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OIL PRICES AND DEBT

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1. INTRODUCTION

Problems related to oil, and in particular those associated with fluctuations in its price, have been prominent in the period since 1973. Considerable responsibility for the world's relatively poor macroeconomic performance during the mid to late 1970s and the early 1980s has been attributed to the big rise in the real price of oil, the conventional argument being that this had a simultaneously cost inflationary and demand deflationary effect. Towards the mid-1980s, however, the price of oil began to fall and in 1986 it fell quite dramatically. But it is not clear that this decline has had or will have a symmetrical impact on the world economy.

Another prominent problem of the 1970s and 1980s has been that of international debt. In nominal terms the level of debt rose rapidly during the late 1970s, but in real terms it became a

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widespread problem in the 1980s, culminating in the Mexican debt crisis of 1982. While some observers initially believed that the rescue packages designed by creditors and debtors to reschedule debts, combined with economic recovery amongst industrial countries, would solve the problem, there is now considerable evidence to suggest that a lasting solution has yet to be found.

The twin problems of oil and debt are, of course, connected. It was largely as a result of the increase in oil prices that non-oil developing countries were faced with the need to borrow in order to finance the related balance of payments deficits. Meanwhile those oil producing countries with initially relatively low absorptive capacity had excess revenue to lend. Although some of the associated recycling took place through the IMF's Oil Facility, the majority was channeled through the private capital markets and commercial banks operating in the Euro-currency market. At the same time many of the oil exporting countries also borrowed heavily on the basis of expected oil revenues to finance rapidly expanding development programmes.

The fall in oil prices has to some extent relieved the debt problems of the oil importing countries, but for the oil exporting debtor countries such as Mexico and Venezuela it has posed serious problems, just as any economy which is heavily reliant on one commodity export would encounter payments difficulties if the price of this commodity were to fall¹.

From the above discussion it may be seen that the connections between oil and debt exist both at the level of individual countries where fluctuations in the price of oil influence a country's capacity to service debt and to borrow on capital markets, and at the level of the international financial system where oil price changes generate financing and adjustment difficulties which severely test the flexibility and adaptability of the system.

These few introductory remarks reveal the wide range of issues raised by any discussion of oil prices and debt. From such a range this paper concentrates on examining the impact on developing countries of the fall in the price of oil from \$27.80 per barrel in 1985 to \$13.50 in 1986 and, in particular, how this decline affected their debt situation.

Briefly what emerges is that it is very unwise to draw a firm overall conclusion. Although an aggregate estimate of gains and losses can be made, this hides the great diversity of impact amongst developing countries.

Although the paper's purpose is not to explain variations in the price of oil, indeed these are essentially taken as given, it needs to be recognised that the debt problems associated with varying oil prices may in turn feed back on the price of oil by influencing the output decisions of oil producers and the usage decisions of oil consumers.

Section 2 of the paper traces out the various ways in which a variation in the price of oil affects an individual economy. Section 3 attempts to quantify some of these effects for a number of developing countries. Section 4 then discusses the implications of these results for policy. Finally Section 5 offers a few concluding remarks.

2. THE CHANNELS OF INFLUENCE

There are various channels through which a falling price of oil will influence individual economies. Some of these are quite direct while others are more indirect.

Perhaps most directly, a fall in the price of oil reduces the dollar-denominated receipts from a given volume of oil exports and simultaneously reduces the dollar value of a given volume of imported oil. Basically, and as one might imagine, the effect of a declining oil price depends strategically on whether the country concerned is a net exporter or a net importer of oil. With other things remaining constant, the current account balance of payments of oil exporters will weaken and that of oil importers will strengthen.

Of course, although it makes life considerably easier to assume that other things do not change, such constancy is rarely observed in the real world. What other things might change to affect the balance of trade of oil exporting and oil importing countries?

First, a change in the price of oil may be expected to influence the quantity of oil traded, depending on the price elasticity of demand for oil. With an elasticity greater than 1, a fall in price will increase rather than reduce the revenue derived by oil exporters, and will also increase the expenditure on oil by oil importers. However, in practice it would appear that the demand for oil is quite price inelastic², at least in the short run. The increase in the price of oil during the 1970s did, however, encourage consumers to substitute out of oil and it may be difficult quickly to reverse this trend towards new patterns of energy consumption which, in some cases, will be associated with specific capital investment and a long-term view of the oil market.

Furthermore, it needs to be noted that the fall in the price of oil may itself be partly explained by the fall in demand associated with both energy switching and energy conservation as well as with industrial recession in many developed economies. In these circumstances any increase in demand induced by a fall in price is unlikely to offset the effects on revenue of the declining unit price and the fall in demand associated with these other factors.

To the extent that a change in the price of oil does affect the demand for alternative energy sources there may be a more indirect link between a declining oil price and the balance of payments of oil exporters and importers. Where an oil exporting country also exports other forms of energy, a fall in the price

of oil which reduces oil revenue may still serve to reduce revenue from other energy exports if the cross elasticity of demand exceeds zero and this will exacerbate the adverse impact on the balance of payments. In practice, countries are unlikely to be caught in this way since any significant fall in the demand for non-oil sources of energy implies a relatively high price elasticity of demand for oil and this protects oil revenue as the oil price falls.

In the case of countries that do not produce oil but do produce competing fuels, a fall in the price of oil will tend to reduce their export receipts. However, they may now be able to buy oil at a lower opportunity cost than that at which they can produce alternative fuels and this should benefit their economies.

Not only does one have to consider the effects of falling oil prices on the demand for substitutes. The prices of oil-related products, or products which use oil intensively will tend to fall, unless taxes are modified to offset the fall in the price of crude oil. Again since such goods are heavily traded, exporters and importers of them will experience effects on their balance of payments, depending on the price elasticity of demand for such goods. Where, for example, an oil exporter also exports a significant quantity of oil-related products, and where the price elasticity of demand for these is high, receipts associated with such exports will rise and this will offset the decline in export revenue from oil.

It clearly emerges from the above discussion that the impact of falling oil prices on any particular country does not simply depend on whether that country is an oil exporter or oil importer. It also depends on the structure of production and trade, on a range of price elasticities of demand, and on the initial causes of the price fall.

Beyond this, the pattern of a country's trade will also be important. An oil importer selling most of its exports to oil exporting countries may find that export revenue falls. On the other hand, an oil importer which sells its exports to other oil importers may find that its export receipts rise as the relaxation in the balance of payments constraint allows these countries to pursue policies which expand demand. Of course, similar relaxation in the domestic economy will tend to raise imports and this will offset the improvement in the balance of payments.

It follows then that another important factor in anticipating the effect of a fall in the price of oil on the balance of payments of oil importing, and indeed oil exporting countries, is the behavioural response of governments in terms of domestic macroeconomic policy.

Moving away from its effects on merchandise trade, there remain various other channels through which a falling oil price may affect economies. Perhaps potentially most significant amongst these is the effect on capital outflows in the form of interest payments and on new capital inflows.

The effect of a fall in the price of oil on the global level of interest rates is, in theory, rather difficult to disentangle, since various factors will be pulling in opposite directions. Pulling interest rates down will be the fact that a significant fall in the price of oil will reduce inflationary expectations. Working in the same direction will be the related incentive for countries to relax domestic monetary restraints and to allow the supply of money to rise more rapidly.

Pushing them up will be the fact that the fall in the price of oil will have an expansionary effect on the global level of aggregate demand which will increase the demand for money and credit.

Of course, even in circumstances where the net effect is to pull interest rates down, they may still actually rise. This will be the case where other influences, such as the size of the US fiscal deficit, dominate the effect of falling oil prices.

Let us assume, however, that, as a result of the fall in the price of oil, interest rates are lower than they would otherwise have been. This would seem to be unreservedly beneficial for all debtor countries. For the oil exporting ones the fall in interest payments offsets the decline in export receipts, while for oil importing ones the strengthening in their balance of payments associated with a fall in import payments will be further enhanced.

Again, however, while it is relatively easy to talk in general terms, the precise impact of falling interest rates on different developing countries depends on a number of things. For example, it depends on the extent to which debt is in a floating or fixed interest rate form. Furthermore, it depends on whether interest rates in all countries fall and on the currency composition of a country's debt. Where a developing country has dollar-denominated debt, and where the US does not relax its monetary policy, there may be little relief coming from interest payments. Indeed, if interest rates in the US were to be deliberately forced up in order to appreciate the dollar, or as a counterpart to the fiscal deficit, the debtor country would find the domestic currency cost, or the non-dollar cost of any given level of dollar-denominated interest payments rising.

As noted earlier, debtors will not only be affected by changes in the costs of servicing old loans. By affecting perceptions of creditworthiness, as well as the distribution of balance of payments surpluses, a fall in the price of oil may be expected to influence the inflow of new capital. Yet again, however, the detailed analysis of the effects becomes quite complex. How a country's creditworthiness is affected depends on what factors influence this; variations in the price of a particular commodity may be one factor but there will be many others³. Moreover, in the case of oil, while a fall in price may damage the creditworthiness of oil exporting countries, it may yet fail to improve that of oil importing countries if lenders believe that the price fall is temporary or if they feel that the

relevant governments will mismanage the opportunities provided by the fall in price.

It is clear that large changes in the price of oil also have a significant effect on the distribution of balance of payments disequilibria. In the early 1970s, with rising oil prices, many OPEC countries moved into substantial surplus, while other developing countries and, initially, industrial countries moved into deficit. A fall in oil prices tends to have the reverse effect. Undoubtedly the OPEC surplus was an important reason why there was increased lending to non-oil developing countries through the Eurocurrency market. The market offered OPEC surplus countries a preferred outlet for their funds. However, with the payments surplus concentrated in certain industrial countries, there is no guarantee that funds will be similarly placed on international financial markets and thereby be available to finance payments deficits in other parts of the world. The banks might therefore not have the resources to lend even if they felt inclined to do so.

Up to now we have focused on certain direct and indirect effects of a falling oil price on the balance of payments of individual oil-exporting and oil-importing countries. However, it is quite possible to take the discussion further. For where the balance of payments changes there will be consequences for the exchange rate. This will induce additional repercussions on both the current and capital accounts. Furthermore, as oil revenue changes so taxation which is based on it will change. In the

absence of a sufficient exchange rate depreciation, tax receipts in oil exporters will fall and the public sector deficit will rise. This in turn may have both microeconomic consequences, as other taxes are altered to compensate, and macroeconomic consequences as the monetary and exchange rate complications of the larger fiscal deficit filter through.

It has been seen in the analysis undertaken above that a fall in oil prices will have effects on the global economy in the form of expanding the level of aggregate demand, reducing cost inflation and thereby possibly reducing nominal interest rates. Another important and less beneficial consequence is that, if it causes a deterioration in the debt position of a number of important debtor countries, it will add further strain to the international banking and financial system. Indeed if it were to push countries into default this particular consequence could have a potentially high cost.

One may assume that the willingness of countries to continue to service their debt rests on an assessment of the costs and benefits of so doing. If a fall in oil prices increases the cost of servicing debt relative to the benefits then it brings nearer the possibility of default⁴. It is indeed conceivable that the global ramifications of default by one or two large oil exporting countries could mean that the apparent benefits of the fall in oil prices to oil importing debtor countries would be more than wiped out.

While it is difficult to be precise in general terms about the effects of the fall in the price of oil on the risks of default, it is clear that a change in the oil price can effect countries' export receipts, import payments, interest payments and capital inflows, and that it is just these variables which impinge on the decision as to whether or not to default. For some countries a fall in the oil price means that the risk of default recedes, for others it becomes a more distinct possibility⁵.

3. ESTIMATING THE EFFECTS

Estimating the effects of a fall in the price of oil on the basis of the channels of influence identified in the previous section would clearly amount to a major modelling exercise. No such sophistication will be attempted here. However, it is relatively easy to get some idea of the orders of magnitude of the more important and direct effects, and to thereby identify which developing countries seem to have come off best and worst from the falling price of oil.

Table 1 shows the effect of both a \$15 per barrel and \$10 per barrel price on selected oil exporting countries, excluding any changes in the quantity of oil sold but including the assumption that a fall in oil prices to \$15 or \$10 is accompanied by a 150 basis points ($1\frac{1}{2}$ per cent) or 200 basis points (2 per cent) fall in dollar interest rates respectively. Under similar assumptions Table 2 shows the effects on selected oil importing countries.

TABLE 1

IMPACT ON MAJOR OIL PRODUCERS

OF A US\$15 OIL PRICE

	Fall in Exports (US\$ mn)	Interest Saving (US\$ mn)	Total Impact (US\$ mn)	Impact as % of	
				Receipts	Imports
Nigeria	-5256	330	-4926	39.4	55.1
Gabon	-696	21	-675	31.4	79.4
Algeria	-4020	270	-3750	27.4	39.5
Venezuela	-5106	525	-4581	27.0	69.0
Ecuador	-828	119	-709	23.6	38.3
Trinidad & Tobago	-600	17	-583	23.3	33.3
Mexico	-6240	1460	-4780	17.7	39.8
Indonesia	-2127	467	-1660	8.5	13.0
Malaysia	-1500	288	-1212	6.3	9.7
Egypt	-984	420	-564	5.0	5.2
Peru	-324	207	-117	2.9	5.9

OF A US\$ 10 OIL PRICE:

	Fall in Exports (US\$ mn)	Interest Saving (US\$ mn)	Total Impact (US\$ mn)	Impact as % of	
				Receipts	Imports
Nigeria	-7446	440	-7006	56.0	78.4
Gabon	-986	28	-958	44.6	112.7
Venezuela	-7905	700	-7205	42.3	109.3
Algeria	-5695	360	-5335	39.5	56.2
Ecuador	-1173	152	-1021	34.0	59.3
Trinidad & Tobago	-850	21	-829	33.2	47.4
Mexico	-8840	1946	-6894	25.5	57.5
Indonesia	-3103	622	-2391	12.3	18.7
Malaysia	-2125	384	-1741	9.1	13.9
Egypt	-1394	650	-834	7.4	7.7
Peru	-459	276	-183	4.6	9.2

Source: Amex Bank

TABLE 2

IMPACT ON MAJOR OIL IMPORTERS:

OF A US\$15 OIL PRICE

	Fall in Exports (US\$ mn)	Interest Saving (US\$ mn)	Total Impact (US\$ mn)	Impact as % of	
				Receipts	Imports
Greece	1464	375	1839	21.1	19.6
Turkey	1728	242	1970	14.2	19.2
Brazil	2832	1505	4337	14.3	29.4
Uruguay	120	72	192	13.4	24.9
Portugal	1044	231	1275	13.2	17.0
Chile	264	285	549	12.5	15.0
India	1872	98	1970	12.2	15.2
Philippines	684	250	934	11.6	14.6
Sri Lanka	192	39	231	11.6	13.2
Korea	2700	645	3345	10.4	11.9
Thailand	708	233	941	9.6	9.6
Pakistan	456	30	486	7.7	7.7

OF A US\$ 10 OIL PRICE

	Fall in Exports (US\$ mn)	Interest Saving (US\$ mn)	Total Impact (US\$ mn)	Impact as % of	
				Receipts	Imports
Greece	2074	500	2574	29.6	27.4
Brazil	4012	2005	6017	21.7	40.8
Turkey	2443	322	2770	19.9	26.9
Uruguay	170	92	262	18.9	34.0
Portugal	1479	308	1787	18.5	23.8
India	2652	130	2782	17.2	21.4
Sri Lanka	272	52	324	16.2	18.5
Philippines	969	335	1304	16.0	20.4
Chile	374	380	754	15.3	20.6
Korea	3825	860	4685	13.9	16.7
Thailand	1003	310	1313	13.8	13.4
Pakistan	646	40	686	10.8	10.8

From amongst the oil exporting group, the greatest loss in oil receipts is experienced in Mexico, with Nigeria, Venezuela and Algeria also suffering reductions in oil revenue of more than \$5,000 million. Taking the interest rate effect into account does not alter the identity of the four countries most seriously affected, though now Nigeria loses the most from the fall in oil prices. Clearly the higher are a country's exports the more it loses from a declining oil price, while the higher its debt the more it benefits from falling interest rates.

Of course absolute figures say little about the relative importance of the decline in oil receipts and interest payments; larger economies will tend to have larger export receipts, import payments and levels of debt payments. Tables 1 and 2 therefore also express the total impact, including both oil receipt and interest rate effects, as a percentage of total export receipts and import expenditure. For those countries most heavily reliant on oil exports the impact is very significant. Large cuts in imports would be required to offset completely the effect of the fall in oil prices on the balance of payments. Indeed it is reasonable to reach the conclusion that such cuts would be infeasible, either because of their political unacceptability or because of their adverse effects on economic development.

For the oil importing countries the effects are generally rather less marked because oil imports are relatively less significant to these countries than oil exports are to the exporting

countries. The principal beneficiaries in terms of reduced expenditure on oil are Brazil, Korea, India, Turkey and Greece. Given its stock of debt, Brazil remains a principal beneficiary, though many other oil importing countries receive gains equivalent to between 10 per cent and 25 per cent of their imports. That the aggregate of the first column of Table 1, as well as that of the third, fourth and fifth columns exceed their equivalents in Table 2 again reflects the greater degree of export as opposed to import concentration. The benefits of lower oil prices are spread more widely amongst other largely industrial countries. The greater degree of equivalence in terms of the interest rate effect reflects the greater similarities between each group of countries in terms of their stock of debt.

Tables 3 and 4 confirm what is implicit in Tables 1 and 2, namely that for many oil exporting countries, the effect of falling interest rates only partially offsets the effect of falling oil prices on their debt position; while for all oil importing countries it enhances the benefit. The interest to earnings ratio rises for all oil exporting developing countries when the interest rate savings are omitted, but falls for Peru, Egypt, Indonesia and Malaysia when the interest rate effect is taken into account, indicating that, from a debt point of view, these countries gain more from the fall in interest rates than they lose from the fall in oil export receipts. From amongst those economies where the ratio rises, indicating a deteriorating debt position, the most marked increases occur in Venezuela, Nigeria, Ecuador and Mexico.

TABLE 3

IMPACT ON INTEREST TO EARNINGS RATIOS*

OIL EXPORTERS

	1985 Ratios	Incl. Interest Gain		Impact as % of	
		Oil at US\$ 15	Oil at* US\$ 10	Oil at US\$ 15	Oil at US\$ 10
Mexico	35.8	39.5	42.5	46.5	53.2
Peru	27.7	24.5	23.5	29.2	30.2
Ecuador	25.9	30.3	34.2	35.8	42.5
Venezuela	22.0	26.0	31.0	30.8	40.3
Egypt	16.0	13.5	12.6	17.6	18.3
Indonesia	13.7	12.7	12.4	15.3	16.2
Nigeria	12.2	16.5	21.4	21.4	30.9
Algeria	9.9	11.3	12.6	14.1	17.2
Malaysia	8.9	8.0	7.7	9.7	10.0
Trinidad & Tobago	4.0	4.4	4.8	5.3	6.1
Gabon	3.7	4.1	4.5	5.5	6.9

* Interest payments on debt as % of current account earnings

Source: Amex Bank

TABLE 4

IMPACT ON INTEREST TO EARNINGS RATIOS*

OIL IMPORTERS

	1985 Ratios	Oil US\$ 15	Oil at US\$ 10
Chile	46.3	40.5	38.6
Brazil	39.8	34.4	32.6
Philippines	22.7	19.4	18.3
Uruguay	22.4	17.2	15.4
Greece	19.7	17.5	16.1
Portugal	13.4	11.1	10.3
Turkey	12.2	10.5	9.9
Korea	11.8	9.9	9.3
Thailand	10.7	8.3	7.5
Pakistan	9.5	9.0	8.8
Sri Lanka	7.5	5.6	4.9
India	6.2	5.6	5.4

* Interest payments on debt as % of current account earnings

Source: Amex Bank

4. THE CONSEQUENCES AND IMPLICATIONS FOR POLICY

The previous section shows how a fall in oil prices has a significantly adverse impact on the debt situation of a number of oil exporting developing countries. At the same time the balance of payments of many oil importing countries improves. As far as the international financial system as a whole is concerned, however, these effects may not cancel one another out. Since at least some large debtor nations may be pushed closer to default, it may be argued that the costs become externalised. Default would, after all, damage the banks that have lent heavily to the defaulters and this could, in principle, set off an international financial crisis from which most countries, whether oil exporters or importers, would lose.

In this section we trace through some of the consequences for individual economies of the change in their debt position resulting from a fall in oil prices. We then move on to examine some of the global effects and to discuss various policy solutions.

For oil exporting countries faced with a deteriorating balance of payments a number of policy options are available. Countries may, in theory, finance the deficit by running down their reserves or by borrowing from international capital markets or from the International Monetary Fund (IMF). However, there are problems with these potential responses. Reserves may already be low⁶, and, because of the reduced creditworthiness which is

associated with a deteriorating balance of payments, countries may find it difficult to raise private capital. At the same time there may be strict limits on the amount of finance that may be borrowed from the IMF⁷.

If in practical terms insufficient money is available to allow countries to finance their deficits, adjustment policies have to be pursued which are directed at eliminating or at least reducing them. The question then becomes, 'what is the most appropriate form of adjustment?' In one sense the most appropriate policy is one which encourages structural adjustment designed to diversify the economy away from its reliance on oil. But such policies are unlikely to have much impact in the short run. Rapid adjustment usually relies on compressing imports either through the use of controls or through deflating domestic demand. However, there are strong reasons for believing that controls are a rather inefficient stabilisation tool and that there are domestic limits on how far a policy of deflation may be taken because of the social and political problems it creates, apart from the potentially damaging effect on economic development⁸. Again, if the costs of adjustment are perceived to be sufficiently high, a point may be reached where governments decide that default is a less unappealing alternative.

For oil importing countries, on the other hand, a fall in the price of oil relaxes the balance of payments constraint on the formulation of domestic policy. Although it is doubtful whether

a strengthening in the balance of payments will immediately raise the country's creditworthiness and thus its ability to borrow - after all a sizeable deficit may still remain - it does permit less rapidly acting, and perhaps therefore preferable, adjustment policies to be selected⁹. Less emphasis needs to be placed on import compression, and domestic consumption may be allowed to rise more rapidly (or to fall less rapidly) than would otherwise be the case.

Where imports are needed in order to sustain economic development the benefits may be long term as well as short term. Alternatively, oil importers may decide to stick with the existing pace of adjustment and to take the benefit of falling oil prices in the form of additional international reserves.

Fairly clearly from the above it may be seen that just as it is difficult to say whether a fall in oil prices is good or bad for developing countries, since the benefits and costs are not evenly distributed, similarly, from a global aspect, a fall in oil prices has a mixture of consequences.

As noted earlier, the overall effect on global aggregate demand should, other things remaining constant, be expansionary, while cost inflationary pressures should be ameliorated. In current circumstances these effects would be generally welcomed. On the other hand, debt default may become a greater risk in certain countries and such default would have undesirable global consequences. How then should this debt dimension be handled?

Much depends on whether the decline in oil prices is temporary or permanent; although the crux of the problem here is that nobody can be sure about the future course of oil prices. If the fall is permanent then adjustment is required. There remains legitimate debate, however, about what form adjustment should take and at what speed it should be achieved. If a relatively slow speed of adjustment is deemed appropriate then a relatively large amount of financing will be needed. By contrast with more rapid adjustment the need for financing will be less.

If the fall in oil prices is temporary, adjustment is less appropriate, and although it may still be sensible to seek a greater measure of diversification, the preferred policy response is to emphasise financing¹⁰. But from where is such finance likely to come?

It is unlikely that the banks will provide it. Banks feel that for various reasons they have become over-exposed in developing countries and they are seeking to reduce, not increase, their exposure. Moreover, while the expectation may be that oil prices will rise again, experiences during the 1980s have made the banks more risk averse, and they may be reluctant to lend on the basis of such an expectation. Furthermore, it needs to be remembered that not only will the banks be unwilling to perform a global financing role, they may not have the resources with which to undertake it. The redistribution of balance of payments disequilibria associated with a fall in oil prices means

that surpluses become more concentrated in the large oil-importing industrial countries. Preferences in these countries may be such that only a small proportion of the related revenues finds its way on to the private international capital markets.

If private capital markets do not supply the necessary finance, what about the official sector in the form of the IMF and the World Bank? There are various avenues through which these organisations could provide temporary balance of payments financing. Indeed in the case of the Fund part of its *raison d'être* is precisely to be a source of such finance. Within the Fund, finance could be supplied via the ordinary credit tranches, the Compensatory Financing Facility (CFF) which is designed to protect countries from the ramifications of temporary export shortfalls, or the Extended Fund Facility (EFF) which is designed to assist structural adjustment¹¹. The World Bank could provide similar support for structural adjustment through its programme of Structural Adjustment Loans (SALs)¹².

In addition it may be recalled that following the first oil price shock in the early 1970s the Fund introduced the Oil Facility which, although subsequently abandoned, was designed to provide extra finance to those countries whose balance of payments were particularly damaged by the oil price surge. There may be a similar case for reintroducing an equivalent facility to deal with the payments repercussions of falling oil prices.

Of course, to a large extent, the precise mechanics through which finance is directed to countries encountering payments and debt problems as a result of falling oil prices is secondary. The primary questions are whether it is accepted that the official institutions should play this role and whether they will be provided with the resources necessary to carry it out¹³. If the resources are forthcoming neither from the official sector nor from the private sector, and if the affected countries do not hold sufficient reserves to see them through their payments difficulties, there are only two alternatives left; adjustment or default. For the reasons mentioned earlier either one of these alternatives may be deemed undesirable.

The policy proposals outlined above contrast significantly with the strategy put forward by US Treasury Secretary, James Baker, at the annual meetings of the Fund and the Bank in 1985, before the big drop in oil prices. Mr Baker identified three elements to resolving the debt problem. First, the pursuit by debtor countries of domestic policies aimed at reducing inflation and promoting economic growth and adjustment. Second, a key role for the Fund and the World Bank in encouraging such policies, especially those with a market orientation. And third, increased lending of about \$20b over three years by the commercial banks in support of adjustment programmes as well as additional lending of about \$9 billion by the multilateral development agencies. The Baker proposals focused on fifteen major debtor countries including both oil exporters and oil importers¹⁴.

In some ways these proposals remain relevant. Few would argue with the claim that resolution of the debt crisis requires an appropriate combination of adjustment and financing¹⁵. Beyond this, however, the fall in oil prices has altered the environment in which the Baker Plan was formulated. Tables 1 and 2 show a significant overall deterioration in the debt position of the 15 countries identified by Mr Baker. Statistics produced by the World Bank confirm this. The Bank estimates that the revenue loss to the five oil exporting countries within the Baker Fifteen during 1985/86 caused by the fall in the price of oil was about \$24b, while the revenue gain to the ten oil importers in the group was little over \$6 billion. The revenue loss represents, on average, about 7.4 per cent of GNP for the oil exporters and the revenue gain only about 1.4 per cent for the oil importers.

With such a deterioration in the overall balance of payments position of the countries targeted in the Baker Plan two things have happened. First, the size of the financing gap has increased. But second, the chances of it being filled by private bank flows has receded still further.

The implication then follows that, unless the official sector adopts a larger financing role, greater pressure will be placed on achieving rapid adjustment. This is most unlikely to entail structural measures but will rather involve a 'quick fix' directed at reducing imports. A strategy of this kind will not foster the growth which the Baker Plan envisages. Whatever its

merits or demerits in 1985, the drop in oil prices has therefore undermined the Baker Plan. If it is intended to try and avoid excessively contractionary adjustment in certain debtor countries, and to reduce the risk of default, it is difficult to avoid the conclusion that the official international agencies will have to adopt a larger financing, as well as adjustment role that has been the case up to now.

5. CONCLUDING REMARKS

This article has shown that there is no short answer to the question of what impact a fall in oil prices has on developing countries and in particular on their balance of payments and debt positions.

A number of effects are generated; some direct, some indirect, some working at the level of individual countries and some working at the global level, though then feeding back on individual countries. The outcome of these various effects seems to be that while certain developing countries gain from a fall in oil prices others lose. The costs of falling oil prices will not, however, be contained within the initial losers, but may spread more widely to the international financial community and to other countries as a result of the additional debt problems generated. While welcoming the expansionary effects of falling oil prices on global aggregate demand it is therefore important not to neglect the debt implications.

The most logical policy response to these problems rests on whether the fall in prices is temporary or permanent. However, given the difficulty in reaching an ex ante judgement on this issue, it seems wise to pursue a blend of both financing and adjustment; with the latter focusing on endeavouring to bring about structural change which reduces vulnerability to subsequent variations in the price of oil.

The appropriate blend of policies can, in principle, be most easily brought about through the lending activities of the IMF and the World Bank and through the conditionality that they can bring to bear. Certainly these institutions will need to adopt a higher profile than the one envisaged in the Baker Plan.

NOTES AND REFERENCES

1. It should perhaps be underlined that while this article concentrates on oil, much the same sort of analysis could be applied to variations in the price of any major primary commodity.
2. R S Pindyck, Structure of World Energy Demand, MIT Press, 1979, for example finds that the long-run elasticity ranges between 0.3 and 1. See Gunnar Myhr and Morten Raaholt 'Oil Prices Less than \$10', paper presented at the International Association of Energy Economists' 1986 Conference, Bergen, Norway, for a brief review of the empirical evidence on price elasticities which confirms the existence of a low long-run price elasticity and an even lower short-run one.
3. For a critical appraisal of the banks' approaches to assessing creditworthiness see, Graham Bird, 'New Approaches to Country Risk', Lloyds Bank Review, October 1986.
4. A number of cases have already occurred where countries have imposed limits on the amount of debt service.
5. For a formal analysis of the economics of default see, for example, John Eaton and Mark Gersovitz, 'Debt with Potential Repudiation: Theoretical and Empirical Analysis', Review of Economic Studies, April 1981.
6. Reserve holdings vary across developing countries. Expressing reserves in terms of months of import coverage the figures for 1983 are as follows: Venezuela, 10.7; Uruguay, 9.3; Chile, 5.3; Peru, 4.6; Algeria, 3.5; Ecuador, 3.4; Malaysia, 2.9; Mexico, 2.5; Indonesia, 2.2; Brazil, 1.8; and Nigeria, 1.0; (World Development Report, World Bank, 1985).
7. For a presentation of these limits see the IMF's Annual Report, 1985, Washington.
8. For a broad discussion of adjustment and stabilisation policy and specific analysis of IMF conditionality in the context of developing countries see, Tony Killick, Graham Bird, Jennifer Sharpley and Mary Sutton, The Quest for Economic Stabilisation: The IMF and the Third World, Overseas Development Institute and Heinemann, London, 1984.
9. We avoid here the question of the relative merits of 'shock' versus 'gradualism' as approaches to adjustment.

10. One set of projections for the oil price comes from the World Bank's Commodities Division. The OPEC average price in US dollars per barrel is projected to be 17.0 in 1987, 19.5 in 1988, 21.0 in 1989 and 22.0 in 1990. On the basis of these figures, there is a partial but not complete recovery in the price of oil to its 1985 level. The effects of the oil price fall described in the text will then be partially but not totally reversed, assuming that there are no irreversibilities. Some combination of financing and adjustment would therefore appear to be the appropriate global strategy.
11. For further information on these facilities see the IMF's Annual Report or Killick et al, op cit.
12. Again a description of SALs may be found in Killick et al, ibid.
13. If a financing and adjustment response is considered appropriate the Fund and Bank are in a strong position to orchestrate it, through their lending and conditionality.
14. The Baker Fifteen are: Ecuador, Mexico, Nigeria, Peru and Venezuela (oil exporters), and Argentina, Bolivia, Brazil, Chile, Colombia, Ivory Coast, Morocco, Philippines, Uruguay and Yugoslavia, (oil importers).
15. But what is the appropriate blend and how is it to be achieved?

