exporting countries can do to ease the problem in their own interests. After all, OPEC's foreign investments will scarcely prosper if the wealth transfusions that create these vast financial surpluses bleed the industrial countries dry and prostrate their economies. But even more important than this consideration is the heavy dependence of a number of OPEC countries on the health of the industrial countries for the success of their own industrialization projects. Given the small internal markets of these countries, large export sales are essential to achieving the economies of scale needed for viable operations. There can be little hope of meeting OPEC's internal development goals if the industrial economies languish and the international monetary and trading systems are in disarray.

In these ways, OPEC's fortunes are inextricably linked to those of the rest of the world. And this interdependence increases with every passing day of mounting investable surpluses and progress toward internal development. Thus, OPEC has an ever-growing stake in oil prices and recycling arrangements that are compatible with a healthy world economy. Sooner or later, if rationality prevails, this reality may induce the oil-exporting countries to adopt more accommodating positions in both of these vital matters.

Much more could be said along these lines, but it would probably not be of great help in answering the "bottom line" questions with which this essay began. Can we get through all right, or will we fall into some kind of chaos?

Muddling Through

Expert opinion covers the spectrum from the Panglossians to the disciples of Murphy, famous for the law that if anything can go wrong, it will. In all candor, I doubt that anyone's vision can penetrate the uncertainties of the next few years in international finance, let alone those of the period beyond. There is no unique solution, but rather a broad spectrum of possible outcomes ranging from the relatively painless to the disastrous. Even at present oil prices, the oil-importing nations may be able to manage without undue hardship under certain conditions: if the stronger among them can agree to assume a good part of the credit risk of lending to the weak, or if OPEC is prepared to step up the financing of its customers (in other words, if broad and uncongested channels for recycling can be maintained); if the oil importers can cooperatively map out adjustment policies appropriate to the situation; and if, with all due haste, they take steps to reduce their dependence on oil imports. In the absence of some or all of these conditions, the prevailing oil price might have altogether unmanageable consequences.

It would be comforting to believe that events will be anticipated and shaped so as to minimize the dangers. Progress toward the creation of the Financial Support Fund and the enlargement of IMF facilities provides some reassurance. These facilities can help to push the most acute dangers some distance into the future. Even so, the industrial, and still more the developing, nations seem to be in for a painful period of "muddling through." This will entail an uncomfortable jostling of countries into mutual accommodation. Such a process can be sketched out as a double spectrum of countries and options, with the countries ranked on a strength-weakness spectrum and the options ranging from financing to devaluation and import restrictions (see the diagram below). The "muddling through" would have the strong not only finance their own deficits and lend to others but acquiesce in devaluations and trade restrictions on the part of the weak. OPEC might be prevailed upon to increase its direct lending to the weak and, conceivably, if the going gets very rough, to give a little on price. In the heat of the crucible, even hardened steel becomes malleable. Such a process could avoid the worst dangers of breakdown, disruption, and suffering, but it would make for a difficult international environment, one that would certainly take its toll on human welfare and economic growth.

Of course, it could be that the future will take a completely different course from this kind of scenario. The Middle East remains highly in-

cendiary. One can conceive of a chain of events that would make today's high oil prices only a flash in the pan of history. Unfortunately, it is hard to conceive of a scenario that would get us out of the economic frying pan without landing us in the political fire. It is, of course, necessary to evaluate, analyze, and forecast. But it is also essential to bear in mind that economic analysis can carry us only so far in the context of the extraordinary political aspects of the international oil problem.

MUDDLING THROUGH

	<u>COUNTRIES</u>	<u>RANGE OF OPTIONS</u>
STRONG	GERMANY	- RELENDING OF OPEC INFLOWS TO THE WEAK
	UNITED STATES	- ALLOWING EXCHANGE RATES TO RISE (TRADE BALANCE TO FALL)
↑ ↓	ITALY	- ACQUIESCING IN IMPORT RESTRICTIONS OF THE WEAK
		- CONTROLS ON CAPITAL INFLOWS
		- "SOFT" BORROWING
		- DEVALUATION
WEAK		- IMPORT CONTROLS
		- RECESSION
	BANGLADESH	- WIDESPREAD SUFFERING

Summary

I conclude with a brief summary. In coping with the balance-of-payments strains of expensive oil, the importing countries face a number of alternatives, each of them substitutable to some extent for the others. They can reduce energy consumption, stimulate indigenous energy production, endeavor to achieve lower oil prices, expand exports to OPEC, finance their payments deficits, and adjust to the residual imbalances. In this discussion, we have focused primarily on the last two alternatives.

We have considered the possible dimensions of the financing problem and speculated on the prospects in the light of OPEC's conservative investment patterns, which favor short-term assets in a few strong countries and institutions. The conservatism is understandable, but it places a heavy burden on intermediation for the financing of oil deficits and makes it more difficult for recycling to expand in line with the need. Part

of the burden is therefore likely to fall on adjustment via price, income, and exchange-rate effects. What is not clear is how heavily adjustment will weigh on living standards, output, and employment. International cooperation could do a great deal to lighten these burdens. We have also noted that, in the environment created by expensive oil, an outbreak of trade warfare is a danger to reckon with. And this danger is heightened by recessionary pressures unrelated to oil which have now engulfed the industrial countries. At present prices, the strains are so great that no one can safely predict that they will prove to be manageable. The "muddling through" process sketched here would be one possible outcome. It would be unpleasant and painful. But it would by no means be the worst of the possibilities.

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12. Fritz Machlup, *Speculations on Gold Speculations*. [Reprinted from *American Economic Review, Papers and Proceedings*, Vol. 56 (May 1969)]
13. Benjamin J. Cohen, *Sterling and the City*. [Reprinted from *The Banker*, Vol. 120 (Feb. 1970)]
14. Fritz Machlup, *On Terms, Concepts, Theories and Strategies in the Discussion of Greater Flexibility of Exchange Rates*. [Reprinted from *Banca Nazionale del Lavoro Quarterly Review*, No. 92 (March 1970)]
15. Benjamin J. Cohen, *The Benefits and Costs of Sterling*. [Reprinted from *Euromoney*, Vol. 1, Nos. 4 and 11 (Sept. 1969 and April 1970)]
16. Fritz Machlup, *Euro-Dollar Creation: A Mystery Story*. [Reprinted from *Banca Nazionale del Lavoro Quarterly Review*, No. 94 (Sept. 1970)]
- * 17. Stanley W. Black, *An Econometric Study of Euro-Dollar Borrowing by New York Banks and the Rate of Interest on Euro-Dollars*. [Reprinted from *Journal of Finance*, Vol. 26 (March 1971)]
18. Peter B. Kenen, *Floats, Glides and Indicators: A Comparison of Methods for Changing Exchange Rates*. [Reprinted from *Journal of International Economics*, Vol. 5 (May 1975)]





