Weighing Poverty in the IDA Allocation Formula

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Introduction

1. There is a consensus that IDA’s allocation system should be predominantly based on country policy and institutional performance, but with some regard to the country’s poverty level. IDA’s current resource allocation formula is structured in line with this approach: the per capita resource allocation has a heavy weighting for performance and much lower, but non-zero, weighting for poverty. The diagram below provides a visual representation of allocations under the IDA formula: allocations increase steeply with better performance, and are inversely (and much less sharply) linked to country per capita GNI levels. Thus, a poorer country would have slightly larger per capita resource allocation than one that is better off, for the same level of performance.

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1 In IDA’s resource allocation formula the performance rating has an exponent of 2 and the GNI/capita has a negative exponent -- to reflect the bias toward poorer countries -- of 1/8.
Chart 1 shows a scatter diagram of allocation norms under the current formula with a resulting $R^2$ of allocations and performance of 0.99.

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**Chart 1 - IDA Norm**

Current formula (GNP^{-0.125})

(Gov. Factor^{1.5})

$R^2 = 0.9855$

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**Collier-Dollar Model**

2. An issue that has come up from time to time among donors is whether a greater bias in favor of poverty levels among the IDA countries would increase the effective use of aid resources in support of poverty alleviation. Renewed interest in this issue has been stimulated by recent work of Collier and Dollar at the World Bank which shows that aid is more effective when it is channeled to poorer countries implementing good policies. In order to analyze this issue some background on the Collier-Dollar (CD) work may be useful.

3. IDA’s Performance-based Allocation (PBA) system draws on many elements from the CD model, which is based on work that looked at the entire spectrum of developing countries. It concluded that much of the ODA which goes to the middle-income countries could be more effective if it were to be provided to low-income countries, provided of course that country

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performance is good. IDA already focuses on the low-income countries (to be eligible countries normally need to have a per capita GNI of less than $885): its resource allocation is therefore already based on a ‘poverty filter’ which excludes less poor countries. Hence the primary basis for resource allocation in the formula has been performance of countries within the IDA category, with a small additional factor in favor of country poverty, as noted above.

4. Recent refinements in the CD model suggest that effectiveness could be increased by further discriminating among IDA countries on the basis of poverty. Thus poorer IDA countries could be provided a higher level of resources for a given level of performance than IDA countries that are better off. CD does caution however that there are some pragmatic considerations that would need to be taken into account. First, although the theoretical effectiveness of aid increases with poverty, in the poorest countries absorptive capacity often becomes a binding constraint. Second, allocating more resources on the basis of poverty does have the effect, ceteris paribus, of reducing the effect of performance on aid allocation, and hence a balance needs to be found in terms of the extent to which poverty can, and should, be taken into account in IDA’s resource allocation formula. In view of these findings two alternative treatments of poverty in the allocation formula were considered.

Alternative I: Two-Part Formula

5. Under the two-part formula alternative the poorest countries -- up to a GNI/cap of $600 -- would receive an allocation that would be purely performance based and for countries with a per capita income of over $600 the allocation formula would include an exponent of –1.0 for GNI/cap in excess of $600. This alternative recognizes that for the poorest countries a bias in favor of poverty may not be useful because of absorptive capacity constraints, and, moreover, aggressively phases down the allocation of IDA resources to countries above the threshold of $600 GNI per capita. It was found, however, that this approach would drastically dilute IDA’s performance-based allocation system and have the effect of forcing the graduation of IDA’s borrowers quite sharply when they reach a GNI of $600 per capita. Chart 2 shows that under this approach the $R^2$ of allocations and performance would be lowered from 0.99 under the current formula to 0.95. Even with this phasing down, using an exponential of –1.0 could not fully capture the drop off in the curve suggested by the CD findings. The exponential would have to be increased to as much as –2.0 to fully reflect the steep drop off in the curve. In other words, performance and per capita income would have to be weighted equally for countries with GNI above $600, thus sharply reducing the relative weight of performance in the formula.
Alternative II: Increasing the Poverty Exponential

6. Another option involves amending the allocation formula for all IDA countries by increasing the exponential of GNI/cap from the current $-0.125$ to $-0.25$, resulting in a somewhat stronger decrease in allocation as the country’s income rises across the spectrum of IDA borrowers. The approach, however, would reduce allocations to not only the IDA countries with the highest incomes, but also to a large number of countries with middle level income. According to the recent Collier-Dollar findings these are some of the countries where the greatest poverty reduction effectiveness could be achieved. It also would have the effect of augmenting resources for the poorest countries, to the extent of their absorptive capacity. Chart 3 shows that under this option the $R^2$ of allocation and performance would be lowered from 0.99 under the current formula to 0.94.
Conclusion

7. On balance management’s recommendation is to maintain the current formula. IDA’s eligibility cut off assures that its funds are directed to low-income countries in general. In addition, its current formula has a small bias in favor of the poorest countries, but at the same time it signals the importance of country policies and institutions. It sets out clear incentives in this regard for IDA’s borrowers by continuing the strong linkage of resource allocations to country performance. While the CD research demonstrates the importance of strong support for very poor countries implementing good policies, capturing this insight through further refinements of IDA’s allocation formula introduces other undesirable effects, particularly in diluting the focus on performance.