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**THE QUALITY OF AID:  
MEASURING TRENDS IN DONOR PERFORMANCE**

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Donor performance can be quantified in four ways: (1) by the amount of aid given; (2) the terms and conditions under which it is given; (3) the extent to which it is tied; and (4) by its allocation to recipients. The way in which each of these criteria can be used to measure donor performance is discussed. The evolution of international guidelines by the Development Assistance Committee of the OECD for each performance criteria and actual donor performance in these areas are also addressed.

**I INTRODUCTION**

Four aspects of a donor's aid programme are readily quantifiable: (1) volume - the amount of aid given; (2) concessionality - the financial terms and conditions under which it is given; (3) tying - the extent to which a recipient country is required to use aid to purchase goods from the donor country; and (4) allocation - its geographical allocation to recipients. There are, of course, many other indicators by which the quality of aid may be judged which are far less easy to measure (e.g. the degree of popular participation and, to a lesser extent, poverty orientation). While we consider these latter aspects important, we do not deal with them in this paper.

Data on the four measures listed above are published regularly by the Development Assistance Committee (DAC). There has been some academic attention to describing trends in the allocation of aid (e.g. McGillivray, 1989; and White and McGillivray, 1992). But, with the exception of Mosley's (1985) aid quality index, there has been little attempt to produce an overall picture of these quantifiable aspects. In particular there is no analysis of trends in these indicators over time, or an assessment of achievements against the historical evolution of DAC targets. This paper fills this gap.

We deal, in Parts II, III, IV and V with volume, concessionality, tying and geographical allocation in turn. Trends in performance in each of these areas are illustrated by reference to four donors: Japan, the Netherlands, the United Kingdom and the United States. We do not consider one measure used by Mosley (1985) in the construction of his aid quality index - share of aid to social sectors - as there appears no unambiguous answer as to what is a "good" share (he assumes the higher the better). Part VI presents a diagrammatic synthesis of these performance indicators and Part VII concludes.



## II AID VOLUME

The most commonly discussed aspect of donor performance is the volume of aid. The appropriate volume of aid may be identified from two different perspectives: supply and demand.<sup>1</sup> Demand-driven estimates - based on the two gap model or variations thereof - have traditionally been popular with the academic community, but made relatively less impression on donors. Calculation of target aid volumes from the supply side (as a percentage of donor GNP) have had a greater impact on donor policy and public attention - though, as we shall see, only varying impact on actual performance.

The savings gap is the difference between investible funds available from domestic sources and required investment to attain the target growth rate: the investment-growth relationship being described by the Harrod-Domar equation. Early estimates of the savings gap were made by the UN (1951), Millikan and Rostow (1956), Tinbergen (for the EEC, 1959), Hoffman (1960) and Rosenstein-Rodan (1961).<sup>2</sup> Estimates of the savings gap in the 1950s typically produced total requirements in the range \$6-7 billion a year, roughly equal to the level of flows attained in the early 1960s.

The trade gap is the difference between the amount of foreign exchange required to finance necessary imports to attain a target rate of growth and that earned from exports. Trade gap models are usually very structuralist. First, the models have an exogenous rate of export growth - that is there is no possibility to adopt policies to favour export promotion. Second, import requirements are given by fixed technical coefficients of production, with no allowance for substitution in response to relative price movements. Estimates of aid requirements, i.e. demand for aid, which were made based on the trade gap (also known as the "Prebisch gap")<sup>3</sup> became common in the early 1960s (GATT, 1962; UN, 1962; Blau for FAO, 1963; and Balassa, 1963). Requirements calculated by this approach were larger than those given by the savings gap, being in the range \$10-20 billion.

Chenery and Strout's (1966) well known paper combined the trade and savings gap in a single model (the two gap model): sufficient capital inflows are required to fill the larger of the savings and trade gaps for each country. This paper was developed from an USAID-financed study to analyse required levels of aid (Chenery and Strout, 1965).

The gap approach of calculating aid requirements gives not only the total amount of aid but also a country-by-country breakdown of the allocation of that aid. The World Bank, in particular, continues to use basically this approach in its RIMSM model. However, long ago it was observed in the DAC Report that demand-driven estimates had

failed to evoke sufficient confidence on the part of the assistance providers to serve as a framework for aid allocation. (DAC 1969: 159).

One short-coming of the demand-side approach, from a donor perspective, is that it says how much aid should be given, but not who should give it. As we describe shortly, part of the appeal of the supply-side perspective has been its emphasis on burden-sharing. But, leaving this aside, we would argue that donors are right to have been sceptical of the value of the numbers produced by the aid requirements calculations. The assumption underlying the gap approach is that aid is endogenously determined to fill the trade and savings gaps. Such an approach ignores the fact that aid may have macroeconomic repercussions on savings (the savings debate), exports (aid as Dutch disease) and other variables. That is, the gap approach to capital requirements ignores many of the channels through which aid may in fact affect the recipient economy.

The supply-side approach is concerned not with how much aid is required but how much donors should give, a calculation based on their national income. The earliest target was that donors should ensure that financial flows to developing countries made up one per cent of their domestic income. Bhagwati attributes the origins of this target to Sir Arthur Lewis, who suggested it to Hugh Gaitskell. Gaitskell was instrumental in the target being adopted by the Labour Party in the UK in the early 1950s (Bhagwati 1972: 123). But de Silva (nd: 7) credits the origination of the idea to an earlier discussion in 1943 between the two economists behind Bretton Woods - Keynes and White. Whatever its origins, the one per cent target became firmly established when it was first adopted by the World Council of Churches in 1958, then by UN General Assembly in 1960 and at the first meeting of UNCTAD in 1964.<sup>4</sup>

Whilst the various bodies mentioned above promoted the one per cent target in the interests of international equity, the United States was equally keen to have it put into practice on grounds of "burden sharing": the political and strategic benefits of aid accrued to the whole "free world" (i.e. these benefits were an international public good) and so all donors ought to pay for them.<sup>5</sup> Yet during the 1950s and at the start of the sixties the US was contributing about two-thirds of all official flows.<sup>6</sup>

The vehicle for the US's concern became the donors' club, the Development Assistance Committee (founded as the Development Assistance Group in 1960 and renamed the following year), whose initial nine members were the United States, United Kingdom, Netherlands, Belgium, Portugal, West Germany, Japan, Italy and Canada. There are now seventeen members (the new members being Australia, Austria, Finland, Ireland, New Zealand, Norway, Sweden and Switzerland). The role of DAC has evolved into that of a forum for the discussion of the whole range of aid policy, and the adoption of guidelines and targets in a number of areas. The one per cent target was the earliest - being endorsed by DAC following the target's adoption at the 1964 UNCTAD -



and most prominent of these. And as a recent DAC report commented: "burden sharing remains a sore issue in DAC discussion (DAC 1989: 135).

The one per cent was a target for all financial flows - that is including private<sup>7</sup> and all kinds of official<sup>8</sup> flows. In 1969 DAC refined its definitions, introducing the still used concept of Official Development Assistance (ODA). There are three parts to this definition, coming from the three words in the name. For a financial flow to be aid it must be:

- (1) official - it must come from official sources (thus excluding money collected by NGOs, but not that channelled through them by official agencies);
- (2) development - the monies must be intended for developmental purposes (excluding much military aid that had been previously included, particularly from the US); and
- (3) assistance - the terms of the aid must be concessional, rather than at those available from commercial borrowing.<sup>9</sup>

The committee that met, at the request of Robert McNamara when he assumed the Presidency of the World Bank, with former Canadian Prime Minister Lester Pearson in the chair, reaffirmed the one per cent target, but with a new target of 0.7 per cent of GNP for ODA alone. This target was subsequently adopted by DAC and remains to this day - having been adopted by all seventeen members of DAC. The Brandt Commission (a similar initiative to the Pearson Committee) recommended that the target be met by all donors by 1985, and that it be increased to one per cent by 2000 (Brandt Commission, 1980: 242). However, Pearson's comment of over twenty years ago still holds true:

it is ironic to note that total resource flows actually did exceed 1 per cent of combined national income in the five years preceding the adoption of the target by DAC. Since then, the target has never been met.

(Pearson et al 1969: 144)

There therefore seems little hope of reaching for the higher target proposed by the Brandt Commission.

Table 1 shows the performance of selected donors during the 1960s and Figure 1 how they have fared against the 0.7 per cent target. As Pearson noted, for most donors, performance has declined away from the target rather than rising to meet it: the DAC average fell from slightly above 0.5 per cent to the 0.4 per cent level by the early 1970s. It hovered around this point, but has fluctuated around a declining trend in the 1980s - being 0.35 in 1990. As White observed, "in terms of the standards [the donors] had set themselves, this was a dismal performance" (1974: 19).

Figure 1

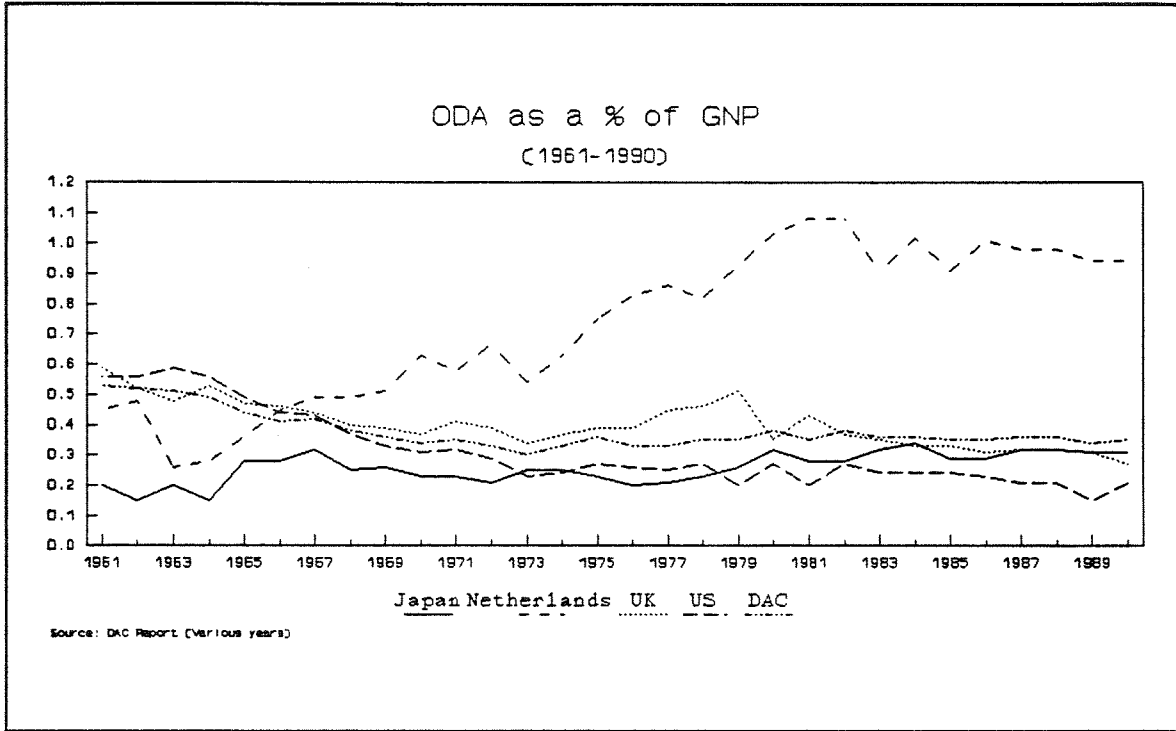


Table 1 Resource Flows as Per Cent of GNP

	1960	1967	1968
Japan	0.58	0.69	0.74
Netherlands	2.11	1.00	1.10
UK	1.21	0.77	0.83
US	0.75	0.69	0.65
Total OECD	0.89	0.74	0.77

Source: Pearson et al 1969: 145

Japan's aid programme has grown rapidly in real terms: in 1988 Japan became the world's largest aid donor, although she fell back to second place in 1990.<sup>10</sup> But the strength of Japan's economic growth means that performance in terms of the target has been modest and she remains some way from attaining it. There has been pressure for some years - particularly the US - for Japan to assume a degree of responsibility for international affairs consistent with its economic power. For many in Japan - who wish the constitutional limit of one per cent of income for defence purposes to be preserved - this responsibility is best assumed through the aid programme (see Wright-Neville (1991) for further discussion). Continued growth of Japanese aid is therefore to be expected.

The US, UK and the DAC average all show a deteriorating performance in recent years. The UK's current commitment to the volume target has been qualified by the condition that it shall be met "when the time is right".

The exception shown here is the Netherlands (other donors doing well on this criterion are Norway, Denmark and Sweden). In 1976 the Netherlands implemented a legal requirement that the aid programme be 1.5 per cent of Net National Income (a measure which is slightly lower than GNP).<sup>11</sup> However, not all items covered by the aid programme qualify as ODA - there being two principle parts of non-ODA uses included in the 1.5 per cent. One has been payments to citizens of Surinam who have settled in the Netherlands and other refugee programmes. The second is the interest subsidy on monies raised on capital markets and on-lent as part of the aid programme. Since the money is either highly concessional or grants the interest payments are not part of the Dutch ODA programme but are covered in the country's "aid budget". The growing interest subsidy has driven an increase in non-ODA items in the aid budget - which rose from 13.9 per cent in 1976 to 18.5 per cent by 1986 (Cooper and van Themaat, 1989: 125).

The Pearson report also claimed that the supply and demand estimates of aid volume were consistent with one another - that is if donors provided one per cent of their GNP this would satisfy the requirements calculated from a

demand perspective. Table 2 shows the data to test this claim for the time at which Pearson was writing and using more recent data.

Chenery and Strout (1966) calculated aggregate aid capital inflow targets at \$10 to \$ 12 billion dollars for 1970 and \$14 to \$17 billion for 1975, both in 1962 prices. In order to compare with the donor GNP (donors being defined as the eighteen current DAC members), these requirements have been converted in Table 2 to their current price equivalents.<sup>12</sup> Table 2 shows that even the 0.7 per cent target would have been sufficient to meet the estimated capital requirements of the developing countries in those years.

Table 2 Capital inflow requirements versus supply driven estimates

	One % of donor GNP	0.7%	Requirements (US\$ billions)
1970	21	15	Chenery and Strout (1966): 12 - 14
1975	40	28	Chenery and Strout (1966): 28 - 34
1985	86	60	Fishlow (1987): 54 - 91 Development Committee (1988): 83 Lensink and Bergeijk (1991): 48 - 112

The Chenery and Strout study was quite comprehensive, covering 50 countries. The studies shown for 1985 (though some report requirements for different years but given - by Lensink and Bergeijk (1991) - in 1985 prices) do not have such wide coverage. All exclude Nigeria and also many middle income countries. Thus all the figures are lower bounds. The range of the estimates is very large and the capital available if the one per cent target were met would fall in the middle of this range (and very close to the Development Committee's figure). If we take this mid-point as representative of the studies, then it appears to still be the case that, in aggregate, the supply and demand approaches give broadly compatible results. However, this conclusion now rests on the full one per cent being met - 0.7 per cent is no longer enough. And if, as Lensink and Bergeijk (1991) argue, their upper estimate of US\$ 112 billion is the more realistic figure then required flows are in excess of those given by achievement of the supply-side targets.

The one and 0.7 per cent targets are systems of proportional taxation - that is each donor pays a fixed proportion of their income. In its *Human Development Report 1992* the UNDP has recently revived the proposal (made before by, for example, Rosenstein-Rodan (1961) and Kravis and Davenport (1963) and mentioned in passing in the Brandt Report) that aid volume targets should rather be based on a progressive taxation - that is richer donors should pay a larger share of their income than poorer ones.

The UNDP Report calculates each donor's tax rate (aid target as a per cent of GNP) by multiplying 0.7% by 1 plus the percentage difference between the donor's GNP per capita and the average GNP per capita of all donors.<sup>13</sup> To put this more formally the proportional target aid volume of donor  $i$  ( $T_i^P$ ) is given by:

$$T_i^P = 0.7 Y_i \quad (1)$$

where  $Y_i$  is donor  $i$ 's GNP. The UNDP's proposed progressive target ( $T_i^G$ ) is given by:

$$\begin{aligned} T_i^G &= 0.7 \left( 1 + \frac{Y_i - \bar{Y}}{\bar{Y}} \right) \\ &= 0.7 \frac{Y_i}{\bar{Y}} \frac{N}{n} \end{aligned} \quad (2)$$

where  $y_i$  is donor  $i$ 's per capita income,  $n_i$  its population,  $N$  the total population of all donors,  $Y$  the total GNP of all donors and  $\bar{y}$  the average GNP per capita for all donors.

From the second line of equation (2) it may be seen that a donor's target is directly proportional to its share in the income of all donors and inversely proportional to its population share. The first line of equation (1) makes it clear that the target per cent of GNP for ODA will be 0.7 if a donor's GNP is equal to the average for all donors - countries which are richer than average should pay more than 0.7 per cent and those which are poorer less.

Table 3 presents 1990 donor ODA/GNP performance (column 1), and the progressive targets as calculated by the UNDP formula (column 2). The third and fourth columns show "performance" - that is actual ODA/GNP as a ratio of the 0.70 per cent target and the UNDP target respectively. Clearly, those countries that are richer than average will do less well on the latter measure and *vice versa*: the countries in the upper segment of the table would be required to pay between 1.08 and 0.74 per cent of their national income to meet the progressive aid target given their larger national incomes.

Some of the worst performers - notably Switzerland, Japan and the US - rank amongst the richest donors so that their performance compared against the progressive rather than proportional target falls from dismal to very poor indeed. Three of the good performers (Norway, Sweden and Denmark) have higher than average incomes - but their GNP/ODA ratio is sufficiently high to more than fulfil the progressive target (that is, the ratio in the fourth column is greater than unity). Of the poorer donors the difference between the two tax systems is greatest for Ireland - whose performance moves from being the worst to average.

Table 3 Donor performance with proportional and progressive targets, 1990

Donor	ODA as %	Target %	Performance	
	of GNP	of GNP	(1)/0.70	(1)/(2)
	(1)	(2)		
Switzerland	0.31	1.08	0.44	0.29
Japan	0.31	0.86	0.44	0.36
Norway	1.17	0.81	1.67	1.44
Finland	0.64	0.80	0.91	0.80
Sweden	0.90	0.78	1.29	1.15
USA	0.21	0.76	0.30	0.28
Denmark	0.93	0.74	1.32	1.26
Germany	0.42	0.74	0.66	0.57
Canada	0.44	0.69	0.63	0.64
France				
inc. DOM/TOM	0.79	0.65	1.13	1.22
exc. DOM/TOM	0.55		0.79	0.84
Austria	0.25	0.63	0.36	0.39
Belgium	0.45	0.59	0.64	0.76
Netherlands	0.94	0.58	1.34	1.62
Italy	0.32	0.55	0.46	0.58
UK	0.27	0.53	0.39	0.51
Australia	0.34	0.52	0.49	0.65
New Zealand	0.22	0.44	0.31	0.50
Ireland	0.16	0.32	0.23	0.50
Average	0.35	0.70	0.50	0.50

Source: UNDP (1992: 44).

### III THE TERMS OF AID

A second major concern of the DAC has been with the terms and conditions of aid. That is, the rate of interest that has to be paid, the period over which payment is due (maturity) and the period before which capital repayments should begin (the grace period). For a particular loan these three aspects are captured in the concepts of grant equivalent and grant element.

Suppose a donor gives a grant - that is there is to be no repayment - of \$1 million. The recipient receives the full one million.<sup>14</sup> But if the money were a loan then the money must be repaid. The nominal value of repayments will exceed the amount of the loan (as principal plus interest must be paid). But a dollar a year from now is not worth as much as a dollar now - so we calculate the present value of repayments (PVR) by summing the discounted value of all repayments of interest and capital.<sup>15</sup> The grant equivalent is then defined as:

$$\text{Grant equivalent} = F - \text{PVR} \quad (3)$$

where F is the face value of the loan (i.e. the principal advanced). The grant element is given by:

$$\text{GE} = \frac{F - \text{PVR}}{F} \quad (4)$$

Clearly the grant equivalent of a grant is the value of the grant itself and the grant element 100 per cent. The grant element of a loan with interest charged at the same rate as the discount rate (10 per cent) will have a grant element (and equivalent) of 0 (regardless of the grace period and maturity). For a financial flow to qualify as ODA it must have a grant element of at least 25 per cent. Official flows that are intended for developmental purposes but do not satisfy the concessionality condition are called other official funds (OOF). Official development finance (ODF) is the sum of ODA and OOF.

World Bank money through the IBRD window is not ODA (having a grant element of about 15-20%), but that via IDA is (having a grant element of approximately 80 per cent). The regional multilateral banks (such as the African Development Bank) also have this two-tier structure of hard and soft windows.

The grant element of a donor's whole aid programme is the weighted average of the grant element of all its individual aid flows. In analysing trends in performance it is useful to break this number down into two constituent parts: the share of loans in total ODA (l) and the average grant element of those loans (GE<sub>l</sub>). Donor i's grant element is therefore given by:

$$GE_i = lGE_L + (1-l) \quad (5)$$

This equation makes clear that a donor can improve its overall grant element either by increasing the share of grants in its aid programme or by increasing the concessionality of that part of its ODA which are loan rather than grant funds.

Figure 2 shows the share of loans in total DAC bilateral ODA, the average grant element of these loans and the resulting total grant element of the whole package. There has been a steady upward climb of the overall grant element from the 1970 figure of approximately 83 per cent to 89 per cent in 1975 and a more or less constant grant element at around 90 per cent thereafter.<sup>16</sup>

The original climb was the result of an improvement in the terms of concessional lending. These improvements have mirrored successive DAC targets for terms and conditions. For example, the 1969 DAC Terms Recommendation stipulated that, as one of three concessionality targets from which donors could choose, 85 per cent of a donor's ODA programmes should have an average grant element of at least 85 percent (assuming the rest of the programme has the minimum grant element of 25 per cent this target puts a lower limit on the concessionality of the whole programme at 76 per cent).

The 1972 Recommendation on Terms and Conditions of Aid, which set a target of an average grant element for total ODA commitments to all developing countries of at least 84 per cent, was therefore a considerable increase in the stringency of the target. The 1972 Recommendation also introduced special conditions for aid to the least developed countries (LLDCs): the average grant element of all commitments from a given donor should be either at least 86 per cent to each LLDC over a period of three years, or at least 90 per cent annually for the LLDCs as a group (DAC Report 1974:120-24).

The latest revision of grant element targets took place in 1978 at which time the overall ODA grant element to each least developed country should be at least 86 per cent annually or - as was already contained in the 1978 guidelines - at least 90 per cent annually for the least developed countries as a group (DAC Annual Report 1986: 59-60).

The DAC terms recommendations now also incorporate a volume condition. A donor cannot be deemed to have satisfied the terms recommendation if its aid is "significantly below the DAC average" (DAC 1988: 174) - it's easy to give money away if you don't give too much! For example, for 1986-87 this disqualified Austria, Ireland, New Zealand and the United States. Italy has not subscribed to the terms recommendation - but it is another example of a



Figure 2

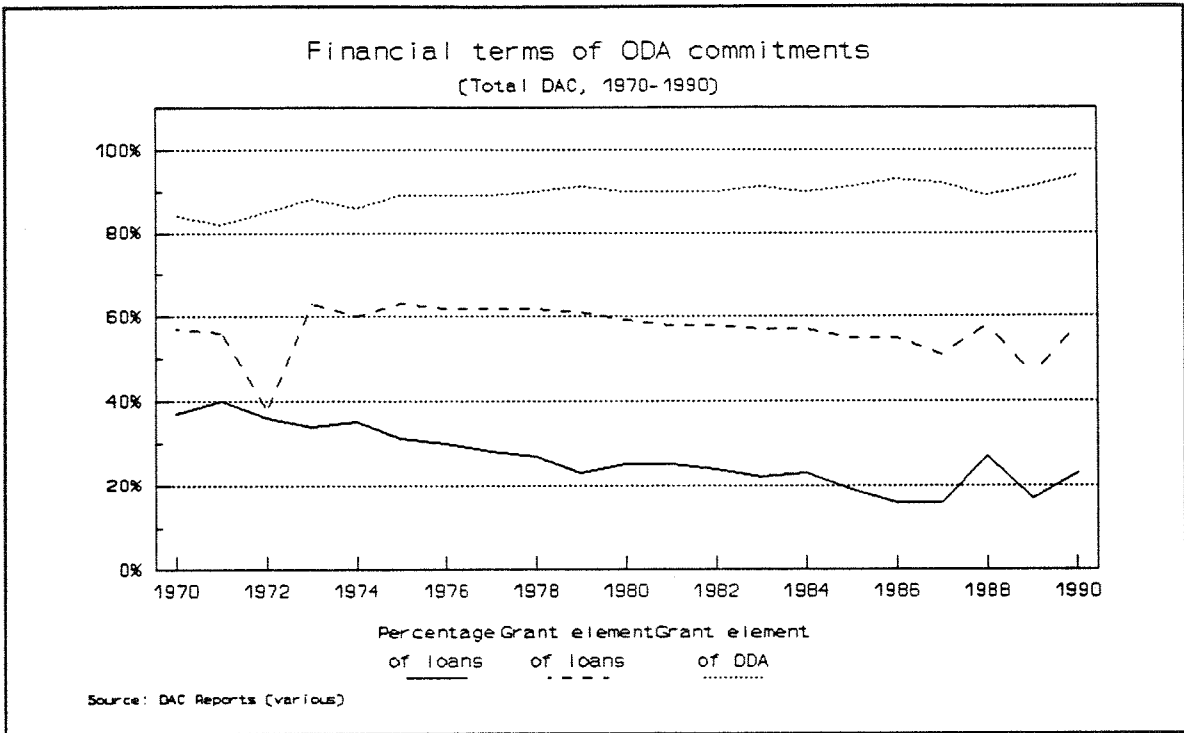
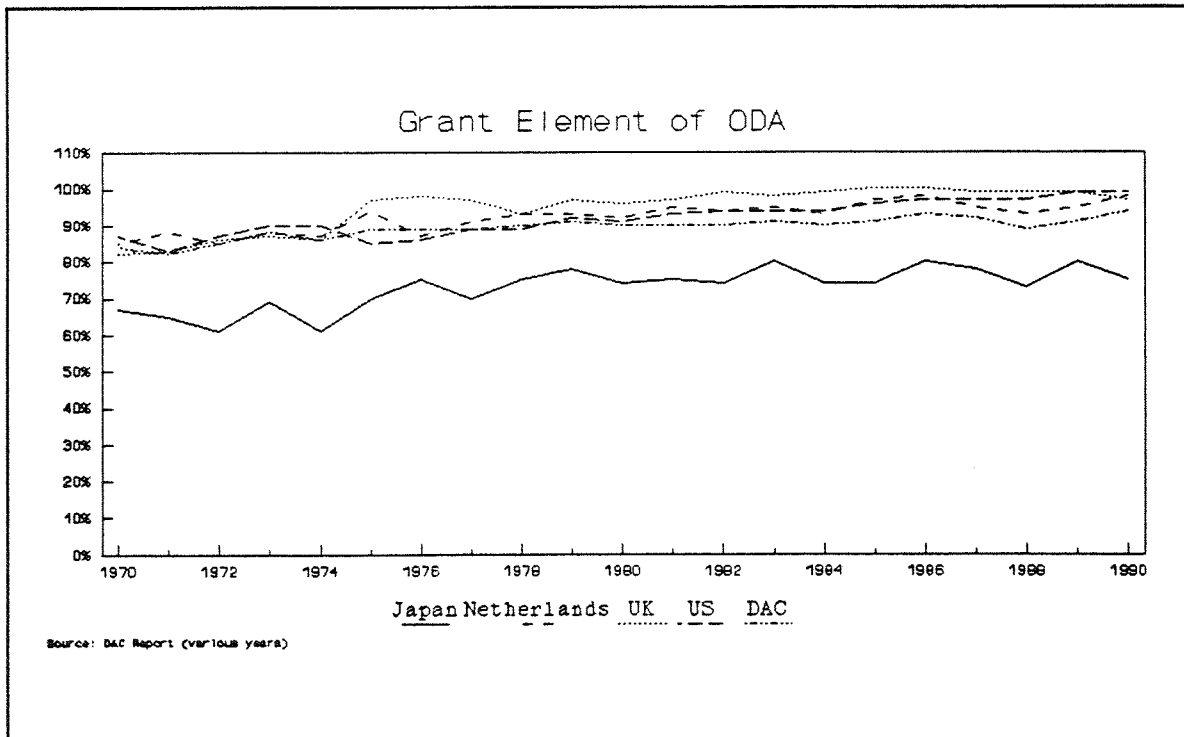


Figure 3



donor who would not qualify has having satisfied the recommendation on account of its low aid volume.

During the eighties the grant element of loans worsened, returning to the levels of the early seventies. However, this trend has been compensated for by an increase in the proportion of aid given in grant form, allowing the overall grant element to remain more or less constant.

Figure 3 presents the overall grant elements of four donor countries - Japan, the Netherlands, the UK and the US - as compared to the DAC average. The trend is a slight and steady rise over time (as discussed above). The Netherlands', UK's and US' grant elements were within close range of the DAC average, with Japan a notable exception. Japanese aid has a reputation of being of low quality - that is not very concessional and heavily tied. In the next section we shall see that the second of these is no longer true, but clearly the former is. Wright-Neville (1991) attributes these characteristics of aid to a cultural tradition in which the beneficiary is always expected to make some return to the benefactor.

It is possible to combine the volume and terms targets by expressing the grant equivalent of a donor's ODA as a percentage of their GNP. The 0.84 per cent target for the overall grant element implies that the combined target is 0.59 (i.e.  $0.7 \times 0.84$ ). Table 4 shows the actual achievement of the DAC members. The four best performers by volume also have very high grant elements - so that they easily meet the 0.59 target. Two of the poor performers - Japan and Austria - fail to meet the terms target and so their comparative performance on the combined target is even worse than judging from the volume target alone.

When calculating the total grant element of a donor's aid allocations, multilateral contributions should also be taken into account. These can be assessed from either a donor or a recipient point of view. From the donor point of view such contributions are grants and should be reflected as such in the share of all aid that is grant aid. However, from the recipient perspective this money may well be loan finance. In fact, figures show that, on average, multilateral aid is slightly harder, i.e. less concessional, than bilateral.<sup>17</sup> Thus, the inclusion of multilateral aid causes a slight downward adjustment in the grant element of total aid to the recipient (but an increase in that from the donor).

Therefore, from the recipient's point of view each donor's aid may not be as concessional as it appears from considering the bilateral programme alone. The extent of this effect will vary between donors according to the relative share of multilateral contributions in their whole aid programme and its distribution between agencies. DAC records the data required to make such

Table 4 Terms performance and terms and volume performance, 1990

Donor	Overall GE	GE x ODA/GNP
Australia	1.00	0.34
Austria	0.76	0.19
Belgium	0.93	0.42
Canada	0.98	0.43
Denmark	1.00	0.93
Finland	0.99	0.63
France	0.90	0.71
Germany	0.91	0.38
Ireland	1.00	0.16
Italy	0.91	0.29
Japan	0.75	0.25
Netherlands	0.98	0.92
Norway	1.00	1.17
New Zealand	1.00	0.22
Sweden	1.00	0.90
Switzerland	1.00	0.31
UK	0.97	0.26
USA	0.99	0.21
DAC	0.94	0.33

Source: DAC (1990, 1991)

calculations and has also included it some grant element data in some years, but not with great consistency.

#### IV AID TYING

Next we come to what Keith Griffin has called "the knotty problem of tied aid" (1987: 249). Aid may be tied in three ways (the 3Ps):

- (a) policy - the receipt of aid may be depend upon the implementation of certain policies (conditionality);
- (b) projects - the aid may be intended for use in a specific project;
- (c) procurement - the goods and services purchased with the aid might have to come from specified countries (the donor in the case of fully tied aid or the donor plus named developing countries in the case of partially tied aid).

Any particular aid deal may be tied in one or two of the above ways, all three or none at all.

Whether or not the first two forms of tying are a measure of good donor performance or not is a matter of debate. The current fashion amongst official donors - though not of their critics, including some NGOs - is to support policy conditionality, broadly falling in line behind the World Bank and IMF. Donors have usually felt it preferable to tie aid to projects, though the 1980s saw something of a revival of general balance of payments and budgetary support.

On the other hand, procurement tying is unambiguously seen to be a bad thing by developmental lobbyists, recipient country governments and many agency officials. It is therefore this form of tying we discuss here.

There are three problems in quantifying the extent of typing. First is that of multilateral contributions. In general multilateral contributions are not tied, though the EC is an exception to this rule.<sup>18</sup> In principle DAC data exist from which the imputed tying element in a donor's aid may be calculated, but such calculations are not reported by DAC.

The second problem is the combination of aid that is tied and that which is partially tied. Goods financed by aid in the latter category may be purchased in either the donor country or in most developing countries. The weight attached to such aid in calculating the percentage of a donor's aid

that is tied should relate to the actual expenditure pattern of such aid. Such data are less readily available.

And thirdly, and less easily quantifiable still, is unofficial tying of aid. One form of this is unwritten agreements that aid shall be tied - such as the "gentleman's agreement" that prevailed in post-colonial Malawi (Morton 1975). A perhaps more pervasive form of unofficial aid tying takes the form of the tying of a small component of an aid programme, which effectively ties much more of it. For example, the tying of a major capital purchase will tie many related purchases for years to come. Or, the requirement to use consultants from the donor country at the design stage of the project is most likely to lead to a project document that specifies donor-country equipment.

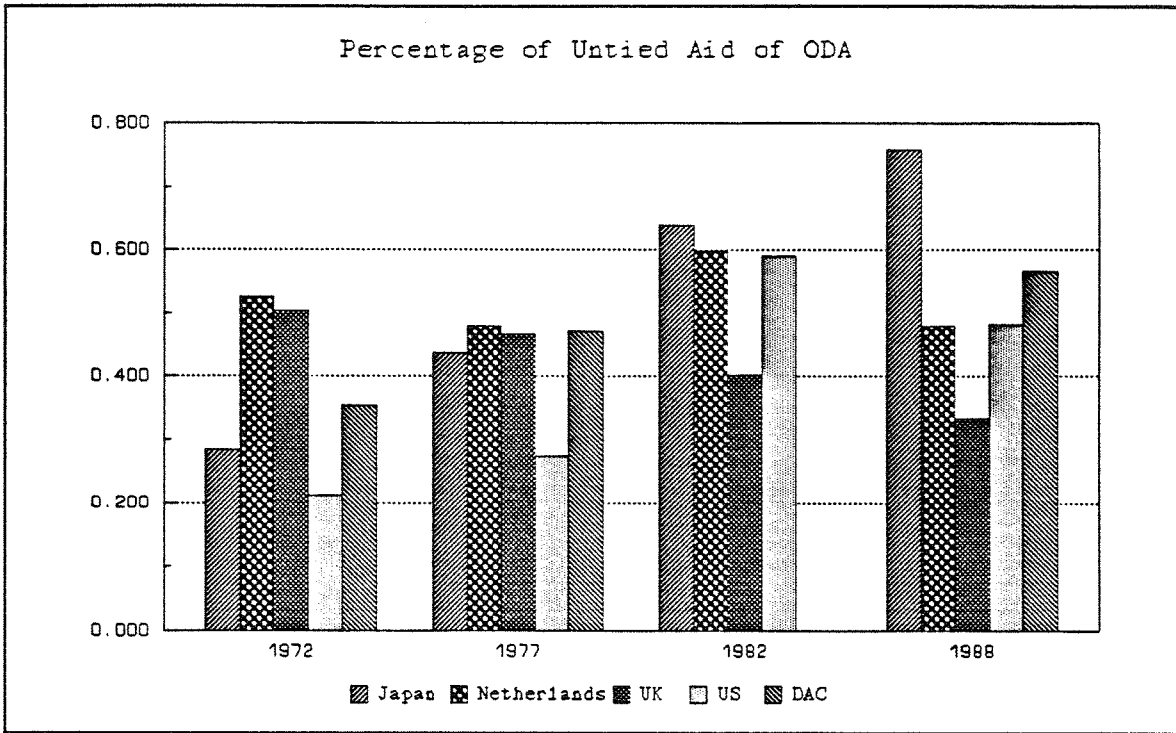
DAC has attempted to regulate the extent of tying since the organisation's inception. The 1965 DAC Recommendation on Financial Terms and Conditions "Measures Related to Aid Tying" encouraged donors to remove procurement restrictions to the maximum extent possible and proposed steps that could reduce adverse effects of tied aid (competitive bidding among domestic suppliers, permission of third-country procurement, untying in favour of developing countries).

Since that time, DAC has numerous times proposed collective reductions in tying levels, but to no great avail. For example, in 1974 ten DAC members (Australia, Denmark, Germany, Italy, Japan, Netherlands, Norway, Sweden, Switzerland and the United States) joined the "Memorandum of Understanding on Untying of Bilateral Development Loans in Favour of Procurement in Developing Countries", which encouraged a move from tying to partial tying (DAC 1985: 242-3).

However, while some progress has been made, in particular the acceptance of the principle that contributions to multilateral programmes should be untied, no agreement has been reached on collective reciprocal untying targets or measures. In general, donors which are competitive in world markets (notably Japan) appear more willing to reduce tying than those who are struggling to maintain their presence in export markets (such as the UK). Figure 4 provides visual confirmation of this statement. The percent of DAC aid that is untied has risen modestly over the two decades shown. The share of untied aid from the UK has actually fallen whilst that for Japan has risen quite dramatically. The US performance shows a less steady improvement and that of the Netherlands fluctuates around no apparent trend.

From the recipient point of view, tying is seen as a negative factor since, not only does it restrict recipient choice but it also opens up the possibility of uncompetitive pricing by supplying countries. While acknowledging the weaknesses of aggregate data, Bhagwati has estimated that

Figure 4



the extra cost to recipients of having to accept tied aid lies between 20 and 25 per cent (1970: 17). More recent studies have also backed up this view: for example, Riddell (1983: 32) estimated a figure of between 10 and 20 per cent for US aid to Zimbabwe.<sup>19</sup> The most recent DAC Guidelines on "Good Procurement Practices for ODA", adopted in 1986 (DAC 1986: Annex I), encourage the use of competitive bidding for and contracts to reduce possible overpricing.

Given an estimate of the extent of overpricing it is possible to combine the nominal grant element and the tying of aid to get an effective grant element (Thirlwall, 1983). Hayter and Watson, amongst others, have argued that over-pricing may offset concessionality:

Such price disadvantages may cancel out the advantages of concessional terms, when the "aid" is in the form of a loan or a grant associated with export credits, so that it would have been cheaper for the borrowing government to buy on the open market and borrow entirely at commercial rates of interest.

(Hayter and Watson 1985: 15-16)

Clearly Hayter and Watson's argument cannot apply to grant aid - free goods are free goods and it cannot be better to buy them.<sup>20</sup> As far as concessional loans are concerned, with a grant element of 80 per cent overpricing would have to be 400 per cent to make commercial borrowing preferable to the aid. The point at which Hayter and Watson's argument may have some validity is in the case of mixed credits: that is aid money that is given in conjunction with a non-concessional trade credit and the whole finance package is procurement tied.<sup>21</sup>

## V AID ALLOCATION

The final aspect of this paper concerns the allocation of aid between recipients. The two main issues are the appropriate allocation and how to measure this allocation. Most assessments of allocation take the benchmark to be recipient income per capita - with the assumption that poorer countries should receive higher aid per capita (for a survey see White and McGillivray, 1992). However, some may question whether giving more aid to the poorest is the appropriate allocation. For example, the aid allocations produced by the two gap model (discussed in Part II above) tend to give more aid to richer countries (since they have the larger gaps). The correlation coefficient between the aid allocation in Rosenstein-Rodan's aid requirement study and recipient income per capita was positive 0.63 (White, 1990: 186).

However, as already pointed out, the gap studies have not been the basis of donor allocation policies. Moreover the rhetoric of aid, and the basis for public support for the aid programme, is that aid should go to the poor. This leaves the further problem that giving aid to "poor countries" is not the same as giving it to poor people. Nonetheless, the view that poorer countries

should receive more aid than richer ones has many defenders<sup>22</sup> and we also believe that a broad indication of how a donor's aid is allocated, as measured against recipient income, is an interesting aspect of performance.

There are a variety of ways in which this may be measured (reviewed in McGillivray and White 1992). For consistency, this paper adopts the measure used by DAC: the percentage of aid going to the lowest income countries, defined as the 42 least developed countries (LLDCs) given in the United Nations 1990 list. The DAC target is that aid to these countries should be 0.15 per cent of donor GNP. Although the two targets are independent, this figure would be equivalent to 21 per cent of ODA if the 0.7 per cent target were met.

In the 1970s three of the four donors shown (the exception being the Netherlands) and the DAC average were below the implicit 21 per cent target (Figure 5). However, it was reached and surpassed in the early 1980s - the DAC average peaking at over 25 per cent in 1985. (Of course the UK, US and Japan would not meet the 0.15 per cent of GNP to LLDCs target since their ODA\GNP ratios under half the 0.7 per cent target). Performance has fallen back since the mid-80s, averaging just under 20 per cent in 1990.

One way in which we may try and understand trends in the allocation of aid is by looking at the regional focus - which is shown in Table 5. Japan's poor performance and the relatively good showing of the UK may be at least in part explained by the historical factors affecting their aid flows. Japan has directed much of its aid to Asia, which is relatively better off than the recipients of UK aid in Africa. The table also shows that there was some, albeit modest, success in increasing the share of ODA going to sub-Saharan Africa during the 1980s. The data show what is already well known - the strong concentration of US aid in the Middle East. In 1990 just under 29 per cent of US aid went to Egypt and Israel alone. By contrast, the more developmental stance of Dutch aid policy is demonstrated by their better performance by this measure.

## VI A DIAGRAMMATIC SYNTHESIS

Is it possible to combine these different aspects of donor performance into a single performance indicator? Mosley's (1985) index of aid quality is an attempt at this. But such an index must of necessity adopt an arbitrary system of weights. Moreover, sources of discrepancy in donor performance will be hidden and we may well wish to unravel the index into its component parts. An alternative approach is a visual presentation of the four aspects - given previously by Åshuvud, (1986) - and shown in Figures 6(a), (b), (c) and (d) respectively.



Figure 5

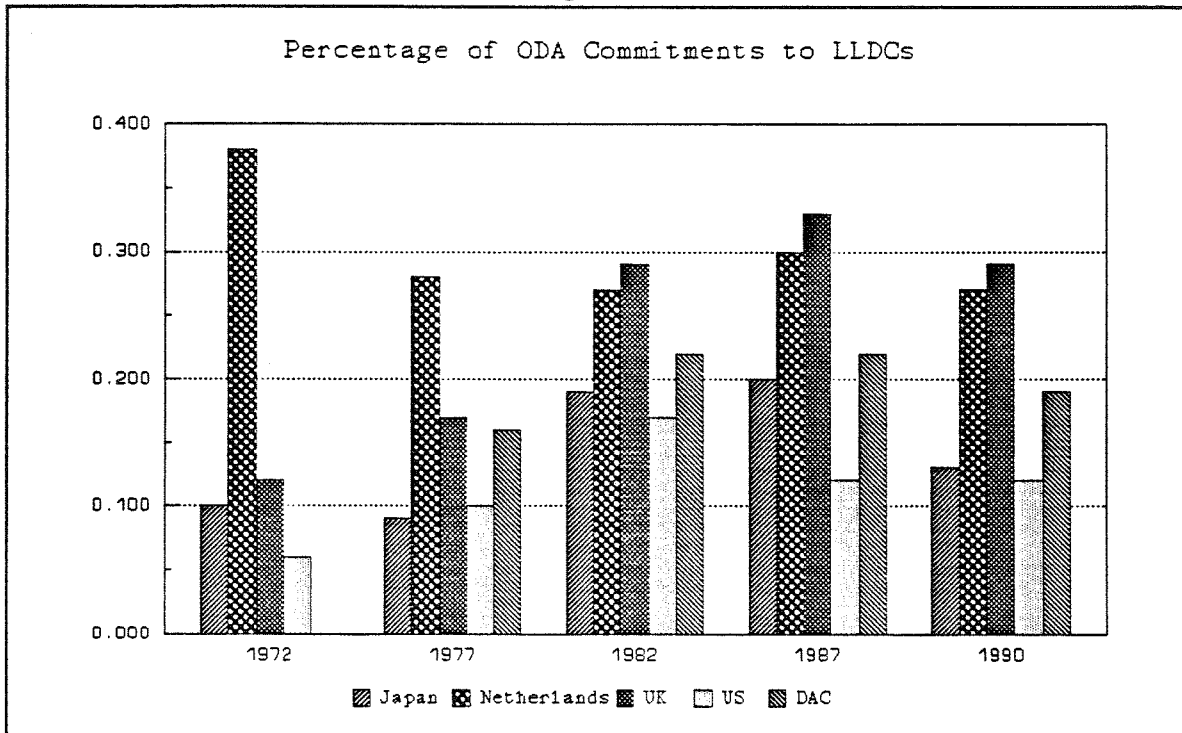


Table 5  
Regional distribution of ODA (net disbursements)

	Japan	Netherlands	UK	US	DAC
1979/80					
Sub-Saharan Africa	15.9	31.1	34.7	15.5	28.8
South Asia	38.2	22.4	32.6	15.1	21.0
Other Asia/Oceania	29.2	9.8	8.4	8.9	13.8
Middle East and North Africa	7.6	6.6	7.4	39.0	17.6
Latin America and Caribbean	6.4	20.8	6.7	10.5	11.2
1989/90					
Sub-Saharan Africa	19.1	34.3	43.7	15.5	32.8
South Asia	17.3	15.9	20.1	9.9	12.2
Other Asia/Oceania	41.5	14.0	8.9	6.2	16.3
Middle East and North Africa	6.7	4.9	3.5	34.1	12.9
Latin America and Caribbean	7.7	17.1	6.9	15.6	12.0

Note: includes imputed multilateral flows.

Source: (DAC 1990: Table 41).

Figure 6(a) Aid diamond for Japan (1990)

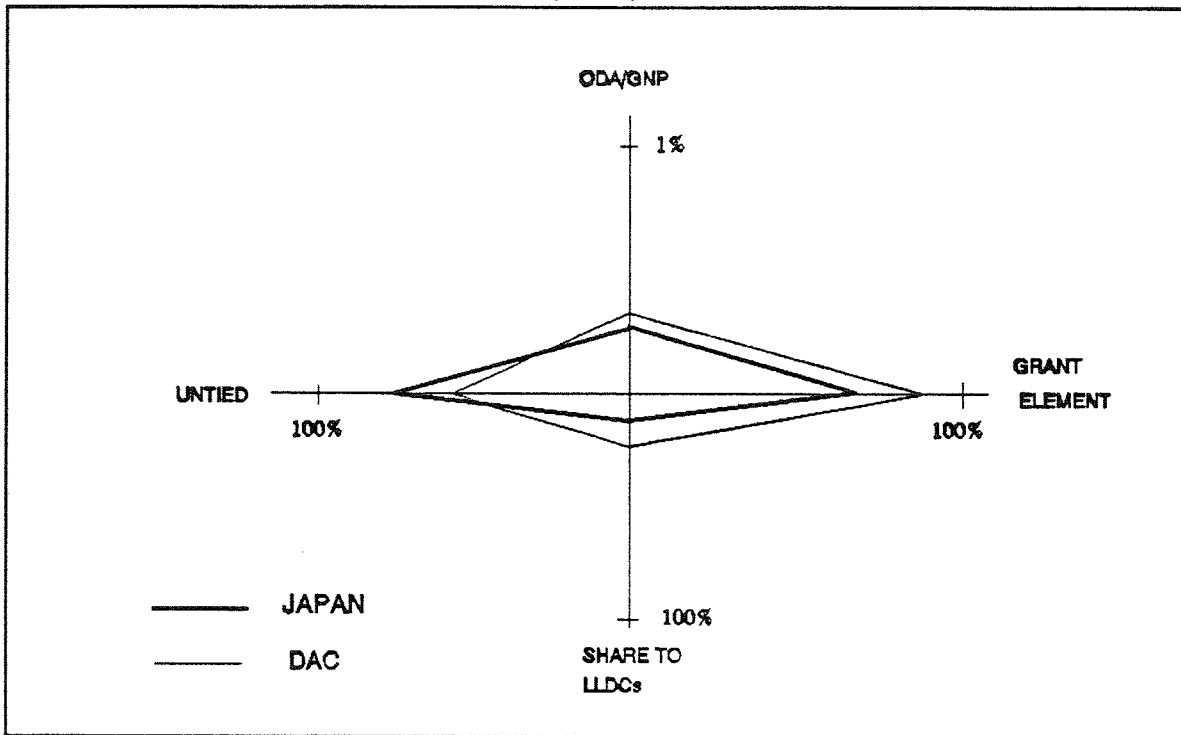


Figure 6(b) Aid diamond for the Netherlands (1990)

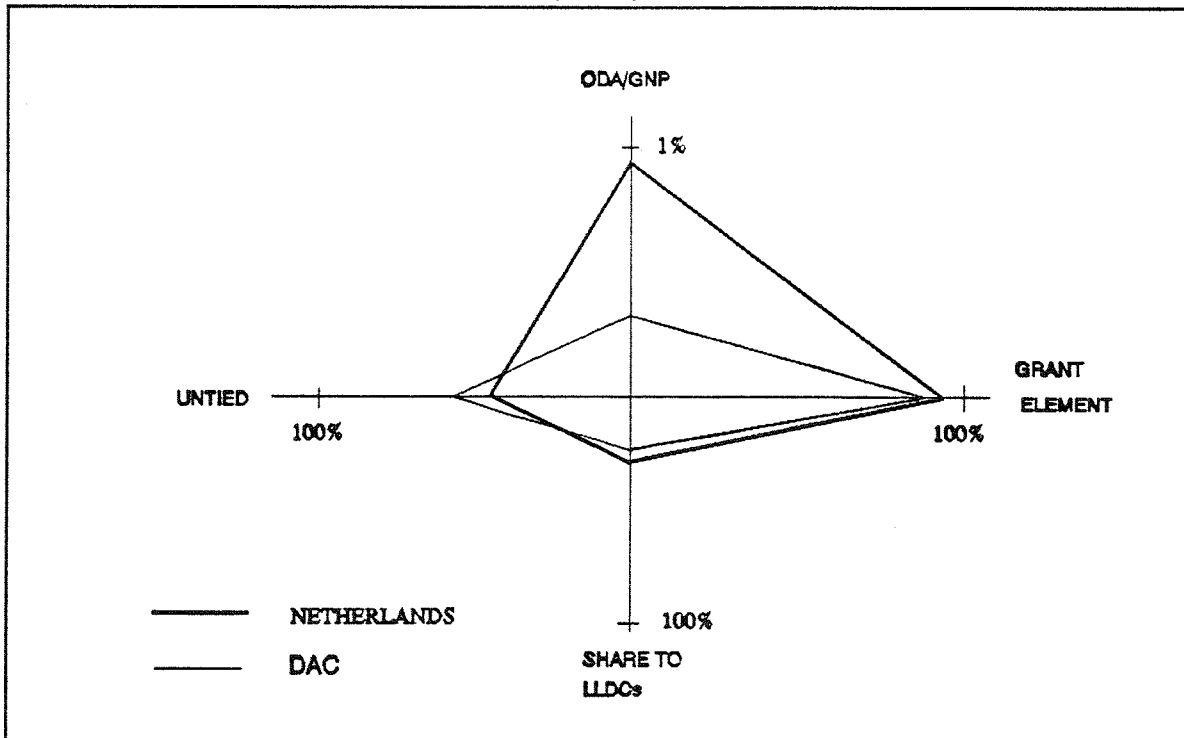


Figure 6(c) Aid diamond for the United Kingdom (1990)

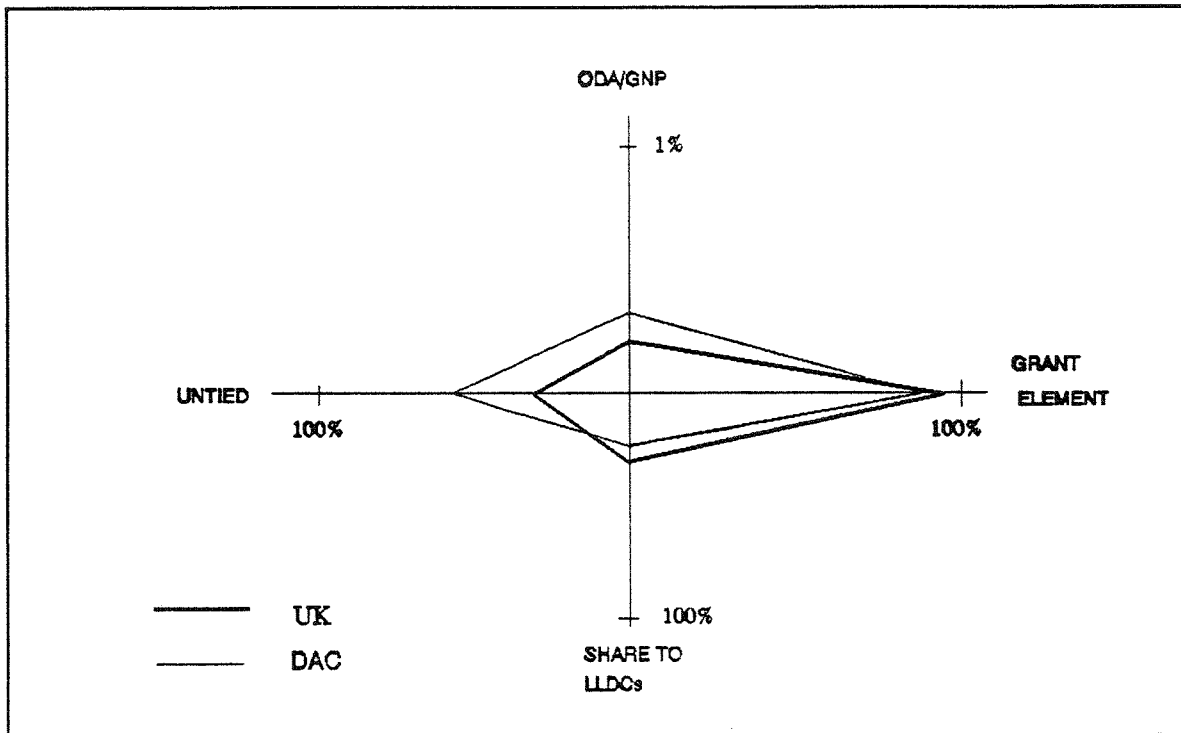
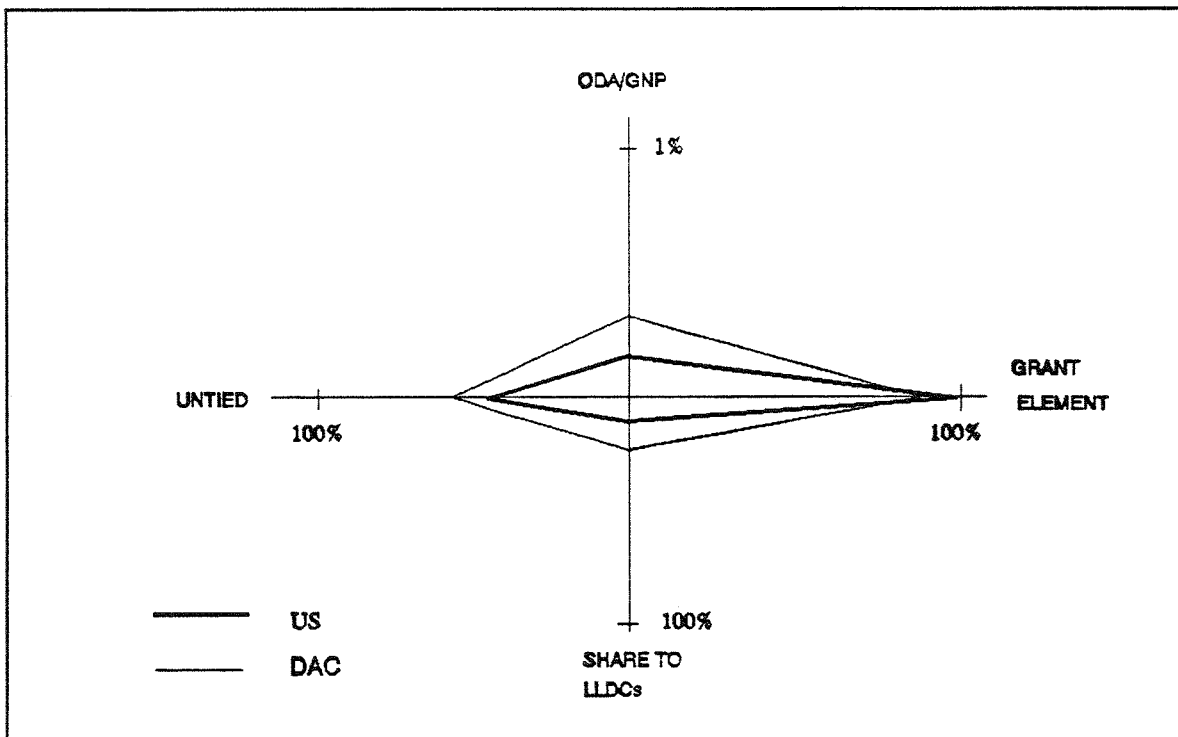


Figure 6(d) Aid diamond for the United States (1990)



The four axis show ODA/GNP, share of aid to the LLDCs, the overall grant element and the percentage of aid untied. Scaling (which is an implicit visual weighting system) is given for the last three by their maximum of 100%. Although 100% could also be used as the top of the scale for ODA/GNP we adopt the highest ratio in the given year. By showing percentage untied full tying and partial tying are not being distinguished (both are being presented as equally bad). The figures also indicate the DAC target for the indicator and, on each graph, the DAC average.

All donors have high grant elements - so that all diamonds extend to the right. Since Japan ties the least of its aid of all donors its diamond stretches in two directions. Therefore the extent to which Japan has untied its aid mean that it no longer appears to have the worst aid quality - from the donors presented here its performance is superior to that of the UK and US. The intercepts of these latter two donors on three of the four axis (i.e. excluding grant element) are quite modest. The diamond for the Netherlands demonstrates the contrast that can be achieved, since its diamond stretches in all directions.

## VII CONCLUSION

We have discussed of four aspects of donor performance: aid volume, concessionality, tying and allocation. For the first of these performance has in general (though the Nordic donors are an exception) deteriorated over time - this despite the commonly accepted 0.7 per cent target. Performance on tying remains poor, and worsening for some donors (notably the UK). The DAC guidelines for concessionality are now more than satisfied by each donor except Japan, the terms of aid having eased considerably since the 1960s. Finally, many would argue that too much aid is still received by well off countries and too little by poor ones, and the shift in aid patterns during the 1980s has not been sufficiently substantial to alter this position. It is as well to remember however White's argument against targets - that it is quality not quantity that counts.

Tying remains the knottiest problem. Not only because DAC guidelines appear to be made to be broken - but also because of the adverse consequences of tying for aid's developmental impact. The answer for the persistence of tying is not hard to find - it lies with the commercial pressures and lobby groups that operate on the aid programme. Those concerned with lobbying in favour of strictly developmental objectives for aid programmes should more vigorously adopt a campaign for the untying of aid. Yet, thus far the efforts of lobby groups have largely focussed on the 0.7 per cent target. Attention would be better focussed on some of the other issues raised here - tying, more aid for poorer countries, and further improvements in concessionality for donors whose aid is not wholly grant finance.



## NOTES

1. A third approach, not examined in this paper, is based on the world welfare gain realised by aid transfers (because of the higher marginal utility of income of the poor) - for applications see Tinbergen (1990) and Sengupta (1993).
2. The UN study, with which Lewis was involved, calculated capital required to provide non-agricultural employment, rather than through the capital-output ratio. For a more detailed review of early capital requirements studies see Ohlin (1966: 76-80) and Pincus (1965: Chapter 2).
3. Since Prebisch was the most well-known name associated with the "export pessimism" and fixed-import requirements assumptions of the trade gap approach.
4. In the early days of the target there was some discussion as to the appropriate denominator - the WCC target, for example, was as a per cent of national income. The 1968 UNCTAD proposed the use of GNP at market prices and DAC (see below) and subsequent discussions have settled on this standard.
5. A small academic literature of the time, of which the best example is Pincus (1965), discusses the theoretical basis for burden sharing.
6. This figure excludes flows from the still colonial powers to their colonies. If these flows are included the share of the US falls to about one half (Little and Clifford, 1965: 48).
7. Private flows include "direct investment, portfolio investment in marketable securities, long-term financial lending and trade credits, and miscellaneous other investment by the private sector of donor countries in less-developed countries and private investment in bonds, loans and participation of multilateral agencies" (OECD 1966: 167-73).
8. Official flows include "all resources made available to or for the account of less-developed countries and multilateral agencies for economic and social development, relief, welfare and related purposes by the central governments, central monetary institutions, local governments and agencies of central and local governments of donor countries" (OECD 1966: 167-73). The principal item excluded from this list is military assistance and expenditure linked to specific defence efforts.
9. Formally the requirement is for a grant element of 25 per cent or more. We discuss this in detail in Part III.
10. Changes in position occur partly on account of exchange rate effects. However, US aid was also low in 1988 because of delays in the IDA replenishment.
11. The other countries to have implemented an ODA/GNP target are Denmark, Finland, Norway and Sweden (DAC Report, 1989: 136).
12. This calculation was done by inflating the figures using the aid deflators that are reported in various DAC reports (for a series based on these see White, 1990: Appendix 1.2).
13. The UNDP's formulation is rather less sophisticated than the earlier proposals mentioned above. This is not necessarily a bad thing, but Ohlin (1966) demonstrated to sensitivity of a donor's contribution to the tax system adopted so alternative formulations may be worthy of examination.

14. There are other problems in the measurement of aid - for example the appropriate valuation of aid-financed commodities. We are not concerned with these here, but note that there was much discussion of these issues in the 1960s (e.g. Pincus, 1963 and Little and Clifford, 1965) that has been (unjustly) lost sight of in recent studies.
15. The discount rate used in this calculation is, following DAC practice, traditionally 10 per cent. There has been some disagreement over the use of this rate. There is also a literature on the appropriate terms for aid based on the fact that the discount rates for donors and recipients will differ (Schmidt, 1964 and Leipziger, 1983).
16. US aid in the 1950s was largely grant aid, but this hardened towards the end of the decade as attitudes to aid hardened and the new bilateral donors on the scene extended concessional loans rather than grants.
17. In the 1980s, the grant element of weighted average of multilateral lending qualifying as ODA was 87 percent. If the harder windows, ie non-ODA (such as IBRD) are included, this number will of course fall. For the decade following the creation of the IDA in 1960 its funds were among the most concessional available - that long since ceased to be true. Many believe there to be a case for converting the IDA to a grant window.
18. Purchases financed by EC funds must be from EC-ACP countries.
19. See also Holtham and Hazlewood (1976).
20. This argument assumes the goods are comparable. There may be quality differences or the goods may come in the context of an undesirable project design imposed by the donor, whereas with commercially borrowed money the recipient is free to design its own project.
21. For an elaboration of this point see Morrissey and White (1993).
22. For example, Griffin's statement that "equity requires that foreign capital should flow disproportionately to the poor countries and if the market mechanism cannot ensure this, then it becomes particularly important that official aid should discriminate strongly in favour of the poorest countries" (1987: 241).



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