



**Pour un instrument d'appui prioritaire à l'intégration régionale
mis en œuvre par la BAD**

***For an instrument implemented by the ADB giving a priority
support to regional integration***

By

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Regional integration, a priority for African development and ADB operations

- Small median economic size of African countries, fifteen of which are landlocked
- Although a permanent concern since the Independences, and many attempts to address the lack of integration, Africa still a fragmented continent
- Economic benefits and political ones as well of regional integration evidenced by many studies
- According to a recent ferdi study on the benefits expected from an enhancement of RI in franc zone monetary unions, possible gains in the annual rate of economic growth estimated around 2-3%



The ADB present support to RI, in particular through ADF

- Growing share of multinational operations in the Group (from 6 to 15% from 2000 to 2010)
- A regional operations (RO) envelope for the ADF, itself progressively raised from 5% for ADF-8 to 20% for ADF-12 (and 21% for ADF-13)
- Response to a countries demand exceeding the amount of available resources, and to the growing concern of partners for regional integration
- Regional Operations are financed according to a cost sharing scheme



The cost sharing scheme

- Since ADF-11, 1/3 of the cost of ROs had to be taken in the national allocation, a proportion raised to 40% during ADF-12 (confirmed for ADF-13) (i.e. the ratio between regional and national cost shares has been lowered from 2 to 1.5)
- A change motivated by the need of resources to meet the strong demand of RO
- However the share of the national allocation was limited to 10% when this allocation was < 20 millions UC (in ADF-13, for « small countries »)
- Moreover in projected ADF-13, for Fraile states (FS) the share may be limited to 1/3 (ratio of 2 instead of 1.5)



The shortcomings of the present system, showing the way to the proposal orientations

- Definition of the regional operations by their multinational location
- Perverse effects of the scheme thresholds
- No consideration of the country needs of RI
- Lack of incentives for RO for countries having access only to the ADB window



Need of a new definition of regional operations

- Several possible criteria to define a RO: location, financing, impact
- The multinational character does not guarantee a regional impact
- Some projects located in one country may have a significant regional impact (road or harbour in a coastal country, research center)
- A RO should be designed by its regional impact: it should be an operation resulting in an intensification of the relationships between two or more close countries, in any field (trade, finance, migration,..)
- Besides the « hard » integration, involving physical investments, importance of « soft » integration through common rules, practices and policies
- Need of an enlarged and more precise definition of ROs



Perverse effects of thresholds and categories

- A general problem in aid allocation formulas...
- Here, the limitation at 10% of the national share for small countries, until now countries with national allocations < 20 millions UC
- Suppose a country whose allocation is raised from 19 to 21 (possibly an improvement of CPIA), intending to participate to a RO where the value imputed to this country is 36: instead of contributing by 1.9 from its national allocation, it has to contribute by 14.4, so that the remaining national allocation is lowered from 17.1 to 6.6
- The threshold effect is lower in the case of FS, since the share from the national allocation is smaller, but the classification as FS raises another and acute threshold issue



Disconnection of the RI incentives from the needs of RI

- Indeed incentives for ADF countries to draw on regional envelope (RE), because they are offered an additional source of finance, as a multiple of the part of the national allocation devoted to RI
- But not necessarily for operations with the highest regional impact
- (They are indirectly depending on the level of the national allocation and its determinants, where only appears the regional cooperation or policy, as component of CPIA, with a small, although increased weight (from 1.8 to 4.2))
- Without any consideration of the integration needs of the country (only through the 10% regime for small states, with the risk of threshold effects)



A new scheme of RI incentives for AFD countries (I)

- Allocation of the RE according to the needs of RI, independently of national allocations
- Allocation to each country of a « regional drawing right » (RDR), a drawing right on the RE, defined by its need of regional integration (see below the design of this index)
- The sum of the RDRs would represent only a part of the RE, the other part (reserved RE) being used for financing regional public goods and other projects difficult to finance on a country RDR
- To maintain (or increase) the level of « regional finance » (without the share presently levied on national allocations), the size of the RE should be increased, either by lowering national allocations or by mobilizing additional resources from partners for the new instrument



A new scheme of RI incentives for AFD countries (II)

- New incentive for member countries to look for RI projects, since they would not lower the amount available for national projects
- With a full ownership, under the condition that the country can evidence a real regional impact
- As presently, countries have to take a part of their potential resources to finance their RO
- Each country could also benefit of the reserved RE, depending on the interest found by ADF in the ROs so financed
- Also easier for countries less motivated by RI to join a RO proposed by the country mainly concerned or even for the latter to finance a project located outside, but enhancing its own integration
- Possible modulation of RDRs according to the country commitment to RI, leading to an adjusted need of RI (index)



Designing a « regional integration need index » (RINI) ou « indice de besoin d'intégration régionale » (IBIR)

- Two main components, possibly supplemented or adjusted by a third one
- 1) *Smallness of the domestic market*, measured by an index IM of the size of GDP, because it limits competitiveness, diversification, attractiveness of FDI,...
- 2) *Remoteness from foreign markets*, measured by an index IR combining geographical distance, possible landlockness, and poor quality of infrastructure, because the cost of reaching foreign markets depends on these elements
- 3) Possibly, *Commitment to regional integration* (CRI), because the effectiveness of the support given to the RI of a country depends on its policy commitment, for instance measured as already done in CPIA components (1/16 of previous components, 2/5 of components of the new cluster E)



Extension to countries not ADF eligible

- For countries eligible only to the ordinary ADB window: neither ex ante national allocations, nor ex ante RE, only ex post ROs, but possible to set up a specific RE within the ADB resources
- It could be allocated according to the same principle that for ADF, i.e. according to RDRs, determined by the same way and same criteria
- Which incentives for drawing on this RE? As suggested by ONRI, besides a technical support, need of financial favourable conditions (subsidizing of sovereign loans, guarantees for other loans)
- Legitimate cost because corresponding to a positive externality, to be covered by ADB with resources mobilized from outside for this new instrument
- RDRs would either apply to the amount of loans (if uniform conditions) or to the amount of the subsidy (if variable conditions)



Methodological issues in the determination of the RDR/ DTR (I) Designing the components of the RINI/IBIR

- *Smallest of domestic market:*
- $IM_1 = |100 - \text{Ind}(\log Y)|$ or
 $IM_2 = \text{Ind}(Y^a)$ avec $Y = y.P$ and $-1 < a < 0$
- *Remoteness from foreign markets:* augmented Ferdi-UNDESA measure combining distance D, landlockness L, infrastructure U
additively: $IR'_1 = \text{Ind} [(1 - r - s) \cdot \text{Ind}(\log D) + r \cdot L + s \cdot (1 - U)]$
multiplicatively: $IR''_2 = \text{Ind} [D^b \cdot U^v] = \text{Ind} [D^b \cdot (U(1 + k''L))^v]$
avec $0 > b < 1$; $0 < k < 0$; $-1 < v < 0$
and with infrastructure index built from CEPR–Ferdi (Carrère-de Melo) rather than the BAD AIDI, less adapted, but giving similar results
- *Commitment to regional integration,* for an augmented RINI/IBIR: possibly assessed from corresponding components of CPIA, it would lead to a measure of RI need « adjusted » or « perceived »,



Methodological issues (II)

Averaging the components of the RINI/IBIR

- Two (three) methods for averaging,
- *Arithmetic*: assumes the substitutability of components
$$\text{IBIR(A)} = \frac{1}{2} [\text{IM}_1 + \text{IR}_1]$$
$$= \frac{1}{2} [100 - \text{Ind} (\log Y)] + \frac{1}{2} \text{Ind} [(1 - r - s) \cdot \text{Ind} (\log D) + r \cdot L + s \cdot U]$$
- *Geometric*: assumes the interaction of the components:
$$\text{IBIR(G)} = (\text{IM}_2 \cdot \text{IR}'_2)^{0.5} = [\text{Ind } Y^a]^{0.5} \cdot [\text{Ind} (D^b \cdot U'^v)]^{0.5}$$
with $U' = U (1 + k''L)$ reflecting that the impact of being landlocked on the remoteness from world markets depends negatively on the quality of infrastructure
- *Mixed* : geometric for the components and arithmetic for the sub-components
$$\text{IBIR(G)'} = (\text{IM}_1 \cdot \text{IR}'_1)^{0.5} = [\text{Ind} (Y^a)]^{0.5} \cdot \text{Ind} [(1 - r - s) \cdot \text{Ind } D^b + r \cdot L + s \cdot U]^{0.5}$$

If a 3rd component was added to reflect the regional commitment of the country, logical to add it through a geometric average since it is simply a factor of adjustment in the determination of the needs of RI, reflecting perceived needs



Methodological issues (III) weighting the components of the RINI/IBIR

- An usual issue for composite indices
- Reasonable to give similar weight (0.5) to IM and IR
- And, if a third component is added (CRI), would be reasonable to also give the same weight (1/3) to the three components
- Choice of weights (r and s or b, k and v) more difficult for the sub components of the remoteness index, depending on the hypotheses about the respective role of distance, possible landlockness and infrastructure)
- No firm empirical ground (relative obstacles to trade, relative impact on transaction costs, ...)
- Holds for the arithmetic average or the geometric average as well



Measurement of the RDR/DTR

- The RDR of a country depends on 3 factors: the relative level of its RINI/IBIR; the relative share of its population ($P_i/P.$); the size of the RE devoted to RDR allocations (AER)

$$DTR_i = AER \cdot (P_i/P.) \cdot (IBIR_i / \underline{IBIR})$$

avec IBIR the average of IBIR, weighted by the share of the population ... and two measures of RDR, depending on the averaging used for IBIR/RINI

- Arithmetic

$$DTRI(A)/AER = \frac{1}{2} (P_i/P.) \cdot [IM_1 + IR_1] / \underline{IBIR}$$

- Geometric

$$DTRI(G)/AER = (P_i/P.) \cdot (IM_2 \cdot IR''_2)^{0.5} / \underline{IBIR}$$

- Mixed

$$DTRI(G')/AER = (P_i/P.) \cdot (IM_1 \cdot IR_1)^{0.5} / \underline{IBIR}$$

- Easy adaptation if a 3rd component was added to RDR, with a weight of 1/3



Simulations

- Levels and ranks of IBIR/RINI and of DTR/RDR calculated
- Successively for only ADF eligible only and for all African countries,
- With arithmetic averaging of components and sub-components (A), with geometric averaging of components and sub-components (G), and with geometric averaging of components and arithmetic averaging of sub-components (G')
- And in each case with 3 options for the value of coefficients (s and r for the A and G' formulas; a, b and v for the G formula)
- Relative stability of results



Some results

- Whatever the formula, some regularities
- Among the top 10 for the RINI/IBIR, many landlocked or SIDS: STP, Comoros, Lesotho, Guinea-Bissau, RCA, Cape V., Zimbabwe, Burundi, Swaziland
- Among the bottom 10: 4 Maghreb countries, 2 major markets (Egypt and South Africa), only 3 ADF countries: Ghana, Soudan, Nigeria, and one LDC Angola)
- Anyway results only tentative and more thinking is needed on the better way to assess both the needs of RI and to allocate RDRs



Some additional modalities of an effective support to RI

- Support to regional cooperation policies, in particular to fiscal policies and to the implementation of customs policies: might be achieved through the regional drawing rights of each country
- Support to regional institutions: might be done through the regional envelope reserved (out of the sum of the RDRs)
- Need to improve the assessment of the country commitment to regional integration through an appropriate index
- And to build a broad and effective consensus on the priority to be given to RI in Africa



thanks

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