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**PERFORMANCE-BASED ALLOCATION AT ADB:
Strengthening the Policy and its Implementation**

Paper for Discussion

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CONTENTS

	Page
EXECUTIVE SUMMARY	i
I. INTRODUCTION	1
II. THE PBA POLICY	3
III. THE IMPACT OF THE POLICY ON LENDING COMMITMENTS, 2002-2004	5
3.1 Historical Lending Patterns, 1995-2001	6
3.2 A Comparison of Historical and Formula Allocations	8
3.3 The Evolving Pattern of Allocations	9
3.4 Performance and Commitments, 2002-2004	11
3.5 Performance Improvement and Changes in Commitment	12
3.6 Issues	13
IV. RATING PERFORMANCE AND MEASURING NEEDS	15
4.1 Rating Country Performance	15
4.2 Rating Governance	17
4.3 Measuring Portfolio Performance	18
4.4 Assessing Needs	19
4.5 Issues	20
V. PROCESS	21
5.1 Implementation	22
5.2 Reporting and Disclosure	24
5.3 Issues	24
VI. RESOURCE MANAGEMENT	26
6.1 Resource Use	26
6.2 Formula Allocations and Adjustments	28
6.3 Country Specific Triggers	28
6.4 Fixed Period and Rolling Allocations	30
6.5 Issues	32
VII. SPECIAL TOPICS AND NEXT STEPS	33
7.1 Regional and Sub-Regional Cooperation	33
7.2 Peace and Post-Conflict Reconstruction Needs	34
7.3 Weakly Performing Countries	34
7.4 Next Steps	35

ANNEXES:

A	The Impact of the PBA Policy on Planned Allocations	38
B	Allocation Mechanisms	51
C	The Application of a Governance Factor	57
D	Performance Ratings, 2002-2004	59

BOXES:

3.1	The IADB Allocation Scheme	14
6.1	The Allocation of ADF Resources under the PBA	26

FIGURES:

2.1	PBA allocation Schematic	4
3.1	Per Capita Lending and Population Size, 1995-2001	7
3.2	Historical Allocations, Per Capita Income, and Population (Group A and B1)	8
3.3	Percentage Change in Lending Share over Historical Average, Group A and B1	10
3.4	Performance, Per Capita Allocations and Population, Group A and B1, 2002-2004	12
5.1	PBA Implementation Cycle	23
A1	Per Capita Lending and Population Size (log scale)	41
A2	Historical Allocations, Per Capita Income, and Population (Group A and B1)	42
A3	Percentage Differences between Performance Neutral and Historical Lending Shares	43
A4	The Distribution of Performance Induced Changes in Lending Commitments, 2002	44
A5	Percentage Change in Lending Share over Historical Average	45
A6	Performance, Per Capita Allocations and Population, Group A and B1, 2002-2004	47
A7	Per Capita allocations, Performance and Population Size (PDMCs, 2002-2004)	48
C1	Changes in Allocation as a Result of the Application of a Governance Factor	58

TABLES:

2.1	Allocation Formulae for Concessionary Funds of MDBs	51
3.1	Historical ADF Lending, 1995-2001 (\$ mil, current)	6
4.1	Country Performance Scoring by Multilateral Development Banks	16
4.2	Correlation Among "Needs" Indicators for Group A and B1 Countries, 2001	19
4.3	Correlation Among "Needs" Indicators for PDMCs, 2001	20
4.4	Inter Agency Coordination Options	21
5.1	Disclosure Practices of Multilateral Development Banks	24
6.1a	ADF Commitments Prior to Triggers, 2002-2004 (\$m)	27
6.1b	ADF Commitments After Triggers, 2002-2004 (\$m)	27
6.2	Collar Adjustments—Absolute % Differences Between Formula and Adjusted Commitments, 2002-2004	28
6.3	Trigger Adjustments, % Change over Base Allocation, 2002-2003	30
6.4	Commitments and Approvals 2002	31
7.1	Summary of Issues and Policy Options	36
7.2	Summary of Issue and Management Options	37

A1	Historical Lending Patterns, 1995-2001 (\$ mil)	38
A2	Historical Lending Patterns, Moving Averages 1997-2001 (\$ mil)	39
A3	Summary Differences ("Needs Component")	43
A4	PBA Allocation by Performance Quintile 2002-2004	46
D1	Criteria for Assessing Country Policy/Institutional Performance	60
D2	Relative Importance of Various Criteria in the Policy/Institutional Performance Score	61
D3	Summary Ratings, 2002-2003	62
D4	Country Performance Assessments, Summary Statistics, 2001-2003 Mean, Standard Deviation, Covariance of Ratings	63
D5	Pearson Correlation Coefficients of Country Performance Ratings, 2001-2003	64
D6	Country Performance Ratings by Quintile, 2001-2003	65
D7	Country Performance Ratings, 2001-2003 (Average Ratings by Quintile)	66

ABBREVIATIONS

ADF	–	Asian Development Fund
AfDB	–	African Development Bank
CBD	–	Caribbean Development Bank
CSP	–	Country Strategy and Program
CSPU	–	Country Strategy and Program Update
CPA	–	Country Performance Assessments
EBRD	–	European Bank for Reconstruction and Development
EC	–	European Community
GDP	–	Gross Domestic Product
GNP	–	Gross National Product
HDI	–	Human Development Index
IADB	–	Inter American Development Bank
IFAD	–	International Fund for Agricultural Development
IDA	–	International Development Agency
MCA	–	Millennium Challenge Account
MDBs	–	Multilateral Development Banks
MDGs	–	Millennium Development Goals
NPRS	–	National Poverty Reduction Strategy
PBA	–	Performance Based Allocation
PDMCs	–	Pacific Developing Member Countries
PNG	–	Papua New Guinea
PPP	–	Purchasing Power Parity
SPD	–	Strategy and Policy Department

EXECUTIVE SUMMARY

A. The Policy and Context for Review

Historical Allocations. Historically, the allocation of ADF resources took place within the framework of country programming and ADB's country assistance plans. Although elements of performance had, together with needs, always implicitly played a role in the allocation of ADF resources, these links were not concerted, nor particularly transparent. Following adoption of ADB's *Poverty Reduction Strategy*, the need to strengthen the link between country performance and resource allocation became apparent in a context where evidence showed that aid had helped to accelerate poverty reduction most where policy and institutional performance was strong.

Policy. The adoption of ADB's *Policy on Performance Based Allocation* (PBA) in March 2001 constituted a significant departure from historical practice. The new approach explicitly recognizes that in seeking to reduce poverty, ADF concessionary resources should be directed to the poor (needs) and to situations where they will be used most effectively (performance). It also provides direct incentives for better performance. Under the PBA, ADF commitments for 2002-2004 have been determined. These have been anchored in common country performance assessments for 2001-2003. The first agreements on country specific performance criteria were made in 2001, and assessed in 2001 and 2002. Triggers agreed in 2002 are scheduled for assessment prior to the end of 2003. The next PBA cycle will commence at the beginning of 2004.

The Review. As committed by the policy, a review of the implementation of the PBA was presented to donors during the Midterm Review of ADF VIII. At that meeting, donors requested a more comprehensive review of the policy and its implementation as part of the ADF IX replenishment process. Borrowers have also expressed a strong interest in how the policy is working. Following consultations with donors, borrowers, and other stakeholders, proposals that may arise out this review process will be presented to ADB's Executive Board.

B. Scope and Themes of the Review.

Scope. This paper seeks to do three things. First, it describes the impact that the PBA policy has had on the allocation of ADF resources. Second, it reviews key elements of the policy and asks, whether in practice, they have served well the policy's intended objectives. Third, it suggests ways in which the policy and its implementation might be improved. To the extent possible, comparisons are made with and lessons drawn from the experiences of other institutions.

Themes. Three key questions emerge: (i.) how can resources be more directly aligned with the policy's objectives? (ii.) How can diversity and the multiple objectives that the policy seeks to serve best be managed? (iii.) How can links between the policy and development effectiveness be strengthened? Issues about process and transparency cut across each of these themes. If the policy is to promote positive changes in borrower performance, its mechanics and outcomes need to be easily communicated and understood.

Emerging Issues. In addition to the core themes, there are a number of other emerging issues related to the PBA policy and its implementation. These include support for peace and post-conflict reconstruction needs, engagement with poorly performing countries, and

reconciling the PBA policy with some aspects of the Graduation Policy. To some extent these topics are considered here but details and specific proposals are to be folded-in to other on-going reviews to be presented subsequently to donors.

C. THE IMPACT OF THE POLICY

Historical Lending. The paper starts with an examination of historical lending. Historically, countries received more ADF as a proportion of their GDP, the smaller their per capita income. But on a per capita basis less populous countries received more.

PBA Impact. The PBA formula implies major shifts in the pattern of lending commitments and allocations. The impact of the formula can be measured in terms of its provision for needs (as approximated by population and the reciprocal of per capita income) and support for performance. In terms of needs, the formula diverts resources from less populous to more populous countries. Its performance impacts are also substantial. Given the large and potentially disruptive changes to individual country's lending programs embedded in the formula, adaptation to PBA allocations has been measured. Graduated adjustments have tended to protect the allocations of less populous countries and restrain allocations to more populous countries.

Performance and Allocations. The new policy requires that a "robust" relationship be established between performance and lending allocations. Over the period 2002-2004, a declining overall resource envelope has somewhat masked this relationship. Many countries have received fewer ADF resources despite improvements in performance. Nevertheless, share allocations over the period 2002-2004 are positively related to performance. For Group A and B1 countries, a 1% improvement in performance attracts, on average, an increase of 1.3% in a country's share of available resources.

Graduation Issues. ADB's *Graduation Policy*, which pre-dates the PBA policy, anticipates that blend countries' would gradually become less dependent on ADF as their incomes level rise, and their debt repayment capacity increases. However, implementation of the PBA is shifting resources in favor of blend countries (other than Indonesia). This is a transitional effect that is occurring largely because, among ADF eligible borrowers, blend countries also happen to be the most populous. Graduation and PBA considerations might be more closely aligned by either attaching a larger absolute weight to the income proxy for poverty, by capping allocations to blend countries, as IDA does, or having blend countries compete for resources within a separate pool, as occurs in IADB and IFAD.

D. The Allocation System

Allocation System. Transparency and ease of communication of PBA outcomes is critical if the policy is to succeed in providing incentives for good performance. However, the geometric allocation formula that ADB has adopted can generate results that are often difficult to understand (Annex B) and, therefore, to explain. For example, it is not easy to link formula weights to the level of allocations (as opposed to changes in allocations). Nor does the formula facilitate an intuitively meaningful picture of the influence of performance and needs on the resources that a country receives. Linear allocation systems offer an alternative that is potentially more transparent and flexible. On the other hand, such systems may limit the extent to which allocations can respond to changes in performance and needs at the margin.

Incentives and Resources. Resources are key to incentives at a number of levels. In general, borrowers will face stronger incentives to improve policy and institutional performance the more resources there are at stake. Within the framework of the PBA there are also more subtle links between resources and incentives. Although borrowers know the standards by which they will be measured *ex-ante*, they do not know how performance translates into a commitment of financial resources until all other countries have been assessed and the resource envelope has been finalized. Borrowers, who may not have particularly good information about the performance of their peers, may therefore perceive that they have very little control or influence over outcomes. Although “performance contracts” that reward absolute rather than relative performance on common country criteria might help clarify incentives, they would require a level of resources sufficient to fund expected achievements. Since resources are finite and somewhat uncertain, absolute performance contracts would present a challenge from a resource management perspective. Allocation systems based on relative performance automatically accommodate resource constraints and do not require the identification and pricing of performance standards. That said, the difficulties of providing credible incentives to borrowing countries when total resources are shrinking are unresolved.

Triggers. Country specific performance criteria are important because they refer to actions over which borrowers have control. But triggers have played a relatively minor role in determining ADF allocations. Baseline assessments have dominated. As a consequence, the proportion of resources that have been allocated on the basis of triggers has been very small, amounting to about 2% of the overall resource envelope in each of 2002 and 2003. The reasons for the marginal impact of triggers are not entirely clear, but questions about objectivity, consistency, and fairness in assessments across countries have arisen. If triggers are to play the role envisaged for them within the policy, greater attention needs to be given to their quality and coherence, and to the way in which they are resourced. A separate pool of resources to finance triggers would possibly allow them to exert more leverage over allocations.

E. The Measurement System

Ratings. There are many challenges in accurately measuring country performance and needs. Efforts at improving measurement systems are taking place across institutions. Currently, both IDA and IADB are reviewing their ratings’ systems and criteria. The use of an extensive set of sub-indicators, and rigorous review and compliance procedures, has given the impression that ADB’s scoring system is more complex than that used by other institutions. Options for a more compact rating system, using perhaps only 15 to 20 indicators, warrant consideration. Although professional judgment will continue to be critical, the use of more data based and results indicators would help reduce scoring biases. As approaches to the measurement of country institutional and policy performance are still evolving, ADB’s rating system should be kept under review. This will allow greater inter-agency collaboration and the accommodation of new information and empirical evidence about what works in reducing poverty. Opportunities for closer coordination of country performance assessments with other multilateral development banks (MDB’s) will also be explored.

Governance. Various MDBs use different formulas and weights. One of the main differences among the current systems is that IDA and AfDF ratings and allocations are much more sensitive to changes in assessments of governance performance than they are to other variables. In the IDA system, governance scores can generate large reallocations. IDA is currently considering how discontinuities generated by the application of the governance factor can be moderated. Steps to strengthen governance ratings, which are among the most

judgmental of the performance criteria, should receive priority in strengthening ADB's rating system.

F. Process and Implementation

Implementation. Operational departments are responsible for implementation of the PBA, and through Operational Vice Presidents recommend lending allocations to Management. Currently, information is communicated about the PBA process to the Executive Board through Country Strategies and Programs (CSPs) and their annual updates (CSPUs). Three non-operational departments have responsibility for setting the overall resource envelope, tracking resource use, and on checking whether implementation has complied with the policy. Going forward, three areas merit attention: a clearer separation of operational responsibilities from resource decisions; streamlining of the implementation process; and fuller reporting and disclosure of ratings and outcomes.

Resource Allocation. In IDA, AfDF and IADB non-operational departments are responsible for managing resources. In ADB, Management sets the expected level of ADF lending in the Planning Directions and operational departments then allocate resources among competing demands within that envelope. Since allocations are a zero-sum game for the operational departments, there are implicit checks and balances on the use of resources. However, while PBA allocations for country programs are "rules-based", decisions about set-asides for sub-regional cooperation, peace and post-conflict reconstruction, and for other needs are largely discretionary. In the interests of transparency and accountability for resource use, decisions about the allocation of fund resources among competing uses would be better separated from operational departments and integrated directly within the overall strategic planning and budgeting process. Within this framework, operational and demand considerations would be balanced against supply considerations. A portion of funds could be set-aside to provide needed flexibility for Management. An appropriate focal point within the Strategy and Policy Department (SPD) should advise Management and be given oversight responsibility for allocations emerging from implementation of the PBA process.

Administration. Delays in implementation have occurred both because of the complexity of the PBA processes and because of difficulties in trimming operational programs to fit a reduced resource envelope. In terms of streamlining processes, a number of options exist. At a minimum, longer lead times should be built in to the system. This means bringing the country performance assessment exercise forward, possibly to third quarter of the preceding year. Another option would be to use performance data that is lagged one year. These changes would be easy to implement and would allow a better alignment of PBA activities with the country programming cycle. A more radical change would be to move to a bi-annual allocation cycle, which might dovetail better with replenishment and mid-term review processes. This would yield savings in administrative overheads, provide additional flexibility in resource allocation, and create the space needed to strengthen underlying processes.

Disclosure. Disclosure is clearly needed for accountability but it is also critical to development effectiveness. Nevertheless, at the same time, disclosure is a sensitive issue for some borrowers especially in a context where they may feel that they are not adequately involved in the ratings' process. ADB has disclosed country performance rankings by quintile range to its Executive Board. Other MDBs disclose more information. For example, IDA intends to move towards full disclosure of its ratings by 2005. As a matter of priority, and in full consultation with borrowers, ADB needs to develop a roadmap for greater disclosure that, among other things, will allow more meaningful reporting of the PBA through the CSP/Us. In

reviewing disclosure options, consideration should also be given as to how there can be greater borrower involvement in the ratings process itself.

Contingencies. There are a number of uncertainties that complicate the operation of the PBA system and the management of ADF resources. In addition to emergency, peace and post-conflict needs, other sources of uncertainty are created by the possibility of demands by new borrowers, changes in the classification of existing borrowers, and variations in the inflow of resources. Under current arrangements existing portfolios adjust to absorb the shocks. As shocks, particularly post-conflict assistance for Afghanistan, have tended to add to demand over the period 2001-2003, this has constrained the resources available for other country programs. One way of mitigating potential disruptions that arise through unanticipated shocks is through the creation of a reserve or a sinking fund as is the practice in some other institutions. The attractions or otherwise of a reserve will depend, among other things, on how it is financed. But without an injection of additional liquid resources, the creation of a reserve would inevitably entail some initial reduction in the overall operational program.

G. PDMCs

Diversity. Currently, the PBA system is applied separately and in parallel for PDMCs. But there are many structural and other differences between PDMCs and other ADF eligible borrowers. Most PDMCs do not have regular annual lending programs and borrow only once in every few years. Some elements of the performance criteria do not seem particularly relevant for PDMCs. The usefulness of agreeing and assessing performance triggers on an annual basis where there may be no lending program seems moot. In moving towards a revised PBA system, the special circumstances of the PDMCs need to be more fully recognized in performance measurement and allocation systems.

H. Next Steps and Options

Moving Forward. This paper provides a preliminary review of ADB's PBA policy and its initial implementation. A number of issues are raised, and some possible solutions and options are proposed. These are summarized in two tables. The first table refers to issues that relate directly to the policy and may require its modification. Realistically, the implementation of such modifications could not begin until the second half of 2004. The second table brings together related issues that fall within the discretion of management and on which action could be taken prior to any revision or modification of the policy. Options are not necessarily mutually exclusive. For example, it is suggested that in the interests of on-going improvements in the system and opportunities of inter-agency collaboration some elements of the current PBA framework would be best removed from the formal policy and placed within the discretion of management. This might be done irrespective of decisions on other matters.

Summary of Issues and Policy Options

Policy Elements	Issues	Options	Costs/Risks/Benefits
1. Allocation Formula	Not easy to understand, difficult to communicate outcomes, and to account for use of resources in terms of performance and needs.	<ul style="list-style-type: none"> i. Use linear system in which trade-offs between needs and performance allocations are explicit and can be more easily understood and evaluated. ii. Move to a system of absolute performance "contracts". iii. Remove formula including the weights from the formal policy and keep under review to expand scope for on-going refinement and inter-agency collaboration. iv. Add vulnerability measures for PDMCs. 	<ul style="list-style-type: none"> i. Moderate to high risk (linear systems have their own limitations), but low cost. Moderate to high benefits. ii. High cost/high risk. More transparent for borrowers but more difficult to manage resources. iii. Low risk/low cost/high potential benefits iv. Moderate to high cost. Modest benefits.
2. Triggers	Entails considerable administrative burden both on ADB and borrowers but, to date, has had little impact on allocations. Triggers need to be strengthened, or revisited.	<ul style="list-style-type: none"> i. Retain triggers in current form; improve quality and strengthen impact; and provide separate funding mechanism. ii. Use triggers to modify country rating scores rather than allocations. iii. Abandon triggers. 	<ul style="list-style-type: none"> i. Moderate cost/moderate risk/more effective policy. ii. Easier to manage than i. But would require trigger scoring scheme. iii. Low cost but moderate risk of diluting incentives on variables over which borrowers have most control.
3. Measurement	Resource intensive and relies too much on judgmental assessments. Need fewer, more robust rating criteria.	<ul style="list-style-type: none"> i. Remove framework and guidelines from the formal policy. Keep under periodic review to permit improvements through time. ii. Greater inter-agency cooperation. 	<ul style="list-style-type: none"> i. Low cost/high benefit. ii. Moderate cost/moderate risk/high benefit.
	More robust measures of need are required. Country variations in inequality mean that population and per capita income are not particularly strongly correlated with either the incidence or depth of poverty. This biases the allocation towards countries with less inequality.	<ul style="list-style-type: none"> i. Refine measures using other proxies, e.g. Human Development Index. ii. Remove definition of country "need" from the formal policy to allow on-going refinement and keep under periodic review. 	<ul style="list-style-type: none"> i. Moderate cost/improved support for needs and countries where there is greater inequality. ii. Low cost/high benefit.
4. Blend countries	Need to better align PBA with graduation considerations. Currently, resources are being diverted from ADF only borrowers to blends.	<ul style="list-style-type: none"> i. Cap blend countries. ii. Separate pool for blends and separate competition for resources. iii. Increase small country bias as ADF only country are the least populous. 	<ul style="list-style-type: none"> i. Low cost/improved support for ADF borrowers. ii. As ii, but more transparent and in keeping with policy. iii. Indirect solution, low cost, but not particularly transparent.

SUMMARY OF ISSUES AND MANAGEMENT OPTIONS

Management Elements	Issues	Options	Costs/Risks/Benefits
1 Resource Allocation and set-asides	Accountability: Separation of responsibility for allocation and use of resources.	<ul style="list-style-type: none"> i. Separate allocation decisions from operational departments and integrate fully within strategic planning and budgetary process. Portion of funds could be allocated at Management discretion. ii. Create new unit responsible for PBA implementation, including resource management. 	<ul style="list-style-type: none"> i. Low cost, and highest benefit to cost ratio. ii. High cost, modest benefits.
2. Ratings	Quality Assurance Ratings review system. More extensive consultation with borrowers another in-country sources of expertise and knowledge.	<ul style="list-style-type: none"> i. Initiate bi-annual ratings review to provide overview on trends, and signal potential problems. ii. Greater disclosure and discussion of ratings during ratings process and country programming. iii. More intensive in-country consultation. 	<ul style="list-style-type: none"> i. Current system working well. Additional oversight could add to implementation delays and costs. Nevertheless, cross-country perspective would be useful. ii. Greater borrower involvement in ratings may help create sense of ownership. but may also compromise independence. iii. Moderate to high cost, but moderate to high pay-off in terms of credibility.
3 Contingencies	Managing Uncertainty: An unpredictable and shrinking resource envelope has added to the opaqueness of the relationship between performance and resources.	<ul style="list-style-type: none"> i. Create reserves or a sinking fund to deal with contingencies. 	<ul style="list-style-type: none"> i. Reserves or sinking funds have immediate costs in terms of financial resources and possibly in terms of reductions in program size. The benefit is more predictable resource flows. A careful evaluation of benefits and costs is needed.
4 Reporting	Greater Disclosure: Consideration should be given to greater disclosure both to serve greater accountability and improve development effectiveness.	<ul style="list-style-type: none"> i. Move to an annual reporting framework such as IDA. ii. Prepare roadmap for fuller disclosure after consultation with borrowers and other stakeholders. iii. Review how links between PBA and CSPUs can be strengthened. 	<ul style="list-style-type: none"> i. Moderate cost. ii. Significant cost, but significant benefits. iii. Moderate cost, significant benefits.

I. INTRODUCTION

1. **The Policy.** ADB's policy on *Performance Based Allocation (PBA) for ADF Resources*¹ was approved in March 2001. The policy explicitly recognizes that in seeking to reduce poverty, ADF resources should be directed to the poor (needs) and to situations where they will be used most effectively. The policy also seeks to provide incentives for improved performance. An initial and partial review of the implementation of the policy was provided to donors during the midterm review of ADF VIII.² At that meeting, donors requested that a comprehensive review of the policy and its implementation be conducted as part of the ADF IX replenishment process. Borrowers have also expressed a strong interest about how the policy is working. Following analysis of the issues, and consultations with donors and borrowers, proposals for enhancing the policy and its implementation will subsequently be presented to ADB's Executive Board.

2. **Themes.** This paper examines how the policy has worked in practice and compares it with PBA systems in other institutions. The paper suggests a number of modifications that might be considered in moving towards an enhanced policy. Donor feedback on these will guide consideration of options. Three key questions are suggested by this preliminary analysis: first, how can resources be better aligned with objectives? Second, how can diversity and multiple objectives best be managed? Third, how can links between the policy and development effectiveness be strengthened? Issues about process and transparency cut across each of these themes. If the policy is to promote positive changes in borrower performance, its mechanics and outcomes need to be easily understood.

3. **Emerging Issues.** There are a number of other emerging issues that are related to the PBA policy and its implementation. These include support for peace and post-conflict reconstruction needs, strategies for engagement with poorly performing countries, and reconciling PBA and graduation considerations. These topics are covered within the scope of this paper. However, details and specific proposals are to be folded-in to other on-going reviews that will be completed during the course of the ADF IX replenishment process.

4. **Possible Enhancements.** The analysis that follows suggests a number of areas for possible strengthening of the policy and its implementation.

- First, there is scope for simplification in the ratings' measurement system. The ratings system is overly complex and relies too much on the judgment of individual raters. Fewer criteria and a greater reliance on data based and possibly results based indicators could help strengthen the system. To derive the benefit of other institutions' experience and to be able to collaborate more purposively with them, the detailed mechanics of the ratings system should not be set by the formal policy. A more focused rating system could be considered for PDMCs.
- Second, the operation of the allocation formula is complex and outcomes are not easy to communicate to borrowers. The formula does not provide an intuitively meaningful picture of the influence of performance and needs on country allocations. The link between formula weights and country allocations is also opaque. These relationships are somewhat clearer in linear allocation systems though these, too,

¹ *Policy on Performance Based Allocation for Asian Development Fund Resources*, Asian Development Bank, Manila, March 2001.

² *How ADB Rewards Performance: A Review of the Implementation of the Policy on Performance Based Lending*, Asian Development Bank, Manila, March 2003.

have their limitations. To allow on-going improvement, and greater scope for inter-agency collaboration, formula and the formula weights should no longer be set by the policy and be kept under periodic review. Consideration should be given to tailoring allocation rules for PDMCs.

- Third, triggers have not worked as intended. To date, their influence on allocations has been negligible. The creation of a separate pool of resources to finance triggers might allow triggers to exert more leverage. There is also a need to strengthen quality assurance processes to ensure consistency and fairness across countries both in the specification and assessment of triggers. The need for annual trigger assessments for PDMCs warrants re-examination in a context where countries borrow only once in very few years.
- Fourth, ADB should prepare a roadmap for fuller reporting and greater disclosure of performance scores and assessments of country needs. This is a necessary step towards fuller accountability and to building stronger links to country strategies and programs. Full consultation with borrowers on this sensitive issue will be needed.
- Fifth, greater accountability for the policy would be served by a separation of resource allocation decisions from operational departments. Although country allocations are largely rules-based, allocations among competing demands (total country programs, post-conflict needs, sub-regional cooperation projects, etcetra) are, within the overall resource envelope, left largely to the discretion of operational departments. Consideration should be given to centralizing and integrating these allocation decisions within the overall strategic planning and budgetary process. The Strategic and Policy Department (SPD) should have oversight responsibility for PBA allocations and advise Management on PBA related matters. To provide needed flexibility, a portion of resources could set-aside for allocation at Management's discretion.
- Sixth, PBA outcomes need to be more closely aligned with graduation considerations. The policy has entailed a transfer of resources towards more populous, blend countries. If, going forward, blend countries were also to exhibit more favorable performance dynamics than ADF only countries, they would then capture a growing proportion of resources. Possible ways to better align performance and graduation considerations would be to give larger weight to allocations on the basis of the income (poverty) component of need, cap blend countries' allocations, or create separate pools of resources for blend and ADF-only countries.
- Seventh, uncertainties and contingencies might be better managed through the creation of reserves or a sinking fund. More predictable resource flows would then strengthen the incentive effects of the policy. However, the creation of reserves would not be cost free and might require an initial contraction in programs. Careful study is needed of the benefits and costs of provisioning for contingencies.
- Eighth, consideration should be given to streamlining the PBA implementation process. At one level, the timing and sequencing of PBA related and country-programming activities needs to be reconsidered. Bringing the annual cycle of PBA activities forward by three to four months would help prevent implementation delays.

A more radical option would be to move from the current annual allocation cycle to a bi-annual cycle.

- Finally, there is sense that borrower's ownership of the policy is weak. Especially in a context of greater disclosure, exploring ways of encouraging greater borrower involvement in the process is important.

While some aspects of the implementation of the policy can be reconsidered at the option of Management, others will have to await the review of the policy by ADB's Executive Board.

5. **Structure.** In Section 2, a brief recap of the policy is provided. Section 3 describes the impact that the adoption of the PBA had on lending commitments between 2002 and 2004, and isolates links to performance and needs. Section 4 surveys the ratings system and related measurement issues. Section 5 reviews PBA processes and Section 6, aspects related to resource management. Section 7 deals with special topics not considered in preceding sections and summarizes priority issues and options. Technical details are provided in Annexes. Throughout, results are presented separately for the Pacific Group of countries (PDMCs), and for other active borrowers. Non-PDMCs are referred to as "Group A and B1" countries, and exclude Indonesia (which is classified as B2).³ The only other B2 country is Papua New Guinea (PNG) that for the purposes of analysis is grouped with other PDMCs. In this paper, the term "commitments" refer to ADF planning allocations approved by Management. "Approvals" refer to aggregate loan amounts approved by ADB's Board.

II. THE PBA POLICY

6. **Pre-PBA Allocations.** Prior to the adoption of the *Policy on PBA* in 2001, the allocation of ADF resources took place within the framework of country programming and ADB's country assistance plans. Although elements of performance had, together with needs, always implicitly played a role in the allocation of ADF resources, these links were not concerted, nor particularly transparent. In particular, the allocation process did not provide explicit incentives for better performance. Following adoption of ADB's *Poverty Reduction Strategy*,⁴ the need to strengthen the link between country performance and resource allocation became apparent in a context where evidence showed that aid had helped to accelerate poverty reduction most where policy and institutional performance was strong.⁵

7. **Performance and Needs.** In this context, the adoption of ADB's PBA policy in 2001 was a significant departure from earlier practices. The PBA policy explicitly recognized that in seeking to reduce poverty, ADF concessionary resources should be directed to the poor (needs) and to situations where they would be used most effectively (performance). The policy also recognized the importance of providing incentives for better performance.

8. **Performance Assessments.** Although the policy has many elements, its cornerstone is the country performance assessment (CPA). CPAs measure country policy and institutional performance against common criteria.⁶ Beyond the mechanics of measurement and allocation, the CPAs are intended to strengthen country knowledge and serve as a means to improve dialogue, the country planning process, and the quality and relevance of operations.

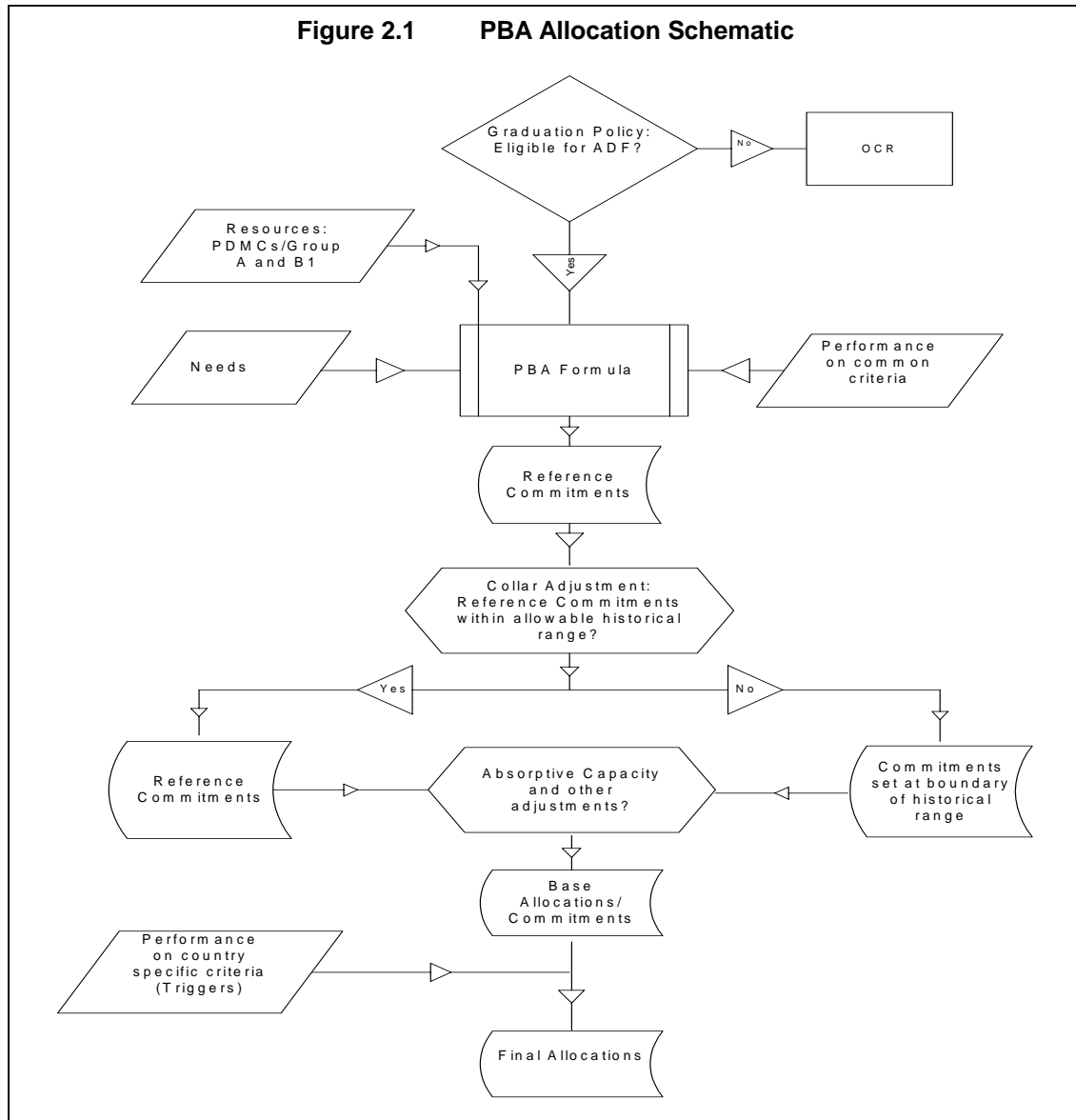
³ Individual PDMCs are also classified as Group A, B1 and B2, but this distinction is, in general, not made.

⁴ *Fighting Poverty in Asia and the Pacific: The Poverty Reduction Strategy*, Asian Development Bank, Manila, 1999.

⁵ *Assessing Aid: What Works, What Doesn't and Why*. World Bank, Policy Research Department, Washington, DC.

⁶ Ratings criteria are discussed in Section 4, and the ratings process in Section 5.

9. **Allocation Framework.** The resource allocation framework is multi-faceted. Figure 2.1, provides a schematic illustration of the various steps entailed. Eligibility for ADF lending is determined in relation to the criteria set out in ADB's *Graduation Policy*.⁷ For eligible countries, having access to ADF, "reference commitments" are then calculated using a formula that links commitment levels to (relative) country performance ratings and (relative) country "need".⁸ Marginal improvements in performance are weighted more heavily than marginal changes in need in influencing allocations. The policy also provides incentives for improved performance through country specific performance assessments that may trigger departures from base lending allocations.



⁷ *A Graduation Policy for the Bank's DMC's*, Asian Development Bank, Manila, December 1998.

⁸ Annex B explains technical details of the formula and some of its properties. Later sections take up issues related to the structure of the formula and its use in more detail.

10. **Diversity.** The policy recognizes and seeks to accommodate the diverse characteristics of ADF countries. First, to help address problems of structural vulnerability, there is provision for a separate pool of resources for the Pacific Developing Member Countries (PDMCs).⁹ PDMCs compete for this pool on performance and needs criteria separately from other ADF eligible countries. Second, and drawing on ADB's Charter mandate, the policy embeds a "small country bias" within the allocation process. Essentially, all else equal, the formula allocates more resources on a per capita basis to less populous countries. This is intended to ensure that operations can have a meaningful development impact in small countries. Third, the policy provides for the flexibility to adjust formula allocations. For example, absorptive capacity constraints or special needs (e.g., post-conflict needs) would warrant adjustments to formula commitments. The policy also provides for modulation of abrupt changes in lending allocations that may adversely affect program coherence and/or project quality. In practice, this has led to the application of rules that moderate large departures from historical lending averages (the, so-called, "collar"). Cautioning against an overly mechanistic approach, the policy nevertheless requires that a "basic robust link" between performance and allocations be established.

11. **Implementation.** Lending commitments for 2002-2004 have been approved under the policy, as have approvals for 2002-2003.¹⁰ Three rounds of country performance assessments have been conducted, and country specific performance triggers have been evaluated twice. A third evaluation is scheduled prior to the end of 2003. Quintile rankings¹¹ of country performance ratings have been disclosed to the Board. The fourth round of the PBA process will commence early in 2004.

12. **Roles and Responsibilities.** Under current implementation arrangements, operational departments are responsible for the conduct and agreement of country performance ratings scores, for the allocation of resources among countries, and across competing demands (post-conflict, etc.), and for the setting and assessment of country specific performance criteria. Operational Vice Presidents make collective recommendations on country and other allocations to Management. The role of non-operational departments is to provide Management with advice on the size of the overall ADF resource envelope, to track ADF resource use, to assess whether PBA implementation complies with the policy and to provide inputs into the country rating process as requested.

III. THE IMPACT OF THE POLICY ON LENDING COMMITMENTS, 2002-2004

13. **Summary.** Compared to the historical pattern of resource allocation, the PBA formula moves resources in favor of more populous countries. This reflects substantially larger provision for the population component of need than was implicit in the historical process. Notwithstanding adjustments to formula commitments, intended to moderate abrupt departures from historical lending averages, the evolving pattern of commitments are strongly linked to performance, and to needs. Cross-country empirics are comparable to that in IDA. However, among the PDMCs, implementation of the PBA has required considerable flexibility. For this group of countries, infrequency of loans means that it will take longer to establish a pattern in which resources are clearly linked to performance. Issues raised by these findings are presented in the conclusion to this section. Annex A provides fuller technical details.

⁹ Within the PDMCs, competition for resources takes place on the basis of performance, needs and absorptive capacity.

¹⁰ Approvals for 2003 are not yet completed.

¹¹ That is rankings of five groups ordered in terms of the best 20% of performers, the next best 20% and so on.

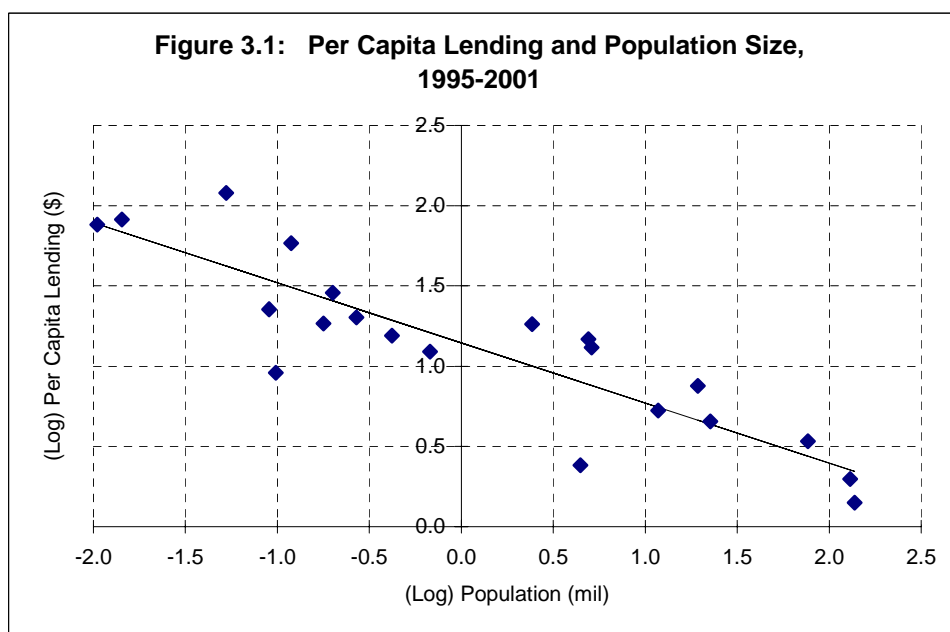
3.1 Historical Lending Patterns, 1995–2001

14. **Historical Patterns.** The historical pattern of ADF loan approvals is shown in Table 3.1. Although there is considerable year-to-year variation in approvals only a few countries experienced consistently rising or falling lending. For the majority of countries, historical approvals varied around a more or less stable level.

Table 3.1 Historical ADF Lending, 1995-2001 (\$ mil, current)

	1995	1996	1997	1998	1999	2000	2001	Average
Pacific Group								
Cook Islands	3.0	5.0	0.8	-	-	-	2.2	1.6
Kiribati	-	-	-	10.2	-	-	-	1.5
Marshall Islands	9.2	-	12.0	-	9.3	6.8	8.0	6.5
Micronesia	-	10.6	18.0	-	-	8.0	13.0	7.1
Nauru	-	-	-	-	-	-	-	-
PNG	-	-	15.0	-	20.0	24.9	5.9	9.4
Samoa	-	-	-	7.5	-	10.5	6.0	3.4
Soloman Islands	-	-	-	26.0	-	10.0	-	5.1
Tonga	3.6	4.9	-	-	-	-	-	1.2
Tuvalu	-	-	-	-	4.0	-	-	0.6
Vanuatu	-	10.0	-	20.0	2.0	-	-	4.6
Pacific Group Total	15.8	30.5	45.8	63.7	35.3	60.2	35.1	40.9
Indonesia	56.7	67.8	30.0	-	-	165.0	100.0	59.9
Group A								
Bhutan	7.5	-	8.0	5.7	10.0	19.6	7.0	8.3
Cambodia	45.1	105.0	-	40.0	88.0	109.6	75.2	66.1
Kyrgyz Republic	40.0	80.0	89.2	65.0	72.0	66.0	75.0	69.6
Lao PDR	93.0	91.7	103.0	20.0	57.6	60.5	65.0	70.1
Maldives	-	-	7.0	6.3	8.0	-	17.5	5.5
Mongolia	84.0	63.5	62.7	-	50.0	41.9	35.7	48.3
Nepal	40.0	252.7	27.0	105.0	50.0	173.3	95.6	106.2
Tajikistan	-	-	-	20.0	25.0	54.0	3.6	14.7
Group A Total	309.6	592.9	296.9	262.0	360.6	524.9	374.6	380.5
Group B 1								
Azerbaijan	-	-	-	-	-	-	-	-
Bangladesh	227.1	256.4	419.7	183.6	250.0	203.1	159.2	242.7
Pakistan	431.8	283.0	251.0	-	95.8	257.0	363.6	240.3
Sri Lanka	140.0	44.0	161.6	185.0	148.8	193.7	86.0	137.0
Vietnam	233.0	303.0	359.6	284.0	180.0	188.5	243.1	255.9
Group B1 Total	1,031.9	886.4	1,191.9	652.6	674.6	842.3	851.9	875.9
Total ADF Lending	1,414.0	1,577.6	1,564.6	978.3	1,070.5	1,592.4	1,361.6	1,365.6

15. **Population.** Population was the most important factor in determining historical loan approvals, with larger countries receiving higher loan volumes. Nevertheless less populous countries still received higher allocations in per capita terms (See Figure 3.1). Between 1995-2001, across countries, for each increment of 1% of population, total lending increased by about 0.5% indicating the presence of a strong “small country bias” in the historical allocation process.



16. **Income.** Income or economic size also played an important role in the historical allocation of resources. One way of looking at the relationship between lending and income is to consider the relationship between loan approvals as a percentage of Gross Domestic Product (GDP) and country per capita income.¹² Figure 3.2 summarizes the relationship between these variables for Group A and B1 countries for historical loan approvals. ADF lending as a percentage of GDP is plotted on the vertical axis and per capita incomes on the horizontal axis. A circle that is proportional in size to population represents each country. It may be noted that for the majority of countries ADF resources constituted less than 2% of GDP. Although care needs to be taken in drawing inferences with so few observations, ADF assistance as a percentage of GDP was generally smaller for countries with larger per capita incomes. But it can also be seen by the preponderance of large observations below the line that more populous countries received lower allocations per unit of GDP than less populous countries¹³. The best-fit relationship is:¹⁴

$$\frac{\text{Allocation}}{\text{GNP}} = \left(\text{Population}^{-0.436} \cdot \frac{\text{GNP}^{-1.247}}{\text{Population}} \right) \quad 15$$

$$\Rightarrow \text{Allocation Share} = A \cdot \left(\text{Population}^{0.564} \cdot \frac{\text{GNP}^{-0.247}}{\text{Population}} \right)$$

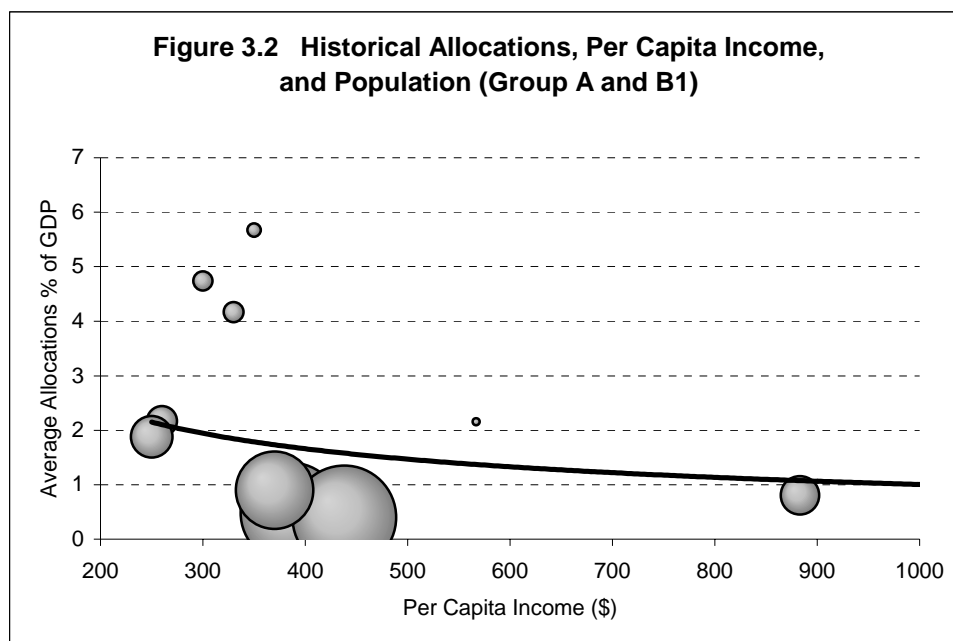
¹² Among ADF eligible countries, per capita incomes tend to be larger in countries with small populations. As a consequence of the small country bias, per capita loan approvals have also, historically, been positively related to per capita incomes. Note that this is not inconsistent with a negative relationship between lending as a % of GDP and per capita income, as shown in Figure 3.2. A positive correlation between per capita lending and per capita GDP is in fact a broader feature of aggregate ODA lending across a much wider group of countries. See, David Dollar, *Raising the "poverty weight" in the IDA allocation formula: some empirical analysis*. Development Policy Division, World Bank, 2003

¹³ It is possible that large countries had difficulty in absorbing resources, but there is no evidence of this. It is more likely that allocations reflected a strategic institutional interest in small countries.

¹⁴ The relationship is statistically significant ($R^2=0.867$). Both estimated parameter values are significant at 1%.

¹⁵ A is a parameter that ensures shares sum to unity.

For PDMCs, however, historical share allocations increased with per capita GNP and also with population size (see Annex A).



3.2 A Comparison of Historical and Formula Allocations

17. **Separating Impacts.** For any country, the impact of the policy is the difference between its historical lending per capita and commitments under the PBA. This difference can be conceptualized in terms of a “needs” and a “performance” component as follows:

$$\text{Historical Allocation} - \text{PBA Allocation} = (\text{Historical Allocation} - \text{Needs Allocation}) + (\text{Needs Allocation} - \text{PBA Allocation}),$$

where the first term on the right hand side is defined as the “needs component” of the impact, and the second terms is defined as the “performance component”. To identify the needs component, the PBA allocation formula is applied on an assumption that performance is uniform across all countries. This effectively eliminates the influence of performance from the formula and from allocations.¹⁶ The performance impact is then defined as the residual difference between the hypothetical needs allocation and the actual PBA allocation. Since there was no performance element associated with historical lending, considering the residual difference as the performance impact seems reasonable.

18. **Needs Impacts.** Three main conclusions emerge from the estimation of needs impacts. First, differences between the historical pattern of allocations and those generated by the needs only formula are substantial. The average absolute percentage difference (i.e., ignoring the direction of change) between historical lending averages and those generated by the needs

¹⁶ Under these assumptions, the PBA reduces to a “needs based” allocation system.

model is 52%.¹⁷ Second, the difference between the allocation generated by the “needs only formula” and the historical allocations are strongly and positively related to the population component of need. Other things equal, the formula allocates more resources to more populous countries. The historical pattern of allocation appears to contain a stronger “small country bias” than does the allocation formula provided by the formal policy. Third, if the impact of population is factored out, per capita income exerts no independent effect on the difference between historical and the allocations generated by the needs only formula. It transpires that formula and historical allocation shares are related to GNP per capita in numerically similar ways. The best-fit historical estimate of the per capita exponent is -0.247 , whereas the formula provides for a value of -0.25 .

19. **Performance Impacts.** The performance component of the difference between historical and PBA allocations can now be calculated as the difference between the allocations generated by the needs only formula and the full PBA formula, including performance scores. This exercise is conducted using actual data for 2002. Adding performance scores to the formula obviously reduces allocations for poor performers and increases allocations for the best performers. The worst performing country loses 70% of its allocation relative to the hypothetical needs formula. The best performing country receives a 150% increase in its allocation. For only eight countries does the inclusion of the performance score lead to changes that are less than $\pm 10\%$ of the hypothetical needs allocation. At a more aggregate level, performance impacts marginally favor Group A over Group B1 countries.

3.3 The Evolving Pattern of Allocations

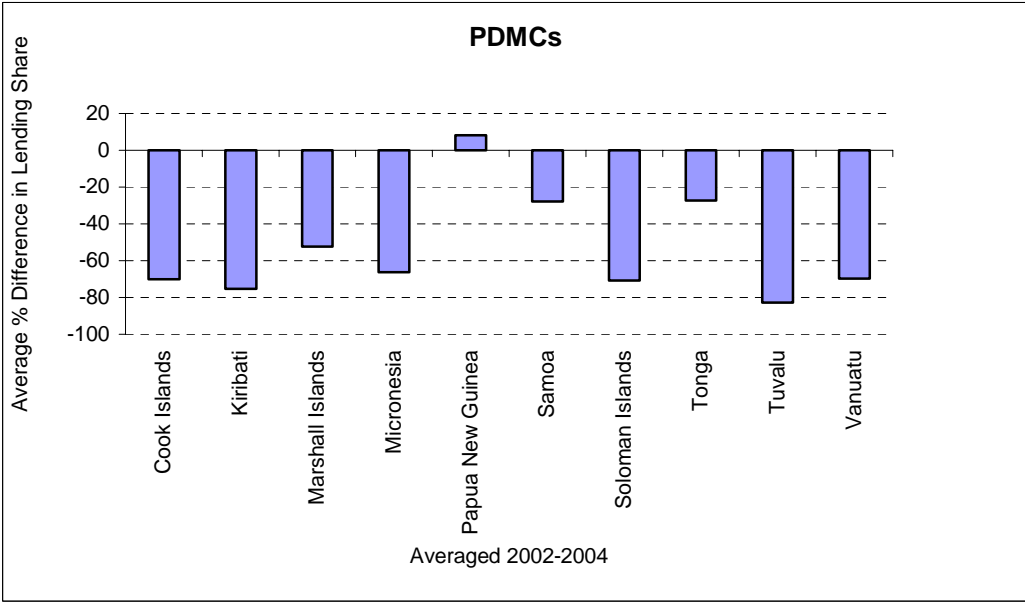
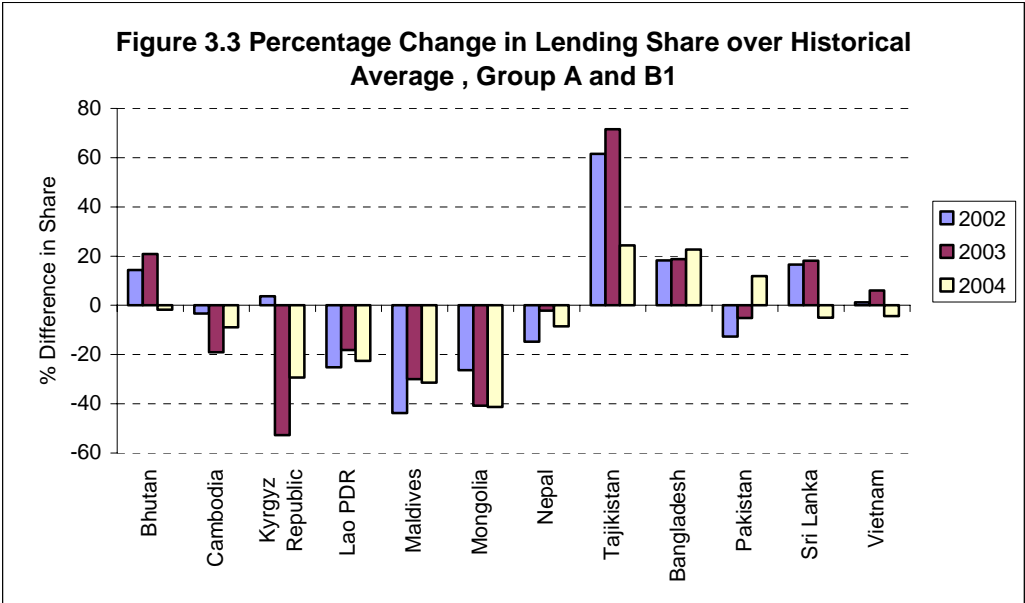
20. **Comparisons.** Figure 3.3 summarizes the evolving pattern of commitment shares over the period 2002-2004 for individual countries. These are expressed as the percentage change between the PBA allocation share (after collar and other adjustments) and the historical share calculated over the period 1995–2001. A positive number indicates an increased share of resources under the PBA, while a negative number indicates a declining share. Given the infrequency of loans for many PDMCs, allocation shares are calculated separately and averaged over the three years. The comparisons are of shares rather than monetary allocations to remove the influence of year-to-year variations in the resource envelope.

21. **Shifting Allocations.** It can be seen that with the adoption of the policy Group B1 countries have increased their share in total allocations while the share of Group A countries has, in general, declined. Tajikistan and Bhutan are the only two Group A countries that increase their share of ADF resources. The drift in allocations to Group B1 countries reflects the operation of the formula and, specifically, the increased allocations that the formula provides for more populous countries. Among PDMCs, the increased weight of the population component of needs shifts resources to PNG, which contains over 80% of the total PDMC population. Allocations to all other PDMCs fall relative to their historical shares to release the resources that the formula provides for PNG.

22. **Country Trends.** Because adjustments are made to modulate abrupt changes from historical lending averages, changes in actual commitment shares are substantially less than would have occurred had formula commitments been applied unadjusted. Large changes in Tajikistan’s share reflect its status as a comparatively new borrower and post-conflict

¹⁷ This may seem somewhat surprising given the apparent similarity between formula weights and the estimated exponent values reported in paragraph 16. However, even small differences in exponent values can lead to substantial reallocations where the underlying range of the variable is large, as it is for population. See Annex B.

assistance. The sharp reduction in the share of the Kyrgyz Republic in 2003 reflected a reduction in commitments based on absorptive capacity considerations. Among the PDMCs, large reductions in lending shares to small countries were needed to release resources to PNG (a B2 country).¹⁸ Bangladesh has increased its share due to increased allocations based on the population element of needs. The increasing share of Pakistan reflects an improvement in its performance over the period. In general, shares of less populous countries fall.



¹⁸ Although the increment is modest for PNG (+8%) and has been limited by the collar (see Section 6), changes for other PDMCs have been large in proportional terms, and have not been constrained by the collar. It would not have been possible to release resources to PNG without a substantial proportional decline in other country programs. This highlights the importance of the budget constraint. If the resource envelope is fixed, a rise in commitments for one country must result in declines for others, irrespective of their performance.

3.4 Performance and Commitments, 2002-2004

23. **Controlling for Population.** Formula lending commitments depend critically on performance but they also depend on measured needs. In the presence of the formula's "small country bias", the relationship is, in particular, influenced by the wide dispersion in population among ADF countries. For a given level of performance, differences in population size critically affect per capita allocations and so distort simple correlations between per capita commitments and performance that could be established otherwise. This point is illustrated and more fully explained in Annex A where quintile performance ratings are compared with population weighted per capita allocations.

24. **Performance-Allocation Link.** Figure 3.4 summarizes the relationship between per capita commitments, performance ratings and population size for the period 2002–2004 for non-PDMCs.¹⁹ Per capita allocations in \$'s are recorded on the vertical axis and country performance scores on the vertical axis. The area of each observation is again proportional to country population size. These data confirm that performance and commitment shares are positively related. For a 1% improvement in performance, the estimated commitment share increases on average by 2.6%, all else equal. Although this relationship is statistically significant, not all else is equal. For a given level of performance, less populous countries attract more resources in per capita terms. This reflects the exponential weight given to population in the formula but also the inertial effect that historical lending averages have played, through the collar, in restraining allocations for more populous countries, and protecting allocations for less populous countries.²⁰

25. **Formula Comparisons.** Actual commitments can be described in terms of the best-fit exponential weights that describe the relationship between commitment shares, performance, population and GNP per capita. For Group A and B1 countries, this relationship is:²¹

$$\text{Commitment Share} = A \cdot \left(\text{Performance}^{1.36} \cdot \text{Population}^{0.64} \cdot \frac{\text{GNP}^{-0.17}}{\text{Population}} \right).$$

The estimated exponential weights on performance (1.36) and per capita income (-0.17) are somewhat smaller (in absolute magnitude) than the corresponding weights in the PBA formula (1.8 and -0.25, respectively). Nevertheless, they are not statistically different from them.²² However, the estimated exponent on the population variable (0.64) is statistically different from the formula weight of 0.75. This is consistent with the observation that less populous countries are receiving more resources than would be provided by the formula alone. An analogous

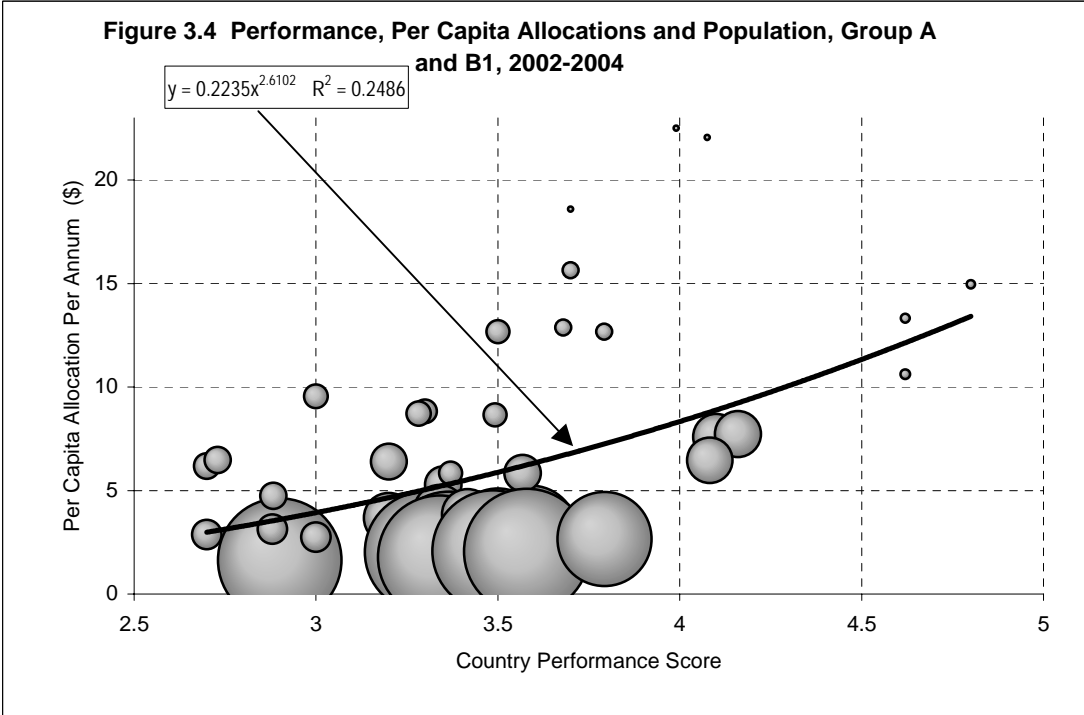
¹⁹ In pooling data across time periods, year-to-year variations in aggregate commitments have been controlled for to remove possible scale biases. In Section 6, the impacts of changes in the resource envelope are described.

²⁰ In the first two years, country allocations were restricted to a range of $\pm 15\%$ around a five-years historical average. For 2004 commitments, allocations were permitted within a $\pm 25\%$ range of a three-years historical average.

²¹ The estimated exponents (=elasticities) are obtained by pooling data across the sample periods and calculating the ordinary least squares relationship between log lending allocations and the log performance rating, the log of population and the log of per capita income. The estimated exponents are all statistically significant at 10 percent, and the population and performance exponents are significant at 1 percent, $R^2=0.873$.

²² The formula weights lie within 2 standard deviations of the estimated values for the exponential weights.

estimation exercise at IDA produces similar results, but suggests a stronger performance effect.²³



26. **PDMCs.** Annex A provides a comparable analysis for the PDMCs. Performance and per capita commitments are again positively related. Taken in isolation from other factors, the estimated performance elasticity is statistically significant for PDMCs but the relationship is not robust to the inclusion of population and per capita income variables. As mentioned, provision of additional resources to PNG under the PBA has “crowded-out” allocations to all other PDMCs (irrespective of their performance). Also, adjustments are being made over a three-year cycle to accommodate infrequent loan projects.

3.5 Performance Improvement and Changes in Commitments

27. **Performance Changes.** Over the first three years of the policy, out of a possible 26 cases, there have been 20 cases where performance ratings improved for Group A and B1 countries. Of these, 12 countries received increased per capita commitments (over the year previous) and 8 countries had commitments reduced.^{24,25} Among the PDMCs, there were 10 cases of improved performance and 10 cases of deteriorating performance. For improved performers, 5 countries received an increase in allocation. In 9 out of 10 cases of deteriorating performance, commitments were reduced.

²³ $Commitment\ Share = A \cdot \left(Performance^{2.3} \cdot Population^{0.73} \cdot \frac{GNP}{Population}^{-0.11} \right)$, see, Dollar (*op cit*).

²⁴ Recall that these are hypothetical commitments based on an assumption that the total resources available were constant. In fact, resources have varied. Resource management issues are discussed in Section 6.

²⁵ One Group A country received an increased commitment despite a deterioration in its rating apparently because of a correction to a mistake in the calculation of its historical lending average.

28. **Relative Performance.** In interpreting these data, it should be borne in mind that the formula rewards relative not absolute performance.²⁶ Also, in cases where the initial formula allocation was substantially less than the historical allocation, phased reductions in commitments via the collar may continue, notwithstanding possible improvements in performance. Among PDMCs, dynamic links are complicated by the infrequency of loan approvals and the reductions in allocations needed to accommodate a larger share of resources for PNG.

3.6 Issues

29. **Adjustments to Formula Allocations.** A number of issues are suggested by this analysis. Relative to historical allocations, the policy provides substantially increased support for the population component of country needs.²⁷ Although stronger support for needs might be welcomed, it comes at the cost of reducing the ADF's presence and possible relevance in less populous countries (such as Lao PDR and Mongolia) that typically have smaller per capita incomes.²⁸

30. **Graduation.** Questions also arise about the consistency between PBA outcomes and graduation considerations. The *Graduation Policy* anticipates that blend countries' (Group B1 and B2) dependence on ADF resources would gradually be reduced as their incomes level rise, and their debt repayment capacity increases. But commitments under the PBA are moving in the opposite direction. The shift in commitments favoring blend countries is a consequence of the PBA allocating more resources on the basis of the population component of need and is transitional. It happens that the most populous countries are blend countries (B1). Other things equal, this effect will recede as actual commitments converge on those provided by the formula. But, if other things are not equal, and blend countries also happen to have more favorable performance dynamics than ADF only countries, the PBA policy would increasingly move ADF resources towards blend countries. Under current arrangements and given the strong pull of performance on allocations at the margin, graduation would then entail a more abrupt cessation of access to ADF resources. Graduation and PBA objectives might be better reconciled by either by increasing the (absolute) weight on the income component of need, capping allocations to blend countries, as occurs in IDA, or by having blend countries compete for resources within a separate pool, as occurs in IADB and IFAD.

31. **Resource Alignment.** Although the response of commitments to changes in needs and performance is linked to formula exponential weights (see Annex B), the relationship between the allocation of resources across countries and levels of performance and needs is not particularly transparent. In monetary terms, it is not possible to build up a picture of how resources are being used to support needs as opposed to rewarding performance. Additive allocation mechanisms such as that used by IADB (Box 3.1) seem to permit a more transparent

²⁶ Theoretically, it is possible to receive a reduced allocation even if relative performance has improved. This is most likely to occur where a country that commands a large share of resources improves its performance, constraining the residual resources available to all other countries.

²⁷ There is no substantive discussion of this issue in the policy paper.

²⁸ If the intention of the policy was to increase the weight of needs and provide more resources for more populous countries, the question arises as to how long such adjustment should take. The policy provides for the modulation of abrupt changes to preserve program coherence and project quality, and to accommodate absorptive capacity constraints. But with a $\pm 25\%$ collar centered on a three years historical lending average, it would take up to ten years for some lending programs to adjust fully (see Section 6, below).

separation and evaluation of needs and performance considerations, but they have their own limitations.²⁹ Given finite resources, all allocation formulae entail trade-offs. As good performers are not typically the most needy countries, objectives cannot be maximized simultaneously. Different formulas negotiate trade-offs in different ways and present different choices to decision makers (see Annex B). This is an issue that deserves closer scrutiny.

Box 3.1 The IADB Allocation Scheme

The first step at IADB is to divide the total funds into needs and performance pots: 40% to need, and 60% to performance. Then the needs-based pot is then divided into two smaller pots, 55% to be allocated on the basis of population, and 45% to be allocated on the basis of per capita income. Similarly, the performance-based pot is divided into two smaller pots, 70% to be allocated on the basis of policy/institutional performance and 30% to be allocated on the basis of portfolio performance. The result is four pots of money as follows: 22% of total funds (to be allocated by population); 18% of total funds (to be allocated by per capita GNP); 42% of total funds (to be allocated by policy/institutional performance); 18% of total funds (to be allocated by portfolio performance). Each country then receives a sub-allocation from each pot (on the basis of a single variable in each case) and its total is the sum of the various sub-allocations. In IADB

$$\begin{aligned} \$\text{Allocation} = & ((\text{ratio of population}/\text{total population}) * (22\% \text{ of total funds})) \\ & + ((\text{ratio of per capita income}/\text{total per capita income})^{-1} * (18\% \text{ of total funds})) \\ & + ((\text{ratio of the policy \& institutional score}/\text{total scores}) * (42\% \text{ of total funds})) \\ & + ((\text{ratio of the portfolio score}/\text{Total portfolio scores}) * (18\% \text{ of total funds})). \end{aligned}$$

One apparent potential difficulty with the IADB formula is that where countries are of different population size, the use of IADB weights implicitly builds in a large “small country bias” in to some pots. For example, a country with twice the performance score of another would attract twice the resources from the performance pot, irrespective of their respective populations. By weighting allocations within each pot on the basis of population, this aspect of the IADB allocation scheme can be modified. See also Annex B.

32. **Incentives.** Finally, if the policy is to succeed in creating incentives for improved performance its financial mechanics need to be clearly understood by borrowers. Although borrowers know the standards by which they will be measured *ex-ante*, they do not know how performance translates into a commitment of financial resources until all other countries have been assessed and the resource envelope has been finalized. Borrowers, who may not have particularly good information about the performance of their peers, may therefore perceive that they have very little control or influence over outcomes. Although “performance contracts” that reward absolute rather than relative performance would help clarify the connection between actions and rewards, they would require a level of resources sufficient to fund expected achievements. Since resources are finite and somewhat uncertain, absolute performance contracts can present difficulties for resource management. By contrast, allocation systems based on relative performance automatically accommodate resource constraints and do not require the identification and pricing of performance standards. The difficulties of providing

²⁹ In Annex B, the results of an initial simulation with a linear allocation system are reported on ADF data and compared with those of the current geometric framework. By using non-linear allocation rules within the performance and needs “accounts”, it is possible to accommodate a “small country bias” and to capture strong marginal impacts of performance change. By incorporating these elements in the allocation formulae, country allocations can be generated that closely resemble those produced by the current geometric formula. This initial experiment suggests that there is nothing inherent in the (mixed-) linear framework that would limit its applicability or make it “unsuitable” for ADF eligible borrowers.

credible incentives to borrowing countries when total resources are shrinking remains unresolved.

IV. RATING PERFORMANCE AND MEASURING NEEDS

33. **Summary.** Reliable measurement is essential for a credible PBA system. There are many challenges in accurately measuring country performance and needs. Efforts at improving measurement systems are taking place across institutions. Currently, both IDA and IADB are reviewing their ratings' systems and ratings' criteria. In choosing indicators, relevance, reliability, availability, and ease of verification and aggregation are important attributes. Measurement systems that are transparent and limited in the number of indicators they use also commend themselves. In particular, the current rating system seems overly complex particularly for small economies with simple structural characteristics. Some issues for further consideration are identified at the end of the section. Annex D provides a summary of ratings outcomes over the period 2001–2003.

4.1 Rating Country Performance

34. **Rating Criteria.** Within the framework of the PBA, a country's policy and institutional performance score is intended to provide an indicator of the likelihood that resources will be used effectively.³⁰ The inclusion of a measure of portfolio performance provides a more institutionally relevant indicator of potential effectiveness. Despite considerable diversity among borrowers, similarities in rating criteria among MDBs are more striking than differences. All systems rate policy and institutional performance and combine this with a measure of loan portfolio quality. In all systems, the policy and institutional component carries a substantially greater weight than the portfolio rating.

35. **Conceptual Challenges.** Assessing country policy-and-institutional performance is necessarily judgmental, and there are several outstanding methodological issues not fully resolved. In principle, all countries, irrespective of their level of development should have an equal chance of scoring well.³¹ But it is difficult to separate perceptions of policy-and-institutional performance from contemporary growth and income levels. It is also difficult to score the relative performance of countries in widely differing circumstances. All MDB's are grappling with these problems.

36. **Performance and Results.** In assessing performance, the policy stresses the importance of actions. While actions, rather than promises, are undoubtedly important, they are inherently difficult to assess, and measure. Since good policies and institutions are of interest only insofar as they serve the broader objective of poverty reduction it does not seem unreasonable to judge the likely effectiveness of investments in relation to outcomes, as well as actions. Although it is undoubtedly true that random factors influence results, in many cases it should be possible to isolate their effects. Noting that there are unsettled issues about the link

³⁰ In the late 1990s, research at the World Bank seemed to indicate that such a correlation did in fact exist (*Assessing Aid*, 1999). More recent research has been unable to replicate these findings, see William Easterly, Ross Levine and David Roodman, *New Data, New Doubts: A Comment on Burnside and Dollar's "Aid, Policies and Growth"* (2000), NBER Working Paper 9846, Cambridge, MA, July 2003.

³¹ Among ADF eligible countries there is a positive correlation between per capita income levels and performance but it is not pronounced. For pooled data over three years, the coefficient of correlation is 0.22. The coefficient of correlation within the PDMCs is 0.41, and for Group A and B1 countries it is 0.40.

between policy and institutional actions,³² other institutions are considering the use of criteria that have a stronger results focus.³³

Table 4.1 Country Performance Scoring by Multilateral Development Banks

Scoring Practice	Multilateral Development Bank			
	IADB	IDA	ADB	CDB
Frequency of performance scoring	Bi-Annual	Annual	Annual	Bi-annual
Primary Scorer(s)	Country economists, sector and thematic experts from Regional Operations Depts.	Country economists, sector and thematic experts from Regional Operations Depts.	Country economists, sector and thematic experts from operational and non-operations Departments	Chief Economist
Comparative analysis of scores	No	Ad hoc working committees	Working Group (Regional Depts.)	No
Review	RES (Chief Economist)		Validation Group (3 non-operational departments.)	No
Benchmarking	No	Extensive (19 IDA and IBRD countries in 2003)	No	No
Special mission	No	No	Yes	No
Substantiation	Written	Not as of 2001	Written	No
Country Self-Scoring	No	No	No	No
Scores linked to performance triggers	No	Unknown	No	No

Note to Table/
Data yet to be collated for AfDB.

37. **Scoring Biases.** Indicators that are based on quantifiable measurement are more easily verified than ones that rely on judgment or subjective opinions. Although it would not be possible or desirable to shift to an entirely mechanical data based system of performance scoring, efforts to make performance criteria more precise and less subject to scorer bias need to continue. Greater use of third party expert assessments, such as by the IMF, and a number of civil society organizations, would help buttress the rating process.³⁴ Ways should also be explored of allowing borrowers and outside experts to have an input. Internally, rigorous assessment and review processes narrow the scope for scoring biases but can lead to implementation delays. At ADB, narrative records supporting ratings scores have been kept since the outset. Table 4.1 compares current performance scoring procedures across MDBs.

³² P. Collier and D. Dollar *Aid Allocation and Poverty Reduction*, World Bank Policy Research Working Paper, 2041.

³³ Allocations within the "Millennium Challenge Account" (MCA) will be guided to some degree by the use of several results indicators. For example, the ratio of girls to boys in schools, immunization rates, country credit ratings. IADB is also thinking about adopting a more results based rating framework. See, e.g., S. Radelet, *Challenging Foreign Aid*, Center for Global Development Economics, Washington D.C., 2003.

³⁴ The use of more quantitative information about governance could be considered. For example, the MCA proposes to use the indicators of Kaufman and Kraay in their performance assessments. See, e.g., *Governance Matters III: Time Series Indicators, 1996-2002*. Kaufman, Daniel ; Aart Kraay and Pablo Zoido-Lobaton, Draft World Bank Policy Research Paper, World Bank, Washington, DC.

38. **Ratings Scale.** ADB, like other institutions, rates performance on a scale from 1 to 6. Although formula allocations are independent of multiplicative scaling of rating values, they are not independent of changes in the dispersion of scores (see Annex B). In practice, it is not clear how the rating scale influences actual scoring but a scale with a larger range could conceivably encourage a wider dispersion. For example, if strong performance attracted a score of 10 rather than 6, and poor performance was scored at 0, this might stretch the distribution of performance scores in which case a reallocation of resources would occur from poor to better performers. For example, other things equal, the difference between a unsatisfactory performance and a score of 2 out of 6 and unsatisfactory performance and a score of 2 out a maximum 10 would be an absolute decline in lending share of 7%. Form the perspective of the selection of formula weights and system design, a narrow ratings' dispersion also dampens the sensitivity of allocations to the choice of the exponent on the performance variable.³⁵

39. **Aggregation Weights.** Finally, there are some differences in the weights used by ADB and other institutions in aggregating over different performance criteria. These are summarized in Annex D. In principle, the choice of weights should reflect the relevance of the variable in terms of the contribution that it makes to intended outcomes, with larger weights being given to those factors that are more important. However, on this matter, there is little direct evidence. It would also seem reasonable to assign smaller weights to scores that may be more prone to error.

4.2 Rating Governance

40. **Governance Factor.** There is wide agreement that the quality of governance is central to development effectiveness. The policy assigns a larger weight to governance scores than to other criteria. Other ratings criteria are also closely related to public and private sector governance. Adding these together gives governance related indicators a weight of close to 40% in the overall system. In IDA, a lower weight on governance is modified by the application of a "governance factor". The IDA governance factor is defined as the governance rating divided by the median governance score (3.5), raised to an exponent value of 1.5. The country policy and institutional rating for a country is then multiplied by the governance factor to generate a final rating. For example, if a country were to score 3.0 on the governance criteria, its share would be reduced by about 21%, all else equal. IDA simulations also suggest that a small drop in just one component of their governance rating can generate a substantial reduction in allocation.³⁶ The overall impact of applying the governance factor depends on the dispersion of governance scores, but will, in general, "hollow out" the middle of the ratings' distribution.

41. **Weighting Governance.** The application of the governance factor is not particularly transparent. In practice, since not all other things are equal, simulation methods are needed to identify its precise impact (Annex C provides illustrations). But adding further to the already substantial weight of the governance score in the overall rating system would risk crowding-out the influence of other relevant factors. A number of options could be considered about how stronger signals for improved governance performance might be given without inducing the discontinuities that are evident in the IDA system. One possibility might be to create a separate pool of resources to reward good governance.³⁷

³⁵ As explained in Annex B, changes in the exponent on population has a large effect because of the large range and variance of the population variable.

³⁶ *IDAs Performance Based Allocation System: Current and Emerging Issues*, IDA, October 2003.

³⁷ IDA had earlier applied a system of "governance discounts" to admonish poor governance performance but abandoned them as they led to draconian changes. This is not a necessary feature of a governance discount but rather depends on how the discounts are calibrated.

4.3 Measuring Portfolio Performance

42. **Portfolio Performance and Effectiveness.** The rationale for using portfolio performance as a variable in the allocation formula is that the past performance of projects in a country is a good indicator of likely effectiveness of new projects. Some preliminary research by IADB has identified a statistically significant link between portfolio performance and country policy-and-institutional performance ($R^2=0.54$), and a significant but weaker link between economic growth and portfolio performance ($R^2=0.42$).³⁸

43. **Challenges.** Portfolio performance has proven particularly difficult to measure. Portfolio performance is more likely to be a consistent predictor of effectiveness at the sector level, rather than more broadly at the country level. Given the length of the project cycle, ratings may also be registering policy and institutional conditions that have long since changed.

44. **Projects at Risk.** ADB, like IDA and other institutions, measures the quality of its portfolio using a “project-at-risk” methodology. While the project-at-risk methodology captures a large range of information about on-going projects, a number of well-known problems exist with this approach for portfolio ratings purposes. For example, if only current projects are included in assessing portfolio performance, then, paradoxically, the complete failure and cancellation of a weak project results in an improved country performance score. Second, evidence from the World Bank suggests that project supervisors tend to score too optimistically, lending an upward bias to portfolio ratings. Third, separating the lending institution’s performance from the borrower’s performance is not easy. For example, the borrower might be tardy when compared with the implementation targets, but those targets might be unrealistic. Lastly, it is difficult to assess the performance of new borrowers or borrowers that have no active projects or only one or two projects. Measuring portfolio performance has been particularly problematic for PDMCs.

45. **Absorptive Capacity.** A possible alternative approach to measuring portfolio performance would be to measure the efficiency with which the borrower has utilized ADF resources, historically. An argument against including absorptive capacity in the allocation formula is that it is better taken into account later when indicative commitments are translated into lending scenarios in the process of developing country strategies and programs. However this assumes that formula allocations are accepted by all as indicative only, and may be substantially modified. Although this view appears to reflect the intent of the PBA policy, shareholders have focused their attention largely on the formula component of the allocation system. The main points in favor of such an approach to calculating portfolio performance are, first, that it is based on firm data and easy to calculate, and, second, it would provide a direct incentive for borrowers to improve their take-up of approved loans. Although absorptive capacity measures may provide useful information, they, like other single dimensional measures, have their limitations. For example, it would be difficult to compare fast-disbursing programs with slower disbursing projects.

46. **Evaluation Information.** Self-evaluation data might also be used as a basis for a “portfolio performance” variable in the resource allocation formula. Independent evaluation data are necessarily selective and therefore could not provide the comprehensive information needed for performance scoring. In this context, the evaluation of programs as well as projects would be relevant. In theory, self-evaluation data would provide a better basis for an assessment of portfolio performance than projects-at-risk. They better capture information about

³⁸ IADB, Draft Working Materials, *Economic Variables and Portfolio Performance*, July 16, 2003.

the quality of the strategy and all active projects. Such an approach would also avoid the traps noted above that are inherent in the at-risk calculation. A review of the suitability of evaluation data for this purpose might be considered within the broader framework of monitoring effectiveness.

4.4 Assessing Needs

47. **Eligibility.** The scope of the review does not include an examination of issues of country eligibility for ADF, nor constraints on access by those who are eligible. Nevertheless it is important to keep in mind that the first stage of resource allocation is the determination of country eligibility to access ADF. Under the present policy, eligibility to borrow is based primarily on per-capita income and debt service capacity considerations. Only the poorest countries are eligible to borrow concessionary funds, although higher income, debt vulnerable countries, and countries classified as "least developed" by the United Nations, are also eligible. As incomes rise and debt repayment capacity improves, countries gain access to ordinary capital resources, at a higher interest rate, and the graduation policy restricts and then terminates access to ADF funds.

48. **Incidence and Depth of Poverty.** At a conceptual level, needs refer to the number of poor people in a country, and their average depth of poverty. In ADB's PBA, as in IDA, data on population and per capita income are intended to provide a surrogate measure of needs. One of the advantages of using per capita income and population data to proxy country needs is that they are available on a broadly comparable basis, and are routinely updated. However, to the extent that levels of income inequality and the dynamics of inequality vary among countries, the income and population variables may not provide a very reliable approximation. To an unknown degree, they will bias allocations away from countries with the greatest inequality. In principle, it would be better to measure needs more directly. In Table 4.2, correlations among variables that might better approximate per capita "needs" are reported for Group A and B1 countries. Since, estimates of poverty incidence and depth are not available for the PDMCs, separate correlations are shown for PDMCs in Table 4.3. While per capita GNP is negatively related to both the incidence and depth of poverty for Group A and B1 countries, the correlations are not particularly strong. The UNDP Human Development Index, life expectancy at birth and PPP estimates of GDP per capita are all more strongly correlated with poverty incidence and depth of poverty than is GDP per capita. For the PDMCs, PPP estimates of GDP are more strongly correlated with the Human Development Index, but per capita income is more strongly correlated with the HDI than with life expectancy at birth.

Table 4.2 Correlation Among "Needs" Indicators for Group A and B1 Countries, 2001^a

	HDI 2001	GDP/GNP Per Capita	Life Expectancy	PPP GDP per capita	PPP Poverty Incidence	Depth of Poverty
Human Development Index (HDI), 2001	1.00	0.47	0.86	0.69	-0.84	-0.81
GDP per capita, (US\$) 2001	0.47	1.00	0.34	0.89	-0.50	-0.53
Life Expectancy at birth, 2001	0.86	0.34	1.00	0.54	-0.75	-0.74
Purchasing Power Parity (PPP): GDP estimates per capita, (US\$) 2001	0.69	0.89	0.54	1.00	-0.70	-0.72
PPP: Poverty Incidence%, ^b	-0.84	-0.50	-0.75	-0.70	1.00	0.99
Depth of Poverty%, ^c	-0.81	-0.53	-0.74	-0.72	0.99	1.00

Table 4.3 Correlation Among “Needs” Indicators for PDMCs, 2001^a

	HDI 2001	GDP/GNP Per Capita	Life Expectancy	PPP GDP per capita
Human Development Index, 2001	1.00	0.76	0.61	0.83
GDP per capita, (US\$) 2001	0.76	1.00	0.61	0.93
Life Expectancy at birth, 2001	0.61	0.61	1.00	0.38
PPP: GDP estimates per capita, (US\$) 2001	0.83	0.93	0.38	1.00

Notes to Tables:

^a Except poverty incidence and depth of poverty (latest year available across countries)

^b % of the population living on less than \$1.08 a day.

^c Poverty gap ratio - measures the magnitude of poverty, considering both the number of poor people and how poor they are. Represents the mean proportionate poverty gap across the whole population (zero gap for the non-poor).

Sources:

HDI Index, Life Expectancy, PPP: GDP per capita - Human Development Report, 2003

GDP Per Capita PPP: Poverty Incidence (Proportion of Population Below \$1 per day, Poverty Gap Ratio - WB World Development Indicators 2003.

Depth of Poverty (Poverty Gap Ratio at \$1/day) - WB World Development Indicators 2003

49. **Data Availability.** Adoption of alternative and more direct measures of poverty and needs has been inhibited by the low quality of data in some countries. However, these numbers are unlikely to change much from year to year. Therefore, although it is true that up-to-date figures are unlikely to be comprehensively available for all eligible borrowers every time a reallocation is undertaken, this might be less a constraint to reasonable use of more direct measures as has been supposed. Consideration might be given to reconsidering the usefulness of per capita income as a surrogate for poverty and combining alternative measures with population in a new overall measure of needs. Faced with major data limitations, the per capita income measure has practical attractions for the PDMCs.

50. **Vulnerability and Post-Conflict Needs.** Vulnerability is considered as a component of need in both the Caribbean Development Bank (CDB) and European Community (EC) formulas. The CDB calculates a vulnerability score and integrates it within its formula. The EC determines its allocation for emergency lending in relation to four indicators, three of which relate to vulnerability. At ADB vulnerability is implicitly taken into account in setting aside a separate pool of funds for PDMCs. *The Emergency Assistance Policy*³⁹ also provides for softer loan terms for countries that borrow for emergency purposes. The *Emergency Assistance* policy proposes the adoption of the IDA framework for evaluating post-conflict needs, including the use of IDA post-conflict performance frameworks and indicators.

4.5 Issues

51. **Streamlining.** The use of an extensive set of sub-indicators has given the impression that ADB's scoring system is considerably more complex than that used by other institutions. Although specificity may help improve the reliability of scores, there is undoubtedly a trade-off with system transparency and implementation costs. Options for a more compact rating system, using perhaps only 15 to 20 indicators, warrant consideration. Although judgment will continue to be critical, there is a consensus that the use of more data based and results indicators may help reduce scoring biases. As approaches to the measurement of country institutional and policy performance are still evolving, and inter-agency collaboration would be helpful, the rating

³⁹ In process, scheduled for consideration by ADB's in Q1, 2004.

system should be kept under review so that it may adapt to new information and empirical evidence about what works in reducing poverty.

52. **New Data.** There is scope for the use of improved data in a number of areas. Strengthened governance indicators would be of particular value given their weight in the allocation process. There may also be reasonable grounds for examining alternative measures of per capita need. While issues about the scale on which performance ratings are measured may seem rather technical, the use of a narrow scale may inadvertently compress ratings assessments. Perhaps more importantly, the narrow dispersion of performance ratings scores makes allocations relatively insensitive to the choice of the formula exponential weight. More generally, a change in the measurement of any formula variable would require recalibration of weights.

Table 4.4 Inter Agency Coordination Options

Level of Coordination	Considerations	Difficulty/Risk
Sharing information on scores and substantiation of scores	Is confidential sharing without full public disclosure possible?	Medium
A common allocation formula	Several different formulas are extant.	Medium
Common performance criteria	Several institutions interested in simplification	Low
Common cycle and procedures	Different fiscal years and planning cycles	High
Common benchmarks in joint countries	Would require IDA collaboration with several institutions	Low
Joint scoring of performance	Require harmonization of other elements first	Medium
Delegation of performance scoring or sharing of responsibilities (reliance)	Would require high level of trust and coordination	High

53. **Inter-Agency Coordination.** While the interpretation and use of ratings information may reasonably differ among experts and institutions, closer inter-agency coordination on performance monitoring and measurement promises benefits. Table 4.4 summarizes some options. A forum for the periodic exchange of information, views and research findings would be a positive first step.

V. PROCESS

54. **Summary.** Operational departments are responsible for implementation of the PBA, and through Operational Vice Presidents recommend lending allocations to Management. Currently, information is communicated about the PBA process to the Executive Board through Country Strategies and Programs (CSPs) and their annual updates (CSPUs). Three non-operational departments have responsibility for setting the overall resource envelope, tracking resource use, and on checking whether implementation has complied with the policy. Going forward, three areas merit attention: a clearer separation of operational responsibilities from resource decisions; streamlining of the implementation process; and fuller reporting and disclosure of ratings and outcomes.

5.1 Implementation⁴⁰

55. **Implementation Cycle.** The PBA implement cycle is annual and begins with the country performance assessment missions and is concluded on the evaluation of country specific triggers and the confirmation of allocations for the coming year. Figure 5.1 summarizes the sequence of activities.

56. **CPAs.** Country economists are responsible for preparing the initial CPAs in consultation with the country teams. The CPAs are carried out at the start of each (calendar) year, prior to the fielding of the country programming missions. Sector and thematic specialists (environment, governance, and poverty reduction) provide inputs during CPA preparation. Economists work closely with resident missions and draw on in-country expertise in arriving at their assessments. The CPAs, and embedded performance ratings, are then subject to internal review within each Department. Since inception, a written record has been kept for all ratings for all countries.

57. **Working Group.** Following the completion of the ratings process at the Departmental level, ratings and supporting narratives are then forwarded to the interdepartmental Working Group for further scrutiny. The Working Group checks for consistency of application and approach across regions. As needed, the Working Group calls on the expertise of thematic and sector committees and of portfolio specialists. The Working Group is responsible for finalizing ratings and for the provisional calculation of PBA lending levels based on ratings and other data.

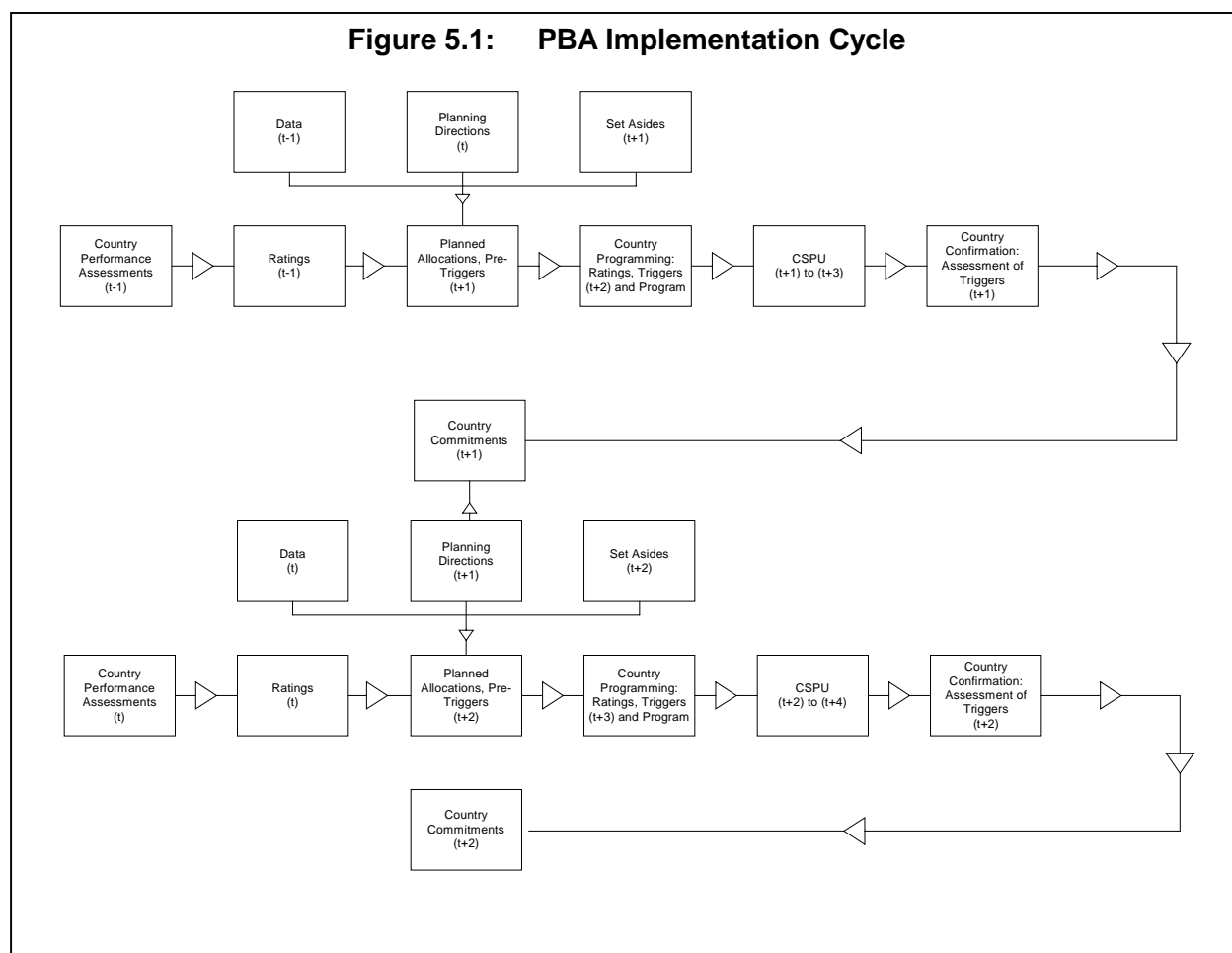
58. **Non-operational departments.** Following the completion of the ratings by the Working Group, Regional Departments calculate and propose the baseline country ADF allocations for the following year, drawing on the PBA formula outcomes and specified adjustments. These proposed initial baseline allocations are based on the aggregate lending figures provided in the annual Planning Directions. Three non-operational departments, through a “Validation Group”, reviews recommended allocations and the process by which they have been reached.

59. **Operational Vice-Presidents.** Ultimately, responsibility for recommending lending allocations to Management rests with Operational Vice-Presidents. Although non-operational departments may make recommendations to the Operational Departments about changes in implementation arrangements, or lending allocations, the acceptance of changes is at the discretion of the Operational Vice-Presidents.

60. **Country Programming.** The next important step in the PBA cycle is the country-programming mission. The country-programming mission provides an opportunity to share the PBA assessment with the Government, to engage in dialogue about steps that may lead to improved performance and to consider whether there is a need to refocus or refine country strategy. During country programming, the country specific performance criteria that determine whether low, base and high lending case scenarios will apply two years hence are discussed and agreed. The range between high and low case scenarios is determined on a country-by-country basis. For operational purposes, the lending scenario maximum range is established $\pm 20\%$ of the base case allocation.⁴¹

⁴⁰ Implementation arrangements are not specified in any detail by the policy. Current arrangements reflect Management instructions to staff and are reflected in ADB's New Business Processes, 2002.

⁴¹ The range was larger for PDMCs given the small base case allocations, which result in large percentage changes even for small changes in the absolute values.



61. **Trigger Assessments.** The final step in the PBA cycle is the evaluation of country specific performance criteria that determine which lending scenario will apply in the following year. Country economists carry out these assessments. Following vetting by the Validation Group, Operational Vice-Presidents submit for ADB Management's consideration, proposals for lending scenarios on the basis of trigger assessments.

62. **Implementation Experience.** Although much has been achieved, there have been some difficulties experienced in bedding-down implementation arrangements. There has been a considerable element of learning by doing in the initial years of implementation and, as a consequence, activities have not always dovetailed as they should. For example, in 2002 and 2003, country-programming missions were conducted without firm knowledge of the following year's PBA allocation. However, the major reason for implementation delays, particularly in 2003, has been the difficulties experienced in trimming operational pipelines to fit reductions in overall allocations. Due to difficulties in finalizing needed economies in country programs, lending levels in the 2004–2006 CSPUs were only indicative of PBA allocations. The expected commitment authority for the last two years of ADF VIII required significant downsizing of country programs as a result of the diversion of resources to support peace and post conflict reconstruction activities in Sri Lanka and Afghanistan.

63. **Resource Costs.** To implement the PBA, an additional five staff have been recruited, and responsibilities for existing staff, including country economists, sector and thematic

specialists, and front-office staff from operational departments has been expanded. Senior staff have also spent considerable time in guiding the process during the first years of implementation. In particular, staff resources have been heavily absorbed by the country performance assessments and the specification and assessment of triggers. During 2002 about 80 working weeks were spent on PBA activities among staff directly involved in the process. This does not include the time of senior staff, the Validation Group or thematic, sector and portfolio experts from non-operational departments. Neither does it include the time of counterparts in borrowing countries. It is not possible to put a precise monetary cost on these resources, but implementation of the PBA may entail administrative costs of upwards of \$200,000 each year. Borrowers have also incurred costs.

5.2 Reporting and Disclosure

64. **Disclosure and Reporting.** The main vehicle for communicating information about the PBA process and outcomes is the CSP/U. CSP/U/s, which are submitted to the Board for review in the third quarter of each year and record Management approved lending levels and agreements about country performance criteria. Executive Board members have also been provided with information about the quintile rankings of countries and there have been two informal Board Seminars on the PBA system.

65. **Disclosure Practices.** Table 5.1 summarizes the disclosure practices of other MDBs. The CDB and IADB are presently the most open in regard to public disclosure of overall scores and ranks. Both disclose the scores and ranking of each member country. IADB also discloses scores on each element of its allocation formula. An internal "oversight note" at IADB has called for even greater transparency in its system. Currently, IDA discloses rankings by quintiles. This information is made public for each of the four performance clusters and for IDA portfolio performance. Since 2001, IDA has also published a report on the allocation of its funds on the basis of performance. In 2004, IDA will disclose performance ratings in half point numerical intervals. Subsequently, IDA will review whether to move towards full disclosure of rating scores. IFAD's PBA system, approved in September 2003, calls for country level scores on its performance variables to be communicated to its Executive Board, and for these results to be made public in accordance with its policy on disclosure.

Table 5.1 Disclosure Practices of Multilateral Development Banks

Disclosure Practice	Multilateral Development Bank			
	IADB	IDA	ADB	CDB
Overall Performance Score	Actual score	By quintile	By quintile	Actual score
Score on each Criteria Cluster	No	By quintile	No	No
Posted on Website	No	Yes	No	No
Publish annual report	No	Yes	No	No
Justification of scores published	No	No	No	No

5.3 Issues

66. **Resource Allocation.** Under current arrangements, set-asides and country allocations are finalized by the Operational Departments. Although the three non-operational departments through their Validation Group reviews ratings, the final decision on allocations rests with Operational Departments who, through Operational Vice-Presidents, make recommendations to Management. The role of the Strategy and Policy Department is to determine the level of the

expected commitment authority, and to track available resources against approvals. The practice in other institutions, including IDA and IADB, is for resource allocation responsibilities to be made by a non-operational department. The centralization and integration of ADF allocations within the overall strategic planning and budgeting framework, under the auspices of SPD, would entail a clearer separation of operational and resource management responsibilities. Consideration should also be given to delegating overall responsibility for PBA allocations to SPD.

67. **Business Processes.** An ongoing review of the new business processes has highlighted the difficulties faced by country programming missions in holding credible negotiations with borrowers, as a consequence of PBA implementation difficulties. Delays may also have made it difficult for borrowers to factor in programs in to their own budgets. Longer leads need to be built into the system at the commencement of the cycle. One possibility might be to use country performance ratings from one year earlier. Options for streamlining and rationalizing should also be examined. In particular, simplifying the CPA (see Section 4) could help accelerate the process. A more radical alternative would be to move the PBA from a one year to a two year cycle that might dovetail with the replenishment and mid-term review processes.

68. **Links to CSP/Us.** Strong links between the PBA and CSP/Us and national poverty reduction strategies are not yet evident. Executive Directors have requested that more information be provided about the allocation process and the rationale for country triggers and trigger assessments. However, within the current format of the CSP/U it is difficult to demonstrate the influence of CPAs on allocations, country dialogue or the refinement of country strategies and operations. The provision of more information about ratings and allocations directly raises questions of disclosure, as the CSP/Us are public documents.

69. **Quality Assurance.** There is no explicit benchmarking of country performance ratings within the ADB system. As part of the ratings review process, benchmarking seems to occur implicitly but a more explicit system would have benefits. In particular, a benchmarking process in which there is wide participation by country economists and thematic experts would help propagate consistent standards and a better understanding of the process. Consideration could also be given to an expanded role for non-operational departments (possibly the Economics Research Department and the Regional and Sustainable Development Departments) in quality assurance and the accreditation of ratings. The rigorous processes that are currently used in the inter-departmental review of country performance ratings need to be extended to the review of country-trigger agreements and assessments.

70. **Ratings Disclosure.** Borrowers and others' concerns about ratings' disclosure have to be balanced against accountability for the use of taxpayer monies. Issues of disclosure also bear on issues of organizational and development effectiveness. For example, if ratings remain confidential, a meaningful discussion of the PBA system within the framework of CSP/Us, which themselves are disclosed, becomes problematic. Fuller disclosure could also facilitate a more meaningful role for borrowers and other experts in the ratings process. In full consultation with borrowers, ADB needs to prepare a roadmap for fuller disclosure and a more comprehensive reporting of outcomes.

VI. RESOURCE MANAGEMENT

71. **Summary.** The multi-layered character of the policy is reflected in the resource management and allocation system. Implicitly, resources have been managed through different “pools” that meet different demands. Making these needs more visible within the planning and budget system would allow trade-offs to be more easily evaluated by both Management and shareholders. Although the policy provides for three-year rolling allocations of funds, ADF resources are managed on a fixed-period, annual cycle.⁴² The degree to which flexibility can be introduced without creating a sense of “entitlements” should be examined.

6.1 Resource Use

72. **Decision Framework.** Box 6.1 describes the allocation decisions taken within the annual PBA cycle. Tables 6.1a,b shows the country breakdown of ADF commitments over the period 2002-2004, with and without trigger evaluations. As a consequence of assistance for Afghanistan and Sri Lanka, ADF commitments, for peace, security and post-conflict needs have shown a sharp increase from 2002. Resources available for country programs and sub-regional cooperation programs have declined. Adjustments for special country circumstances have been small and no commitments were made on this basis for 2004. In each year, trigger assessments have led to more resources being allocated to Group B1 countries, and less to Group A countries.

Box 6.1 The Allocation of ADF Resources under the PBA

- First, based on the expected commitment authority of the Fund, at the commencement of each financial year (January) total ADF resources available for program allocations during the year ($t=0$) are identified together with indicative planning figures for the next three years ($t=1,2,3$). The Planning Directions also set lending allocations for countries on the watch-list for graduation, currently only Indonesia.
- Second, given the Planning Directions figure revisions are made to earlier planned PBA commitments for the current year ($t=0$), and operational pipelines are adjusted accordingly.
- Third, planned country allocations for the following year ($t=1$) are made contingent on set-asides for PDMCs, sub-regional cooperation, and peace, and security and post conflict needs. Allocations are made for PDMCs and Group A and B1 countries on the basis of (relative) performance ratings and needs, and relevant adjustments.
- Finally, assessments of country specific performance criteria (towards the end of the year, $t=0$), set in the previous year ($t=-1$) determine whether base, low or high lending scenarios apply for the following year ($t=1$). Revisions to commitments are made on the basis of triggers.

73. **PDMCs.** Allocations for PDMCs have been largely based on historical shares in ADF lending, reflecting agreements reached during the ADF VIII negotiations. Throughout, allocations for PDMCs have been set at \$50m. In per capita terms, PDMCs receive about 3.5 times the average allocation for other ADF eligible countries. The reference formula allocation for PNG, whose population size is 40 times that of the average PDMC, is, as a consequence of the weight given to the population component of need, over 60% of the total PDMC pool.

74. **Sub-regional Cooperation.** Over the period 2002–2004, allocations for sub-regional cooperation projects have constituted around 5% of total ADF lending. Essentially, resources sufficient to finance the pipeline of sub-regional projects have been made available, with commensurate adjustments in the resources available for programs for Group “A” and “B1” countries.

⁴²For PDMCs, country allocations are managed within a three-year cycle. Overall allocations are made annually.

Table 6.1a ADF Commitments Prior To Triggers, 2002-2004 (\$m)⁴³

Program	2002		2003		2004	
	Commitments	% Share	Commitments	% Share	Commitments	% Share
PDMCs	50	3.3	50	3.2	50	3.8
Indonesia	150	9.8	100	6.5	60	4.6
Group A	321	20.9	288	18.5	261.8	20.1
Group B1	878	57.2	824	53.2	738.2	56.8
Group A + Group B1	1199	78.2	1112			0.0
Peace, Security and Post Conflict ^a	30	2.0	202	13.0	135	10.4
Sub-regional Cooperation	100	6.5	85	5.5	55	4.2
Other Special Circumstances	5	0.3	-		-	—
TOTAL	1534	100.0	1550	100.0	1300	100.0

Table 6.1b ADF Commitments After Triggers, 2002-2004 (\$m)

Program	2002		2003		2004	
	Commitments	% Share	Commitments	% Share	Commitments	% Share
PDMCs	66.0	4.2	44.1	2.8	50.0	3.8
Indonesia	150.0	9.6	103.2	6.7	60.0	4.6
Group A	296.0	18.9	288.4	18.6	261.8	20.1
Group B1	922.0	58.8	827.3	53.4	738.2	56.8
Group A + Group B1	1218.0	77.6	1115.8	72.0		0.0
Peace, Security and Post Conflict ^a	30.0	1.9	202.0	13.0	135.0	10.4
Sub-regional Cooperation	100.0	6.4	85.0	5.5	55.0	4.2
Other Special Circumstances	5.0	0.3	-	-	-	-
TOTAL	1569.0	100.0	1550.0	100.0	1300.0	100.0

Notes/ ^a \$20m to CAM (A), \$10m to TAJ (A) in 2002; \$150m to Afghanistan, \$17m to Tajikistan; and \$35m to SRI (B1) in 003; \$135 to AFG in 2004

75. **Peace and Post Conflict Needs.** Assistance for peace, security and post-conflict needs has risen sharply during the period of ADF VIII (see Table 6.1). In both Afghanistan and Sri Lanka, needs assessments were undertaken (jointly with the World Bank) and allocation decisions have been based on these, subject to available resources. Nevertheless, since there were no reserves or contingencies with which to finance these demands, peace, security and post-conflict demands have led to substantial diversion of resources away from other country programs.

76. **Indonesia.** Allocations for Indonesia have been identified in the Planning Directions, but re-assessed in the context of broader country programming considerations. Indonesia has been on ADB's watch list for graduation from ADF eligibility since 1997. No ADF lending to Indonesia took place in either 1998 or 1999. In the context of reversals brought on by its financial crisis, a decision to reinstate Indonesia's access to ADF was made in 2000, and allocations were provided in the Planning Directions, 2000-2002. CPAs have been conducted, for each

⁴³ After post-conflict allocations.

year between 2001-2003, and assessment of triggers took place in 2001 and 2002, but Indonesia's ADF allocation has been based on a review of specified needs and overall resource availability, not its performance *per se*. Allocations for Indonesia have been declining.

6.2 Formula Allocations and Adjustments

77. **Formula Allocations.** Once the resource pools available for PDMC and Group A and B1 programs are known, and country performance ratings have been finalized, the PBA formula provides "reference" commitments for each country. These commitments automatically satisfy the budget constraint within each pool.

Table 6.2 Collar Adjustments
Absolute % Differences Between Formula and Adjusted Commitments, 2002-2004

Country	2002	2003	2004	Notes
Bhutan	0.1	4.7	13.7	No lending in 2002.
Cambodia	32.8	7.7	17.9	\$20m increase in 2002 due to post-conflict situation.
Kyrgyz	52.2	4.7	33.7	Absorptive capacity constraints. Allocation set by formula, not collar.
Lao PDR	40.3	51.3	43.4	
Maldives	54.8	54.0	56.9	
Mongolia	50.9	39.4	42.6	\$5m increase in 2002 due to 3 consecutive harsh winters.
Nepal	0.2	4.7	0.3	
Tajikistan	41.5	31.9	9.9	\$10m and \$17m increase in 2002 and 2003, respectively, post-conflict
Azerbaijan	0.1	4.7	13.7	No lending, has not taken up ADF allocation.
Bangladesh	11.4	20.9	13.7	\$30m reduction in 2002 to correct population bias
Pakistan	4.5	29.3	13.7	\$10m reduction in 2002 to correct population bias
Sri Lanka	42.5	38.4	36.6	\$35m increase in 2003 due to post-conflict situation. If not used, \$20m to be carried over to 2004.
Viet Nam	0.3	4.7	13.7	
Average (A)	34.1	24.8	27.3	
Average (B1)	11.8	19.6	18.3	
Average (A+B1)	25.5	22.8	23.8	
Cook Islands	43.7	55.2	29.7	
Kiribati	8.9	13.5	15.3	No lending in 2002
Marshall Islands	75.8	81.3	84.9	No lending in 2002
Micronesia	46.6	60.4	75.8	No lending in 2002
PNG	83.0	66.3	80.8	Unable to take up full allocation due to absorptive capacity constraints
Samoa	1.6	10.7	15.3	No lending in 2002
Solomon Islands	75.7	81.8	55.4	No lending in 2002
Tonga	44.7	45.2	16.6	
Tuvalu	23.2	18.5	28.9	
Vanuatu	34.6	19.8	15.3	No lending in 2002
Average (PDMCs)	47.6	45.3	41.8	

78. **Collar Rules.** To limit potentially disruptive adjustments to country programs, changes in commitment levels over historical lending averages have been restrained. In 2002 and 2003, commitments were allowed to vary by no more than $\pm 15\%$ of the lending average over the previous five years. In 2004, the collar was widened to $\pm 25\%$ and calculated on a three year lending average. While the collar adjustments permit upward and downward flexibility in lending, after the initial 15% or 25% change has occurred, dynamic adjustments unfold rather slowly. With a $\pm 15\%$ collar calculated on a 5 years historical lending average, lending may rise or fall by

15% in the first year, with adjustments thereafter taking place in annual increments of approximately $\pm 3\%$. By increasing the collar to $\pm 25\%$ based on a 3 years historical lending average, the pace of incremental change is approximately $\pm 8\%$ per annum. Given the large distance between some of the historical lending averages and those generated by the formula, adjustments will take some time to complete.

79. **Special Country Circumstances.** Adjustments for special country circumstances have also been made. The policy makes the point that the allocation system needs a “safety valve” to adjust for impractical outcomes. Considerations of absorptive capacity and special country circumstances, including countries that are undertaking far-reaching reforms, are cited as cases where allocations based on performance might be adjusted. Cases where such adjustments have been made are shown in the last column of Table 6.2. In practice, allocations for special country circumstances have not added significantly to aggregate resource demands. Absorptive capacity constraints have reduced the demand for resources (see Table 6.2), while, other than for peace, security and post-conflict purposes, additional demands have been limited.

6.3 Country Specific Triggers

80. **Country Specific Performance Criteria.** The policy provides for the evaluation of country-specific criteria that can be used to modify the planned commitments that emerge from the assessment on common criteria. The policy stipulates that specific and easily monitored conditions should be set for each lending scenario. The criteria are also intended to be time-bound, specific and relevant to ADB’s country strategy. The setting and assessment of country-specific performance criteria is intended to strengthen dialogue and the country planning process. The policy proposes that strong performance on country specific criteria should attract additional resources over the base case, while weak performance may lead to a reduction in commitments and lending.

81. **Assessments.** Country specific performance criteria have been agreed with borrowers during country programming missions in each of the years 2001–2003. Two rounds of trigger assessments have been completed, and a third is in process. In 2001, only an interim assessment of actions was possible.⁴⁴ A more comprehensive evaluation was conducted in 2002. An eighteen months interval between setting and evaluation of triggers is now being followed.

82. **Lending Scenarios.** Table 6.3, summarizes the outcomes for the trigger assessments for 2002 and 2003. In both years, the majority of countries have been assessed as meeting conditions for the base scenario. Among Group A and B1 countries, low lending scenarios have yet to be triggered. As there have been no savings over base commitments created by low lending scenarios, provisioning for positive trigger assessments has required trimming base allocations for other countries to satisfy overall resource constraints. For example, in 2003, trigger assessments increased overall demand for resources by \$29 million, about 2% of the overall country program.

⁴⁴ The first set of triggers agreed in 2001 were evaluated twice, after 6 months and after 18 months. This is because no triggers had been in place prior to the approval of the policy.

Table 6.3 Trigger Assessments, % Change over Base Allocation, 2002–2003

Country	2002 Triggers	2003 Triggers
Bhutan	0.0	0.0
Cambodia	0.0	0.0
Kyrgyz	0.0	0.0
Lao PDR	0.0	0.0
Maldives	20.0	10.0
Mongolia	20.0	10.0
Nepal	0.0	0.0
Tajikistan	0.0	0.0
Azerbaijan	0.0	0.0
Bangladesh	0.0	0.0
Pakistan	20.0	10.0
Sri Lanka	0.0	0.0
Viet Nam	0.0	0.0
Cook Islands	0.0	0.0
Kiribati	0.0	10.0
Marshall Islands	0.0	10.0
Micronesia	0.0	0.0
Papua New Guinea	0.0	0.0
Samoa	0.0	10.0
Solomon Islands	0.0	0.0
Tonga	0.0	0.0
Tuvalu	0.0	(10.0)
Vanuatu	0.0	(10.0)
Indonesia	0.0	0.0

6.4 Fixed Period and Rolling Allocations

83. **Rolling Allocations.** The policy anticipates that allocations will be made on a three-year rolling basis, to be reported and updated annually in the CSP/U. Specifically, the policy requires the CSP to provide a PBA allocation for the following year (including details of low, base and high case scenarios), and an accompanying rolling three-year allocation. The policy does not, however, provide information to guide allocation of resources over time other than to stipulate the allocations should be revised on the basis of country performance assessments each year. The policy neither precludes nor provides for carry-over of unutilized commitments, or for “over-programming” to be funded from future years’ commitments.

84. **Fixed Period Allocations.** In practice, allocations under the policy have been made on an annual, fixed-period cycle. Responsibility for tracking overall approvals against the commitment authority rests with SPD. Where there has been insufficient commitment authority,

lending has been approved on a conditional basis.⁴⁵ Alignment of country pipelines with PBA planned commitments is the responsibility of Operational Departments. Differences between planned commitments and approvals have been few, and where they have occurred they have typically been small (see Table 6.4). Indonesia and Nepal were allowed to carry forward under-utilized commitments in 2002 to 2003 on an exceptional basis, as security concerns had proven operationally disruptive in both countries in 2002. In each case where approvals exceeded PBA commitments, commitments have been correspondingly reduced in the following year.

Table 6.4 Commitments and Approvals, 2002

Country	Commitments (after trigger assessment)	Approvals
Azerbaijan	23.0	
Bangladesh	263.0	269.6
Bhutan	-	
Cambodia	75.0	75.9
Cook Islands	-	
Indonesia	150.0	131.0
Kiribati	-	
Kyrgyz	20.0	15.0
Lao PDR	45.0	46.0
Maldives	6.0	5.0
Marshall Islands	6.0	7.0
Micronesia	-	
Mongolia	50.0	34.1
Nepal	83.0	60.0
Pakistan	270.0	276.0
Papua New Guinea	24.0	5.7
Samoa	8.0	
Solomon Islands	10.0	
Sri Lanka	146.0	160.3
Tajikistan	52.0	50.3
Tonga	10.0	10.0
Tuvalu	2.0	1.8
Vanuatu	6.0	
Viet Nam	220.0	225.0
Totals	1,469.0	1,372.7

⁴⁵ Conditional approvals are funded when the commitment authority becomes available. Rationing rules are that program loans, sector development programs and emergency loans take priority with project loans being funded on a first come first served basis. Conditional approvals will not be permitted in the last year of the current replenishment (2004).

6.5 Issues

85. **Resource Pools.** This analysis of resource management and related implementation processes raises a number of issues. First, there is a need to consider the way in which different demands on ADF resources are managed. Many decisions on the allocation of resources are currently taken outside of the overall strategic planning and budgeting framework on the basis of assortment of criteria. An alternative and more visible approach, would be for Management, within the framework of the Planning Directions, to explicitly allocate resources among competing uses i.e., the PDMC program, Group A and B1 country programs (perhaps separately), emergency and post conflict assistance programs; sub-regional co-operation programs; and for near-graduates. This approach would allow strategic trade-offs to be more clearly evaluated, and would entail a clearer separation of resource allocation and operational responsibilities. An appropriate level of resources could be set-aside for allocation at Management's discretion.

86. **Vulnerability.** There are economies outside of the PDMCs that might share similar disadvantages but which do not benefit from special allocations. One way of rectifying this apparent anomaly would be, as in IDA, to provide minimum guaranteed lending levels for Group A and B1 countries. This would benefit disproportionately smaller countries. Including direct measures of vulnerability in the formula, as happens in the CBD or EC, would tend to add unnecessarily to system complexity. Vulnerabilities are already recognized through the separate provision for PDMCs, and are also recognized in the policy on *Emergency Lending*.

87. **Uncertainty and Contingencies.** There are a number of uncertainties that complicate the operation of the PBA system and the management of ADF resources. In addition to emergency, peace and post-conflict needs, other sources of uncertainty are created by the possibility of demands by new borrowers, changes in the classification of existing borrowers, and variations in the inflow of resources. Under current arrangements existing portfolios adjust to absorb the shocks. As shocks have tended to add to demand over the period 2001–2003, this has constrained the resources available for other country programs. If country allocations are more sensitive to shifts in the overall resource envelope than to performance, the incentive effects of the PBA system are likely to be weakened. The issue of how to provide effective incentives in the context of shrinking resources is unresolved.

88. **Reserves and Sinking Funds.** One way of mitigating potential disruptions that arise through unanticipated shocks is through the creation of a reserve or a sinking fund. Currently, the CDB, IADB and EC operate reserve or sinking funds. IDA makes no such provisions. But the greater the shock absorptive capacity that is built in to a reserve or sinking fund, the higher will be its costs. Also unless additional liquidity can be found, the creation of reserves is likely to require a lower level of operations until reserves reach their target level. The benefits of greater predictability of resource flows need to be weighed against the resource costs entailed in the creation of reserves. Consideration would also have to be given as to the rules that would guide the draw-down and replenishment of reserves.

89. **Fixed Period and Rolling Allocations.** There is limited flexibility under current arrangements to accommodate over-programming and/or rollovers of unused commitments. Rollovers have been allowed on an exceptional basis only. Over-programming, which has been limited, has been compensated by a reduction in commitments in the following year. Other institutions appear to allow somewhat more flexibility. For example, IADB permits unused commitments to be carried over in to the first quarter of the following year. IDA also permits greater flexibility in moving resources across periods within the three years timeframe of each

country's assistance strategy. ADB should consider ways of introducing greater operational flexibility in the deployment of commitments through time that do not risk creating a sense of entitlements.

90. **Triggers.** To date, triggers have played a relatively minor role in determining allocations. If the proportion of resources that are moved in relation to trigger assessments remains small, their incentive effects are likely to be negligible. One way in which triggers could be given greater leverage would be through the creation of a separate pool of resources to fund high lending scenarios. Alternatively, trigger assessments could be used to modify overall country ratings. But since triggers are deliberately country and situation specific, it is difficult to ensure consistency and fairness in assessments across countries. For this reason, steps need to be taken to strengthen the internal review of trigger agreements and assessments. Finally, consideration might be given to providing new kinds of incentives within the PBA. For example, it would be possible to reward improvements in performance as well as high levels of performance. Such an innovation would create the strongest incentives for those starting from a low scoring base, and who would therefore have the greatest room for improvement.

VII. SPECIAL TOPICS AND NEXT STEPS

91. **Summary.** In this final Section, emerging issues not covered elsewhere are briefly taken up. Specific proposals on these topics are the subject of other reviews and on-going studies. The paper ends by identifying priority issues for the review of the PBA and possible approaches to their resolution.

7.1 Regional and Sub-Regional Cooperation

92. **Regional and Sub-regional Allocations.** Most MDBs use some part of their concessionary funds to support regional or sub-regional cooperation programs. At AfDB, about 10% of total resources are set-aside for this purpose. IDA is now proposing to set aside about 5% of the total IDA resource envelope to support regional projects and programs. ADB is mandated through its Charter to support regional and sub-regional cooperation activities. Over the period 2002–2004, ADB has, on an *ad hoc* basis, set-aside about 5% of total available commitments for regional and sub-regional projects. Going forward, it is anticipated that demands for sub-regional cooperation projects, and possibly for the support of the provision of regional public goods, will remain strong.

93. **Rationale for Sub-Regional Allocations.** The case for having a separate pool of resources outside of national allocations to fund regional and sub-regional projects rests on a combination of factors. For example, it may be difficult to align the benefits and costs of regional projects among affected countries, so that special arrangements may be needed to allow projects to go ahead that might otherwise get bogged down in complex distributional issues. Although national performance is germane to the evaluation of sub-regional cooperation projects, a measure of performance at regional or sub-regional level cannot simply be obtained by aggregating across national entities. Of course, for the case of regional public goods distributional analyses may not be meaningful, or possible.

94. **Decision Criteria.** But in rationalizing sub-regional allocations some areas need closer attention. Within a performance based framework and an emerging emphasis on managing for results, decisions on resource allocations should not be based only on demand considerations. The definition of a regional project needs to be tightened, as do performance criteria on which judgments rest about whether regional and sub-regional projects should be supported. The

development of Regional Cooperation Strategies and Programs is an important step in providing a framework within which programs and projects can be evaluated. A framework for the Pacific countries was discussed at an informal Board seminar in August 2003. ADB's Executive Board will review a strategy for the Mekong Region in March 2004. Currently, strategies are in preparation for South Asia, Central Asia, and Southeast Asia.

7.2 Peace and Post-Conflict Reconstruction Needs

95. **Peace and Post-Conflict Reconstruction.** During ADF VIII, unanticipated demands for peace and post-conflict reconstruction needs, particularly in Afghanistan, had serious consequences for other country programs and lending needs. In an increasingly uncertain environment, provisioning for these needs and for other emergencies would allow greater predictability in the use of resources for other demands. Alternatively, consideration could be given to setting-aside a separate pool of resources to address peace and post-conflict needs. Some of the issues that would be raised by creating reserves are discussed in Section 6.

96. **Emergency Lending Policy.** Historically, ADB's approach to post-conflict assistance has been based on an assessment of needs relative to overall resource availability. Assistance has in practice been limited to a three years period. Going forward, ADB is now proposing to adopt the IDA framework, including IDA performance indicators, for the assessment of post-conflict reconstruction. IDA is currently proposing to improve the accuracy of its Post-Conflict Progress Indicators, to reduce the subjective element in its rating process. Consideration might also be given to the duration of post-conflict assistance and its relationship to the profile of assistance through time. Some research favors lower initial levels of assistance that, contingent on performance, is then increased and stretched over time, possibly for as long as seven years. It is anticipated that in the case of post-conflict needs and emergencies, efforts would initially be directed at examining opportunities for portfolio restructuring within the affected country.

7.3 Weakly Performing Countries

97. **Weak Performance.** A performance based allocation system will, by design, restrict access of weak performers to resources. There is a presumption that as performance weakens, the expected social return on investment projects declines. Credit risks to the fund may also increase. PBA systems can help to provide an early warning of deterioration in a country's institutional and policy environment. IDA has suggested that there may be need to refine ratings scales to allow greater discrimination in the assessments of countries that are at the bottom of the performance spectrum. The identification of weak performers, however, probably requires a more comprehensive evaluation of economic and social circumstances than is possible within the framework of the PBA.

98. **ADB's Approach.** Weak performance can be the result of structural difficulties, exceptional circumstances, or weak capacity and bad policy and institutional choices. In all of these circumstances, there is clearly a need to remain engaged with borrowers and to developed suitable strategies to help countries improve their performance. While the PBA policy will automatically limit lending to weakly performing countries, it does not address their circumstances or special needs. To cover this gap in existing policies, ADB will now formulate an approach to the identification of and engagement with weakly performing countries. *Inter alia*, these should consider initiatives from improving data and information, strengthening dialogue, improving focus and selectivity in operations, and providing capacity and institution building assistance. Preliminary proposals will be presented to donors in March 2004.

7.4 Next Steps

99. **Priorities.** A large number of issues have been considered in the course of this review of the PBA policy and its implementation. A recap of priority issues is summarized in Tables 7.2 and 7.3 (also presented in the Executive Summary). Table 7.2 refers to issues that relate directly to the policy and may require its modification. Realistically, the implementation of such modifications could not begin until the second half of 2004. Table 7.3 brings together related issues that fall within the discretion of management and on which action could be taken prior to any revision or modification of the policy. Options are not necessarily mutually exclusive. For example, it is suggested that in the interest of facilitating on-going improvements in the system and its implementation, some elements of the current PBA framework be would be best removed from the formal policy and placed within the discretion of management. This might be done irrespective of decisions on other matters.

Table 7.1 Summary of Issues and Policy Options

Policy Elements	Issues	Options	Costs/Risks/Benefits
1. Allocation Formula	Not easy to understand, difficult to communicate outcomes, and to account for use of resources in terms of performance and needs.	<ul style="list-style-type: none"> i. Use linear system in which trade-offs between needs and performance allocations are explicit and can be more easily understood and evaluated. ii. Move to a system of absolute performance “contracts”. iii. Remove formula including the weights from the formal policy and keep under review to expand scope for on-going refinement and inter-agency collaboration. iv. Add vulnerability measures for PDMCs. 	<ul style="list-style-type: none"> i. Moderate to high risk (linear systems have their own limitations), but low cost. Moderate to high benefits. ii. High cost/high risk. More transparent for borrowers but more difficult to manage resources. iii. Low risk/low cost/high potential benefits iv. Moderate to high cost. Modest benefits.
2. Triggers	Entails considerable administrative burden both on ADB and borrowers but, to date, has had little impact on allocations. Triggers need to be strengthened, or revisited.	<ul style="list-style-type: none"> i. Retain triggers in current form; improve quality and strengthen impact; and provide separate funding mechanism. ii. Use triggers to modify country rating scores rather than allocations. iii. Abandon triggers. 	<ul style="list-style-type: none"> i. Moderate cost/moderate risk/more effective policy. ii. Easier to manage than i. But would require trigger scoring scheme. iii. Low cost but moderate risk of diluting incentives on variables over which borrowers have most control.
3. Measurement	Resource intensive and relies too much on judgmental assessments. Need fewer, more robust rating criteria.	<ul style="list-style-type: none"> i. Remove framework and guidelines from the formal policy. Keep under periodic review to permit improvements through time. ii. Greater inter-agency cooperation. 	<ul style="list-style-type: none"> i. Low cost/high benefit. ii. Moderate cost/moderate risk/high benefit.
	More robust measures of need are required. Country variations in inequality mean that population and per capita income are not particularly strongly correlated with either the incidence or depth of poverty. This biases the allocation towards countries with less inequality.	<ul style="list-style-type: none"> i. Refine measures using other proxies, e.g. Human Development Index. ii. Remove definition of country “need” from the formal policy to allow on-going refinement and keep under periodic review. 	<ul style="list-style-type: none"> i. Moderate cost/improved support for needs and countries where there is greater inequality. ii. Low cost/high benefit.
4. Blend countries	Need to better align PBA with graduation considerations. Currently, resources are being diverted from ADF only borrowers to blends.	<ul style="list-style-type: none"> i. Cap blend countries. ii. Separate pool for blends and separate competition for resources. iii. Increase small country bias as ADF only country are the least populous. 	<ul style="list-style-type: none"> i. Low cost/improved support for ADF borrowers. ii. As ii, but more transparent and in keeping with policy. iii. Indirect solution, low cost, but not particularly transparent.

TABLE 7.2 SUMMARY OF ISSUES AND MANAGEMENT OPTIONS

Management Elements	Issues	Options	Costs/Risks/Benefits
1 Resource Allocation and set-asides	Accountability: Separation of responsibility for allocation and use of resources.	<ul style="list-style-type: none"> i. Separate allocation decisions from operational departments and integrate fully within strategic planning and budgetary process. ii. Portion of funds could be allocated at Management discretion. iii. Create new unit responsible for PBA implementation, including resource management. 	<ul style="list-style-type: none"> i. Low cost, and highest benefit to cost ratio. ii. High cost, modest benefits.
2. Ratings	Quality Assurance Ratings review system. More extensive consultation with borrowers another in-country sources of expertise and knowledge.	<ul style="list-style-type: none"> i. Initiate bi-annual ratings review to provide overview on trends, and signal potential problems. ii. Greater disclosure and discussion of ratings during ratings process and country programming. iii. More intensive in-country consultation. 	<ul style="list-style-type: none"> i. Current system working well. Additional oversight could add to implementation delays and costs. Nevertheless, cross-country perspective would be useful. ii. Greater borrower involvement in ratings may help create sense of ownership. but may also compromise independence. iii. Moderate to high cost, but moderate to high pay-off in terms of credibility.
3 Contingencies	<ul style="list-style-type: none"> i. Managing Uncertainty: An unpredictable and shrinking resource envelope has added to the opaqueness of the relationship between performance and resources. 	<ul style="list-style-type: none"> i. Create reserves or a sinking fund to deal with contingencies. 	<ul style="list-style-type: none"> i. Reserves or sinking funds have immediate costs in terms of financial resources and possibly in terms of reductions in program size. The benefit is more predictable resource flows. A careful evaluation of benefits and costs is needed.
4 Reporting	<ul style="list-style-type: none"> ii. Greater Disclosure: Consideration should be given to greater disclosure both to serve greater accountability and improve development effectiveness. 	<ul style="list-style-type: none"> i. Move to an annual reporting framework such as IDA. ii. Prepare roadmap for fuller disclosure after consultation with borrowers and other stakeholders. iii. Review how links between PBA and CSPUs can be strengthened. 	<ul style="list-style-type: none"> i. Moderate cost. ii. Significant cost, but significant benefits. iii. Moderate cost, significant benefits.

The Impact of the PBA Policy on Planned Allocations

A. Historical Lending Data

1. Table A1 summarizes the pattern of ADF lending, by country, over the period 1995-2001. Average lending is shown in the penultimate column. The last column measures the volatility of lending expressed as the standard deviation of lending over the period expressed as a percentage of the mean.¹

TABLE A1: HISTORICAL LENDING PATTERNS, 1995-2001 (\$ mil)

	1995	1996	1997	1998	1999	2000	2001	Mean	COV
Pacific Group									
Cook Islands	3.0	5.0	0.8	-	-	-	2.2	1.6	122.4
Kiribati	-	-	-	10.2	-	-	-	1.5	264.6
Marshall Islands	9.2	-	12.0	-	9.3	6.8	8.0	6.5	72.5
Micronesia	-	10.6	18.0	-	-	8.0	13.0	7.1	102.7
Nauru	-	-	-	-	-	-	-	-	-
PNG	-	-	15.0	-	20.0	24.9	5.9	9.4	111.7
Samoa	-	-	-	7.5	-	10.5	6.0	3.4	130.6
Soloman Islands	-	-	-	26.0	-	10.0	-	5.1	193.0
Tonga	3.6	4.9	-	-	-	-	-	1.2	173.6
Tuvalu	-	-	-	-	4.0	-	-	0.6	264.6
Vanuatu	-	10.0	-	20.0	2.0	-	-	4.6	168.9
Pacific Group Total	15.8	30.5	45.8	63.7	35.3	60.2	35.1	40.9	41.4
Indonesia	56.7	67.8	30.0	-	-	165.0	100.0	59.9	98.2
Group A									
Bhutan	7.5	-	8.0	5.7	10.0	19.6	7.0	8.3	71.4
Cambodia	45.1	105.0	-	40.0	88.0	109.6	75.2	66.1	60.0
Kyrgyz Republic	40.0	80.0	89.2	65.0	72.0	66.0	75.0	69.6	22.2
Lao PDR	93.0	91.7	103.0	20.0	57.6	60.5	65.0	70.1	40.6
Maldives	-	-	7.0	6.3	8.0	-	17.5	5.5	115.0
Mongolia	84.0	63.5	62.7	-	50.0	41.9	35.7	48.3	55.1
Nepal	40.0	252.7	27.0	105.0	50.0	173.3	95.6	106.2	76.8
Tajikistan	-	-	-	20.0	25.0	54.0	3.6	14.7	137.9
Group A Total	309.6	592.9	296.9	262.0	360.6	524.9	374.6	380.5	32.5
Group B 1									
Azerbaijan	-	-	-	-	-	-	-	-	-
Bangladesh	227.1	256.4	419.7	183.6	250.0	203.1	159.2	242.7	35.2
Pakistan	431.8	283.0	251.0	-	95.8	257.0	363.6	240.3	61.9
Sri Lanka	140.0	44.0	161.6	185.0	148.8	193.7	86.0	137.0	39.4
Vietnam	233.0	303.0	359.6	284.0	180.0	188.5	243.1	255.9	25.1
Group B1 Total	1,031.9	886.4	1,191.9	652.6	674.6	842.3	851.9	875.9	21.7
Total ADF Lending	1,414.0	1,577.6	1,564.6	978.3	1,070.5	1,592.4	1,361.6	1,365.6	18.3
Ratio of A to B1	0.300	0.669	0.249	0.401	0.535	0.623	0.440	0.434	36.4

Note to Table/ "Cov" is the coefficient of variation of lending, defined as the standard deviation as a percentage of the mean over the sample period. The larger the number, the more volatile lending has been over the sample period.

¹ While variations in aggregate lending over the sample period inevitably induce variation at country level, the dispersion in aggregate lending can be easily factored out. For the entire sample, the dispersion of aggregate lending was 18% of the sample mean. No country or group of countries had a coefficient of variation smaller than this, suggesting the presence of additional country-specific volatility.

2. Several observations can be made about the historical pattern of ADF lending within countries. First, historically, lending to PDMCs has shown considerable volatility. Volatility has been largely reflected in the presence or absence of loans rather than year-to-year changes in the size of the programs *per se*. Due to their small size, and limited absorptive capacity, most PDMCs have only been able to accommodate one project every few years.

TABLE A2: HISTORICAL LENDING PATTERNS, MOVING AVERAGES 1997-2001 (\$ mil)

	1997	1998	1999	2000	2001	Mean	COV
Pacific Group							
Cook Islands	2.9	1.9	0.3	-	0.7	1.2	105.0
Kiribati	-	3.4	3.4	3.4	-	2.0	91.3
Marshall Islands	7.1	4.0	7.1	5.4	8.0	6.3	25.5
Micronesia	9.5	9.5	6.0	2.7	7.0	6.9	41.1
Nauru	-	-	-	-	-	-	-
PNG	5.0	5.0	11.7	15.0	16.9	10.7	51.8
Samoa	-	2.5	2.5	6.0	5.5	3.3	74.7
Soloman Islands	-	8.7	8.7	12.0	3.3	6.5	73.4
Tonga	2.8	1.6	-	-	-	0.9	144.9
Tuvalu	-	-	1.3	1.3	1.3	0.8	91.3
Vanuatu	3.3	10.0	7.3	7.3	0.7	5.7	64.5
Pacific Group Total	30.7	46.7	48.3	53.1	43.5	44.4	21.8
Indonesia							
Group A							
Bhutan	5.2	4.6	7.9	11.8	12.2	8.3	43.0
Cambodia	50.0	48.3	42.7	79.2	90.9	62.2	34.4
Kyrgyz Republic	69.7	78.1	75.4	67.7	71.0	72.4	5.9
Lao PDR	95.9	71.6	60.2	46.0	61.0	66.9	27.7
Maldives	2.3	4.4	7.1	4.8	8.5	5.4	44.4
Mongolia	70.1	42.1	37.6	30.6	42.5	44.6	33.7
Nepal	106.6	128.2	60.7	109.4	106.3	102.2	24.4
Tajikistan	-	6.7	15.0	33.0	27.5	16.4	19.7
Group A Total	399.8	377.3	291.5	349.5	392.5	362.1	12.1
Group B 1							
Azerbaijan	-	-	-	-	-	-	-
Bangladesh	301.1	286.6	284.4	212.2	204.1	257.7	17.8
Pakistan	321.9	178.0	115.6	117.6	238.8	194.4	45.0
Sri Lanka	115.2	130.2	165.1	175.8	142.8	145.8	17.0
Vietnam	298.5	315.5	274.5	217.5	203.9	262.0	18.8
Group B1 Total	1,036.7	910.3	839.7	723.2	789.6	859.9	14.0
Total ADF Lending	1,467.2	1,334.2	1,179.5	1,125.7	1,225.6	1,266.5	10.7
Ratio of A to B1	0.386	0.414	0.347	0.483	0.497	0.421	15.2

3. Within Group A countries, volatility has been most pronounced for Bhutan and the Maldives, both small economies. Volatility in lending was also high for Cambodia and Nepal. During these years, both countries faced internal security problems. In some years loan processing was impractical, leading to bunching in others. Cambodia also received post-conflict assistance during this period, and its lending was affected by the inclusion of one sizeable sub-

regional project in 1998. In other countries, lending levels varied within more modest ranges. For Group B1 countries, lending has been less volatile than for Group A countries, or the PDMCs. Pakistan exhibited the greatest volatility, largely because of an absence of lending in 1998 due to sanctions.

4. In Table A2, three-year moving lending averages are summarized. Moving average data make it easier to detect trends within countries. Averages are centered on the preceding year, requiring truncation of the sample to the period 1997-2001. As might be expected, the three-year moving average data are somewhat less erratic than the annual data.

5. Overall, the three-year moving average data suggest broad stability in lending patterns over the period. However, some localized trends are apparent. Lending to PNG drifted up. Lending levels also increased for Bhutan and for Cambodia. In Cambodia, lending expanded with post-conflict assistance. Among Group B1 countries, lending declined for both Bangladesh and Viet Nam, and edged up in Sri-Lanka. The presence of large program loans in 1996 in both Bangladesh and Viet Nam ratcheted lending levels up at the start of the period, and so help explain some of the decline thereafter. Sanctions on lending to Pakistan in 1998 explain the dip and subsequent incline in its lending profile.

B. Historical Lending, Population and Needs

6. The pattern of historical lending across countries is, of course, strongly influenced by population. To control for this size effect, lending can be expressed in per capita terms.² Over the period 1995-2001, lending per capita varied from an average of \$120 per capita, per year, in the Marshall Islands (population 50,000) to about 30 cents per capita, per year, in Indonesia (population 207 million).³ In Figure A1, a scatter plot of population and per capita lending is shown on a logarithmic scale. There is a strong negative relationship between size and per capita lending, which is statistically significant.⁴

7. Income or economic size also played an important role in the historical allocation of resources. One way of looking at the relationship between lending and income is to consider the relationship between loan approvals as a percentage of Gross Domestic Product (GDP) and country per capita income.⁵ Figure A.2 summarizes the relationship between these variables for Group A and B1 countries for historical loan approvals. ADF lending as a percentage of GDP is plotted on the vertical axis and per capita incomes on the horizontal axis. A circle that is proportional in size to population represents each country. It may be noted that for the majority of countries ADF resources constituted less than 2% of GDP. Although care needs to be taken

² End of the sample period population, or the closest estimate to that is used throughout.

³ The particularly low allocation for Indonesia was partly because over the period it was on the watch-list for ADF graduation. The next lowest allocation was for Pakistan, which received on average \$1.4 dollars per year per capita. This figure, too, is depressed by the absence of lending in 1998 due to sanctions.

⁴ The estimated elasticity of per capita lending with respect to population is -0.374 ($t = -8.22$). Although the relationship between per capita lending and population size among ADF eligible countries is strongly influenced by ADF operations in the PDMCs, the relationship remains statistically significant for Group A and B1 countries only. In this restricted sample, the estimated elasticity is -0.435 ($t = -6.17$).

⁵ Among ADF eligible countries, per capita incomes tend to be larger in countries with small populations. As a consequence of the small country bias, per capita loan approvals have also, historically, been positively related to per capita incomes. Note that this is not inconsistent with a negative relationship between lending as a % of GDP and per capita income, as shown in Figure 3.2. A positive correlation between per capita lending and per capita GDP is in fact a broader feature of aggregate ODA lending across a much wider group of countries. See, David Dollar, *Raising the "poverty weight" in the IDA allocation formula: some empirical analysis*. Development Policy Division, World Bank, 2003

in drawing inferences with so few observations, ADF assistance as a percentage of GDP was generally smaller for countries with larger per capita incomes. But it can also be seen by the preponderance of large observations below the line that more populous countries received lower allocations per unit of GDP than less populous countries⁶. The best-fit relationship is:⁷

$$\frac{Allocation}{GNP} = \left(Population^{-0.436} \cdot \frac{GNP^{-1.247}}{Population} \right)$$

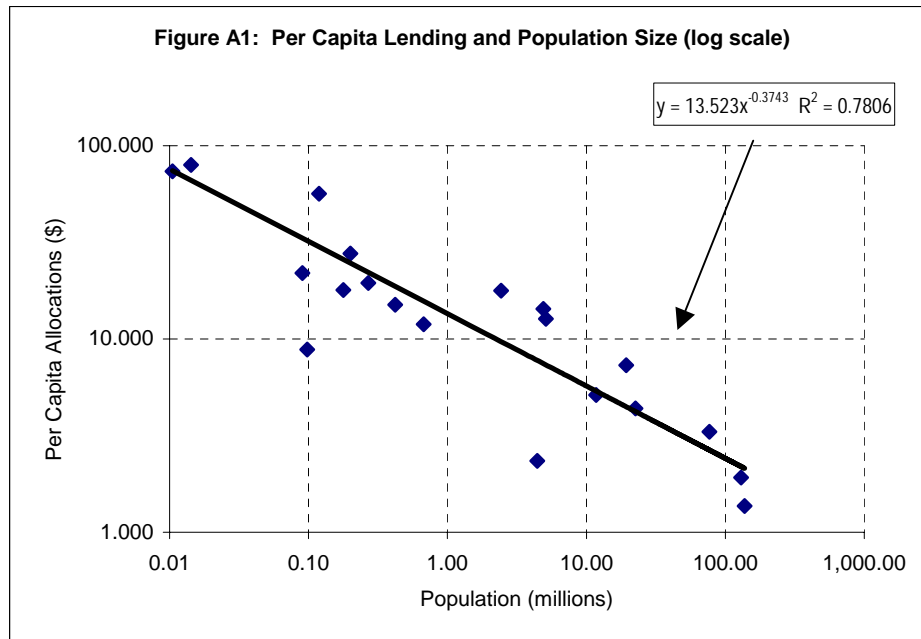
$$\Rightarrow Allocation\ Share = A \cdot \left(Population^{0.564} \cdot \frac{GNP^{-0.247}}{Population} \right)$$

This relationship is consistent with a needs model in which there is embedded a small country bias. For PDMCs the relationship is:

$$\frac{Allocation}{GNP} = \left(Population^{-0.496} \cdot \frac{GNP^{-0.447}}{Population} \right)$$

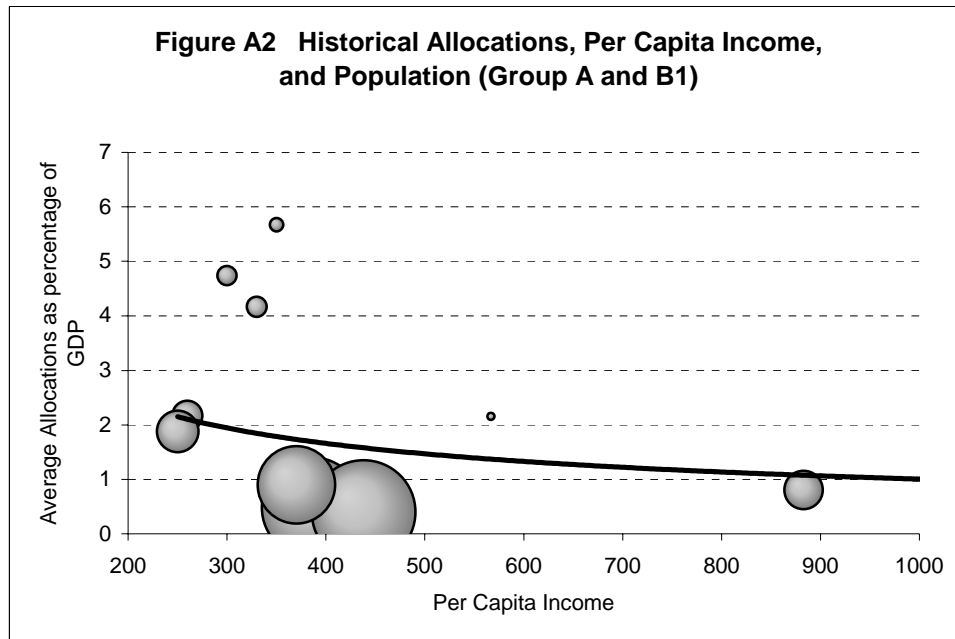
$$\Rightarrow Allocation\ Share = A \cdot \left(Population^{0.504} \cdot \frac{GNP^{0.553}}{Population} \right)$$

This relationship is not statistically significant, and the estimated coefficient on the GNP per capita term in the derived allocation share equation is wrongly signed.



⁶ It is possible that large countries had difficulty in absorbing resources, but there is no evidence of this. It is more likely that allocations reflected a strategic institutional interest in small countries.

⁷ The relationship is statistically significant ($R^2=0.867$). Both estimated parameter values are significant at 1%.



C. A Comparison of Historical and Formula Allocations

8. For any country, the impact of the policy is the difference between its historical lending per capita and commitments under the PBA. This difference can be conceptualized in terms of a “needs” and a “performance” component as follows:

$$\text{Historical Allocation} - \text{PBA Allocation} = (\text{Historical Allocation} - \text{Needs Allocation}) + (\text{Needs Allocation} - \text{PBA Allocation}),$$

where the first term on the right hand side is defined as the “needs component” of the impact, and the second terms is defined as the “performance component”. To identify the needs component, the PBA allocation formula is applied on an assumption that performance is uniform across all countries. This effectively eliminates the influence of performance from the formula and from allocations.⁸ The performance impact is then defined as the residual difference between the hypothetical needs allocation and the actual PBA allocation. Since there was no performance element associated with historical lending, considering the residual difference as the performance impact seems reasonable.

9. Table A3, summarizes the needs impact.⁹ Two statistics are summarized. The mean absolute percentage difference between historical and (performance-neutral) formula shares, and a “z-score” measuring the number of standard deviations the formula share lies from the corresponding historical mean.¹⁰ For each group, the (performance neutral) formula share is at least one standard deviation different from the historical share, and in the case of Group “A” countries it is more than two standard deviations apart.

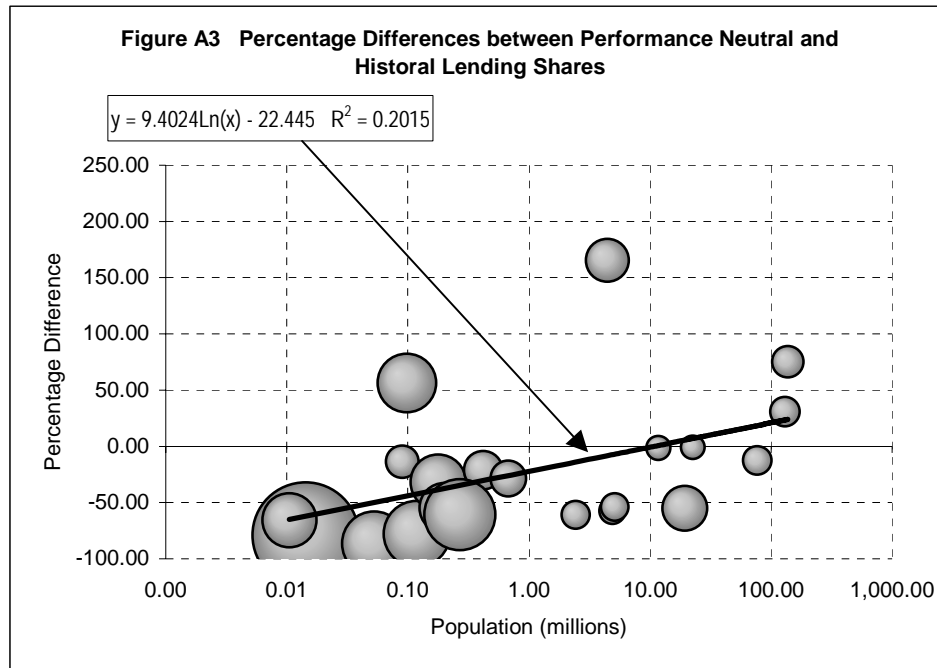
⁸ Under these assumptions, the PBA reduces to a “needs based” allocation system.

⁹ Uniform performance ratings across all countries self cancel in ADB’s geometric formula. See Annex B.

¹⁰ In these comparisons, and those that follow, shares have been calculated separately for the PDMCs and other eligible ADF countries. The policy provides for the allocation of resources within separate pools for Group A and B1 countries and PDMCs.

**TABLE A.3: SUMMARY DIFFERENCES
("NEEDS COMPONENT")**

	Absolute % Difference	Z-Score
Pacific Group	65.3	1.2
Group A	37.8	2.2
Group B1	43.4	1.8
Group A+B1	39.8	2.1
All	52	1.7



10. Three main conclusions emerge from the estimation of needs impacts. First, differences between the historical pattern of allocations and those generated by the hypothetical needs model, are substantial.¹¹ The average absolute percentage difference between historical lending averages and those generated by the needs model is 52%.¹²

11. Second, the difference between the shares generated by the “needs model” and the historical allocations are strongly and positively related to the population component of need. This relationship is shown in Figure A3. Percentage differences between historical and “needs-

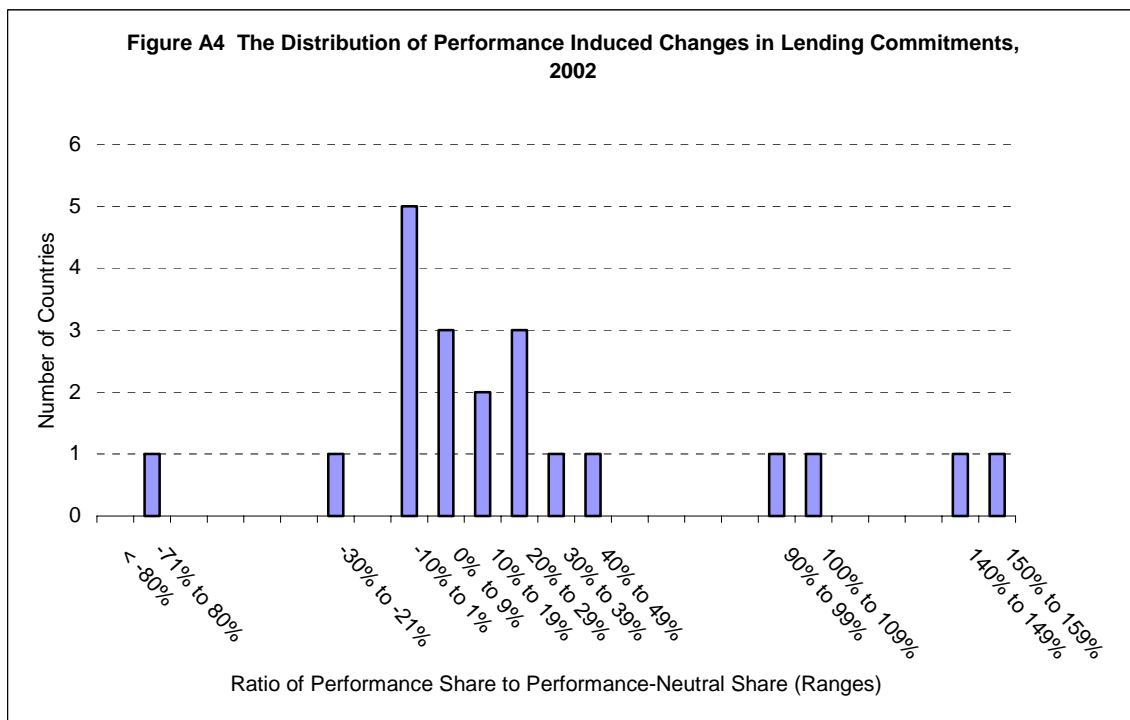
¹¹ The underlying reasons for the large differences between historical and performance neutral allocations are not easy to discern. Possibly, the formula corrects anomalies that were present in the historical pattern of lending. An obvious outlier was Sri Lanka. However, large differences are common.

¹² This may seem somewhat surprising given the apparent similarity in formula and the estimated exponent values. However, even small differences in exponent values can lead to substantial reallocations where the underlying range of the variable is large, as it is for population. See Annex B.

only” allocations are plotted on the vertical axis and population in millions on the horizontal axis. The size of each observation is proportional to per capita income. Other things equal, the formula allocates more resources to more populous countries. Indeed, only four countries gain shares: two of these are the most populous countries in Group “A” and “B1” (Bangladesh and Pakistan), and one is the most populous country among the PDMCs (PNG). Elsewhere, the incidence of reductions in shares fall most heavily on the least populous countries.

12. Third, the data seem to suggest that, on balance, the formula reduces lending for countries with larger per capita incomes, but this effect is secondary and is largely a consequence of the fact that those countries with the largest incomes are also some of the least populous. Having controlled for population, per capita income exerts no independent effect on the difference between historical and the imputed needs based allocations. The best-fit historical estimate of the per capita income exponent, and the formula value are almost identical

13. The performance component of the difference between historical and PBA allocations can now be calculated as the difference between the allocations generated by the needs only formula and the full PBA formula, including performance scores. This exercise is conducted using actual data for 2002. Adding performance scores to the formula obviously reduces allocations for poor performers and increases allocations for the best performers. The worst performing country loses 70% of its allocation relative to the hypothetical needs allocation. The best performing country receives a 150% increase in its allocation. For only eight countries does the inclusion of the performance score lead to changes that are less than $\pm 10\%$ of the hypothetical needs allocation. The distribution of these changes is shown in Figure A4. At a more aggregate level, performance impacts marginally favor Group A over Group B1 countries.

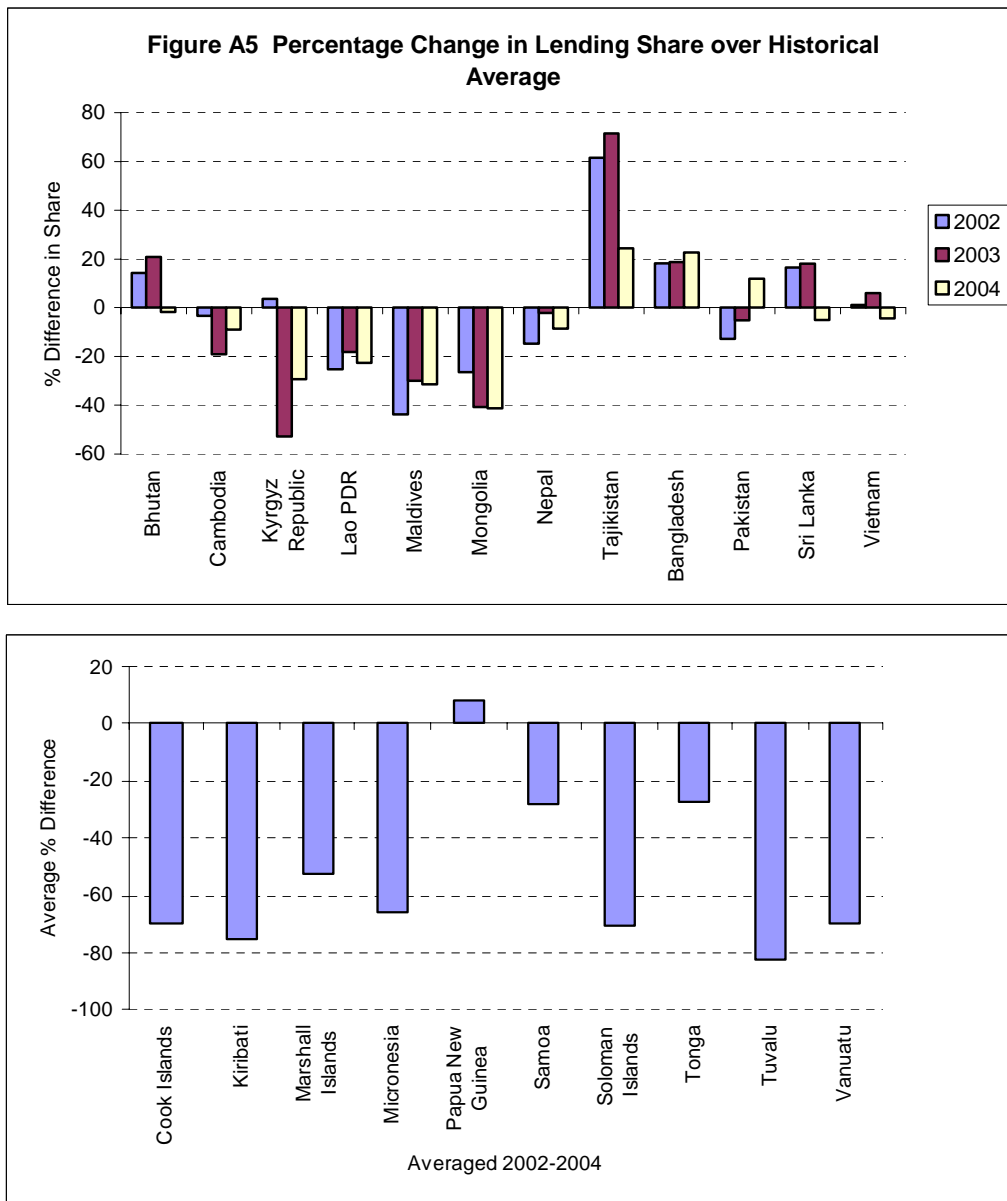


14. In summary, the PBA implied a substantial shift in reference (formula) allocations from historical lending patterns. The principal reason for this is that the formula makes greater provision for the population component of need. While performance exercises significant

leverage on lending shares for individual countries, these impacts appear to be distributed more or less neutrally across Group “A” and “B1” countries, with a slight bias towards Group “A”. Having controlled for the influence of population, per capita incomes do not appear to be independently related to differences between historical and formula lending shares.

D. The Evolving Pattern of Allocations

15. Figure A5 summarizes the evolving pattern of commitment shares over the period 2002-2004 for individual countries, expressed as the percentage change over average historical shares (1995-2001). Given the infrequency of loans for many PDMCs, shares are calculated separately and averaged over the three years. PDMCs are shown in the bottom panel and Group A and B1 countries in the top panel of the Figure.



16. It can be seen that with the adoption of the policy Group B1 countries have increased their share in total allocations while the share of Group A countries has declined. The shift in allocations to Group B1 countries reflects the operation of the formula and, specifically, the increased allocations that the formula provides for the population component of needs. Among PDMCs, the increased weight of the population component of needs shifts resources to PNG with allocations to all other countries falling relative to their historical share. PNG contains over 80% of the total PDMC population.

17. For the most part, changes in actual commitment shares are substantially smaller than would have occurred had formula commitments been applied. Large changes in Tajikistan's share reflect its status as a comparatively new borrower. The sharp reduction in the share of the Kyrgyz Republic in 2003 reflected reduced commitments based on absorptive capacity considerations. Among the PDMCs, large reductions in lending shares to small countries were needed to release resources to PNG (a B2 country).¹³ Bangladesh has increased its share due to increased allocations based on the population element of needs. The increasing share of Pakistan reflects an improvement in its performance over the period. In general, shares of less populous countries fall.

E. Performance and Commitments, 2002-2004

18. Formula lending commitments depend critically on performance but they are also depend on measured needs. In the presence of the formula's "small country bias", the relationship is, in particular, influenced by the wide dispersion in population among ADF countries. For a given level of performance, differences in population size critically affect per capita allocations and so distort simple correlations in which the influence of population is not properly accounted for.¹⁴

Table A4 PBA Allocation by Performance Quintile 2002-2004

Performance Quintile	Population Weighted Average					
	2002		2003		2004	
	PR	ADF PC	PR	ADF PC	PR	ADF PC
First	4.13	8.15	4.18	8.21	4.11	5.80
Second	3.38	2.75	3.45	2.63	3.65	2.07
Third	3.21	5.29	3.34	2.37	3.47	2.19
Fourth	2.88	1.94	2.92	5.44	2.95	3.88
Fifth ^a	1.85	21.53	2.63	7.50	2.50	4.01
Total	3.22	2.97	3.40	2.98	3.57	2.37

PR = performance rating; ADF PC = ADF Per Capita allocation

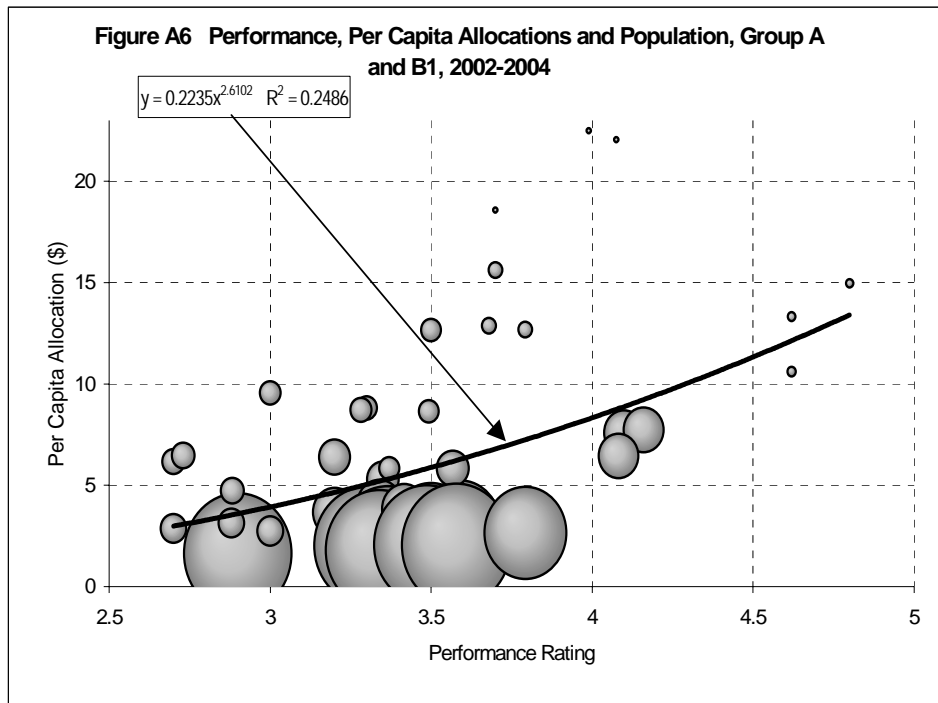
^a Five in 2002 (inc. Nauru), four in 2003-2004.

¹³ Although the increment is modest for PNG (+8%) and has been limited by the collar (see Section 6), changes for other PDMCs have been large in proportional terms, and have not been constrained by the collar. It would not have been possible to release resources to PNG without a substantial proportional decline in other country programs.

¹⁴ Differences in population size can, for example, distort the calculation of population weighted average allocations by quintile rankings as produced by IDA. This in fact happens in the ADF sample, where a number of small countries are clustered in the bottom quintile. Quintiles are reported in Annex A.

19. Assessing the relationship between allocations and performance is also rendered problematic by the preponderance of very small countries among those that are eligible for ADF. Eleven out of 23 countries (excluding Indonesia) have a population of less than one million. Of these, four have a population of less than 100,000. At the other end of the population spectrum, two countries have populations in excess of 100 million (Bangladesh and Pakistan), and Viet Nam has a population of close to 80 million. Taken together, small countries and large countries dominate the sample. There are only 8 countries with populations in the range of one to twenty-five million. In a context where resource allocation has been and is critically influenced by population size (see above), the preponderance of “outliers” presents considerable difficulties in comparing like with like.

20. In Table A4, population weighted, per capita allocations are shown for performance quintiles for the period 2002-2004. Quintile rankings are sometimes difficult to interpret because large variations in performance within quintiles can co-exist with small differences in performance at quintile borders. Table A4 illustrates a further difficulty when per capita allocations are being compared across quintiles that have vastly different population sizes. For example, in 2002, Vanuatu, Marshall Islands and Solomon Islands are all in the fifth performance quintile have a combined population of just 600,000.¹⁵ By comparison, in 2002, the aggregate population of the second quintile is 214 million while that of the fourth quintile is 156 million. Low per capita allocations for the large countries in the second and fourth quintiles lower their population weighted average per capita allocation. As a consequence of Pakistan’s improving performance the second and third quintiles have the largest populations in 2003 and 2004 weighing down their population weighted per capita allocations in these years.

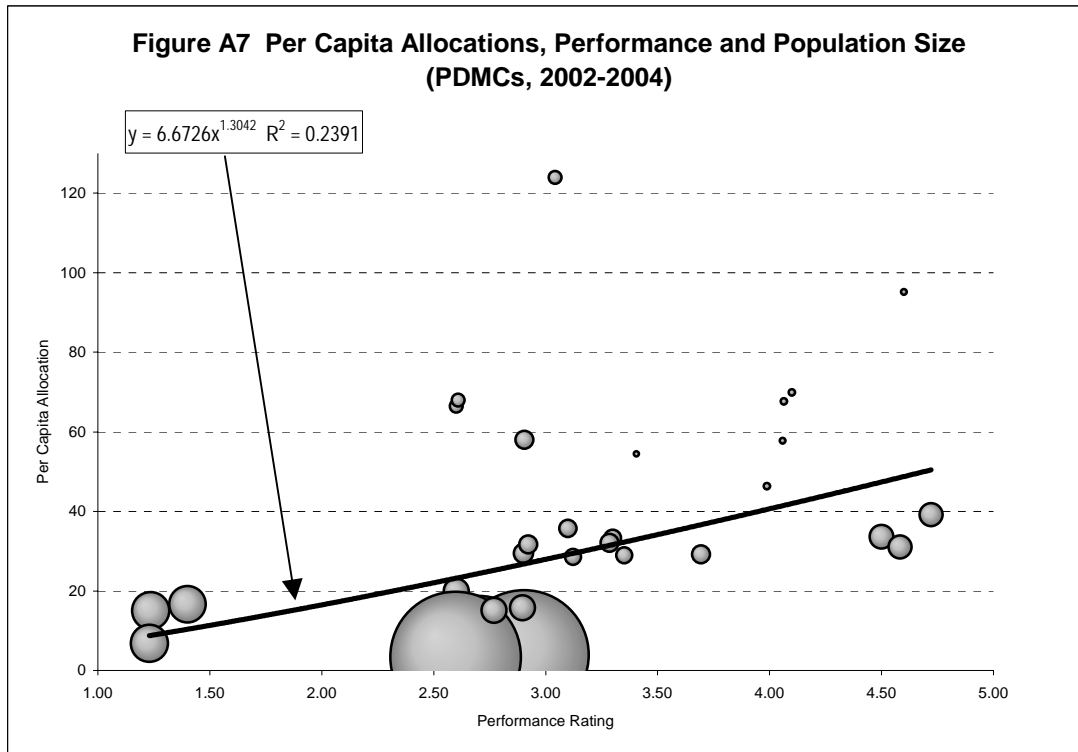


21. Figure A6 provides an alternative and more complete view of the relationship between per capita allocations, performance ratings and population size for the period 2002-2004 for

¹⁵ Note that these quintile rankings exclude Indonesia and Nauru both of which were included in the 2001 CPA exercise. Nauru did not receive an allocation, and Indonesia’s ADF allocation is not linked to the PBA formula.

Group A and B1 countries. In pooling data across time periods, adjustments have been made so that per capita allocations are independent of year-to-year variations in aggregate resource availability. Effectively, they have been scaled to a fixed and uniform lending level. Performance ratings are plotted on the horizontal axis and per capita allocations on the horizontal axis. The area of each observation is proportional to country population size. The line that best fits the data is also shown.

22. Two main observations arise from Figure A6. First, for Group “A” and “B1” countries, performance and allocations are positively related. The estimated elasticity is 2.6, and is statistically significant. But care should be taken in interpreting this relationship. Closer examination reveals that observations for countries with small populations typically lie above the line, with observations for larger countries lying below. For a given rating, smaller countries attract more resources in per capita terms. This not only reflects the influence of the “small country bias”, but also the presence of collar adjusted lending levels that are anchored to historical averages and which therefore amplify the small country bias.¹⁶ If countries that have populations larger than 50 million are eliminated from the sample (Viet Nam, Bangladesh and Pakistan), the goodness of fit of the relationship improves somewhat ($R^2=0.411$) and the estimated elasticity falls a little to, 2.4.



23. In Figure A7, the relationship between performance ratings and per capita allocations is summarized for the PDMCs. The estimated elasticity of this relationship while positive is smaller (1.3) than for Group A and B1 countries. This is not unexpected given that allocations in the PDMCs are made over a three-year cycle and must adjust to accommodate the presence of irregularly processed loan projects. For a given level of performance, more populous PDMCs

¹⁶ A similar analysis controlling for per capita incomes shows no discernable pattern. Per capita incomes and population are strongly and inversely correlated so that some countries with large per capita incomes also attract larger per capita allocations for a given level of performance.

receive a lower per capita allocation. Nevertheless, the relationship is statistically significant at 1%.

24. Actual commitments can be described in terms of the best-fit exponents that describe the relationship between commitment shares, performance, population and GNP per capita. For Group A and B1 countries, this relationship is:¹⁷

$$\text{Share of lending} = A \cdot \left(\text{Performance}^{1.36} \cdot \text{Population}^{0.64} \cdot \frac{\text{GNP}^{-0.17}}{\text{Population}} \right),$$

where, A , is a parameter that ensures shares sum to unity. The estimated exponential weights on performance and per capita income are somewhat smaller than the corresponding weights in the PBA formula but they are not statistically different from them (1.8 and -0.25 , respectively).¹⁸ However, the hypothesis that the estimated exponent on the population variable is equal to the formula value of 0.75 can be rejected. For actual commitments there is a stronger small country bias than the policy provides for.

25. For PDMCs the best-fit relationship is shown below. While the estimated exponent on the performance variable is significant at 10%, the other parameters are not statistically significant and the overall relationship is poorly determined.

$$\text{Share of lending} = A \cdot \left(\text{Performance}^{1.78} \cdot \text{Population}^{2.0} \cdot \frac{\text{GNP}^{-0.08}}{\text{Population}} \right)$$

F. Performance Improvement and Changes in Commitments

26. Over the first three years of the policy, out of a possible 26 cases there have been 20 cases where performance ratings improved for Group A and B1 countries. Of these, 12 countries received increased per capita commitment (over the year previous) and 8 countries had commitments reduced.^{19,20} Among the PDMCs, there were 10 cases of improved performance and 10 cases of deteriorating performance. For improved performers, 5 countries received an increase in allocation. In 9 out of 10 cases of deteriorating performance, commitments were reduced.

27. In interpreting these data, it should be borne in mind that the formula rewards relative not absolute performance.²¹ Also, in cases where the initial formula allocation was substantially less than the historical allocation, phased reductions in commitments via the collar may continue, notwithstanding possible improvements in performance. Among PDMCs, dynamic

¹⁷ The estimated exponents are obtained by pooling data across the sample periods and calculating the ordinary least squares relationship between log lending allocations and the log performance rating, the log of population and the log of per capita income. The estimated exponents are all statistically significant at 10 %, and the population and performance exponents are significant at 1 %, $R^2=0.873$.

¹⁸ The formula weights lie within 2 standard deviations of the estimated values for the exponential weights.

¹⁹ Recall that these are hypothetical commitments based on an assumption that the total resources available were constant. In fact, resources have varied. Resource management issues are discussed in Section 6.

²⁰ One Group A country received an increased commitment despite a deterioration in its rating apparently because of a correction to a mistake in the calculation of its historical lending average.

²¹ Theoretically, it is possible to receive a reduced allocation even if relative performance has improved. This is most likely to occur where a country that commands a large share of resources improves its performance, constraining the residual resources available to all other countries.

links are complicated by the infrequency of loan approvals and the reductions in allocations needed to accommodate a larger share of resources for PNG.

Allocation Mechanisms

A. Two Types of Formula

1. ADB uses an allocation formula first used by IDA. This is a multiplicative formula that includes three variables, each carrying an exponential weight that reflects its importance. Two variables measure country needs (population and income) and the other measures country performance. In this formula, country shares are obtained by the product of the three weighted variables, divided by a quotient, A . The quotient A is defined as the sum of the products (see the note to Table B1) and ensures that allocation shares sum to one. All MDBs other than IADB currently use a multiplicative formula. IADB uses an additive formula.

2. Table B1 summarizes the formulae that are currently used by different institutions.

Table 2.1: Allocation Formulae for Concessionary Funds of MDBs

<i>Multilateral Development Bank</i>	Allocation share, S , equals:
AfDB	$(POP \times GNPC^{-0.125} \times PR^{2.0})/A$
ADB	$(POP^{0.75} \times GNPC^{-0.25} \times PR^{1.8})/A$
CBD	$(\text{Log } POP \times GNPC^{-0.9} \times PR^{2.0} \times VUL^{2.0})/A$
IADB (IFF)	$(.133xF) \times pop + (.133xF) \times gnpc^{-1} + (.6xF) \times pr + (.133xF) \times debt$
IADB (FSO)	$(.22xF) \times pop + (.18xF) \times gnpc + (.6xF) \times pr$
IDCA	$(POP \times GNPC^{-0.125} \times PR^{2.0})/A$

Notes/

For AfDF, ADB and IDA:

$$A = \sum_{i=1}^n POP_i^{w_{POP}} \cdot GNPC_i^{w_{GNPC}} \cdot PR_i^{w_{PR}}$$

where w are exponential weights. $DEBT$ = debt service ratio, $GNPC$ = gross national product per capita, POP = population, PR = country performance rating (policy/institutional performance and portfolio performance), VUL = vulnerability, F is the total value of the fund, pop is the ratio of country population to aggregate population, $gnpc$ is the ratio of country GNPC to the aggregate of GNPC, pr is the ratio of the country performance score to the aggregate of all performance scores and $debt$ is the ratio of the debt service ratio to the aggregate of debt service ratios.

B. Multiplicative Formulae

3. Geometric formulae have a number of important properties. An understanding of these properties is essential for a judicious choice of formula weights. Even then, the influence of weights on level allocations is not particularly clear, nor easy to communicate.

4. Division of the allocation share of country i (S_i) by the allocation share for country j (S_j) yields:

$$(B.1) \frac{S_i}{S_j} = \left[\frac{POP_i}{POP_j} \right]^{w_{POP}} \cdot \left[\frac{GNPC_i}{GNPC_j} \right]^{w_{GNPC}} \cdot \left[\frac{PR_i}{PR_j} \right]^{w_{PR}}$$

This expression shows that the ratios of the needs and performance variables are critical in determining relative shares. It can also be seen from this expression that country allocations are “scale independent” in the sense that a common proportional change applied to all values of a variable will self-cancel in the numerator and denominator leaving share allocations unaltered.

5. To understand how allocation shares respond to changes in need and performance it is necessary to partially differentiate the allocation shares. This gives the following expression for the elasticity (i.e. a ratio of proportional changes) of the share of country i with respect to a change in the value of variable, X (population, per capita income, or performance score), $\varepsilon_{S_i, X}$:

$$(B.2) \quad \varepsilon_{S_i, X} = \frac{\partial S_i}{S_i} \div \frac{\partial X_i}{X_i} = (1 - S_i) \cdot w_X$$

In words, the elasticity of a country’s share allocation with respect to a change in a formula variable, X , is equal to the product of its exponential weight in the formula and one minus its initial allocation share. Although the elasticity is functionally related to the formula weight it is important to note that it is not equal to it, unless the initial allocation happens to be zero.

6. There are a number of properties of the formula that can be inferred from this result. First, since the allocation shares will self-cancel, the ratio of needs and performance impacts (as measured by their elasticities) is equal to the ratio of their respective exponential weights. Specifically, the ADB formula implies that a 1% increase in performance attracts 2.4 times (=1.8/0.75) the increase in resources that a 1% increase in population would attract, or 7.2 (1.8/0.25) times the increase in resources that a 1% increase in need generated by a decline in per capita income would induce. This property of the formula is invariant under uniform scaling of the weights. However, underlying allocation shares are not independent of the scale of the exponential weights. From (B.1) it can be seen that a doubling of all weights would change the ratio of allocation shares. More generally, large absolute values of the exponential weights would tend to increase the dispersion in the allocation of resources, whereas smaller weights would generate greater concentration in the distribution of shares.

7. The expression for the response elasticity shows that they differ by country. In particular, initial allocation shares, themselves a function of the formula weights, play a part in determining how changes in need and performance generate subsequent changes in allocation. Countries with larger initial allocation shares have lower response elasticities (on both performance and needs variables) than countries that have smaller allocation shares. Within the range of data for Group A and B1 countries, response elasticities may vary by up to about 25%. Measured in terms of marginal (rather than proportional) changes in share allocations, the response is even more complicated. For a 1% improvement in performance or increase in needs, the induced change in a country’s level share will increase as a function of its initial share allocation in the interval (0,0.5), and will decline, symmetrically, in the interval (0.5,1). Since no country has a share of greater than 20% of ADF resources, this implies that countries with larger initial shares will attract, in dollar terms, more resources for a given improvement in performance or increase in need.

8. Next, it is of interest to ask how allocations (rather than changes in shares) are related to the choice of formula weights. In considering the balance of needs and performance in allocations greatest attention has been given to the selection of weights. Mathematically, it can be shown that:

$$(B.3) \quad d \ln \left(\frac{S_i}{S_j} \right) = \ln \left(\frac{X_i}{X_j} \right) \cdot dw_X,$$

where all terms are as previously defined, and all factors are held constant except the change in the exponential weight of variable X . This result shows that if the weight on X is increased, and $X_i > X_j$ the allocation share of country i increases relative to country j , and vice-versa. However, this result also demonstrates that the impact of the change in weight on allocation shares is critically dependent on the domain of the underlying values of the X variables. Consider, for example, the impact on allocation shares of a change in performance and population weights. Since performance scores are measured in a domain of 1:6, changes in the exponential weight on the performance variable will, in general, have much less of an impact on allocations than a change in the weight of the population variable, measured in a relative domain of 1:507. For the extreme values of performance and population data, a given change in the population weight has about an 85 times larger impact on the relative allocation shares than does the weight on the performance variable. Alternatively, suppose that the domain in which performance was measured changes from 1:6 to 1:100, then the relationship between maximum and minimum scores and their impact on allocations changes from:

$$\left(\frac{6}{1} \right)^{1.8} \text{ to } \left(\frac{100}{1} \right)^{1.8} = \left(\frac{6^{2.57}}{1} \right)^{1.8}$$

To retain the same allocation of resources at the extreme bounds after this hypothetical change in the domain of performance scores would therefore require a reduction in the exponential formula weight from 1.8 to $1.8/2.57 = 0.7$.

9. Finally, the question arises as to what geometric allocation formulae imply about the contributions of needs and performance to total country allocations. The ratio form of the allocation equation, (B1) is homogenous and has degree equal to the sum of the exponential weights of the formula, $\lambda = w_{PR} + w_{POP} + w_{GNPC}$. It follows that the ratio of country allocations can then be expressed as:

$$(B.4) \quad \frac{S_i}{S_j} = \frac{1}{\lambda} \left(f' \left(\frac{PR_i}{PR_j} \right) \cdot \frac{PR_i}{PR_j} + f' \left(\frac{POP_i}{POP_j} \right) \cdot \frac{POP_i}{POP_j} + f' \left(\frac{GNPC_i}{GNPC_j} \right) \cdot \frac{GNPC_i}{GNPC_j} \right),$$

where f' denotes the partial derivative of the ratio function, f , homogenous of degree λ , and:

$$(B.5) \quad f' \left(\frac{X_i}{X_j} \right) = \frac{w_X}{X_i/X_j} \cdot \frac{S_i}{S_j}$$

Substituting (B.5) in (B.4), after some algebraic manipulation, gives gives:

$$(B.6) \quad \Rightarrow S_i = \left[\frac{w_{PR}}{w_{PR} + w_{POP} + w_{GNPC}} \cdot \left(\frac{S_i}{PR_i} \right) \right] \cdot PR_i + \left[\frac{w_{POP}}{w_{PR} + w_{POP} + w_{GNPC}} \cdot \left(\frac{S_i}{POP_i} \right) \right] \cdot POP_i + \left[\frac{w_{GNPC}}{w_{PR} + w_{POP} + w_{GNPC}} \cdot \left(\frac{S_i}{GNPC_i} \right) \right] \cdot GNPC_i,$$

If the terms in square brackets were interpreted as the “shadow prices” of performance, and population and income need, this result might be taken to imply that performance, population and per capita income contribute to a country’s share allocation in proportions that are fixed by their respective exponential weights, much in the way that factor shares are fixed by the exponents of a Cobb-Douglas production function. However, in the context of a PBA system, this interpretation is hardly intuitive or appealing. The form (2.6) simply reflects an inherent property of the partial derivatives of homogenous functions. An alternative and probably more reasonable interpretation is that there is no interesting or particularly meaningful way to decompose shares into their needs and performance contributions within a geometric (and homogenous) allocation framework.¹

10. On a number of levels, these results show that the impacts of geometric allocation rules are not particularly easy to unravel. Level allocations are related not only to the parameter values but also to the dispersion in underlying values of variables. Moreover, response elasticities are country specific and are related to initial allocation shares. In these circumstances, numerical simulation is usually needed to arrive at a clear understanding of how levels and changes in performance and need are transmitted to allocation shares. Especially in the transition to a new allocation system, communicating a clear understanding of the results of such simulations to staff, borrowers and shareholders is potentially problematic.

C. Linear Formulae

11. The additive formula adopted by the IADB considers needs and performance allocations separately. Additive formula permit choices about how resources are to be distributed between needs and performance at an aggregate level, and allocation formulae are then used to distribute resources within each pot. If desired, needs and performance pots can be further broken down in to different components. For example, IADB has separate allocations for the population and per capita income components within the allocation for needs. Additive formulae have the attraction that they allow the policy objectives to be directly stated in terms of how resources should be divided between need and performance, and so permit an easier evaluation of trade-offs and communication of results.

12. Once a decision has been made about how to allocate resources by objective, allocation rules are needed to determine the distribution of resources within each pot among countries. IADB uses simple linear rules in which resources are distributed on the basis of relative scores on each variable. For example in the IADB system a country that scores 4 out of 6 on performance gets twice the share from the performance pot that a country that scores 2 out of 6 receives. Likewise the IADB rule allocates resources on straight per capita basis from the population pot.

13. While these IADB allocation rules are easy to understand they have some inherent limitations. First, a linear allocation rule within the performance pot may not provide adequate incentives for improved performance. Second, and more importantly, linear allocation rules of the type used by IADB would generate impractical allocations where countries have vastly different population sizes. The IADB rule implies that, irrespective of population size, all countries that have the same performance score would receive the same dollar resources from the performance pot. This constitutes a very strong, implicit, “small country bias”. Using non-

¹ When either performance or needs are uniform across all countries, then the system collapses to a pure need or pure performance-based system.

linear allocation rules within each pot, and expressing these in terms of per-capita allocations, as required, can easily rectify these limitations. In this way, incentives for improved performance can be strengthened within the performance pot, or a “small country bias” can be created within the needs pot.

D. A Preliminary Comparison of Linear and Geometric Allocation Models

14. As a preliminary check of the plausibility of a linear allocation system, a simple allocation system was calibrated on ADF data. The structure of the allocation rule adopted was:

$$(B.7) \quad S_i = \left[\frac{PER_i^{w_{PER}} \cdot POP_i^{w_{POP}}}{\sum_{j=1}^n PER_j^{w_{PER}} \cdot POP_j^{w_{POP}}} \right] \cdot \alpha_{PER} + \left[\frac{POP_i^{w_{POP}}}{\sum_{j=1}^n POP_j^{w_{POP}}} \right] \cdot \alpha_{POP} + \left[\frac{GNPC_i^{w_{GNPC}} \cdot POP_i^{w_{POP}}}{\sum_{j=1}^n GNPC_j^{w_{GNPC}} \cdot POP_j^{w_{POP}}} \right]^{-1} \cdot \alpha_{GNPC},$$

where the exponential weights, w , are set equal to those in the ADF formula for the corresponding variable X and the weights for the performance and needs pots, α , the share of each pot, was set on the basis of the ratio of the respective exponential weights to the sum of weights (as in (B.6)) of the ADF geometric formula. Hence, 64% (α_{PER}) is allocated to performance, 27% (α_{POP}) is allocated to the population component of need, and 9% (α_{GNPC}) to the per capita income (reciprocal) component of need. Note that since there is wide dispersion in the populations of Group A and B1 countries, the performance and per capita income needs pots are allocated on a population weighted basis, where the formula weight of 0.75 is applied. It may be noted that the response elasticities of this formula, $\varepsilon_{S_i, X}$ are given by:

$$(B.8) \quad \varepsilon_{S_i, X} = \frac{\partial S_i}{S_i} \div \frac{\partial X_i}{X_i} = (1 - S_{i, X}) \cdot w_X \cdot \alpha_X$$

and $S_{i, X}$ is the share of country i in pot “X”. It is not possible to compare unambiguously the elasticities of (B.8) with (B.1). But for given exponential weights, the elasticities of (B.8) are likely to be of smaller magnitude, though this will depend on the precise distribution of country shares within each “pot”, $S_{i, X}$, compared to the size of the linear allocation weight, α , for that pot.

15. Using data for the actual 2002 PBA exercise, the allocation shares generated by this framework are on average just 0.49% different from those of the companion geometric model, with ten out thirteen shares being within $\pm 0.5\%$ of one another. The maximum difference for any country’s share is just over 2%. In per capita terms, the average absolute difference in allocations is \$0.08, with a maximum difference for any one country of \$0.21, and this is for the Maldives that has a population of only 270,000 persons. Another way to compare the allocation systems is to consider the ratio of per capita allocations for the best and worst performers. In 2002, there were two countries tied for worst performance so that two comparisons are involved. The ratio of per capita allocations for best to worst performers within the geometric framework is 2.38 and 2.8, and for the linear allocation framework the corresponding ratios are about 2.0. For common data and parameter values, the linear system marginally dilutes incentives for better performance. Raising the performance exponent in the linear system, from 1.8 to 2.0, raises the ratio of per capita allocations of the best to worst performer from 2 to about 2.2.

16. This simple experiment is intended to demonstrate only that a linear system, with appropriate allocation rules, can generate allocations that are broadly comparable to those generated by a similarly calibrated geometric framework. The linear system differs from the geometric system in three main ways. First, it allows preferences to be expressed about how resources should be distributed among objectives. Second, it allows allocations to be preserved within different pots, so that improvements in performance by one country are paid for out of the performance pot by other countries, with their needs allocations protected. Third, the outcomes of the linear system are possibly easier to communicate to stakeholders and provide for greater accountability.

17. In summary, both geometric and linear formulae embody objectives that cannot be maximized simultaneously. In the real world, high-need countries are not typically high-performance countries. In such cases, no formula will fit completely comfortably.

The Application of a Governance Factor

1. ADF's country performance rating attaches a 30% weighting to governance factors compared to the 20 % weight used in IDA's rating scheme. Other ADF categories that are closely related to public and private sector governance include (i) Fiscal Policy (3.33%), (ii) Financial Sector Efficiency and Soundness (2.5%); (iii) Enabling Environment for Private Sector Development (2.5%); (iv) environmental Laws and Institutions (2.5%); and (v) Empowerment and Participation (6%). Overall, judgments about the quality of governance exercise a considerable influence on the country performance rating under the ADB system.

2. In addition to rating governance, IDA has experimented with a variety of different ways of adjusting its country ratings based on its assessment of governance. In 2001 a "governance factor" was introduced. The governance factor works by reducing the overall county rating where governance performance falls below a designated threshold (3.5) and increasing the country rating where measured governance performance exceeds the standard.¹ Effectively, the governance factor amounts to counting governance scores twice in the overall rating process. All other things equal, the governance factor will stretch ratings towards the tail of the ratings distribution and hollow out its middle. Indeed following application of the governance factor, a country may exceed the maximum rating score of 6.²

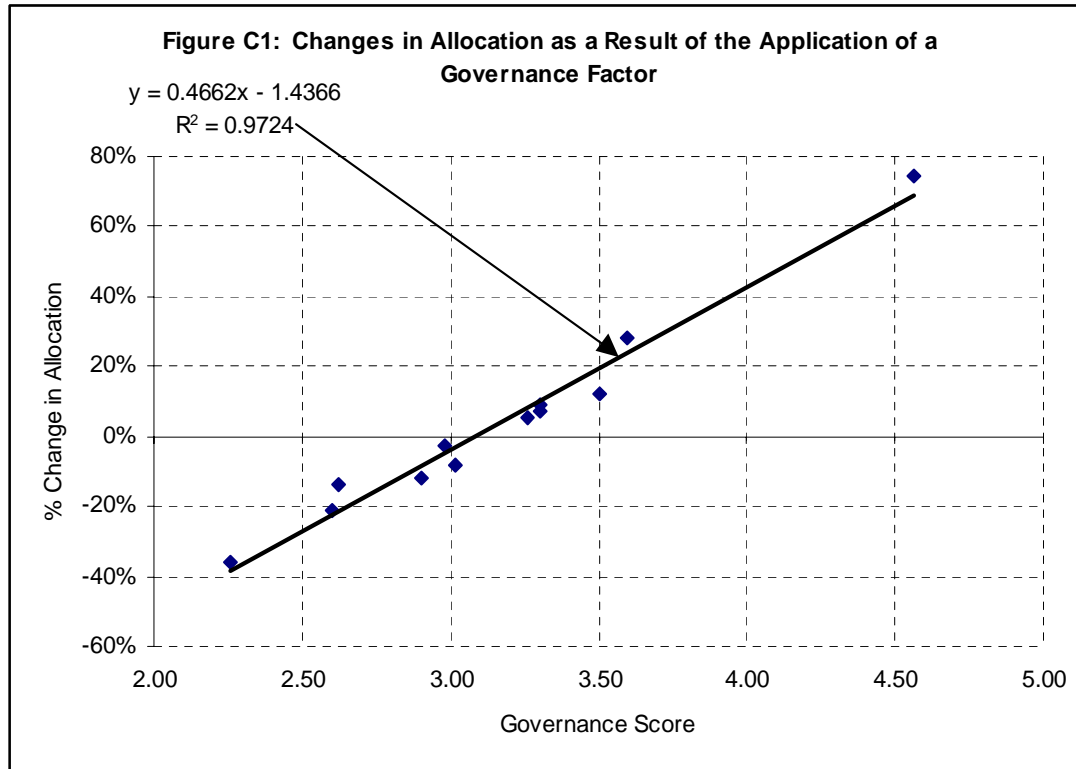
3. It is of interest to examine what would have happened to ADF share allocations if IDA weights and a governance factor had been applied to ADB's individual performance scores. This experiment is conducted using the 2002 ratings for Group A and B1 borrowers. The application of IDA weights alone to ADF constituent performance ratings makes little difference to overall country ratings for 2002. The average difference in country ratings using IDA and ADB weights is 2.2%, with a maximum difference for any one country of just 8%. As might be expected, given the relative weights in the ADB and IDA frameworks, countries where governance is rated highly receive a higher overall country rating using ADB weights, all else equal.

4. To illustrate the impact that the application of the governance factor has on formula outcomes, the percentage differences in formula shares are plotted in Figure C1 against governance ratings. Following application of the governance factor, the country with the highest governance rating (4.6) would be rewarded with a 74% increase in resources, while the country with the lowest governance rating (2.3) would lose 36% of its ADF allocation. For only 5 out of 13 countries is the imputed allocation within $\pm 10\%$ of that given by the allocation formula without a governance factor. Note also that some countries with governance rating scores of below 3.5 (the median) receive more resources after the application of the governance factor. The reason for this is that the formula allocates resources on the basis of relative and not absolute scores, irrespective of whether a governance factor has been applied or not. For example, if all countries scored below 3.5 on governance criteria, resources would still be reallocated towards those that performed less weakly than others.

¹ The governance factor is defined as $(\text{governance rating}/3.5)^{1.5}$, and the final rating is defined as the product of this number and the CPA rating.

² The mean rating is not invariant to the application of the governance factor. If country and governance ratings were distributed symmetrically around 3.5, prior to the application of the governance factor, the mean country rating would increase to 3.59 after the application of the governance factor. In a system that works on the basis of relative scores, this results in a reduced allocation for the mean performer.

5. These calculations also confirm that country performance ratings are highly sensitive to the application of a “governance factor”. IDA³ reports that in its sample a one point drop in just one of seven governance criteria results in a 7.5% drop in the overall IDA rating and a 15% drop in a country’s allocation. A drop of just 0.1 point in the present calculations for one country results in a 5% drop in its allocation. These results suggest that overall ratings and allocations are highly sensitive to marginal changes in governance scoring in the presence of a governance factor. Given the degree of confidence that it would be reasonable to ascribe to governance scores these marginal impacts would appear to be disproportionate. IDA is currently considering options for smoothing out this discontinuity.



³ IDA’s Performance Based Allocation System: Current and Emerging Issues. International Development Association, October 2003.

Performance Ratings, 2002-2004

A. The Rating Framework

1. In Table D1, a summary of the criteria and weights used in ADB's performance rating system is provided along with information about the ratings systems used in other MDBs. In Table D2, the weights that are used by different institutions in aggregating over different performance criteria are summarized.

2. Some MDBs, including ADB and the CDB, use a single weight for each cluster of policy/institutional performance criteria. Others, including the IADB, give a weight to each criterion. This means that different criteria across clusters are implicitly assigned different weights. The environmental protection cluster has a weight of 5% and contains two criteria, so each has an implicit weight of 2.5%. The "socially inclusive development" cluster has a weight of 30% and contains five criteria, so each of these has an implicit weight of 6%.

3. Both IDA and AfDB express the weights for policy/institutional performance criteria out of 100%. By contrast, ADB includes "portfolio performance" along with "policy/ institutional performance" and has weights that add to 100% for both considered together. These two approaches have to be converted to a common base for the weights to be comparable. In Table D2, the IDA approach to weighting is followed for ease of comparison. The choice of weights shows a wide range from one multilateral development bank to another. It can be seen that ADF applies comparatively low weight to the sustainable economic growth cluster and comparatively large weights to the socially inclusive development and governance and public sector management clusters. However, the weights applied to the policy/institutional performance criteria appear in all instances to be somewhat arbitrary. None are strongly rooted in evidence about their link to poverty reduction.

4. All MDBs currently use a scale of 1 to 6 for scoring country performance. There are, however, some differences in ratings guidelines. For ADF, a score of 1 is reserved for "poor" performance, "average" performance is scored at 3.5 and "strong" performance at 6. The ratings guidelines provide a range of qualitative criteria that can be used to make judgments on each criteria but do not refer to the consistency or otherwise of performance across time, nor to the increments (decrements) in terms of which improvements or deteriorations should be registered. IDA, by contrast, allows increments of 0.5 between 2 and 5, reserving the scores of 1 and 6 to denote consistently poor or strong performance over a three years period, respectively. AfDF uses only whole-number scores.

5. IDA and AfDF scores for individual criteria are multiplied by the criteria weights, and then averaged. However, because the ADF (and the EU) have "cluster weights" rather than "individual criterion weights", their numerical ratings for each factor in a cluster are first added and averaged. The average score for the cluster is then multiplied by the cluster weight. The aggregate performance rating is the weighted average of the cluster ratings.

6. In summary, there are a number of differences between the ratings systems of different MDBs. It would appear, however, there is little evidence to guide choices among the different systems. Although to some degree, weights should reflect different institutional priorities there is a need to relate them more directly to poverty reduction and other shared objectives.

Table D1 Criteria for Assessing Country Policy/Institutional Performance

IDA	B. ADF	AfDF	IDB	CDB
II. ECONOMIC MANAGEMENT <ul style="list-style-type: none"> Fiscal policy Management of inflation and current account Management of external debt Management and sustainability of the development program 	Macroeconomic Management <ul style="list-style-type: none"> Fiscal policy Monetary policy External financing policies 	III. MACROECONOMIC POLICIES <ul style="list-style-type: none"> Fiscal policy General macroeconomic performance Macroeconomic and external debt management capacity 	IV. ECONOMIC MANAGEMENT <ul style="list-style-type: none"> Macroeconomic imbalances (fiscal and monetary policies) Management of external debt 	V. MACROECONOMIC MANAGEMENT <ul style="list-style-type: none"> Fiscal policy Monetary policy External financing policies
VI. STRUCTURAL POLICIES <ul style="list-style-type: none"> Trade policy and foreign exchange regime Financial stability and depth Banking sector efficiency and resource mobilization Competitive environment for the private sector Factor and product markets Environment¹ Policies and institutions for environmental sustainability² 	VII. STRUCTURAL POLICIES <ul style="list-style-type: none"> Trade policy and foreign exchange regime Financial sector efficiency and soundness Enabling environment for private sector development Factor/product markets, prices Environment: Environmental laws & institutions, and environmentally damaging subsidies. 	VIII. STRUCTURAL POLICIES <ul style="list-style-type: none"> Trade policy and foreign exchange regime Financial stability and depth Competitive environment for the private sector Policies for reducing public sector burden Policies and institutions for regional integration Environment: Environmental policies and regulations. 	IX. STRUCTURAL POLICIES <ul style="list-style-type: none"> Trade and commercial policy Banking and financial sector stability Policies and institutions for environmental stability. 	X. STRUCTURAL POLICIES <ul style="list-style-type: none"> Trade policy and foreign exchange regime Financial sector efficiency and soundness Factor and product markets and prices Enabling environment for private sector development
Policies for Social Inclusion/ Equity <ul style="list-style-type: none"> Gender equity³ Equity of public resource use Building human resources Social protection and labour⁴ Poverty monitoring & analysis 	Socially Inclusive Development <ul style="list-style-type: none"> Empowerment & participation Equity and social safety nets Develop human capital of poor Enhance economic capital of poor Framework for poverty policy & monitoring 	Policies for Growth + Equity and Poverty Reduction <ul style="list-style-type: none"> Gender equality & social inclusion Policies towards labour intensive activities Building human capital Pro-poor targeting programs/invest. Poverty monitoring and analysis 	Policies for social inclusion/equity <ul style="list-style-type: none"> Gender equality, indigenous and other minorities inclusion issues Building human resources and social protection Monitoring and analysis of poverty 	Socially-inclusive development <ul style="list-style-type: none"> Framework for poverty reduction policy Enhancing economic and human capital of poor Equity and social safety nets Gender, empowerment and participation
Public Sector Management and Institutions <ul style="list-style-type: none"> Property rights and rule-based governance Quality of budgetary and financial management Efficiency of revenue mobilization Efficiency of public expenditures Transparency, accountability and corruption in the public sector 	Governance and Public Sector Management <ul style="list-style-type: none"> Rule of law Management and efficiency of public expenditures Revenue mobilization and budget management Civil service Anti-corruption and accountability institutions 	Governance and Public Sector Performance <ul style="list-style-type: none"> Property rights and rule-based governance Quality of budget and public investment process Revenue mobilization efforts and rationalization of public expenditures Accountability/transparency of the public service Anti-corruption policies and practices Political stability 	Public sector management and institutions <ul style="list-style-type: none"> Property rights, governance and private sector development Transparency and accountability in the public sector 	Governance/private sector development <ul style="list-style-type: none"> Rule of law Anti-corruption and accountability of institutions Civil service Revenue mobilization and budgetary management Management and efficiency of public expenditures

¹ Other MDBs include “environment” among “structural policies”, rather than shown as a separate area as it is above. They have been identified separately to highlight the fact that the ADB has an additional environmental factor – “environmentally damaging subsidies”.

² In 2000 “The criterion regarding Policies and Institutions for Environmental Sustainability was placed more explicitly in the context of the overarching goal of poverty reduction. Moreover, separate descriptions were included in the scoring questionnaire on what would be considered good policy for natural resource use and pollution control.

³ This criterion was previously “Equality of economic opportunity” and covered gender and socioeconomic group. In 2000, it was changed to “gender equity” in order to avoid potential confusion in regard to its scope. [“IDA 13, Linking IDA Support to Country Performance: Recent Experience and Emerging Issues”, January 2001, p. 6

⁴ In 2000, this criterion was changed to “cover more explicitly labor market regulation, including the use of core labor standards.” IDA 13, “Linking IDA Support to Country Performance: Recent Experience and Emerging Issues”, January 2001, p.6

**Table D2 Relative Importance of Various Criteria in the Policy/
Institutional Performance Score**

IDA*	ADB	AfDB	CBD	IDB	RANGE
Economic Management 20%	Macroeconomic Management 11.8%	Macroeconomic Policies 15%	Macroeconomic Management 25%	Economic Management 15%	11.8% to 25% (ADF low in range)
Structural Policies 25%	Structural Policies 11.8%	Structural Policies 25%	Structural Policies 15%	Structural Policies 20%	11.8% to 25% (ADF low in range)
Environment 5%	Environment 5.9%	Environment 5%	Environment 10%	Environment (implicitly 6.6%)	5% to 10%
Policies for Social Inclusion and Equity 25%	Socially Inclusive Development 35.3%	Policies for Growth with Equity & Poverty Reduction 25%	Social Development 25%	Policies for Social Inclusion and Equity 35%	25% to 35% (ADF high in range)
Public Sector Management & Institutions 25%	Governance and Public Sector Management 35.3%	Governance and Public Sector Performance 30%	Governance & Public Sector Management 25%	Public Sector Management and Institutions 30%	25% to 35% (ADF high in range)

Note: Criteria cluster weights are normalized to 100% for each of the four institutions above, for facilitate easy comparability.

* IDA assigns a weight to each sub-criterion. These are totals of the individual criteria within each of the five clusters named in the table above.

B. Ratings Outcomes

12. In Table D3, a summary is provided of ratings outcomes for each of the three years of the PBA rating exercise. For each criteria and each cluster average, scores across all countries are shown. The numbers identified as “effective weights” are obtained by dividing cluster scores by the overall aggregate and then by multiplying by the result by the cluster aggregation weight. A value larger than the raw weight indicates an above average score for that cluster in that year.

13. The data in Table D3 point to a number of preliminary findings. First, at an aggregate level, ratings have drifted up over the three years of the implementation of the PBA. The improvements in ratings are modest but nonetheless perceptible. Moreover, the improvements have been due to improvements in the policy and institutional components of the ratings, and not to the improved quality of country portfolios. Second, looking across ratings, clusters, portfolio scores are, in general, numerically largest, and governance scores numerically smallest. The largest score within clusters is for Trade Policy and the smallest score is for the Management and Efficiency of Public Expenditure. Looking across time, average rating scores show a moderate degree of stability. There are no significant changes in rank ordering either across or within clusters. The largest improvement in any score is for the Framework for Poverty Monitoring and Policy Formulation, which increased by just under 0.5 between 2001 and 2003. This possibly reflects increased awareness by both borrowers and assessors of the

central role that national poverty reduction strategies play in setting goals and specifying action plans. The largest deterioration in any score is about -0.25, which is for performance on Environment Protection. Performance ratings on elements of fiscal and monetary policy are also adjudged to have deteriorated.

Table D3 Summary Ratings, 2002-2003

	Weight	2001		2002		2003	
		Mean	Effective Weight	Mean	Effective Weight	Mean	Effective Weight
I. 1ST SET OF CRITERIA: POLICIES AND INSTITUTIONAL FRAMEWORK							
A. Sustainable Economic Growth	25.0%	3.44	25.90%	3.47	25.78%	3.50	25.53%
(I) Macroeconomic Management	10.0%	3.81	11.47%	3.59	10.68%	3.62	10.56%
1. Fiscal Policy		3.64		3.36		3.43	
2. Monetary Policy		3.89		3.75		3.71	
3. External Financing Policies		3.88		3.66		3.70	
(ii) Structural Policies	10.0%	3.39	10.20%	3.54	10.52%	3.56	10.39%
4. Trade Policy and Forex Regime		4.29		4.40		4.35	
5. Financial Sector Efficiency and Soundness		3.05		3.23		3.41	
6. Factor and Product Markets and Prices		2.96		3.09		3.08	
7. Enabling Environment for Private Sector Development		3.28		3.44		3.38	
(iii) Environment Protection	5.0%	3.39	5.11%	3.08	4.58%	3.14	4.58%
8. Environmental Laws and Institutions		3.08		3.08		3.13	
9. Environmental Damaging Subsidies		3.08		3.09		3.14	
B. Socially Inclusive Development	30.0%	3.25	29.38%	3.43	30.61%	3.46	30.35%
10. Framework for Poverty Monitoring and Policy Formulation		3.24		3.68		3.71	
11. Enhancing the Economic Capital of the Poor		3.03		3.22		3.26	
12. Developing the Human Capital of the Poor		3.28		3.37		3.36	
13. Equity and Social Safety Nets		3.43		3.52		3.53	
14. Empowerment and Participation		3.27		3.36		3.46	
C. Governance and Public Sector Management	30.0%	3.08	27.84%	3.13	27.92%	3.15	27.62%
15. Rule of Law		3.22		3.20		3.21	
16. Anticorruption and Accounting Institutions		2.96		3.07		2.98	
17. Civil Service		3.19		3.14		3.14	
18. Revenue Mobilization and Budget Management		3.34		3.36		3.46	
19. Management and Efficiency of Public Expenditures		2.70		2.88		2.97	
II. 2ND SET OF CRITERIA: QUALITY OF PORTFOLIO PERFORMANCE	15.0%	3.78	17.07%	3.55	15.83%	3.80	16.65%
ALL CRITERIA, AVERAGE	100.0%	3.32		3.36		3.42	

14. Table D4, summarizes mean ratings, and provides information on their cross country dispersion measured in terms of the standard deviation of ratings, and the coefficient of variation. In terms of the variation in performance among countries, portfolio quality scores show the greatest dispersion across countries. It is interesting that over the three ratings exercises, the cross-country variance in ratings has steadily declined. It is not possible to say

whether this reflects convergence of policies, a convergence of perceptions, or possibly herding behavior by raters.

Table D4 Country Performance Assessments, Summary Statistics, 2001-2003
Mean, Standard Deviation, Covariance of Ratings

I. 1ST SET OF CRITERIA: POLICIES AND INSTITUTIONAL FRAMEWORK	2001			2002			2003		
	Mean	STDEV	COV	Mean	STDEV	COV	Mean	STDEV	COV
A. Sustainable Economic Growth	3.44	0.68	19.70	3.47	0.63	18.11	3.50	0.61	17.46
(I) Macroeconomic Management	3.81	0.94	24.81	3.59	0.69	19.33	3.62	0.68	18.81
1. Fiscal Policy	3.64	1.06	29.23	3.36	0.82	24.25	3.43	0.81	23.67
2. Monetary Policy	3.89	0.76	19.63	3.75	0.63	16.77	3.71	0.65	17.53
3. External Financing Policies	3.88	1.29	33.22	3.66	1.12	30.64	3.70	0.89	24.11
(ii) Structural Policies	3.39	0.53	15.67	3.54	0.60	16.93	3.56	0.58	16.23
4. Trade Policy and Forex Regime	4.29	0.88	20.42	4.40	0.90	20.55	4.35	0.83	19.04
5. Financial Sector Efficiency and Soundness	3.05	0.80	26.21	3.23	0.85	26.33	3.41	0.86	25.29
6. Factor and Product Markets and Prices	2.96	0.61	20.61	3.09	0.64	20.57	3.08	0.62	19.96
7. Enabling Environment for Private Sector Development	3.28	0.75	22.94	3.44	0.88	25.55	3.38	0.79	23.29
(iii) Environment Protection	3.39	0.79	23.32	3.08	1.15	37.32	3.14	0.88	28.16
8. Environmental Laws and Institutions	3.08	1.11	36.04	3.08	1.17	37.95	3.13	0.90	28.71
9. Environmental Damaging Subsidies	3.08	1.11	36.13	3.09	1.14	36.85	3.14	0.89	28.16
B. Socially Inclusive Development	3.25	0.86	26.41	3.43	0.88	25.70	3.46	0.90	25.99
10. Framework for Poverty Monitoring and Policy Formulation	3.24	0.96	29.72	3.68	0.95	25.91	3.71	0.98	26.41
11. Enhancing the Economic Capital of the Poor	3.03	0.84	27.78	3.22	0.91	28.19	3.26	0.91	27.89
12. Developing the Human Capital of the Poor	3.28	1.20	36.55	3.37	1.23	36.55	3.36	1.26	37.56
13. Equity and Social Safety Nets	3.43	1.01	29.30	3.52	1.05	29.70	3.53	1.02	29.01
14. Empowerment and Participation	3.27	0.85	26.03	3.36	0.76	22.61	3.46	0.73	21.25
C. Governance and Public Sector Management	3.08	0.85	27.50	3.13	0.77	24.48	3.15	0.76	24.02
15. Rule of Law	3.22	1.01	31.55	3.20	1.00	31.38	3.21	0.94	29.38
16. Anticorruption and Accounting Institutions	2.96	1.21	41.08	3.07	1.04	33.87	2.98	1.04	34.79
17. Civil Service	3.19	0.91	28.65	3.14	0.83	26.51	3.14	0.86	27.51
18. Revenue Mobilization and Budget Management	3.34	0.93	28.00	3.36	0.91	27.12	3.46	0.80	23.24
19. Management and Efficiency of Public Expenditures	2.70	0.97	35.91	2.88	0.85	29.42	2.97	0.98	33.02
II. 2ND SET OF CRITERIA: QUALITY OF PORTFOLIO PERFORMANCE	3.78	1.23	32.46	3.55	0.95	26.91	3.80	0.91	24.01
ALL CRITERIA, AVERAGE	3.32	0.74	22.36	3.36	0.71	21.17	3.42	0.71	20.78

COV = standard deviation/mean*100 ; STDEV - standard deviation

Table D5 Pearson Correlation Coefficients of Country Performance Ratings, 2001-2003

Main Clusters	Sustainable Economic Growth			Socially Inclusive Development			Governance & Public Sector Management			Quality of Portfolio Performance		
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
Sustainable Economic Growth	1.00	1.00	1.00	0.77	0.76	0.83	0.81	0.82	0.83	0.57	0.72	0.74
Socially Inclusive Development	0.77	0.76	0.83	1.00	1.00	1.00	0.80	0.76	0.84	0.61	0.65	0.61
Governance and Public Sector Management	0.81	0.82	0.83	0.80	0.76	0.84	1.00	1.00	1.00	0.50	0.63	0.57
Quality of Portfolio Performance	0.57	0.72	0.74	0.61	0.65	0.61	0.50	0.63	0.57	1.00	1.00	1.00

Sustainable Economic Growth	Macroeconomic Management			Structural Policies			Environmental Protection		
	2001	2002	2003	2001	2002	2003	2001	2002	2003
Macroeconomic Management	1.00	1.00	1.00	0.61	0.66	0.72	0.22	0.46	0.69
Structural Policies	0.61	0.66	0.72	1.00	1.00	1.00	0.66	0.55	0.71
Environmental Protection	0.22	0.46	0.69	0.66	0.55	0.71	1.00	1.00	1.00

Macroeconomic Management	Fiscal Policy			Monetary Policy			External Financing Policies		
	2001	2002	2003	2001	2002	2003	2001	2002	2003
Fiscal Policy	1.00	1.00	1.00	0.61	0.52	0.69	0.85	0.65	0.74
Monetary Policy	0.61	0.52	0.69	1.00	1.00	1.00	0.64	0.20	0.42
External Financing Policies	0.85	0.65	0.74	0.64	0.20	0.42	1.00	1.00	1.00

Structural Policies	Trade Policy & Foreign Exchange Regime			Financial Sector Efficiency & Soundness			Factor & Product Markets & Prices			Enabling Environment for Private Sector		
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
Trade Policy and Foreign Exchange Regime	1.00	1.00	1.00	0.02	0.24	0.28	0.21	0.10	-0.02	0.14	0.08	0.20
Financial Sector Efficiency and Soundness	0.02	0.24	0.28	1.00	1.00	1.00	0.41	0.49	0.63	0.61	0.75	0.71
Factor and Product Markets and Prices	0.21	0.10	-0.02	0.41	0.49	0.63	1.00	1.00	1.00	0.64	0.72	0.65
Enabling Environment for Private Sector Development	0.14	0.08	0.20	0.61	0.75	0.71	0.64	0.72	0.65	1.00	1.00	1.00

Environmental Protection	Environmental Laws & Institutions			Environmentally Damaging Subsidies		
	2001	2002	2003	2001	2002	2003
Environmental Laws and Institutions	1.00	1.00	1.00	1.00	0.99	0.96
Environmentally Damaging Subsidies	1.00	0.99	0.96	1.00	1.00	1.00

Socially Inclusive Development	Framework for Poverty Monitoring & Policy			Enhancing the Economic Capital of the Poor			Developing the Human Capital of the Poor			Equity & Social Safety Nets			Empowerment & Participation		
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
Framework for Poverty Monitoring & Policy Formulation	1.00	1.00	1.00	0.68	0.76	0.81	0.62	0.81	0.76	0.65	0.69	0.68	0.77	0.63	0.69
Enhancing the Economic Capital of the Poor	0.68	0.76	0.81	1.00	1.00	1.00	0.89	0.85	0.88	0.82	0.86	0.85	0.64	0.69	0.76
Developing the Human Capital of the Poor	0.62	0.81	0.76	0.89	0.85	0.88	1.00	1.00	1.00	0.82	0.80	0.89	0.64	0.67	0.80
Equity and Social Safety Nets	0.65	0.69	0.68	0.82	0.86	0.85	0.82	0.80	0.89	1.00	1.00	1.00	0.69	0.75	0.80
Empowerment and Participation	0.77	0.63	0.69	0.64	0.69	0.76	0.64	0.67	0.80	0.69	0.75	0.80	1.00	1.00	1.00

Governance & Public Sector Management	Rule of Law			Anticorruption & Accountability			Civil Service			Revenue Mobilization & Budget Management			Management & Efficiency of Public Expenditures		
	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003	2001	2002	2003
Rule of Law	1.00	1.00	1.00	0.62	0.67	0.70	0.63	0.64	0.55	0.52	0.47	0.64	0.52	0.30	0.22
Anticorruption and Accountability Institutions	0.62	0.67	0.70	1.00	1.00	1.00	0.70	0.72	0.67	0.73	0.74	0.73	0.76	0.57	0.51
Civil Service	0.63	0.64	0.55	0.70	0.72	0.67	1.00	1.00	1.00	0.75	0.73	0.64	0.57	0.67	0.74
Revenue Mobilization and Budget Management	0.52	0.47	0.64	0.73	0.74	0.73	0.75	0.73	0.64	1.00	1.00	1.00	0.43	0.52	0.49
Management and Efficiency of Public Expenditures	0.52	0.30	0.22	0.76	0.57	0.51	0.57	0.67	0.74	0.43	0.52	0.49	1.00	1.00	1.00

15. Table D5 provides information on the covariance structure of ratings within each performance cluster in terms of the simple correlations on each pair-wise comparison of criteria. This information can help in detecting indicators whose informational content is low. Typically such an indicator would be strongly correlated with other like indicators. Among the main clusters, the portfolio scores show least correlation with other scores. All cluster scores are, however, positively correlated across countries, with the highest correlation being between performance on Sustainable Economic Growth and Governance and Public Sector Management. In the ADF sample, scores on both of these clusters are also positive correlated with GDP per capita.

16. Within the clusters, there is in general only modest correlation among scores across countries, suggesting that, for the most part, individual criteria are detecting different facets of policy and institutional performance. The highest correlation is among the environment variables, suggesting that there has been little informational benefit in differentiating between “Laws” and “Institutions and Subsidies”. Scores within the Socially Inclusive Development cluster tend also tend to be quite closely correlated, suggesting the possibility of some redundancy. The scores that show least affinity are those for the variables that are monitoring structural criteria, although correlations within this group have increased steadily over the three years of the rating exercise.

17. Finally, in Table D6 information on how countries perform in terms of the quintile distribution of performance is provided for the period 2001-2003. Table D7 translates this information to quintile average scores.

TABLE D6 COUNTRY PERFORMANCE RATINGS BY QUINTILE, 2001-2003

	2001	2002	2003
First Quintile	Bhutan, Cook Islands, Samoa, Sri Lanka, Tuvalu	Bhutan, Cook Islands, Samoa, Sri Lanka, Tuvalu	Bhutan, Cook Islands, Maldives, Samoa, Sri Lanka
Second Quintile	Bangladesh, Kyrgyz Republic, Maldives, Mongolia, Viet Nam	Bangladesh, Kyrgyz Republic, Maldives, Mongolia, Viet Nam	Indonesia, Mongolia, Pakistan, Tonga, Viet Nam
Third Quintile	Cambodia, Indonesia, Kiribati, Lao People’s Democratic Republic, Nepal	Cambodia, Indonesia, Kiribati, Nepal, Pakistan	Bangladesh, Cambodia, Kyrgyz Republic, Nepal, Tuvalu
Fourth Quintile	Azerbaijan, Federated States of Micronesia, Pakistan, Papua New Guinea, Tonga	Federated States of Micronesia, Lao PDR, Papua New Guinea, Tonga, Vanuatu	Azerbaijan, Kiribati, Lao PDR, Micronesia, Marshall Islands
Fifth Quintile	Marshall Islands, Nauru, Solomon Islands, Tajikistan, Vanuatu	Azerbaijan, Marshall Islands, Solomon Islands, Tajikistan	Papua New Guinea, Solomon Islands, Tajikistan, Vanuatu

Note: 2001-2003 exercise excludes Afghanistan and Myanmar; 2002-2003 exercise also excludes Nauru.

**TABLE D7 COUNTRY PERFORMANCE RATINGS, 2001- 2003
(AVERAGE RATINGS BY QUINTILE)**

Performance Quintile	Number of Countries	2001	2002	2003
First Quintile	5	4.42	4.30	4.30
Second Quintile	5	3.54	3.60	3.69
Third Quintile	5	3.26	3.34	3.47
Fourth Quintile	5	2.86	3.00	3.07
Fifth Quintile ¹	5/4	2.22	2.36	2.37
Overall	25/24	3.26	3.36	3.42

¹ Five countries in 2001 and four countries in 2002-2003.

18. While the quintile data are interesting they are subject to a number of interpretive problems, the most difficult of which occurs where there are border problems in the assignment of quintiles. This occurs most obviously where two scores are tied and the two countries in question are assigned to different quintiles. Several such cases occurred in the quintile ranking of ADF performance scores. More generally, quintile classifications do not guarantee that performance scores within quintile groups are more similar to each other than those across quintiles (especially at the borders).