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Options for a More Robust ADF Performance-Based Allocation System

Discussion Paper

ADF-13 First Replenishment Meeting
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Executive Summary

The resources of the African Development Fund (ADF) are allocated to national country envelopes through the Performance-Based Allocation (PBA) system, to the dedicated envelope for Regional Operations (ROs) and to the Fragile States Facility (FSF). This paper presents options for improvements to the PBA system for determining national country allocations. The FSF is discussed in the paper "Review of the Bank's Engagement in Fragile States". The overall ADF resource allocation framework, encompassing all three elements, will be addressed in a comprehensive manner during the second ADF-13 replenishment meeting.

At the ADF-12 Mid-Term Review, Management presented five avenues of exploration to modernize and improve the PBA system. Following Deputies' guidance, a Board of Directors' seminar, external consultations and further internal deliberations, this paper proposes concrete options for a more robust PBA system for Deputies' consideration, with a view to implementation in ADF-13. While maintaining an undiminished focus on performance, including in the field of governance, and preserving the simplicity of the system, the objective of these options is three-fold: (i) to align the allocation methodology with the Fund's strategic and regional focus; (ii) to ensure a meaningful engagement with recipient countries through country allocations; and (iii) to strengthen the PBA framework for fragile states.

The paper provides information on the institutional context, justification of Management's reasons to propose modifications to the current system, and an analysis of each option against five criteria: (i) clarity and simplicity; (ii) data availability; (iii) variation in allocations; (iv) impact on alignment between allocations and performance; and (v) efficiency in achieving outcome.

The options proposed for discussion by Management at the first meeting of the ADF-13 replenishment are the following:

1) Gradually revise the current Country Policy and Institutional Assessment (CPIA) questionnaire to better capture the performance of countries' policies and institutions related to established ADF operational priorities such as infrastructure and regional integration, and include the annual Africa Infrastructure Development Index developed by the ADB in the PBA formula as a needs component;

2) Increase the minimum allocation currently at UA 5 million to UA 10, 15 or 20 million to enable small allocation countries to take advantage of economies of scale;

3) Lower the exponent of population in the PBA formula from 1 to 0.75 or 0.5 to favor less populous countries and better reward performance;

4) Increase the (negative) exponent of Gross National Income (GNI) per capita from -0.125 to -0.25, -0.5 or -1 to account for access to other concessional and non-concessional sources of funding;

5) Use a partially differentiated CPIA questionnaire for fragile states that assesses their performance in dealing with the sources of fragility;

6) Incorporate an index of fragility in the PBA formula as a complement to existing measures of needs to address the different levels of fragility existing in all ADF countries.

These options aim to refine the current system for determining country allocations by addressing various elements of the system, both the measures of performance and of needs. It should be noted that the options are not mutually exclusive and can be combined at will. Management also emphasizes that the options presented in this paper concerning the PBA framework for fragile states do not pre-empt nor detract from the discussions on the Fragile States Facility, which will take place in the context of the paper "Review of the Bank's Engagement in Fragile States".

The paper also presents Management's intentions to strengthen the quality of the current measure of portfolio performance used in the PBA formula, during the ADF-13 period.

Deputies are invited to share their views on this paper and provide guidance with respect to Management's proposals. In particular;

- Which of the 6 options do you feel merit further analysis with a view to implementation in ADF-13?
- Is there any additional option not included which merits consideration?
- Is there any additional analysis you would like to see for the second replenishment meeting?

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Abbreviations

ADB	African Development Bank
ADF	African Development Fund
ADF-12	Twelfth Replenishment of the African Development Fund
ADF-13	Thirteenth Replenishment of the African Development Fund
AIDI	African Infrastructure Development Index
CPIA	Country Policy and Institutional Assessment
DSF	Debt Sustainability Framework
EVI	Economic Vulnerability Index
FSF	Fragile States Facility
GNI	Gross National Income
IADB	Inter-American Development Bank
IDA	International Development Association
IFAD	International Fund for Agricultural Development
LTS	Long Term Strategy
MTR	Mid-Term Review
PBA	Performance Based Allocation System
PPA	Portfolio Performance Assessment
RMC	Regional Member Country
SFI	States Fragility Index
WB	World Bank

OPTIONS FOR A MORE ROBUST ADF PBA SYSTEM

1. Introduction

1.1. The resources of the African Development Fund (ADF or the Fund) are allocated to national country envelopes through the Performance-Based Allocation (PBA) system, to the dedicated envelope for Regional Operations (ROs) and to the Fragile States Facility (FSF[1]). At the Mid-Term Review (MTR) of the Twelfth Replenishment of the ADF (ADF-12), Management presented five areas of possible improvement to the PBA system to strengthen the efficiency and impact of the Fund's operations on sustainable and inclusive growth: (i) alignment between the ADF aid allocation methodology and the Fund's operational priorities; (ii) consideration of continent- and region-specific factors affecting development in regional member countries (RMCs); (iii) rewarding outcome-based performance; (iv) ensuring a meaningful engagement through country allocations; and (v) improvement of the resource allocation system for fragile states.

1.2. Following Deputies' guidance, a Board of Directors seminar[2], and further internal reflections, this paper presents six options for discussion and potential implementation in ADF-13. Four other options have been analyzed but not selected after preliminary screening (see Annex V for information). In addition, this paper presents four proposed actions to strengthen the quality of the current measure of portfolio performance used in the PBA formula.

1.3. The six options are grouped under three categories according to their main area of impact: (i) aligning the allocation methodology with the Fund's strategic and regional focus; (ii) achieving meaningful engagement with recipient countries through the country allocations; and (iii) enhancing the PBA framework for fragile states. The analysis and evaluation of each option considers five characteristics: (i) clarity and simplicity; (ii) data availability; (iii) the variation in allocations that would occur if the option were implemented; (iv) the impact on the relationship between country allocations and performance; and (v) the efficiency in achieving the desired outcomes.

1.4. The options presented in this paper concern only the PBA system for allocating ADF resources to national country envelopes. The FSF is discussed in the "Review of the Bank's Engagement in Fragile States paper", and any options regarding the PBA for fragile states presented in this paper do not pre-empt nor detract from that discussion. The full ADF resource allocation framework, including the PBA, the RO envelope and the FSF, will be the subject of a comprehensive paper for the second replenishment meeting. The options presented here do not focus on leveraging capacity and co-financing incentives, as these are addressed in the ADF Long-Term Financial Capacity paper.

1.5. There are strong linkages between this paper, the "Review of the Bank's Engagement in Fragile States" and the "Long-Term Financial Capacity of the ADF" papers. Issues of identification of fragile states and eligibility criteria for additional resources through the FSF are also important to discussions on allocating PBA resources to these countries. At the same time, Management recognizes that some countries will be affected not only by modifications to the PBA system, but also by the proposal in the Long-Term Financial Capacity paper to differentiate lending terms. Management takes a holistic view and will perform additional country-specific analysis where necessary.

1.6. The paper is divided into six sections. Following this introduction, section 2 presents the context of the review. Then the current PBA system is briefly recalled in section 3. The six options are presented in section 4, while a summary of the evaluation of each option is provided in section 5. Section 6 concludes. Additional information regarding the options, including options that have been analyzed but not selected, is available in the annexes. In addition, a separate Technical Annex containing the full set of simulations is available upon request (in English only).

[1] The Fragile States Facility was created in 2008 and designed to provide support to eligible regional member countries via three pillars: the Supplemental Support window for funding infrastructure, state capacity building and accountability (Pillar I), the Arrears Clearance window (Pillar II) and the Technical Assistance and capacity building window (Pillar III).

[2] A Board of Directors seminar was organized on December 14th, 2012.

2. Context

2.1. As agreed during the ADF-12 replenishment and set out at the ADF-12 MTR, Management has undertaken internal and external consultations on the Fund's PBA system with academics, representatives from other multilateral financial institutions and policy-makers from ADF donor and regional member countries. Building on these consultations, the African Development Bank (ADB) in its role of African knowledge institution organized a High-Level Seminar on the "Prospects for Aid Allocation in a Changing Africa" in February 2012, attended by aid experts and scholars from Regional and Non-regional Member Countries. Following the discussion at the ADF-12 MTR, Management also held a seminar with the ADB Board of Directors on 14 December 2012.

2.2. What emerges from these consultations, and also from the clients' survey conducted by the Bank in 2012, is a strong consensus that the current PBA system, implemented in 1999, is due for review. The PBA system allocates resources according to a relationship between country needs, as measured by population and Gross National Income (GNI) per capita, and performance, as measured by the Country Policy and Institutional Assessment (CPIA), the Governance Rating (GR) and the Portfolio Performance Assessment (PPA). For more than ten years the system has remained fundamentally unchanged, modeled on that of the World Bank. Over time, Africa and the Bank Group have witnessed substantial changes in their economic and institutional circumstances, which may need to be reflected in the ADF's resource allocation system.

2.3. Also taking into account the substantial changes to the development assistance landscape, an examination of options to ensure that the ADF PBA system continues to meet the requirements of both donors and clients is warranted. Management acknowledges that any proposal for improving the current PBA system must be based on the premise that the ADF resources are best employed in countries with a good track record in terms of institutional and policy reforms (particularly in the area of governance) and project implementation.

2.4. Over the last decade, many African countries have made substantial progress in macroeconomic stability and economic growth but failed to achieve equivalent gains in social transformation and poverty reduction. The 2011 political revolution in Arab countries confirmed the need for policies and institutions designed for inclusive growth. Recognizing the need for enhancing the quality of growth, the Bank Group is formulating its Long Term Strategy (LTS) to guide its vision for the African continent for the next ten years. Following these developments, Management believes that the ADF's resource allocation system should be reviewed and adjusted to better reflect RMCs' needs and the LTS strategic vision.

2.5. In recent years, the Bank Group has become widely recognized as a knowledge institution with sufficient analytical expertise to assess whether a tailored resource allocation system is the best option for the Fund. The Bank Group has also remained focused thanks to a well-defined strategic orientation, which has been often praised by donors and clients but is not reflected in the current system.

2.6. The resource allocation framework is important for supporting the broader strategy of the Fund, especially: (i) implementing the LTS over 2013-2022 and achieving identified strategic objectives; (ii) responding to changes in the international development assistance architecture, which emphasizes the need for complementarity and division of labor; and (iii) capturing important changes in the ADF's client base, in particular the greater access of a number of ADF-only countries to non-concessional financing.

2.7. At the MTR, Management presented five possible areas of improvement to the PBA system. Participants indicated overall support for a review of the ADF PBA system, including the treatment of fragile states, with a range of views on whether it needed modest adjustments or deeper reforms. ADF Deputies stressed that the PBA system needs to be simple and transparent to recipient countries and donors alike. Alignment with other multilateral development banks, particularly the International Development Association (IDA), is important, but the differences between ADF's and IDA's operational priorities should also be taken into account.

2.8. Participants underscored that any options for improvement should maintain the focus on rewarding countries' good use of economic resources for achieving sustainable development and reinforce the role of country performance as the "bedrock" of the ADF allocation system.

Participants also remarked that effective use of country envelopes for development purposes cannot be addressed entirely through the PBA formula, but should also be tackled from a programmatic perspective, through the choice and design of aid instruments that fit each country's particular characteristics and context.

3. The Current Performance-Based Allocation System

3.1. The current PBA system dates from ADF-11, when some changes were made to the system introduced in ADF-8. The most notable of these changes were the creation of the dedicated Fragile States Facility and subsequent removal of the Post-Conflict Enhancement Factor from the PBA formula, and the separation of CPIA Clusters A through C from CPIA Cluster D, which became the Governance Rating (see Annex I for the clusters and the 16 CPIA criteria). Other, more minor, changes concerned the timing of the Debt Sustainability Framework (DSF) ratings, population and GNI per capita data, and the composition of the Country Portfolio Performance Rating (now called Portfolio Performance Assessment).

3.2. The annual allocation of ADF resources to eligible RMCs is a six-step process.

- First, resources for the RO envelope and the FSF are set aside. For the ADF-12 cycle, UA 1,164 million (i.e. 20% of total available resources) were set aside for RO and UA 764 million were set aside for the FSF.
- Second, all countries are granted a minimum allocation, currently set at UA 1.67 million per year or UA 5 million per cycle.
- Third, the remaining resources are allocated to eligible countries based on annual assessments of country circumstances using the PBA formula.
- Fourth, country-specific financing terms (loan, grant, or loan/grant combination) are determined using the agreed Joint World Bank- International Monetary Fund DSF.
- Fifth, debt relief to eligible countries under the Multilateral Debt Relief Initiative (MDRI) is deducted from beneficiary countries' allocations, while donor resources provided to compensate the ADF for foregone reflows are re-allocated to all ADF-only countries on the basis of the PBA.
- Finally, all allocations that fall under the minimum of UA 5 million for the ADF cycle are topped up to reach that level.

Application of the PBA Formula

3.3. Countries' allocations are determined by their needs, as measured by the GNI per capita and country population, and their performance, as measured by the country performance assessment score (CPA):

$$A_i = \frac{S_i}{\sum_{1}^{N} S_i} \times Total\_PBA\_envelope$$

Where A_i is the basic PBA allocation for country *i* and

$$S_i = (CPA_i)^4 \ x \ \left(GNI/P\right)_i^{-0.125} \ x \ P_i^1$$

With

$$CPA_i = 0.26\ CPIA_{(A-C)_i} + 0.58\ GR_i + 0.16\ PPA_i$$

And:

CPA_i	is the country performance assessment for country *i*
$(GNI/P)_i$	is the gross national income per capita for country *i*
$CPIA_{(A\text{-}C)i}$	is the country policy and institutional assessment for country *i*
GR_i	is the governance rating for country *i*
PPA_i	is the portfolio performance assessment for country *i*
P_i	is the population for country *i*

3.4. All else constant, an increase in a country's GNI per capita relative to the other ADF countries causesa decrease in the per capita allocation, while a relative increase in the CPA due to a net positive impact of CPIA, GR and/or PPA will cause an increase in the per capita allocation. Countries with large populations are allocated more resources in absolute terms.

3.5. Basic country allocations are currently capped at 10% of the total PBA envelope[3]. The excess is reallocated among the rest of the countries. Basic allocations for Blend countries[4] are subject to a 50% discount that is reallocated among the rest of the countries. No further cap is applied during the rest of the process (i.e. allocations resulting from the modified volume approach and the MDRI adjustments are not subject to any cap).

The DSF and modified volume approach

3.6. The DSF, used to determine each country's risk of debt distress, is based on two criteria: the country's institutional strength and the ability of its policies to withstand debt distress; and country-specific debt burden indicators (i.e. the net present value of debt/GDP ratio, the net present value of debt/exports ratio and debt service/exports ratio). Countries are classified as red, indicating high risk of debt distress; yellow, moderate risk; or green, low risk. Countries in the red category qualify for 100% grants; countries in the green category for 100% loans; and countries in the yellow category for a 50/50 loan/grant combination. Gap countries, Blend countries and graduating countries are not eligible for grants, regardless of their DSF status.

3.7. The primary purpose of the modified volume approach is to cover the forgone income and administrative charges for grant allocations upfront and to strengthen the incentive structure in the PBA system. This approach applies a 20% volume discount to all PBA grants: a 14.57% charges-related portion and a 5.43% incentives-related portion[5]. The incentives-related portion is then re-allocated to all ADF-only countries, using the basic allocations, to reinforce the PBA system's incentive structure.

MDRI Netting-out

3.8. The entry into effect of the MDRI in September 2006 introduced an additional step in the allocation of ADF resources. Countries qualifying for debt relief under the MDRI have their cancelled debt service payments deducted from their allocations each year through the netting-out mechanism. Resources provided by donors to compensate the ADF for the debt relief are re-allocated to all ADF-only countries, using the basic allocations resulting from the first step of the allocation process.

Ensure the Minimum Allocation

3.9. Any country whose allocation has fallen below the minimum level of UA 5 million for the three-year cycle (UA 1.667 million per year) due to the modified volume approach and MDRI adjustments, will see its allocation topped up to this minimum level, which was established in 2002 (ADF-10).

4. Identified Options for a More Robust ADF PBA system

4.1. Based on the guidance on selectivity provided by Deputies at the ADF-12 MTR, this section focuses on three areas for improving the PBA System: (i) aligning the aid allocation methodology with the ADF's strategic and regional focus; (ii) ensuring meaningful engagement with recipient countries through country allocations; and (iii) strengthening the PBA system for fragile states. The section also addresses the cross-cutting area of strengthening the quality of the current measure of PPA.

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[3] In 2012, the 10% cap applied only to Ethiopia and Nigeria

[4] Nigeria was the only Blend country in 2012

[5] The PBA country allocations of fragile states eligible for grants are subject only to the charges-related discount of 14.57%. These countries are excluded from the deduction and reallocation of the incentives-related portion of the volume discount. The discount on grants does not apply to top-up allocations under Pillar I of the Fragile States Facility.

4.2. For each area of focus, we describe the current situation, the rationale for intervention, and the options for improvement identified by Management. The analysis and evaluation of the different options follow in section 5, with descriptive statistics in Annex 4 (i.e. distribution by performance, variation of small versus large allocations, etc.). The options are not mutually exclusive, and Deputies can choose to apply multiple options simultaneously.

Focus area 1: Aligning the allocation methodology with the ADF's strategic and regional focus

4.3. Strengthening the link between the current PBA system and the areas of strategic focus for the Fund, such as infrastructure and inclusive growth, would align the PBA's incentive structure with the areas of direct ADF engagement. It would also increase the clarity of the system for clients by establishing a more direct relationship between the Fund's operations and the areas in which country performance is measured.

4.4. Given the stronger role of new donors in Africa and the virtually exclusive focus on African low-income countries that IDA will have by 2025, the link would also sharpen the Fund's comparative advantage and complementarity within the global development financial architecture. Most of the Regional Development Banks using the PBA system already take into consideration the links between mandate, strategic priorities, and country allocations. The International Fund for Agricultural Development (IFAD) considers performance in the rural sector and need in terms of rural population, the Caribbean Development Bank considers vulnerability indicators, and the Inter-American Development Bank (IADB) uses a modified CPIA aligned with its areas of intervention (see annex II).

Inclusive growth

4.5. According to the draft Long Term Strategy, inclusive growth is a cross-cutting objective which will make all Africans more prosperous, in part by providing more economic opportunities for Africans across age, gender, ethnicity and geography. It refers to "economic growth that results in wider access to sustainable socio-economic opportunities for a broader number of people, regions or countries, while protecting the vulnerable, all in an environment of fairness, justice and political plurality"[6]. The concept goes beyond income distribution to take into account the specific context of Africa in eight areas: job creation, including improving skills for competitiveness; equal access to basic infrastructure and social services; access to business opportunity; voice and accountability; regional integration, especially for smaller and landlocked countries; social protection and inclusion; access to productive knowledge; and agricultural productivity. Most of these areas are however poorly reflected in the current PBA system.

4.6. On the performance side, recent events in the region have uncovered important limitations of the CPIA framework used by the ADF. Issues such as government employment policies, conflict prevention, and food security, which are central for achieving inclusive growth, are not directly addressed in the current CPIA questionnaire. In line with the Bank Group's increased expertise and capacity, the criteria for measuring institutional performance in cross-cutting issues vital for Africa -such as gender equality, integration of ethnic minorities, resilience to climate change and environmental sustainability - require streamlining and clarification.

4.7. On the needs side, the current indicators (GNI per capita and population size) do not capture elements such as poverty prevalence and income distribution. Indicators of social development needs and capabilities that are linked to the Bank Group's focus on inclusive growth, such as the level of human capital and social equity, are absent in the current formulation. The differing structural characteristics of ADF recipient countries are also missing. For example, nearly one-third of African countries are landlocked, with no direct access to maritime ports and international transport networks. Among these, some are oil importers, making them highly vulnerable to external shocks and climate change.

[6] African Development Bank Group. *"At the Center of Africa's Transformation: Strategy 2013–2022*". ADB/BD/WP/2012/110/Rev.1

Infrastructure

4.8. Infrastructure development remains the main vehicle through which the ADF seeks to enable inclusive and sustainable economic growth in Africa. Investing in infrastructure advances human development, poverty reduction, and attainment of the Millennium Development Goals. The international community at the G8 Summit of 2005 pledged significant support for infrastructure. The Commission on Growth and Development (2008) also views infrastructure investment as crucial to structural transformation and export diversification. Other recent studies further confirm a positive relationship between infrastructure and economic growth[7].

4.9. Infrastructure's large share in the ADF portfolio, at more than 60% of ADF operations in ADF-11 and ADF-12, reflects the Bank Group's understanding that infrastructure development is a key driver of Africa's development and a vital enabler for regional integration and economic growth. It also reflects the significant contribution of infrastructure to human development, poverty reduction and the attainment of the Millennium Development Goals. The Africa Infrastructure Country Diagnostic results show that investment in infrastructure accounts for more than half of the recent improvement in economic growth in Africa, with the potential to do more[8].

4.10. Infrastructure's importance, however, is not fully reflected in the current PBA system. On the performance side, the CPIA does not include any direct references to countries' policy and institutional responses to their infrastructure needs. Transforming infrastructure investments into inclusive and sustainable growth requires a consistent and coherent government strategy over a long time.

4.11. On the needs side, the GNI per capita and the population factors do not capture differences in infrastructure development across Africa (Table 1). Countries like Mali and Chad, that have similar GNIs per capita and populations, differ greatly in infrastructure development. The opposite is also true: countries with wide disparities in population and GNI per capita like Niger and the Democratic Republic of Congo can have similar levels of infrastructure development.

Table 1: Population, GNI per capita and African Infrastructure Development Index, selected countries

Country	GNI per capita (USD) 2008-2010 average	Population (Millions) 2010	African Infrastructure Development Index 2010
Chad	593.3	11.51	14.05
Mali	563.3	13.32	28.86
Niger	346.7	15.89	16.90
DR Congo	170.0	67.83	14.38

Source: African Development Bank.

Notes: the African Infrastructure Development Index (AIDI) is a composite of five indicators: (i) net electricity generation (kilowatt-hours per capita); (ii) total mobile and fixed-line telephone subscribers (percentage of total population); (iii) paved roads (percentage of total roads); (iv) access to water (percentage of population); and (v) access to sanitation (percentage of population)

Identified options for improvement

4.12. Attempting to address the issues outlined above meets with serious challenges in terms of data availability and methodology. For example, including additional poverty and/or economic or social inclusion measures (such as poverty headcount or the Gini coefficient) in the PBA formula would weaken a system that is based on the premise of a fair and robust comparability across countries. Data from household surveys that provide the basis for the calculation of these indicators is difficult and expensive to gather and therefore scarce, irregular, or missing entirely in ADF countries. Taking these shortcomings into consideration, Management has identified the following option as the most suitable for reaching a better alignment between the allocation system and ADF strategic and operational priorities.

[7] Anyanwu and Erhijakpor (2009); Canning and Pedroni (2008); Égert, Koźluk and Sutherland (2009)

[8] Africa's Infrastructure: A Time for Transformation, World Bank 2010

Option 1: gradual revision of the current CPIA questionnaire and inclusion of the annual Africa Infrastructure Development Index in the PBA formula as a needs component

4.13. This option would increase the robustness of the PBA's main performance indicator, the CPIA, while complementing the existing measures of country needs. Gradual revision of the CPIA questionnaire is supported by the progress of the Bank Group in strengthening its analysis of the determinants and indicators of inclusive and sustainable growth in Africa. Including the annual AIDI developed by the ADB in the formula is in line with the Bank's role as a premier knowledge institution that produces high-quality data to inform policy-making in Africa.

Gradual Revision of the CPIA Questionnaire

4.14. In a first phase and for the 2013 CPIA scores (i.e. the ones to be used in the calculation of the 2014 allocations), revisions to the questionnaire would seek to strengthen measurement of the performance of policies and institutions related to established ADF operational priorities, such as infrastructure and regional integration. This can entail modifying individual questions, adding or replacing questions, changing the weighting of questions within clusters, or changing the weighting of whole clusters. The questions and their assessment would seek to take into account country-specific circumstances in order to achieve a more tailored approach. In a second phase, once the Bank has gained enough experience to develop suitable indicators of performance, the questionnaire would be further adjusted to measure countries' institutional and policy performance on inclusive growth and transition to green growth in a more detailed and comprehensive manner.

Inclusion of the AIDI as a needs component in the PBA formula

4.15. The AIDI monitors the status and progress of infrastructure development in Africa using five indicators: (i) net electricity generation; (ii) number of mobile and fixed-line telephone subscriptions; (iii) percentage of roads that are paved; (iv) access to water; and (v) access to sanitation. Each country is awarded a score ranging from 0 (lowest level of infrastructure development) to 100 (highest). The index would be included in the PBA formula with a negative exponent such that a lower score, i.e. a poorer level of infrastructure, would lead to a larger allocation. In line with the strategic and operational priorities of the Fund and in consistency with the LTS, incorporating the AIDI in the PBA formula would help direct the ADF's strong support for infrastructure to countries with relatively weaker basic physical infrastructure. This more tailored approach would help disadvantaged countries realize their full potential and advance toward economic productivity and growth, trade, and poverty reduction.

Focus area 2: Ensuring that country allocations allow for meaningful engagement with recipient countries

4.16. This sub-section sets out three challenges to meaningful engagement with recipient countries and how they could be addressed through the PBA: (i) the size and (lack of) adjustment of the minimum allocation, (ii) the role of population in determining the size of allocations; and (iii) the role of the ADF relative to other sources of official development assistance (ODA) and to non-concessional resources.

Size of allocations

4.17. In 2012, 4 of the 41 ADF-eligible countries received the minimum PBA allocation of UA 1.67 million (corresponding to UA 5 million per cycle) established in 2002 (ADF-10). Eight countries received an allocation below IDA's minimum of UA 3 million per year, i.e. UA 9 million per cycle.[9] At the same time, only two countries were affected by the 10% cap applied to basic allocations[10].

4.18. Since the minimum allocation was fixed in 2002 under ADF 10, the minimum allocation level has remained unchanged while the ADF replenishment size has more than doubled and consumer price inflation in Sub-Saharan Africa has averaged 9% per year (11% in ADF-eligible countries).

[9] In 2013, 3 of the 40 ADF-eligible countries received the minimum allocation of UA 1.67 million, and nine countries received an allocation below IDA's minimum of UA 3 million per year.

[10] Nigeria and Ethiopia

4.19. Larger minimum allocations would allow the ADF to finance more investment projects in small allocation countries and to leverage the effects of economies of scale. There is strong evidence of a scale effect in infrastructure projects in Africa as shown by the cost differential between small and large infrastructure projects (Table 2). Having the capacity to finance larger projects allows countries to benefit from significantly lower costs per unit. At the lower unit costs associated with larger projects, UA 5 million (the current minimum allocation) translates into 7 more kilometers of road, 600 more kilometers of electricity distribution line or 225 more kilometers of water pipe. Table 2 also shows how the lack of adjustment for general inflation affects the purchasing power of ADF minimum allocations. The same amount of resources could afford 2.5 less kilometers of roads, 35 less kilometers of electricity distribution, or 35 less kilometers of water pipes in 2011 than in 2006.

Table 2: Cost of infrastructure and purchasing power of the ADF minimum allocation - 2006 vs. 2011

Type	Unit	Cost 2006	Purchasing Power of ADF Min Allocation in 2006*	Purchasing Power of ADF Min Allocation in 2011	Difference
Electricity					
Distribution <66kv	USD/line km	27,632	280.5	245.4	-35.1
Distribution >= 66kv	USD/line km	8,278	936.2	819.1	-117.1
Substations =<50 MVA	USD/MVA	205,682	37.7	33.0	-4.7
Substations >50 MVA	USD/MVA	68,865	112.5	98.5	-14.1
Roads					
Construction (paved) < 50km	USD/lane km	401,646	19.3	16.9	-2.4
Construction (paved) >= 50km	USD/lane km	290,639	26.7	23.3	-3.3
Rehabilitation (paved) < 50km	USD/lane km	352,613	22.0	19.2	-2.7
Rehabilitation (paved) >= 50km	USD/lane km	299,551	25.9	22.6	-3.2
Water and Sanitation					
Pipe - small diameter	USD/km	26,000	298.1	260.8	-37.3
Pipe - midsize diameter	USD/km	144,000	53.8	47.1	-6.7

* *all in kilometers except for substations which are expressed in megavolt ampere*

4.20. Countries receiving smaller allocations are also more likely to be negatively affected by the MDRI netting-out step in the allocation process. In general, since 29 of the 41 ADF-eligible countries have now become eligible for MDRI debt relief, the effects of MDRI netting out and reallocation on the final ADF allocations are smaller than in IDA. In 2012, the amounts netted out from the (then) 26 MDRI countries' allocations were re-allocated to all 38 ADF-only countries, i.e. largely to the same countries[11]. However, ADF-12 saw the first four countries falling below the minimum allocation due to the amount of MDRI netted out, and this not being offset through reallocation. At the same time, Management analysis concludes that increasing the minimum allocation is a simpler and more effective way of dealing with this issue than limiting the netting out would be (see Annex V for options that were not selected).

[11] In 2012, 15 countries (of which 5 fragile states) had a lower allocation after the MDRI netting out and reallocation step in the allocation process than before, on average by UA 2.3 million (21.5% of their allocation). 23 countries (of which 12 fragile states) had a higher allocation after this step, on average by UA 1.5 million (6.6%).The remaining countries saw no change to their allocation.

Incidence of population in determining the size of allocations

4.21. Within the current system, the strong incidence of population in the formula explains much of the size of the allocation, which makes this factor the most strongly correlated with the size of the country PBA envelopes[12]. A basic simulation exercise shows that if all population differences were disregarded (i.e. if all countries were assumed to have the same number of inhabitants), the current 5 largest allocations would be cut by half on average, while the 5 smallest allocations would increase fivefold[13].

4.22. The current formula does not take into consideration aspects such as insularity, geographic and natural conditions that increase the costs of investment for smaller countries. Moreover, because the population factor outweighs each of the three components of the country performance assessment, substantial amounts of ADF resources flow to populous countries with weak portfolio and CPIA performance. Data also shows that countries with smaller allocations use PBA resources faster. All this suggests that the current exponent of the population factor is limiting the level of resources going to countries that need them despite their small populations and that have the capacity to use ADF resources in a way that would increase the overall performance and efficiency of the Fund's portfolio.

Relative role of the ADF vis-a-vis other donors and non-concessional sources

4.23. Table 3 shows that the countries receiving the lowest amount of ADF allocations (PBA + FSF Pillar I) in 2012[14] also received the least ODA from other sources. In three of these countries, the ADF (PBA and FSF Pillar I) provides more than 20% of the total ODA. In contrast, in none of the top eight ADF allocation countries does the ADF provide more than 10% of ODA. In other words, countries with small allocations depend more on the ADF to finance their development than do countries with large allocations.

Table 3: ADF Allocation, total ODA and ADF Share

Country	Rank ADF Allocation[1] 2012	Rank Total ODA Disbursements in 2005-2010[2]	ADF as % of Total ODA Disbursements 2005-2010[3]
Ethiopia	1	8.00	9.38
Tanzania	2	1.00	8.47
Kenya	3	4.00	3.05
Uganda	3	5.00	8.85
Ghana	5	6.00	7.77
DR Congo	6	10.00	3.74
Nigeria	7	3.00	0.62
Mozambique	8	2.00	8.62
Guinea-Bissau	30	34.00	21.76
Comoros	31	38.00	0.70
Lesotho	32	35.00	5.84
Eritrea	33	32.00	4.52
Djibouti	34	36.00	5.85
Gambia	35	33.00	24.21
Mauritania	36	26.00	12.73
Sao Tome & Principe	36	37.00	28.67

Sources: African Development Bank for ADF Allocations, OECD for Total ODA

Notes: (1) PBA + FSF Pillar I, Rank out of 36; (2) Rank out of 37; (3) ADB calculations based on OECD/DAC data

[12] Based on the correlation between the volume of country allocations and the different components of the PBA formula for 2012: 0.62 for population, 0.51 for CPIA, 0.48 for Governance Rating, 0.19 for portfolio performance and -0.06 for GNI per capita

[13] Management calculations based on the 2012 Country Allocations under ADF-12

[14] Somalia was not included as it received no ADF disbursement during the period.

4.24. Data also shows that ADF countries with the highest GNI per capita tend to receive the highest levels of foreign direct investment (FDI) per capita (exceptions being Cameroon and Cote d'Ivoire). In addition, some countries in this group have gained substantial access to financial markets in recent years, issuing public and publicly guaranteed debt. Limiting the volume or hardening the terms of ADF allocations for such relatively higher income level countries would free up scarce ADF resources for countries with greater needs and where the ADF can play a relatively more important role vis-à-vis other non-concessional sources of funding.

Table 4: Foreign Direct Investment (FDI) for the highest income ADF-only countries

Country	GNI per capita (Atlas Method, Average 2008 - 2010)*	FDI per capita (Net inflows, Average USD 2008 – 2010)
Congo, Rep. of	1990.00	654.72
Sudan	1266.67	61.72
Djibouti	1260.00	136.90
Ghana	1190.00	91.32
Cameroon	1183.33	10.75
Nigeria	1180.00	48.02
Cote d'Ivoire	1130.00	19.24
Sao Tome & Principe	1113.33	240.41
Senegal	1063.33	25.04
Lesotho	1050.00	52.46
Zambia	1010.00	84.55
Mauritania	986.67	31.07

* *GNI per capita, Atlas method, OECD for ODA*

Identified options for improvement

4.25. Management analyzed two types of options: (i) change in the ad-hoc measures complementing the PBA formula that impact the size of the allocation, and (ii) changes to the existing indicators of country needs and/or performance in the PBA formula. From all the analyzed options, three were identified by Management as the most suitable for potential implementation in ADF-13. Additional options that were not selected, including lowering the cap of 10% on basic allocations, are set out in Annex V.

Option 2: Increase the minimum allocation currently at UA 5 million to UA 10, 15 or 20 million

4.26. As stated above, increasing the size of the minimum allocation would allow ADF countries to benefit from important economies of scale. It would also provide a larger basis for the leveraging and catalytic role of ADF funding. For illustrative purposes, Management ran simulations assuming minimum allocations of UA 10, 15 and 20 million for the entire cycle. The UA 10 million scenario would represent a doubling of the current minimum, while 20 million is currently considered a "small allocation" eligible for cost-sharing exceptions in the context of the Regional Operations Framework[15]. Further discussions can be held on the exact minimum size (for example correcting for average inflation in Africa over the past 10 years).

Option 3: Lower the exponent of population from 1 to 0.75 or 0.5

4.27. For illustrative purposes, Management chose to include in this paper simulations assuming an exponent of 0.75 and 0.5. The exponent of 0.5 represents halving the current exponent while 0.75 constitutes the midpoint between the two. These two scenarios illustrate the potential impact of changes in the population exponent on country allocations. If Deputies agree to pursue this option, alternative scenarios may arise from further statistical and empirical analysis.

[15] *"Strategic and Operational Framework for Regional Operations"* (ADB/BD/WP/2008/31, 19 February 2008)

Option 4: Increase the (negative) exponent of the GNI per capita from -0.125 to -0.25, -0.5 or -1

4.28. Lower income countries tend to rely more heavily on concessional resources and typically face more difficulty in accessing non-concessional finance. This makes them more vulnerable to fluctuations in financial flows arising from the financial and economic crisis which can also affect donors' contributions. Increasing the negative weight of the GNI per capita could better target the ADF resources toward countries that receive few non-concessional resources. For illustrative purposes, Management chose to include in this paper simulations assuming an exponent of -0.25, -0.5 and -1. The exponent of -0.25 refers to the level used by the Asian Development Bank. The exponent of -1 refers to the level used by the InterAmerican Development Bank. The exponent -0.5 is an arbitrary choice between the two other scenarios. If Deputies agree to pursue this option, alternative scenarios may arise from further statistical and empirical analysis.

4.29. Management considers the GNI per capita level to be a good proxy for ADF countries' access to other sources of funding. As stated above, the countries with the highest GNI per capita among ADF recipients also exhibit the highest values of FDI per capita and some of them have also gained substantial access to financial markets during recent years. For the top 20 ADF countries in terms of GNI per capita, the correlation between this measure and FDI net inflows per capita is high (76%). At the same time, using the GNI per capita allows to "protect" countries with high FDI but still low levels of income such as Liberia that remain in need of large amounts of external concessional financing. Increasing the negative exponent on the GNI per capita factor in the PBA formula would allocate more resources to the poorest countries.

4.30. The three simulated scenarios (GNI per capita exponent of -0.25, -0.5 and -1) are meant to provide an illustration of the potential impact on country allocations. If Deputies agree to pursue this option, alternative scenarios may arise from further statistical and empirical analysis.

Focus area 3: Strengthening the PBA framework for fragile states

4.31. Conflict and state fragility (or situations of fragility) pose major constraints and risks to the development of a significant number of ADF client countries. Africa is currently home to 19 out of the 34 states considered fragile around the world[16]. Fragility is multi-dimensional[17] and affects countries differently depending on the state's capacity to prevent, resolve or manage conflict; guarantee security, justice and legitimate political processes; ensure good governance and economic management; and deliver basic government functions and services. Fragility also generates negative externalities for neighboring countries and sub-regions and even across continents.

4.32. The Bank Group LTS sets out the institution's renewed commitment to significantly scale up support to fragile regional member states and strengthen the Bank Group's strategic leadership role. A critical element of this scaled-up engagement is the need to improve the ADF resource allocation framework to better respond to the needs of countries that are identified as fragile[18], as well as those countries at risk of falling into that category. The ADF has a larger number of fragile states and populations than any other multilateral fund.[19] While the provision and amount of financial resources is not the only mechanism to prevent and respond to fragility, an effective allocation system should deliver a distribution of resources that addresses the particularities and implications of this condition.

4.33. This paper deals only with the PBA part of the ADF resource allocation framework. The role of the FSF in supporting fragile states is discussed in the "Review of the Bank Group's Engagement in Fragile States". Following the discussions at the first replenishment meeting,

[16] According to the AfDB/World Bank Harmonized List of Fragile Situations FY13, the recent update of which includes Libya and Mali.the term "Fragile Situations" indicates: either a) a harmonized average CPIA country rating of 3.2 or less, or b) the presence of a UN and/or regional peace-keeping or peace-building mission during the past three years.

[17] Fragility covers diverse situations. Though the major features remain the same - for instance insecurity, violence, conflict, weak institutions, poor economic and administrative governance - the degree of fragility and its symptoms varies across countries.

[18] This was highlighted in the Operations Evaluation Department's evaluation of the Bank's engagement in fragile states and also in the ADF Clients Survey undertaken in 2012

[19] In ADF-12, 18 out of the 41 ADF-eligible countries are fragile states according to the Bank Group's classification. While 17 of them are eligible for the Fragile States Facility, only 12 meet the eligibility criteria for Pillar I resources aiming at supporting infrastructure development and government strengthening.

Management will take a coordinated approach for the second meeting and present a paper covering the broader resource allocation framework in a comprehensive way.

Limitations of the current PBA approach for fragile states

4.34. The rationale for creating the FSF to provide additional resources to fragile states that meet the eligibility criteria was that fragile states have huge resource needs that cannot be addressed 'fairly' through the PBA system, as they start from a very low base of CPIA performance. Nonetheless the CPIA is used to classify countries as 'fragile' (if they score 3.2 or less) and determine their eligibility for resources from the FSF. While greatly appreciated for its rationale (addressing needs) and simplicity, implementation of this approach over the last two ADF cycles has revealed important limitations.

4.35. It has become clear that the CPIA is not an optimal tool for capturing the broad spectrum of fragility. The CPIA approach establishing a threshold below which countries are classified as fragile is based on the assumption that "weak capacity to develop and implement policies" necessarily reflects a state of fragility. While a strong correlation is undeniable, many countries which have sound and performing institutions remain vulnerable to other drivers of fragility such as inequality, lack of political freedom or even national identity issues. The CPIA is of limited value or applicability when it comes to capturing the heterogeneity or specificity and key drivers of fragility that fall outside of the standard performance indicators under the current four clusters (economic management, structural policies, policies on social inclusion and equity, and public sector management and institutions).

4.36. The recent examples of Tunisia, Libya and Mali, all countries with CPIA scores above the established threshold, tend to suggest that, at least, fragility is a broader and more comprehensive concept for which the current CPIA only captures part of its dimensions. At the same time, it has become generally accepted in international thinking that the concept of "performance" differs between fragile and non-fragile states, and that our current measures of performance may not be adequate for fragile states, which would plead for the development of new and different indicators to measure performance in these countries.

4.37. To address these limitations, there may be advantages in addressing the issue of fragility and the needs of fragile states through the PBA framework. This would entail that a fragility-oriented measure of performance or need would be applied to all ADF countries, including those already identified as fragile, as well as those at risk of becoming fragile. This approach is not meant to replace the role of the FSF, but rather to complement it by enabling the PBA to direct more resources towards countries displaying higher levels of fragility or facing a higher risk of fragility. The FSF would continue to provide dedicated resources to countries or situations with acute cases of fragility, state failure and/or post-conflict reconstruction and recovery needs. Such a complementary scheme between the PBA (as a preventive approach) and FSF (responsive) could also prove to be more cost-efficient than the current approach under which fragility is only treated ex-post (i.e. once the country has experienced a conflict or a crisis that has caused serious destruction to its economy).

Options for Improvement

4.38. The options analyzed by Management related to this area of focus were of two types: (i) change the way in which performance of fragile states is measured through the CPIA, and (ii) apply changes to complement the existing indicators of country needs in the PBA formula to account for fragility. From all the analyzed options, two were identified by Management as the most suitable for potential implementation in ADF-13:

Option 5: Use a partially differentiated CPIA for fragile states that additionally assesses their performance in dealing with the sources of fragility.

4.39. This option responds to the recognition that the concept of "performance" is different for fragile states, the need to capture the challenges and effectiveness in addressing the underlying causes of fragility, and the limitation of the current CPIA framework in capturing the broad spectrum of issues related to fragility. In addition to the regular CPIA, the option proposes the definition of a set of criteria and measurable indicators to assess performance in addressing drivers of fragility. Satisfactory performance on such indicators would entail a "bonus" which would be added to the regular CPIA score of the country. Since disentangling the causes for lack of performance (i.e. government policy, capacity or structural) may prove difficult in the context of fragility, this system rewards good performance without penalizing the lack of it.

4.40. The set of criteria and indicators could be inspired by the development of the peace- and state-building goals and indicators that were released by the International Dialogue Movement for Peace- and State-Building in November 2012. It could be considered to add one or two indicators to each of the current four CPIA clusters (economic management, structural policies, policies on social inclusion and equity, and public sector management and institutions) or to create a new, additional Cluster E which collects these indicators related to fragile states.

4.41. The implementation of this option would follow a two-step approach: for the next allocation exercise (i.e. 2014), an interdepartmental task force would be put in place to design and propose a set of criteria and measurable indicators for assessing countries' performance in dealing with fragility, building on the expertise across the Bank and the ongoing international dialogue on fragility issues. The second step would be the launch of the partially differentiated CPIA questionnaire for fragile states.

Option 6: Incorporate an index that measures state fragility in the PBA formula to complement current measures of needs.

4.42. In order to address the different degrees of fragility exhibited by ADF countries, a fragility index could be included in the PBA formula to complement the existing measures of needs. There are a number of indexes measuring state fragility developed by various academic and policy institutions. Despite all being related to fragility, the indexes' backgrounds, underlying rationales and compositions differ. While some aim at predicting the future risk of state failure, others attempt to depict the current level of state development. While some indexes focus exclusively on the security dimension, most add political, economic and social factors. The most well known and most used indexes include the Bertelsmann Transformation Index by the Bertelsmann Stiftung, the Country Indicators for Foreign Policy Fragility Index by Carlton University, the Failed State Index by the Fund for Peace, the Index of State Weakness in the Developing World by the Brookings Institution, the Economic Vulnerability Index (EVI) by the Committee for Development Policy of the United Nations Economic and Social Council, and the State Fragility Index by the Center for Systemic Peace.

4.43. In the absence of a Bank fragility index, Management simulated, for illustrative purposes, the inclusion of the State Fragility Index in the PBA formula. The choice was made based on the fragility dimensions covered by the index (security, political, economic and social) and the availability of data (produced annually from 1995 to date). The index ranges from 0 (lowest level of fragility) to 25 (highest level) and is included in the formula with a positive exponent, such that more fragile countries are allocated more resources.

4.44. Management ran simulations with an exponent of 0.5, 1 and 1.5, to provide an illustration of the potential impact on country allocations. Many alternative indexes and scenarios are possible. However, it should be noted that indexes covering fragile states in Africa generally face a challenge with the data availability. Data sources are scarce, not always reliable, prone to bias, and data can be expensive to collect. These factors should be taken into account when considering the use of fragility indexes to allocate resources. While options for dealing with fragility in the PBA formula are not mutually exclusive with the Bank's FSF, Management believes that fragility indexes may be better suited for defining fragility, or characteristics of fragility, and identifying fragile states.

Focus area 4 (cross cutting): Strengthening the quality of the measure of portfolio performance

4.45. The measure of portfolio performance in the PBA formula (PPA) is relevant for each of the three areas described above. In some cases, increasing the weight of the PPA could help to achieve the three identified objectives. However, due to its current shortcomings, Management believes that any increase in the weight of the PPA must be preceded by an improvement in the quality of the measure. This section first describes the linkages between the PPA and the three areas, and then proposes Management actions for the ADF-13 period.

4.46. *Alignment with strategic and regional focus*: ADF programs and projects are developed consistent with the Fund's strategic selectivity and on the basis of country-led priorities as determined by Country Strategy Papers. They therefore reflect the Fund's strategic and operational priorities at the time of approval. Consequently, increasing the weight of the portfolio measure in the PBA formula would help to align the allocation system to the Fund's strategic and regional focus in each recipient country, as measuring performance in ongoing Fund projects is analogous to measuring performance in the sectors and areas of the Fund's interventions.

4.47. *Achieving meaningful engagement with recipient countries*: excessive volatility of country allocations hampers the Fund's engagement with recipient countries by adding uncertainty to the future flow of resources. The PPA is the most important source of intra-cycle volatility in the PBA allocations. Between 2011 and 2012, the PPA was the most important driver of the change in country allocations with an average impact of 9.18%, above the impact of the Governance Ratings which came second with 4.13%. In addition, the lag between the country allocations and the portfolio rating used in their calculation complicates policy dialogue with ADF country governments.

4.48. *Strengthening the PBA framework for fragile states*: recent empirical evidence shows that fragile states score relatively low in terms of CPIA vis-à-vis non-fragile ones but that there are no differences in terms of portfolio performance[20]. This result can in part be explained by the fact that project design and the programmatic approach follow the Country Strategy Paper and thus already take into consideration the policy and institutional context of fragile countries. The rate of project supervision in fragile states has also increased in recent years, and might be contributing to overall improvements in portfolio performance. In this context, increasing the weight of portfolio performance could be considered in order to direct more PBA resources to well performing fragile countries.

4.49. In general, the PPA is currently calculated on the basis of the percentage of problem projects among the total number of ongoing supervised projects per country, using quarterly data. The percentage is converted to a rating using a conversion scale. While this is a seemingly simple and convenient way to assess country portfolio performance, the measure displays a number of shortcomings:

- there is a two-year lag between the country allocations and the portfolio rating used in their calculation, i.e. the 2012 allocations are based on 2010 portfolio performance, which weakens the relationship between allocations and performance;
- changes in the PPA particularly affect countries with a small number of projects in their portfolio due to the current adjustment for portfolio size as part of the conversion scale. This particularly affects fragile states;
- by counting only problem projects, the PPA is an unsophisticated measure that does not give a comprehensive picture of overall portfolio performance. It makes no distinction between projects that are performing satisfactorily, well or very well, for example. It also does not take into account the age of projects in the portfolio, which can be relevant for strategic alignment (older projects may be less aligned with current priorities).

Proposed Management Actions

4.50. Management will undertake a number of actions during the ADF-13 period to improve the quality of the PPA measure. These include:

- **Action 1**: examine how the time lag between the collection of portfolio performance data and their use in the ADF allocation calculations can be reduced, for example through the use of a 4-quarter rolling basis rather than the 4 quarters of a single calendar year.
- **Action 2**: examine how to reduce the excessive volatility in allocations caused by the PPA for small portfolio countries - for example by using annual or semi-annual rather than quarterly data, or revising the conversion scale with a view to reducing or removing the distortion for small portfolios.

[20] Once we eliminate the adjustment for size of portfolio. Based on the average performance of ADF countries for the period 2010 – 2012

- **Action 3**: evaluate the impact of the new project supervision rating developed by the Quality and Results Department and recently introduced as part of the Implementation Progress and Results Reporting for Public Sector Operations. The new rating system is more sophisticated and partially forward-looking. Using it to determine the proportion of problem projects is expected to improve the quality and strengthen the consistency between the portfolio performance measures used across the Bank Group. It would also help to address the issue of the time lag, as the ratings will be updated on a rolling basis and can be extracted when desired. The evaluation of this action would be subject to the collection of enough data to perform a robustness analysis.
- **Action 4**: consider to replace the size correction currently applied through the conversion scale by an adjustment for portfolio age so as to limit the impact of projects newly entering the portfolio. Under this approach, a discount is applied to the rating based on the probability that a project becomes problematic. Young projects are applied a harder discount than older projects because they are less likely to be problematic (they have had less time to run into problems). Conversely, projects that have been implemented over a number of years without becoming problematic indicate better performance. The probability and time horizons for projects becoming problematic would be calculated based on historical data. This methodology is already applied by the WB, the IADB and the Asian Development Bank.

5. Evaluation Results

5.1. Management has evaluated all options set out above in terms of their efficiency and effectiveness in achieving its three overarching objectives: (i) to align the allocation methodology with the ADF's strategic and regional focus; (ii) to ensure a meaningful engagement with recipient countries through country allocations; and (iii) to strengthen the PBA framework for fragile states. Each option was rated across 5 criteria: (a) clarity and simplicity; (b) data availability; (c) variation in allocations; (d) impact on the alignment between performance and allocations; and (e) efficiency in achieving the desired outcome.

5.2. This section summarizes the results of the analysis for the options outlined in section 4 under focus areas 1, 2 and 3. Proposed Management actions presented under area 4 (cross cutting) are not expected to have a significant impact on allocations during ADF-13 and thus they will be analyzed in further documents.

5.3. A description of the baseline and the analysis of each of the scenarios is set out in Annex IV. All inputs are those used for the calculation of the 2012 ADF-12 country allocations[21]. Angola and Cape Verde were not included in the simulations because they will complete their transition periods to ADB-only and will no longer be eligible for ADF resources during ADF-12 and ADF-13 respectively[22]. Annex IV contains a summary of the quantitative analysis for each option. A Technical Annex with the complete set of simulations is available upon request (in English only).

5.4. Management's qualitative evaluation indicates that **Option 1, gradually revising the CPIA questionnaire and including the AIDI as a new element in the PBA formula** with a negative exponent, is a relatively clear and simple measure (although adding an element to the PBA formula would increase its complexity) for which data are readily available. The variation (positive or negative) in allocations resulting from the implementation of this option is moderate, ranging from 2.5% to 14%. Scenarios show 13-14 countries (including 8-9 of the 17 fragile states) benefiting from redistribution. The (negative) impact on the link between performance and allocations is small. The option offers an effective approach to improve the alignment between the PBA system and the Fund's strategic and regional focus, as the introduction of the AIDI directs more resources to countries with greater infrastructure needs. The combination with the revision of the CPIA questionnaire ensures that the alignment between allocations and performance is maintained and even reinforced. However, in all simulated cases, more than 65% of the total redistributed resources are concentrated in three countries, reducing the efficiency of the option. Also, given that the AIDI is expressed in per capita terms, it strengthens

[21] See "*2012 Country Allocations Under ADF-12".* ADB/BD/WP/245

[22] Angola will no longer receive ADF resources as of 2013. Cape Verde will receive 60% of its ADF allocation in 2013, 40% in 2014 and 20% in 2015, losing eligibility for ADF in 2016.

the role of the population factor in driving allocation size. A combination of this option with a decrease in the population exponent (Option 3) is therefore advisable.

5.5. Management's evaluation indicates that **Option 2, increasing the minimum allocation**, is a clear and simple option and data availability is not an issue. 22 countries, including 16 fragile states, would receive a higher PBA allocation under the three scenarios simulated. The average variation in allocations is substantial for the countries gaining from this option (up to 116%), particularly -and as intended- for the 10 smallest allocations (up to 224%), but limited for the countries losing allocation (up to 7%); it is therefore efficient at achieving the desired outcome. Implementing the option has a limited negative impact on alignment between performance and allocations (small reallocation from top performing countries to lower performers). This option would therefore be relevant for enabling small allocation countries to take advantage of economies of scale and benefit from a larger basis to leverage more financing.

5.6. According to Management's analysis, **Option 3 of lowering the exponent of the population factor** is a clear and simple option for which data is already available. The average variation in allocations ranges from 12% to 80% although the average impact on the smallest allocations is much larger: up to 155%. With 29-30 countries including 13 fragile states receiving a higher allocation, the option would favor the majority of countries. The impact on alignment between performance and allocations is positive for the top performance quintile: with lower exponents, it receives more resources (but at the expense of the second quintile). However, the efficiency in achieving the desired outcome of meaningful engagement could be improved. The average nominal decrease is quite large compared to the average increase, half of the redistributed resources flow to just 5 countries, and the option does not account for the composition of the population in terms of social and infrastructure needs. Thus, countries which have a large population but also substantial "pockets" of poverty would see their allocations reduced. It is recommended to combine this option with another option (for example option 1) that can target the redistribution of resources towards countries with higher numbers of people in greatest need.

5.7. **Option 4, increasing the negative exponent of the GNI per capita factor in the PBA formula** to better capture ADF countries' access to other sources of financing, is clear and simple and data is readily available. The variation in allocations is balanced both in terms of number of countries seeing their allocation increase (18-19 of which 9-10 fragile states) and decrease (17 of which 5 fragile states) and in terms of the average magnitude of change (5-38%). However, most of the redistribution is skewed towards the middle of the allocation spectrum: neither the 10 largest nor the 10 smallest allocations are strongly impacted. Implementing the option weakens the linkages between performance and allocation size - up to 7% of resources are redistributed from the top performance quintile to the bottom quintile. While the option directs more resources to the poorest countries, examining other factors such as countries' access to FDI and ODA (see par. 4.23-24) shows that the option is not very effective in achieving the desired outcome: in general, the low FDI per capita and low ODA countries do not substantially gain. Therefore, Management believes the proposal for the differentiation of ADF lending terms included in the ADF Long Term Financial Capacity Paper represents a more effective way to engage meaningfully with recipient countries than this modification of the PBA formula.

5.8. **Using a partially differentiated CPIA for Fragile States that assesses countries' performance in dealing with the sources of fragility (Option 5)** is an effective approach for aligning the allocation methodology with the Fund's objective of enhancing its support to fragile states. This option is a relatively clear and simple measure. It will enhance the understanding of drivers of fragility and reward performance, as countries performing well in dealing with fragility drivers will receive additional resources. While there are challenges to collecting data in fragile states, use could potentially be made of ongoing work on the peace- and state-building goals and indicators, and the Bank's strong presence in the field should contribute to the robustness of the analysis.

5.9. Finally, Management's evaluation indicates that **Option 6, including an index of fragility in the PBA formula** to address the different levels of fragility existing in all ADF countries, may appear to be a clear and simple approach (although adding an element to the PBA formula would increase its complexity). However, the number and scope of the existing fragility indexes that could be considered are significant, they generally face challenges with availability and reliability of data, and they each have their pros and cons. The State Fragility Index used for the simulations in this paper is composed of 8 indicators, is compiled annually and data is available for nearly all ADF countries. The average variation in allocations that results is moderate: between 2% and 10%. 20-21 countries, of which 11-12 fragile states, see their allocation increase, while 15 (of which 3 are fragile states) see a decrease. The option redistributes resources from the top performers towards the lower performers. In addition, while the cost for the largest allocations may be low, the simulations suggest that the option is not a very efficient way to achieve the desired outcome. While approx. 60% of the redistributed resources flow to the 17 fragile states, the reallocation is highly concentrated to only 3 of them, who together with 2 non-fragile states receive approx. 65% of the total. Management therefore believes that indexes of fragility may be better used in the context of defining fragility and identifying/distinguishing fragile states.

6. Conclusions

6.1. After extensive internal and external consultations Management has defined three objectives for improving the PBA system: (i) to align the allocation methodology with the ADF's strategic and regional focus; (ii) to ensure a meaningful engagement with recipient countries through country allocations; and (iii) to strengthen the PBA framework for fragile states.

6.2. The options included in this paper constitute a small sub-set of the many options for improvement analyzed by Management. They have undergone a quantitative and qualitative analysis based on 5 criteria including clarity and simplicity, data availability, efficiency, impact on allocations as well as the impact on the relationship between the volume of ADF allocations and country performance. Some options refine the definition of country needs. Others strengthen the measurement of countries' performance.

6.3. Six concrete options to increase the robustness of the current PBA system are presented for discussion and consideration for ADF-13:

- Gradual revision of the CPIA questionnaire plus the inclusion of the African Infrastructure Development Index in the PBA formula as an additional measure of countries' needs;
- Increase the minimum allocation to allow small allocation countries to take advantage of economies of scale;
- Lower the exponent of the population factor in the PBA formula in order to favor less populous countries and better reward performance;
- Increase the negative exponent of the GNI per capita factor to better capture ADF countries' access to other sources of financing;
- Use a partially differentiated CPIA for fragile states that assesses their performance in dealing with the sources of fragility;
- Include an index that measures state fragility in the PBA formula to address the different levels of fragility existing in all ADF countries.

6.4. Management's assessment of and initial comments on these options are contained in section 5. In addition, Management proposes four actions to strengthen the quality of the current measure of portfolio performance.

7. Issues for Deputies' Guidance

1. Which of the 6 options do you feel merit further analysis with a view to implementation in ADF-13?
2. Is there any additional option not included which merits consideration?
3. Is there any additional analysis you would like to see for the second replenishment meeting?

References

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Annex I: The African Development Bank Country Policy and Institutional Assessment (CPIA)

The ADB CPIA is a system designed to assess the quality of a country's present policy and institutional framework, in terms of how conducive it is to the efficient utilization of scarce resources in the pursuit of sustainable and poverty reducing development. It is based on the analysis of ADB Country Experts across 16 criteria covering four main clusters: a) Economic Management; b) Structural Policies; c) Policies for Social Inclusion and Equity; and d) Public Sector Management. Scores range between 1 (very weak for two years or more) and 6 (very strong for 3 years or more) and are revised every year. Ratings derive from informed judgment on tangible results resulting from implementing policies over a sustained period of time rather than on intended policies. Institutions and their good functioning are also important. Scores focus on the level of performance assessed against a given criteria rather than the degree of improvement since the previous year.

Box II-1: CPIA CRITERIA

A. Economic Management

1. Macroeconomic Management
2. Fiscal Policy
3. Debt Policy

B. Structural Policies

4. Policies and Institutions for Economic Cooperation, Regional Integration & Trade
5. Financial Sector
6. Business Regulatory Environment

C. Policies for Social Inclusion/Equity

7. Gender Equality
8. Equity of Public Resource Use
9. Building Human Resources
10. Social Protection and Labor
11. Environmental Policies and Regulations

D. Governance Rating: Public Sector Management and Institutions

12. Property Rights and Rule-based Governance
13. Quality of Budgetary and Financial Management
14. Efficiency of Revenue Mobilization
15. Quality of Public Administration
16. Transparency, Accountability, and Corruption in the Public Sector

Annex II: Current PBA Allocation Formulas among Multilateral Financial Institutions

Institution	Indicator	Weight Exp.	Categorization	Source	Indicator	Weight Exp.	Categorization	Overall Allocation	Denomination
AfDB	GNI per Capita Population	-0.125 1	Main Component Main Component	World Bank UN Population Division	Country Performance Assessment (CPA) CPIA Country Governance Rating (GR) Portfolio Performance Assessment (PPA)	4 0.26 0.58 0.16	Main Component CPA Sub-Component CPA Sub-Component CPA Sub-Component	(CPA)^4 * Population^1*(GNI/P)^-0.125 Where CPA = (0.26 CPIA + 0.58 GR + 0.16 PPA)	Allocation Formula
AsDB	Per Capita Income (PCI) Population (Pop)	-0.25 0.6	Main Component Main Component	World Bank UN Population Division	Composite Country Portfolio Performance (CCPR) Policy and Institutional Rating (PIR) Governance Rating (GR) Portfolio Performance Rating (PR)	2 1.4 2 0.6	Main Component CCPR Sub-Component CCPR Sub-Component CCPR Sub-Component	(CCPR^2 * Pop^0.6 * PCI^-0.25) * Scaling Factor Where CCPR^2 = (PIR^1.4 * GR^2.0 * PR^0.6) Scaling Factor = 1 ÷ Σ (PIR^1.4 * GR^2.0 * PR^0.6 * Pop^0.6 * PCI^-0.125)	Country Allocation Share (CAS)
CARIBANK	Per Capita Income (GNP pc) LOGARITHM Population (LogPOP) Vulnerability (VUL)	-0.9 1 2			Country Performance (CP) Policy and Institutional Performance (PRES) Portfolio Performance (PORT)	2 0.7 0.3	Main Component CP Sub-Component CP Sub-Component	(Country Need) * (Country Performance)^2 (logPOP * GNPpc^-0.9 * VUL^2) * (0.7 PRES + 0.3 PORT)^2	

IADB	GNI per Capita (GNI/C) Population (Pop)	-1 0.5	Main Component Main Component	World Bank UN Population Division	Country Performance (CP) Country Institutional and Policy Evaluation (CIPE) Portfolio Performance (PP)	2 0.7 0.3	Main Component CP Sub-Component CP Sub-Component	(GNI/C)^1 * Pop^0.5 * (0.7*CIPE + 0.3 * PP)^2	Enhanced Performance -Based Allocation (EPBA)
IDA	GNI per Capita (GNI/capita) Population	-0.125 1	Main Component Main Component	World Bank UN Population Division	Country Performance Rating (CPR) CPIA Cluster A to C CPIA Cluster D County Portfolio Performance Rating	5 0.24 0.68 0.08	Main Component CPR Sub-Component CPR Sub-Component CPR Sub-Component	F(CPR^5.0, Population, GNI/capita^-0.125)	IDA Resource Allocation Index (IRAI)
IFAD	GNI per Capita (GNI/C) Rural Population Data (RP)	1 1	Main Component Main Component	World Bank UN Population Division	IDA CPIA (IRAI) Rural Sector Performance (RSP) Portfolio Assessment Rating (PAR)	0.3 0.4 0.3	Main Component Main Component Main Component	GNIC * RP * IRAI *0.20 + RSPA * 0.45 + PAR * 0.30	Allocation Formula

Annex III: Summary of Simulation Scenarios for the Six Proposed Options

Focus Area	Option	Simulation Scenarios	Population Exponent	GNI pc Exponent	CPA Exponent	AIDI Exponent	SFI Exponent	Minimum Allocation (UA MM per cycle)	New PBA Allocation Formula	Comments
			1	**-0.125**	**4**	**0**	**0**	**5**		
I. Aligning the allocation methodology with Fund's strategic and regional focus	*1. Gradual Revision of CPIA* +	1	1	-0.125	4	0	0	5	Simulation Scenario 1: $PBA = CPA^{4} * Population^{1} * (GNI/P)^{-0.125} * AIDI^{-0.5}$ Simulation Scenario 2: $PBA = CPA^{4} * Population^{1} * (GNI/P)^{-0.125} * AIDI^{-0.25}$ Simulation Scenario 3: $PBA = CPA^{4} * Population^{1} * (GNI/P)^{-0.125} * AIDI^{-0.125}$	May affect the weight of CPIA clusters but overall weight will remain the same.
	Inclusion of AIDI	1	1	-0.125	4	-0.5	0	5		The effective weights will change as an additional component is added to the PBA formula.
		2	1	-0.125	4	-0.25	0	5		
		3	1	-0.125	4	-0.125	0	5		
II. Meaningful engagement with recipient countries	*2. Increase Minimum Allocation*	1	1	-0.125	4	0	0	10	No changes in the PBA formula (remains as it is currently): $PBA = CPA^{4} * Population^{1} * (GNI/P)^{-0.125}$	The PBA components keep the same weight; all country allocations are automatically adjusted to the minimum agreed allocation.
		2	1	-0.125	4	0	0	15		
		3	1	-0.125	4	0	0	20		
	3. Decrease Population Exponent	1	0.75	-0.125	4	0	0	5	Simulation Scenario 1: $PBA = CPA^{4} * Population^{0.75} * (GNI/P)^{-0.125}$ Simulation Scenario 3: $PBA = CPA^{4} * Population^{0.5} * (GNI/P)^{-0.125}$	The effective weights will change at the expense of the population component of the PBA formula.
		2	0.5	-0.125	4	0	0	5		
	4. Increase the (negative) Exponent of GNI pc	1	1	-0.25	4	0	0	5	Simulation Scenario 1: $PBA = CPA^{4} * Population^{1} * (GNI/P)^{-0.25}$ Simulation Scenario 2: $PBA = CPA^{4} * Population^{1} * (GNI/P)^{-0.5}$ Simulation Scenario 3: $PBA = CPA^{4} * Population^{1} * (GNI/P)^{-1}$	The effective weights will change at the expense of the GNI pc component of the PBA formula.
		2	1	-0.5	4	0	0	5		
		3	1	-1	4	0	0	5		
III. Strengthening the PBA framework for fragile states	*5. Differentiated CPIA for Fragile States*	1	1	-0.125	4	0	0	5	No changes in the PBA formula (remains as it is currently): $PBA = CPA^{4} * Population^{1} * (GNI/P)^{-0.125}$	May affect the weight of CPIA clusters but overall weight will remain the same.
	6. Inclusion of State Fragility Index (SFI)	1	1	-0.125	4	0	0.5	5	Simulation Scenario 1: $PBA = CPA^{4} * Population^{1} * (GNI/P)^{-0.125} * SFI^{0.5}$ Simulation Scenario 2: $PBA = CPA^{4} * Population^{1} * (GNI/P)^{-0.125} * SFI^{1}$ Simulation Scenario 3: $PBA = CPA^{4} * Population^{1} * (GNI/P)^{-0.125} * SFI^{1.5}$	The effective weights will change as an additional component is added to the PBA formula.
		2	1	-0.125	4	0	1	5		
		3	1	-0.125	4	0	1.5	5		

* *The red color indicates the changes made in the PBA formula; i.e. new indexes and respective exponents or changes within the CPIA questionnaire*

Annex IV: Detailed Analysis of Options for Improvement

Methodological notes

All options have been simulated against a baseline scenario which uses the same input data as for the 2012 ADF-12 allocations[23] but excludes Angola and Cape Verde, as they will complete their transition periods to ADB-only and lose eligibility for ADF resources during ADF-12 and ADF-13 respectively.

The analysis and evaluation of each option considers five criteria: (i) clarity and simplicity; (ii) data availability; (iii) the variation in allocations that would occur if the option were implemented; (iv)the impact on the relationship between country allocations and performance; and (v) the efficiency in achieving the desired outcomes.

The first criterion "Clarity and simplicity" assesses the extent to which the option is easy to understand and does not add complexity to the PBA system.

The second criterion "data availability" takes into account the availability of appropriate, good quality data that is regularly produced.

The third criterion "variation in allocations" assesses the magnitude of the impact in the direction of the desired outcome. For example, a positive shift would direct more resources to low allocation countries, to countries with strong infrastructure needs or to countries at higher levels of (risk of) fragility. It considers the total redistributed resources and the number of countries that are positively affected by the option, including impacted fragile states. It also assesses the average impact in percentage and in volume terms on the 10 smallest allocations and the 10 largest allocations.

The fourth criterion "impact on the relationship between country allocations and performance" assesses the extent to which the option affects the performance principle by examining the distribution of resources per CPA Performance Quintile following each scenario.

The fifth criterion "efficiency in achieving the desired outcome" weighs the extent to which the desired outcome is reached (i.e. increases in the allocations of certain countries) against the "cost" for achieving this result (i.e. the decreases experienced by other countries). For example, an option which yields a small positive impact for certain countries but at the cost of large decreases in allocation for other countries is not efficient. Moreover, as it is an overall assessment, this final step identifies potential adverse consequences of the option's implementation and recommends combination between options to optimize the expected outcome.

FOCUS AREA 1: Aligning the allocation methodology with the ADF's strategic and regional focus

Option 1: Combination of Gradual Revision of the CPIA questionnaire with Inclusion of the AIDI in the PBA formula

This option would increase the robustness of the PBA's main performance indicator, the CPIA, while complementing the existing measures of country needs in accordance with the ADF's strategic focus.

Scenarios

There are no modeling scenarios for the revision of the CPIA questionnaire yet. The revision would seek to strengthen the measurement of the performance of countries' policies and institutions related to established ADF operational priorities such as infrastructure and regional integration. This can entail the modification of individual questions, adding or replacing questions, changing the weighting of questions within clusters, or changing the weighting of whole clusters.

For the AIDI, Management ran scenarios of AIDI inclusion with exponents of -1, -0.5, -0.25 and -0.125. The scenario of -1 was disregarded due to the redistribution of nearly UA 50 million towards a single country with a subsequent negative impact on the alignment between performance and allocations.

Clarity and Simplicity

The revision of the CPIA will ensure that specific indicators and methodology are established in as simple and clear a way as possible. Although it is recognized that adding an element to the PBA

[23] *"2012 Country Allocations Under ADF-12".* ADB/BD/WP/245

formula would increase its complexity, the AIDI provides consolidated and comparative information on the status and progress of infrastructure development in African countries in per capita terms, using 5 well-known physical indicators. The index has a clear and simple methodology for collecting and compiling information.

Data Availability

The AIDI is produced by the ADB. Data is available since 2000 and is updated every year. The lag of this index is two years but no important swings are shown in the past 10 years of data. Regarding the revision of the CPIA, data issues will be managed as present. When available, data on internationally recognized indicators will be collected. If this information is not available, then country economists will rely on local data and qualitative assessments. The strong Bank presence in the field will certainly contribute to the robustness of the analysis.

Variation in Allocations

Regarding the revision of the CPIA, should Deputies favor this option, Management will provide more information on various possible changes for the second replenishment meeting.

Regarding the inclusion of the AIDI, Table V-1 below summarizes the results for the three simulated scenarios in terms of the number of countries affected, total resources redistributed and average increase/decrease in UA million and % of the ten smallest/largest allocations. Including the AIDI in the formula would have a total redistributive effect of between UA 18 and 65 million. Scenarios show 13-14 countries (including 8-9 fragile states) benefiting from such redistribution. However, in all cases, 3 countries receive more than 65% of the total resources redistributed. Most of the redistribution takes place among the medium-sized allocations; the smallest and the largest allocations are not much affected. Robustness analysis using the period 2000-2010 shows absence of major swings in allocations as a result of the introduction of the index.

Table V-1: Summary of Simulations – Impact* of Introduction of AIDI in the PBA formula

Exponent AIDI	# Higher Allocation	# Lower Allocation	# No change	Total Redistributed Resources (UA per year)**	Average Increase (per year)		Average Decrease (per year)		Average Impact on 10 smallest allocations (per year)		Average Impact on 10 largest allocations (per year)	
					UA MM	%	UA MM	%	UA MM	%	UA MM	%
-0.125	13	22	4	18.16	1.40	3.65	-0.83	-2.59	-0.02	-0.88	0.40	0.57
-0.25	13	22	4	35.81	2.75	7.38	-1.65	-5.10	-0.03	-1.69	0.73	1.11
-0.5	14	22	3	64.68	4.62	14.13	-3.16	-9.70	-0.05	-2.75	0.72	1.87

* *As measured against Baseline Scenario, **Sum of additional resources going to increased allocations*

Impact on Alignment between Performance and Allocation

The proposed revision of the CPIA questionnaire aims to improve the quality of the Fund's measurement of countries' performance, and thus to strengthen the alignment between allocations and performance.

For the AIDI, under the -0.125 and -0.25 exponent scenarios, there are no major distortions in terms of the relationship between performance (as measured by the CPA) and the size of allocations when compared to the baseline scenario. When we test for the -0.5 exponent in the AIDI, we observe 2.7% redistribution from the top performance quintile to the bottom one.

Table V-2: Distribution of Resources per CPA* Performance Quintile (%)

Performance	Baseline	AIDI Exponent		
		-0.125	-0.25	-0.5
1st Quintile (top performers)	25.25	24.50	23.77	22.50
2nd Quintile	41.68	41.74	41.72	41.08
3rd Quintile	18.14	18.26	18.41	18.83
4th Quintile	6.56	6.76	6.98	7.50
5th Quintile	8.37	8.74	9.13	10.08

* *0.26 CPIA + 0.58 GR + 0.16 PPA*

Efficiency in achieving outcome

Revising the CPIA questionnaire to improve the measurement of countries' performance in the ADF's areas of focus, such as inclusive growth and infrastructure, is an efficient and effective way to achieve greater alignment between the allocation methodology and the Fund's strategic objectives and regional focus. The questions and their assessment would seek to take into account country-specific circumstances in order to achieve a more tailored approach. Including the AIDI in the formula will direct more resources to countries with a weaker level of infrastructure development, and is thus also an effective measure.

However, the redistribution of allocations as a result of the introduction of the AIDI is highly concentrated to three large population countries. This is mainly due to the per capita expression of the index which further strengthens the already substantial effect of the population factor in driving allocations (see par. 4.21).This effect could be countered by combining this option with a decrease in the population exponent (Option 3).

FOCUS AREA 2: Ensuring meaningful engagement with recipient countries through country allocations

Option 2: Increase the minimum allocation

Increasing the size of the minimum allocation would allow ADF countries to benefit from important economies of scale and would also provide a larger basis for the leveraging and catalytic role of ADF funding.

Scenarios

Management ran simulations assuming minimum allocations of UA 10, 15 and 20 million for the entire cycle.

Clarity and Simplicity

The option is clear and simple. If the option is selected, Management proposes a consultation process involving the relevant sector departments to determine the best option for the minimum allocation size.

Data availability

This does not apply to this option.

Variation in allocations

Table V-3 below summarizes the results for the three simulated scenarios in terms of the number of countries affected, total resources redistributed and average increase/decrease in % and UA million of the ten smallest/largest allocations. The total redistribution is between UA 26 and 80 million. It is interesting to note that not only the 4 countries currently receiving the minimum allocation, or the 8 countries below IDA's minimum, would benefit from this option, but actually 22 countries would see their allocations increase. While the average impact on the 10 largest allocations is limited, the average impact on the 10 smallest allocations is very high in percentage terms because all allocations below the new cutoff mechanically increase. The largest single allocation decrease is UA 5.8, 11.7 and 17.5 million under the UA 10, 15 and 20 million scenario, respectively. Regarding the impact on fragile states, 16 of the 17 countries currently benefiting from the FSF would receive a higher allocation under the three scenarios, on average between 36% and 110% increase.

Table V-3: Summary of Simulations – Impact* of increase in Minimum ADF Allocation

Minimum Allocation for the whole ADF cycle (UA million)	# Higher Allocation	# Lower Allocation	# No change	Total Redistributed Resources (UA per year)**	Average Increase (per year)		Average Decrease (per year)		Average Impact on 10 smallest allocations (per year)		Average Impact on 10 largest allocations (per year)	
					UA MM	%	UA MM	%	UA MM	%	UA MM	%
10	22	17	0	26.46	1.20	38.36	-1.68	-2.36	1.66	73.86	-2.42	-2.89
15	22	17	0	53.03	2.41	77.05	-3.36	-4.73	3.34	148.49	-4.86	-5.79
20	22	17	0	79.81	3.63	116.3	-5.05	-7.12	5.04	224.39	-7.30	-8.71

* *As measured against Baseline Scenario, **Sum of additional resources going to increased allocations*

Impact on alignment between performance and allocations

There is a negligible impact under the UA 10 million scenario. The increase to UA 20 million results in 2% of resources being redistributed from the top performance quintile to the lowest quintile.

Table V-4: Distribution of Resources per CPA* Performance Quintile (%)

Performance	Baseline	10 million	15 million	20 million
1st Quintile (top performers)	25.25	24.63	24.01	23.39
2nd Quintile	41.68	40.78	39.87	38.95
3rd Quintile	18.14	18.37	18.59	18.81
4th Quintile	6.56	7.28	8.00	8.74
5th Quintile	8.37	8.94	9.52	10.11

* *0.26 CPIA + 0.58 GR + 0.16 PPA*

Efficiency in achieving outcome

This option combines a high impact on small allocations, including those of fragile states, with a moderate impact on large allocations (in % terms). The higher minimum allocation would it make possible for the current smallest allocation countries to take advantage of economies of scale and benefit from a larger basis to leverage more financing. Should Deputies favor this option, a consultation process involving the relevant sector departments to determine the best option for the minimum allocation size should be launched.

Option 3: Decrease the Exponent of Population

This option aims to mitigate the weight of population, which is an important determinant of allocation size, in the formula. This would favor less populous countries and enhance the relative weight of performance.

Scenarios

Management simulated two scenarios: a population exponent of 0.75 and 0.5. The latter is used by the InterAmerican Development Bank in its PBA formula (the Asian Development uses an exponent of 0.6). These are meant to provide an illustration of the potential impact on country allocations.

Clarity and Simplicity

The implementation of this option is simple. If the option is selected, Management proposes a consultation process involving the relevant sector departments to determine the most appropriate exponent.

Data Availability

There are no issues regarding data availability. The indicator is already in use for the calculation of ADF Performance Based Allocations.

Variation in Allocations

Table V-5 below summarizes the results for the two simulated scenarios in terms of the number of countries affected, total resources redistributed and average increase/decrease in % and UA million of the ten smallest/largest allocations.. In both cases the number of countries with an increased allocation is almost triple the number of countries with lower allocations and includes 13 fragile states. Between UA 74 and 175 million are redistributed, of which nearly 50% flows to 5 countries, although most recipients receive at least UA 0.5 million and UA 1 million additional resources under the 0.75 and 0.5 exponent scenarios, respectively. The average variation in allocations (positive or negative) ranges from 12% to 80%, but the average percentage increase in the 10 smallest allocations is much higher (up to 155%) than the decrease in the 10 largest ones.

Table V-5: Summary of Simulations – Impact* of decreasing the exponent of Population

Pop exponent	# Higher Allocation	# Lower Allocation	# No change	Total Redistributed Resources (UA per year)**	Average Increase (per year)		Average Decrease (per year)		Average Impact on 10 smallest allocations (per year)		Average Impact on 10 largest allocations (per year)	
					UA MM	%	UA MM	%	UA MM	%	UA MM	%
0.75	30	8	1	73.87	2.46	25.60	-9.45	-11.62	1.21	43.78	-6.23	-5.48
0.5	29	10	0	174.60	6.02	79.54	-18.09	-21.26	3.86	155.09	-15.40	-13.46

* *As measured against Baseline Scenario, **Sum of additional resources going to increased allocations*

Impact on alignment between performance and allocations

The reduction of the population exponent creates a stronger alignment between performance and allocations, particularly for the top performance quintile (although to some extent at the expense of the second quintile). This is mainly due to many midsize population countries which are very good performers relative to large population countries.

Table V-6: Distribution of Resources per CPA* Performance Quintile (%)

Performance	Baseline	0.75	0.5
1st Quintile (top performers)	25.25	27.66	30.58
2nd Quintile	41.68	38.28	33.65
3rd Quintile	18.14	19.06	19.40
4th Quintile	6.56	7.48	9.19
5th Quintile	8.37	7.52	7.18

* *0.26 CPIA + 0.58 GR + 0.16 PPA*

Efficiency in Achieving Outcome

Three-quarters of ADF countries benefit from this option, which redistributes resources from large to small allocations, and in percentage terms, the positive impact on small allocations outweighs the negative impact on large allocations. However, in nominal terms, the average decrease is quite large compared to the average increase. Also, this option, while effective in improving the alignment between allocation and performance, does not take into account the composition of the population in terms of social and infrastructure needs. Thus, countries which have a large population but also substantial "pockets" of poverty would see their allocations being reduced. It is recommended to combine this option with another option that can target the redistribution of resources towards countries with higher numbers of people in greatest need (such as Option 1).

Option 4: Increase the weight (negative exponent) of GNI per capita

This option aims to take into account the extent to which countries have access to other (non-concessional) resources in the allocation calculation. Lower income countries tend to rely more heavily on concessional resources and typically face more difficulty in accessing non-concessional finance, and are therefore more vulnerable to fluctuations resulting from the financial and economic crisis and to the increase in food prices. The option would help countries with small allocations and strong needs, and de facto more dependent on the ADF, finance their development through a meaningful engagement.

Scenarios

Management simulated three scenarios: GNI per capita exponent of -0.25 (level used by the Asian Development Bank), -0.5 and -1 (level used by the InterAmerican Development Bank). These are meant to provide an illustration of the potential impact on country allocations.

Clarity and Simplicity

The implementation of the option is clear and simple, and Management believes GNI per capita to be a good proxy for inflows from other sources.

Data Availability

There are no issues regarding data availability. The indicator is already in use for the calculation of ADF Performance Based Allocations.

Variation in Allocations

Table V-7 below summarizes the results for the three simulated scenarios in terms of the number of countries affected, total resources redistributed and average increase/decrease in % and UA million of the ten smallest/largest allocations.

In all cases, the variation in allocations is balanced both in terms of the numbers of countries with an increased or decreased allocation (17-18) and in terms of the nominal average change (UA 1.5-10 million). 9-10 out of 17 fragile states see their allocation increase. While between UA 28 and 171 million are redistributed, the average amount of variation is moderate and the redistribution is concentrated in the center of the spectrum: neither the 10 largest nor the 10 smallest allocations are strongly impacted.

Table V-7: Summary of Simulations – Impact* of increasing the (negative) exponent of GNI per capita

GNI per capita exponent	# Higher Allocation	# Lower Allocation	# No change	Total Redistributed Resources (UA per year)**	Average Increase (per year)		Average Decrease (per year)		Average Impact on 10 smallest allocations (per year)		Average Impact on 10 largest allocations (per year)	
					UA MM	%	UA MM	%	UA MM	%	UA MM	%
-0.25	18	17	4	27.72	1.54	5.50	-1.69	-5.14	-0.01	-0.36	0.36	1.31
-0.5	19	17	3	81.66	4.30	15.78	-5.03	-14.98	-0.04	-1.03	0.94	3.85
-1	19	17	3	171.31	9.02	37.82	-10.73	-31.23	-0.06	-1.01	0.38	5.91

* *As measured against Baseline Scenario, **Sum of additional resources going to increased allocations*

Impact on alignment between performance and allocations

The option redistributes resources from the top 20% performers towards the bottom 20%. While this effect is not very strong under the -0.25 scenario, the increase of the negative exponent of GNI per capita to -1 leads to a redistribution of 7% of resources from the top to the bottom performers. The option weakens the alignment between performance and allocations.

Table V-8: Distribution of Resources per CPA* Performance Quintile (%)

Performance	Baseline	-0.25	-0.5	-1
1st Quintile (top performers)	25.25	24.11	21.81	17.74
2nd Quintile	41.68	42.03	42.45	43.16
3rd Quintile	18.14	18.15	18.18	18.47
4th Quintile	6.56	6.55	6.49	6.39
5th Quintile	8.37	9.16	11.08	14.24

* *0.26 CPIA + 0.58 GR + 0.16 PPA*

Efficiency in Achieving Outcome

While the option directs more resources to the poorest countries and the average allocation increase is the largest of all the options in nominal terms (reaching up to UA 9 million per year), examining other factors, such as countries' access to FDI and ODA (see para. 4.23-24 and Tables 3 and 4), shows that the resources are not clearly reallocated from countries with high levels of FDI per capita, or with substantial access to ODA, to countries that are the most dependent on the ADF. For example, 4 countries with the lowest levels of FDI per capita see no change or see their allocation decrease with this option. 5 countries who rank at the bottom in terms of total ODA see no change or lose allocation with the option. Only one country which is very dependent on ADF sees its allocation increase.

Moreover, there are some caveats attached to this option. Firstly, any consideration of countries' access to alternative sources of financing for the purposes of adjusting the volume of ADF resources should avoid worsening countries' risk of debt distress. This option does not take account of the fact that some of the relatively higher income countries among ADF recipients are still at high risk of debt distress, and therefore the reduction in concessional resources may hurt the debt sustainability outlook of these countries. Moreover, GNI per capita is not a fully satisfactory proxy for countries' needs in terms of inclusion and non-monetary dimensions of poverty. The increase of the negative value of the GNI per capita exponent would lead to a decrease in resources for countries with relatively high levels of income but also high needs in terms of non-monetary dimensions of poverty.

For these reasons, Management believes the proposal for the differentiation of ADF lending terms included in the ADF Long Term Financial Sustainability and Capacity Paper (Para. 3.12-3.22) represents a more effective way to ensure meaningful engagement with recipient countries than this modification of the PBA formula.

FOCUS AREA 3: Strengthening the PBA framework for fragile states

Option 5: Use a partially differentiated CPIA for fragile states that assesses their performance in dealing with the sources of fragility

Scenarios

There are no modeling scenarios for the revision of the CPIA questionnaire yet. The revision of the CPIA questionnaire would seek to propose a set of criteria and measurable indicators to add to the existing clusters A through D or to combine in a new cluster E in order to assess the performance of fragile states in addressing fragility drivers.

Clarity and Simplicity

The simplicity of a differentiated CPIA for fragile states will depend on the specific criteria/indicators or cluster to be defined. By revising the CPIA to include fragility drivers, it will be ensured that the specific criteria/indicators or cluster are established in as simple and clear a way as possible.

Data Availability

The set of criteria and indicators could be inspired by the development of the peace- and state-building goals and indicators that were released by the International Dialogue Movement for Peace- and State-Building in November 2012. Data issues will be managed as at present; i.e. when available, data on internationally recognized indicators will be collected. If this information is not available, then country economists will rely on local data and qualitative assessments. The strong Bank presence in the field, including in fragile states[24], will contribute to the robustness of the analysis.

Variation in Allocations

If this option is retained by Deputies, Management will provide more information on various possible changes for the second replenishment meeting. As satisfactory performance on the indicators/criteria to be developed would entail a bonus to be added to the regular CPIA score, the country's allocation is likely to increase as the final CPIA score (all Clusters combined) will increase. However, it should be

[24] The Bank has Field Offices in the following fragile states: Burundi, Central African Republic, Chad, Democratic Republic of Congo, Liberia, Sierra Leone, Sudan, South Sudan, Togo and Zimbabwe. In Guinea-Bissau and Sao Tome and Principe the Bank has a customized presence. Côte d'Ivoire is the Bank's headquarters, therefore strongly present in that country.

noted that the variation in the allocation is tempered by the CPIA score's effective weight in the PBA formula, which will remain the same.

Impact on alignment between performance and allocations

A partially differentiated CPIA for fragile states aims to improve the quality of the Fund's measurement of countries' performance in addressing the sources of fragility, and thus strengthens the alignment between allocations and performance.

Efficiency in Achieving Outcome

Revising the CPIA questionnaire to improve the measurement of countries' performance in addressing drivers of fragility is an efficient way to achieve greater alignment between the allocation methodology and the Fund's strategic objective of enhanced support to fragile ADF eligible countries.

Option 6: Inclusion of an index measuring state fragility in the PBA formula

As set out in the para. 4.42, there are many indexes of state fragility that could be included in the PBA formula. For illustrative purposes, Management modeled the inclusion of the State Fragility Index elaborated annually by the Centre for Systemic Peace. The index ranges from 0 (least fragile) to 25 (most fragile), and it is included in the formula with a positive exponent so that states that are more fragile are allocated more resources. Three scenarios were modeled: an exponent of 0.5, 1 and 1.5.

Clarity and Simplicity

Adding an element to the PBA formula would increase its complexity. Behind the simple index score ranging from 0 to 25 is a broad range of information, which reduces clarity somewhat. The SFI measures two essential qualities of state performance, namely effectiveness and legitimacy, across 4 areas each: security, political, economic and social, thus totaling eight indicators. Within this measurement system, a rating/score indicating the degree of fragility is assigned on the basis of a country's ability to deal with conflict; make and implement public policy; deliver essential services and its systemic resilience in maintaining system coherence, cohesion and quality of life; responding effectively to challenges and crises; and sustaining progressive development.

Data Availability

The index is compiled annually and data is available for nearly all ADF countries. However, it should be noted fragile states in Africa generally face a challenge with data availability and reliability. Data sources on states facing fragility could also be expensive to collect.

Variation in Allocations

Table V-9 below summarizes the results for the three simulated scenarios in terms of the number of countries affected, total resources redistributed and average increase/decrease in % and UA million of the ten smallest/largest allocations. The total redistribution varies from UA 55 to 162 million and benefits 20-21 countries, of which 11-12 fragile states. 3 fragile states see their allocation decrease. The average nominal increase and decrease are limited, as is the average variation in allocations: between 2% and 10%. The 10 largest and 10 smallest allocations are not strongly affected. Again, most of the redistribution takes place among the medium-sized allocations.

Table V-9: Summary of Simulations – Impact* of Including the SFI

Exponent of SFI	# Higher Allocation	# Lower Allocation	# No change	Total Redistributed Resources (UA per year)**	Average Increase (per year)		Average Decrease (per year)		Average Impact on 10 smallest allocations (per year)		Average Impact on 10 largest allocations (per year)	
					UA MM	%	UA MM	%	UA MM	%	UA MM	%
0.5	20	15	4	54.71	2.74	10.24	-3.94	-7.40	0.07	1.36	-1.12	1.23
1	21	15	3	108.95	0.15	3.04	-2.18	2.41	0.15	3.04	-2.18	2.41
1.5	21	15	3	161.54	0.24	4.95	-3.13	3.57	0.24	4.95	-3.13	3.57

* *As measured against Baseline Scenario, **Sum of additional resources going to increased allocations*

Under this option, the 12 countries currently eligible for FSF Pillar I receive between 47.9 percent and 53.8 percent of the total redistributed resources, while this percentage rises to between 57.9 percent and 64.7 percent if all 17 Fragile States eligible for FSF Pillar III are taken into account. While not all fragile states get a positive reallocation under this option, three of them concentrate the bulk of the redistributed resources. Together with 2 non-fragile states, they receive approx. 65% of the amount redistributed.

Impact on alignment between performance and allocations

In general, the option redistributes resources from the top 2 performance quintiles towards the bottom two. The redistribution effect is more notable under the scenario applying an exponent of 1.5, with the top two quintiles losing more than 8 percent of the resources.

Table V-10: Distribution of Resources per CPA* Performance Quintile (%)

Performance	Baseline	0.5	1	1.5
1st Quintile (top performers)	25.25	23.97	22.58	21.08
2nd Quintile	41.68	40.15	38.59	37.03
3rd Quintile	18.14	18.78	19.29	19.63
4th Quintile	6.56	7.12	7.72	8.35
5th Quintile	8.37	9.98	11.83	13.92

* *0.26 CPIA + 0.58 GR + 0.16 PPA*

Efficiency in Achieving Outcome

While the cost for the largest allocations is low, the inclusion of a fragility index in the PBA formula is not as effective and efficient in achieving the desired outcome (more resources for fragile states) as might be expected, since the benefits accrue strongly to a limited number of fragile states. In addition, the option also significantly benefits non-fragile states, and 2 in particular.

Annex V: Additional analyzed options that were not selected

#1: Include the Economic Vulnerability Index in the PBA Formula

The Economic Vulnerability Index (EVI), which has been defined by the Committee for Development Policy of the United Nations Economic and Social Council (ECOSOC), could complement existing measures of needs in the PBA formula, with a view to both ensuring a meaningful engagement with recipient countries through country allocations and strengthening the PBA framework for fragile states.

The Economic Vulnerability Index (EVI) aims to identify countries that are the most disadvantaged by structural handicaps to growth. It measures structural economic vulnerability which can result from exposure to external shocks such as volatile world commodity prices or international fluctuations in interest rates and from exogenous factors such as remoteness. The EVI, which is compiled every three years, comprises eight indicators: (i) population size; (ii) remoteness; (iii) merchandise export concentration; (iv) share of agriculture, forestry and fisheries in the economy; (v) share of population in low elevated coastal zones; (vi) instability of exports of goods and services; (vii) victims of natural disasters; (viii) instability of agricultural production. The introduction of the EVI in the PBA formula would strengthen the needs component by taking into account external factors that are imperfectly encompassed by existing measures.

Table VI-1 below sums up the results of EVI inclusion in the PBA formula against three scenarios with exponent equal to 0.5; 1 and 1.5. Data are sourced from FERDI[25] and are available until 2008.

Table V-1: Summary of Simulations – Impact* of Including the EVI

Exponent of EVI	# Higher Allocation	# Lower Allocation	# No change	Total Redistributed Resources (UA per year)**	Average Increase (per year)		Average Decrease (per year)		Average Impact on 10 smallest allocations (per year)		Average Impact on 10 largest allocations (per year)	
					UA MM	%	UA MM	%	UA MM	%	UA MM	%
0.5	27	8	4	58.61	2.17	11.10	-7.74	-9.65	0.23	7.30	-3.47	-0.65
1	28	8	3	112.55	4.02	22.73	-15.11	-19.49	0.53	19.45	-6.83	-1.72
1.5	28	9	2	174.51	6.23	37.67	-20.48	-25.90	0.92	36.02	-10.65	-2.81

* *As measured against Baseline Scenario, **Sum of additional resources going to increased allocations*

Table V-2: Distribution of Resources per CPA* Performance Quintile (%)

Performance	Baseline	0.5	1	1.5
1st Quintile (top performers)	25.25	26.52	27.38	28.40
2nd Quintile	41.68	38.57	36.03	33.01
3rd Quintile	18.14	18.41	18.49	18.61
4th Quintile	6.56	7.05	7.58	8.27
5th Quintile	8.37	9.46	10.52	11.72

* *0.26 CPIA + 0.58 GR + 0.16 PPA*

Adding an element to the PBA formula would increase its complexity. Under this option, 27-28 countries including 12 fragile states would see their allocation increase, while 8-9 countries see a decrease. However, the nominal average decrease is large compared to the average increase, raising questions about the option's efficiency. Implementing the option would also redistribute resources from the top two performance quintiles to the bottom two quintiles. The higher the exponent is, the larger the distortion on the performance principle.

As a composite index, the EVI compiles a large amount of data and its calculation calls for approximation when data are missing, which is regularly the case for ADF countries. To date, this option presents serious challenges in terms of robustness, as simulations over several years exhibit large swings in ADF allocations due to the gaps in data and to the fact that data for ADF countries

25 http://www.ferdi.fr/

fluctuates significantly over time. It should also be noted that at this stage, the EVI is not compiled annually.

Finally, considering to include the EVI in the PBA formula risks confusing “vulnerability” with “fragility”, while the Bank has decided to focus on the latter in its strategy and policy framework.

Management therefore believes that indexes of fragility may be better used in the context of defining fragility and identifying fragile states.

#2: Include measures of inclusiveness and/or alternative monetary and non-monetary dimensions of poverty in the PBA formula as complementary indicators of country needs.

Achieving more inclusive growth is an important objective of the draft Long Term Strategy of the Bank Group. The concept goes beyond income distribution to take into account the specific context of Africa in several areas such as job creation, equal access to basic infrastructure and social protection. The current indicators of needs in the PBA formula (GNI per capita and population size) do not capture elements such as poverty prevalence and income distribution, for instance. Indicators of social development needs and capabilities that are linked to the Bank Group’s focus on inclusive growth, such as the level of human capital and social equity, are absent in the current formulation.

However, addressing these issues entails serious challenges in terms of data availability and methodology. For example, including additional poverty and/or economic or social inclusion measures (such as poverty headcount or the Gini coefficient) in the PBA formula would weaken a system that is premised on fair and robust comparability across countries. Data from household surveys that provides the basis for the calculation of these indicators is difficult and expensive to gather and therefore extremely scarce, spotty, or missing entirely in ADF countries, yielding indicators whose availability across years and countries varies strongly (see Table X below). Taking these shortcomings into consideration, Management has identified more reliable options to better assess country needs.

Table V-3: Data Availability for Poverty Indicators in ADF Countries

Countries	Year	Poverty Headcount ratio at $2 a day (PPP) (% of population)	Poverty Headcount ratio at national poverty line (% of population)	Poverty Headcount ratio at rural poverty line (% of population)	Poverty Headcount ratio at urban poverty line (% of population)	Poverty Headcount ratio at $1.25 a day (PPP) (% of population)
Benin	2003	x	x	x	x	x
Burkina Faso	2009	x				x
Burkina Faso	2003		x	x	x	
Burundi	2006	x	x	x	x	x
Cameroon	2007	x	x	x	x	x
Central African Republic	2008	x	x	x	x	x
Chad	2003	x	x	x	x	x
Comoros	2004	x	x	x	x	x
Congo DRC	2006	x	x	x	x	x
Cote d'Ivoire	2008	x	x	x	x	x
Djibouti	2002	x				x
Eritrea						
Ethiopia	2005	x	x	x	x	x
Gambia, The	2003	x				x
Gambia, The	2010		x	x	x	
Ghana	2006	x	x	x	x	x
Guinea	2007	x	x	x	x	x
Guinea-Bissau	2002	x	x	x	x	x
Kenya	2005	x	x	x	x	x
Lesotho	2003	x	x	x	x	x
Liberia	2007	x	x	x	x	x
Madagascar	2010	x				x
Madagascar	2005		x	x	x	
Malawi	2004	x	x	x	x	x
Mali	2010	x	x	x	x	x
Mauritania	2008	x	x	x	x	x
Mozambique	2008	x	x	x	x	x
Niger	2008	x				
Niger	2007		x	x	x	
Rwanda	2011	x	x	x	x	x
Sao Tome & Principe	2001	x		x	x	x
Sao Tome & Principe	2009		x			
Senegal	2005	x	x	x	x	x
Sierra Leone	2003	x	x	x	x	x
Somalia						
South Sudan	2009		x	x	x	
Sudan	2009	x	x	x	x	x
Tanzania	2007	x	x	x		x
Togo	2006	x	x	x	x	x
Uganda	2009	x	x	x	x	x
Zambia	2006	x	x	x	x	x
Zimbabwe	2003		x			
Zimbabwe	2001			x	x	

#3: Limiting the amount of MDRI that is deducted from the PBA allocation

ADF countries that benefit from debt relief under the MDRI see this reflected in their ADF allocations through the MDRI netting out mechanism, which is a 2-step process. First, the MDRI-eligible country's annual foregone debt service is deducted from its annual PBA allocation. Second, compensatory donor resources that the ADF receives in lieu of the debt service are then reallocated through the PBA system to all ADF only countries, including those who do not benefit from MDRI debt relief. This mechanism was agreed as a means to reduce moral hazard and promote equity of treatment among all ADF countries. According to this principle, low income countries that did not accumulate excessive external debt should also benefit from the compensatory resources that donors provide to ADF for MDRI debt relief. IDA had the same system.

As a result of the MDRI netting out and reallocation mechanism, a few non-MDRI IDA countries gained a significant extra amount of IDA allocation while some MDRI IDA countries saw their final allocation limited. Some of the poorest countries faced severe adverse allocation impact, which made engagement and development in these MDRI countries more challenging for IDA. Limiting the amount of MDRI that is deducted from the PBA allocation was therefore proposed as an option to ensure a meaningful engagement with recipient countries. After long and difficult discussions, IDA Deputies agreed to cap the MDRI netting out at 30% of IDA countries' PBA allocation during the IDA 16 replenishment, despite the additional complexity this would bring to the system.

The situation is quite different within the ADF. In general, since most ADF-eligible countries are also MDRI recipients, the effects of MDRI netting out and reallocation on the final ADF allocations are better distributed than in IDA. In 2012, the amounts netted out from the (then) 26 MDRI countries' allocations were re-allocated to all 38 ADF-only countries, i.e. largely to the same countries. 15 countries (of which 5 fragile states) had a lower allocation after the MDRI netting out and reallocation step in the allocation process than before, on average by UA 2.3 million (21.5% of their allocation). 23 countries (of which 12 fragile states) had a higher allocation after this step, on average by UA 1.52 million (6.6%).The remaining countries saw no change to their allocation. Four countries fell below the minimum allocation due to the amount of MDRI netted out not being offset through reallocation, and their allocation was topped up to the minimum.

In addition to this difference between ADF and IDA, the report on the reform implemented during IDA 16 is not unequivocally positive. While the modified mechanism has delivered significant benefits to some IDA MDRI recipients, the netting out policy continues to have adverse allocation impacts on certain IDA countries. In addition, the mechanism has the unintended consequence of reducing the performance incentive in the PBA for stronger performing MDRI recipients. Most importantly, the net benefits from the modified netting out mechanism remain asymmetric. During FY 2011-2013, the top 4 beneficiaries of the modified MDRI netting out mechanism captured 79% of the net gains even though they are already among the top recipients of IDA allocations. The most adversely affected remain the most fragile. Such a high concentration of the benefits demonstrates that the capping mechanism has not been sufficiently effective in terms of addressing the asymmetric impact of the MDRI netting out on IDA countries.

Given this analysis, limiting the MDRI netting out in the ADF would affect all ADF countries across the board without targeting the countries most affected in their PBA allocations. This makes it an inefficient measure that would substantially complicate the current system. As the distribution of the MDRI netting out and reallocation impact is less asymmetric among ADF countries than in IDA, and since such a reform could distort the performance incentive in the PBA, Management believes that increasing the minimum allocation is a simpler and more efficient way of addressing the issue of a meaningful engagement with recipient countries.

#4: Decrease in the 10% cap applied to basic allocations

Currently, country allocations are capped at the basic allocation stage to ensure that no single ADF country receives more than 10% of the PBA resources. Under ADF 12, two countries reached the cap. Decreasing this cap could be an option to better distribute the total envelope and ensure a meaningful engagement with recipient countries through country allocations.

Management has simulated the effects of reducing the cap to 7.5% and to 5% and the results are summarized in Table X below.

Table V-4: Summary of Simulations – Impact* of decreasing the 10% cap on basic allocations

Cap	# Higher Allocation	# Lower Allocation	# No change	Total Redistributed Resources (UA per year)**	Average Increase (per year)		Average Decrease (per year)		Average Impact on 10 smallest allocations (per year)		Average Impact on 10 largest allocations (per year)	
					UA MM	%	UA MM	%	UA MM	%	UA MM	%
7.5%	33	2	4	41.04	1.24	3.51	-21.46	-22.37	0.06	1.55	-1.85	-1.30
5%	30	6	3	233.70	7.79	33.42	-41.16	-39.37	0.63	19.90	-17.22	-8.48

* *As measured against Baseline Scenario, **Sum of additional resources going to increased allocations*

Table V-5: Distribution of Resources per CPA* Performance Quintile (%)

Performance	Baseline	7.5%	5%
1st Quintile (top performers)	25.25	26.35	31.07
2nd Quintile	41.68	40.81	28.19
3rd Quintile	18.14	17.36	20.51
4th Quintile	6.56	6.81	8.94
5th Quintile	8.37	8.68	11.28

* *0.26 CPIA + 0.58 GR + 0.16 PPA*

The average impact of the 7.5% scenario is limited, since UA 41 million is redistributed among 33 countries. Under the 5% cap scenario, the average impact on the increased allocations is more substantial (UA 7.8 million), but the price for the 6 countries losing allocation is very high: UA 41 million or close to 40% per year on average. At the same time, the impact on the smallest allocations remains limited. Distortions in performance are also significant under the 5% scenario, with 7.7% of resources being redistributed from the top 2 performance quintiles towards the lower quintiles. In general, the impact distribution of the option is very asymmetric since the few countries affected by the cap see their allocation decline significantly, with the difference diluted among many countries.

In order to achieve a substantial average impact (which the smallest allocations still do not benefit very strongly from), the decline in the capped countries' allocations would have to be disproportionally strong. Therefore, Management thinks that increasing the minimum allocation would have a more direct impact, particularly on the smallest allocations, to ensure a meaningful engagement with recipient countries.

Annex VI: Categorization of all analyzed options

Area	Option/Action	Description	Comments
Alignment with strategic and regional focus	1	Include measures of inclusiveness (i.e. social equity and poverty prevalence), and alternative monetary and non-monetary dimensions of poverty in the PBA formula	Not selected by Management because of heterogeneity in the quality of data that makes many measures unreliable.
	2	Perform gradual changes to the CPIA framework	
		Include the Africa infrastructure development index (AIDI) produced by the African Development Bank in the PBA formula as a needs component	
	3	Include the Economic Vulnerability Index in the PBA Formula as a complementary measure of needs	Not selected by Management because it focuses on vulnerability rather than fragility and would introduce distortions regarding the FSF. Also, this option presents problems in terms of robustness as there are large swings in simulated allocations associated with the gaps and fluctuations in data.
Meaningful engagement with Recipient Countries	1	Increase the minimum allocation currently at UA 5 million per cycle	
	2	Reduce the current 10% cap applied to basic country allocations	Not selected by Management because the redistribution is inefficient and sub-optimal. The impact on the capacity for engagement in small allocation countries remains limited. It would be more efficient to increase the minimum allocation.
	3	Limit the impact of the MDRI discount on ADF allocations	Not selected by Management because it would make the system more complex and the net effects are not the same as in IDA due to different client base. It would be more efficient to increase the minimum allocation.
	4	Lower the exponent of population	
	5	Increase the (negative) exponent of the GNI per capita	
Strengthening the PBA framework for fragile states	1	Partially differentiated CPIA for Fragile States	
	2	Incorporate an index of fragility into the PBA formula	
Proposed Actions for strengthening the quality of the current portfolio performance measure			
	1	Examine how the time lag between the collection of portfolio performance data and their use in the ADF allocation calculations can be reduced.	
	2	Examine how to reduce the excessive volatility in allocations caused by the PPA for small portfolio countries	
	3	Evaluate the impact of the new project supervision rating recently introduced as part of the Implementation Progress and Results Reporting for Public Sector Operations.	
	4	Consider to replace the size correction currently applied through the conversion scale by an adjustment for portfolio age as to limit the impact of projects newly entering the portfolio.	