



**Aid as a resilience factor:  
Ex ante or ex post?  
A stabilizer or an insurance?**

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## Introduction

### **From the aid volatility concern to the issue of aid as a factor of resilience**

- Aid volatility has been a long lasting concern in the literature on aid effectiveness, and in the political arena as well
- Changed with the more specific concern of aid unpredictability, becoming a new conventional wisdom,
- Is aid stability or even aid predictability a key issue for managing macro-economic volatility and increasing resilience?



## From the aid volatility concern...

- Aid volatility and unpredictability are considered as factors of aid ineffectiveness
- Semantic and methodological issues in assessing « aid volatility » and aid unpredictability
- Has diverted attention from the *aid level* issue, that is of major importance for the resilience of economies
- And from the adaptation of *aid modalities* to the exogenous sources of volatility, which may involve an aid voluntarily volatile (unstable), while not necessarily predictable



...to aid as a factor of resilience

- A somewhat different approach: although volatile, and not fully predictable, aid is a factor likely to increase the resilience, i.e. the capacity to cope with the exogenous shocks
- It does so if it reduces the macro-economic volatility induced by these shocks and/or its consequences
- It can do so by two ways
- Ex ante: depending on its permanent or average level, aid can be a *stabilizer* with regard to exogenous shocks
- Ex post: depending on its adaptation to exogenous shocks, aid can be an *insurance* against shocks



## Aid as a stabilizer: ex ante funding

Two issues are considered:

- A positive one:  
has aid been stabilizing in the past?  
what are the economic consequences of a stabilizing impact of aid ?  
*cf Chauvet & Guillaumont RDE 2009*  
*and on-going work with Maelan Le Goff*
- A normative one:  
how to make the world allocation of aid more stabilizing? Proposal  
of a reform of aid allocation criteria  
*cf Guillaumont 2008,*  
*Guillaumont & Guillaumont Jeanneney 2009, 2010*



## Has aid been stabilizing or destabilizing?

- Stabilizing impact, as for pro or counter-cyclicity, has to be defined with regard to another exogenous flow
- Many measures of pro/counter-cyclicity refer to flows highly dependent on aid (income, fiscal revenue,...), possibly biased towards pro-cyclicity
- More relevant to refer to exports of goods and services, a major exogenous source of shocks in low-income countries, which are not immediately (year to year) dependent on aid
- Whatever the flow, needs to measure a deviation from a normal value, that can be measured by various ways [here a mixed trend value:  $X_t = f(X_{t-1}, t)$  or a HP filter]
- Stabilizing impact differs from contra-cyclicity



## Designing the stabilizing impact of aid ( $S_i$ ) at the country level, over a multiyear period

- $S = \text{INS}(X) - \text{INS}(X+A) > 0$  if  $\text{INS}(X) > \text{INS}(X+A)$
- pro-cyclicality if correlation between  $(X_t - X_t^*)$  and  $(A - A_t^*) > 0$
- 4 cases, according to  $S < 0$  or  $> 0$  and correlation  $> 0$  or  $< 0$
- Pro-cyclical,  $S < 0$ :
- Pro-cyclical,  $S > 0$  : *possible, if relatively low aid instability*
- Contra-cyclical,  $S > 0$
- Contra-cyclical,  $S < 0$ : *possible, if relatively high aid instability (and level)*



Results at the country level, 2 sources:

(1) 10 year periods over 1970-99 (L.Ch & PG)

(2) 5 year periods over 1980-2005, focus on Africa (PG & M Le Goff)

- Aid slightly more pro than contra cyclical, and most often unimportantly: 57% in (1), 51% in (2), 45% of significant cases
- Aid more often stabilizing than destabilizing (**71%** in 1, 67 % in 2), although significantly only in a minority of cases
- Stabilizing in a large number of cases while it is pro-cyclical (**64%** in 1)
- Stabilizing in most cases where it is contra-cyclical, but also destabilizing in a few cases (**19%**)

## Coefficients of correlation between aid and exports cycles, and stabilizing character of aid with regard to exports

Africa South of Sahara (5 year periods over 1980-2005)

	80-84	85-89	90-94	95-99	00-05	Total(%)	Total[ ]
<b>Coefficients of correlation</b>							
Average	0.007	0.08	0.12	-0.05	0.08	0.06	
No. of positive correlations	16[3]	13[4]	9[6]	21[4]	21[1]	<b>80 (57%)</b>	18(62%)
No. of negative correlations	9 [1]	13[0]	19[3]	10[5]	9[2]	<b>60 (43%)</b>	11(38%)
<b>Aid stabilizing character</b>							
Destabilizing total	6[0]	8[2]	8[0]	13 [3]	12[3]	<b>47 (33%)</b>	8(24%)
Stabilizing total	18[3]	18 [7]	20 [4]	18 [8]	19 [3]	<b>93(67%)</b>	25(76%)



## Overall results

- The relative aid level most often has a stabilizing impact
- This impact is positively correlated with the aid/GDP ratio, although marginally decreasing, once controlled for the instability of exports (for a ratio <19% in Africa)
- More or less important depending on its contra or pro-cyclical character
- And dampened by the relative level of aid volatility, which has a destabilizing impact
- Results consistent with other studies using other methods (Collier & Goderis 2009, Guillaumont Jeanneney & Tapsoba 2010)



Another approach: aid as a determinant of growth volatility on a cross country basis

- Complementary approach: allows identifying aid impact on growth volatility, whatever the origin of shocks, controlling for the impact of export instability, and instrumenting aid
- Results from LCh & PG 2009 on 5 year periods over 1970-99, 87 countries: growth volatility dampened by the aid level (aid/GDP), but increased by aid volatility (weighted by the aid level)
- Confirmed by new results from PG & MLG 2010: dampening effect higher in Africa



## Why the dampening effect of aid matters for aid effectiveness

- Specific shocks as well as growth volatility shown to have long lasting negative effects on average growth, and on the extent to which growth reduces poverty, and on socio-political stability as well
- Marginal impact of aid on growth higher in vulnerable countries (ie facing exogenous shocks), shown in several papers by L.Ch & PG (2001, 2004, 2010)
- Evidence supplemented by the inclusion of the measure of the stabilizing impact in the growth regression: it enhances growth, while the traditional multiplicative variable (aid x export instability) remains significant, suggesting a dampening effect of the average aid level, beyond the year to year stabilizing impact



**Normative implications:  
taking into account vulnerability in the allocation of aid  
between countries**

- An urgent issue
- Present debate on the criteria used for aid allocation, in particular by the MDB in the perspective of replenishment of their resources,
- Impact of the crisis, which makes even clearer the vulnerability of LICs, although evidenced for a long time
- Some official support of the wish to taking into account vulnerability among aid allocation criteria (UN SG report for DCF 2008, Joint Ministerial Forum on Debt Sustainability 2009) ...
- Studies and proposals made in this direction for the reform of the allocation formula of some MDBs (African Dev. Fund,...)



## The conventional formula

- Reference to the PBA « performance based allocation », with 4 main features
  - 3 main indicators: GNIpc, Pop, «performance»
  - subjective measure of performance (from CPIA)
  - overwhelming weight given to performance
  - exceptions (in particular fragile states...)

- The formula

$$A_i = \text{CPR}_i^5 \cdot \text{GNIpc}_i^{-1.125} \cdot P_i$$

$$\text{CPR}_i = 0.24 \text{ CPIA}_{\text{ABC}} + 0.68 \text{ CPIA}_{\text{D}} + 0.08 \text{ PORT}$$

Similar formula for AfDF (main differences: CPR<sup>4</sup> and 0.2 PORT)



## The proposal

- Adding to the above criteria a new criterion of structural economic vulnerability
- Consistent with finding that the average level of aid is a factor dampening the impact of exogenous shocks: would enhance the role of aid as a stabilizer, working ex ante, and preventing more than compensating macro-economic volatility and its consequences
- This criterion (besides a criterion of weakness of human capital) would balance the weight of « performance », itself debated
- Making aid more stable and predictable, as far as the conventional measure of performance is unstable, and to a significant extent pro-cyclical



## Consistency with general allocation principles

- Adding a criterion of structural economic vulnerability meets three principles of a good allocation, effectiveness, equity and transparency, neglected in the present formula
- Effectiveness: because, as exposed above, marginal effectiveness of aid is higher in vulnerable countries
- Equity: because vulnerability is a structural handicap to be compensated for equalizing opportunities
- Transparency: because it contributes to avoiding the multiplication of exceptions (caps, floors, and special treatment for fragile & post-conflict states)



## Weak reasons to reject the proposal

- Feasibility: can structural vulnerability be measured? Already done at the UN through EVI, an index adapted to LDCs & other LICs. EVI is a composite index of 4 exposure to shock components and 3 recurrent natural and external shocks components
- Political attachment of donors to « performance » as the key criterion: taking into account structural vulnerability leads to an augmented measure of performance, adjusted for exogenous factors
- High redistributive effects: depends on the coefficients
- Subsidiarity: may vulnerability issue be addressed by another way?



## Aid as an insurance: ex post funding

- A natural answer from the international community is to mobilize resources when a shock or a crisis occurs: ad hoc emergency funds, vulnerability windows, special programmes, dependent on the current good will of donors, are not really an insurance
- Insurance involves some guarantee to be financed after the shock has occurred, then some ex ante arrangement even if funding is only ex post
- Two options:
  - only one side compensatory finance
  - two side scheme tackling boom as well as busts, likely to smooth the whole cycle



## **On (one side) compensatory finance**

- A debated experience, with 2 main instruments, recently improved
- IMF compensatory finance facility, progressively kept aside, then supplemented/replaced(?) by the ESF (2005), itself amended (2008)
- EC stabex (1975-2000), replaced by Flex, itself under reexamination



## Main issues raised by these experiences

- Difficulty to implement quick disbursements
- Uncertainty about the appropriate degree of conditionality: lack of automaticity due to the absence of a priori rules for use
- Then trade-off between quickness of disbursements and conditionality
- Related difficulty of passing through to the groups the more affected by the shocks
- Determination of the triggering thresholds (past trends rather than averages) and of the level of compensation
- Durable impact of the crisis on the design of the schemes or only emergency measures?
- Risk of moral hazard



## Lessons from Stabex...and Flex

- European scheme to compensate export shortfalls of specific agricultural products from ACP countries (1975-2000)
- Two initially innovative principles, which appeared contradictory: automaticity and support to farmers
- Lessons: more and more control on funds use, longer and longer disbursement delays, and debatable targetting
- Moreover, recurrent underfunding due to the calculation of shortfalls
  
- Flex: grant budget support, without sectoral aims, but not fully automatic, of limited use before the crisis (trigerring rules amended in 2008), and implemented with delays...
- Supplemented by a « vulnerability flex » or « V-flex » disbursed for ½ in Dec. 2009 to 11 countries targetted from their vulnerability and policies in place. Eligibility conditions, lags?



## Orientations for reform

- Quickness needs automaticity
- Insurance is a contract: offering a guarantee conditioned by rules
- Rules may be related to the way by which macro economic and sectoral support can be (ex ante) connected (eg domestic insurance schemes)
- Long term market signals not to be blurred when reference values and thresholds are determined: shortfalls (due to price or volume) to be compensated are with regard to a trend, rather than an average
- Rules cannot forget the management of the booms



## **On aid as a means to dampening instability rather than compensating shortfalls**

- Instability is a succession of booms and shortfalls and the difficulty to cope with shortfalls often comes from a poor management of the booms
- Then aid will be a better insurance if it helps to manage booms as well as shortfalls
- It should offer a guarantee in exchange of the previous adoption of rules
- Two ways, micro and macro



## Micro approach: « contra-cyclical loans »

- Experimented by AFD on the basis that a majority of debt distresses follow an export shortfall
- « Floating amortization », likely to be postponed according to an index of exports value (in euros) on a moving average of the previous 5 years (similat riger as stabex) ...
- Might be extended to support insurance schemes in low-income countries, in particular in the agricultural sector
  
- However limited macroeconomic impact (progressive)
- Little relevant for countries mainly dependent on grants
- Usual technical issue of the index of reference



## Macro-economic approach: indexing debt service?

- Possible higher macro impact
- But similar problems to face (indexing on what? triggering thresholds, relevance for countries weakly indebted,...)
- And additional problems to manage on a macro scale (at the loaner or at the world level) the acceleration and slowing down of amortization
- Would need a special fund...
- ...and in that case why not a similar one for weakly indebted (and often poorest) countries?



Another form of macro-insurance,  
the monetary guarantee

- E.g. the French Treasury unlimited guarantee to CFA francs
- Allows countries to face sudden shortfall of external resources without drastic exchange controls or sharp depreciation
- As an insurance contract, it involved rules of monetary management, determined ex ante
- But it does not presently address the issue of the flexibility in public balance the management of shocks could need



## Conclusion: ex ante stabilization or ex post insurance?

- Both are needed and complementary
- Need of ex ante allocation taking into account structural vulnerability, due to the difficulties to mobilize additional resources quickly and unconditionally when shocks occur
- At the same time need for ex post and specific instruments, due to the possible gap between the ex ante assessment of vulnerability and the actual size of shocks, only evidenced ex post
- Possibility to link ex post macro-insurance to domestic insurance schemes looked for by usual development aid



## Need for research

- Assessment of the conditions making development aid stabilizing at the macro and possibly micro level and thus enhancing its contribution to growth and poverty reduction
- Comparison of the related impact of the level of aid and of its modalities
- Implications of changing the rules of allocation vs the improvement of compensatory (or regulatory) schemes