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"Study on shock absorbing schemes in ACP countries – FLEX Study"

Contract N° 2010/240-876
Framework Contract Commission – Lot 5

Final Report

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Executive summary

The recent global financial crisis as well as recent and current food and fuel price increases have had large effects on developing countries. Sudden external shocks can involve sudden net capital outflows, sudden declines in export revenues, increased costs of essential imports such as food and oil products or declines of remittances. These will affect growth and government revenue. This can lead to increased poverty in the short term, and reduction in critical expenditures, which can have long-lasting negative development effects. Donors and international financial institutions have designed shock facilities in order to cushion the impact of shocks on the poor and protect critical spending categories, so as to sustain growth. This paper examines the future design of shock facilities by the European Commission, as well as makes broader suggestions for a more general shocks architecture.

The European Commission has put in place various shock absorbing schemes most recently the FLEX, V-FLEX and Food facility initiatives. Recent studies (TAC, 2009; Aiello, 2009) have suggested a number of strengths and weaknesses in the past schemes and suggested the initiation of new shock compensatory schemes.

This report discusses a number of issues. We first review the recent literature on the impact of shocks on development in order to appreciate the efforts to address the impact of shocks. We then review and provide a statistical analysis of critical expenditures and vulnerability to understand what happens to government spending categories when crises hit economies. We then include a review of the range of policy options open to countries to address crises. A major part of this paper includes a review of existing shock facilities and lessons learned. This sets the stage for a discussion on a range of assessment criteria against which we would consider in any new EU shock absorber scheme. We discuss a large number of alternatives as part of three broad options and analyse these including through numerical simulations. We provide specific comments and suggestions on trigger variable thresholds, and scale of the facility and we suggest that payments should be dependent on resilience.

Economic shocks have become more important....

Shocks have become more important in today's globalising world. Our review of the evidence in the text and the appendices suggests that shocks can have a large effect on growth, government expenditure and development. The G20's development agenda is explicitly about growth and resilience. The IMF has been enhanced during the crisis focusing on balance of payments support. A European angle could be to protect critical spending such as social spending and infrastructure projects.

... and therefore it is important to devote attention towards dealing and coping with shocks

There are various ways of dealing with economic shocks, and two of them include 1) resilience building to improve dealing with shocks and 2) providing finance in case shocks affect critical spending. Large donors such as the European Commission could lead the way in two ways: 1) they are a large donor on its own with development and shock components in their indicative programmes and 2) they can co-ordinate and pool loan and grant resources for a large European shock facility, which could hopefully incorporate resources from other donors.

Scale and speed are particularly important criteria for shock absorber schemes, including those by the EU, so that they can have a genuinely counter-cyclical and significant effect on developing countries facing external shocks. It would seem desirable to increase the proportion of donor

resources going to shock absorber schemes, as shocks seem to be a major cause of lower growth in developing countries and shocks have become more frequent; furthermore, even for liquidity facilities (e.g. by the IMF) , greater emphasis on significant scale low conditionality lending in the face of shocks seems highly desirable.

The next multi-year financial framework will cover the period 2014 – 2020 and it is likely that EDF will not be budgetised until the next period. Assuming that some €22 billion will be found, we assume that at least €1.1 billion or 5% (adding Flex and V-Flex amounts in previous period) will need to be reserved for a shock facility and more could be pooled from EU bilateral states. The World Bank's IDA crisis facility reserves a similar proportion from all IDA resources for dealing with crises. However, we argue that €3 billion is a better approximation of what would be needed to deal with another big shock such as the global financial crisis.

So what might be the key elements in a new European approach?

Access to the new shock facility needs to be simple and flexible, yet also predictable. There should be a set of clear trigger variables. Our study favours the use of forecasts such as those on GDP and the current account as elements for a *trigger variable* because this allows faster and speedier allocation of resources. A case can be made to spend some resources for monitoring shocks, e.g. by supporting a team of researchers at Commission or IMF and to do this in collaboration with partner countries. Such a team could monitor categories of variables more closely related to preserving critical spending but which might not be readily available from international databases, including data on government spending. Of course, the use of different trigger variables can result in very different allocations so this needs a further discussion. In particular, if a new shock absorber scheme needs to address shocks quickly and at scale to protect critical spending, it needs to have up to date information on the underlying financing situation and this can facilitate ex-ante engagement with countries to ensure an optimal impact from the shock facility. A further decision is required on the *threshold* used for each trigger variable. The tighter the threshold the fewer countries are eligible.

Our study examines pros and cons of different trigger variables and suggest to use country specific GDP shocks (or fiscal shocks if data were available) on the basis of IMF forecasts, verified by in-country examination with partner countries, using a 3% threshold (or changed to the median GDP shock) initially. The trigger value of 3% reaches around half of the countries in the first instance (at least based on the 2009 shock as simulated in table 11). In other years, such a trigger may not be sufficient and so one could consider changing the trigger threshold to the median shock (it was 3% in 2009) and could be closer to 1% (too high a threshold might make the shock system to inflexible). The trigger threshold would be country specific (and not group specific or necessarily as high as in the IDA CRW whose thresholds are considered too tight).

Current shock facilities such as FLEX and V-FLEX are for *ACP countries*, but a new scheme could be for all developing countries (the Food facility was one such example), LDCs or low income countries. Given that the EDF is unlikely to be budgetised for the period 2014-2020, and following the Cotonou Partnership Agreement, it might be useful to remain focused on ACP for now, but to begin to extend the shock facilities into all developing countries (and finding new resources) by the next period from 2020 onwards. This means that preparations could start now by extending the new FLEX scheme to all developing countries whilst bringing in additional resources from the EU budget.

An innovation in future EU shock facilities involves the incorporation of the concept of resilience and resilience building. We have argued that resilient countries are better able to withstand shocks, and hence less resilient countries should receive more funding ex-post, whilst (to counteract the moral

hazard problem) ex-ante more funding should be devoted towards resilience building. Some efforts would need to be devoted towards measuring resilience (Briguglio, 2010).

We argue that shock absorber payments should take into account whether countries are resilient to shocks. We used different measures of resilience and show that the use of resilience indicators could alter payments substantially from a situation where payments are proportional to the shock. Ideally the notion of resilience-scaled payments would be based on a resilience index available for all countries. Work on this should start soon. But whilst the ideal indicator is still absent, we suggest to scale payments by a combination of income levels (GDP per capita in international dollars), government debt (as % of GDP) and population (the latter to account for the inherently vulnerable characteristics of small states). Whist highly indebted countries should get greater compensation in times of shocks; in good times countries should receive payments to become more resilient to shocks.

We have also examined channels of delivery. The Commission specialises in grant resources and we suggest this would continue to be relevant for low income countries. V-FLEX paid resources through budget support which could be continued for those countries ready to receive budget support and in co-ordination with other development institutions. We have also argued that COM could use its co-ordinating role and bring in other funders, e.g. loans from the AfD or KfW. In addition, critical spending is often related to large infrastructure projects which require project financing and which could be provided by the EIB including using blending schemes. COM could also liaise with the other institutions such as the Wold Bank and Regional Development Banks in the delivery of project finance. Working with others could also help to improve the additionality and leveraging effect of the EU's interventions.

Acknowledgements

We are grateful to those contributing to the study. We thank the large number of officials and experts from the European Commission, IMF, WB, African Development Bank, Inter-American Development Bank, UNCTAD, Commonwealth Secretariat, development agencies from France, UK, Germany and Netherlands, the ACP secretariat and Commission officials and universities for valuable inputs. We have held two seminars, on 13 December 2010 at the European Commission, on 5 April 2011 at the ACP secretariat and the presentation of the draft financial report was on 16 May 2011. The comments during those meetings contributed to the study, but the views expressed in this study remain the responsibility of the authors.

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List of acronyms

ACP	African, Caribbean and Pacific states
ADB	Asian Development Bank
CCRIF	Caribbean Catastrophe Risk Insurance Facility
DG	Development Directorate General for Development and Relations with ACP states
DRC	Democratic Republic of the Congo
EC	European Commission
ECF	Extended Credit Facility
ED	External Demand
EDF	European Development Fund
EDI	Economic Diversification Index
EDSL	Economic Diversification Support Loan
EFF	Extended Fund Facility
ENDA	Emergency Natural Disaster Assistance
EPCA	Emergency Post Conflict Assistance
ESF	Exogenous Shock Facility
EU	European Union
EVI	Economic Vulnerability Index
FCL	Flexible Credit Line
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
GFCF	Gross Fixed Capital Formation
GNI	Gross National Income
GRA	General Resources Account
IADB	Inter American Development Bank
IDA	International Development Association
IFC	International Finance Corporation
IFI	International Financial Institutions
IMF	International Monetary Fund
LDC	Least Developed Country
LIC	Low Income Countries
MDB	Multilateral Development Bank
MDGs	Millennium Development Goals
MIC	Middle Income Countries
PRGF	Poverty Reduction and Growth Facility
PRSP	Poverty Reduction Strategy Paper
PSI	Policy Support Instrument
RDB	Regional Development Bank
RCF	Rapid Credit Facility
SBS	Sector Budget Support
SCF	Standby Credit Facility
UCT	Upper Credit Tranche
UNCTAD	United Nations Conference on Trade and Development

1. Introduction

The recent global financial crisis as well as sudden food and fuel price increases have had large but highly variable effects on developing countries. Sudden external shocks can involve sudden net capital outflows, sudden declines in export revenues, increased costs of essential imports such as food and oil products or declines of remittances. These will lead to a number of negative effects on growth including via declines in government revenue. This can lead to increased poverty in the short term, and reduction in critical expenditures, which can have long-lasting negative development effects. Donors and international financial institutions have designed shock facilities in order to cushion the impact of shocks on the poor and protect critical spending categories, so as to sustain growth. This paper for the European Commission informs the future design of shock facilities by the European Commission, as well as makes broader suggestions for a more general shocks architecture.

The European Commission has put in place various shock absorbing schemes most recently the FLEX, V-FLEX and Food facility initiatives. Recent studies (TAC, 2009; Aiello, 2009) have suggested a number of strengths and weaknesses in the current schemes and have suggested the initiation of new shock compensatory schemes. In addition, on-going discussions in the lead up to the Financial Perspectives 2014-2020, which might include budgetisation of the EDF, could involve the design of a shock compensatory scheme which covers a wide range of developing countries and a wide range of shocks, as well as facilitating a speedier response.

This study takes into account a number of new issues such as a better understanding of vulnerabilities of developing countries to the various international crises and the resulting external shocks through various channels, understanding of the evolution of critical expenditures during crises and the new institutional environment. It also discusses options for a future shocks architecture.

This draft final report discusses a number of building blocks:

- A review of the impact of shocks on development in order to appreciate the efforts to address the impact of shocks (section 2);
- A review and statistical analysis of critical expenditures and vulnerability to understand what happens to government spending categories when crises hit economies (section 3);
- A brief review of the range of policy options open to countries to address crises (section 4);
- A review of existing shock facilities and lessons learned (section 5);
- Future directions of shock facilities, especially by the European Commission (section 6);
- Assessment of the various shock absorber scheme options (section 7); and
- Conclusions (section 8)

The report also contains a number of appendices which support the analysis in the main text.

This report builds on the progress report and incorporates comments from the in-depth discussions at the European Commission workshop held on 13 December 2010, at the ACP Secretariat on 5 April 2011 and at the European Commission open workshop with ACP on May 16, 2011 We gratefully acknowledge the valuable comments made by the European Commission and by all the participants at these workshops. This report aims to inform the new shock absorber schemes of the EC.

2. Shocks, volatility, growth and development

This section reviews the literature and focuses on why shocks matter. This has always been true, but we think is particularly true in today's uncertain world. Climate change makes natural disasters more likely; frequent and deep, as well as increasingly globalised, financial crises create external shocks for developing countries even if they are following good policies, via the trade, capital flows and remittances channel. As a consequence, it seems that shocks have become more frequent and more damaging. An important policy conclusion is that more emphasis may need to be placed on dealing with shocks, to avoid countries being derailed from their development path. There is growing consensus that aid, alongside official liquidity and development finance, needs to play an important role in mitigating the impact of shocks. This seems to imply the desirability of allocating a higher proportion of ODA to help developing countries address shocks, though the trade-off to allocate less funds to other development activities funded by aid needs to be considered.

Allocating considerable resources to help developing countries face shocks is consistent with the general assessment that donors and IFIs had responded well to the 2008-2009 global financial crisis; most of this response was however through temporary mechanisms and it is therefore desirable to review existing facilities, with the view to establish a more permanent shocks architecture. We focus here more on the facilities of the European Commission.

A study conducted for the European Commission (TAC, 2009) covers a large number of questions and issues related to "protecting" developing countries (and particularly ACP countries) against exogenous shocks. This study refers to external or exogenous shocks as economic shocks on which domestic policies and institutions have no influence. External shocks can include shocks owing to natural disasters, commodity price shocks, financial crises and others. The measurement of an exogenous shock however is not straightforward. Shocks can be measured as loss in export revenues, as a deterioration in the current account of the Balance of Payments , as a development finance gap, for example measured in the fiscal accounts or even as a forecast decline in GDP growth, caused by the shock. Statistically shocks can be measured ex-post, deploying statistical techniques such as econometric filters and before-after comparison, and in *real time*, using indicators on the current state of affairs, or forecasts. The use of forecasts facilitates a truly counter-cyclical response by donors and lenders. The category of external shocks excludes the shocks which are generated through domestic institutions and policies and which according to Rabbatz (2007) are also important in explaining output volatility. There would be moral hazard problems in compensating for domestic policy generated shocks (see also Box 1).

Box 1. Does the nature of the shock matter for shock absorber schemes?

Different shocks will have different effects on different countries. But does the nature of the shock matter for the design of shock absorber schemes? Some argue that some shocks are more important than others. Some shocks might be anticipated as regarded rather as trends; some suggest we need minimum periods over which the shock has to persist; some commodity shocks are easier to deal with through policy, some suggest looking at inputs into shocks rather than outputs of shocks; some suggest shock absorber schemes need to deal with temporary rather than permanent shocks; however, the latter distinction is often difficult to predict. For this purpose the key is that shocks are exogenous, that is shocks on which domestic policies have no influence. Martin and Barghawi (2004) review these issues and suggest that all limitations of and distinctions amongst shocks are spurious: "If a country is making genuine efforts to promote economic development and reach the MDGs, shocks should be foreseen and avoided – and if this is not possible, genuine unforeseeable "shocks", especially those which impact on MDG progress, should be compensated regardless of their source, nature or duration." One factor is whether the country is making a genuine effort, which is why this paper suggests excluding shocks which are generated through domestic policies and institutions. It should be noted however that in practice, though usually clear, sometimes the distinction between external and policy shocks can be somewhat blurred.

For shocks that are clearly external no additional policy conditionality should be added to new loans or grants for countries pursuing reasonable policies; this automaticity is both appropriate in economic terms, and also will facilitate quick and thus genuinely counter-cyclical response. The use of the budget support mechanism wherever possible, combined with lack of additional conditionality could help ensure both speed of disbursement and sufficient scale, which as we discuss below are key criteria for successful shocks facilities. An important challenge for the EC new facilities will be to combine focus on maintaining priority spending, e.g. on infrastructure (which may require allocating resources to specific projects) with the mechanism of budget support. A third element contributing to speedy response are simple criteria to assess the scale of resources countries need, ideally based on forecasts or data that can be obtained very easily.

However, a type of pre-conditionality is the on-going overall policy dialogue with the country, for example, where necessary, to attempt to improve extremely poor governance; such poor governance could prevent or reduce the effectiveness of implementation of shock absorber schemes. Similarly, measures such as export bans or reactive protectionist measures need to be prevented, to avoid negative impacts on other developing countries.

Evidence shows the problem in poor countries is not just a failure to record periods of positive economic growth but also the frequency of downturns (Winters et al., 2010). LICs defined as such on the basis of their 2008 GNI per capita increased their per capita GDP by only 11% between 1960 and 2007. Either halving negative growth rates, i.e. halving the severity of downturns, or halving the percentage of years of negative growth over the forty seven years would have produced much the same result, increasing GDP by about 70%. But if negative growth rates could have been eliminated altogether, GDP per capita would have more than doubled and average annual growth would have increased to over 2% (rather than 0.23%). Similar effects apply when using 1962 GNI per capita basis for the LIC category.

Table 1. The effects of shocks on incomes

Scenario	**GDP per capita**		**Average Annual Growth Rate**
	1960	2007	
(A)LICs classified by GNI per capita, 2008			
Base case	100	111	0.23
Halving negative growth rates	100	172	1.18
Halving number of negative growth years	100	175	1.2
Setting all negative growth rates to zero	100	269	2.13
(B) LICs classified by GNI per capita, 1962			
Base case	100	250	1.97
Halving negative growth rates	100	333	2.59
Halving number of negative growth years	100	337	2.62
Setting all negative growth rates to zero	100	444	3.22

Source: Winters et al. (2010)

Poor countries appear to remain poor because they are plagued by volatile growth, with frequent periods of deeply negative growth that more than cancel out prior periods of positive growth. Such periods of negative or low growth can be caused by external shocks. LICs are often poorly equipped to deal with, and recover from, adverse shocks, which could range from global economic shocks, to severe commodity price volatility, to famine and other devastating natural disasters (Aiello, 2009).

An emerging empirical literature suggests that growth slow-downs are important in understanding the medium- to long-run growth process in LICs (further evidence is provided in appendix I). Some

studies examine the statistical relationships between shocks and growth and development outcomes. For example,

- The recent literature on the effects of shocks highlight the short-run and long-run effects of shocks for growth, with a focus on financial crisis due to the recent global financial crisis. In general, financial crises can have significant negative short-run effects and long-run effects (IMF, 2009).
- Countries that suffer spells of real income stagnation are more likely to be poor (Reddy and Minoiu, 2009).
- Berg et al. (2010) use several methodological approaches, including impulse response function analysis, growth spells techniques and panel regressions, to show that external demand (ED) shocks are not historically associated with sharp declines in output growth. However, they also show that there seem to be persistent output losses associated with ED shocks in the medium-run. Their analysis suggests that countries with lower deficits, lower debt, more flexible exchange rate regimes, and a higher stock of international reserves are more likely to dampen the effects of an ED shock on growth.
- TAC (2009) carries out a statistical analysis that confirms a clear correlation between exogenous shocks and negative movements on macroeconomic variables, particularly for the most vulnerable countries. An econometric panel analysis shows a negative impact of large natural disasters on the economy (i.e. real GDP growth) of ACP countries. The same econometric panel model confirms the effect of these real time triggers when estimated on government expenditures and there is a positive impact of natural disasters on expenditures while terms of trade have a negative impact on government expenditures.
- Reinhart and Rogoff (2008) suggest that financial crises have three effects. First, asset market collapses are deep and prolonged. Second, the aftermath of banking crises is associated with profound declines in output and employment. The unemployment rate rises an average of 7 percentage points over the down phase of the cycle, lasting on average for around four years. Output falls (from peak to trough) an average of over 9 percent, lasting on average for around two years. Third, the real value of government debt tends to explode the literature on why shocks, and especially negative downturns, can have long-term effects is well established. For example:
- Crises can result in sharp declines in investment in education and health, declines that can potentially have long-lasting effects (Benhabib and Spiegel, 1994; Krueger and Lindahl, 2001).
- There can be irreversibilities in the response to a crisis. For example, if children are severely malnourished, pulled out of school, subject to neglect or violence and/or pushed into work, they live with the consequences for their whole life, sometimes passing the consequences onto their own children (Harper, 2005). This would imply much greater future poverty, probably higher inequality and lower prospects for economic growth (Harper et al., 2009).
- Even if some countries did recover economic growth a few years after structural adjustment, there is still evidence that even these countries incurred significant costs in this period (reduced nutrition, withdrawal from school, etc.) (Cornia et al., 1987).
- Investment, especially lumpy infrastructure investment, is often sacrificed during a crisis because investment decisions are sensitive to uncertainty about the future outcomes of key variables (Dixit and Pindyck, 1994). An increase in uncertainty can change the investment decision and lead to the cancellation of lumpy investment projects with long-term implications.

There is no agreement on the specific effects of the crises on type of spending because that depends on the specific shocks and specific circumstances. But it is clear that external shocks matter for growth in poor countries, including in the long-run through cuts in fixed capital formation and/or social spending. Shock absorber schemes need to address external shocks not generated through domestic policy errors, and help maintain investment in long term growth.

Such shock absorber schemes need to combine grants and loans in an appropriate mix. One of the advantages of loans is that they allow to scale up the assistance, helping cover a larger proportion of the financing gap. Secondly, they reduce the risk of moral hazard. An important consideration is that flexibility can be introduced into loans, by allowing for repayment holidays in case of shocks (as the Agence Francaise de Development does) and possibly acceleration of repayment in times of rapid growth.

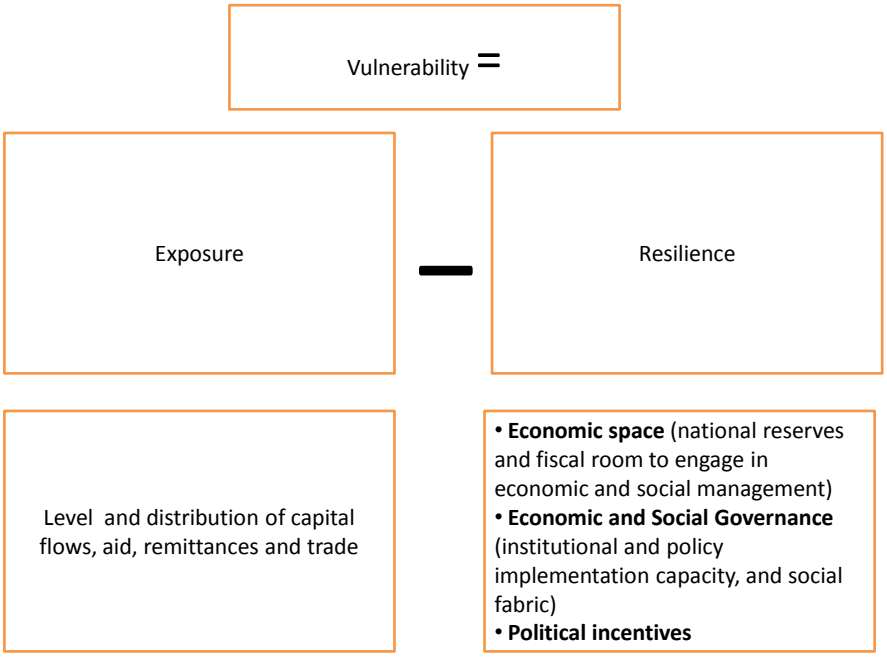
3. Vulnerability, exposure and resilience

Vulnerability to export fluctuations is recognized as an important risk to the development agenda in ACP countries and as such has been addressed in Article 68 of the ACP-EU Partnership Agreement (Cotonou Agreement). However, vulnerability is a complex concept. This section discusses the concepts of vulnerability, exposure and resilience. We need to have an understanding of which types of country are vulnerable to crises (3.1), and what happened to critical expenses in these countries (3.2). Ultimately, shock absorber schemes should not only be concerned with reducing exposure of a country to a crisis, but also with the ability of a country to cope with a shock, that is increasing resilience. This implies that shock facilities need to tackle both elements, build resilience and reduce exposure. Such an approach points to a double track: short term reactions to mitigate negative effects and long term interventions to build resilience and reduce exposure. It seems important to consider if and how both tracks should be integrated, for example by the possibility of using resources devoted to shock absorber schemes for building resilience , if the shocks do not happen

3.1 Exposure and resilience

Vulnerability of a country to a crisis depends on the exposure to the crisis as well as the ability of the country to cope and respond (resilience), see Te Velde et al. (2009a), Briguglio et al. (2006) and Fosu and Naude (2009). Hence exposure it is not the only factor that drives vulnerability (Guillaumont, 2008). Economic resilience is the policy-induced ability of a country to withstand or recover from the adverse effects of shocks (Briguglio et al., 2006). In order to understand the most pressing need for shock absorber schemes, we need to have a clear understanding of both exposure and resilience to shocks. Figure 1 describes this in more detail. See Appendix E for more details.

Figure 1. Key components of vulnerability (= exposure – resilience) to shocks



Source: Te Velde (2009)

Whilst exposure is relatively easily measured, it is more difficult to measure resilience. Below we examine resilience through country descriptions and through indicators. While all countries have been affected by the recent financial crisis, it should be added that the impact has been highly

varied, from very small or no macro effects in some countries (even though disaggregated effects at sector level and in some groups may be visible) to very large effects in others (Ocampo, Griffith-Jones et al., 2010). Te Velde et al. (2010) provide a number of country examples of why some developing countries were more exposed to the global financial crisis than others. This includes financial and real exposure and goes much further than the typical focus of shock absorber schemes on export loss.

Financial exposure:

- Financial transmission mechanisms to low-income countries initially appeared limited, and attention quickly focused on the real (trade and remittance) transmission mechanisms; however, it quickly became clear that bank lending, stock market contagion and worsening banking systems did propagate the crisis. One lesson is that some low-income countries are more integrated financially than is often thought.
- Another myth dispelled by the crisis is that FDI is always resilient in crises (or more resilient than other flows). In fact, FDI fell significantly in countries such as DRC (even before security problems occurred), Cambodia and Bolivia. In some other countries, such as Uganda and Kenya, portfolio flows changed quickly.
- Countries with complex, weakly regulated banking sectors / stock markets were more vulnerable;
- Countries with a high share of foreign-owned banks and foreign assets;
- Countries dependent on external private capital flows (e.g. FDI, portfolio);

Real exposure :

- Countries with a significant share of exports to crisis-hit advanced economies; Economies with concentrated exports in a few commodities
- Countries exporting commodities whose prices have dropped or products and services with high income elasticity of demand (e.g. tourism);
- Countries heavily dependent on remittances
- Countries dependent on aid.

But exposure is only half the story. Some countries are more resilient to a crisis and are therefore more capable of bouncing back after a crisis. Te Velde et al. (2010) provide the following examples:

- While certain types of openness have left countries more exposed to crisis, this may not always have meant increased vulnerability, as some countries have also become more resilient (e.g. Tanzania and Bolivia through good macroeconomic management, including using mineral resources to build up foreign exchange reserves). It is important that countries promote crisis-resilient growth, as in this way they are better prepared for recovery.
- In particular, diversification (products and destinations) is important for growth and resilience to crises. This should be promoted and could give be given more attention than has previously been the case. It is also important to diversify sources of capital flows, such as FDI inflows. For example, Chinese FDI is making up for some of the losses in mining in Zambia.
- Good macroeconomic management allows more scope for policy responses later. This requires good institutions in managing finances.
- Indeed, the crisis highlights that flexible institutions are important in dealing with crises. There are examples of task forces that led to policy responses to the crisis in Bangladesh, Tanzania and Mauritius, and these were set in a more institutionalised way.

Apart from country specific issues, there are also cross-country approaches to measuring vulnerability, exposure and resilience (Massa, te Velde and Cali, 2009). Appendix E contains a review

of vulnerability indicators. The Commonwealth Secretariat has developed the Commonwealth Vulnerability Index. This profile of vulnerability and resilience aims to (i) identify the manifestations and sources of structural economic vulnerability in a specific country, (ii) identify the sources of policy-induced economic resilience, and (iii) propose new policy responses to promote resilience-building. In order to do this, the profile is developed according to the methodology proposed by Briguglio et al. (2008a). It is a composite index that aggregates three determinants of income volatility:

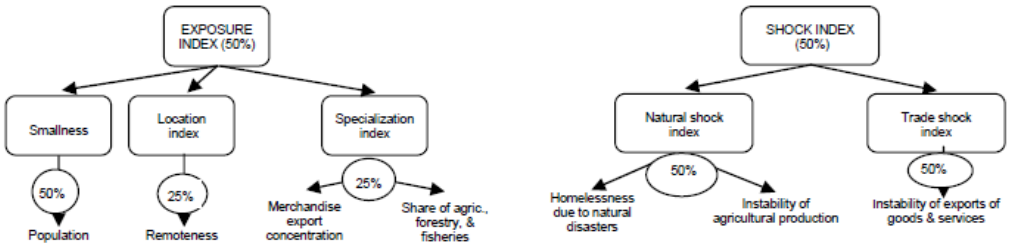
- the lack of export diversification (measured by the UNCTAD export diversification index);
- the extent of export dependence (measured by the export to GDP ratio);
- the impact of natural disasters (measured by the share of population affected by natural disasters).

The Commonwealth Secretariat also developed a composite economic resilience index which is computed as a simple average of four components (Briguglio et al. (2008b):

- macroeconomic stability;
- microeconomic market efficiency;
- good governance;
- social development.

The United Nations was one of the pioneer institutions to assess economic vulnerability by creating a specific index. In 2000, the Committee for Development Policy (CDP) adopted the so-called Economic Vulnerability Index (EVI), which substituted the old composite Economic Diversification Index (EDI) among the criteria to identify the Least Developed Countries (LDCs) and to decide which countries are to be graduated from the LDCs' list. The EVI is an index that assesses structural economic vulnerability. In other words, it focuses on inherent factors rather than policy-induced ones. The main goal of the EVI is to allow the identification of those countries that are the most disadvantaged by structural handicaps to growth. The EVI is a composite index that in its most recent version includes 7 indices, which reflect the primary channels through which structural vulnerability affects a country's growth potential. These indices can be sub-divided into 3 shock indices and 4 exposure indices. Shocks indices include instability of agricultural production, homeless population as a result of natural disasters, and instability of exports of goods and services. Exposure indices include primary activities as a percentage of GDP, merchandise export concentration, economic smallness and economic remoteness.

Figure 2. The Economic Vulnerability Index (EVI)



Source: Guillaumont (2008).

The IMF's vulnerability indicators focus mainly on the financial and macro-aggregate side of the economy. Although the World Bank does not produce specific economic vulnerability/resilience indices, it develops a series of country assessments that range from general to specific and provide indirectly information on economic, social as well as environmental vulnerability and resilience issues. The assessments can be classified into four main areas: (i) economic assessments; (ii) energy-environmental assessments; (iii) social assessments; and (iv) governance.

One important consideration in choosing vulnerability and resilience indicators for the new EC schemes is simplicity, as too complex criteria need to be avoided. More broadly, the analysis of combining vulnerability and resilience could lead the European Commission to adopt a mechanism that provided resources to countries, when they faced shocks; however, if they did not face shocks in a particular year, these resources could be used, if the country wished, to increase resilience against future shocks.

3.2 What happens to the critical government expenditure during crises

There is very little systematic analysis on what actually happens to different types of government spending during a crisis. Nonetheless, it is important that we examine this. One typical view by economists is that spending on lumpy investment projects is cut during a crisis. A typical social policy view is that social spending is likely to be cut disproportionally. Either category of spending can have long term effects. Cuts in investment are most likely to affect growth and incomes in the long-run because they reduce capacities, but as explained in section 2 social spending cuts can also have long-term effects by eroding human capital.

The recent global financial crisis suggests that a crisis can hit public expenditures hard, either due to government spending cuts and/or deficits and debt level increasing. Te Velde et al. (2010) provide some examples of how government revenues are affected. Receipts from import duties and VAT fell in countries such as Bangladesh and Ethiopia, reinforcing the need for direct tax revenues. The crisis worsened the tax intake in mining dependent countries such as Zambia, where anticipated increases in the mining tax intake by the government did not occur. And the 2009 budget in Sudan suffered a 50% reduction from the expected budget revenue because of the sharp decline in oil prices from $147 to $47 a barrel. Whilst we know that government expenditure is affected during crisis, is government affected disproportionally either in relation to GDP or total government expenditure?

In order to examine systematically the relationship between crises, government spending and shock facilities, we estimate the following relationships (Appendix A contains further details) for African countries over 1980-2008.

Share Govt Inv (i,t) = a (i) + b*SHOCK (i,t) + c*SHOCK FACILITY(i,t) + time dummies

i=country i., t=time t, SHARE– share of government investment in GDP, SHOCK = various (e.g. y-o-y % change in exports), SHOCK FACILITY = value of shock facility payments, a(i) = dummies for each country (except one) and time dummies= dummies for each year. The results in appendix A show that in some countries the government investment share is lower when exports drop and in others it is the reverse. Table 1 provides a summary of the country effects (ACP and non-ACP African countries only) in the period from 2000 to 2009. In most African countries the effects are not significant in part because there are only few observations. Table 1 examines whether the share of investment in total government expenditure shifts in crises but this is also not clear. The coefficients in the pooled regressions are not significant.

Table 1: The effects of Export shocks on GPCFE's share of GDP

Coefficient	Medium to High significance levels	Not significant
Positive correlation	Niger**; Rwanda**;	Benin; Burundi; Cameroun; Cape Verde; Cote d'Ivoire; Gabon; Gambia; Kenya; Mauritius; Mozambique; Namibia; Seychelles;
Negative correlation	Uganda**	Botswana; Burkina Faso*; Central African Rep.; Ethiopia; Lesotho; Madagascar; Mali; Nigeria; Senegal; Swaziland; Togo; Zambia

Notes: Star codes for significance: * p<0.10 (low significance), ** p<0.05 (medium significance), *** p<0.01 (high significance)

Table 2: The effects of Export shocks on GPCFE's share of Total public expenditures

Coefficient	Medium to High significance levels	Not significant
Positive correlation	Malawi**;	Burundi; Cameroun; Cape Verde; Comoros*; Côte d'Ivoire ; Gabon ; Gambia ; Ghana ; Kenya ; Madagascar; Namibia; Niger*; Rwanda; Seychelles; Tanzania;
Negative correlation	Swaziland**; Uganda***;	Benin; Botswana; Burkina Faso; Central African Rep.*; Ethiopia*; Guinea; Lesotho; Nigeria; São Tomé & Príncipe*; Senegal; South Africa*; Togo; Zambia;

Notes: Star codes for significance: * p<0.10 (low significance), ** p<0.05 (medium significance), *** p<0.01 (high significance)

There are similar results when using the current account variable as the shock variable (results available upon request). Tables 1 and 2 provide a summary of the country effects (ACP and non-ACP African countries). A general conclusion is that there is no systematic relationship between the government investment share of GDP and measures of shock so that shocks affect, on average investment and GDP in the same way. Similarly, there is no systematic relationship between the government investment share in total government expenditures and measures of shock so that shocks affect, on average, government investment and government consumption in the same way. Vice versa, GDP is a good measure of government investment and overall government spending is correlated with government investment, although this applies to African countries and with considerable country heterogeneity. On the other hand, when including the current account variable shock variable together with the total value of shock facility payments the former regressor's impact on the government investment share in total government expenditures becomes highly significant. We get the same significant result when adding country and years dummies to these two regressors.

4. Policy responses to shocks: resilience, capabilities and shock facilities

Countries can address shocks in various ways: they can absorb a shock, insure against shocks by trade and investment diversification, insure through reserves and other financial insurance schemes, or they can ask for support from external shock compensatory schemes.

4.1 Country level policy responses

There are four types of country level policy response to help countries to respond to a crisis (see Figure 1):

1. Reducing the *exposure* to a shock (avoiding a crisis)
2. Macro-economic management (insuring against a crisis)
3. Social policies to manage the impact (coping with a crisis)
4. Economy-wide and sector structural growth policies (escaping from a crisis using capability)

The first point on reducing exposure to a shock does not necessarily imply fewer exports. On the contrary it implies diversification into commodities, manufacturing and services affected less by the crisis, or at least to build up a diversified trade portfolio. This diversification can be both by types of products and by regions to which countries export to. For example, trade has remained a crucial factor for sustained growth in many countries, and the current pronounced shift in Africa's trading pattern towards faster-growing parts of the global economy should help to maintain export growth, as it did increasingly during the mid-2000s. By limiting the direct impact on the region's economies of the global recession, these factors also make it less likely that potential growth will be permanently affected (IMF, 2010).

On the second point, the macro side includes "automatic" macro-economic stabilisers such as regulatory and other policies in banking , monetary policies, and fiscal policies. The above policies can be put in place to dampen the negative impact of the shock. For example, monetary easing can increase the level of liquidity in an economy and stimulate demand, e.g. by reducing interest rates which would encourage consumption and investment, while increased fiscal spending (e.g. public works) might promote growth directly. Financial and banking policies could transfer assets from the private to the public sector, e.g. in the case of non-performing loans. The extent to which countries can use these policies will depend to a large extent on whether they have been prudent in the lead up to crises. If they have built up foreign exchange reserves and fiscal surpluses in good times (called economic space in Figure 1), they are less restricted in the short term to use fiscal and monetary policies when hit by shocks. However, such policies, even if positive, do have important opportunity costs, especially clear for low income countries.

The IMF's Regional Economic Outlook on Sub-Saharan Africa (IMF, 2010) argues that the region's resilience through the global financial crisis owes much to sound economic policy implementation. Before the 2007-2009 global shocks, most of the region's economies were in good shape: steady growth, low inflation, sustainable fiscal balances, rising foreign exchange reserves and declining government debt. When the shocks hit, countries were able to use fiscal and monetary policies nimbly to dampen the adverse effects of the sudden shifts in world trade, prices and financial flows. However, if the world economy continues to be fragile, then these cushions may no longer be available.

Te Velde et al. (2010) also suggests that developing countries were able to respond to the crisis using short-term macroeconomic management policies. For example, by March 2009 (half a year into the worst of the crisis) the Central Bank of Kenya lowered the cash reserve ratio from 6% to 5% and the central bank rate from 9% to 8.25% in order to lower interest rates and enhance credit supply in the economy. In Bolivia, the 2009 national budget included a 20.6% increase in public investment and a 12% rise in public servants' wages and salaries and Cambodia produced an expansionary budget. Ethiopia devalued its currency twice in 2009; Kenya had a significantly expansionary budget in 2009 (6% of GDP deficit in FY2009/10 compared with 2% the year before); there was a fiscal loosening in Mozambique for in 2009; a fiscal stimulus in Tanzania (government deficit at 1.6% for FY 2009/10) and a relaxed monetary policy; Zambia increased its borrowing to 3% of GDP in 2009 from the planned 1.9% in 2009. It is important to note that countries were only able to act counter cyclically because of reserves and low debts.

On the third point, social policies could include: putting in place or using safety nets and cash transfers for households affected by the global financial crisis; putting in place safety nets for firms affected by the global financial crisis; changing allocations for social sectors, such as education and health. Equity and reduction in poverty can help resilience. Too much inequality undermines macroeconomic resilience because it depresses aggregate demand, stimulates conspicuous consumption, creates political and social tensions, leads to excessive risk taking in financial markets, entrenches special interests that delay policy reforms, impedes counter-cyclical measures and affects the operation of institutions (see, e.g., Vandemoortele, 2010).

There are limits to what can be done through short-term economic and social management, as this is unlikely to deal with structural challenges. Normal growth-enhancing policies are one way to get a country out of the crisis. For example, a fiscal stimulus may bring spending and hence growth forward, but a change in business conditions would lead to faster investment, which may raise growth now and in the future. A question mark is whether the crisis has led to a slowing down of such measures, or on the contrary, to an acceleration of such measures. Much depends on the policy implementation capacity and political will (Figure 1). Structural policies could include: investment in infrastructure and education; trade policies (tariffs, subsidies); tax policies (e.g. corporate taxes, investment incentives); competition policies; industrial policies (e.g. export processing zones and technology); business policies; investment climate measures and administrative procedures.

4.2 The role of external shock absorber schemes in country

When there is little policy space for measures in 4.1, e.g. because there is no scope to engage in macro-economic policies or when the fiscal deficit is too high, and when the countries are facing a major shock for which they have not put out any insurance, the only way to cope with the shock is to ask for access to external shock absorber schemes.

The global financial crisis led to a number of high risk situations with respect to reserves. For example, in DRC, by February 2009 gross official reserves had fallen to the equivalent of less than 1 day of imports. The IMF granted $195 million under the Rapid Access Component of the ESF, which increased the level of gross official reserves to $237 million, or 1.9 weeks of imports (see Appendix F). Without the shock absorber, the country would probably have ceased to function economically. Winters et al. (2010) suggest that the IMF has helped countries extremely well.

Appendix G examines the effects of shock-absorber schemes in four ACP countries. The appendix contains data and narratives on shocks, government spending, and the value of shock absorber support by donors for Benin, Burundi, DR Congo and Mauritius. Generally, some payments from shock facilities were much later than when the shock first occurred. However, an important message

from all the four cases is that overall government spending, and specifically government investment, as % of GDP is higher in years (or following years) when shock facility payments are higher. This does mean that shock facility payments help government maintain higher levels of critical spending compared to what would otherwise have been the case given the size of the shock. This clearly shows the development value of speedy and sufficiently large shock absorber schemes.

Table 3 summarises the results. This type of analysis is the closets we have been able to get to analyse the chain of beneficiary. It is very challenging enough to check whether critical government sending can be safeguarded (Table 3). It is rather difficult to examine in more detail the chain of beneficiaries, certainly for payments made through budget support. HTPSE (2011) evaluates VFLEX and suggests that "The review of available country reports, IMF Country Reviews for the 2009 beneficiaries and from feedback indicates that qualitatively at least the VFLEX was pro-poor in its impact by reducing the incentive and need for Finance Ministries to cut pro-poor or development expenditure. An added impact was that of the ephemeral but important aspect of confidence – VFLEX helped recipient economies to ensure macroeconomic balances and prevent reduction in country risk through otherwise possible second-round macroeconomic destabilisation through for instance possible currency or bank runs. "

Table 3 The effects of shock absorber schemes on government spending

	Government spending as % GDP	Government investment as % of GDP	Narrative provided by officials documents
Benin	Relatively large shock facility payments in 2008 allowed government spending (% of GDP) to be relatively higher	Relatively large shock facility payments in 2008 allowed government investment (% of GDP) to be relatively higher.	To mobilize additional resource aiming at covering the financing gap resulting from the fiscal response to mitigate the impact of these shocks, Benin strengthened the partnerships with development partners, including World Bank, European Union, and other multilateral donors, to keep spending plans.
Burundi	Payments allowed an increase for government spending, e.g. in 2008 and 2009 allowed it to increase further and stay at high levels	Payments in 2008 and 2009 allowed investment to increase further, whilst investment fell back in years without payments (2005, 2006)	Mitigation of the impact of higher food and oil prices on the poor by enhancing social safety nets. The budgetary impact of these policy responses (estimated at about 3 per cent of GDP) was fully financed by donors.
DR Congo	Government spending as % of GDP at higher level owing to higher payments in 2008 and 2009	Investment boosted especially in 2008 and 2009	The government envisaged a domestic fiscal deficit of 1⅓ per cent of GDP; to limit the financing gap to the equivalent of ½ per cent of GDP, which would be covered by support in 2010 from shock facilities.
Mauritius	Government consumption (as % of GDP) increased in 2009 when shock payments were actually disbursed.	No direct relationship between shock facilities and investment	In 2009,V-FLEX payments aimed to maintain levels of public spending in priority areas, including in the social sectors, without jeopardising macroeconomic stability

Source: appendix G.

5. Lessons learned from existing shock facilities

5.1 How do we assess shock facilities

In order to learn lessons from existing shock facilities, we set up a methodology based on three stages which each shock facility follows. Table 4 sets out the key decision points for the facilities: they need to diagnose what the scale and nature of shock is, they then need to determine what countries themselves can do about the shock, and then decide what is the nature and scope of shock absorber instruments to be used.

Table 4. Steps towards providing shock absorber schemes

	Depends on the following key questions	Relevant measures/indicators
Diagnosis		
Country eligibility	Which countries are eligible?	List of ACP, all LICs and MICs? Has there been an application asking for help?
Trigger	Past data Forecasts Generic or case-by-case	Value of export shock Current account balance Government balance Commodity prices, terms of trade Finance gaps, GDP forecasts Capacity in funder to engage in assessments
Resilience and capability		
Degree of resilience and capability	What is the capacity to deal with shock;	Resilience, capability and vulnerability of country
Nature and scope of support		
Degree of concessionality	Which instrument (loans or grants), and which level of concessionality. Can country deal with debt?	Debt sustainability framework Low income, maybe also low middle income, small & vulnerable vs middle income (or more and less vulnerable countries perhaps moving away from classifications).
Delivery	Use budget support, SBS or project support Agency – bilateral, multilateral or EU donor Ultimate beneficiary – government, firms and households Exit strategy	Cost, leverage, speed Cost, leverage, speed Level of critical expenditures When to withdraw support

The following issues are relevant.

Phase 1: Diagnosis of the shock.

- Scale of the shock (exposure). It seems most appropriate to use these facilities for intermediate to fairly large shocks. Thus a shock like the Haiti earthquake would be excluded, as would require a special mechanism. On the other hand, a very small shock, below a certain trigger would be similarly excluded.
- Trigger – what procedures are used to establish the need for support? Past data, real time or projected.

- Country eligibility – which countries are eligible?

Phase 2: Resilience and capability to address shock

- Resilience – is the country partly capable of dealing with the shock? Should the country be rewarded if it has made efforts to increase resilience to shocks?

Phase 3: Nature and scope of instruments to overcome shock

- Level and length of support
- Degree of concessionality – has the country debt management capacity and especially debt overhang? The key challenge here is to maximize the effectiveness of the use of grants to benefit particularly the poorest countries and people, as well as those that are most vulnerable to shocks and whose economies are most fragile. For countries that are less poor, or vulnerable, grants could be used to subsidize loans. In the case of the EU, an obvious institution that could be used for this purpose is the European Investment Bank (EIB); a relevant question here is these loans should be only to governments or, where appropriate, also to the private sector?
- Delivery – how can donors best support in-country programmes? As pointed out, programme lending has clear advantages, e.g. in terms of simplicity and speed; however, in targeting maintaining priority spending, some attention to specific sectors and even projects, may be required.
- Should EC mechanism/s only focus on assisting countries with resources to defend high priority spending in times of shocks or, in periods when shocks do not occur, could the resources –if the country agrees- be used to improve resilience? The latter implies setting aside funds in the country strategy paper, for example via a Trust Fund for a certain period, that could have either use. The predictability that such a fund would give would have positive signalling effects for the private sector. In the case of building resilience, e.g. against natural disasters, it may be desirable to have regional programmes, as this may be the most effective way of increasing resilience. Implementing these ideas may require some changes in EC practice.

5.2 Describing existing shock facilities

During the Global Financial Crisis all major IFIs, the EU and regional bodies responded via various shock facilities. This section describes briefly the main characteristics of those facilities, as well (where relevant) of previously existing ones, such as FLEX, and draws attention to differences between them. The following section then discusses the performance of those facilities during and after the crisis. Appendices B and C provide further details. Box 2 provides a quick overview.

As illustrated in the figure below, the many distinguishing features of the shock absorber facilities are:

- The country eligibility, largely determined by the constituent countries of the relevant IFI
- The trigger structure, ranging from deterministic based on key economic indicators to qualitative case-by-case assessment
- The level of financing and its maturity and concessionality, often linked to trigger features and eligible countries; and
- The delivery which ranges from broad budget support, to key macroeconomic variables (Balance of payments) to targeted programmes for specific development or needs requirements, such as food and social programmes.

Box 2. Brief overview of shock facilities

The European Commission has put in place various shock absorbing schemes: the FLEX Mechanism as well as the V-FLEX and Food Facility initiatives.

In 2000 the EC set up a new programme, the **FLEX**. The purpose of the new FLEX was to be more comprehensive and simpler than its predecessor, the so-called commodity-related scheme STABEX. Early evidence in using FLEX showed that the initial eligibility criteria were too stringent, resulting in relatively few ACP countries being considered eligible. This is why FLEX has already been revised twice, in 2004 and 2008. FLEX had €600mn available for 2008-2013. Eligibility for additional resources depends on a 10% (2% in the case of least-developed, landlocked, island, post-conflict and post-natural disaster states) loss of export earnings from goods compared with *the arithmetic mean* of the earnings in the four years preceding the application year, *excluding the most extreme value*. The current criteria also include that the drop in export earnings must be 0.5% or more of GDP. The FLEX mechanism aimed at safeguarding socio-economic reforms and policies that could be affected negatively as a result of a drop in export earnings. However, it could not adequately respond to the challenges posed by the crisis since it compensates only for export losses, does not therefore help countries affected by other shocks, such as increases in imports due to higher prices and does not provide for rapid counter-cyclical measures, as based on ex-post measurements. This seems to imply that FLEX should be very radically modified or replaced by a new mechanism

In 2009, the EC set up an ad-hoc temporary **Vulnerability Flex (V-FLEX)** which has allocated resources in 2009 and 2010 to address the fall out of the global financial crisis. This operated in parallel to the FLEX facility. The basis of allocation of resources depends on the loss in certain government revenues or declines in forecast fiscal financing gaps; the need to finance at least 50% in the residual financing gap; adjustments for vulnerability, and sufficient absorptive capacity. V-FLEX has been broadly seen as more successful than FLEX as the amounts granted were far larger and it was far speedier as it considered forecasts, rather than ex-post data; this allowed it to act in a counter-cyclical way. There was reportedly far better inter-institutional coordination with IFIs, especially the IMF. However, not all potential financing gaps were captured, though a significant proportion was. The fact that it was demand driven, by the countries, was positive, in the sense that countries bought into the scheme, but there was a sense that there was a lottery element. To avoid this, eligibility criteria in future facilities should be very clearly defined.

In December 2008, the European Parliament and the Council adopted a Regulation establishing a EUR 1 billion facility for rapid response to soaring and volatile food prices in developing countries (**Food Facility**) as a complement to the European Union's existing development policy instruments by bridging the gap between emergency response and long-term development. Financial allocations to countries were made on the basis of the following factors: poverty levels and needs of the population; food policy developments and potential social and economic impact related to reliance on food imports, social vulnerability, political stability and macroeconomic effects on food price developments; capacity of the country to respond and to implement appropriate response measures: agricultural production capacity and resilience to external shocks.

One of the general problems of these EC Facilities is that they supported both low income (LICs) and middle income (MICs) countries, with quite a large share of resources going to MICs. One of the challenges for the future is how to redesign these facilities so as to focus more on the most vulnerable countries, including in particular low income countries.

Source: Appendix B.

Table 5 summarises the key programmes by IFI and their features. Further details, including technical details, are given in the appendices to this report.

Table 5. Overall comparison of EU and IFI emergency financing facilities (excluding food and social response programmes)

Facility*	EU FLEX and V-FLEX	IMF (ECF, SCF & RCF)	IDA Crisis Response Window
Country Eligibility	ACP. Subject to trigger criteria such as past export shocks in FLEX; on case-by-case basis and government revenue shocks and expected fiscal finance gaps for V-FLEX	IMF eligible countries with concessional funds for LICs	IDA eligible countries
Trigger	Drop in export earnings for FLEX, past data basis: for V-FLEX broadened to deterioration in government revenues, foreign reserves & fiscal deficit, forecast data	No fixed quantitative trigger: Case by case assessment of short & long term Balance of Payments problems and emergency needs	3% GDP decline to be *considered only, has to happen for several countries*; Then case by case assessment with board approval
Level and length of support	Trigger determined level of support; Maximum of 4 consecutive years.	Scale as a factor of IMF quota; Maximum 10 year term	5% of IDA 16 replenishment resources; Variable length of term
Degree of concessionality	Grants	Concessional interest rates (Including 0% after crisis)	Various levels
Delivery	Budget support; or, if not feasible due to capacity, via existing social mitigation programs	Balance of payments need including natural disasters support	Focus on core development spending; implemented largely through existing programs

Source: Authors. *See Appendices B and C for more detail on all facilities and details of food and social response programs

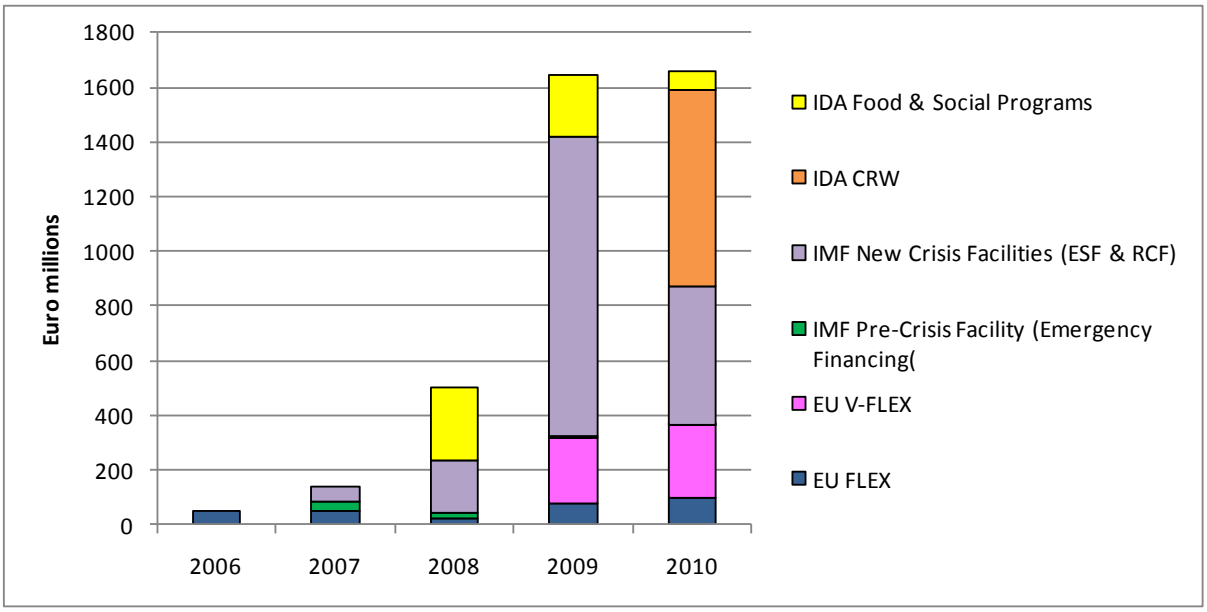
5.3 Lessons learned

As we discuss in Appendix C in more detail, during the global financial crisis all major IFIs and bodies such as the EC responded to provide assistance to their relevant constituent countries (and much more so than bilateral donors, see Massa and Te Velde, 2009). However all also faced major challenges owing to the scale of the crisis. They subsequently considered and revised their shock facilities or created new ones. This section considers an assessment of the lessons learned from these experiences, some of which have already been recognised and incorporated into the design of new or planned facilities.

As shown below, firstly, the overall scale of loans and grants made to poorer and more vulnerable countries as part of the response to the crisis was broadly positive, though relatively there was greater focus on middle income countries.; this was illustrated for example by the far higher proportion of IMF quotas allowed for lending to middle income countries than for low income ones, even though the latter also received a large increase in IMF loans (for more detailed discussion, see for example, Ocampo, Griffith-Jones, et al., 2010) ;in the case of the World Bank, whereas IBRD lending commitments grew by 144% in the crucial period between 2008 and 2009, IDA commitments grew by only 25% in the same period (see Appendix C of this Report for data); however, the IDA CRW later provided much needed resources to low income countries, but with greater delay. Overall financing achieved a reasonable absolute scale with nearly €4bn being funded from 2007 to 2010 to 65 ACP countries by key IFIs and the EC (this combines loans and grants), or €4.5 bn including the Food facility . In addition the financing provided as a percentage of exports shortfall (a proxy, though a somewhat imperfect one for the size of the shock) was also fairly reasonable. However the level of financing as a percentage of GDP was very small, ranging from

0.01% in Sudan to 7.4% in Guinea-Bissau in 2000-2009 in countries where data were available. Also the results for 2008 and 2009 were improved by the strong and rapid response of IDA's Global Food Crisis Response Programme. The achievement of this fundamental criterion of sufficient scale was very important and provided a significant scale of counter-cyclical financing that helped sustain growth in developing countries. It was in strong contrast to the contribution of shocks facilities in 2006, the last year before the crisis, when the proportion of financing as share of export shortfalls was extremely low. In particular FLEX payments (to ACP countries as a group) reached only 3% of export shortfalls in application year 2005; even by application year 2006, they reached only 4%. But for application year 2007 the share was 18%.

Figure 3. Shock financing in Euro millions, by IFI, by crisis facility, 2006-2010



Source: Elaborated by Authors. Includes all ACP countries

Table 6. Financing committed as a percentage of shortfall in export earnings 2006-2009
(Note low net export shortfalls in 2007 affected 2007 figures).

IFI	**2006**	**2007**	**2008**	**2009**	**Facilities**
EU	4%	18%	22%	7%	FLEX, V-FLEX
IMF	5%	67%	15%	22%	Emergency assistance, SCF/ESF, ESF
IDA	0%	0%	19%	4%	CRW, Food & Social Response Programs
IDA: CRW only	0%	0%	0%	0%	CRW only
All IFIs	**9%**	**84%**	**56%**	**34%**	

Note: CRW only started to be disbursed in 2010

Table 7. Financing committed as a percentage of GDP 2006-2009

IFI		2006	2007	2008	2009	Facilities
EU	Weighted	.19%	.28%	.26%	.29%	FLEX, V-FLEX
	Unweighted	.01%	.00%	.04%	.05%	
IMF	Weighted	.28%	.39%	.32%	.61%	Emergency assistance, SCF/ESF, ESF
	Unweighted	.01%	.01%	.03%	.15%	
IDA	Weighted	.00%	.00%	.28%	.39%	CRW, Food & Social Response Programs
	Unweighted	.00%	.00%	.04%	.03%	
IDA: CRW only		.00%	.00%	.00%	.00%	CRW only
All IFIs	Weighted	**.23%**	**.36%**	**.35%**	**.67%**	
	Unweighted	**.02%**	**.02%**	**.01%**	**.23%**	

Note: CRW only started to be disbursed in 2010, weighted calculation is only for those countries that received support. For all figures, see Appendices A and D for detailed figures and sources.

Triggers

Interestingly the approach taken by different institutions to achieve this result was very varied. For example the EU sought to use defined trigger-determined support levels based on key indicators of the impact of the crisis, whereas the IMF abandoned its previous use of triggers and took a took a qualitative case by case assessment of financing needs approach (see Appendix C for discussion and critique of recent changes in IMF shocks facilities).

The IMF has inappropriately merged lending for external shocks needs with lending caused by domestic policies, thus eroding the crucial distinction between external shocks and other lending (except for a very small Standby Credit facility, that reaches only 50% of quota). The problem with this is that even Balance of Payments need (measured as a financing gap) caused by purely external shocks will now mainly be financed with upper credit tranche conditionality, which is both inappropriate and time consuming, implying delays in crucial lending.

The practical abolishment of low conditionality compensatory financing for low income countries at the IMF seems particularly negative from an economic analysis perspective, as it could imply unnecessary costs in terms of growth and poverty reduction, as was recognized when compensatory financing was created at the IMF "so import capacity is unaffected by export fluctuations in export earnings caused by external events" (see Goreux, 1980). However, it should be mentioned that this new IMF facility has been in existence for only a short period (since beginning of 2010) and so a full assessment is not yet possible. It should also be mentioned that other IMF measures for modifying its lending have been broadly very positive (see Appendix C again).

Scale of support

The facility which had failed to meet these criteria initially, in the early 2000s FLEX, the weakness related to triggers which implied too high declines to be appropriate. This problem was overcome by a modification of trigger criteria for FLEX; however, the magnitude of the shocks hitting countries increased very significantly as a result of the crisis; thus resources that may have been relatively adequate in normal times, became clearly insufficient in the light of the crisis; as a result, the scale of FLEX actually granted in proportion to export shortfalls was very low. This issue was addressed in the new (although temporary) V-FLEX facility which rapidly scaled up the EU response. This was very positive.; nevertheless as in other EC facilities, an important concern was that V-Flex also focussed too much on MICs. However the key lesson is that where triggers are used they need to be carefully assessed as to the scope and level (as well as limiting complexity, which seems somewhat excessive in FLEX) and that retention of a level of discretionary assessment should be considered. The World

Bank in its IDA CRW, for example, combines an objective trigger for a country with a subjective assessment.

Modality of coordination

One of the key positive lessons from the global crisis response was the extent to which international financial institutions and bodies like the European Commission coordinated both at the global and country level. An example was in the implementation of V-Flex, where the EC coordinated with other international partners to achieve informal intensified consultation, so as to define and contribute to cover a fairly important part of financing gaps. Such good practice should be extrapolated, though in an adapted manner, to more normal times. Coordination in more normal times with smaller shocks should not be a bureaucratic heavy exercise, but an event-specific, agile, but strong, consultation process. It is important that different institutions do not wait for others to take the initiative, but that in a coordinated manner they agree to cover a significant part of the financing gap.

Speed

However, equally important for ensuring an effective countercyclical response, is speed. The major IFIs were slow to respond to the crisis, with many failing to respond until 2008, or at even 2009 or 2010, well after the onset of the crisis and after the acute 2008 phase had largely passed. The 2007 and 2008 responses were also dominated by the IDA Food Crisis response Program and the existing IMF PRGF facility, although V-FLEX became active from late 2008. The new IDA and IMF crisis facilities only became active in late 2009 and 2010, over 2 years after the onset of the crises.

Underlying reasons for this slow speed of response again varied by institution but most critical seem to be the lack of the lack of dedicated crisis facilities. Some IFIs responded by using existing facilities, even expanding them, and these ramped up sooner than new facilities. However speed remained constrained by lengthy internal processes appropriate to less time-critical “normal” conditions, as well as sometimes excessive conditionality for countries with good policies . Alternatively some IFIs, and the EC, created new dedicated shock facilities which, while better tailored to the crisis conditions, were in some cases somewhat slow to be created due to the need to design and approve such new facilities. The V-FLEX facility however was created fairly quickly and operated very rapidly: whilst FLEX compensated countries on average 4 years later, V-FLEX has been much faster. One of the reasons for that is that V-FLEX uses forecast fiscal finance gaps as a shock measure whilst FLEX used past export data.

Both IFI and EC approaches also suffered from the need to identify additional funds. Some IFIs sought to avoid this by diverting funds from existing programmes but, while speedy in responding to the acute issues, this can create short and long term trade-offs. Alternatively, where additional funds were sought, this was one of the sources of the slow response. Issues included limitations set by existing capital levels and lengthy approval of additional funds from donors and members of IFIs. An important lesson is the need to have in existence appropriate crises facilities, and to provide sufficient resources for them ex-ante, even if on a contingent basis.

6. Future directions for the EC shock absorber facilities

This section of the report discusses the financing of shock facilities (section 6.1) whilst section 6.2 presents and assesses the criteria to evaluate the different options for EC facilities, which we present in section 7 below.

6.1 Financing shock facilities

Before we present the criteria for assessing the different options for the shock facilities, we need to discuss how they could be financed. At the beginning of the 10th EDF (2008-2013) it was decided that a certain amount (€1.8 bn) would be kept in the EC reserves account in order to respond to unforeseen needs (the so called B-envelope), including emergency assistance, debt relief and FLEX. Some €600 mn out of this reserve has been earmarked to FLEX for the entire period, which is around €100 mn per year. V-FLEX was an additional €500mn over two years. How would this be done for the period 2014-2020?

First, we need to consider whether EDF would be budgetised or not. If EDF were not budgetised and it were kept as a Fund it would be possible to allocate resources under EDF specifically for dealing with shocks. We could have the same amount as for the previous EDF, or more, or less, depending on the importance of shocks. On this basis we initially assumed there would be around €150 mn per year.

Whilst we work with that number in the rest of this paper, we examine now how much funds are actually needed for shock facilities., and we regard € 150 million as low. The aim is to safeguard critical expenditure. In developing countries government spending is some 20% of GDP. Later we will show that the GDP shock facing ACP countries in 2009 was around €130 billion (using 1% or 3% triggers, which give very similar results for that year); this would translate into a €25 billion shortfall in government spending (20% of GDP). We assume the donor community and developing countries split the coverage of the shock (€12.5 billion each) and following the experience in 2009, a quarter of international community financing support is covered by grants (EC) and the rest through loans (IMF, WB). This means a grant shock facility of around €3 billion, or €500 million annually over 2014 – 2020, would be sufficient to cover a one-off Global Financial Crisis like shock in the coming EDF period.

A greater allocation of EDF resources to EU shock absorber schemes than in the past is desirable. External shocks are likely to be more frequent than in the past; this is on the one hand due to increased frequency of natural disasters, linked to climate change, to more frequent financial crises and to greater volatility of commodity prices; on the other hand, there is growing evidence (provided for example in Winters et al, op cit) that periods of negative growth, often caused by external shocks are a major cause of low long term growth in developing countries, and particularly in low- income ones. Indeed the G20 have recognized this and have put financing facilities for absorbing shocks on their development agenda.

Looking at 2009, the year of the biggest shocks in recent times, the amounts committed by the international community were significant, and helped developing countries avoid very bad development outcomes as a result of the global financial crisis. V-FLEX amounted to€ 260 million. V-FLEX and FLEX reached approximately 7% of the export shortfalls in that year (see Table 6); however, the total contributions from all external financing sources reached around one third of total export shortfalls. In fact, it may have been desirable to have financed a greater proportion of export shocks, for example one half, assuming developing countries could have used their own buffers to finance the remaining half of their export shocks. In that case, all facilities should have been doubled, so the

international community could cover two thirds of export shortfalls. This would have meant support from FLEX and V-FLEX of at least €500 million in 2009.

We can conclude that the New-FLEX should have an amount ideally reaching €500 million annually. We would stress again that recipient countries should not feel entitled to receive these amounts unless large shocks happen, to avoid moral hazard. Indeed, if shocks do not happen or are smaller, such resources could be redeployed to finance resilience against shocks spending or on general development spending.

If EDF is to be budgetised,which seems unlikely for the next period, setting aside annual amounts will not be straightforward as the amount set aside for shocks will have to be spent by the end of the year. This is one of the reasons why DG RELEX (external relations) has not had a crisis response window and resources for the Food facility had to be found from elsewhere. Of course other options could be explored such as Trust Funds (e.g. the EU-Africa Infrastructure Trust Fund) or buying in private insurance. So rather than paying out grants directly to recipient countries on an annual basis, one could transfer fund resources annually to a trust fund or to a private insurance scheme. Another option that is conceptually and developmentally attractive, but is difficult to achieve within current rules is to allow rolling over surpluses from one year to the next.

Second, we need to discuss lock-in of resources versus flexibility of resources. There is some advantage in locking-in resources for shock absorbing schemes, as this would ensure quick disbursements. However, there are also opportunity costs of holding amounts in certain accounts. This could be especially problematic when shock absorbing schemes are designed for dealing with specific shocks which never materialise. For example , the WB had a number of facilities and one or two have had funds attached which have not been spent. It would be less problematic if the shock facilities were general for all shocks and when resources can be used flexibly.

Third, we need to examine whether it is possible to have both grant and loan resources. The B-envelope is pure grants, but could this be blended with loans, e.g. from the Commission and used for subsidized loans by the European Investment Bank, the member states using its own lending institutions (e.g. KfW or AfD), or external parties such as the WB or the IMF? EIB lending is largely project based and this is likely to remain in the foreseeable future, which could require adaptation for it to finance budget support.

6.2 Criteria for evaluating different options for EC facilities

It is important to define first the objective of the European Commission future shock absorbing facilities. This objective is to contribute to preserve the capacity of the country to continue investing in long term growth, which relates both to essential fixed capital formation, especially that which is directly productive, as well as maintaining investment in social infrastructure, particularly in health and education. A key aim is therefore to protect high priority public spending programmes when countries are hit by shocks, as well as encouraging private investment. Indeed, independently if shocks are temporary or permanent, the aim of the EC shocks mechanism should be to stabilize priority public expenditure.

The options described below need to be checked against this key benchmark, as the main value added of the EC shocks facility would lie in preserving countries' capacity to invest in long term growth, by limiting the fluctuations in high-priority public spending. The EC aim of preserving essential fiscal spending that could be hurt by external shocks would then contrast with the role of the IMF, which is more focussed on mitigating broad based Balance of Payments needs. The EC and IMF facilities, as well as those of other actors (like the World Bank and RDBs) would naturally complement each other.

The support of the EC, the IMF and other actors would also help countries have more room for maintaining or even increasing, the latter in a countercyclical way, fiscal spending in the face of shocks; this would help sustain growth both in the short and long term. The EC grant facility would be particularly valuable as it would allow maintaining or increasing government spending, without increasing government debt, thus without leading to future debt problems.

In the next section we will outline several options that the European Commission can consider for a new shocks architecture, with emphasis on the nature and role of the EC shocks instruments. We will then evaluate these options against the following specific parameters, within the broader framework of the aim of the European Commission to support core investment spending, essential for long term development, in the face of shocks: country eligibility, triggers, criteria for allocation of resources (linked both to exposure to magnitude of shocks as well as resilience), volume of resources, blending of loans and grants, and delivery mechanisms to ensure speed as well as other aims. Two additional very important issues will be considered: the first is how best to ensure a leadership and ownership role for beneficiary countries, which refers both to role in decision making as well as responsibility in implementation; the second is how best can the European Commission coordinate with other actors, such as IMF, World Bank and regional development banks.

Table 8 identifies key issues in the design and execution of shock facilities applicable to the EC.

Table 8 Assessment criteria for future shock absorber schemes

Assessment area	Key issues
Critical spending	Is the facility aimed at maintaining critical spending, or some other financing gap?
Country eligibility	Does the facility aim to reach all developing countries, or ACP countries, low income countries, LDCs, vulnerable countries?
Predictability of access / triggers	What measure is being used for shocks to trigger access to funds?
Criteria for allocating resources	What criteria are being used
Volume	How much resources can be mobilised by the facility?
Loans/grants	What is the composition of resources offered: grants, loans, or concessional loans?
Delivery/speed	How would the finance be transferred (e.g. budget support, project funding), what would be the assessment criteria?
Ownership	How are recipient countries included in the discussions?
Co-ordination	How are other institutions included?

We make suggestions in relation to defining and measuring overall vulnerability and differentiation of different types of shocks and related responses. We also provide policy suggestions in relation to international financial compensatory architecture design. This will include the sufficient scale of resources devoted to shocks architecture, optimization of scale and resources allocated, including appropriate proportions of shocks that will be covered, the use of grants (either as grants or as subsidies on loans) and options for accelerating response speed such as pre and ante crisis planning (including coordination among institutions).

We need to consider the role of different agencies, in the international financial compensatory architecture, including IMF (liquidity provision) WB, RDBs, (development lending) and EC as well as bilateral donors (in relation to grants). Special emphasis is placed on the EC and whether and in what areas the EC should be taking lead and coordinating roles; for example should the EC play a lead role not just as regards its own grants for compensatory financing, but also coordinating all relevant bilateral aid contributions; as a first step the EC should coordinate member states grants for this purpose, but ideally it may be desirable if it could coordinate all bilateral grants for this purpose; what should be its links with the rest of the international and regional institutions to maximize effectiveness and speed of delivery?

We do not consider the EC absorber schemes in isolation of other relevant discussions. For example, Box 3 shows that the International Development Association has adopted the use of a crisis response window which tackles much the same questions as we are interested in this paper.

Box 3. Establishment of a crisis response window in IDA 16

Discussions on the IDA 16 replenishment have been finalized. They included the establishment of an IDA crisis response window. We discuss the main technical features on procedures to allocate crisis resources.

Dealing with widespread shock of growth declines (in IDA countries) of at least 3 percentage points:

- note to show that the crisis has a severe impact on IDA countries and that it has been caused by exogenous variables;
- propose overall volumes of CRW resources, factoring in nature and scope of crisis as well as CRW resources available;
- two-stage allocation procedure: 1) depending on impact on countries and 2) taking into account additional country specificity. There would be a cap and a base on country allocations.

Dealing with exogenous price shocks:

- commodity price shocks which primarily affect the balance of payments could be addressed by the IMF, but when there are poverty implications this would need coverage by CRW resources;
- rather than analysing the specificities of the trigger, CRW could use a 3 percentage point year-on-year decline in GDP; it is possible to also use fiscal impact triggers under certain conditions.

Dealing with natural disasters:

- a major disaster triggers CRW resources sparingly and only where existing resources and allocations are insufficient to mount a credible response;
- the size of CRW allocations would depend on the impact of the crisis and the resources available to deal with it. A UN flash appeal is considered useful under certain circumstances.

Whilst it is acknowledged that financing CRW resources ex-ante could lead to idle resources, IDA suggested that ex-post financing would compromise the immediate availability of highly needed resources in times of crises, which are increasingly apparent.

Source: IDA (2010): Technical Note on the Establishment of a Crisis Response Window in IDA16.

7. Assessing the pros and cons of the options

Building on analysis and lessons learned in section 5, we develop options for a broad shock architecture focusing both on instruments and institutional aspects (7.1). We then analyse in more detail the specifics of each option (7.2) using quantitative simulations.

7.1 Options

We consider three broad options, with a number of sub-options within them:

- Option 1: Business as usual approach (FLEX).
- Option 2: Common European approach with a number of different sub-options, but building on the overall positive V-FLEX experience, to create a NEW FLEX
    - 2A – building on V-FLEX, based on fiscal financing gaps for ACP
    - 2B – building on V-FLEX, as 2A, but vary country eligibility (ALL, ACP, LIC, LDC)
    - 2C - building on V-FLEX, as 2A, but vary trigger variables (GDP, CA, FISCAL) and amounts
    - 2D - building on V-FLEX, as 2B all counties, but vary triggers , and new allocation criteria based also on countries' ability to respond to shocks (GDP/cap; DEBT; CPIA)
    - 2E - building on V-FLEX, as 2B all counties, but vary triggers , and loan/grant varied according to countries' ability to respond to shocks
- Option 3: A fully integrated shock facility architecture

We consider options 1 and 3 as somewhat extreme options, both of which seem unlikely. Table9 presents the options against the assessment criteria discussed previously.

Table 9 Shock absorber scheme variants; assessment criteria

Assessment area	Key issues	Option 1- BAU old style FLEX	2A – V-FLEX	2B – V-FLEX with varying country eligibility	2C – V-FLEX with varying triggers	2D – V-FLEX with new allocation criteria	2E – V-FLEX with new financing modalities	Option 3 – Fully integrated
Critical spending	**Is the facility aimed at maintaining critical spending, or some other financing gap?**	Paid years after event so not able to have desired effect	Paid close to event so possibility of desired effect	Paid close to event so possibility of desired effect	Paid close to event so possibility of desired effect	Paid close to event so possibility of desired effect	Paid close to event with scale so possibility of desired effect	Paid close to event with scale so able to achieve effect
Country eligibility	**Does the facility aim to reach all developing countries, or ACP countries, low income countries, LDCs, vulnerable countries?**	ACP	ACP	LDC, LIC, ACP, All	All	All	All	All
Predictability of access / triggers	**What measure is being used for shocks to trigger access to funds?**	Past export shocks	Forecast fiscal financing gap; government revenue shock	Forecast fiscal financing gap; government revenue shock	Current forecast or last year's actual shock in export shortfalls,GDP, CA, FISCAL – 1, 5 and 10%	Forecast fiscal financing gap; government revenue shock	Forecast fiscal financing gap; government revenue shock	Integrated analysis
Criteria for allocating resources	**What criteria are being used?**	Size of export shock, scaling factor	Size of fiscal gap; covering at least 50% of gap	Size of gap; scaling factor	Size of gap; scaling factor	Size of gap + scaled for ability to respond to shock (e.g. GDP/cap; debt; reserves)	Size of gap; scaling factor	Size of gap; scaling factor
Volume	**How much resources can be mobilised by the facility?**	Around €100mn a year	€150 mn per year (based on €1.1bn over 7 yrs, ie FLEX + V-FLEX)	€150 mn per year (based on €1.1bn over 7 yrs); additional from EU budget	€150 mn per year (based on €1.1bn over 7 yrs): additional from EU budget when appropriate	€150 mn per year (based on €1.1bn over 7 yrs): additional from EU budget when appropriate	€150 mn per year (based on €1.1bn over 7 yrs) worth of grants; additional from EU budget when appropriate; additional MS loans and grants	€150 mn per year (based on €1.1bn over 7 yrs) worth of grants; additional from EU budget when appropriate; additional MS loans and grants
Loans/grants	**What is the composition of resources offered: grants, loans, or concessional loans?**	Grants only	Grants only	Grants only	Grants only	Grants only	Loans and grants, EU and MS, EIB (projects)	Loans and grants, EU and MS, other (EIB, DFIs etc)
Delivery/speed	**How would the finance be transferred (e.g. budget support, project funding), what would be the assessment criteria?**	Slow, on average 4 yrs after the shock	Budget support quick; project support	Budget support quick; project support	Budget support quick; project support	Budget support quick; project support	Budget support quick; project support	Budget support quick; project support
Ownership	**How are recipient countries included in the discussions?**	Submission of request for funds	Submission of request for funds and discussion with country authorities	Submission of request for funds and discussion with country authorities	Submission of request for funds and discussion with country authorities	Submission of request for funds and discussion with country authorities	Submission of request for funds and discussion with country authorities	Integral
Co-ordination	**How are other institutions included?**	Low	Medium to high at country level	Medium to high at country level	Medium to high at country level	Medium to high at country level	Medium to high at country level	High globally and at country level

Option 1 – continue with FLEX

The first option continues the FLEX facility as it has been in the past few years. This recognises that even though V-FLEX might be a better scheme, it was ad-hoc, and there is no guarantee it will continue. This option is basically the status quo before the crisis, with all the problems described of FLEX. This option would use trigger mechanisms related to past export shocks and only consider eligible ACP countries. It would deliver grants, with an average of 4 years delay and with no co-ordination with other institutions addressing shocks.

Option 2 – continue with V-FLEX

All sub-options in broad option 2 follow the principle of the V-FLEX facility such as using forecast financing gaps to make delivery of grants faster (see Box 5). It could use different triggers such as all balance of payments or current account shocks, not just past export shocks or fiscal financing gaps. Moving to a broader balance of payments basis would ensure a wider coverage of shocks than just export shocks, although the focus of the EU is on protecting priority spending (rather than the IMF's alleviating balance of payments), which could imply using fiscal financing gaps may be a more precise option .

Furthermore, the scale of V-FLEX was much larger, allowing it to compensate for a more significant proportion of external shocks.

It is currently not clear what would replace V-FLEX and the Food facility once they expire. So a key advantage with the suggested improvements is that if high food and oil prices, natural disasters or weak international economic growth continue there is a replacement. It is important to replace V-FLEX and the Food facility, as a large proportion of EC support to ACP counties has in recent crisis years been provided through that mechanism (see Appendix D). Amounts granted through FLEX have been very small as proportion of shocks, measured as export shortfalls. V-FLEX should replace FLEX which seemed both too slow and too small scale. We estimated initially that 1.1 billion Euros over 6 years would lead to around an annual €150 million for V-FLEX; this would be a minimum amount, especially if large external shocks persist. Our calculations of need, discussed above, are nearer €500 million annually.

Within option 2, there are a number of considerations:

- Option 2A builds on V-FLEX, based on fiscal financing gaps for ACP (rather than exports). A problem of this approach drawing on fiscal gaps may be more limited availability of speedy data or forecasts; this could perhaps be overcome with assistance for example of the IMF or more specific data gathering exercises.
- Option 2B builds on 2A, but varies country eligibility, e.g. to include either all developing countries, all ACP countries or all LICs or LDCs. If countries outside the ACP would be included, it is assumed that the EU budget would be used to cover more funds (e.g. double the amount); furthermore other donors (bilateral EU members and non EU members could also contribute if non ACP developing countries were recipients).
- Option 2C builds on 2A, but varies the trigger variables, e.g. changes in exports, GDP, current account, or fiscal gaps and varies with different trigger thresholds (e.g. 1%, 3% and 10%)
- Option 2D builds on 2B, but uses varying triggers, and introduces new allocation criteria based on countries' ability to respond to shocks (GDP/cap; or Government debt). The reasoning is that more capable countries are better able to respond to a shock so are less in need of funds when a shock occurs (though they might need funds to build capabilities, or receive an incentive for having built resilience).

- Option 2E builds on 2B, but varies triggers building on V-FLEX, as 2B all countries, but varies triggers as 2C, and offers concessional loan (possibly through EIB)/grant varied according to countries' ability to respond to shocks

There are therefore important possible innovations in the shock facilities at the EC level. It might include all developing countries from the start, rather than just ACP; and integrate other EU bilateral donors (e.g. it could leverage in grants and loans from agencies such as KfW and AfD) and non-EDF EC aid; it could also coordinate aid/ concessional loans given or made by non-EU donors/lenders. It could provide preferences to countries with lower capacity and resilience (e.g. small middle income countries which high debt not caused by their own policy mistakes,, as well as focussing mainly on low income countries), so it is important to analyse and measure vulnerabilities (see Box 5).

One sub option would combine loans and grants (See box 4). The advantage of loans is that a higher proportion of shock would be financed, due to leveraging of grant resources. However care needs to be taken not to cause debt vulnerability in future. The trigger would be calculated to include all variables that affect countries capacity to import in real terms, taking account of prices of exports and imports to determine whether the shock was exogenous. So this could be a development finance gap forecast linked to (forecast) balance of payments gaps (as V-FLEX related to forecast fiscal financing gaps). The advantage of balance of payments (or rather current account) gap may be ease of access to speedy information.

Box 4 Use of blending to protect critical spending during crises

The European Commission specialises in using grants for shock facilities. Grants are used in the form of budget support. However, recently the EU has used blending schemes adding loans and grants and such schemes could also be used to support higher volumes of project financing to protect critical spending such as large scale infrastructure projects which can only be financed if resources beyond grants are available.

ETTG (2011) examines EU blending schemes (e.g. the EU-Africa Infrastructure Trust Fund, ITF, or the Neighbourhood Investment Fund, NIF; these together have absorbed more than €1 billion of EC and EU member states pooled grants, of which some € 400 million to the ITF for regional infrastructure) which add grants to loans. Blending grants to loans is used to finance essential TA studies, improve the quality of the project and achieve the required level of concessionality for funding including for infrastructure. The study estimates that one unit of grants leverages in between 5-6 units of loans (for both ITF and NIF) and a further 15 units of other finance (in the case of the ITF aimed at cross border African infrastructure). Thus aid grants (already some €400 mn for the ITF) are likely to leverage in substantial amounts of other finance (official loans as well as private finance) including for regional infrastructure. In times of crises, project financing dries up and so a commitment to continue support through blending programmes could protect critical spending.

Blending could also facilitate working with others, which could also help to improve the additionality and leveraging effect of the EU's interventions (see e.g. evaluation of V-FLEX by HTPSE , 2011).

Option 3 – Fully integrated shock facility

Option 3 would be a totally integrated shock financing facility, that would combine grants (where appropriate), concessional lending and official liquidity, the latter provided by the IMF; whilst the

contributions made by the different institutions would probably have to be approved by their respective authorities, they would be coordinated by a Committee, composed of the IMF, World Bank, European Commission and recipient country representatives.

This Committee would determine the scale of the external shock and the resulting financing gap (subjects on which the IMF could take the lead, with inputs from the World bank on the more long term dimensions, and of course in discussions with recipients), and then the Committee, in discussion with the recipient country, would define by how much and how the gap should be filled. Firstly, a decision would be made, in discussion with the recipient country, on what proportion would be covered by grants, (coordinated by the EC) , which by development finance loans (as well as the possible level of concessionality of these loans) and which proportion by official short term liquidity. These proportions would depend on the level of income of the country, and on other indicators of countries' resilience and capabilities, such as concentration and variability of exports, level of debt overhang, smallness and remoteness, etc. Thus countries with higher levels of income and more capacity (e.g. lower debt overhang, greater diversification of exports) would get somewhat less funding, of which a higher proportion would be given as loans; on the other hand, a poorer country (LICs and probably LMICs) should ideally get funds that would fully cover the financing gap caused by the external shock, and get those in a high proportion as grants, especially if it already had a high debt overhang or had other sources of vulnerability. Because the source of the problem is external, countries with reasonable policies, should have no or very light additional policy conditionality attached to the shocks financing.

As regards grants, the European Commission would take the lead in providing the calculated necessary grant resources. If these were insufficient, they would approach key bilateral donors for additional resources to try and fill the gap.

The great advantage of option 3 is that it would imply a totally integrated response from the international community to support countries in the face of external shocks, that are so damaging in their impact on growth and poverty. If this was combined with a sufficient scale of overall resources for this purpose, it could help developing countries maintain their development momentum in the face of external shocks. However, this coordination would need to be done in an agile way, so that the involvement of different institutions did not excessively complicate or delay commitments of resources and their disbursement to recipient countries, as speed is a key element of a genuine counter- cyclical shocks architecture.

Further discussion of options

One issue that may facilitate a more agile coordination between several institutions would be the existence of broad criteria for allocation of resources, that could be done ex-ante, even though these then could be adjusted by more qualitative indicators, such as vulnerability to debt and/ or resilience and in-depth discussion in-country. Particularly as regards grants (including loan subsidies), a first decision is how much to devote to shocks facilities as part of aid programming. If shocks are as damaging as the empirical and theoretical literature seems to indicate, there seems a strong case to devote greater proportion of grants both for making countries more resilient by promoting and helping finance resilience building measures and by increasing the volumes of resources available for shock absorber schemes.

A second decision is how much to concentrate the grant resources on the poorest and most vulnerable countries; an alternative option is to give access to part of these resources also to relatively less poor and less vulnerable countries. This decision is also linked to whether grants should mainly be used as such, or to what extent they should be used to subsidize loans, as already

discussed. There may be a mixed approach, similar to that of the World Bank, where countries with relatively greater capacity and income levels would get a smaller proportion of the shock financed, and especially most of it would come in the manner of loans, with some subsidy element; however, the poorer and less resilient countries would get a far higher proportion of the shock financed (and the poorest, e.g. LICs, would have the totality of the shock financed) with a high proportion of the financing being provided mainly or only by grants. Unless there are extreme conditions, there may be a case of some small proportion of concessional loans to be part of a package for even very poor countries, to limit any possible moral hazard.

A further issue is the extent to which a certain proportion of resources from donors and institutions such as the World Bank/IDA should be channelled to support countries buying private insurance against shocks. An argument in favour of such measures is the potential leverage which this could allow, especially for grant resources. However, such mechanisms have limited applicability, e.g. for prices of certain products (like oil), and have limited term or maturity; furthermore, such insurance is costly. Finally the recent financial crisis (especially the case of AIG) has shown the limits and dangers of private insurance for systemic risks. However, some of these instruments may be of interest, for example if oil importers could hedge their risk with oil exporters – a transaction that could be intermediated by the World Bank, and thus be zero cost.

Box 5. Further details for EC shock facilities

In order to move ahead with any of the broad options above we must also decide on further details such as on:

Triggers – whilst there is some consensus on the need to look at balance of payments shocks, how would this be measured, e.g. a minimum change in the balance of payments as % of GDP (the lower the threshold, the more limiting factors need to be included at a later stage). A key indicator could be changes to capacity to import in real terms due to external shocks. This could be supplemented by country-specific qualitative notes to ensure the shock is external. Balance of payments data come in with a time-lag, but the IMF produces at least 6 monthly forecasts of the balance of payments.

Capabilities – one could determine capabilities through a combination of income levels, level of external reserves (and as % of yearly imports), level of government debt as % of GDP. The higher the thresholds (more reserves, less debt, higher income), the less a country would receive (as % of the shock) in terms of value of the grants (scale) or in terms of the grant element of the overall package (level of concessionality).

Moral hazard – in order to reward those countries that have aimed at becoming more resilient in their growth strategies in the run-up to crisis, e.g. with additional allocations, it is important to measure this, though it is not always easy to distinguish impact of good policies and for example good luck, e.g. finding a new mineral. Indeed, to implement this, a special measurement effort would be necessary to evaluate the effort(e.g. measured by resources allocated,) to building resilience by the country in a previous period, e.g. last 5 years

Specific values of the above criteria (within fixed envelopes) would lead to a different distribution of resources across countries and instruments.

7.2 Quantitative simulations

This section discusses a number of quantitative simulations we have undertaken on the basis of different trigger variables and threshold values. These show how different types of countries are affected when moving to a different trigger variable.

Simulations based on past economic performance

We performed the following simulations. We calculated shocks in 2009 by comparing the value of a variable and compared the value both with the average value of that variable over the previous 3-4 years (taking out extremes) and the value in the previous year (2008). From the overarching target group (either all developing countries, or ACP, or LDCs or LICs) we considered those countries as eligible when they had a shock that was greater than a certain percentage (e.g. a GDP shock greater than 3 %). Actual payments would be scaled by the amount available divided by the sum of the absolute shock in eligible countries.

Table 10 provides an overview. To take the first row as an example: consider all developing countries, the rows show the sum of export losses (i.e. for a minimum 10% decline), GDP losses (minimum 1%) etc. Then on the second and third set of rows, we calculate the ratio of actual payments (€150 million and a similar exercise was done with an actual payment amount of €300 million, see appendix) divided by the total shock value in eligible countries. The final column reports on the number of eligible countries. Naturally, the tighter the criteria, the fewer countries are eligible. For example, 38 ACP countries had a shortfall of more than 10 % in exports but 42 (46) had a shortfall of more than 5% (2.5%)in exports. Some details are included in appendix H, although we have not included all the results (available upon requests).

Table 10: Simulating different trigger variables and threshold values

	Country Category	Export loss in 2009 greater than 10%	GDP loss in 2009 greater than 1%	Current Account Loss greater than 1 percentage point	Export loss in 2009 greater than 5%	GDP loss in 2009 greater than 3%	Current Account Loss: 3%	Export loss: 2.5%	GDP loss: 0.5%	Current Account Loss: 0.5%
Total Loss: 2009-2008 (EUR, Mn)	DCs	-1429930.29	-2372239.08	-409251.70	-1437303.85	-2366174.56	-347838.57	-1437655.67	-2380945.08	-411571.31
	ACPs	-125467.96	-1298312.09	-997.78	-126126.40	-1297671.54	-993.75	-126211.97	-1298288.92	-1382.69
	LLDC	-53967.63	-1229117.97	-1313.65	-54083.46	-1218902.46	-1313.65	-54352.51	-1219234.94	-1698.56
	LICs	-5924.55	-27734.31	-227.43	-6122.15	-19545.78	-227.43	-6391.20	-27734.31	-612.34
Scaling Factor (ratio 150 nm spending / shock value)	DCs	-0.00015	-0.00009	-0.00051	-0.03520	-0.00009	-0.00060	-0.00015	-0.00009	-0.00051
	ACPs	-0.00166	-0.00016	-0.20903	-0.00165	-0.00016	-0.20988	-0.00165	-0.00016	-0.15084
	LLDC	-0.00386	-0.00017	-0.15877	-0.00386	-0.00017	-0.15877	-0.00384	-0.00017	-0.12279
	LICs	-0.03520	-0.00752	-0.91706	-0.03407	-0.01067	-0.91706	-0.03263	-0.00752	-2.93595
Eligible Countries	DCs	95	86	18	103	76	15	109	89	20
	ACPs	38	43	2	42	37	1	46	44	3
	LLDC	19	25	1	21	19	1	23	26	2
	LICs	16	20	1	18	18	1	20	21	2

Source: IMF IFS Database and own calculations in appendices.

The simulations reveal a number of important issues. Using the export or GDP trigger ensures that around half the countries were eligible (and the different trigger threshold values used did not alter this conclusion substantively). However, a handful of countries dominate the payments. For example, in the export change simulations, oil exporters such as Angola, Nigeria, Trinidad and Tobago and Sudan would absorb the majority of payments, followed by smaller oil exporters (e.g. Gabon) and middle income countries such as Jamaica and PNG. The other countries would receive very little. Of course, one could decide to exclude oil exporters, and other criteria can also be used. Without further policy guidance on what are considered the most important shocks, we are unable to progress further on this particular issue.

A further challenge in using export triggers is that this does not cover shocks such as import shocks (e.g. recent and current large food and oil price shocks) or capital flows shocks. Of course, one could introduce different triggers for each shock, or an aggregate trigger such as the current account value. We have examined the use of data on the current account as a trigger. More precisely, we took the actual current account data (e.g. in IMF IFS) for the years including 2008 and 2009 and we then computed the percentage change difference between the current account as per cent of GDP in 2009 and 2008. If this difference is larger than say 1 percentage point the country would be eligible. Table 10 shows the challenge in using this trigger: 18 developing countries would be eligible, but only 2 ACP countries. This has two reasons, one is that current account data combine a number of shocks and so even for 2009 actual current accounts may not have worsened for all countries (despite a GDP slow down), but secondly, and more troubling, data from this international source were often not available for 2009 (in early 2011), so the calculations could not be done. This links in to a more general point relating to data availability and timeliness. It seems important to explore with institutions producing or compiling the data (e.g. IMF), whether data on the current account could be obtained earlier; another option may be to construct another indicator, for which data could be calculated much faster, e.g. capacity to import perhaps, based maybe on volume of imports, multiplied by changes of the terms of trade (though this would not include other items affecting the capacity to import).

Table 10 also includes information on the scaling factor. This is calculated as €150 million (total of pay-outs) divided by the sum of the shock in eligible countries. For some variables such as exports in the ACP group, the shock facility would only cover 0.166%, though potentially 3.52% in the case of focussing only on low income countries. This shows the limits of shock absorber schemes, if €150 million only is the assumed level of resources allocated, and confirms the need for more resources to be allocated for this purpose, as discussed above.

Triggers based on forecasts of economic performance

We can solve the problem of timing and availability of data by using other trigger variables, notably using forecasts based e.g. on the IMF's world and regional economic outlook (WEO and REO). The IMF's WEO includes forecasts for variables such as GDP, current account balance and government balance for a large number of countries (though not *all* ACP countries). We consider shocks as if we were in October 2009 with the available data then. As a measure of the shock we compare the IMF's forecasts made then for 2009 with the IMF's forecast for 2009 done in 2008 (this happens to be before most of the global financial shock had taken place, and hence the difference could be seen a good estimate of the effects of the global financial crisis). We do this for growth rates in constant price GDP and for the current account (as % of GDP), specifically taking a difference in percentage points.

Table 11 shows the number of countries eligible for shock facility payments for two trigger variables and for different thresholds (we had to abandon using the government balance as WEO does not contain sufficient information). It shows that 65 out of 67 countries suffered a decline in forecast

GDP growth rate, and of these, 35 suffered a decline in GDP forecasts between 2008 and 2009 of more than 3%. Much fewer countries, 36, were expected to suffer a decline in the current account balance, which confirms the findings above. Using the current account balance as a measure of forecasts reduces the scope of countries considerably. Of course if thresholds on both variables are sufficiently high, e.g. 8 percentage points, fewer countries, around 10, would be eligible. The figures in appendix J illustrate the GDP growth and current account shocks.

Table 11 Number of eligible ACP countries

Threshold (percentage points)	GDP growth shocks (2009-2008)	Current account as % of GDP shocks (2009-2008)
0	65	36
-1	60	31
-2	44	26
-3	**35**	**24**
-4	26	21
-5	17	16
-6	12	16
-7	11	13
-8	8	12

Note: 67 ACP countries with data considered. The median GDP shock in 3.08 per cent ; the current account shock 0.4 per cent.

Table 12 shows payments when using the triggers and 3% thresholds. Again, we observe that a few oil exporters dominate the suggested pay outs using the GDP variable (e.g. Nigeria) though less so when using the current account balance (e.g. Nigeria would then be excluded as it was not forecast to have a current account shock that was more than 3 percentage points). Notice too that payments would be different from possible FLEX allocation and actual V-FLEX payments in 2009. This also shows that we need to continue to examine the use of appropriate triggers as none is perfect and most have advantages and disadvantages.

In particular, if a new shock absorber scheme needs to address shocks quickly and at scale to protect critical spending, it needs to have up to date information on the underlying financing situation. HTPSE (2011) suggests that VFLEX was particularly critical in terms of assistance and therefore impact and value-for-money for fragile states lacking financing – including Burundi, CAR, Comoros, Guinea Bissau, Haiti, Sierra Leone and Solomon Islands; for countercyclical cases such as Grenada, Mauritius and Zambia; and fiscal consolidation cases such as Ghana, Malawi and Seychelles. One of conclusion to this study includes the need to monitor economic conditions necessary to maintaining critical spending.

Table 12 Advantages and disadvantages of different triggers

	Advantages	Disadvantages
Past export performance	Export data widely available from WDI and other sources	Data available with a time lag; only refer to exports, whilst there could be an import price shock, or capital flows shock
Past current account shock	Incorporates a variety of shocks (e.g. import and remittance shocks)	Current account already incorporates lower imports due to less capacity to import, so understate the potential to affect critical spending; Data available with a time lag and with a number of gaps.
Past GDP shocks	GDP data widely available from WDI and other sources, but with more delays than export data	Data available with a considerable time lag
Forecast GDP shock	Quickly available allowing quick payments; data from WEO forecast available twice a year	Forecasts might be unreliable
Forecast current account shock	Quickly available allowing quick payments; data from WEO forecast available twice a year	Forecasts might be unreliable
Fiscal gap / government spending shock	Quickly available allowing quick payments *if* data were easily available (but this depends on in depth in-country measures); Theoretically the best measure as this would allow measurement of whether countries can maintain critical spending.	Data not easily available from international databases, so depends on co-ordination with partner countries
Development finance gap (capacity to import)	Theoretically a good measure as this would allow measurement of whether countries can maintain spending	Difficult to measure: perhaps estimate as combination of net trade, remittance and capital flow shocks
Qualitative accounts	Better able to determine whether GDP shocks were due to external shocks; compensates for lack of data	Lack of objective criteria for accessing payments

Table 12 summarises the advantages and disadvantages of different triggers. Based on this quick overview, the preferred trigger is the use of GDP forecasts coupled with a qualitative analysis that verifies the forecasts with partner countries and which shows that shocks have been due to external events not under the direct control of domestic policy. If the data are available, forecasts of the capacity to import or government's critical spending would be preferable but as long as these are not easily available, GDP forecasts are a useful alternative.

We argue that the trigger value could be 3% decline of GDP growth if the objective is to reach around half of the countries in the first instance (at least based on the 2009 shock as simulated in table 11). In other years, such a trigger may not be sufficient and so one could consider changing the trigger threshold to the median shock (which was 3% in 2009). The trigger threshold would be country specific (and not group specific or necessarily as high in the IDA CRW whose thresholds are considered too tight).

Hence, we suggest to use country specific GDP shocks on the basis of IMF forecasts, verified by in-country examination with partner countries, using a 3% threshold (or changed to the median GDP shock) initially .

Table 13 Payments according to trigger variables based on IMF forecasts

	Payment proportional to shock		Payment based on shock and resilience		Memorandum items	
	GDP shock>3pp	CA shock >3pp	GDP shock>3pp	CA >3pp	V-FLEX 2009	FLEX 2009 (allocated for 2008)
Angola	28.36	58.37	11.49	40.79		
Antigua and Barbuda	0.01	0.03	0.00	0.01		
Bahamas, The						
Barbados	0.34		0.04			
Belize		0.00		0.00		
Benin					25	
Botswana	2.75	5.66	0.47	1.66		10.50
Burkina Faso						9.42
Burundi					13.6	
Cameroon		0.00		0.00		
Cape Verde	0.23	0.48	0.15	0.55		
Central African Rep.		0.00		0.00	7.6	
Chad	2.30	4.73	4.07	14.46		
Comoros					4.7	0.30
Congo, Dem. Rep. of	3.03		22.76			
Congo, Republic of	6.66	13.71	3.99	14.15		
Cook Islands						0.07
Côte d'Ivoire						
Cuba						
Djibouti						
Dominica		0.00		0.00	5	0.27
Dominican Republic						15.33
East Timor						
Equatorial Guinea	7.08	14.58	0.49	1.75		
Eritrea						
Ethiopia						
Fiji	0.73	1.50	0.37	1.33		
Gabon	4.51	9.28	0.29	1.01		
Gambia, The		0.00		0.00		
Ghana					35	
Grenada	0.02		0.01		5	0.29
Guinea	0.16		0.35			
Guinea-Bissau					8	1.45
Guyana						
Haiti					30	
Jamaica	2.12		0.64			17.00
Kenya	3.90	8.03	5.96	21.14		
Kiribati						
Lesotho	0.13	0.26	0.21	0.74		
Liberia	0.18		1.12			
Madagascar	1.55		3.47			
Malawi					25	
Mali						
Mauritania	0.62	1.28	0.74	2.62		
Mauritius	0.54		0.10		10.9	
Micronesia						
Mozambique						11.67
Namibia						
Niger	0.35		1.20			
Nigeria	66.15		74.43			
Papua New Guinea		0.00		0.00		
Rwanda						
Samoa	0.01		0.00			0.44
São Tomé & Príncipe						
Senegal	1.62		2.13			11.80
Seychelles	0.02		0.00		9	
Sierra Leone		0.00		0.00	12	
Solomon Islands					15.2	
Somalia						
St. Kitts and Nevis	0.03		0.00			
St. Lucia	0.08		0.02			
St. Vincent & Grens.	0.07	0.14	0.02	0.06		0.43
Sudan	12.35	25.41	13.72	48.71		
Suriname	0.16		0.05			
Swaziland		0.00		0.00		
Tanzania	0.78		1.41			
Togo						
Tonga						0.15
Trinidad and Tobago	3.18	6.54	0.29	1.02		
Tuvalu						
Uganda						
Vanuatu						
Zambia					30	
Zimbabwe						
Total	150	150	150	150	236	79.12

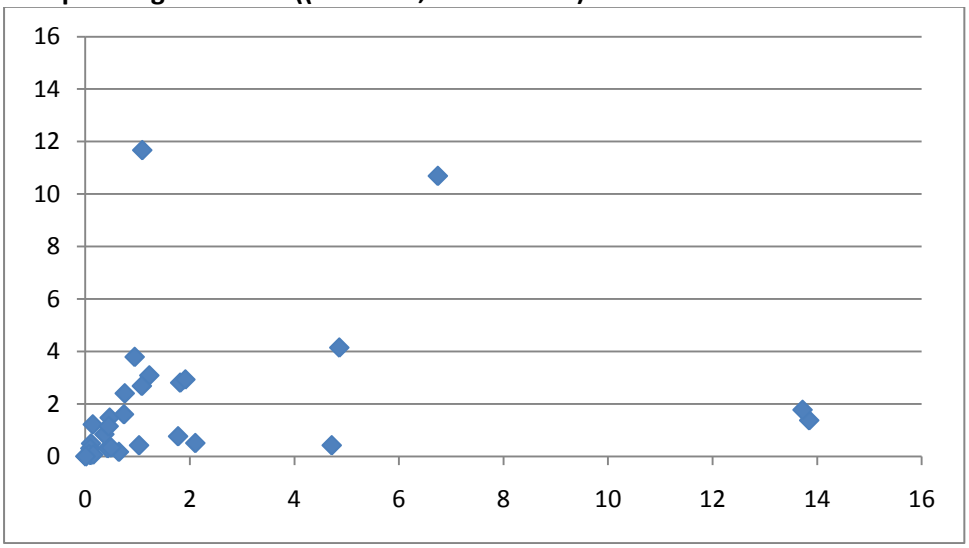
Introducing the concept of resilience into shock absorber schemes

We also examine what would happen when introducing the concept of resilience into shock absorber schemes, which is one of the scenarios. The starting point is the simulation based on ACP countries with past export shocks greater than 10%. Table 14 (and table 13, the final columns) provides an example of which countries would receive a payment and how much (payments in 2009 assumed to be proportional to export shock). We suggest that payments should be scaled by a measure of resilience – countries with greater resilience would receive fewer payments because they are better able to cope with it. First we measure resilience as GDP per capita (international dollars, from WDI). Columns 3-4 report the results. For ease of reference we have also included allocations by FLEX (based on application year 2008) and V-FLEX 2009.

There are a number of observations. The export shock triggers payments in some countries, but not all countries which were set to receive FLEX (e.g. not included: Burkina Faso, Burundi, Guyana, Mali, Mauritania, Niger, Niue, Samoa, St Vincent, Tonga, which covered about 7% of total FLEX payments in 2009) or V-FLEX payments (e.g. not included: Benin, Burundi, Ghana, Grenada, Guinea Bissau, Haiti, Malawi, Seychelles, Sierra Leone, which covered about two thirds of total V-FLEX payments in 2009). Especially, V-FLEX payments were based on forecasts (rather than past performance). Oil exporters dominate the pay outs, but that is a peculiarity of 2009, as in that year the price of oil, before at high levels, fell sharply.

Introducing the concept of resilience would alter payments drastically. Table 13 shows how payments would change if we scale the payments by one measure of resilience, GDP per capita in international dollars taken from the WDI for the year 2008, whilst keeping the €150 million pay outs in total. Basically we are using the level of GDP per capita as an indicator of resilience, or rather we are assuming the facility should favour low income countries, where there are proportionally more poor people. Figure 4 illustrates this more clearly, as it shows that some pay outs as much as €14 million would turn into payments of €2million, and vice versa. If resilience played no role in funding decision, the dots in figure 4 would have been on a 45 degrees slope. Scaling by resilience does help to channel more funds to the poorer (and needier) countries, although more attention needs to go into avoiding penalising countries for becoming more resilient by supporting resilience building. The final columns in tables 13 and 14 also incorporate resilience and further illustrate the nature of the effects.

Figure 4 Comparing payments proportional to the shock (€ million, horizontal axis) and to incorporating resilience ((€ million, vertical axis)



Notes: excluding Angola and Nigeria which skew the figure.

Table 14 Indicative example of two highly specific scenarios for ACP countries

Eligible country (ACP and export shock in 2009 greater than 10%):	Simulation based on past export shock (2009)		Simulation based on export shocks and "resilience" (2009)		Actual EC support (2009)
	Export Loss (for eligible countries): 2009-2008	Financial Provision by country based on export shock > 10%	GDP per capita (measure of resilience)	Financial Provision by country based on export shock > 10%	V-FLEX support
	USD	EURO (mn)	International dollars	EURO (mn)	EURO (mn)
Angola	-32098.2	46.54	5873	26.91	
Bahamas, The	-61.477	0.09			
Barbados	-76.791	0.11			
Belize	-66.059	0.10	6796	0.05	
Botswana	-1450	2.10	13971	0.51	
Cameroon	-1250	1.81	2191	2.81	
Central African Rep.	-75	0.11	747	0.49	7.6
Chad	-843.23	1.22	1344	3.09	
Comoros	-2	0.00	1179	0.01	4.7
Congo, Dem. Rep.	-750	1.09	316	11.67	
Congo, Rep. of	-3350	4.86	3976	4.15	
Cook Islands	-1.2	0.00			
Dominica	-5.7902	0.01	8923	0.00	5
Dominican Republic	-707.8	1.03	8189	0.43	
Equatorial Guinea	-9550	13.85	34166	1.38	
Fiji	-294.12	0.43	4652	0.31	
Gabon	-3250	4.71	37625	0.43	
Guinea	-320	0.46	1066	1.48	
Jamaica	-1222.64	1.77	7837	0.77	
Kenya	-508.74	0.74	1560	1.61	
Lesotho	-250	0.36	1454	0.85	
Liberia	-97	0.14	391	1.22	
Madagascar	-519.04	0.75	1062	2.41	
Mauritius	-441.97	0.64	12519	0.17	10.9
Mozambique	-650	0.94	844	3.79	
Nigeria	-28115.3	40.77	2116	65.43	
Papua New Guinea	-1318.98	1.91	2215	2.93	
Rwanda	-64.533	0.09	1035	0.31	
Solomon Islands	-47.083	0.07	2643	0.09	15.2
South Africa		0.00	10481		
Sudan	-4650	6.74	2142	10.69	
Suriname	-102.411	0.15	7459	0.07	
Swaziland	-340	0.49	4966	0.34	
Tanzania	-306.96	0.45	1311	1.15	
Tonga	-2	0.00	4460	0.00	
Trinidad and Tobago	-9462.28	13.72	26225	1.78	
Zambia	-744.76	1.08	1365	2.69	
Zimbabwe	-450	0.65			30
Total (above)	**-103445.36**	**150.00**		**150.00**	**73.40**

Whilst we used GDP per capita as a measure of resilience, in practice this is much more complex (although there is a close correlation, see appendix figure K1). There are a number of ways of introducing different resilience measures into shock absorber schemes. Table 15 summarises the advantages and disadvantages of various resilience indicators.

Table 15 Advantages and disadvantages of various resilience indicators

	Advantages	Disadvantages
GDP per capita	Widely available from WDI	Not a perfect measure of resilience
Government debt as per cent of GDP	Widely available from IMF WEO	One aspect of resilience
Reserves expressed as months of imports	Widely available from IMF WEO	Data gaps for a number of relevant countries
Population / smallness	Widely available from IMF WEO, smallness is an inherence characteristic of vulnerability	Smallness on its own not a sufficient indicator (e.g. there are poor and rich small states)
Resilience index (Briguglio et al, 2008b)	Useful index measuring and aggregating various aspects of resilience	Available for a small sample of countries (e.g. lacks data on many small countries)
Economic Vulnerability Index (Guillaumont, 2008)	Useful index aggregating various aspects of vulnerability (incl. exposure) and available for quite a number of countries	Broader than just aspects of resilience which abstracts from exposure. Lack of data for a number of countries

Source: see appendix K for country specific data for these resilience indicator

We used these measures to see how payments would change if payments were not just proportional to the shock (here GDP shock based on IMF forecasts). Table 16 shows the payments that would be made if the GDP shock was greater than 3 percentage points (so it only shows those countries that had a forecast shock of more than 3 percentage points). The following can be observed:

- Introducing GDP per capita as a resilience indicator and scaling payments by this factor means poorer countries get more and richer countries get fewer payments than would have been the case it if was proportional to the shock. It could differ by a factor of 7, e.g. in the case of DRC which is poor.
- Introducing government debt as percentage of GDP as a negative measure of resilience results in more payments to countries that are highly indebted and therefore less able to withstand the shock (such countries are often small middle income countries that have lacked access to HIPC). However, Botswana (with low debt) would lose and Jamaica (with high debt) would gain from this arrangement, which would also help to address the problem that oil exporters dominate because oil exporters (Nigeria) should have built up a reasonable fiscal position before the crisis, and thus should have less government debt.. Of course, not all countries (DRC, Sudan) did this and they would still receive substantial payments.
- Using reserves (expressed as months of imports) provides similar insights as oil exporters had on the whole built up reserves before the shock. But there are less data, so fewer countries get a payment (if we kept to this mechanistic way of determining payments).
- The use of the resilience index would result in too few observations. The use of the vulnerability index is better but it does not cover a number of small indebted countries and its use would also lead to large payments to countries with large reserves and low debt such as Nigeria.
- Finally, the column "Mix" uses a scaling factor as the inverse of "(GDP per capita * population) / (government debt as % of GDP). This would allocate more funds to those countries that are poorer, smaller and with high government debt. This seems a preferred measure.

Table 16 Payments using various resilience indicators

	Standard	GDP/cap	Gov debt/ GDP	Reserves / imports	Population	EVI	Mix
Angola	28.4	11.5	31.5	39.7	11.4	32.5	8.4
Antigua and Barb.	0.0	0.0	0.0	0.0	1.1		0.7
Barbados	0.3	0.0	1.0	0.4	8.5		5.2
Botswana	2.7	0.5	1.2	0.7	10.5		1.2
Cape Verde	0.2	0.2	0.5	0.3	3.1	0.2	7.0
Chad	2.3	4.1	2.1		1.6	1.8	4.2
Congo, Dem. Rep.	3.0	22.8	12.1		0.3	3.5	16.0
Congo, Republic of	6.7	4.0	11.1		12.3	6.7	20.1
Equatorial Guinea	7.1	0.5	1.0		38.6	5.0	0.6
Fiji	0.7	0.4	1.1		5.8		7.5
Gabon	4.5	0.3	3.4		21.3		1.7
Grenada	0.0	0.0	0.1	0.0	1.7		2.6
Guinea	0.2	0.3	0.3		0.1	0.2	0.9
Jamaica	2.1	0.6	8.2	2.9	5.5		10.5
Kenya	3.9	6.0	5.6	4.6	0.8	8.0	2.7
Lesotho	0.1	0.2	0.2		0.4	0.1	1.2
Liberia	0.2	1.1	1.2	1.0	0.3	0.1	20.0
Madagascar	1.5	3.5	1.5		0.5	1.9	1.9
Mauritania	0.6	0.7	1.9		1.4	0.8	8.1
Mauritius	0.5	0.1	0.8	0.5	3.0		1.3
Niger	0.3	1.2	0.2	0.4	0.2	0.3	0.4
Nigeria	66.1	74.4	29.8	33.6	3.0	73.5	2.5
Samoa	0.0	0.0			0.2	0.0	
Senegal	1.6	2.1	1.5	2.9	0.9	1.9	1.7
Seychelles	0.0	0.0	0.1	0.1	1.7		1.2
St. Kitts and Nevis	0.0	0.0	0.2	0.0	3.6		4.8
St. Lucia	0.1	0.0	0.2	0.1	3.3		2.8
St. Vincent&Grens.	0.1	0.0	0.1	0.1	4.4		4.0
Sudan	12.3	13.7	28.9	60.4	2.2	12.3	9.3
Suriname	0.2	0.1	0.1	0.1	2.2		0.7
Tanzania	0.8	1.4	1.0	0.7	0.1	1.1	0.5
Trinidad and Tob.	3.2	0.3	3.0	1.5			
Total	150	150	150	150	150	150	150

The use of the "mix" variable or any other resilience indicator as in table 16 still allows payments to all countries as long as their GDP shock is greater than 3 percentage points. Hence, as there were quite a few countries satisfying that threshold in 2009, resources would go to quite a large number of countries. A further way of using resilience indicators is not just by using it to scale payments but rather to categorise countries into those that should and those that should not receive payments. For example, one may decide to suggest that only countries that have a debt to GDP ratio that is higher than the median get resources. This would obviously exclude half of the countries and focus payments on those countries with high debt (so this would exclude e.g. Nigeria and Angola, countries that are dominating payments when using most other indicators). Concluding, the use of resilience indicators alters payments. Ideally the notion of resilience-scaled payments would be based on an index available for all countries. Work on this should start soon. But whilst the ideal indicator is still absent, we suggest to scale payments by a combination of income levels, government debt and population.

8. Conclusions and future directions

The recent global financial crisis as well as recent and current food and fuel price increases have had large effects on developing countries. Sudden external shocks can involve sudden net capital outflows, sudden declines in export revenues, increased costs of essential imports such as food and oil products or declines of remittances. These will affect growth and government revenue. This can lead to increased poverty in the short term, and reduction in critical expenditures, which can have long-lasting negative development effects. Donors and international financial institutions have designed shock facilities in order to cushion the impact of shocks on the poor and protect critical spending categories, so as to sustain growth. This study has examined the future design of shock facilities by the European Commission, as well as made broader suggestions for a more general shocks architecture.

The European Commission has put in place various shock absorbing schemes most recently the FLEX, V-FLEX and Food facility initiatives. Recent studies (TAC, 2009; Aiello, 2009) have suggested a number of strengths and weaknesses in the past schemes and suggested the initiation of new shock compensatory schemes.

This report discusses a number of issues. We first review the recent literature on the impact of shocks on development in order to appreciate the efforts to address the impact of shocks. We then review and provide a statistical analysis of critical expenditures and vulnerability to understand what happens to government spending categories when crises hit economies. We then include a review of the range of policy options open to countries to address crises. A major part of this paper includes a review of existing shock facilities and lessons learned. This sets the stage for a discussion on a range of assessment criteria against which we would consider in any new EU shock absorber scheme. We discuss a large number of options as part of three broad options and analyse these including through numerical simulations. We provide specific comments and suggestions on trigger variable and thresholds and we suggest that payments should be dependent on resilience.

Economic shocks have become more important....

Shocks have become more important in today's globalising world. Our review of the evidence in the text and the appendices suggests that shocks can have a large effect on growth, government expenditure and development. The G20's development agenda is explicitly about growth and resilience. The IMF has been enhanced during the crisis focusing on balance of payments support. A European angle could be to protect critical spending such as social spending and infrastructure projects.

... and therefore it is important to devote attention towards dealing and coping with shocks

There are various ways in dealing with economic shocks, and two of them include 1) resilience building to improve dealing with shocks and 2) providing finance in case shocks affect critical spending. Large donors such as the European Commission could lead the way in two ways: 1) they are a large donor on its own with development and shock components in their indicative programmes and 2) they can co-ordinate and pool loan and grant resources for a large European shock facility, which could hopefully incorporate resources from other donors.

Scale and speed are particularly important criteria for shock absorber schemes, including those by the EU, so that they can have a genuinely counter-cyclical and significant effect on developing countries facing external shocks. It would seem desirable to increase the proportion of donor resources going to shock absorber schemes, as shocks seem to be a major cause of lower growth in

developing countries and shocks have become more frequent; furthermore, even for liquidity facilities (e.g. by the IMF) , greater emphasis on significant scale low conditionality lending in the face of shocks seems highly desirable.

The next multi-year financial framework will cover the period 2014 – 2020 and it is likely that EDF will not be budgetised until the next period. Assuming that some €22 billion will be found, we assume that at least €1.1 billion or 5% (adding Flex and V-Flex amounts in previous period) will need to be reserved for a shock facility and more could be pooled from EU bilateral states. The World Bank's IDA crisis facility reserves a similar proportion from all IDA resources for dealing with crises. However, we argue that €3 billion of allocation by the EU to be reserved for shock absorber facility is a better approximation of what would be needed to deal with another shock such as the global financial crisis. It is important that there is the flexibility so such resources can be deployed for other purposes were such a large shock not to materialize.

So what might be the key elements in a new European approach?

Access to the new shock facility needs to be simple and flexible, yet also predictable. There should be a set of clear trigger variables. Our study favours the use of forecasts such as those on GDP and the current account as elements for a *trigger variable* because this allows faster and speedier allocation of resources. A case can be made to spend some resources for monitoring shocks, e.g. by supporting a team of researchers at Commission or IMF and to do this in collaboration with partner countries. Such a team could monitor categories of variables more closely related to preserving critical spending but which might not be readily available from international databases, including data on government spending. Of course, the use of different trigger variables can result in very different allocations so this needs a further discussion. In particular, if a new shock absorber scheme needs to address shocks quickly and at scale to protect critical spending, it needs to have up to date information on the underlying financing situation and this can facilitate ex-ante engagement with countries to ensure an optimal impact from the shock facility. A further decision is required on the *threshold* used for each trigger variable. The tighter the threshold the fewer countries are eligible.

Our study examines pros and cons of different trigger variables and suggest to use country specific GDP shocks on the basis of IMF forecasts, verified by in-country examination with partner countries, using a 3% threshold (or changed to the median GDP shock) initially. The trigger value of 3% reaches around half of the countries in the first instance (at least based on the 2009 shock as simulated in table 11). In other years, such a trigger may not be sufficient and so one could consider changing the trigger threshold to the median shock (which was 3% in 2009). The trigger threshold would be country specific (and not group specific or necessarily as high as in the IDA CRW whose thresholds are considered too tight).

Current shock facilities such as FLEX and V-FLEX are for *ACP countries*, but a new scheme could be for all developing countries (the Food facility was one such example), LDCs or low income countries. Given that the EDF is unlikely to be budgetised for the period 2014-2020, and following the Cotonou Partnership Agreement, it might be useful to remain focused on ACP for now, but to begin to extend the shock facilities into all developing countries (and finding new resources) by the next period from 2020 onwards. This means that preparations could start now by extending the new FLEX scheme to all developing countries whilst bringing in additional resources from the EU budget.

An innovation in future EU shock facilities involves the incorporation of the concept of resilience and resilience building. We have argued that resilient countries are better able to withstand shocks, and hence less resilient countries should receive more funding ex-post, whilst (to counteract the moral

hazard problem) ex-ante more funding should be devoted towards resilience building. Some efforts would need to be devoted towards measuring resilience (Briguglio, 2010).

We argue that shock absorber payments should take into account whether countries are resilient to shocks. We used different measures of resilience and show that the use of resilience indicators could alter payments substantially from a situation where payments are proportional to the shock. Ideally the notion of resilience-scaled payments would be based on a resilience index available for all countries. Work on this should start soon. But whilst the ideal indicator is still absent, we suggest to scale payments by a combination of income levels (GDP per capita in international dollars), government debt (as % of GDP) and population (the latter to account for the inherence vulnerable characteristics of small states). Whist highly indebted countries should get greater compensation in times of shocks , in good times states should receive payments to become more resilient to shocks.

We have also examined channels of delivery. The Commission specialises in grant resources and we suggest this would continue to be relevant for low income countries. V-FLEX paid resources through budget support which could be continued for those countries ready to receive budget support and in co-ordination with other development institutions. We have also argued that COM could use its co-ordinating role and bring in other funders, e.g. loans from the AfD or KfW. In addition, critical spending is often related to large infrastructure projects which require project financing and which could be provided by the EIB including using blending schemes. COM could also liaise with the other institutions such as the Wold Bank and Regional Development Banks in the delivery of project finance. Working with others could also help to improve the additionality and leveraging effect of the EU's interventions.

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Appendix A. Data appendix for the statistical analysis

Three sets of data have so far been assembled for the study – the first to assess shocks to all developing countries, the second to measure the response of the various facilities currently in existence to address these in ACP countries.

Table A1 shows the series collected or compiled for the 'shocks' dataset, which covers 150 countries (75 ACP and 75 other developing, the 4 ACP countries missing include Marshall Island, Nauru, Niue, Palau) for the period 1970–2009.

Table A1. 'Shocks' dataset

Series	**Source**
GDP value (national currency mn)	IMF IFS
GDP deflator	IMF IFS
Real GDP (national currency million)	Calculated from IMF data
Real GDP year-on-year change (%)	Calculated from IMF data
Exchange rate (national currency unit per US$, period average)	IMF IFS
Govt consumption expenditure value (national currency mn)	IMF IFS
Gross fixed capital formation value (national currency mn)	IMF IFS
Gross fixed capital formation share of government consumption expenditure + GCFC (%)	Calculated from IMF data
Government consumption expenditure value as share of GDP value (%)	Calculated from IMF data
Gross fixed capital formation value as share of GDP value (%)	Calculated from IMF data
Export value (US$ mn)	UN COMTRADE
Export value year-on-year change (%)	Calculated from UN COMTRADE data
Import value (US$ mn)	UN COMTRADE
Trade balance (US$ mn)	Calculated from UN COMTRADE data
Trade balance value as share of export value (%)	Calculated from IMF data
Trade balance value as share of GDP value (%)	Calculated from IMF data
Trade balance value as share of GDP value year-on-year change (ratio, percentage points)	Calculated from IMF data
Exports of goods and services (national currency mn)	IMF IFS
Exports of goods and services year-on-year change (%)	Calculated from IMF data
Current account balance (US$ mn)	IMF IFS
Current account balance value as share of GDP value (%)	Calculated from IMF data
Current account balance value as share of GDP value year-on-year change (ratio, percentage points)	Calculated from IMF data
Government revenue excluding grants as share of GDP (%)	Data provided by IMF
105 Commodity Price Indices	IMF IFS

Country coverage for the various series is shown in Table A2 (although the presence of an X in a cell indicates only that data are available for some years within the period – not necessarily all).

Table A2. 'Shocks' dataset country coverage

Country	ACP/ non ACP	GDP value	GDP deflator	Real GDP	Real GDP y-o-y change	Exrate	Govt consumption expend. value	GFCF value	GFCF share of govt cons expend + GCFC	Govt cons. expend. value as share of GDP value	GFCF value as share of GDP value	Export value	Export value y-o-y change	Import value	Trade balance	Trade balance value as share of export value	Trade balance value as share of GDP value	Trade balance value as share of GDP value y-o-y	Exports of goods and services	Exports of goods and services y-o-y change	Current a/c balance	Current a/c balance value as share of GDP value	Current a/c balance value as share of GDP value y-o-y change
ACP	**75**	**62**	**53**	**52**	**52**	**71**	**56**	**55**	**54**	**54**	**53**	**73**	**72**	**73**	**73**	**73**	**60**	**58**	**56**	**56**	**69**	**61**	**60**
Non-ACP	**75**	**67**	**58**	**55**	**55**	**72**	**64**	**64**	**63**	**63**	**63**	**71**	**70**	**71**	**71**	**71**	**64**	**63**	**63**	**63**	**71**	**64**	**64**
Afghanistan	Non					X						X	X	X	X	X					X		
Albania	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Algeria	Non	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Angola	ACP	X	X	X	X	X						X	X	X	X	X					X	X	X
Antigua/Barbuda	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Argentina	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Armenia	Non	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Azerbaijan	Non	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bahamas	ACP	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bahrain	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bangladesh	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Barbados	ACP	X	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	X	X	X
Belarus	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Belize	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Benin	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bhutan	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Bolivia	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Bosnia/Herzegovina	Non	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Botswana	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brazil	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brunei Darussalam	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Burkina Faso	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Burundi	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cambodia	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Country	ACP/ non ACP	GDP value	GDP deflator	Real GDP	Real GDP y-o-y change	Exrate	Govt consumption expend. value	GFCF value	GFCF share of govt cons expend + GCFC	Govt cons. expend. value as share of GDP value	GFCF value as share of GDP value	Export value	Export value y-o-y change	Import value	Trade balance	Trade balance value as share of export value	Trade balance value as share of GDP value	Trade balance value as share of GDP value y-o-y	Exports of goods and services	Exports of goods and services y-o-y change	Current a/c balance	Current a/c balance value as share of GDP value	Current a/c balance value as share of GDP value y-o-y change
Cameroon	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cape Verde	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Central African Rep.	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Chad	ACP	X	X	X	X	X						X	X	X	X	X	X	X			X	X	X
Chile	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
China: Mainland	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X
China:Hong Kong	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
China:Macao	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Colombia	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Comoros	ACP	X				X						X	X	X	X	X	X				X	X	X
Congo, Dem. Rep.	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Congo, Republic of	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cook Islands	ACP											X		X	X	X							
Costa Rica	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Côte d'Ivoire	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Croatia	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cuba	ACP											X	X	X	X	X							
Djibouti	ACP	X				X						X	X	X	X	X	X				X	X	X
Dominica	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Dominican Republic	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
East Timor	ACP											X	X	X	X	X							
Ecuador	Non		X									X	X	X	X	X					X		
Egypt	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
El Salvador	Non		X			X						X	X	X	X	X					X		
Equatorial Guinea	ACP	X	X	X	X	X	X	X	X	X	X								X	X	X	X	X
Eritrea	ACP					X						X	X	X	X	X					X		
Ethiopia	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Country	ACP/ non ACP	GDP value	GDP deflator	Real GDP	Real GDP y-o-y change	Exrate	Govt consumption expend. value	GFCF value	GFCF share of govt cons expend + GCFC	Govt cons. expend. value as share of GDP value	GFCF value as share of GDP value	Export value	Export value y-o-y change	Import value	Trade balance	Trade balance value as share of export value	Trade balance value as share of GDP value	Trade balance value as share of GDP value y-o-y	Exports of goods and services	Exports of goods and services y-o-y change	Current a/c balance	Current a/c balance value as share of GDP value	Current a/c balance value as share of GDP value y-o-y change
Fiji	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Gabon	ACP	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Gambia	ACP	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Georgia	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Ghana	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Grenada	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Guatemala	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Guinea	ACP	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Guinea-Bissau	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Guyana	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Haiti	ACP	X	X	X	X	X		X			X	X	X	X	X	X	X	X	X	X	X	X	X
Honduras	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
India	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Indonesia	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Iran, I.R. of	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Iraq	Non	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Jamaica	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Jordan	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Kazakhstan	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Kenya	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Kiribati	ACP					X						X	X	X	X	X					X		
Kosovo	Non	X					X	X	X	X	X								X	X	X	X	X
Kuwait	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Kyrgyz Republic	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Lao PDR	Non	X	X	X	X	X						X	X	X	X	X					X	X	X
Lebanon	Non	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Lesotho	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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Liberia	ACP					X						X	X	X	X	X					X		
Libya	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Macedonia	Non		X			X	X	X	X			X	X	X	X	X			X	X	X		
Madagascar	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Malawi	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Malaysia	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Maldives	Non	X	X	X	X	X						X	X	X	X	X	X	X			X	X	X
Mali	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Mauritania	ACP	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Mauritius	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Mexico	Non					X						X	X	X	X	X					X		
Micronesia	ACP					X																	
Moldova	Non	X				X	X	X	X	X	X	X	X	X	X	X	X	X			X	X	X
Mongolia	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Morocco	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Mozambique	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Myanmar	Non	X	X	X	X	X		X			X	X	X	X	X	X	X	X	X	X	X	X	X
Namibia	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Nepal	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Nicaragua	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Niger	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Nigeria	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Oman	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Pakistan	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Panama	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Papua New Guinea	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Paraguay	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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Peru	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Philippines	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Qatar	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Russian Federation	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Rwanda	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Samoa	ACP	X	X	X	X	X						X	X	X	X	X	X	X			X	X	X
São Tomé/Príncipe	ACP					X						X	X	X	X	X					X		
Saudi Arabia	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Senegal	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Serbia	Non	X				X	X	X	X	X	X								X	X	X	X	X
Seychelles	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Sierra Leone	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Solomon Islands	ACP	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Somalia	ACP					X						X	X	X	X	X					X		
South Africa	ACP					X	X	X	X			X	X	X	X	X					X		
Sri Lanka	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
St. Kitts and Nevis	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
St. Lucia	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
St. Vincent/Grens.	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Sudan	ACP	X				X						X	X	X	X	X	X	X			X	X	X
Suriname	ACP	X				X	X			X		X	X	X	X	X	X	X	X	X	X	X	X
Swaziland	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Syria	Non	X	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	X	X	X
Tajikistan	Non	X				X						X		X	X	X	X				X	X	X
Tanzania	ACP		X			X	X	X	X			X	X	X	X	X			X	X	X		
Thailand	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Togo	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

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Tonga	ACP	X	X	X	X	X						X	X	X	X	X	X	X			X	X	X
Trinidad/Tobago	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Tunisia	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Turkey	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Turkmenistan	Non					X						X	X	X	X	X					X		
Tuvalu	ACP											X	X	X	X	X							
UAE	Non	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Uganda	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Ukraine	Non	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Uruguay	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Uzbekistan	Non					X																	
Vanuatu	ACP					X						X	X	X	X	X					X		
Venezuela	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Vietnam	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
West Bank/Gaza	Non																				X		
Yemen	Non	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Zambia	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Zimbabwe	ACP	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

The 'facilities' dataset, which covers the 79 ACP countries only, comprises the series shown in Table A3.

Table A3. 'Facilities' dataset

Series	**Source**
Shortfall in export earnings (absolute value € mn)	Data provided by the Commission
GDP value (current € mn)	*World Development Indicators*
Current account balance: absolute difference between year X and year X-1 (€ mn)	Calculated from *World Economic Outlook* October 2010 data
Difference between WEO forecast percent change in GDP 2009 over 2008 and actual	Calculated from *World Economic Outlook* October 2010 data
Actual FLEX support (€ mn)	Data provided by the Commission
V-FLEX allocations (€ mn)	Data provided by the Commission
Food Facility allocations (€ mn)	Data provided by the Commission
IMF total – all shock facilities (€ mn)	IMF Annual Financial Statements
WB total – all shock facilities (€ mn)	World Bank Annual Report 2010, UK Department for International Development
Total all facilities – FLEX, V-FLEX, Food Facility, IMF total, WB total (€ mn)	Calculated from above data
FLEX + V-FLEX as % of shortfall in export earnings	Calculated from above data
FLEX only as % of shortfall in export earnings	Calculated from above data
FLEX + V-FLEX as % of GDP	Calculated from above data
FLEX only as % of GDP	Calculated from above data
FLEX + V-FLEX as % of change in current account balance	Calculated from above data
FLEX only as % of change in current account balance	Calculated from above data
Food facility as % of shortfall in export earnings	Calculated from above data
Food facility as % of GDP	Calculated from above data
Food facility as % of change in current account balance	Calculated from above data
IMF TOTAL as % of shortfall in export earnings	Calculated from above data
IMF TOTAL as % of GDP	Calculated from above data
IMF TOTAL as % of change in current account balance	Calculated from above data
WB TOTAL as % of shortfall in export earnings	Calculated from above data
WB TOTAL as % of GDP	Calculated from above data
WB TOTAL as % of change in current account balance	Calculated from above data
Total all facilities – FLEX, V-FLEX, Food Facility, IMF total, WB total as % of shortfall in export earnings	Calculated from above data
Total all facilities – FLEX, V-FLEX, Food Facility, IMF total, WB total as % of GDP	Calculated from above data
Total all facilities – FLEX, V-FLEX, Food Facility, IMF total, WB total as % of change in current account balance	Calculated from above data

Table A4 shows the results of country regressions (the coefficient b) in:

Share Govt Inv (i,t) = a (i) + b*SHOCK (i,t) + time dummies

Table A4: Regression Results: Dependent Variable = GPCFE's share of GDP; Independent Variable = Shock = Percentage Change of Exports

Country (number of observations)	Coefficient of 'exports_yoych' (t-value)
Benin (8)	.0001115 (0.54)
Botswana (9)	-.0003427 (-0.89)
Burkina Faso(6)*	-.0002225 (-2.63)
Burundi(10)	.0001406 (0.54)
Cameroon(6)	.0000604 (0.69)
Cape Verde (6)	.000026 (0.41)
Central African Rep. (6)	-.0003712 (-1.79)
Côte d'Ivoire (8)	.000123 (1.37)
Ethiopia (10)	-.0001261 (-1.82)
Gabon (7)	3.27e-06 (0.37)
Gambia(9)	.0000716 (0.67)
Kenya(10)	.0000729 (0.33)
Lesotho (4)	-.0003864 (-2.03)
Madagascar (10)	-8.42e-06 (-0.08)
Mali (9)	-.0001995 (-1.23)
Mauritius (10)	.0001894 (0.86)
Mozambique (8)	.3015237 (1.27)
Namibia (4)	5.26e-06 (0.11)
Niger(9)**	.0008975 (2.40)
Nigeria (4)	-.0002176 (-2.26)
Rwanda (7)**	.0003143 (3.49)
Senegal (9)	-.000174 (-0.64)
Seychelles (6)	.0017637 (1.05)
Swaziland (6)	-.0001793 (-1.96)
Togo (6)	-.0001141 (-1.91)
Uganda (9)**	-.000688 (-3.27)
Zambia (10)	-.0003002 (-0.99)

Table A5 : Regression Results: Dependent Variable = GPCFE's share of GDP; Independent Variables = Shock = Percentage Change of Exports and Total Shock Absorber

Country (number of observations)	Coefficient of 'exports_yoych' (t-value)	Total shock Absorber (t-value)
Benin (7)	-.0003855 (-1.88)	-.0087933** (-3.84)
Botswana(9)	-.0000207 (-0.06)	0018152 (1.93)
Burkina Faso(6)	-.0002225* (-2.63)	droppped
Burundi(10)	.0003058 (1.30)	.003507* (2.03)
Cameroon(6)	.0000604 (0.69)	droppped
Cape Verde(6)	.000026 (0.41)	droppped
Central African Rep. (6)	-.0004198* (-3.13)	-.006079* (-2.59)
Côte d'Ivoire (8)	.0001288 (1.30)	.0000422 (0.32)
Ethiopia (10)	-.0001057 (-1.80)	-.000039* (-2.11)
Gabon (7)	4.23e-06 (0.44)	.0001345 (.0001927)
Gambia(9)	.0000718 (0.69)	.0209728 (1.17)
Kenya(9)	.0000257 (0.10)	dropped
Lesotho (4)	-.0003864 (-2.03)	dropped
Madagascar (10)	.0000195 (0.19)	.0063887 (1.35)
Mali(9)	-.0001496 (-0.90)	-.0052311 (-1.10)
Mauritius (10)	.0001433 (0.58)	.0001835 (0.55)
Mozambique (8)	.3015237 (1.27)	dropped
Namibia (4)	5.26e-06 (0.11)	dropped
Niger (9)	.0010116** (2.89)	.0052867 (1.55)
Nigeria (4)	-.0002176 (-2.26)	dropped
Rwanda(7)	.0002344 (1.92)	.0023842 (0.98)
Senegal (9)	-.0002525 (-0.88)	.0007079 (0.94)
Seychelles (6)	.0017637 (1.05)	dropped
Swaziland (6)	-.0001794 (-1.70)	.0000572 (0.10)
Togo (6)	-.0001141 (-1.91)	dropped
Uganda(9)	-.000688** (-3.27)	dropped
Zambia (10)	-.000374 (-1.24)	-.0014202 (-1.20)

Appendix B. Detailed description of EC facilities

Vulnerability to export fluctuations is recognised as an important risk to the development agenda in ACP countries and as such has been addressed in Article 68 of the ACP-EU Partnership Agreement (Cotonou Agreement) signed in Cotonou on 23 June 2000 and revised in Luxembourg on 25 June 2005 as follows:

"The Parties recognise that instability of export earnings, particularly in the agricultural and mining sectors, may adversely affect the development of the ACP States and jeopardise the attainment of their development requirements. A system of additional support in order to mitigate the adverse effects of any instability in export earnings, including in the agricultural and mining sectors, is therefore set up within the financial envelope for support to long-term development."

"The purpose of support in cases of short-term fluctuations in export earnings is to safeguard socio-economic reforms and policies that could be affected negatively as a result of a drop in revenue and to remedy the adverse effects of instability of export earnings in particular from agricultural and mining products" (Article 68(2) of the Cotonou Agreement).

In accordance with Article 3(2) of Annex IV of the Cotonou Agreement, ACP countries benefit from an allocation (the so-called B-envelope) to *"cover unforeseen needs such as emergency assistance where such support cannot be financed from the EU budget, contributions to internationally agreed debt relief initiatives and support to mitigate adverse effects of instability in export earnings"* (EC, 2008). The conditions for the mobilisation of the envelope for unforeseen shocks suggest that the instability of export earnings derives from a shock of an exogenous nature, such as a natural disaster, unfavourable weather conditions, price fluctuations of the market price of a commodity, etc.

Article 100 of the ACP-EU Partnership Agreement states that "The signatory countries of the ACP-EU Partnership Agreement, aware that the instability of export earnings could be prejudicial to the development of the ACP States, have set up a system of additional support to mitigate the adverse effects of any instability in export earnings, including those of the agricultural and mining sectors; they confirm that the aim of this support is to safeguard socio-economic reforms and policies that could be affected negatively as a result of a drop in earnings and to remedy the adverse effects of instability of export earnings from agricultural and mining products (ACP-EU, 2008)."

The European Commission has put in places various shock absorbing schemes: The FLEX Mechanism as well as the V-FLEX and Food facility initiatives. Recent studies (TAG, 2009; Aiello, 2009) have suggested a number of *strengths and weaknesses* in the current schemes. In what follows, the facilities' operational rules are described in detail.

B1 2008 Revision of FLEX

In 2000 the EU set up a new programme, the FLEX. The purpose of the new FLEX was to be more comprehensive and simpler than its predecessor the so-called commodity-related scheme, STABEX. Early evidence in using FLEX showed that the initial eligibility criteria were too stringent, resulting in relatively few ACP countries' being considered eligible. This is why FLEX has already been revised twice, in 2004 and 2008 (Aiello, 2009).

The system of support to mitigate the adverse effects of any instability in export earnings was amended for the first time by Decision No 2/2004 of the ACP-EC Council of Ministers of 30 June 2004. Aiello (2009) notes that the revision did not regard the main principle of the instrument, i.e. financial

assistance to cover for losses in Government revenues as a consequence of a shortfall in export earnings (Commission of the European Communities 2004b). In order to improve the functioning of the FLEX system so that it responded more adequately to its objectives, it was revised again by the ACP-EC Council Decision № 01/2008 of 13 June 2008. The changes introduced by the revision regard the eligibility criteria (i.e. the revision of the terms and conditions of financing for short-term fluctuations in export earnings), calculation of the financial support and its disbursement method.

B1.1 Country eligibility criteria for FLEX support in 2008

From 2000 until the 2004 revision, FLEX payments were activated if in the application year N, export earnings from goods were 10% (2%) below the reference level. Alternatively, ACPs could claim assistance if a sudden drop of 10% (2% for LDCs) in earnings related to the total for agricultural or mineral products and these sectors were considered to be highly relevant for that particular ACP economy (the exports from these sectors had to represent at least 40% of national exports) (Annex II, art. 9(1/a) of the Cotonou Agreement). Whatever the export aggregation (total exports or agricultural/mineral exports), the reference level was determined as the arithmetical average of earnings in the years N-4 to N-2. Furthermore, it was required that the drop in export earnings caused a worsening of 10% in the programmed public deficit either for the year of application or for the successive one (Annex II, art. 9(1/b) of the Cotonou Agreement). Both revisions aimed at improving the functioning of FLEX, in the sense of simplifying the eligibility criteria, so the facility effectively pursued its objectives (Aiello, 2009).

From the experience of applying FLEX in its initial years of implementation (2000-2002), it emerged that few countries applying for FLEX support met the eligibility criteria. Modification of the facility was, therefore, proposed (Commission of the European Communities 2004a; 2004b). By taking into account the proposal made by the EU Commission, the EU-ACP revised the terms and conditions of financing for fluctuations in export earnings in 2004 (ACP-EC Council of Ministers, 2004).

The main change made in 2004 regarded the reduction from 10% to 2% of the increase that ACPs had to register in their public deficit as a result of export side exogenous shocks. Furthermore, the special clause applying to LDCs was extended to landlocked countries and island states, lowering the eligibility threshold to a 2 per cent loss in export earnings. Had the proposed criteria been applied from 2000–02, ACP states would have received €255 million from FLEX, six times more than the amount actually disbursed (DFID 2004; Commission of the European Communities 2004a referred to in Aiello, 2009).

According to the 2008 Revised FLEX the eligibility for additional resources is now established by the revised Article 9 of Annex II of the Cotonou Agreement as follows:

Eligibility for additional resources shall be established by:

- a 10 % (2 % in the case of least-developed, landlocked, island, post-conflict and post-natural disaster States) loss of export earnings from goods compared with *the arithmetic mean* of the earnings in the four years preceding the application year, *excluding the most extreme value*,

Criterion (a) shall be met if:

- the value of total exports of goods in the application year N is less than or equal to 90% (98% for least-developed, landlocked, island, post-conflict and post-natural disaster States) of

the arithmetical average of total exports of goods in years N-4, N-3, N-2 and N-1, excluding the most extreme value (i.e. the highest absolute difference) compared to the four year average.

- a 10 % (2 % in the case of least-developed, landlocked, island, post-conflict and post-natural disaster States) loss of export earnings from the total of agricultural or mineral products compared with the arithmetic mean of the earnings in the four years preceding the application year, excluding the most extreme value for countries where the agricultural or mineral export earnings represent more than 40 % of total export earnings from goods,
- a 10 % (2 % in the case of least-developed, landlocked, island, post-conflict and post-natural disaster States) loss of export earnings from the total of agricultural or mineral products compared with the arithmetic mean of the earnings in the four years preceding the application year, excluding the most extreme value for countries where the agricultural or mineral export earnings represent between 20 % and 40 % of total export earnings from goods, provided that total earnings do not increase more than proportionally with respect to the impact of the loss of export earnings from agricultural or mineral products as a proportion of total exports.';

If criterion (a)(1) is not met, the ACP State can request the application of one of the following two options:

1) the total value of exports of agricultural or mineral products in the application year N is less than or equal to 90% (98% for least-developed, landlocked, island, post-conflict and post-natural disaster States) of the arithmetical average of agricultural or mineral exports in years N-4, N-3, N-2 and N-1 (excluding the most extreme value), and agricultural or mineral exports represent more than 40% of total exports of goods, based on the arithmetical averages of this ratio in years N-4, N-3, N-2 and N-1 (excluding the most extreme value compared to the four year average), or
2) the total value of exports of agricultural or mineral products in the application year N is less than or equal to 90% (98% for least-developed, landlocked, island, post-conflict and post-natural disaster States) of the arithmetical average of agricultural or mineral exports in years N-4, N-3,N-2 and N-1 (excluding the most extreme value), and agricultural or mineral exports represent between 20% and 40% of total exports of goods, based on the arithmetical average of this ratio in years N-4, N-3, N-2 and N-1 (excluding the most extreme value compared to the four year average), provided that total earnings do not increase more than proportionally with respect to the impact of the loss of export earnings from agricultural or mineral products as a proportion of total exports.

It is therefore possible for a country to be eligible on the basis of sufficient export losses of agricultural or mineral products without having losses of the total exports as shown in the examples below:

	Percentage that the agricultural or mineral exports make up of the total exports and maximum eligible increase in total exports		
Export losses of agricultural or mineral products	**20%**	**30%**	**40%**
- 2%	+ 0,4%	+ 0,6%	+ 0,8%
-5%	+ 1%	+ 1,5%	+ 2%
- 10%	+ 2%	+ 3%	+ 6%
- 20%	+ 4%	+ 6%	+ 8%
- 30%	+ 6%	+ 9%	+ 12%

If a loss in export earnings occurs during the application year N, the Government can submit a request for FLEX support from the B-envelope in year N+1, accompanied by the following export statistics:

- option (1): total exports of goods (excluding petroleum and gas) per year N-4, N-3, N-2, N-1, N[1] (FOB values[2]), excluding goods in transit from customs warehouses and exports from free zones or ports without local added value;
- option (2, 3): in addition to total exports, also total exports of agricultural products and/or mineral products (excluding petroleum and gas) per year N-4, N-3, N-2, N-1, N[3] (FOB values), excluding goods in transit from customs warehouses and exports from free zones or ports without local added value.

The Revision in 2008 led to the replacement of a number of articles:
Article 9(2) is replaced by the following:
'2. The loss of export earnings defined in paragraph 1 must be 0.5 % of GDP or more for there to be entitlement to additional support. Entitlement to additional support shall be limited to three successive years';

The initiative for mobilising resources from the B-envelope to compensate for the theoretical budgetary impact of the short-term fluctuations in export earnings shall be taken by the ACP State. A request from the ACP State to the Commission, including transmission of statistics, must be the starting point for any procedure under the current FLEX.[4]

3. Article 9(3) is replaced by the following:
'3. The additional resources shall be reflected in the public accounts of the country concerned. They should be utilised in accordance with programming rules and methods, including the specific provisions of Annex IV "Implementation and management procedures", on the basis of agreements drawn up in advance between the Community and the ACP State concerned in the year following the application year. By agreement of both Parties the resources may be used to finance programmes included in the national budget. However, a part of the additional resources may be set aside for specific sectors, in particular to develop market-based insurance schemes offering protection against the risk of fluctuations in export earnings.' (Art.1.203 in ACP-EC, 2008).

4. An Article 9a is added to Chapter 3 of Annex II:
1. The amount of additional financial support should be equal to the loss of export earnings multiplied by the arithmetic mean of the "government revenue/gross domestic product" ratio of the four years preceding the application year, excluding the most extreme value and capping that ratio at 25 %.
2. The Commission analyses the data provided by the ACP States for the purpose of establishing eligibility and additional financial support as defined in Article 9 in the local currency corrected for inflation. The Commission will then convert the potential amount of additional financial support into euro in accordance with its procedures.

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1 Countries where the fiscal year does not match the calendar year but runs from July to June, for instance, can present export figures for the latest respective fiscal year (if this implies a change in practice compared to previous FLEX application, then it should be clearly mentioned and specified). In this case the public finance figures and exchange rates should also correspond to the same period.

2 FOB = Free On Board (excluding costs of insurance and freight)

3 Countries where the fiscal year does not match the calendar year but runs from July to June, for instance, can present export figures for their respective fiscal year. In this case the public finance figures and exchange rates should also correspond to the same period.

4 Advances "shall be mobilised on the basis of provisional export statistics drawn up by the government and submitted to the Commission." (Article 10, Annex II). This wording implies that the process is triggered by statistics presented by the ACP State.

3. Each year, within the total financial allocation for national indicative programmes, the Commission should establish an envelope covering all ACP countries to provide support in the event of short-term fluctuations in export earnings. If the amount of financial support calculated on the basis of the criteria defined in Article 9 exceeds the amount of that envelope, each ACP State's share will be established in proportion to the potential amount of its additional financial support expressed in euro.'

5. Article 10 is replaced by the following:
'The system for allocating additional resources shall provide for advances to cover any delays in obtaining consolidated trade statistics and to ensure that the resources in question can be included in the budget of the second year following the application year at the latest. Advances must be reserved for States where FLEX financial support can be implemented by means of general budgetary support. They shall be mobilised on the basis of provisional export statistics drawn up by the government and submitted to the Commission (cf. the case of Botswana in Table B4). The maximum advance must be 100 % of the amount of additional financial support for the application year. The amounts thus mobilised must be adjusted in the light of the final consolidated export statistics. Those statistics must be submitted no later than 31 December of the second year following the application year.' (EC, 2008b; ACP-EC, 2008).

B1.2 Trigger of FLEX

The trigger mechanism of the initial 2000 FLEX Mechanism for the use of resources under the B-envelope aimed at financing short-term fluctuations in export earnings (FLEX).

According to the 2008 Revised FLEX export statistics should be submitted for all years between **N-4** and **N**. The excel file automatically identifies the most extreme value (above or below the 4-year average) which will be excluded from the calculations. That is, as illustrated by **the case of Botswana** experiencing a fall in total export earnings from 2008 to 2009 of 31% (, the largest absolute difference between total export value of each of the four years (**N-4 to N-1**) (38,706,467,264.39 in year 2007=**N-2**) and the average total exports (35,403,053,656.42), which equals 3,303,413,607.96. Thus most extreme value is in year 2007 (i.e. cell E3), which will be excluded from equation:

(1.1) Average total exports less the extreme value = 34,301,915,787.10 (i.e. cell G7) = Avg. total exports. This leads us to equation:

(1.2) Total export loss: Export value year N - (1.1)
= 24,315,251,214.00 - 34,301,915,787.10 = -9,986,664,573.10.

This enables us to calculate equation:
(1.3) Total export loss as a % of average total exports: (1.2)/(1.1) =
-9,986,664,573.10 / 34,301,915,787.10 = 29.11%,

Which is above 2% (or 10% in cases mentioned above), it results in sufficient loss and further calculations follow.

According to the IMF's WEO Apr.2010 Botswana's GDP in current prices in 2009 was 83.272 bn in national currency. 0.5% of the GDP was equivalent to 416,361,500 (i.e. cell H11). Thus, in the case of Botswana the (1.4) Total export loss: (1.2) equal to 11.99% of GDP, which represents much more than the minimum of 0.5% of GDP = 416,361,500.00. Values are expressed in local currency[5] corrected

[5] Local currency is used for calculations in order to avoid triggering FLEX only on the basis of exchange rate fluctuations vis à vis euro.

for inflation (In the case of Botswana cumulative consumer price index (CPI) is used instead of GDP deflator and not the annual level of consumer price inflation)[6].

Moreover, in Botswana the average share of Government revenues to GDP from 2005 to 2009 is 33.35%. The largest absolute difference between the revenues/GDP ratio of each of the four years (N-4 to N-1) (i.e. the extreme value in year 2008 equivalent to 30.61%) and the average is 2.74% (i.e. cell H15). The Average revenues/GDP less the extreme value is expressed in equation
(1.5) = 34.26 > 33.35%.

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In order to concentrate the FLEX intervention in the countries less well armed to face fluctuations in export earnings, and in particular countries with relatively weak central government revenue excluding grants, interventions are limited to the theoretically estimated budgetary impact and capped in the countries whose share of those revenues in GDP is above the ACP average. Article 9a of Annex II defines the amount of additional financial support as being "equal to the loss of export earnings multiplied by the arithmetic mean of the "government revenue/gross domestic product" ratio of the four years preceding the application year, excluding the most extreme value and capping that ratio at 25% (EC, 2008a)."

Thus, capping equation (1.5) at 25% in equation (1.6) enable the calculation of the amount of the potential financial support: (1.4)*(1.6) = which is equal to 2,496,666,143.28 Botswana Pulas (BWP). Given the official exchange rate in 2009: 1 EUR = 9.0447 BWP the value in EURO is equivalent to €247,405,636.07 (i.e. cell G20). The theoretically requested amount of FLEX support is converted into euro on the basis of Inforeuro exchange rates (fiscal year average of monthly rates) and rounded at the level of hundred thousand euros. This result is shown as 'Provisional theoretical financial support for FLEX application year 2009' in Table B3. The total of €1093.92 million would be the total theoretical amount for which all countries would be eligible under this exercise, should the EC have had enough money to compensate them entirely.Thus, the underlying calculation shown in Table B4 forms the basis of the results shown in Table B3. This is illustrated in the row which contains Botswana statistics. Equation (1.2) 'Total export loss: export value year N - (1.1)' (in national currency) (Table B4) appears as export loss (in million Euros) in Table B3.

Equation (1.3) 'Total export loss as a % of average total exports: (1.2)/(1.1)' appears as 'Export loss (%)'.

With regards to the Cook Islands: In column "Reason for non-eligibility" it's written "Export loss not higher" , but at the same time the export loss in percentage (19.73%) is higher than some of those who are considered eligible e.g. Barbados and Bahamas. The export loss of a country is determined by comparing the export value of year N (2009) with the average of the previous 4 years which excludes the extreme value. The reason for the non-eligibility of Cook Islands is the non-compliance with the eligibility criteria which says that the export loss should be higher than 0.5% of GDP. This explains that a relative wealthy country such as e.g. Barbados is considered eligible (notwithstanding the big export loss of 33%, but less than the Cook's islands in the case of Bahamas (15.94%).

Since, (1.3) = 29.11% is higher than 10% (in the case of Botswana, which has a landlocked country status) the loss is "sufficient" and Botswana is considered eligible.

Concerning the 'Current Scenario: Provision pro rata of FLEX envelope 2009 column in Table B3, since the available financial resources are usually lower than the total theoretical amount for which all countries would be eligible, the repartition is done on a pro-rata basis: Country A is eligible for X

[6] Nominal prices have to be transposed into real prices. The preferred option for calculations is to use the GDP deflator. Either option has to be used consistently over the reference years.

Millions of Euros, which represents Y% of the total theoretical amount. The Y% is applied to the available envelope and it will be granted to country A.

Concerning 'V-FLEX 2010' column this information has been added to the table to show the interested parties that there is a minimum overlapping between the 2 instruments.

Concerning the reason why only €100 million was disbursed out of the €1,093 million in 2009, at the beginning of the 10th EDF it has been decided that a certain amount will be kept in the reserves account in order to respond to unforeseen needs (B-envelope). However €600M out of this reserve has been earmarked to FLEX for the entire period, this gives approximately €100M per year. Moreover, this is one of the paradoxes for application year 2009 that the EC has such a limited envelope in comparison with the total theoretical amount of €1,093 million. The previous year the total theoretical amount was only €80M. The the FLEX envelope is divided amongst the ACP according to a repartition key calculation (see the explanation provided under Current Scenario: Provision pro rata of FLEX envelope 2009).

Finally, the reason why the amounts were so small in 2009 is e.g. due to the fact that 4 countries (i.e. Botswana; Dominican Republic; Jamaica; and Papua New Guinea) are responsible for 80% of the available amount (equivalent to €880.31 Million) and the 17 other FLEX eligible countries responsible for the remaining €213.62 M, which as a result give the small amounts.[7]

B1.3 Level and length of support

In the initial 2000 FLEX mechanism ACPs that met the qualifying criteria had access to FLEX support for a maximum four successive years (Annex II, art. 9(2) of the Cotonou Agreement) (Aiello, 2009).

According to the 2008 Revised FLEX article 9(2) of Annex II to the Cotonou Agreement defines that *"Entitlement to additional support shall be limited to three successive years."* This is in line with the principle that the support is limited to short-term fluctuations and not to structural trends towards a fall in export earnings.

If the request for support is based on provisional export statistics, the following provision (Article 10 of Annex II to the Cotonou Agreement) applies:

"The system for allocating additional resources shall provide for advances to cover any delays in obtaining consolidated trade statistics and to ensure that the resources in question can be included in the budget of the second year following the application year at the latest. Advances shall be reserved for States where FLEX financial support can be implemented by means of general budgetary support. They shall be mobilised on the basis of provisional export statistics drawn up by the government and submitted to the Commission. The maximum advance shall be 100% of the amount of additional financial support for the application year. The amounts thus mobilised shall be adjusted in the light of the final consolidated export statistics..."

This provision is only relevant to countries that are eligible to budgetary support. After presentation of final consolidated trade statistics, the definitive amount of support is determined and any differences in financial support is settled with the ACP State (EC, 2008a).

B1.4 Degree of concessionality

In countries not eligible to budget support, financing for short-term fluctuations in export earnings

[7] Partly based on a correspondence with Alina Parau, European Commission – DG Development Unit C1: Aid Programming and Management.

shall be used for contributions to projects/programmes in focal or non-focal sectors as defined in the Country Strategy Paper (CSP) and National Indicative Programme (NIP), or for mitigating measures or for the promotion of market based insurance mechanism schemes.

Countries not eligible for budget support can commit their funds only after final statistics for all countries are available and final amounts of FLEX support on this basis are established. These final amounts will be confirmed by *a corrective Order for Service* in the 1st quarter of year N+2.

B1.5 Delivery

According to the Initial 2000 FLEX as for the use of financial support, the ACP-EU agreement established that the additional funds should be reflected in the ACP country's public account. The general rule was that the use of resources ought to be made in accordance with the programming rules and methods, as jointly established by the EU and the beneficiary ACP, and had to address finance activities included in the national budget (Article 9.2 of the Annex IV of the Cotonou Agreement). However, beneficiaries could devote FLEX funds to other uses, although the agreement was vague in specifying what the alternative uses of the financial support were ("a part of additional resources may be set aside for specific sectors", Annex II, art. 9(3) of the Cotonou Agreement) (Aiello, 2009).

According to the 2008 Revision based on the provisional export statistics for year N, a global decision will be taken in year N+1 for replenishment of B-envelopes in order to provide FLEX support for application year N (i.e. based on export statistics for year N). On this basis, DG DEV will prepare an Order for Service in September/October of year N+1. On the basis of this Order for Service it will be possible to commit the funds where they will be used as budget support. In countries which intend to use the FLEX funds under the form of projects/programmes funds will only be committed after the receipt of the corrective Order for Service in the 1st quarter of year N+2 based on the final export statistics (EC, 2008a).

Table B1. Export earnings instability of ACP states and FLEX support. Eligibility criteria and financial support to individual countries, 2000-2004

Countries	Application Year: 2000			Application Year: 2001			Application Year: 2002			Application Year: 2003			Application Year: 2004			2000-2004		
	Shortfall in Export Earnings		Actual FLEX support	Shortfall in Export Earnings		Actual FLEX support	Shortfall in Export Earnings		Actual FLEX support	Shortfall in Export Earnings		Actual FLEX support	Shortfall in Export Earnings		Actual FLEX support	Number of years		
	Absolute value	In % (I Criterion)		Absolute value	In % (I Criterion)		Absolute value	In % (I Criterion)		Absolute value	In % (I Criterion)		Absolute value	In % (I Criterion)		Suffered Export Shocks	Suffered from Impact on public deficit	Receiving FLEX Support
Botswana										165.50	5.90	8.06				1	1	1
Burundi	5.59	10.13		19.37	31.02	3.18	24.51	47.48		14.53	30.20	2.68				4	4	2
Central Afr. Rep.							3.10	5.20		49.20	31.30	4.40	52.87	0.33		3	3	1
Chad – Tchad	12.47	5.91		38.28	17.06											2	2	0
Comoros													2.66	0.15	0.38	1	1	1
Côte d'Ivoire	42.90	2.10		66.40	3.20								38.62	0.02		3	0	0
Dom. Republic	51.58	15.98		32.33	10.85								62.00	0.08		3	3	0
Dominica	0.33	1.65		4.70	22.60		5.48	10.80		14.88	29.10	4.38				4	4	1
Ethiopia	10.67	2.85		104.54	26.85		27.18	7.47		9.24	15.30					4	4	0
Fiji													47.40	0.10	2.10	1	1	1
Gambia	4.81	25.76		2.72	18.44		2.37	18.12		10.34	75.40	1.80				4	4	1
Ghana				81.70	11.70								52.83	0.07		2	1	0
Guinea-Bissau										10.00	19.00	2.00	6.90	0.12	1.20	2	2	2
Guyana	205.97	30.71	SEE 2001	178.49	29.04	8.40				64.61	12.30		87.87	16.23		4	4	1
Jamaica										323.96	30.10	2.00				1	1	1
Malawi	15.00	3.30		25.40	5.70		25.86	6.93		48.95	10.80	8.76	115.15	0.24	1.24	5	5	2
Mali	35.50	12.70		94.20	32.70		58.20	21.40					85.60	0.17	1.11	4	4	1
Mauritania							13.36	9.41	3.63	79.21	21.10	17.97	85.60	0.23		3	3	2
Mauritius										90.40	6.00		233.80	0.15	0.44	2	2	1
Papua N Guinea										90.38	4.40	22.44				1	1	1
Samoa										3.42	21.50	0.94	4.58	0.28	1.14	2	2	2
Solomon Islands	56.70	44.77	SEE 2001	71.25	58.80	7.25	21.74	30.12		18.01	29.70					4	4	1
St Lucia				7.76	20.09		8.78	16.90		6.32	13.30	1.68	11.50	0.27	3.00	4	4	2
St.Vincent/Gren.										15.24	35.60	4.40				1	1	1
Tanzania							53.28	13.16		53.28	13.20					2	2	0
Uganda	309.76	46.61		192.26	33.95		63.60	13.20					47.58	0.10		4	5	0
Vanuatu	1.15	4.99		7.45	29.60	1.70	8.24	24.95		2.45	11.50					4	4	1
Zambia	58.01	6.61	11													1	1	1
Total	**822.95**		11	**1,042.03**		**20.53**	**954.31**		3.63	**1575.2**		**81.51**	**1,134.78**		**10.61**	5	5	5
Countries receiving support	18	18	1	20	20	4	17	17	1	24	24	13	17	17	8	103	100	32

Table B2. Export earnings instability of ACP states and FLEX support. Eligibility criteria and financial support to individual countries over 2004-2008

Countries	Application Year: 2004			Application Year: 2005			Application Year: 2006			Application Year: 2007			Application Year: 2008			2000-2004		
	Shortfall in Export Earnings		Actual FLEX support	Shortfall in Export Earnings		Actual FLEX support	Shortfall in Export Earnings		Actual FLEX support	Shortfall in Export Earnings		Actual FLEX support	Shortfall in Export Earnings		Actual FLEX support	Number of years		
	Absolute value	In % (I Criterion)		Absolute value	In % (I Criterion)		Absolute value	In % (I Criterion)		Absolute value	In % (I Criterion)		Absolute value	In % (I Criterion)		Suffered Export Shocks	Suffered from Impact on public deficit	Receiving FLEX Support
Belize	25.10	0.13		2.96	0.02								23.71	32.47		3	1	0
Benin (PMA)				32.16	0.16	1.43	101.94	50.60	3.82							2	2	2
Botswana													107.80	3.75	10.50	1	0	1
Burkina Faso													115.72	39.87	9.42	1	0	1
Burundi										4.26	14.16	0.85	2.69	6.28		2	0	1
Central Afr. Rep.	52.87	0.33		38.29	0.27	0.93										2	2	1
Comoros	2.66	0.15	0.38	12.32	0.56	0.51	12.52	61.30	0.46				5.72	56.24	0.30	4	3	4
Côte d'Ivoire	38.62	0.02		256.67	0.13	11.48	260.89	12.30	10.36	114.91	8.13	20.09	198.77	4.50		5	2	3
Cook Islands													0.72	25.05	0.07	1	0	1
Dom. Republic	62.00	0.08											242.50	4.74	15.33	2	1	1
Dominica				13.60	0.30	1.03	6.24	17.10	0.43				2.76	9.27	0.27	3	2	3
Fiji	47.40	0.10	2.10													1	1	1
Grenada				23.98	0.58	1.71	12.82	46.80	0.66				2.96	13.76	0.29	3	2	3
Ghana	52.83	0.07														1	0	0
Guinea-Bissau	6.90	0.12	1.20				1.35	2.90		10.15	21.46	1.73	21.76	37.78	1.45	4	2	3
Guyana	87.87	16.23		73.00	0.14	6.13	20.47	4.20								3	2	1
Jamaica													174.38	10.78	17.00	1	0	1
Madagascar	140.26	0.27		227.29	0.57	5.72	127.39	40.80	2.95				76.58	18.24		4	3	2
Malawi	115.15	0.24	1.24	16.36	0.04		60.09	14.30	2.82							3	3	2
Mali	85.60	0.17	1.11										82.50	26.31		2	1	1
Mauritania	85.60	0.23		11.88	0.08	0.86							0.01	4.98		3	2	1
Mauritius	233.80	0.15	0.44	391.10	0.25	19.51	270.80	18.50	12.06							3	3	3
Mozambique													201.96	14.20	11.67	1	0	1
Papua N Guinea																0	0	0
Samoa	4.58	0.28	1.14				4.54	34.00					4.64	39.92	0.44	3	2	2
Senegal													153.43	33.89	11.80	1	0	1
St Lucia	11.50	0.27	3.00	10.90	0.26	0.70										2	2	2
St. Kitts & Nevis							5.06	13.90	0.38	7.10	25.77	1.78				2	1	2
St.Vincent/Gren.							4.68	13.30	0.33				4.45	32.34	0.43	2	1	2
Sudan							61.00	45.30								1	1	0
Swaziland							238.38	17.60	15.21							1	1	1
Tonga							6.45	49.90	0.42				1.64	22.08	0.15	2	1	2

Countries	Application Year: 2004			Application Year: 2005			Application Year: 2006			Application Year: 2007			Application Year: 2008			2000-2004		
	Shortfall in Export Earnings		Actual FLEX support	Shortfall in Export Earnings		Actual FLEX support	Shortfall in Export Earnings		Actual FLEX support	Shortfall in Export Earnings		Actual FLEX support	Shortfall in Export Earnings		Actual FLEX support	Number of years		
	Absolute value	In % (I Criterion)		Absolute value	In % (I Criterion)		Absolute value	In % (I Criterion)		Absolute value	In % (I Criterion)		Absolute value	In % (I Criterion)		Suffered Export Shocks	Suffered from Impact on public deficit	Receiving FLEX Support
Uganda	47.58	0.10														1	1	0
Zimbabwe				432.71	0.53											1	1	0
Total	**1,134.78**		**10.61**	**1,543.22**		**50.01**	**1,194.62**		**49.90**	**136.42**		**24.45**	**1,431.73**		**79.12**	5	3	5
Countries receiving support	18	18	8	14	14	11	16	16	12	4	4	4	23	23	14	80	47	54

B2 Vulnerability FLEX mechanism (V-FLEX)

The existing FLEX mechanism aims at safeguarding socio-economic reforms and policies that could be affected negatively as a result of a drop in export earnings, and based on statistics from previous years. However, it could not adequately respond to the challenges posed by the crisis since it compensates only for export losses and did not provide for rapid counter-cyclical measures (EC, 2009c).

The ACP-EC Partnership Agreement provides that the financial allocation from which an ACP country may benefit includes an allocation to cover unforeseen needs (i.e. the 'B-envelope'). Commission Decision of 30.10.2007 concerning the indicative allocations for National Indicative Programmes under the Multi-annual Financial Framework for the period 2008 to 2013 of the ACP-EC Partnership Agreement allocates €601 million for the B-envelopes and creates a reserve of €1,199 million to cover further unforeseen needs and to increase national and regional indicative programmes. Based on an ad hoc review carried out by the Commission in accordance with Article 5(4) of the 10th EDF Implementing Regulation, the Community may, in order to take account of special needs, increase a country's allocation (EC, 2009c, 2009d; EC, 2010c).

The Commission in close coordination with international organizations (the International Financial Institutions, the United Nations, etc) carried out a review to assess the impact of the global crisis on the most vulnerable developing countries. The Commission concluded that the crisis had a significant impact especially on the most vulnerable ACP countries, adversely affecting progress towards achieving the Millennium Development Goals (MDGs). The Vulnerability FLEX is one of the EU responses to these challenges as part of the international effort targeting the most vulnerable.

The Commission proposed a series of short to mid-term measures, including the use of €200M from the 10th EDF to assist ACP countries in addressing the budgetary and social impact of soaring international food prices[8], the establishment of a 1 billion Euro Food Facility to help developing countries to cope with the food crisis[9], as well as longer-term measures designed to assist developing countries in addressing the impact of the global crisis, including advancing of commitments of the Community assistance to speed up aid delivery (EC, 2009c).[10]

B2.1 Country eligibility criteria for V-FLEX support

The Vulnerability FLEX instrument is conceived as a demand-driven mechanism. The eligibility of requests submitted by the national authorities of the ACP countries are being assessed on the basis of the following basic criteria:

[8] COM (2008)6493 concerning the adoption of special measures regarding the allocation f resources for unforeseen needs from the tenth EDF to assist ACP countries in addressing the macro-economic and social impact of soaring international food prices, 12/11/2008

[9] Regulation (EC) No. 1337/2008 of 16 December 2008 OJ L 354, 31.12.2008, p.62

[10] COM(2009)160 of 8.4.2009 on Supporting developing countries in coping with the crisis.

(a) High economic, social and political vulnerability to the crisis as measured by the following variables for fiscal years 2009 and 2010 (assessed by the partner country drawing on the most recent IMF country forecast):

- year-on-year deterioration, as a consequence of the global crisis, of government revenues, excluding government revenues stemming from the export of oil and gas, by at least 1 percentage point of GDP taking the pre-crisis fiscal year as base year; or
- deterioration, as a consequence of the global crisis, in the current fiscal year of foreign reserves below a value equivalent to two months of imports; or
- deterioration of the fiscal deficit, as a consequence of the global crisis, excluding grants, by at least 2 percentage points of GDP year-on-year, taking the pre-crisis fiscal year as base year, due to maintaining public priority expenditures and particularly in the social sectors, at the level prior to the crisis; and
- Residual fiscal financing gaps in 2009 and 2010 as forecasted by the IMF and/or regional development banks, and not covered by ongoing or pledged commitments of the donor community or foreign and domestic borrowing. Where fiscal financing gaps have been closed in 2009 or are expected to be closed in 2010 by reducing planned priority expenditures, notably in the social sectors, financing under the Vulnerability FLEX may compensate for this reduction; and

(b) As a general principle a reduction by at least 50% in the residual financing gap;

(c) The Commission may adjust the thresholds mentioned in paragraph (a) for ACP countries in situations of fragility, meaning for the purpose of this decision mainly those countries for which the application of crisis, emergency and post-emergency procedures has been decided in accordance with Articles 72 and 73 of the Cotonou Agreement at the time of examination by the Commission of their application for Vulnerability FLEX support or may be decided in the future. For these countries eligibility for the Vulnerability FLEX as a fragile state will be demonstrated on a case by case basis in the context of the subsequent allocation decision by the Commission.

(d) In addition to the three cumulative basic criteria laid out in points (a), (b) and (c), ACP countries must demonstrate in order to be eligible to the V-FLEX a sufficient absorptive capacity through an ongoing budget support programme or an existing established social safety net or equivalent mechanism by providing evidence that additional funds are allocated to priority programmes (Art.2 in EC, 2009c, 2009d, 2010c).

B2.2 Level and length of support

For the purpose of establishing an ad hoc Vulnerability FLEX mechanism to support the most affected ACP countries coping with the impact of the global financial crisis, the Commission decided to, to set aside an amount of €500 million from the reserve of the national and regional indicative programmes under the 10th EDF to respond to the impact of the global crisis in the most affected ACP countries during the period 2009 to 2010 and to support measures to mitigate the social consequences of the crisis (EC, 2009d; Art.1 in EC, 2009c).

On the basis of the requests submitted by the ACP countries, and pursuant to Article 5(6) of the 10th EDF Implementing Regulation, the Commission prepared an allocation decision for 2009 and for 2010. The allocated funds are mobilised under the form of special measures and adopted according to the procedures set out in Article 8 (1) of the 10th EDF

Implementing Regulation (Art.1.2-3 in EC, 2009c). The 2009 funds allocated under this Decision should have been committed by 30 April 2010. Funds that are not committed by that date are reallocated to the Vulnerability FLEX allocation for 2010. Amounts that are not committed before 31 December 2010 will be transferred back to the reserve of the national and regional indicative programmes under the 10th EDF (Art.1.4-5 in EC, 2009c; Art.1.2 in EC, 2009d).

Under the 2009 allocation of the Vulnerability FLEX and following the submission of 26 requests (of which 25 were presented by ACP countries and one was introduced by a regional body), 17 requests were originally considered *eligible* while 2 were subsequently withdrawn. 15 requests were finally considered *eligible* in compliance with the criteria established under the Vulnerability FLEX mechanism for a total amount of €236 million.
Under the 2010 allocation of the Vulnerability FLEX and following the submission of 36 requests by ACP countries, 19 requests should be considered *eligible* and in compliance with the criteria established under the Vulnerability FLEX mechanism for a total amount of €264 million (Art.1 in EC, 2010c; EC, 2009d)

The addenda to the Country Strategy Papers and National Indicative Programmes between the European Community and the ACP countries identified in Annex I in EC(2009d) as *eligible for budget support* and aimed at increasing the B-envelope allocation of the countries concerned for the amounts allocated.

In accordance with the Communication of 8 April 2009[11] budget support should be the preferred financial response modality under the Vulnerability FLEX. This is consistent with the need for quick, robust and coordinated action in those ACP countries fulfilling the three key budget support eligibility criteria, namely:

- A stability-oriented macroeconomic policy framework,
- credible and relevant progress in public financial management reform and
- a well-defined, poverty focused national or sectoral development strategy.

The use of budget support, where feasible, is also consistent with and supportive of *the aid effectiveness commitments* undertaken by the Community and its Member states before the international community. Budget support under the Vulnerability FLEX is the fastest and most efficient mechanism to help partner countries to maintain public spending in priority areas. In countries which fulfil the Vulnerability FLEX criteria but are not immediately eligible for budget support, support is delivered through projects or programmes (EC, 2009c).

B2.3 Delivery

Support under the Vulnerability FLEX will be delivered using:

(a) Either budget support, where feasible, as the most appropriate delivery modality to address the impact of the crisis, in terms of timeliness, effectiveness, efficiency, accountability and sustainability; or

(b) Alternative aid modalities can be used in ACP countries eligible for support under the Vulnerability FLEX when budget support is not feasible; where countries undertake dialogue on a stability-oriented macro-economic policy framework, effective and immediate social mitigation can best be assured, through already existing projects,

[11] COM (2009) 160.

programmes or trust funds and in close coordination with other donors (Art.2.3 in EC, 2009c).

The following implementation modalities are established:

- In countries fulfilling the eligibility criteria for budget support, the Vulnerability FLEX support shall be provided preferably in the form of an addition to existing budget support programmes in view of addressing the actual and/or forecasted budgetary consequences of the crisis.
- In countries which are not immediately eligible for budget support, but which fulfil the conditions laid down in Article 2 (1) and (2) in EC(2009c), the Vulnerability FLEX support is delivered through projects or programmes in support of measures to mitigate the social consequences of the crisis, including social safety nets, employment creating initiatives and actions aimed at maintaining social; service provision and maintain social cohesion in a post-conflict environment. Allocations granted under non-budget support arrangements should preferably take the form of an increase in the budgets of existing projects and programmes (Art.3 in EC, 2009c).

B3 EU Food Facility

Food Security has gained much attention on the international development agenda in recent years, mainly due to the food price hikes in late 2007 and the first half of 2008 created many challenges for developing countries, particularly for the net food importing countries (EC, 2010a). The recent food crisis, accompanied by a financial and energy crisis and environmental deterioration, risked putting additional hundreds of millions of people in extreme poverty, and in circumstances of hunger and malnutrition and therefore called for increased solidarity with those populations (EU, 2008). In December 2008, and as a response to these challenges, the European Parliament and the Council adopted a Regulation establishing a EUR1 billion facility for rapid response to soaring and volatile food prices in developing countries (Food Facility) (EC, 2009a; 2010a) as a complement to the European Union's existing development policy instruments by bridging the gap between emergency response and long-term development. In that sense, it complements the interventions of both the humanitarian instruments and of the longer-term development instruments such as the country-based development interventions and the Food Security Thematic Programme (EC, 2010a).

The primary objectives of the assistance and cooperation of the Food Facility are to:

(a) Encourage a positive response from the agricultural sector in target countries and regions;
(b) Support activities to respond rapidly and directly to mitigate the negative effects of volatile food prices on local populations in line with global food security objectives, including UN standards for nutritional requirements;
(c) Strengthen the productive capacities and the governance of the agricultural sector to enhance the sustainability of interventions (EC, 2009a; EC, 2010a).

B3.2 Country eligibility criteria for Food Facility support

The Food Facility Regulation proposes a differentiated approach depending on the development context and the impact of the volatile food prices in order for the target countries, regions and their populations to be provided with tailor-made and well adapted support based on their own needs, strategies, priorities and response capacities. On the basis of the indicative criteria set out in the Annex to the Food Facility Regulation, 50 priority countries have been identified to receive assistance from the Food Facility (see Annex L in EC, 2009a; EC, 2010a).

The measures benefit developing countries, as defined by the Organisation for Economic Cooperation and Development's Development Assistance Committee (OECD/DAC), and their populations. To optimise the utility and impact of this Regulation, resources are concentrated on a limited list of high-priority target countries, identified on the basis of the set of criteria laid down in the Annex:

Indicative criteria to select target countries and allocate financial resources:

- Poverty levels and real needs of populations
- Food price developments and potential social and economic impact
- Reliance on food imports
- Social vulnerability and political stability
- Macroeconomic effects of food price developments
- Capacity of country to respond and implement appropriate response measures
- Agricultural production capacity
- Resilience to external shocks, while taking special circumstances into account wherever appropriate. And in coordination with other donors and other development partners through *relevant needs-assessments* made available by specialised and international organisations such as those of the UN system, in consultation with partner countries (EU, 2008, 2010a).[12]

The entities eligible for funding are, insofar as their programmes contribute to the objectives of this Regulation: Partner countries and regions, and their institutions (Art.4.1 in EU, 2008).

In exceptional cases, and for actions targeting "fragile states" only, full financing of the total eligible costs may be applied where such full financing is deemed essential to carry out the action in question (EC, 2009a).

There are three sets of eligibility criteria, relating to:

- organisations which may request a grant (2.1.1), and their partners (2.1.2),
- actions for which a grant may be awarded (2.1.3),
- types of cost which may be taken into account in setting the amount of the grant (2.1.4).

(1) In order to be eligible for a grant, applicants must:

- be legal persons and
- belong to one of the following categories:
  i. Public and parastatal bodies below the central government level, local authorities and consortia or representative associations;
  ii. Private sector organisations;

[12] Populations of other developing countries not belonging to that region can benefit from the programme in question to ensure the coherence and effectiveness of Community assistance, where the programme to be implemented is of a regional or cross-border nature (Art.1.5, EU, 2008).

iii. Financial institutions that grant, promote and finance private investment in the partner countries and regions;
iv. Non-State actors (NSAs) (EC, 2009a).

Applicants may act individually or in partnership. Acting in partnership is encouraged. Applicants' partners participate in designing and implementing the action, and the costs they incur are eligible in the same way as those incurred by the grant beneficiary. They must therefore satisfy the same eligibility criteria as applicants (EC, 2009a).

Table B6. Countries eligible under the food facility regulation

Country	Region	Country	Region
Afghanistan	Asia	Lesotho	Africa
Bangladesh	Asia	Liberia	Africa
Benin	Africa	Madagascar	Africa
Bolivia	Latin-America	Malawi	Africa
Burkina Faso	Africa	Mali	Africa
Burundi	Africa	Mauritania	Africa
Burma/Myanmar	Asia	Mozambique	Africa
Cambodia	Asia	Nepal	Asia
Central African Rep.	Africa	Nicaragua	Latin-America
Comoros	Africa	Niger	Africa
Cuba	Caribbean	Palestinian Adm.Area	Middle-East
Democratic Rep. Of Congo	Africa	Pakistan	Asia
Eritrea	Africa	Philippines	Asia
Ethiopia	Africa	Rwanda	Africa
Gambia	Africa	Sao Tome e Principe	Africa
Ghana	Africa	Senegal	Africa
Guatemala	Latin-America	Sierra Leone	Africa
Guinea Bissau	Africa	Somalia	Africa
Guinea	Africa	Sri Lanka	Asia
Haiti	Caribbean	Tajikistan	Asia
Honduras	Latin-America	Tanzania	Africa
Jamaica	Caribbean	Togo	Africa
Kenya	Africa	Yemen	Middle-East
Kyrgyz Republic	Asia	Zambia	Africa
Laos	Asia	Zimbabwe	Africa

Source: EC, 2009a:30.

Annex M in EC (2009a:31) lists *additional eligibility criteria* and administrative conditions for proposals involving microcredit/microfinance initiatives.

B3.3 Trigger

35 countries were eligible to benefit from the European Commission 'Food Facility: Facility for rapid response to soaring food prices in developing countries' restricted Call for Proposals 2009. Financial allocations to countries were made on the basis of the following factors:

- Poverty levels and needs of the population;
- Food policy developments and potential social and economic impact related to reliance on food imports, social vulnerability, political stability and macroeconomic effects on food price developments;

- Capacity of the country to respond and to implement appropriate response measures: agricultural production capacity and resilience to external shocks (EC, 2009a).

B3.4 Level and length of support

The initiative is limited in time: The Regulation will expire on 31 December 2010, with activities ending by the end of December 2011. This very tight timeframe has made the planning, programming and implementation of the activities particularly challenging, both for the European Commission and for the implementing partners (EC, 2010a; Art.14 in EU, 2008).

Due to the limited duration of the Food Facility Regulation, the degree to which a proposed action is ready for immediate implementation was an important consideration in assessing proposed actions (EC, 2009a). A maximum of 2% of the Food Facility (i.e. a maximum of €20 million) can be used for support measures (EC, 2010a). Due to the limited duration of the Food Facility Regulation, the implementation of all the proposed actions should be finished by 31 October 2011

The indicative financial allocations to countries are based on the target country selection criteria and take into account the population size of the target country. Account will also be taken of other sources of financing available to the target country, at short term, from the donor community, to respond to the food price developments (Annex in EU, 2008).

According to Article 1.1 of the EC Regulation (EC) of 16 December 2008 "The Community shall finance measures aimed at supporting a rapid and direct response to the volatile food prices in developing countries, addressing primarily the period between emergency aid and medium- to long-term development cooperation." Coherence and continuity must be ensured between short-term measures aimed at providing relief to the populations most directly and seriously affected by the soaring and/or volatile food prices, and more structural measures intended to prevent the recurrence of the current food crisis. Hence, the Regulation should fit in with a long-term strategy to contribute to food security in developing countries, based on their own needs and plans (EU, 2008).

An appropriate balance is applied in the allocation of resources between the bodies listed in paragraph 1(d) of Article 4 and other eligible entities (Art.4.2 in EU, 2008). The total financial reference amount for the implementation of this Regulation over the period 2008-2010 is EUR 1 billion (Art.12 in EU, 2008).

For multi-country actions, the minimum grant amount for the activities in each targeted country should respect the above mentioned rules (e.g. a proposal submitted by a non-state actor and targeting 3 countries should request a minimum grant amount of EURO 3.000.000, since the minimum grant amounts apply on a per-country basis).

Table B7. Indicative amounts for each country, 2009

Country	Indicative Amount (€ million)
Afghanistan	10.2
Bangladesh	15
Benin	6.1
Burkina Faso	5
Burundi	3.4
Democratic Rep. Of Congo	4.6
Eritrea	4.4
Ethiopia	13

Country	Indicative Amount (€ million)
Ghana	5.9
Guatemala	4
Guinea Bissau	2.4
Guinea	13.5
Haiti	4
Kenya	7.2
Laos	5.8
Lesotho	2
Liberia	2.75
Madagascar	3
Malawi	2
Mali	3.05
Mauritania	7.6
Mozambique	4.5
Nepal	6
Nicaragua	4.15
Niger	3.2
Pakistan	10
Philippines	11.3
Sao Tome e Principe	2.1
Senegal	3.6
Sierra Leone	2.85
Tanzania	12.4
Togo	3
Yemen	3
Zambia	3
Grand Total	**200**

Source: EC, 2009a:5; EC, 2009b:2.

The Food Facility Regulation provided that the Commission should present to Council and Parliament an overall plan that includes the list of target countries benefitting from the Facility, as well as the balance between the entities eligible for implementation. This overall plan was submitted in March 2009 and included an overview of indicative allocations to beneficiary countries (Table B7), broken down according to the *three main categories of eligible entities* and modes of implementation:

- International Organisations through contribution agreements;
- non-governmental organisations, private sector and Member States' agencies through a Call for Proposals; and
- national governments through budget support.

In the Overall Plan, most of the indicative allocations (€920 million) were destined for the country level, while €60 million was set aside for regional-level interventions in Africa. The final €20million was retained for administrative support for the implementation of the Food Facility Regulation (temporary staff, studies, audits, monitoring & evaluation).

The specific character of the Food Facility required fast treatment of the proposed actions. A specific Task Force was instituted within the Commission to expedite project formulation, contracting and monitoring. Moreover, in preparing the Food Facility, the European Commission had already invited the UN agencies and World Bank, through the UN High Level Task Force, to propose actions that could easily be expanded. These proposals formed the first actions that were subject to detailed

formulation, organised in two 'batches' for discussion and approval by the Budgetary Authorities (EC, 2010a).

The action fiches for the first 'batch' of projects were presented to the Quality Support Group (QSG) meeting which took place on 15 January 2009 and subsequently to the meeting of the Development Cooperation Instrument (DCI) Committee on 17 February 2009. A first Financing Decision was adopted on 30 March 2009 for a value of €313.9 million.

The second "set of measures" was presented to the QSG on 19 and 20 February 2009 and to the DCI Committee on 23 March 2009. This Financing Decision was adopted on 29 April 2009 for a value of €393.8 million. The second 'batch' included a 'Call for Proposals' for a value of €200 million. A third set of measures for a value of €121.95 million was presented to the Council and Parliament in early October 2009. The Financing Decision was adopted by the European Commission on 9 December 2009 (EC, 2010a).

The speed of the approval process owes much to the flexibility shown by the European Parliament which accepted shortened periods for exercising its right of scrutiny of the proposed measures. In general, the formulation of projects and programmes financed under the Food Facility, took into account the specific nature of the Regulation which required speed of implementation, a short-time span, coordination and a focus on one or more of the three types of eligible activities under the Facility. The formulation process differed according to the chosen method of implementation (EC, 2010a).

Indicatively €200 million was earmarked for the Call for Proposals. Relevance of the actions to the objectives of the Food Facility, as well as country needs, was given a high priority when assessing the proposals while their potential effectiveness, sustainability and feasibility within the allotted timeframe (in average 22 months) were the criteria for assessment. The contracting of the 131 selected proposals took place at the end of 2009, together with advance payments (EC, 2010a).

As of 31 December 2009 a total amount of nearly €510 million had been contracted with International Organisations. The total contract value amount of the Food Facility at the end of 2009 was well over €700 million (Table B8)[13]. Payments at that date were €456 million, most payments having been made in relation to projects with International Organisations (€325.2 million), followed by projects originating from the Call for Proposals (€115 million) (EC, 2010a).

Table B8. Programming of the Food Facility

Operational response measures	Total Amount (€ million)	Commitments 2009	Commitments 2010
Country-level measures	906.7	746.7	160
Regional-level measures	60	60	-
Reserve	13.3[14]	13.3	0
Total	**980**	**820**	**160**

Source: EC, 2009b:2.

B3.5 Delivery (financial follow-up)

Most projects implemented by International Organisations and approved under batches 1 and 2 are still in the early stages of implementation. Information on the status of projects implemented by

[13] Contracts at least signed by EC.

[14] Of which 12.65 for the call for proposals

International Organisations is provided in section IV in EC (2010b). Other projects and programmes have been approved more recently (from the Call for Proposals and under batch 3) and hence have not yet led to effective implementation. Some of the projects which have been under implementation in partnership with International Organisations since spring 2009 are starting to show results and concrete outputs:

- Seeds, fertilizers and agricultural tools have been distributed;
- safety net mechanisms are in operation,
- vulnerability assessments undertaken,
- national capacity building training delivered and
- coordinating mechanisms strengthened.

A number of projects are being implemented in conflict-torn countries where security is still a major issue, which may affect the progress of several projects (Somalia, Sri Lanka, and Pakistan). Challenges also exist in countries that have been hit by natural disasters (Philippines, Bangladesh, Horn of Africa, Guatemala, and Haiti).

To the extent possible, projects are being integrated and aligned with existing donor coordination mechanisms at country level. Preparation of projects has benefitted from these mechanisms to realize synergy potentials with other partners. The Food Facility interventions have also strongly contributed to strengthening coordination among UN agencies and other national stakeholders. The European Commission makes regular use of the Results-Oriented Monitoring (ROM) system to provide external, independent and objective feedback on the performance of cooperation projects. In November 2009, teams were already monitoring projects with various international organisations e.g. in Liberia (EC, 2010a).

Table B9. FLEX decision tree

Player	N (Application Year)	N+1		N+2
ACP Government (FLEX eligible country)	Submission of **request for FLEX support** from the B-envelope	Request, including transmission of **Export statistics** for the application year N should be presented at the latest by 15 June (in Excel format).(i)	To submit the draft Commission decision to the EDF Committee in September and be able to commit funds in the budget support eligible countries before the end of the same year	
		If final export statistics are not available at that stage, can formulate a request on the basis of **provisional export statistics**		
			Final trade statistics must be presented by 31 December	to be able to commit funds in all FLEX eligible countries in the course of year N+2 at the latest
DG DEV/C/1 (Aid programming unit of DG DEV in charge of FLEX programme).	Assessment of eligibility	Prepare an Order for Service in September/October		
		If eligibility is confirmed: 1) inform the Delegations of the proposed allocations; 2) prepare the FLEX B-envelope replenishment decision (including the proposed CSP addendum) and send *an Order for Service* to AIDCO indicating the potential amounts and expected use of funds		In countries (not eligible for budget support) which intend to use the FLEX funds under the form of projects/programmes funds will only be committed after the receipt of the corrective Order for Service in the 1st quarter based on the final export statistics
Delegation/AIDCO		Preparation by Delegation/AIDCO of a financing proposal and financing decision using normal procedures integrated in the first next annual action plan or under the form of a special measure		

Notes: (i) The statistics have to be accompanied by a cover note signed by HoD highlighting the possible anomalies in the consistency of data and confirming the exogenous nature of shocks resulting in the drop in export revenues, as well as indicating the expected use of funds (budget support or project/programme support).
Source: Authors based on EC, 2008

Table B10. Allocation decision V-FLEX 2009

Country		Eligibility[15]	V-FLEX 2009 allocation	Vulnerability rating*
1	**Bénin**	1. **Vulnerability to the crisis** (2009 proj vs 2008): • Change in revenues (excl grants): 0.0% • Change in the fiscal balance (excl grants): -2.4percentage points of GDP • Gross international reserves: 7.2 months / imports 2. **Financing gap**: €67M before IMF/WB/AfDB top up and €25M after. 3. **FLEX 2009**: NO 4. **V-FLEX 2009**: €25M 5. **Impact on the financing gap:** 100%	€25 M	**IMF**: M **COM:** H/M
2	**Burundi**	1. **Vulnerability to the crisis** (2009 proj vs 2008): • Change in revenues (excl grants): -0.6% • Change in the fiscal balance (excl grants): -2.6 percentage points of GDP • Gross international reserves: 5.5 months / imports 2. **Financing gap**: €18-25M 3. **FLEX 2009**: €0.73M 4. **V-FLEX 2009**: €13.6M 5. **Impact on the financing gap:** 57-80%	€13.6 M	**IMF:** H **COM:** M **FRAGILE COUNTRY**
3	**Central African Republic**	1. **Vulnerability to the crisis** (2009 proj vs 2008): • Change in revenues (excl grants): +0.1% • Change in the fiscal balance (excl grants): -1.3 percentage points of GDP • Gross international reserves: 2.6 months / imports **--> FRAGILITY WAIVER** 2. **Financing gap**: No formal gap, but cut in expenditure and delayed domestic arrears repayment 3. **FLEX 2009**: NO 4. **V-FLEX 2009**: €7.6 M 5. **Impact on the financing gap:** 100%	€7.6 M	**IMF:** H **COM:** H **FRAGILE COUNTRY**

[15] Eligibility assessments utilised data available up to 24.07.2009.

Country		Eligibility[15]	V-FLEX 2009 allocation	Vulnerability rating*
4	**Comoros**	1. **Vulnerability to the crisis** (2009 proj vs 2008): • Change in revenues (excl grants): +0.7% • Change in the fiscal balance (excl grants): +4 percentage points of GDP • Gross international reserves: 5.8 months / imports **--> FRAGILITY WAIVER** 2. **Financing gap:** €5 M. 3. **FLEX 2009:** €0.3 M 4. **V-FLEX 2009:** €4.7 M 5. **Impact on the financing gap:** 100%	€4,7 M	**IMF :** M **COM:** M/H **FRAGILE COUNTRY**
5	**Ghana**	1. **Vulnerability to the crisis** (2009 proj vs 2008): • Change in revenues (excl grants): +1.1% • Change in the fiscal balance (excl grants): +3.8 percentage points of GDP • Gross international reserves: 1.9 months / imports 2. **Financing gap:** $50 M after IMF and WB exceptional loans 3. **FLEX 2009**: NO 4. **V-FLEX 2009:** €35 M 5. **Impact on the financing gap:** 100%	€35 M	**IMF:** H **COM:** H
6	**Grenada**	1. **Vulnerability to the crisis** (2009 proj vs 2008): • Change in revenues (excl grants): -3.2 % • Change in the fiscal balance (excl grants): +0.7 percentage points of GDP • Gross international reserves: 4.3 months / imports (aggregated for the whole ECCU) 2. **Financing gap**: €6.5 M 3. **FLEX 2009**: €0.29 M 4. **V-FLEX 2009**: €5 M 5. **Impact on the financing gap:** 80%	€5 M	**IMF:** M **COM:** M

Country		Eligibility[15]	V-FLEX 2009 allocation	Vulnerability rating*
7	**Guinee Bissau**	1. **Vulnerability to the crisis** (2009 proj vs 2008): • Change in revenues (excl grants): -2.7% • Change in the fiscal balance (excl grants): -20.7 percentage points of GDP • Gross international reserves: n.a. 2. **Financing gap**: €4.7 M + cfa10 bi = 2008 domestic arrears (salaries). Major cuts done in budget 2009. 3. **FLEX 2009:** €1.45 M 4. **V-FLEX 2009**: €8 M 5. **Impact on the financing gap:** 53% of total arrears (100% salary arrears for 2008)	€8 M	**IMF:** L **COM:** M **FRAGILE COUNTRY**
8	**Haiti**	1. **Vulnerability to the crisis** (2009/10 proj vs 2007/08): • Change in revenues (excl grants): +0.8% • Change in the fiscal balance (excl grants): -3.2 percentage points of GDP • Gross international reserves: 3.1 months / imports 2. **Financing gap:** Gap 2009/10 is estimated at $50 M. But could be $70 M 3. **FLEX 2009**: NO 4. **V-FLEX 2009**: €30 M 5. **Impact on the financing gap:** 70-90%	€30 M	**IMF**: H **COM:** M **FRAGILE COUNTRY**
9	**Jamaica**	1. **Vulnerability to the crisis** (2009/10 proj vs 2007/08): • Change in revenues (excl grants): -0.1% • Change in the fiscal balance (excl grants): -4.3 percentage points of GDP • Gross international reserves: 12 weeks / imports 2. **Financing gap**: no financing gap but drop in social expenditures in real terms by €25.8 M 3. **FLEX 2009**: €17 M 4. **V-FLEX 2009**: €9 M 5. **Impact on the financing gap:** 100%	€9 M	**IMF:** Not scored **COM:** H

Country		Eligibility[15]	V-FLEX 2009 allocation	Vulnerability rating*
10	**Malawi**	1. **Vulnerability to the crisis** (2008/09 FY proj vs 2007/08): • Change in revenues (excl grants): -0.6% • Change in the fiscal balance (excl grants): -7.7 percentage points of GDP • Gross international reserves: 1 month / imports 2. **Financing gap**: €49.6 M 3. **FLEX 2009**: NO 4. **V-FLEX 2009:** €25 M 5. **Impact on the financing gap:** 50%	€25 M	**IMF:** M **COM:** H/M
11	**Mauritius**	1. **Vulnerability to the crisis** (2009 proj vs 2008): • Change in revenues (excl grants): -1.1% • Change in the fiscal balance (excl grants): -3 percentage points of GDP • Gross international reserves: "comfortable level" according to IMF 2. **Financing gap**: €25.8 M after the pledges by development partners and domestic financing projections 3. **FLEX 2009**: NO 4. **V-FLEX 2009**: €10.9 M 5. **Impact on the financing gap:** 50%	€10.9 M	**IMF:** Not scored **COM:** M
12	**Namibia**	1. **Vulnerability to the crisis** (2008/09 proj vs 2007/08): • Change in revenues (excl grants): -0.1 % • Change in the fiscal balance (excl grants): -6.2 percentage points of GDP • Gross international reserves: 19 weeks / imports 2. **Financing gap:** €27.3 M 3. **FLEX 2009**: NO 4. **V-FLEX 2009**: €15 M 5. **Impact on the financing gap:** 55%	€15 M	**IMF:** Not scored **COM:** H

Country		Eligibility[15]	V-FLEX 2009 allocation	Vulnerability rating*
13	**Seychelles**	1. **Vulnerability to the crisis** (2009 proj vs 2008)**:** • Change in revenues (excl grants): +2.3% • Change in the fiscal balance (excl grants): +6.5 percentage points of GDP • Gross international reserves: 1.3 months / imports 2. **Financing gap**: $12 M 3. **FLEX 2009**: NO 4. **V-FLEX 2009**: €9 M 5. **Impact on the financing gap:** 100%	€9 M	**IMF:** Not scored **COM:** H
14	**Sierra Leone**	1. **Vulnerability to the crisis** (2009 proj vs 2008): • Change in revenues (excl grants): -0.4 % • Change in the fiscal balance (excl grants): -1.8 percentage points of GDP • Gross international reserves: 5 months / imports **--> FRAGILITY WAIVER** 2. **Financing gap**: $20 M (assuming no exceptional increase in domestic borrowing) 3. **FLEX 2009**: NO 4. **V-FLEX 2009:** €12 M 5. **Impact on the financing gap:** 75%	€12 M	**IMF**: M **COM:** H/M **FRAGILE COUNTRY**
15	**Zambia**	1. **Vulnerability to the crisis** (2009 FY proj vs 2008): • Change in revenues (excl grants): -2.9% • Change in the fiscal balance (excl grants): -3.4 percentage points of GDP • Gross international reserves: 3 months / imports 2. **Financing gap**: €59.8 M 3. **FLEX 2009**: NO 4. **V-FLEX 2009:** €30 M 5. **Impact on the financing gap:** 50%	€30 M	**IMF:** H **COM:** H

Country		Eligibility[15]	V-FLEX 2009 allocation	Vulnerability rating*
16	**Dominica**	1. **Vulnerability to the crisis** (2009/10 proj vs 2007/08): • Change in revenues (excl grants): -1.4% • Change in the fiscal balance (excl grants): -1.2 percentage points of GDP • Gross international reserves: 4.3 months / imports (aggregated for the whole ECCU) 2. **Financing gap**: EC$19 M (€5 M) 3. **FLEX 2009**: €0.27M 4. **V-FLEX 2009**: €5 M 5. **Impact on the financing gap:** 100%	€5 M	**IMF:** M **COM:** M
17	**Solomon Islands**	1. **Vulnerability to the crisis** (2009 proj vs 2008): • Change in revenues (excl grants): +0.1% • Change in the fiscal balance (excl grants): -3.7 percentage points of GDP • Gross international reserves: 2.3 months / imports 2. **Financing gap**: $26 M for 2009 3. **FLEX 2009**: NO 4. **V-FLEX 2009**: €15.2 M 5. **Impact on the financing gap:** 75%	€15.2 M	**IMF:** Not scored **COM:** H **FRAGILE COUNTRY**
	TOTAL V-FLEX 2009:		**M€ 260**	

(*) Vulnerability ratings: H=High; M=Medium; L=Low

(**) IMF scores refer only to the Low Income Countries (LIC) covered by the IMF study: "The implications of the global financial crisis for Low Income Countries", March 2009

(***) COM scores combine assessments made by Headquarters, on the basis of 8 macro-economic vulnerability criteria (March 2009), and by Delegations (April 2009)

Source: EC, 2009d:5-10.

An amount of €260 million is set aside from the reserve of the national and regional indicative programmes under the 10th EDF in the context of the 2009 allocation of the Vulnerability FLEX mechanism, in order to provide additional short-term financial support to eligible ACP countries. This amount is allocated as set out in **Annex3** (EC, 2009d).

Table B11. Allocation decision V-FLEX 2010

Country		Eligibility	V-FLEX 2010 Allocation €M
AFRICA			
1	**Benin**	1. Vulnerability to the crisis (2010 proj vs 2008): • Change in revenues (excl grants): +1.4% • Change in the fiscal balance (excl grants): -2.5% • Gross international reserves: 7.5 months / imports 2. Financing gap: €26M after IMF/WB/AfDB 3. Absorptive capacity: YES 4. V-FLEX 2009: YES (€25M) 5. V-FLEX 2010: €13 M 6. Impact on the financing gap: 50%	13
2	**Burundi**	1. Vulnerability to the crisis (2010 proj vs 2008): • Change in revenues (excl grants): -1% • Change in the fiscal balance (excl grants): -3.4% • Gross international reserves: 7 months / imports 2. Financing gap: €27.4 M 3. Absorptive capacity: YES 4. V-FLEX 2009: YES (€13.6M) 5. V-FLEX 2010: €15 M 6. Impact on the financing gap: 55%	15
3	**Burkina Faso**	1. Vulnerability to the crisis (2010 proj vs 2008): • Change in revenues (excl grants): +0.8% • Change in the fiscal balance (excl grants): -2.9% • Gross international reserves: 4.6 months / imports 2. Financing gap: €28 M 3. Absorptive capacity: YES 4. V-FLEX 2009: NO (not requested) 5. V-FLEX 2010: €14 M 6. Impact on the financing gap: 50%	14
4	**Cape Verde**	1. Vulnerability to the crisis (2010 proj vs 2008): • Change in revenues (excl grants): -3% • Change in the fiscal balance (excl grants): -9,8% • Gross international reserves: 3,9 months/imports 2. Financing gap: €18M 3. Absorptive capacity: YES 4. V- FLEX 2009: NO (not requested) 5. V-FLEX 2010: €9M 6. Impact on the financing gap: 50%	9
5	**Central African Republic**	1. Vulnerability to the crisis (2010 proj vs 2008): • Change in revenues (excl grants): +0.3% • Change in the fiscal balance (excl grants):-1 % • Gross international reserves: 4.2 months / imports **>> FRAGILITY** 2. Financing gap: €25.46 M 3. Absorptive capacity: YES 4. V-FLEX 2009: YES (€7.6M) 5. V-FLEX 2010: €13 M 6. Impact on the financing gap: 51%	13

Country		Eligibility	V-FLEX 2010 Allocation €M
6	**Guinea Bissau**	1. Vulnerability to the crisis (2010 proj vs 2008): • Change in revenues (excl grants): +1.2% • Change in the fiscal balance (excl grants): -1.7% • Gross international reserves: 6.4 months/imports (2009) **>> FRAGILITY** 2. Financing gap: €15 M after IMF ECF. 3. Absorptive capacity: YES 4. V-FLEX 2009: YES (€8 M) 5. V-FLEX 2010: €8.5M 6. Impact on the financing gap: 57%	8.5
7	**Lesotho**	1. Vulnerability to the crisis (2009/10 proj vs 2007/08): • Drop in revenues excl grants: -11.3% • Deterioration of the fiscal deficit excl grants: -20.5 % • Gross international reserves: 6.8 months/imports 2. Financing gap: €42 M 3. Absorptive capacity: YES 4. V-FLEX 2009: NO (not requested) 5. V-FLEX 2010: €21 M 6. Impact on the financing gap: 50%	21
8	**Liberia**	1. Vulnerability to the crisis (2010/11 proj vs 2007/08): • Change in revenues excl grants: +9.4% • Change in the fiscal balance (excl grants): -4.3% • Gross international reserves: 1.9 months / imports 2. Financing gap: €25 M. 3. Absorptive capacity: YES 4. V-FLEX 2009: NO (not requested) 5. V-FLEX 2010: €12.5 M 6. Impact on the financing gap: 50%	12.5
9	**Malawi**	1. Vulnerability to the crisis (2010/11 FY proj vs 2007/08): • Drop in revenues excl grants: +5.9% • Deterioration of the fiscal deficit excl grants: -0.9% • Gross international reserves: 1.8 month / imports 2. Financing gap: €38 M 3. Absorptive capacity: YES 4. V-FLEX 2009: YES (€25 M) 5. V-FLEX 2010 : €19 M 6. Impact on the financing gap : 50%	19
10	**Democratic Republic of Congo**	1. Vulnerability to the crisis (2010 proj vs 2008): • Change in revenues (excl grants):-0.6 % • Change in the fiscal balance (excl grants): -13.8% • Gross international reserves: 2.5 months / imports 2. Financing gap: €100M before IMF cuts 3. Absorptive capacity: YES 4.V- FLEX 2009: NO (no request because there was a planned B-envelope/Food Facility intervention) 5. V-FLEX 2010: €50M 6. Impact on the financing gap: 50%	50

Country		Eligibility	V-FLEX 2010 Allocation €M
11	**Sierra Leone**	1. Vulnerability to the crisis (2010 proj vs 2008): • Change in revenues (excl grants): +0.9% • Change in the fiscal balance (excl grants): -1.5% • Gross international reserves: 4.3 months / imports **>> FRAGILITY** 2. Financing gap: €19 M 3. Absorptive capacity: YES 4. V-FLEX 2009: YES (€12M) 5. V-FLEX 2010: €10M 6. Impact on the financing gap: 52%	10
12	**Togo**	1. Vulnerability to the crisis (2010 proj vs 2008): • Change in revenues (excl grants): +1.8% • Change in the fiscal balance (excl grants): -3.1% • Gross international reserves: 4.5 months / imports 2. Financing gap: €23 M after WB CRW. 3. Absorptive capacity: YES 4. V-FLEX 2009: NO (not granted) 5. V-FLEX 2010: €12M 6. Impact on the financing gap: 52%	12
13	**Zimbabwe**	1. Vulnerability to the crisis (2010 proj vs 2008): • Change in revenues (excl grants): less than 1%• Change in the fiscal balance (excl grants): NA • Gross international reserves: NA **>> FRAGILITY (pending on the final macro-economic data)** 2. Financing gap: €32 M 3. Absorptive capacity: YES 4. V-FLEX 2009: NO (not granted) 5. V-FLEX 2010: €16M 6. Impact on the financing gap: 50%	16
CARIBBEAN			
14	**Antigua & Barbuda**	1. Vulnerability to the crisis (2010 proj vs 2008): • Change in revenues (excl grants): +1% • Change in the fiscal balance (excl grants): 3.2% • Gross international reserves: 1,7 months / imports 2. Financing gap: € 17.4 M after IMF/CDB 3. Absorptive capacity: YES 4. V-FLEX 2009: NO (not requested) 5. V-FLEX 2010: €9M 6. Impact on the financing gap: 52%	9
15	**Grenada**	1. Vulnerability to the crisis (2010 proj vs 2008): • Change in revenue (excl grants): - 1.1 % • Change in the fiscal balance (excl grants): +2.2% • Gross international reserves: 5 months / imports 2. Financing gap: €7M in priority spending to be restored 3. Absorptive capacity: YES 4.V- FLEX 2009: YES (€5M) 5. V-FLEX 2010: €3.5M 6. Impact on the financing gap: 50%	3.5

Country		Eligibility	V-FLEX 2010 Allocation €M
16	**Haiti**	1. Vulnerability to the crisis excluding earthquake impact (2010/11 proj vs 2007/08): • Change in revenue (excl grants): + 1.4 % • Change in the fiscal balance (excl grants): -0.8% • Gross international reserves: 3 months / imports **>> FRAGILITY** 2. Financing gap: €46 M excl earthquake 3. Absorptive capacity: YES 4.V- FLEX 2009: YES (€30 M) 5. V-FLEX 2010: €26 M 6. Impact on the financing gap: 56% (excl earthquake)	26
PACIFIC			
17	**Samoa**	1. Vulnerability to the crisis (2010/11 proj vs 2007/2008): • Change in revenues (excl grants): -0.6% of GDP • Change in the fiscal balance (excl grants): -11% of GDP • Gross international reserves: 3.5 months/imports 2. Financing gap: €11 M 3. Absorptive capacity: YES 4. V-FLEX 2009: NO (not requested) 5. V-FLEX 2010: €5.5 M 6. Impact on the financing gap: 50%	5.5
18	**Tonga**	1. Vulnerability to the crisis (2010/11 proj vs 2007/8): • Change in revenues (excl grants): -6.1% of GDP • Change in the fiscal balance (excl grants): -14% of GDP • Gross international reserves: 4.3 months / imports 2. Financing gap: €11M 3. Absorptive capacity: YES 4. V-FLEX 2009: NO (not requested) 5. V-FLEX 2010: €5.5M 6. Impact on the financing gap: 50%	5.5
19	**Tuvalu**	1. Vulnerability to the crisis (2010 proj vs 2008): • Change in revenues (excl grants): -2.9% of GDP • Change in the fiscal balance (excl grants): +5.4% of GDP • Gross international reserves: 9.5 months/imports (2009) 2. Financing gap: €3 M 3. Absorptive capacity: YES 4. V-FLEX 2009: NO (not requested) 5. V-FLEX 2010: €1.5 M 6. Impact on the financing gap: 50%	1.5
	TOTAL V-FLEX 2010		**€264 M**

Source: EC, 2010c:5-10.

Appendix C. Description and lessons learned (EC, IMF and WB)

C1. Criteria and design of compensatory finance

Table C1: Types of shocks and desirable facilities responses

Country/Shock		Desirable International Shock Response		
		Official Liquidity, IMF	**Official Loans**	**Grants; EC, other donors**
All LICs	Temporary	Speedy, low conditionality, concessional, large scale in proportion to size of the shock	Speedy, low conditionality, large scale in proportion to size of the shock. Concessional.	Needed for LICs, ,especially high proportion of shock if LIC very poor, vulnerable and/or heavily indebted
	Permanent	Speedy, low conditionality, concessionality, proportional to size of the shock	Sustain development spending and support investment in impacted and new sectors when more permanent effect of shock becomes apparent. Concessional.	Needed for LICs; cover especially high proportion of shock if LIC very poor, vulnerable and/or heavily indebted
All MICs	Temporary	Speedy, low conditionality, large scale in proportion to the shock	Speedy, low conditionality, large scale in proportion to the shock; some concessionality for "special case MICs"	Needed only for "special case MICs", e.g., highly vulnerable and/or heavily indebted
	Permanent	Speedy, low conditionality, large scale in proportion to the shock	Sustain development spending and support investment in new sectors when more permanent effect of shock becomes apparent	Less needed; possible exception "special case"MICs"

Source: Authors

In order to assess the effectiveness of compensatory financing mechanisms to date it is necessary to set out the relevant criteria against which to assess them[16]. Building on Griffith-Jones and Ocampo, 2008, we consider that the key criteria are as follows:

1. **Scale**, including both amount and maturity. It is important to ensure the impact of the shock can be compensated sufficiently, to avoid unnecessary reductions in imports, and thus on growth and poverty reduction. Sufficient scale of finance in proportion to the needs generated by the shock is perhaps the MOST important criteria from a development and a developing country perspective. As regards maturity, this could be flexible, to take account of future shocks. In this respect the loans by Agence Francaise de Development that allow non payment of loans during particular years if export shortfalls have a certain pre established magnitude, and the related literature, provide a useful precedent and analysis

[16] Griffith-Jones and Ocampo 2008.

2. **Speed** is important to minimise the period when negative impact of shocks takes place. In the case of FLEX, this was identified as an important problem, for which remedies are being sought. Speed of access can be impaired by a number of factors. These include excessive policy conditionality – see below- and overly complex process for approvals. For example, the IMFs execution of financing was slowed by the requirement for complex documentation and policy commitments[17]. An additional factor, key in the EU case, is the use of data, that takes time to gather.(seeTAC, 2009)

3. **Low or no conditionality** has historically facilitated speed of compensatory financing through reducing the requirements before disbursement and broadening the scope of eligible countries. It can be argued that real speed requires automaticity. However the recent trend, even for provision of official liquidity for compensatory financing has required upper credit conditionality for most of the IMF lending, which is unfortunate and inappropriate. Conditionality seems less of a problem in the case of EU facilities.

4. A response for compensatory finance also should be **needs-based** and assessed in relation to a specific crisis and country. The scale and nature of crisis can vary significantly – for example from a rapid onset humanitarian crisis relating to a natural disaster to the slow onset impact of a balance of payments crisis. In addition to direct needs, there also are secondary effects such as impact on core development spending. In assessing needs it is also important to assess **capacity** to absorb financing and the pre-existing needs of a specific country. The level of income of a particular country, as well as its level of overall structural vulnerability to shocks (including elements such as debt overhang) can be good indicators of the latter.

5. Finally, and especially for low income countries and, in some cases, for small vulnerable economies, financing needs to be **concessional in the case of loans, or preferably grants**. Pre-existing needs and vulnerability are important criteria for determining the level of concessionality, especially as they relate to poverty alleviation, and are higher in poorer countries. A high level of concessionality also helps ensure such countries are not left post-crisis with unacceptable levels of debt. One of the great strengths of EU mechanisms, like FLEX, is that they provide grants. However, this often means that the scale of resources channelled to countries is a very small proportion of the external shock. The first best option is to increase the resources available for mechanisms like FLEX, so they can have a meaningful impact; the second option-that can also be complementary to the first- is to blend grants with loans; the latter would mean that part of FLEX could be given as very concessional loans, which would allow it to cover a far higher proportion of the shock.

C2. International Financial Institutions' responses to the financial crisis and shock facilities

C2.1 European Commission (based on Appendix B)

The European Commission put in place various shock absorbing schemes most recently the FLEX, V-FLEX and Food facility initiatives.

The original FLEX facility differentiates itself, compared to the World Bank and the IMF, by a focus on the impact of crisis on export earnings. To build on this approach, and as part of the European

[17] Source: Staff comment

Commission response to the financial crisis, the V-FLEX was created to allow a more flexible response to crisis.

In particular from the evaluation of FLEX, which was introduced in 2000, TAC concludes that the main lesson to be learned from the past working of the facility (specifically for the application years 2000-2006) is that FLEX failed significantly to achieve its objective mainly because of lack of finance to be allocated to ACPs and delays in financing. They point out that the recent increase of financial resources in the annual FLEX allocation for all ACP countries appears to be enough to cover the financial requirements of ACPs coping with exogenous shocks from exports side. However, this changed –given the seriousness of the global crisis. With regards to the second lesson from FLEX it is unquestionable that the time delay in providing financial support is due to the fact that the facility operates on the basis of an ex-post rather than a real time mechanism.

Finally, they conclude that the real effort from the EC to address these two lessons learnt would not bear the expected results in terms of faster disbursements as long as decisions will remain dependent on having the actual data and statistics on exports, since this will make the hoped-for so-called N+1 schedule extremely difficult to hold.

C2.1.1 The FLEX facility

Vulnerability to earning from export earnings is one of the key issues affected by crises such as natural disasters, weather conditions or export price volatility. This is particularly true for those countries whose exports are heavily concentrated in sectors, notably agriculture and minerals, and where price volatility in these exports can and has been high. As a response to this the FLEX facility was set up in 2000 by the EU as its main crisis response facility. The facility aimed to be both more comprehensive and simpler than its predecessors and was open to all ACP states, and from 2004, a broader group of LDCs.

An interesting feature of the FLEX is that it closely links these issues with the facility trigger, which is objectively defined through export driven measures. This contrasts with more subjective triggers for other IFIs shock facilities (Discussed in more detail below).

In the instance of FLEX, the trigger was a percentage drop in export earnings below a reference level and that this caused a worsening of the public deficit. The reference levels for these triggers are defined as the average export earnings in the prior 2- 4 years. For a subset of countries where the agriculture or mineral sector were key sectors, defined as 40% of more of export earnings, these could also act as an alternative trigger on a similar basis[18]. The FLEX was available for a maximum of four successive years. In the initial 2000 FLEX the trigger level for export earning reduction was 10% but this was later considered too extreme and it was reduced to 2% in 2004 and the worsening of the defciict reduced from 10% to x%.

A further interesting feature of FLEX is that funds made available can be used for multiple undefined purposes and so was much less restrictive than some of the crisis facilities at other IFS (Discussed in more detail below).

Full details of the FLEX triggers and eligibility and the evolution of the facility including its amendments in 2004 and 2008 are given in Appendix B.

[18] Further in 2008 the triggers were adjusted so that eligibility included if either the overall export criteria above where met or if the agricultural and mineral export earnings rather than “and”. Details of these triggers are given in the appendix.

C2.1.2 The Vulnerability-FLEX Facility ("V-FLEX")

The FLEX facility operated well since 2000 but the global financial crisis created huge challenges including in assisting the most vulnerable countries who were heavily impacted. In late 2007 in response to these challenges the Vulnerability FLEX was created which sought to offer greater speed and flexibility to cover "unforeseen needs".

V-FLEX eligibility is defined as countries with "high social, economic and political vulnerability to the crisis". In objective criteria this is measured in V-FLEX by a selection of key measures including crisis-driven deterioration in government revenues, foreign reserves and fiscal deficit. Fiscal financing gaps were also moved away from historic measure to forecast measures (Based on the IMF forecasts) and on planned cuts in expenditures, especially social expenditures, which can be compensated by the facility. Eligibility was also revised to allow subjective case-by-case eligibility for fragile states. Absorptive capacity remains a requirement.

V-FLEX also retains similar with the original FLEX in that the main delivery mechanism is general budget support. Social mitigation through existing programmes and in coordination with other donors is also allowed where direct budget support is not considered feasible. The programme also aims to make expansion of existing programs and project which thus allows for rapid implementation.

As at 2010 V-FLEX had committed €524m in funds. Details of countries receiving these funds in 2009 and 2010 are detailed in Appendix E.

Table C2. V-FLEX allocations, 2009 (see Appendix B for further details)

Country	**2009 (€ mn)**	**2010 (€ mn)**
AFRICA		
Bénin	25.0	13.0
Burundi	13.6	15.0
Burkino Faso		14.0
Cape Verde		9.0
Central African Republic	7.6	13.0
Comoros	4.7	
Congo DR		50.0
Ghana	35.0	
Grenada	5.0	
Guinee Bissau	8.0	8.5
Haiti	30.0	
Jamaica	9.0	
Lesotho		21.0
Liberia		12.5
Malawi	25.0	19.0
Mauritius	10.9	
Namibia	15.0	
Seychelles	9.0	
Sierra Leone	12.0	10.0
Togo		12.0
Zambia	30.0	
Zimbabwe		16.0
CARIBBEAN		
Antigua		9.0
Dominica	5.0	

Country	2009 (€ mn)	2010 (€ mn)
Grenada		3.5
Haiti		26.0
PACIFIC		
Samoa		5.5
Solomon Islands	15.2	
Tonga		5.5
Tuvalu		1.5
TOTAL:	**260.0**	**264.0**

Source: EC

C.2.1.3 The Food Facility

Similar to other IFIs, the EC raised concerns about the impact of food price inflation in late 2007 and 2008. In December 2008 as part of the response to this concern, the European Parliament created the "Food facility", initially allocating E1 billion for this purpose. The goal was to bridge the gap between long term, more structural development financing and emergency and humanitarian responses.

The Food Facility is designed to support a number of areas relating to improvement in the agricultural sector and in its governance and to improve food security. Specific measures and examples of program initiatives are given in Table C3 below.

Table C3. Summary of GFSP components

Component	Examples of programs
Access to agricultural inputs & services	Access to improved seeds and fertilisers
Agricultural productivity	Reducing transfer & transaction cost Mobilising rural finance
Food needs of the "most vulnerable"	Managing price & weather risk Strengthening food related social protection Improving nutrition of vulnerable groups
Microeconomic measures	Microcredit & investment Equipment, infrastructure and storage Training & technical support

Source: European Commission

The food facility was also directed towards specific countries with 50 being selected for priority (see Appendix B) and are then subject to a review of eligibility based upon poverty levels and need, vulnerability and high level policy and political environment and the anticipated absorption capacity.

As of 31 December 2009 a total amount of nearly €510 million had been contracted with International Organisations (see table below). The total contract value amount of the Food Facility at the end of 2009 was well over €700 million . Payments at that date were €456 million, most payments having been made in relation to projects with International Organisations (€325.2 million), followed by projects originating from the Call for Proposals (€115 million) (EC, 2010a).

Table C4. Programming of the Food Facility

Operational response measures	Total amount (€ million)	Commitments 2009	Commitments 2010
Country-level measures	906.7	746.7	160
Regional-level measures	60	60	-
Reserve	13.3[19]	13.3	0
Total	**980**	**820**	**160**

Source: EC, 2009b:2.
Notes: More details of the programming per country are provided in Appendix B.

The food facility is also limited to an end date of December 2010 with program,es running through to 2011. It is not yet known if there will be any extension of this maturity.

C2.2 MDBs: The World Bank and the Regional Development Banks

C2.2.1 Response during the Global Financial Crisis

As illustrated in the tables below, the MDBs rapidly increased lending commitments in response to the financial crisis. The World Bank responded strongly to the crisis by almost doubling lending commitments, from US$25 billion in fiscal year 2008 (Ending in June) to US$45 billion in 2009. Some Regional Development Banks responses were also very impressive, with the AfDB increasing loan commitments by 137% in the same period

Table C5. MDBs commitments 2007 to 2010 for all countries

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Source: Annual Reports and Internal Data

However three issues were important in constraining the response of the MDBs, as well as its timeliness. Firstly, the response was partly constrained by the limitation of their capital (te Velde and Massa, 2009). In April 2009, the G-20 agreed to support, if necessary, the recapitalization of MDBs to enable increased lending. The Asian Development Bank agreed, in April 2009, to a capital stock increase of 200% to $165 billion from $55 billion and the capital of the AfDB was increased by 200% in the 2009 spring meetings. Similarly, the World Bank and The IADB had their capital increased.

Secondly, there was an insufficient response to the needs of low-income countries. At the World Bank, we can contrast IBRD lending commitments to middle-income countries which substantially increased from 2008 to 2009, by US$19.4 billion or 144%, versus IDA lending commitments to low-income countries which was only increased by US$2.8 billion or 25% (Table C1). The proposal, presented at the end of 2009, to create an US$ 1.3 billion IDA Crisis Response Window, to disburse IDA funds for protecting core spending on health, education, safety nets, infrastructure was thus very welcome (and is discussed in more detail below).

Table C6. MDBs commitments 2007 to 2009 for LICs only

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Source: Annual Reports and Internal Data

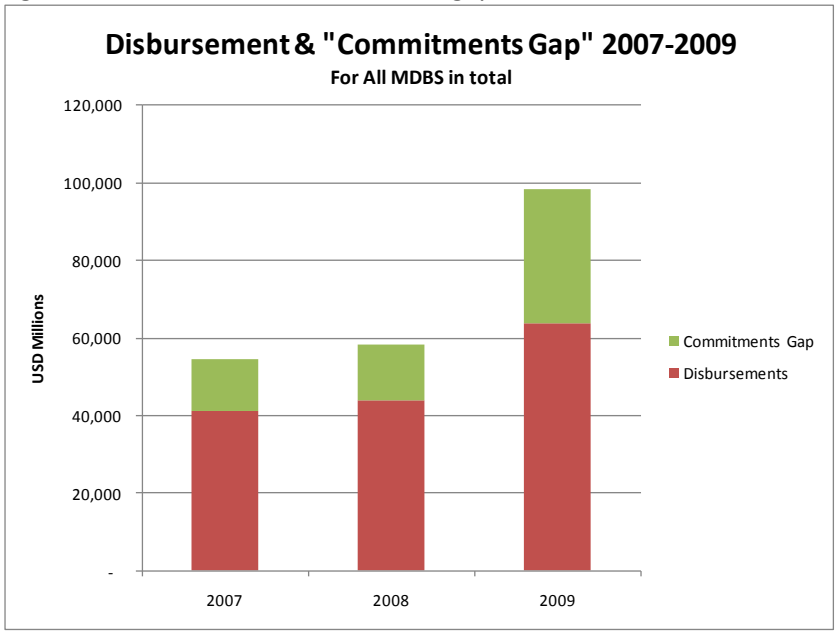
Another set of policy proposals relate to the MDBs introducing lending instruments that make developing countries less vulnerable during crises, either because they reduce currency mismatches by lending in local currency or because they adjust maturity of repayments of loans in a counter-

[19] Of which 12.65 for the call for proposals

cyclical manner, so that net lending can increase more in bad times. Examples include local currency lending by MDBs and new instruments. The latter could include GDP-linked or commodity price linked loans for developing countries. An interesting idea being discussed in the World Bank is to vary loan repayment in relation to the price of oil, for both oil importers and oil exporters, but obviously in inverse ways; then the World Bank would be hedged in its risk of variable repayments, as effects would broadly cancel out; however, countries would benefit.

Thirdly, the dynamics of rapidly expanding commitments was not reflected in disbursements, which for the World Bank, both IBRD (77%) and IDA (1%),grew far slower in 2008 to 2009 than the commitments as illustrated in Figure C1 below. Though the increase in IBRD disbursements was impressive, that of IDA was totally insignificant. This means in practice that the contribution to the recovery was more limited than it could have been, especially for LICs. This needs urgent review and change both for future crises, so as to fully mainstream the counter-cyclical function in general and to external shocks in particular .

Figure C1. MDBs Disbursements and "gap" to commitments 2007 to 2009 for all countries



Source: Annual Reports and Internal Data

However overall in relation to the MDBs, the crisis demonstrated the **crucial countercyclical role** that they can play when private financial markets dry up and when other shocks occur. Furthermore, for the first time this valuable role was given open recognition. Whilst the international community had emphasized the role that MDBs play in poverty reduction and the provision of global public goods, this counter-cyclical role was not clearly recognized. This missed many lessons from past experience, which indicated that, aside from provision of liquidity during crises, it is equally important to provide official long-term finance when private finance dries up during and after crises, not least important to maintain the dynamics of investment projects.

In addition a very positive feature of the MDB response was that a number of targeted large regional initiatives were launched, mainly working jointly with other institutions, notably the World Bank working together with regional development banks (RDBs). Examples are the Joint Plans in Africa, Latin America and the Caribbean, and for Central and Eastern Europe (te Velde and Massa, 2009, for more details). The massive needs caused by the crisis pushed these institutions to collaborate rather than compete.

In the next section we discuss the new facilities and programs created by the World Bank in response to the financial crisis in more depth.

C2.2.2 The IDA Crisis Response Window (CRW)

In November 2009 a proposal was made to create a specific pilot IDA Crisis Response Window and this was followed by a further proposal to make this permanent in May 2010. The pilot was expected to be operational for the January 2010 to June 2011 period.

The new facility plans a more systematic approach to a permanent CRW for both economic shocks and natural disasters and aims to focus only on large scale natural disasters and exogenous economic shocks (to avoid moral hazard).

Specific triggers are not used for automatically generating availability of the facility – but are used to activate consideration with use on a country case basis and then requiring Board approval.
Triggers for consideration are as follows;

- A widespread or a regional year-on-year projected decline of GDP growth of at least 3 percentage points in a significant number of IDA countries. The 3 percentage point decline in growth would be the threshold to identify countries that could be eligible for CRW support.
- This preliminary ring-fencing would be vetted by an analysis of available fiscal and other relevant data in line with the CRW objective to protect core spending in the short-term and avoid derailing long-term development objectives.
- If a severe price shock that did not result in a GDP growth decline in line with this trigger, CRW support could be considered on an exceptional basis if: (i) the shock is broad based and deemed severe in terms of fiscal impact (i.e., additional spending for targeted interventions to protect vulnerable groups); (ii) there is consensus that a concerted international response is needed; and (iii) the existing IDA allocations of affected countries are deemed insufficient to provide an adequate response.

Since 2008 over $1.6bn has been committed via the CRW.

C2.2.3 The Global Food Crisis Response Programme

From 2002 to 2007 food prices experienced sharp price increases and volatility. However before the financial crisis food prices experienced very rapid rises and, although these issues have ameliorated, since then through to 2010 inflated prices and volatility continue.

In response to these issues, the World Bank Group set up the Global Food Crisis Response Programme (GFRP) in May 2008 to provide immediate relief to countries hard hit by food high prices. The Bank worked in coordination with the United Nations' High-Level Task Force (HLTF) on food security. Between May 2008 and October 2010, $2.0 billion of World Bank funds, was made available including in a renewal of the program to 2011.

The food programme consisted of a number of components but is centred on support to agriculture and food-related social programs. The latter has included school meals, cash and food for work programs and nutritional supplements. Only IDA countries are eligible. Private sector programmes

can also be eligible. Programmes have been undertaken in over 40 countries as at May 2008 and over $1.5 billion has been committed via the GFCR[20].

Table C7. Summary of GFSP components

Component	Examples of programs
Raising Agricultural productivity	Adoption of higher yielding technologies & their development Water management Land rights & use
Linking farmers to markets	Reducing transfer & transaction cost Mobilising rural finance
Reducing Risk & Vulnerability	Managing price & weather risk Strengthening food related social protection Improving nutrition of vulnerable groups
Improving Non-Farm Rural Livelihoods	Improving the investment climate Promoting non-farm rural entrepreneurship
Technical Assistance, Institution-Building & Capacity Development	Sector strategy, investment & implementation Design, monitoring & evaluation Knowledge development & dissemination

Source: www.world bank.org [21]

C2.2.4 The Rapid Social Response Programme

In many LICs social safety nets are weak or non-existent and past crisis indicate that they may be most impacted, as fiscal revenues fall during crises and needs increase during crises or external shocks, affecting the poorest.

In response to this issue the World Bank created a specific new programme to support LICs in promoting social protection measures and maintaining access to basic social services. The programme aims to coordinate, monitor and report on Bank's response in thematic areas of safety nets, labour, and access to basic social services and to channel additional donor grant contributions to leverage IDA resources. Priority is given to lower income countries, especially fragile states, states with inadequate social policy responses and states with limited fiscal resources.

The programme consists of three components which are detailed in Table C8 below.

Table C8. RSRP components

RSRP component	Fund size ($ millions)	Eligible countries	Mandate
Multi-Donor Trust Fund	58.5	IDA only	to help IDA countries better prepared & mitigate market failure: pilot projects (with/without IDA co-financing), needs assessments, diagnosis & evaluation of existing programs, capacity building & S-S knowledge transfer.
Japan Social Development Fund Emergency Window[22]	200	IDA and IBRD	Complement the GFRP or RSRP
DfID Catalytic Fund	2.6	IDA only	supporting immediate capacity building activities

[20] Source: Zoellick presentation, 2010 Annual Meeting of IMF and the World Bank Group

[21] http://siteresources.worldbank.org/NEWS/Resources/GAFSPFramework.pdf

[22] Note that the JSDF program is not executed by the World Bank.

			in IDA countries

Source: www.worldbank.org

By April 2010[23] the MTDF has considered 69 proposals for $109 million of which 18 were approved projects for $24.2 million. This included programs for conditional cash transfer, nutrition and youth Employment. The DfiD Catalytic Funds had been allocated to about 20 activities across regions, including cash transfer programs and analysis of the existing institutional programs.

[23] Source: www.worldbank.org http://siteresources.worldbank.org/SOCIALPROTECTION/Resources/280558-1254328646148/RSRP_Mtg_April_2010_v6_EXT.pdf?resourceurlname=RSRP_Mtg_April_2010_v6_EXT.pdf

C2.3 IMF

In recent years, the IMF has made important changes to its programs, including as a response to the global crisis. The IMF responded rapidly to the crisis with lending increasing by over SDR36bn during the crisis period. This included, for PRGF-eligible countries, increases in commitments from an average of SDR1.5bn in 2007 and 2008, to a peak of SDR7.9bn in 2009 before declining to a lower, but still much greater than pre-crisis level, of SDR4.9bn in 2010. Outstanding credits and loans followed a similar pattern with a peak of SDR4.6bn in 2009, declining slightly to SDR3.8bn in 2010. Overall the IMF response to PRGF-countries was strong.

However though these were large increases in IMF lending for low income countries, and were welcome, together with a doubling of access as a percentage of quotas in 2009, the increases were smaller than for middle income countries. Furthermore, the recent changes in IMF compensatory financing are rather disappointing, and seem, in several aspects, even to imply steps backwards. In the next section we will discuss in detail these new IMF Shock facilities.

C2.3.1 The new IMF shock facilities

The IMF has revised its facility architecture for LICs which was announced in mid 2009 and became operational in early 2010. Table C7 below describes the characteristics of new IMF facilities for LICs. These new facilities have replaced the previously existing PRGF ("Poverty Reduction and Growth Facility"), the ESF ("Exogenous Shock Facility") and the Post Conflict and Natural Disaster Facilities. The aim of these recent changes was to streamline and simplify existing facilities and adjust them better to LIC needs. The intention also was to follow a similar structure to that of the middle income countries, with a strong distinction between long term and short term balance of payments needs.

Table C9. Summary of key features of the IMF'ss new LIC financing facilities

Facility	**ECF** **Extended Credit Facility**	**SCF** **Standby Credit Facility**	**RCF** **Rapid Credit Facility**
Function	Long term balance of payments problems	Short term balance of payments needs	Low-access, emergency funding
Replaces	PRGF (Poverty Reduction & Growth Facility)	Exogenous Shock facility (High Access Component)	Exogenous Shock facility (Low Access Component), Emergency Post-Conflict Assistance & Emergency Natural Disaster Assistance
Term	3 years	1-2 years	Outright disbursement
Repayment	5-10 years	4-8 years	5.5-10 years
Extendable	Yes	No	No
Repeatable	Yes	Limited to 2.5 out of any 5 years	Yes
Precautionary	No	Yes (Subject to maximum of 50% of quota)	No
Interest Rates*	0.25%	0.25% plus commitment fee	0.25%
Upper Credit Tranche	Yes	Yes	No
PRSP required	Yes	No	No

Limit on scale	Annual limit of 100% of quota; Limit of 300% cumulative basis; Limits decline with outstanding	Annual limit of 100% of quota; Limit of 300% cumulative basis; Limits decline with outstanding	Sub-limits of annually 25 & cumulative 75% of quota
Trigger	On a case-by-case basis examining balance of payments and macro-economic policy		

Plus concessional zero-interest rate for all facilities to the end of 2011 as part of the IMFs crisis response.
Source: IMF

There are some positive features in the recent reform of the LIC IMF facilities. For example the consolidation of facilities also has simplified them and made them more comprehensible. In addition, the increase of concessionality across all facilities from 0.5% to 0.25%, with some lending (such as to Haiti and Nepal) having 0% interest initially and the RCF is more concessional as it now has double the maturity (up to 10 years). Furthermore, it is positive that IMF lending to small SVEs, with: a) a population of less than 1 million, and b) with a level of per capita income no more than twice the level of IDA countries, which currently reaches US $1165, continues to have more positive treatment, as regards concessionality. However, this favourable treatment may reportedly finish once the global crisis is overcome.

Another positive feature is the consolidation of emergency facilities, for post conflict and natural disaster, as well as external economic shocks in the RCF, though again the scale of lending, at only 25% of quota is very small. It is also positive that the IMF has streamlined conditionality for the SCF to focus on policy actions that are "critical for achieving the program's objectives"; this means that though the SCF should be "consistent with poverty reduction objectives"; it does not require ex ante a PRSP.

However despite these positive features and improvements, the new facilities have quite a serious problem from the perspective of compensatory financing especially for countries with difficult access to international private capital markets. The current evolution of IMF facilities means that the original concept of IMF compensatory financing, -as providing countries facing purely external shocks almost automatic, very rapid and significant(as proportion of the shock) liquidity- continues to be very sharply diluted, in this instance for low income countries. Indeed, the Compensatory Financing Facility, applicable to middle income countries that had been so widely and successfully used in previous decades (see for example Griffith-Jones and Ocampo, 2008) had been previously also abolished. The only low conditionality IMF compensatory financing facility remaining at present (which is for LICs) is the VERY small RCF (or Rapid Credit Facility), which only reaches 25% of a country's quota per annum.

In this sense we can see in fact a step backward from the purpose with which the IMF Compensatory Financing Facility was created in 1963, an aim explicitly recognized in a special Fund study on the subject, (Goreux, 1980); "... the facility would enable a member to borrow when its export earnings and financial reserves are low and to repay when they are high, so its import capacity is unaffected by fluctuations in export earnings caused *by external events*". The philosophy behind this was clearly based on solid economic analysis: IMF official liquidity should allow levels of imports, as well as government spending, to be maintained in the face of temporary external shocks so as to avoid unnecessary negative effects on growth and poverty reduction.

We therefore see a gradual erosion of compensatory financing at the IMF through time, driven by an increase of conditionality. The Compensatory Financing Facility (CFF) was created in 1963, mainly as a low conditionality facility to deal with external shocks relating to trade; though different changes

were introduced, a clear trend through the years was a gradual increase in conditionality, even though the developing countries pleaded for a decline in conditionality for external shocks. Since 2000, when CFF conditionality was raised to the maximum upper credit tranche level, middle income developing countries stopped using it. This fact was utilized-very incorrectly in our view- as an argument for abolishing CFF for middle income countries. The ESF and PRGF augmentation, the compensatory mechanisms that were created for low income countries, which were focussed exclusively on compensating for external shocks, even though they had already too high conditionality have also now been abolished, and –with a small scale exception, the very small RCF- all compensatory financing for low income countries became clearly upper credit tranche conditionality . The practical abolishment of low conditionality compensatory finance for low income countries at the IMF seems particularly negative from an economic perspective; it implies unnecessary costs in terms of smaller poverty alleviation. However, it should be stressed that the facility has been in existence for a short period and so a full assessment is not yet possible.
The limitations of compensatory financing at the IMF for LICs makes the case for EU support for external shocks stronger, even though there is a need to make a distinction between liquidity and grants.

Limiting, or practically eliminating compensatory financing at the IMF seems particularly undesirable in a world where external shocks are , if anything, far more common due to frequent and increasingly global financial crises and major modifications of the climate, that hit countries directly as well as indirectly, due for example to fluctuations in food prices. Such an evolution of the world economy would seem to require more and especially tailored compensatory financing, rather than far less and more diluted one, as seems to emerge from the evolution of IMF facilities.

Thinking at IDA has focussed in contrast on responses to crises, with a clear preference seems to have emerged for a dedicated crisis response mechanism especially to face economic shocks, to try to ensure both timeliness and additionality. (IDA, 2009).

Furthermore, IMF movements on compensatory financing are in contrast with the overall positive trends, of some lightening of structural conditionality at the IMF itself, as well as a greater emphasis on more counter-cyclical macroeconomic policies in the light of the crisis, within IMF programmes

Appendix D. The magnitude of shock facilities

Table D1. FLEX and V-FLEX allocations [a] as a percentage of export earnings shortfall (%)

	FLEX + V-FLEX as percentage of shortfall in export earnings									
	2000	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009* (V-FLEX)*
Angola										
Antigua & Barbuda				0.00%						
Bahamas										0.00%
Barbados										0.00%
Belize				0.00%	0.00%	0.00%			0.00%	0.00%
Benin			0.00%			4.45%	3.75%			
Botswana				4.87%					9.74%	0.00%
Burkina Faso			0.00%						8.14%	29.83%
Burundi	0.00%	16.42%	0.00%	18.44%				19.95%	0.00%	276.24%
Cameroon									0.00%	
Cape Verde										
Central African Rep.			0.00%	8.94%	0.00%	2.43%				
Chad - Tchad	0.00%	0.00%								
Comoros					14.29%	4.14%	3.67%		5.24%	0.00%
Congo (Brazzaville)										
Congo DR	0.00%	0.00%			0.00%	4.47%	3.97%	17.48%	0.00%	
Cook Islands									9.72%	0.00%
Dominica	0.00%	0.00%	0.00%	29.44%		7.57%	6.89%		9.78%	0.00%
Dominican Republic	0.00%	0.00%			0.00%				6.32%	0.00%
Eritrea				0.00%						
Ethiopia	0.00%	0.00%	0.00%	0.00%						
Fiji					4.43%					
Gabon										
Gambia	0.00%	0.00%	0.00%	17.41%					0.00%	
Ghana		0.00%			0.00%					
Grenada						7.13%	5.15%		9.80%	853.66%
Guinea-Bissau				20.00%	17.39%		0.00%	17.04%	6.66%	
Guyana	0.00%	4.71%	#DIV/0!	0.00%	0.00%	8.40%	0.00%			0.00%
Haiti										
Jamaica				0.62%					9.75%	0.00%
Kenya									0.00%	
Lesotho										
Liberia										18.33%
Madagascar				0.00%	0.00%	2.52%	2.32%		0.00%	
Malawi	0.00%	0.00%	0.00%	17.90%	1.08%	0.00%	4.69%			
Mali	0.00%	0.00%	0.00%		1.30%				0.00%	0.00%
Mauritania			27.17%	22.69%	0.00%	7.24%			0.00%	0.00%
Mauritius				0.00%	0.19%	4.99%	4.45%			
Mozambique			0.00%						5.78%	0.00%
Namibia										
Niger			0.00%	0.00%	0.00%					0.00%
Niue										0.00%
Papua New Guinea				24.83%						0.00%
Rwanda			0.00%	0.00%						
Samoa				27.49%	24.89%		0.00%		9.48%	222.67%
Sao Tome & Principe	0.00%	0.00%								
Senegal				0.00%					7.69%	
Seychelles										

Sierra Leone										
Solomon Islands	0.00%	10.18%	0.00%	0.00%						
St. Kitts & Nevis	0.00%	0.00%					7.51%	25.07%		0.00%
St. Lucia		0.00%	0.00%	26.58%	26.09%	6.42%				
St. Vincent&Grenadines				28.87%			7.05%		9.66%	0.00%
Sudan		0.00%					0.00%			
Suriname		0.00%								
Swaziland	0.00%						6.38%			
Tanzania			0.00%	0.00%						
Togo										
Tonga	0.00%	0.00%					6.51%		9.15%	119.31%
Tuvalu										
Uganda	0.00%	0.00%	0.00%		0.00%					
Vanuatu	0.00%	22.82%	0.00%	0.00%						
Zambia	19.81%									
Zimbabwe			0.00%	0.00%		0.00%				
Total	**1.40%**	**1.97%**	**0.38%**	**5.17%**	**0.93%**	**3.24%**	**4.18%**	**17.92%**	**5.53%**	**5.24%**

Notes:

(a) V-FLEX 2010 allocations in AY 2009.

(b) Total allocations in each year as a percentage of the total annual export earnings shortfall of the beneficiary countries in that year. Allocations under V-FLEX were also made to Antigua and Barbuda, Cape Verde, Ghana, Haiti, Lesotho, Seychelles, Sierra Leone, Togo, Tuvalu and Zimbabwe, but none of these countries reported export earnings shortfalls in the relevant years (2008 and 2009).

(c) Total annual allocations as a percentage of total annual export earnings shortfall – all ACP countries.

Sources: Data provided by the European Commission.

Table D2. FLEX and V-FLEX allocations[a] as a percentage of GDP (%)

	FLEX + V-FLEX as percentage of GDP									
	2000	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009* (V-FLEX)*
Angola			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Antigua & Barbuda	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.10%
Bahamas	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		
Barbados	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Belize	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Benin	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	0.10%	0.00%	0.00%	0.27%
Botswana	0.00%	0.00%	0.00%	0.11%	0.00%	0.00%	0.00%	0.00%	0.11%	0.00%
Burkina Faso	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.17%	0.24%
Burundi	0.00%	0.43%	0.00%	0.51%	0.00%	0.00%	0.00%	0.12%	0.00%	1.57%
Cameroon	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cape Verde	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.81%
Central African Rep.	0.00%	0.00%	0.00%	0.44%	0.00%	0.09%	0.00%	0.00%	0.00%	0.90%
Chad - Tchad										
Comoros	0.00%	0.00%	0.00%	0.00%	0.13%	0.16%	0.14%	0.00%	0.08%	0.00%
Congo (Brazzaville)										
Congo DR	0.00%	0.00%	0.00%	0.00%	0.00%	0.20%	0.15%	0.28%	0.00%	0.64%
Cook Islands										
Dominica	0.00%	0.00%	0.00%	1.88%	0.00%	0.43%	0.17%	0.00%	0.11%	0.00%
Dominican Republic	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.05%	0.00%
Eritrea	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Ethiopia	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Fiji	0.00%	0.00%	0.00%	0.00%	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%
Gabon	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Gambia	0.00%	0.00%	0.00%	0.55%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Ghana	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Grenada	0.00%	0.00%	0.00%	0.00%	0.00%	0.38%	0.15%	0.00%	0.06%	0.78%
Guinea-Bissau	0.00%	0.00%	0.00%	0.96%	0.52%	0.00%	0.00%	0.62%	0.46%	
Guyana	0.00%	1.08%	0.00%	0.00%	0.00%	0.92%	0.00%	0.00%	0.00%	
Haiti	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.54%
Jamaica	0.00%	0.00%	0.00%	0.02%	0.00%	0.00%	0.00%	0.00%	0.17%	0.00%
Kenya	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Lesotho	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.66%
Liberia	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.98%
Madagascar	0.00%	0.00%	0.00%	0.00%	0.00%	0.14%	0.07%	0.00%	0.00%	0.00%
Malawi	0.00%	0.00%	0.00%	0.41%	0.06%	0.00%	0.11%	0.00%	0.00%	0.53%
Mali	0.00%	0.00%	0.00%	0.00%	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%
Mauritania	0.00%	0.00%	0.30%	1.58%	0.00%	0.06%	0.00%	0.00%	0.00%	0.00%
Mauritius	0.00%	0.00%	0.00%	0.00%	0.01%	0.39%	0.23%	0.00%	0.00%	0.00%
Mozambique	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.17%	0.00%
Namibia	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Niger	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Niue										
Papua New Guinea	0.00%	0.00%	0.00%	0.72%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Rwanda	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Samoa	0.00%	0.00%	0.00%	0.35%	0.38%	0.00%	0.00%	0.00%	0.11%	1.54%
Sao Tome & Principe		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Senegal	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.13%	0.00%
Seychelles	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sierra Leone	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.72%

Solomon Islands	0.00%	1.63%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
St. Kitts & Nevis	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.10%	0.47%	0.00%	0.00%
St. Lucia	0.00%	0.00%	0.00%	0.26%	0.47%	0.10%	0.00%	0.00%	0.00%	0.00%
St. Vincent&Grenadines										
Sudan	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Suriname	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Swaziland	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.71%	0.00%	0.00%	0.00%
Tanzania	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Togo	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.58%
Tonga	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.18%	0.00%	0.06%	2.46%
Tuvalu										
Uganda	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Vanuatu	0.00%	0.57%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Zambia	0.33%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Zimbabwe	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%				
Total	**0.01%**	**0.01%**	**0.00%**	**0.04%**	**0.01%**	**0.02%**	**0.02%**	**0.01%**	**0.03%**	**0.09%**

Notes:

(a) V-FLEX 2010 allocations in AY 2009.

(b) Total allocations in each year as a percentage of the total GDP of the beneficiary countries in that year. Allocations were also made to Bahamas, Barbados, Belize, Cook Islands, Niue, Tuvalu and Zimbabwe, but in years for which their GDP data are not available.

(c) Total annual allocations as a percentage of total annual GDP – all ACP countries for which available.

Sources: Data provided by the European Commission; GDP data from World Development Indicators.

Table D3. FLEX and V-FLEX allocations [a] as a percentage of change in current account balance (%)

	FLEX + V-FLEX as percentage of CU									
	2000	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009* (V-FLEX)*
Angola	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Antigua & Barbuda	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	24.17%
Bahamas	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Barbados	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Belize	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Benin	0.00%	0.00%	0.00%	0.00%	0.00%	21.07%	13.53%	0.00%	0.00%	-31.78%
Botswana	0.00%	0.00%	0.00%	3.43%	0.00%	0.00%	0.00%	0.00%	-1.06%	0.00%
Burkina Faso	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-3.70%	4.76%
Burundi	0.00%	10.07%	0.00%	-490.11%	0.00%	0.00%	0.00%	-14.74%	0.00%	-36.31%
Cameroon	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Cape Verde	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	38.21%
Central African Rep.	0.00%	0.00%	0.00%	-85.44%	0.00%	-1.75%	0.00%	0.00%	0.00%	44.74%
Chad - Tchad	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Comoros	0.00%	0.00%	0.00%	0.00%	-7.87%	-5.30%	25.60%	0.00%	-1.57%	0.00%
Congo (Brazzaville)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Congo DR	0.00%	0.00%	0.00%	0.00%	0.00%	-2.14%	1.81%	35.79%	0.00%	11.18%
Cook Islands										
Dominica	0.00%	0.00%	0.00%	88.87%	0.00%	-6.43%	1.88%	0.00%	-1.58%	0.00%
Dominican Republic	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-1.02%	0.00%
Eritrea	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Ethiopia	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Fiji	0.00%	0.00%	0.00%	0.00%	-1.41%	0.00%	0.00%	0.00%	0.00%	0.00%
Gabon	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Gambia	0.00%	0.00%	0.00%	353.76%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Ghana	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Grenada	0.00%	0.00%	0.00%	0.00%	0.00%	-1.62%	-6.63%	0.00%	2.30%	5.32%
Guinea-Bissau	0.00%	0.00%	0.00%	1179.19%	4.47%	0.00%	0.00%	6.40%	11.22%	147.00%
Guyana	0.00%	-47.79%	0.00%	0.00%	0.00%	-15.29%	0.00%	0.00%	0.00%	0.00%
Haiti	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	52.52%
Jamaica	0.00%	0.00%	0.00%	0.41%	0.00%	0.00%	0.00%	0.00%	-12.05%	0.00%
Kenya	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Lesotho	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-19.56%
Liberia		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	10.11%
Madagascar	0.00%	0.00%	0.00%	0.00%	0.00%	-5.37%	6.65%	0.00%	0.00%	0.00%
Malawi	0.00%	0.00%	0.00%	-112.64%	9.54%	0.00%	1.97%	0.00%	0.00%	13768%
Mali	0.00%	0.00%	0.00%	0.00%	-1.76%	0.00%	0.00%	0.00%	0.00%	0.00%
Mauritania	0.00%	0.00%	1.98%	-9.35%	0.00%	-0.30%	0.00%	0.00%	0.00%	0.00%
Mauritius	0.00%	0.00%	0.00%	0.00%	-0.25%	-11.67%	-5.31%	0.00%	0.00%	0.00%
Mozambique	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-5.04%	0.00%
Namibia	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Niger	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Niue										
Papua New Guinea	0.00%	0.00%	0.00%	12.17%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Rwanda	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Samoa	0.00%	0.00%	0.00%	59.56%	-	0.00%	0.00%	0.00%	1.11%	41.53%

					61.66%					
Sao Tome & Principe	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Senegal	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-3.60%	0.00%
Seychelles	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Sierra Leone	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	24.19%
Solomon Islands	0.00%	206.74%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
St. Kitts & Nevis	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-2.47%	-17.53%	0.00%	0.00%
St. Lucia	0.00%	0.00%	0.00%	11.08%	11.28%	-1.41%	0.00%	0.00%	0.00%	0.00%
St. Vincent&Grenadines	0.00%	0.00%	0.00%	-17.34%	0.00%	0.00%	-2.28%	0.00%	18.05%	0.00%
Sudan	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Suriname	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Swaziland	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-20.50%	0.00%	0.00%	0.00%
Tanzania	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Togo	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-56.54%
Tonga	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-5.33%	0.00%	-2.43%	-63.60%
Tuvalu	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-0.03%
Uganda	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Vanuatu	0.00%	1058.86%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Zambia	-4.68%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Zimbabwe	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	-4.59%
Total	**0.37%**	**-0.40%**	**11.76%**	**1.59%**	**0.87%**	**3.86%**	**0.97%**	**-0.31%**	**-0.83%**	**-2.19%**

Notes:
(a) V-FLEX 2010 allocations are included in AY 2009. Negative numbers refer to years when the current account balance fell.
(b) Total allocations in each year as a percentage of the total change in current account balance of the beneficiary countries in that year. Allocations were also made to Cook Islands, Niue and Tuvalu, for which current account balance data are not available
(c) Total annual allocations as a percentage of total change in current account balance – all ACP countries for which available.
Sources: Data provided by the European Commission; current account balance data from *World Economic Outlook*, October 2010.

Table D4. Total IMF allocations [a] as percentage of GDP (%)

ACP country	2006	2007	2008	2009
Angola				0.35
Belize			0.38	n/a
Cameroon				0.45
Comoros			0.58	0.29
Congo DR			1.17	0.65
Côte d'Ivoire	0.15	0.21	0.09	
Dominica	0.39	0.59	0.27	0.83
Dominican Republic				0.63
Ethiopia			0.13	0.33
Gabon	0.50	0.68	0.27	
Guinea-Bissau	0.35	0.48	0.65	n/a
Jamaica				2.96
Kenya				0.47
Malawi			0.84	0.37
Mozambique				1.06
Senegal			0.19	0.10
Seychelles			0.77	0.48
St. Kitts & Nevis				0.39
St. Lucia				0.78
St. Vincent & Grens.				0.72
Weighted average [b]	**0.28**	**0.39**	**0.32**	**0.61**
Unweighted average [c]	**0.01**	**0.01**	**0.03**	**0.15**

Notes:

(a) Emergency Assistance, Standby Credit Tranche, Exogenous Shocks Facility.

(b) Total allocations in each year as a percentage of the total GDP of the beneficiary countries in that year. 2009 GDP data unavailable for Belize and Guinea-Bissau.

(c) Total annual allocations as a percentage of total annual GDP – all ACP countries for which available.

Sources: IMF Annual Financial Statements.

Table D5. Total IMF allocations [a] as percentage of change in current account balance (%)

ACP country	2006	2007	2008	2009
Angola				-2.46
Belize			-6.62	7.70
Cameroon				-50.64
Comoros			-10.98	11.30
Congo DR			-7.92	11.26
Côte d'Ivoire	5.76	-6.31	3.49	
Dominica	4.35	-6.71	-4.09	39.37
Dominican Republic				13.79
Ethiopia			-5.91	-49.12
Gabon	-9.35	18.91	3.23	
Guinea-Bissau	-3.51	4.97	15.68	39.26
Jamaica				42.26
Kenya				-354
Malawi			-10.34	9595
Mozambique				-197
Senegal			-5.11	1.81
Seychelles			-3.19	2.12
St. Kitts & Nevis				5.54
St. Lucia				7.73
St. Vincent & Grens.				-65.39
Weighted average [b]	**-97.33**	**-52.81**	**-18.99**	**-28.37**
Unweighted average [c]	**0.22**	**-0.45**	**-3.16**	**-7.83**

Notes:

(a) Emergency Assistance, Standby Credit Tranche, Exogenous Shocks Facility. Negative numbers refer to years when the current account balance fell.

(b) Total allocations in each year as a percentage of the total change in current account balance of the beneficiary countries in that year.

(c) Total annual allocations as a percentage of total change in current account balance – all ACP countries for which available.

Sources: IMF Annual Financial Statements.

Table D6. Total World Bank allocations [aa] as percentage of GDP (%)

ACP country [b]	2008	2009
Benin	0.14	-
Burundi	0.91	-
Central African Rep.	0.37	-
Comoros	-	0.18
Djibouti	0.54	-
Ethiopia	1.13	-
Guinea	0.28	n/a
Guinea-Bissau	1.16	n/a
Haiti	0.17	0.08
Kenya	-	0.18
Mali	0.06	-
Mozambique	0.22	-
Niger	0.14	-
Rwanda	0.24	0.16
Senegal	-	0.08
Sierra Leone	0.44	0.31
Sudan	0.01	-
Tanzania	-	1.03
Togo	0.26	-
Weighted average [b]	**0.28**	**0.39**
Unweighted average [c]	**0.04**	**0.03**

Notes:

(a) IDA: CRW commitments, Rapid Social Response Program, Global Food Response Program.

(b) Total allocations in each year as a percentage of the total GDP of the beneficiary countries in that year. An allocation was also made to Somalia, for which GDP data are unavailable (as is the case for Guinea and Guinea-Bissau in 2009).

(c) Total annual allocations as a percentage of total annual GDP – all ACP countries for which available.

Sources: IDA: CRW commitments, Global Food Response Program – UK Department for International Development; Rapid Social Response Program – World Bank Annual Report 2010; GDP data from World Development Indicators.

Table D7. Total World Bank allocations [a] as percentage of change in current account balance (%)

ACP country	2008	2009
Benin	15.87	-
Burundi	51.28	-
Central African Rep.	-8.05	-
Comoros	-	7.23
Djibouti	-11.78	-
Ethiopia	-51.17	-
Guinea	77.19	-
Guinea-Bissau	28.11	-
Haiti	-3.81	7.34
Kenya	-	-137
Mali	-1.14	-
Mozambique	-6.28	-
Niger	-2.31	-
Rwanda	-7.54	-5.00
Senegal	-	1.45
Sierra Leone	-6.72	10.54
Sudan	0.54	-
Tanzania	-	-177
Togo	-20.67	-
Weighted average [b]	**-29.64**	**60.71**
Unweighted average [c]	**-4.01**	**-1.57**

Notes:

(a) IDA: CRW commitments, Rapid Social Response Program, Global Food Response Program. Negative numbers refer to years when the current account balance fell.

(b) Total allocations in each year as a percentage of the total change in current account balance of the beneficiary countries in that year. An allocation was also made to Somalia, for which current account balance data are unavailable.

(c) Total annual allocations as a percentage of total change in current account balance – all ACP countries for which available.

Sources: IDA: CRW commitments, Global Food Response Program – UK Department for International Development; Rapid Social Response Program – World Bank Annual Report 2010; current account balance data from *World Economic Outlook*, October 2010.

Table D8. Total of all allocations by EC,[a] IMF and World Bank as a percentage of export earnings shortfall (%)

ACP country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Bahamas										1.74
Barbados										2.29
Belize									14.73	10.40
Benin						4.45	3.75			
Botswana				4.87					9.74	2.29
Burkina Faso									8.14	31.05
Burundi		16.42		18.44				19.95	755	278
Central African Rep.				8.94		2.43				
Comoros					14.29	4.14	3.67		124	62.14

ACP country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Congo DR						4.47	3.97	17.48	46.75	
Cook Islands									9.72	
Cuba										
Dominica				29.44		7.57	22.83		216	28.26
Dominican Republic									6.32	22.64
Eritrea										
Fiji					4.43					
Gambia				17.41						
Grenada						7.13	5.15		179	854
Guinea-Bissau				20.00	17.39		66.31	30.27	68.15	
Guyana		4.71				8.40				2.29
Jamaica				0.62					9.75	52.02
Liberia										20.38
Madagascar						2.52	2.32			
Malawi				17.90	1.08		4.69			
Mali					1.30				4.06	1.54
Mauritania			27.17	22.69		7.24				2.00
Mauritius					0.19	4.99	4.45			
Mozambique									12.42	18.46
Niger										1.17
Niue										2.78
Papua New Guinea				24.83						2.29
Samoa				27.49	24.89				9.48	225
São Tomé & Príncipe										
Senegal									18.62	
Solomon Islands		10.18								
St. Kitts & Nevis							7.51	25.07		133
St. Lucia				26.58	26.09	6.42				
St. Vincent & Grens.				28.87			7.05		9.66	75.83
Swaziland							6.38			
Tonga							6.51		9.15	121
Uganda										
Vanuatu		22.82								
Zambia	19.81									
Weighted average [b]	**19.81**	**7.42**	**27.17**	**9.80**	**2.09**	**4.58**	**9.96**	**84.47**	**58.97**	**33.59**
Unweighted average [c]	**1.40**	**1.97**	**0.38**	**5.17**	**0.93**	**3.24**	**9.24**	**84.47**	**55.53**	**33.58**

Notes:

(a) Does not include the Food Facility, which is assumed to relate to 2010 (for which GDP data are not yet available).

(b) Total allocations in each year as a percentage of the total export earnings shortfall of the beneficiary countries in that year. Allocations were also made to Angola, Antigua and Barbuda, Cameroon, Cape Verde, Côte d'Ivoire, Djibouti, Ethiopia, Gabon, Ghana, Guinea, Haiti, Kenya, Lesotho, Rwanda, Seychelles, Sierra Leone, Somalia, Sudan, Tanzania, Togo, Tuvalu and Zimbabwe, but these countries had not export earnings shortfalls, or had none in the years to which the allocations relate.

(c) Total annual allocations as a percentage of total annual export earnings shortfall – all ACP countries..

Sources: Data provided by the Commission; IMF Annual Financial Statements; UK DFID; World Bank Annual Report 2010; GDP data from World Development Indicators.

Table D9. Total of all allocations by EC,[a] IMF and World Bank as a percentage of GDP (%)

ACP country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Angola										0.35
Antigua & Barbuda										1.10
Belize									0.38	n/a
Benin						0.04	0.10		0.68	0.27
Botswana				0.11					0.11	0.27
Burkina Faso									0.17	0.25
Burundi		0.43		0.51				0.12	2.54	1.58
Cameroon										0.45
Cape Verde										0.81
Central African Rep.				0.44		0.09			0.91	0.90
Comoros					0.13	0.16	0.14		1.96	0.48
Congo DR						0.20	0.15	0.28	1.17	1.29
Côte d'Ivoire							0.15	0.21	0.09	
Djibouti									0.50	
Dominica				1.88		0.43	0.57	0.59	2.34	0.91
Dominican Republic									0.05	0.67
Ethiopia									1.17	0.33
Fiji					0.10					
Gabon							0.50	0.68	0.27	
Gambia				0.55						
Ghana									0.31	
Grenada						0.38	0.15		1.14	0.78
Guinea									0.26	n/a
Guinea-Bissau				0.96	0.52		0.35	1.10	4.73	n/a
Guyana		1.08				0.92				n/a
Haiti									0.84	0.62
Jamaica				0.02					0.17	3.10
Kenya										0.66
Lesotho										1.66
Liberia										2.20
Madagascar						0.14	0.07			
Malawi				0.41	0.06		0.11		1.70	0.90
Mali					0.03				0.06	0.03
Mauritania			0.30	1.58		0.06				0.15
Mauritius					0.01	0.39	0.23		0.17	
Mozambique									0.37	1.15
Niger									0.13	0.01
Papua New Guinea				0.72						0.51
Rwanda									0.22	0.16
Samoa				0.35	0.38				0.11	1.56
Senegal									0.32	0.17
Seychelles									2.20	0.48
Sierra Leone									1.30	1.03
Solomon Islands		1.63							3.45	
St. Kitts & Nevis							0.10	0.47		0.39
St. Lucia				0.26	0.47	0.10				0.78
St. Vincent & Grens.				1.28			0.08		0.11	0.74
Sudan									0.01	
Swaziland							0.71			
Tanzania										1.03
Togo									0.24	0.58
Tonga							0.18		0.06	2.50
Vanuatu		0.57								
Zambia	0.33								0.30	
Weighted average [b]	**0.33**	**0.91**	**0.30**	**0.32**	**0.07**	**0.22**	**0.23**	**0.36**	**0.35**	**0.67**
Unweighted average [c]	**0.00**	**0.00**	**0.00**	**0.02**	**0.00**	**0.01**	**0.02**	**0.02**	**0.10**	**0.23**

Notes:
(a) Does not include the Food Facility, which is assumed to relate to 2010 (for which GDP data are not yet available).
(b) Total allocations in each year as a percentage of the total GDP of the beneficiary countries in that year. Allocations were also made to Bahamas, Barbados, Cook Islands, Niue, Somalia, Tuvalu and Zimbabwe, but in years for which their GDP data are not available (as is the case for Belize, Guinea, Guinea-Bissau and Guyana in 2009).
(c) Total annual allocations as a percentage of total annual GDP – all ACP countries for which available.
Sources: Data provided by the Commission; IMF Annual Financial Statements; UK DFID; World Bank Annual Report 2010; GDP data from World Development Indicators.

Table D10. Total of all allocations by EC,[a] IMF and World Bank as a percentage of change in current account balance (%)

ACP country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Angola										-2.46
Antigua & Barbuda										24.17
Bahamas										0.62
Barbados										3.09
Belize									-6.62	9.73
Benin						21.07	13.53		75.34	-31.78
Botswana				3.43					-1.06	-4.54
Burkina Faso									-3.70	4.95
Burundi		10.07		-490				-14.74	143	-36.56
Cameroon										-50.64
Cape Verde										38.21
Central African Rep.				-85.44		-1.75			-19.46	44.74
Comoros					-7.87	-5.30	25.60		-37.17	18.93
Congo DR						-2.14	1.81	35.79	-7.92	22.44
Côte d'Ivoire							5.76	-6.31	3.49	
Djibouti									-10.87	
Dominica				88.87		-6.43	6.23	-6.71	-34.93	42.83
Dominican Republic									-1.02	14.72
Ethiopia									-53.16	-49.12
Fiji					-1.41					
Gabon							-9.35	18.91	3.23	
Gambia				354						
Ghana									-4.36	
Grenada						-1.62	-6.63		41.94	5.32
Guinea									71.27	
Guinea-Bissau				1179	4.47		-3.51	11.37	115	186
Guyana		-47.79				-15.29				1.17
Haiti									-19.28	59.86
Jamaica				0.41					-12.05	44.20
Kenya										-491
Lesotho										-19.56
Liberia	n/a									11.24
Madagascar						-5.37	6.65			
Malawi				-113	9.54		1.97		-20.92	23364
Mali					-1.76				-1.05	2.15
Mauritania			1.98	-9.35		-0.30				3.15
Mauritius					-0.25	-11.67	-5.31		-3.08	
Mozambique									-10.84	-213
Niger									-2.13	-0.09
Papua New Guinea				12.17						-3.11
Rwanda									-6.96	-5.00
Samoa				59.56	-61.66				1.11	41.98
Senegal									-8.71	3.26
Seychelles									-9.06	2.12
Sierra Leone									-20.09	34.73
Solomon Islands		207							-40.76	
St. Kitts & Nevis							-2.47	-17.53		5.54

ACP country	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
St. Lucia				11.08	11.28	-1.41				7.73
St. Vincent & Grens.				-17.34			-2.28		18.05	-67.34
Sudan									0.50	
Swaziland							-20.50			
Tanzania										-177
Togo									-19.08	-56.54
Tonga							-5.33		-2.43	-64.75
Vanuatu		1059								
Zambia	-4.68								-18.16	
Zimbabwe										-4.59
Weighted average [b]	**-4.68**	**116**	**1.98**	**11.65**	**-3.22**	**-3.66**	**29.24**	**-87.50**	**-13.61**	**-31.44**
Unweighted average [c]	**0.09**	**-0.23**	**-0.04**	**1.38**	**0.22**	**2.20**	**0.41**	**-0.57**	**-11.88**	**-11.97**

Notes:

(a) Does not include the Food Facility, which is assumed to relate to 2010 (for which GDP data are not yet available). Negative numbers refer to years when the current account balance fell.

(b) Total allocations in each year as a percentage of the total change in current account balance of the beneficiary countries in that year. Allocations were also made to Cook Islands, Niue, Somalia and Togo, but in years for which data on their current account balance are not available.

(c) Total annual allocations as a percentage of total change in current account balance – all ACP countries for which available.

Sources: Data provided by the Commission; IMF Annual Financial Statements; UK DFID; World Bank Annual Report 2010; current account balance data from *World Economic Outlook*, October 2010.

Appendix E. Comparative analysis of vulnerability indices

This appendix contains a review of vulnerability indicators. The ComSec has developed the Commonwealth Vulnerability Index. The ComSec profile of vulnerability and resilience aims to (i) identify the manifestations and sources of structural economic vulnerability in a specific country, (ii) identify the sources of policy-induced economic resilience, and (iii) propose new policy responses to promote resilience-building. In order to do this, the profile is developed according to the methodology proposed by Briguglio et al. (2008a). According to this methodology, the economic vulnerability/resilience of a country can be assessed through three stages:

- an assessment of the symptoms of economic vulnerability;
- an analysis of the causes of vulnerability;
- a study of the sources of economic resilience.

The Commonwealth Vulnerability Index (CVI) for developing countries is based on Atkins et al. (2000). It is a composite index that aggregates three determinants of income volatility

- the lack of export diversification (measured by the UNCTAD export diversification index);
- the extent of export dependence (measured by the export to GDP ratio);
- the impact of natural disasters (measured by the share of population affected by natural disasters).

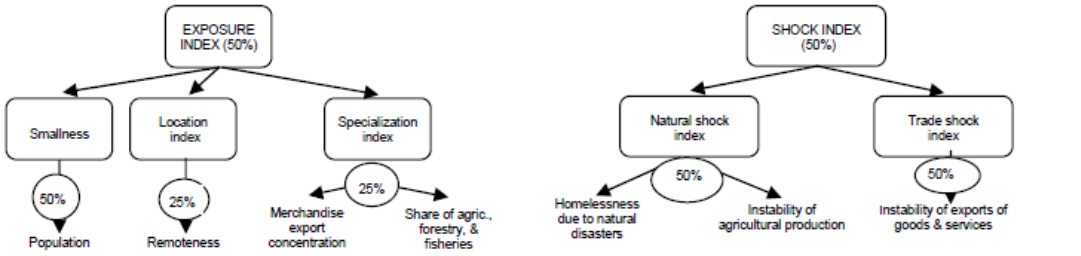
The Commonwealth Secretariat also developed a composite economic resilience index which is computed as a simple average of four components (Briguglio et al. (2008b):

- macroeconomic stability;
- microeconomic market efficiency;
- good governance;
- social development.

The United Nations was one of the pioneer institutions to assess economic vulnerability by creating a specific index. In 2000, the Committee for Development Policy (CDP) adopted the so-called Economic Vulnerability Index (EVI), which substituted the old composite Economic Diversification Index (EDI) among the criteria to identify the Least Developed Countries (LDCs) and to decide which countries are to be graduated from the LDCs' list. The EVI is an index that assesses structural economic vulnerability. In other words, it focuses on inherent factors rather than policy-induced ones. The main goal of the EVI is to allow the identification of those countries that are the most disadvantaged by structural handicaps to growth. The EVI is a composite index that in its most recent version includes 7 indices, which reflect the primary channels through which structural vulnerability affects a country's growth potential. These indices can be sub-divided into 3 shock indices and 4 exposure indices.

Shocks indices include instability of agricultural production, homeless population as a result of natural disasters, Instability of exports of goods and services. Exposure indices include primary activities as a percentage of GDP, merchandise export concentration, economic smallness and economic remoteness.

Figure E1. The Economic Vulnerability Index (EVI)



Source: Guillaumont (2008).

The IMF's vulnerability indicators focus mainly on the financial and macro-aggregate side of the economy, and can be grouped into four broad categories:

- Debt indicators (foreign and domestic);
- Reserves adequacy indicators;
- Financial soundness indicators; and
- Corporate sector indicators.

Although the World Bank does not produce specific economic vulnerability/resilience indices, it develops a series of country assessments that range from general to specific and provide indirectly information on economic, social as well as environmental vulnerability and resilience issues. The assessments can be classified into four main areas: (i) economic assessments; (ii) energy-environmental assessments; (iii) social assessments; and (iv) governance.

Table E1. Vulnerability indicators

	Commonwealth Secretariat			UNCTAD		IMF			World Bank		
	Vulnerability Profile	***Vulnerability Index***	***Resilience Index***	***Vulnerability Profile***	***EVI***	***Art. IV***	***FSAP***	***Vulnerability Indicators***	***Economic Assessments CAS***	***Environmental Assessments CEA***	***Social Assessments CSA***
Country coverage	2 SIDS (Seychelles, St. Lucia)	111 Developing Countries	86 Developed and Developing Countries	7 LDCs (Cape Verde, Equatorial Guinea, Kiribati, Maldives, Samoa, Tuvalu and Vanuatu)	65 LDCs and other Low income countries. (2006 review of LDCs)	185 ember states	About three-quarters of member states	Emerging Markets, expanding to Developed Countries	185 member states	Around 16 countries at various stages of completeness	22 countries
Aim	1) To identify sources economic vulnerability; 2) To identify sources of policy-induced economic resilience; 3) To propose new policy responses.	To measure the extent to which a country is affected by external shocks.	1) To disseminate information and enhance people awareness; 2) To create a common definition; 3) To induce to take action in several areas.	To assess to what extent countries are exposed to external economic and natural shocks to decide for graduation from the LDCs list.	To identify the LDCs and to decide which countries are to be graduated from the LDCs list.	1) To provide an appraisal of member states economic situation and policies; 2) To offer advices on policies.	To increase the effectiveness of efforts to promote soundness of financial systems in member countries.	To prevent financial crises by improving the quality and transparency of data on external and domestic debt, international reserves and capital flows	To identify key areas where the World Bank's assistance can have the biggest impact on poverty reduction.	To analyze the environmental priorities of development, the environmental implications of key policies, and each states capacity to address these priorities.	To assess how power, institutions and governance affect relevant socio-economic variables. (i.e. economic opportunities, and access to services by various social groups within a country).
Scope	Macro, Trade, Environment, Social	Trade, Macro	Macro, Trade, Micro Governance, Social	Macro, Social, Trade, Geography	Macro, Trade, Geography	Macro, Finance	Finance	Macro, Finance, Micro	Macro, Micro, Environment, Trade, Social, Governance	Environment	Social

Source: Cali et al. (2009) based on UNCTAD, IMF, World Bank, ComSec

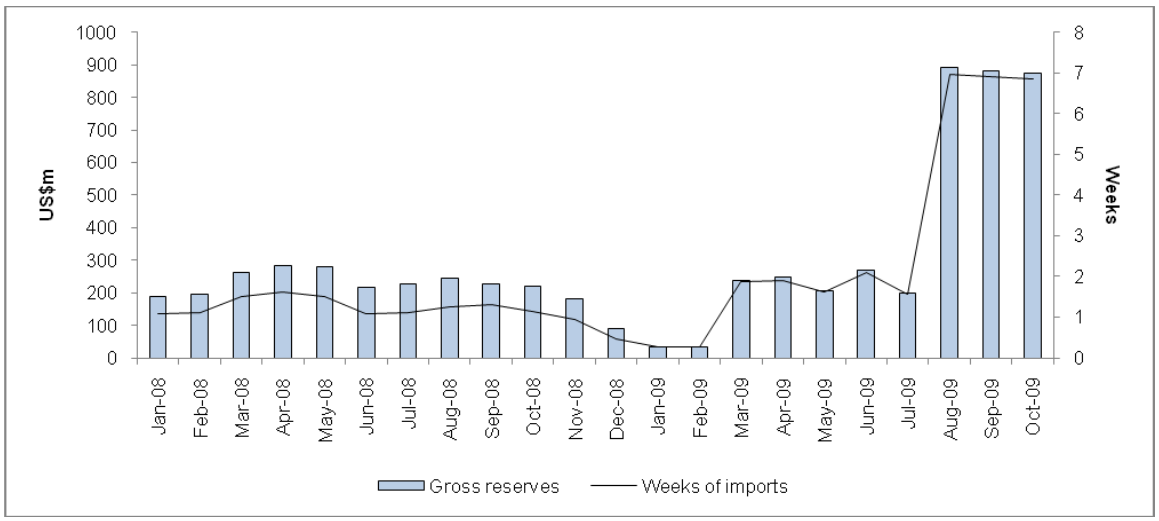
Note: In the World Bank's case, the reports were chosen to simplify comparativeness; the assessments are by no means exhaustive of all the reports produced by the World Bank.

Table E2. Detailed comparative analysis of the scope of vulnerability/resilience profiles

Indicators	Commonwealth Secretariat			UNCTAD		IMF			World Bank		
	Vulner-ability Profile	*Vulner-ability Index*	*Resilience Index*	*Vulner-ability Profile*	*EVI*	*Art. IV*	*FSAP*	*Vulner-ability Indicators*	*Economic Assessments CAS*	*Environ-mental Assessments CEA*	*Social Assessments CSA*
Economic											
Agricultural Sector[a]				*x*	*x*				*X*		
Credit [a]							*x*	*x*			
Debt			*x*			*X*	*x*	*x*	*X*		
Exchange Rates	*x*					*X*		*x*	*X*		
Exports	*x*	*x*		*x*	*x*	*X*		*x*	*X*		
GDP	*x*	*x*		*x*				*x*	*X*		
GDP per capita	*x*			*x*					*X*		
Government Expend.						*X*		*x*	*X*		
Imports	*x*	*x*		*x*		*X*			*X*		
Infrastructure[a]									*X*		
Inflation	*x*		*x*			*X*					
Interest Rates						*X*		*x*	*X*		
Unemployment	*x*		*x*						*X*		
Remoteness[a]		*x*		*x*	*x*						
Population				*x*							
Reserves								*x*	*X*		
Environmental											
Pollution, climate change, etc.)[a]	*x*			*x*					*X*	*x*	
Natural Disasters[a]				*x*	*x*				*X*	*x*	
Social / Other											
Education[a]	*x*		*x*	*x*					*X*		
Gender[a]											*x*
Health[a]	*x*		*X*						*X*		
Institutions[a]	*x*		*X*			*x*			*X*	*x*	*x*
Malnutrition[a]	*x*			*x*					*X*		
Mortality[a]	*x*			*x*					*X*		

Sources: UNCTAD, IMF, World Bank, ComSec, and and Cali et al. (2009)

Appendix F. International reserves in DRC, Jan 2008-Mar 2009 (in US$ end of the month)



Source: Te Velde et al. (2010)

Appendix G. Shock Absorbers and critical public expenditure and country level

In this section we case study evidence to identify whether shifts in the growth (measured as percentage change in GDP in current prices) and terms-of-trade (measured as percentage change of export of goods and services in current prices) time series data have been affected by the provision of shock facilities (measured as total all facilities - V-FLEX, FOOD FACILITY, IMF TOTAL, WB TOTAL, excluding FLEX allocations and disbursements) to sustain the critical public expenditures (measured as Gross public fixed capital formation (GPFCF)).

We have selected a sample of four ACP countries with available data: Burundi (LDC and landlocked country); DRC (LDC and fragile country); Benin (LDC and small-open economy); and Mauritius (MIC and small-open vulnerable island economy) to identify whether the effects of external shocks on their critical public expenditures have been smoothed by shock facilities by looking at the period from 2000 until 2010.. In 2009 the € 500 million Vulnerability FLEX (V-FLEX) was introduced by the EC in addition to the € 1 billion Food Facility adopted on 30 March 2009 to help developing countries to cope with higher food prices.

This section illustrates whether this external support, including that of the IMF and the World Bank, since 2000 actually has contributed to a substantial reduction in the frequency and severity of critical public expenditure declines in these four ACP economies as a result of short-term instability in export earnings (i.e. export side shocks). The response is given by looking at the distribution of shocks and actual support disbursement across the four ACP country cases that *report statistics on export earnings* in order to apply for FLEX support, namely: Benin, whose three exports shocks shortfalls from 2000-2007 satisfied the FLEX first eligibility criterion two times; Burundi, who was affected by export shocks for five years during the same period of which two shocks were eligible; DRC (hasn't sent statistics); and Mauritius, who recorded shocks in 4 out of the 8 years with 3 being eligible. They all registered temporary shortfalls in export earnings, and hence the purpose of this section is to explore to what extent the EC, World Bank and the IMF support was able to deal with them.

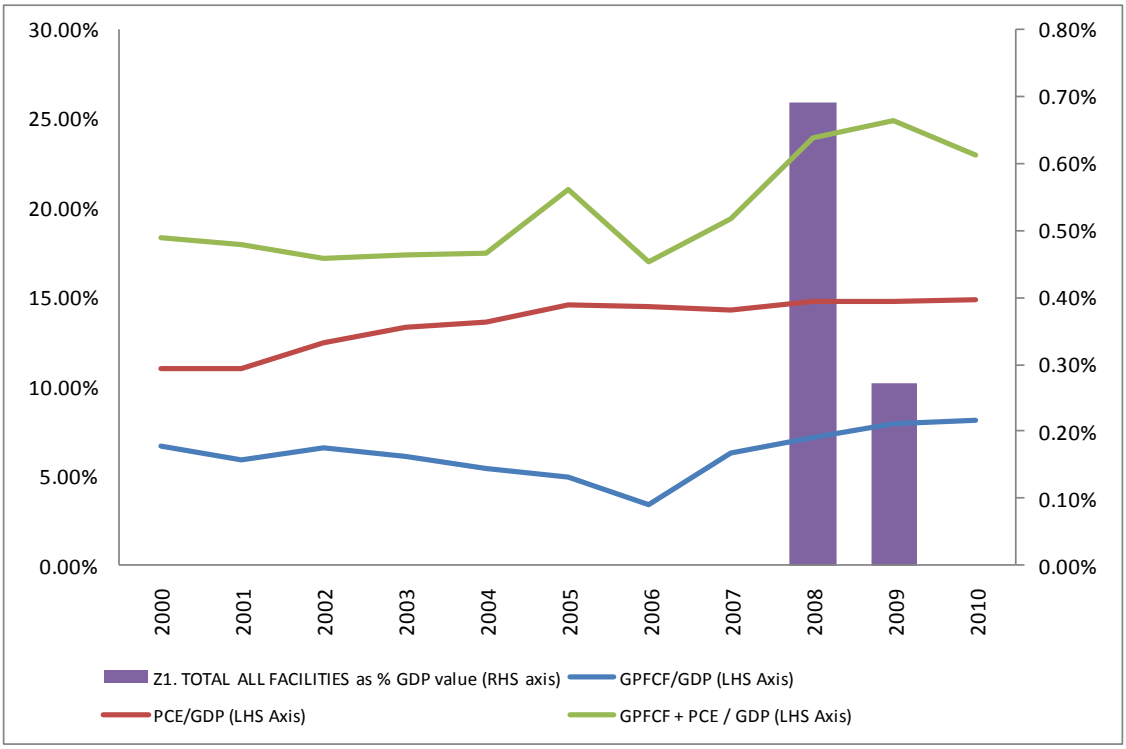
Benin

In the period from 2000 to 2008 Benin was allocated FLEX support two times from the EC in 2005 (€1.43 mn) and in 2006 (€3.82 mn) due to a shortfall in export earnings of €32.16 mn and €101.94 mn in respectively 2005 and 2006 in addition to 2 years suffering from *impact on the public deficit* (see table B2 in Appendix B). During the period 2000-2007 Benin was allocated the 13th highest absolute value of Flex support (€6.65 Mn) (Aiello, 2009).

When looking at the payments made by the EU in favour of Benin and the dates of these disbursements a number of key results emerge from the data. The first finding refers to *the time-lag* between the shortfall years 2005 and 2006 and the years when the actual payments were made. For application year 2005 the year of disbursement was in 2009 and for the application year 2006 there was no payment yet as of 2010. In fact at the time it took on average about 4 years to make a payment. This time-lag was similar to that associated to another main compensatory financing facility (Aiello, 2009).

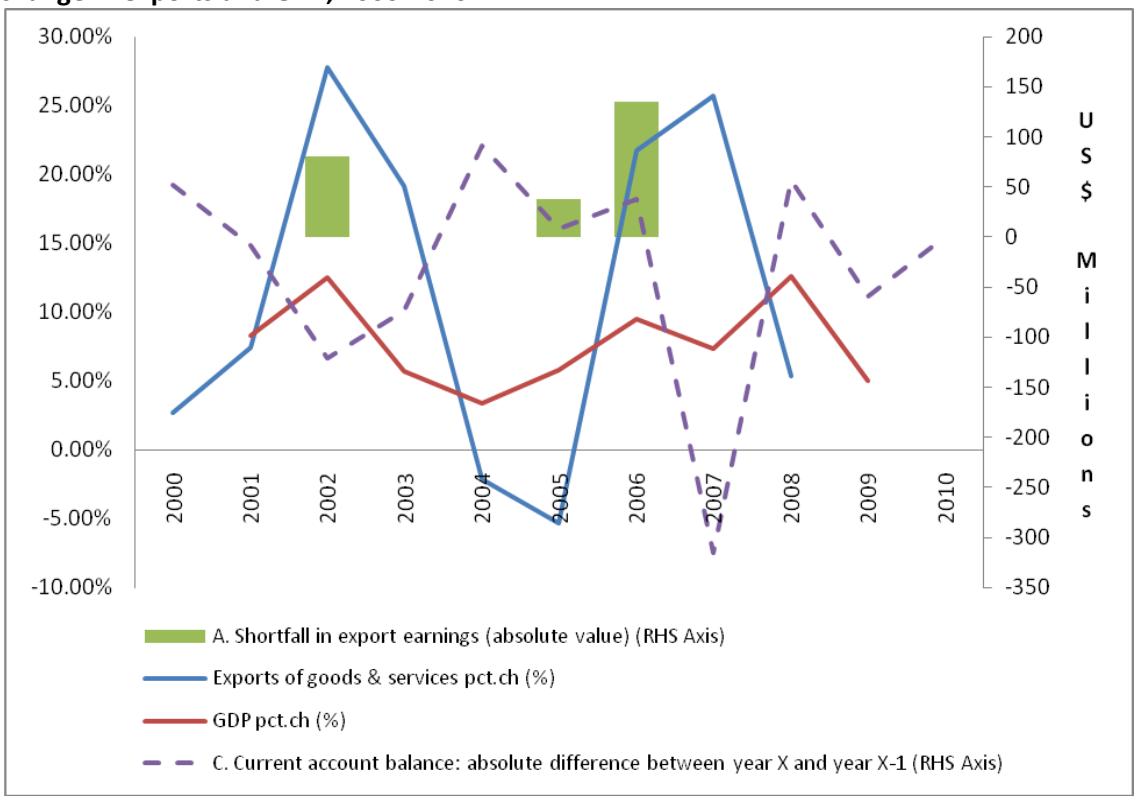
The second finding refers to the interpretation of figure 1 and figure 2 below due to the fact that the declared FLEX payments have not actually been made. In the case of Benin the 2nd 2006 accepted request was still unpaid in 2010 (Aiello, 2009). Then, in 2009 Benin received €25 Mn from the V-FLEX facility (Table C2) agreed for financing in response to the economic crisis (Aiello, 2009).

Figure G1: Critical Public Expenditures and Total Shock Absorber payments



Note: Total all facilities exclude FLEX disbursements.
Source: Authors Calculations.

Figure G2: Shortfalls in export earnings, yearly current account difference, and percentage change in exports and GDP, 2000-2010



Source: Authors Calculations.

On the 16th of November 2010 the EC took the decision to *adopt and finance Special measures* in favour inter alia of the Republic of Benin to cope with the impact of the global crisis under the *ad hoc Vulnerability Flex allocation* for 2010. The Country Strategy Papers and National Indicative Programmes 2008-2013 for the Republic of Benin foresee Budget Support Programmes focused on poverty reduction under the A-envelope and a B-envelope to cover unforeseen needs. The B-envelopes for the Republic of Benin was increased by €13 Mn. The Commission has adopted the Annual Action Programme 2008 for the Republic of Benin. The following budget support programme was adopted under the annual action programme 2008: Benin "Programme d'Appui budgétaire général à la Stratégie de Croissance pour la réduction de la Pauvreté" (ABG-SCRP)" of €13Mn to be financed from envelope B to be financed from the 10th European Development Fund. This programme should be increased with resources from the *ad hoc Vulnerability FLEX* mechanism.[24]

In 2008 Government of Benin's spending continued to increase driven by *higher spending on wages and domestically-financed infrastructure investment*. Between September 2008 and March 2009, *international prices of Benin's main export,* cotton, fell by 32 percent in dollar terms. Banks reported that *workers' remittances* were down 30 percent in the first quarter of 2009. The authorities intended to tackle the crisis by allowing *automatic fiscal stabilizers* to work and increasing social safety nets. For 2009, this implies keeping to the overall spending

[24] Source available at http://ec.europa.eu/europeaid/documents/aap/2010/aap_2010_cpv_en.pdf

envelope agreed under the programme, except for additional discretionary outlays on social safety nets amounting to 0.7 percent of GDP. These outlays would:

(i) provide access to basic health services for targeted segments of the population,
(ii) increase resources for *labour intensive public projects*, and
(iii) give transfers to small farmers to transition from cotton to more profitable crops.

Additional *fiscal easing* would be applied in 2010. Given the expected shortfall in revenues, the basic primary balance would turn into deficit in 2009 and 2010, and the overall fiscal deficit (excluding grants) would widen to 5.9 percent of GDP in 2009 and 6.1 percent of GDP in 2010.

The fiscal expansion would generate *a financing gap* of CFAF 44.3 billion (1.4 percent of GDP) in 2009. The authorities were confident that they would be able to mobilize the *additional external assistance* from the IMF, the EU, the World Bank, and other donors to close the financing gap. Pending availability of additional financing and to reduce the risk that the tight treasury situation might force the re-emergence of domestic payments arrears, the authorities were *delaying 2–3 percent of GDP in non-priority spending* to the second half of 2009. If *the additional external financing falls short of the estimated financing gap*, the authorities would be forced to *cancel or postpone outlays.*

Benin was also eligible under the EC's food facility regulation (see table B6 in Appendix B) with an indicative allocation of €6.1 mn (3.1% of €200 mn) in 2009 (see table B7 in Appendix B). In 2009 Benin's *financing gap* was €67 mn before the IMF/WB/AfDB top up and €25 Mn afterwards (table B10). Due to Benin's vulnerability to the crisis in terms of change in revenue and change in the fiscal balance (excl. grants) of – 2.4 percentage points of GDP, it became one of 17 eligible countries which benefited from 9.6% (€25 mn) of *the total V-Flex allocation* of €260 mn in 2009 (table C2) with an impact on the financing gap of 100% (see table B10 in Appendix B). Finally, due to its continuous state of vulnerability to the crisis in 2010 in terms of change in the fiscal balance (excl grants) of -2.5%, Benin again was granted a V-FLEX allocation of €13 Mn (4.92% of €264 Mn total V-FLEX in 2010). This constituted an impact on the financing gap, which was €26 Mn after IMF/WB/AfDB top up, of 50% (see table B11 in Appendix B).

In 2008 the *overall fiscal deficit* (cash basis excluding grants) deepened, amounting to CFAF 218.8 billion, or 7.3 percent of GDP (1.9 percentage points off target). This deficit was financed in part from *disbursements of budgetary support* under the World Bank's 2007 PRSC IV program (CFAF 17.9 billion) and aid granted by France (CFAF 3.6 billion), Denmark (CFAF 1.7 billion), the European Union (CFAF 16.6 billion),[25] Swiss Cooperation (CFAF 0.6 billion), KFW-Germany (CFAF 1.3 billion), and the Netherlands (CFAF 6.6 billion). *The balance was financed* by a drawing on government deposits with the banking system of about CFAF 120 billion and a portion of the resources from the privatization of SONAPRA's industrial tools division (CFAF 4.7 billion). The issuance of Treasury bonds and bills in the amount of CFAF 58.1 billion made it possible to replenish a portion of the government's deposits. Wage arrears to permanent public employees were cleared by issuing commercial paper (CFAF 54 billion, 20 billion of which was discounted by the local banks). The Total World Bank allocations to Benin as a percentage of GDP was 0.14% in

[25] In 2008 CFA Francs per US dollar (period average) = 445.7.

Benin is a member of the West African Economic and Monetary Union (WAEMU) and has no separate legal tender. The union's common currency, the CFA franc, is pegged to the Euro at a rate of CFAF 655.957 = EUR 1, consistent with the official conversions rate of the French franc to the Euro

2008 (see table D6 in appendix D) and the same World Bank allocations as a percentage of change in current account balance was 15.87% in 2008 (see table D7 in appendix D).

The total of all allocations by the EC, the IMF and the World Bank as a percentage of *export earnings shortfall* in Benin was 4.45% in 2005 and 3.75% in 2006 (see table D8 in Appendix D). The total of all allocations as a percentage of GDP was 0.04% in 2005, 0.10% in 2006, 0.68% in 2008 and 0.27% in 2009 (see table D9 in Appendix D). The total of all allocations as a percentage of change in current account balance was fluctuating between 21.07% in 2005, 13.53% in 2006, 75.34% in 2008 and -31.78% in 2009 (see table D10 in appendix D).

In June 2009 the Government of Benin issued a statement which expressed the authorities awareness of the challenges ahead, in particular the need to design an appropriate policy *response to the shocks* stemming from global economic downturn. In response to this the authorities have put in place four-pronged strategies aiming at increasing *the resilience of Beninese economy to exogenous shocks* while putting it on the path of broad-based growth.

1. First, they have allowed *the use of automatic fiscal stabilizers with the view to sustain domestic demand* given the downward economic cycle projected for 2009 and 2010.
2. Secondly, they have focused their efforts on the improvement of Benin's economy competitiveness.
3. Third, the authorities are requesting an augmentation of access of 15 percent of quota to help mitigate the impact of global economic crisis. At the same time, they are envisaging a successor PRGF programme, which will be designed at the end of the current IMF programme to support the authorities' efforts to cope with the negative effects of the current economic crisis.
4. Finally, to mobilize additional resource aiming at covering *the financing gap resulting from the fiscal response to mitigate the impact of these shocks*, the authorities are strengthening their partnerships with development partners, including World Bank, European Union, and other multilateral donors.

The global economic crisis adversely affected the near term prospects of the Beninese economy. Real GDP growth was projected to slow to 2.5 percent and 3.0 percent in 2009 and 2010, respectively, a significant decline from 5.0 percent in 2008. The slowdown was mainly *driven by weak prospects for cotton production and exports*, and trade with neighbouring countries. Notwithstanding *improvement in the terms of trade*, *the external current account deficit*, excluding grants, was expected to widen to about 13 percent of GDP in 2009 (figure 2), reflecting on one hand the decline in cotton exports and, on the other hand, *expansionary fiscal policy*. The fiscal situation deteriorated significantly in the first half of 2009 (figure 1). In 2008 *the wage bill* grew by 35 percent mainly driven by fringe benefits to civil servants. *Domestic capital spending* nearly tripled, compared to the first half of 2008, due in part to a CFAF 81 billion *carryover of expenditure commitments* from 2008, as the authorities sought to stimulate growth. Overall, compared to the authorities' programme, expenditure slippages amounted to about 4 percent of GDP, which resulted in a significant increase in the overall deficit.

Following an IMF mission to Cotonou in September 2009, the authorities took additional measures to contain public spending and *mobilized additional donor support to reduce the financing gap* for the remainder of 2009. In particular, the authorities:

- Stopped *most expenditure commitments for capital investment* from September 28, 2009;
- Scaled back stipends and pensions by CFAF 5.3 billion in line with the pace of execution up to end-September 2009;
- Reduced other expenditures and transfers; and
- Postponed about CFAF 50 billion in *capital spending to the 2010 budget*.

Notwithstanding various domestic resource mobilization efforts, the overall cash deficit (excluding grants) was expected to reach 10.1 percent of GDP, a fiscal deterioration of 3.4 percent of GDP compared with the authorities' programme approved by the IMF Executive Board in June 2009. Some of the *spending cuts were supposed to be achieved by postponing spending to the 2010 budget*, entailing additional financing pressures in early 2010. *The timing of donor disbursements to reduce the residual financing gap, however, was unclear*. The authorities assured IMF staff that the *proposed spending cuts will not affect priority spending for the social sectors.*

Burundi

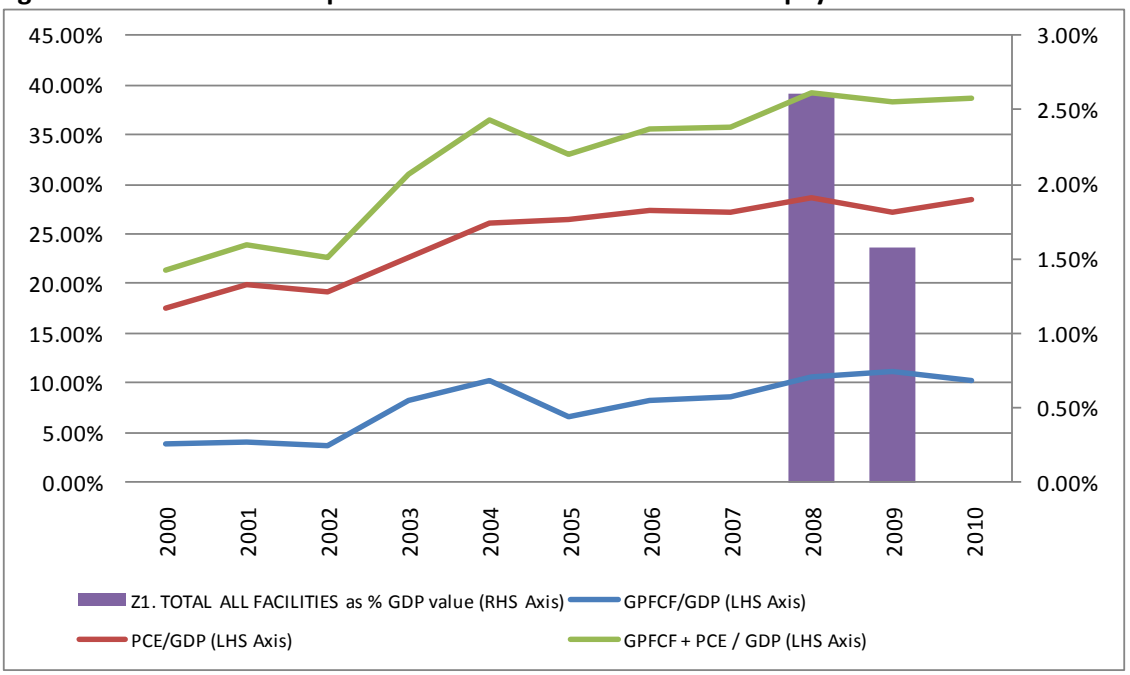
In the period from 2000 to 2008 Burundi (with fragile country status) were allocated FLEX support by the EC three times in 2001 (€3.18 mn); in 2003 (€2.68 mn) and in 2007 (€0.85) due to a shortfall in export earnings of €19.37 mn; €14.53 mn and €4.26 mn in respectively 2001, 2003 and 2007 as well as 4 years suffering from impact on the public deficit (see table B2 in Appendix B). During the period 2000-2007 Burundi were allocated the 12th highest absolute value of Flex support (€6.71 Mn) (Aiello, 2009).

The V-FLEX repartition in 2010 led to the biggest allocation of €15 mn amongst the 17 beneficiary countries. These FLEX and V-FLEX allocations in Burundi constituted 16.4% in 2001, 18.44% in 2003, 20.0% in 2007, and 276.24% in 2009 as *a percentage of export earnings shortfall* (see table D1 in Appendix D); and in terms of *Flex and V-Flex allocations as a percentage of GDP* 0.43% in 2001, 0.51% in 2003, 0.12% in 2007, and 1.57% in 2009 (see table D2 in Appendix D); and *the Flex and V-Flex allocations as a percentage of change in current account balance* were 10.07% in 2001, -490% in 2003, -14.74% in 2007, and -36.31% in 2009 (see table D3 in Appendix D).

When looking at the payments made by the EU in favour of Burundi and the dates of these disbursements a number of key results emerge from the data. For the short-fall application year 2001 the year of disbursement was as late as in 2004 and for the application year 2003 the year of disbursement was even one year later in 2007/2008. And for application year 2007 no disbursement has yet been made as of 2010.

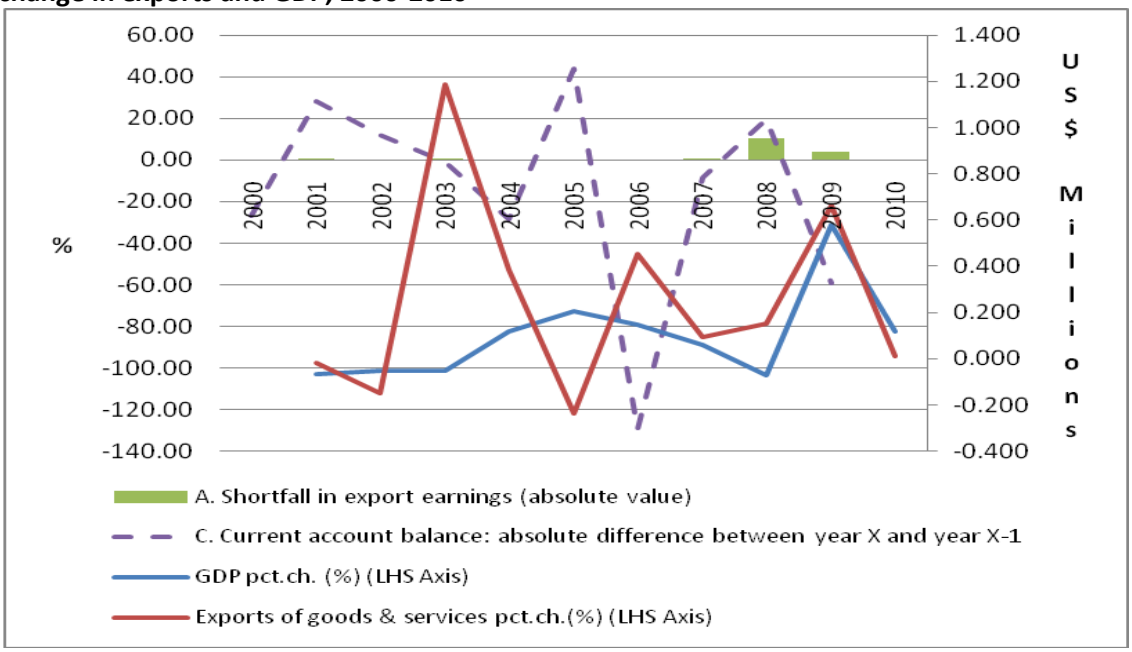
In 2009 Burundi received €13.6 Mn agreed for financing in response to the economic crisis of which the entire amount came from the V-FLEX facility and none from the FLEX facility (Table B10).

Figure G3: Critical Public Expenditures and Total Shock Absorber payments



Note: Total all facilities exclude FLEX disbursements.
Source: Authors Calculations.

Figure G4: Shortfalls in export earnings, yearly current account difference, and percentage change in exports and GDP, 2000-2010



Source: Authors Calculations.

The authorities have sought to *mitigate the impact of higher food and oil prices* on the poor by enhancing social safety nets (e.g., food security programs and school feeding programmes). To boost food output, they distributed seeds and fertilizers to smallholders, provided micro-credits,

and rehabilitated irrigations systems. The budgetary impact of these policy responses (estimated at about 3 percent of GDP) was *fully financed by donors*. Burundi was also eligible under the EC's food facility regulation (see table B6 in Appendix B) with an indicative allocation of €3.4 mn (1.7% of the grand total) in 2009 (see table B7 in Appendix B). In 2009 Burundi's financing gap was €20-25 mn (table B10). Due to its vulnerability to the crisis in terms of change in revenue (-0.6%) and change in the fiscal balance (excl. grants) of – 2.6 percentage points of GDP, Burundi likewise became one of 17 eligible countries which benefited from 5.2% (€13.6 mn) of the total V-Flex allocation of €260 mn in 2009 with an impact on the financing gap of 57-80% (see table B10 in Appendix B). In 2010, because of its continuous state of vulnerability to the crisis in terms of change in revenues (excl grants) of -1% and change in the fiscal balance (excl grants) of -3.4%, Burundi again was granted an V-FLEX allocation of €15 Mn (5.68% of €264 Mn total V-FLEX in 2010). This constituted an impact on the €27.4 mn financing gap of 55% (see table B11 in Appendix B).

The total World Bank allocations to Burundi as a percentage of GDP was 0.91% in 2008 (see table D6 in appendix D) and the same World Bank allocations as a percentage of change in current account balance was 51.28% in 2008 (see table D7 in appendix D).

On July 7, 2008, the IMF Executive Board approved a three-year PRGF arrangement with access of SDR 46.2 million (60 percent of quota). As of August 2008 Burundi became a PRGF-eligible country.

The total of all allocations by the EC, the IMF and the World Bank as a percentage of export earnings shortfall in Burundi fluctuated between 16.42% in 2001, 18.44% in 2003, 19.95% in 2007, 755% in 2008 and 278% in 2009 (see table D8 in Appendix D). The total of all allocations as *a percentage of GDP* varied between 0.43% in 2001, 0.51% in 2003, 0.12% in 2007, 2.54% in 2008 and 1.58% in 2009 (see table D9 in Appendix D). The total of all allocations as *a percentage of change in current account balance* ranged from 10.07% in 2001, -490% in 2003, -14.74% in 2007, 143% in 2008, to -36.56% in 2009 (see table D10 in appendix D).

IMF Staff and Burundi's authorities have agreed on the need to pursue appropriate growth-enhancing reforms, which intend to:

(i) *refocus capital spending on key infrastructure* to help relieve major supply bottlenecks (for example, electricity and irrigation for agriculture);
(ii) continue to remove economic distortions, especially in the agricultural sector, to boost total factor productivity; and
(iii) accelerate EAC integration to improve competitiveness and the business environment.

At the conclusion of the 2008 Article IV consultation, IMF Executive Directors urged the authorities to further strengthen public financial management (PFM) and move forward with structural reforms to improve the investment climate and spur growth. *The HIPC decision point* was reached in August 2005 and the completion point in January 2009. Burundi's PRSP was published in September 2006. The latest annual progress report was completed in December 2009.

Fiscal performance in 2009 was broadly satisfactory. Total spending was contained below the programmed level, as *externally-financed spending was lower than programmed*. The wage bill was also kept within the envisaged budgetary envelope. Overall, the fiscal deficit (excluding

grants) was lower than programmed. Adjusted for the shortfall in external non-project financial assistance, domestic financing of the budget was well within the programmed target.

Despite *the food and oil shock* and the global financial crisis, the external position was supported by Heavily Indebted Poor Country (HIPC) and Multilateral Debt Relief Initiative (MDRI) relief and the SDR allocation. Notwithstanding the negative impact of the food and oil crisis on the trade balance, the external current account deficit improved in 2008 because of high transfers to mitigate the effects of the shock. In contrast, in 2009 the external current account deficit worsened, even as the terms of trade improved, because of lower donor support. Overall, the balance of payments position was supported by HIPC and MDRI relief and the SDR allocation.

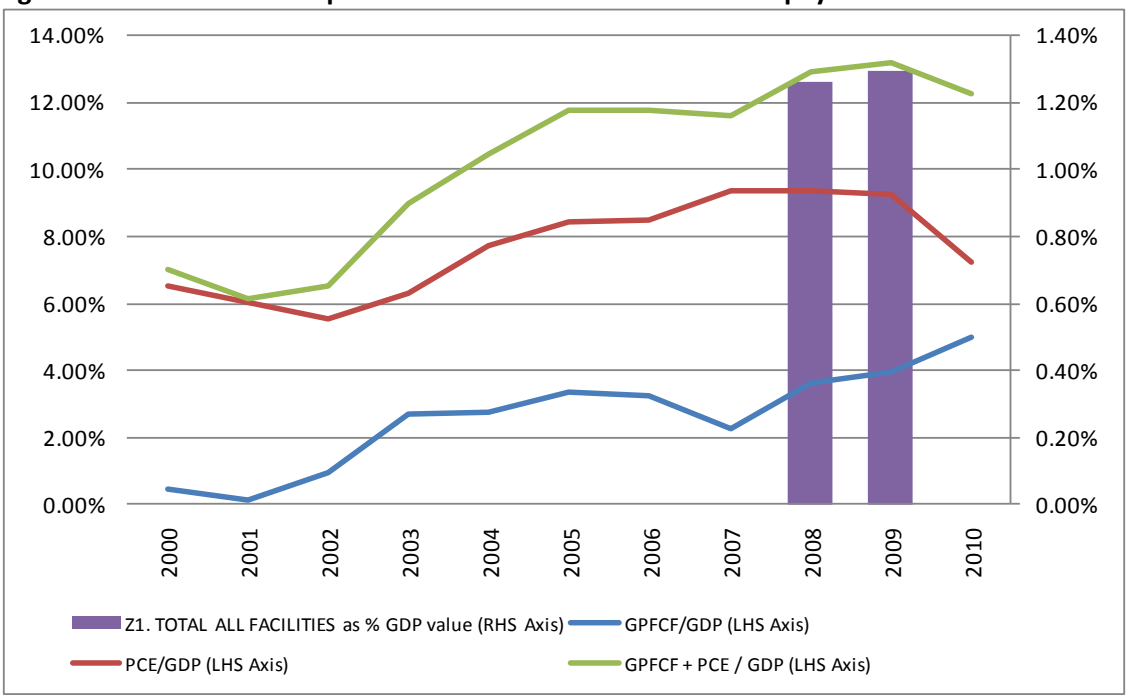
The overall fiscal deficit (on a commitment basis, including non-HIPC grants) is projected to decline from an average of 4.7 percent of GDP in 2005–09 to about 1.5 percent by 2013, supported by gradual improvement in revenue collections. Driven by *spending on PRSP priority areas*, current spending would average about 25 percent of GDP in 2010–15, broadly unchanged from recent years. The wage bill is projected to decline gradually to 11 percent of GDP by 2015, taking into account demobilization and the need to accommodate hiring in priority sectors. Acknowledging the need for *significant investment in public infrastructure* and in agriculture, the macro framework shows an increase in capital spending, supported by project grants.

The primary objective of expenditure policy in 2010 is to significantly improve the composition of *public spending in favour of priority sectors*. Accordingly, pro-poor spending is expected to increase by about 1.8 percent of GDP. In line with Burundi's poverty reduction strategy, MDRI resources will be spent on agriculture, water, rural infrastructure, health, and education.

Democratic Republic of the Congo

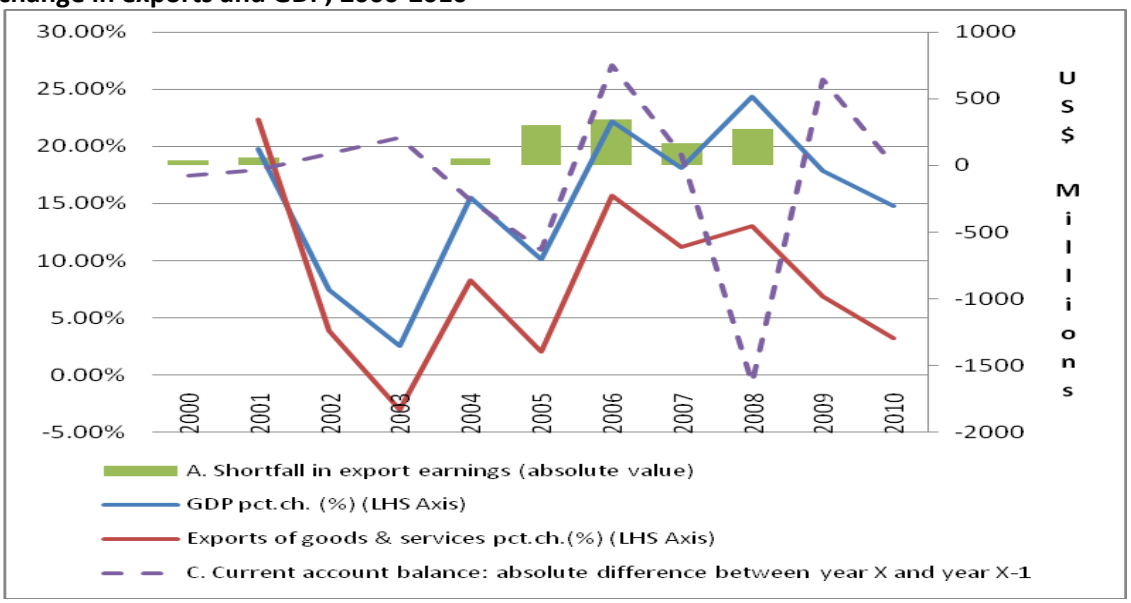
In the period from 2000 to 2008 DRC's FLEX and V-FLEX allocations from the EC constituted 4.5% in 2005, 4.0% in 2006, and 17.5% in 2007 as *a percentage of export earnings shortfall* (see table D1 in Appendix D); and in terms of *Flex and V-Flex allocations as a percentage of GDP* 0.20% in 2005, 0.15% in 2006, 0.28% in 2007 and 0.64% in 2009 (see table D2 in Appendix D); and the Flex and V-Flex allocations as *a percentage of change in current account balance* were -2.14% in 2005, 1.81% in 2006, 35.79% in 2007, and 11.18% in 2009 (see table D3 in Appendix D).

Figure G5: Critical Public Expenditures and Total Shock Absorber payments



Note: Total all facilities exclude FLEX disbursements.
Source: Authors Calculations.

Figure G6: Shortfalls in export earnings, yearly current account difference, and percentage change in exports and GDP, 2000-2010



Source: Authors Calculations.

DRC was also eligible under the EC's food facility regulation (see table B6 in Appendix B) with an indicative allocation of €4.6 mn (2.3% of €200 mn) in 2009 (see table B7 in Appendix B). In 2010 because of its state of vulnerability to the crisis in terms of change in revenues (excl grants) of -0.6% and change in the fiscal balance (excl grants) of -13.8%, DRC for the first time was granted

the largest V-FLEX allocation of €50 Mn (18.94% of the €264 Mn total V-FLEX).[26] This constituted an impact on the €100 Mn financing gap before IMF cuts of 50% (see table B11 in Appendix B).

The total of all allocations by the EC, the IMF and the World Bank as a percentage of export earnings shortfall in DRC was 4.47% in 2005, 3.97% in 2006, 17.48% in 2007, and 46.75% in 2008 (see table D8 in Appendix D). The total of all allocations as *a percentage of GDP* was 0.20% in 2005, 0.15% in 2006, 0.28% in 2007, 1.17% in 2008 and 1.29% in 2009 (see table D9 in Appendix D). The total of all allocations as *a percentage of change in current account balance* was -2.14% in 2005, -1.81% in 2006, 35.79% in 2007, -7.92% in 2008, and 22.44% in 2009 (see table D10 in appendix D).

In December 2009, the IMF Executive Board approved a three-year arrangement under the *Extended Credit Facility (ECF)* for the DRC with access of SDR 346.45 million (65 percent of quota). The Executive Board completed the first review in June 2010 and decided that the DRC had reached *the completion point under the enhanced Heavily Indebted Poor Countries (HIPC) Initiative*. HIPC debt relief amounted to about $7.3 billion in present value terms: the highest among all HIPC countries. According to the IMF *the programme's broad fiscal policy objectives for 2010* were achievable despite *a shortfall in external financing*, owing to improved tax and other revenue collections (including from the natural resource sector), tight control over spending, and *cuts in some lower priority public investment*.

Fiscal discipline has provided a solid foundation for the IMF programme. No fiscal slippages occurred from spending pressures in the lead up to the 50th anniversary of independence celebration in June 2010; *spending was scaled back in response to lower foreign financing* in the second part of the year; and the budget envelope for 2011 aligns with the goal of eliminating financing from the central bank. Efforts are made to prioritize spending to minimize the impact of reduced resources on pro-growth and pro-poor social policies.

The government's 2011 fiscal programme aligns expenditure with domestic revenue and expected foreign financing to avoid central bank financing of the budget. Accordingly, it envisages a domestic fiscal deficit of about 1⅓ percent of GDP to limit the financing gap to the equivalent of ½ percent of GDP, which will be covered by *budget support* in 2010 from the European Commission. Consequently, the programme is fully financed. The deficit for 2011 is slightly higher than envisaged at the time of the first review largely on account of election related spending, which was not included earlier.

The government initially set high expenditure ceilings for 2011 but scaled them back to reflect lower levels of foreign financing. The budget includes increases in the wage bill, goods and services, and *domestically-financed investment*, compared with the previous year. The higher wage bill mainly reflects salary increases and recruitment of teachers, and one-off payments to election-related workers and indemnities to retiring Parliamentarians; while higher outlays for goods and services mainly reflect pro-poor spending in health and education, resources for the parliamentary and presidential elections later in 2011, and security-related outlays (which were previously recorded under exceptional spending).

[26] In 2009 there was no request for V-FLEX because there was a planned B-envelop/Food Facility intervention.

Mauritius

Since 2000 Mauritius has *suffered a series of external shocks*. The phasing-out of the Multi-Fiber Agreement (MFA) for textiles in December 2004; reductions in the European Union's sugar protocol prices (by 36 percent for 2006–09); and rising prices for imports of petroleum and other commodities caused a cumulative terms of trade shock of nearly 20 percent between 1999 and 2009. At the same time, economic growth declined from an average of 5 percent in the 1990s to just 3 percent in the first half of the 2000s. The global credit crisis in 2008/09 was only the latest shock; it hit tourism and textiles particularly hard.

In the period from 2000 to 2008 Mauritius together with Burundi were two amongst only 10 of the 28 ACP beneficiaries, which were allocated FLEX support three times from the EC. The first time was in 2004 (€0.44 mn); the second time was in 2005 (€19.51 mn); and finally again in 2006 (€12mn) due to a shortfall in export earnings of €233.8 mn; €393.10 and €270.80 mn in respectively 2004, 2005 and 2007 as well as 3 years suffering from impact on the public deficit (see table B2 in Appendix B). During the period 2000-2007 Mauritius was allocated the 2nd highest absolute value of Flex support (€32.60 Mn) after Ivory Coast (€42.54 Mn equivalent to 16.61% of the total). This is an indication of the fact that the distribution of transfers by country was quite concentrated with the top five beneficiaries accounting for more than 50% of the total. However, it emerged that in relative terms Mauritius (€26.2 Flex support pro capita) was the 4th top beneficiary (Aiello, 2009).

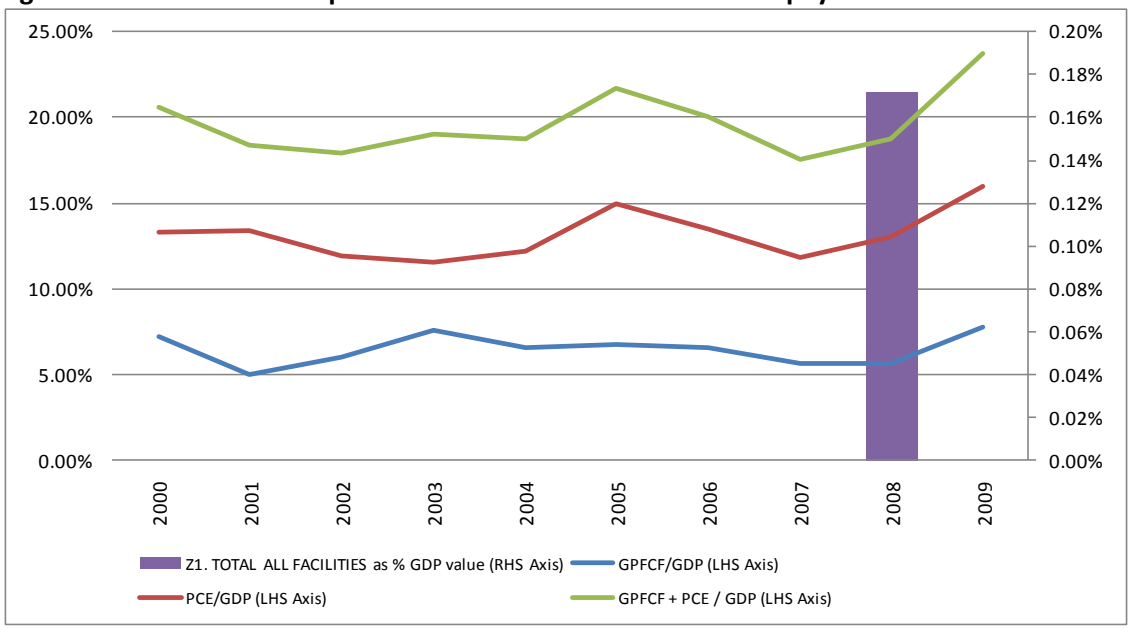
Mauritius was contrary to the three other countries in the sample not amongst the 50 countries eligible under the EC food facility regulation (see table B6 in Appendix B).

Mauritius together with Benin, Burundi and 10 other ACP countries were among first countries to benefit from *the V-FLEX mechanism* in 2009. In 2009 Mauritius received €10.90 Mn agreed for financing in response to the economic crisis of which the entire amount came from the V-FLEX facility.

For this first tranche, all amounts are paid in form of *budget support*, which will enable partner countries to *maintain their level of public spending in priority areas*, including in the social sectors, without jeopardising macroeconomic stability. Most of these funds were expected to be paid before the end of 2009. Additional allocations would follow in 2010.

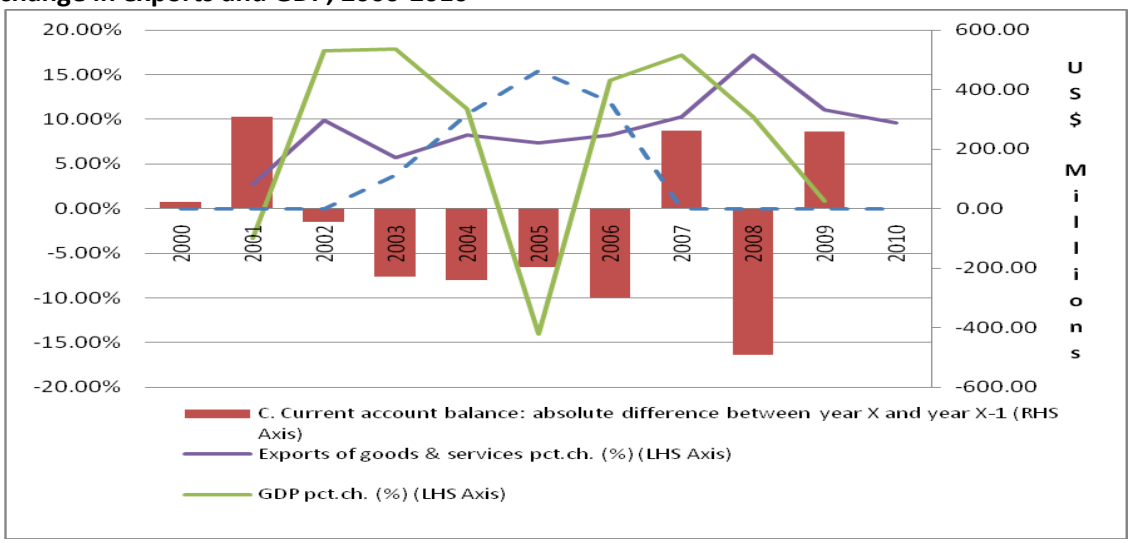
The FLEX and V-FLEX allocations constituted 0.19% in 2004, 5.0% in 2005, and 4.45% in 2006 as *a percentage of export earnings shortfall* (see table D1 in Appendix D); and in terms of Flex and V-Flex 0.17% in 2008 (see table D2 in Appendix D); and the Flex and V-Flex allocations as *a percentage of change in current account balance* were -0.257% in 2004, -11.67% in 2005, -5.31% in 2006, and -3.08% in 2008 (see table D3 in Appendix D). Due to its vulnerability to the crisis in terms of change in revenues (-1.1%) and change in the fiscal balance (excl. grants) of – 3 percentage points of GDP, Mauritius became one of 17 eligible countries which benefited from 4.2% (€10.9 mn) of the total V-Flex allocation of €260 Mn in 2009 with an impact on the financing gap of 50% (see table B10 in Appendix B).

Figure G7: Critical Public Expenditures and Total Shock Absorber payments



Source: Authors Calculations.

Figure G8: Shortfalls in export earnings, yearly current account difference, and percentage change in exports and GDP, 2000-2010



Source: Authors Calculations.

The total IMF allocation as a percentage of GDP constituted 1.17% in 2008 and 0.65% in 2009, whereas the total IMF allocation as a percentage of change in current account balance constituted respectively -10.98% in 2008 and 11.26% in 2009.

Finally, the total of all allocations by the EC, the IMF and the World Bank as a percentage of export earnings shortfall in Mauritius was 0.19% in 2004, 4.99% in 2005, and 4.45% in 2006 (see table D8 in Appendix D). The total of all allocations as *a percentage of GDP* was 0.01% in 2004, 0.39% in 2005, 0.23% in 2006, and 0.17% in 2008 (see table D9 in Appendix D). The total of all allocations as *a percentage of change in current account balance* was -0.25% in 2004, -11.67% in 2005, -5.31% in 2006, and -3.08% in 2008 (see table D10 in appendix D).

Mauritius remains vulnerable to global developments—but the private sector is dynamic, economic fundamentals are strong, institutions are robust, and the authorities have not only implemented far-reaching reforms in *an environment of continued macroeconomic stability*, they have also established a track record of strong *policy responses to unexpected shocks.* As with previous shocks, the government responded by enacting policies to absorb the impact of the shocks and to position the economy for a rebound by implementing bold policy reforms. This explains why Mauritius was able to maintain positive growth in 2009. Its comprehensive and exemplary policy response included fiscal stimulus, monetary easing, ensuring foreign exchange (FX) liquidity, strengthening the social safety net, and facilitating workouts of private sector debt and preservation of jobs (Imam and Köhler, 2010).

Some further issues

The main lessons to be learnt from the experience of the four ACP countries over the period 2000 to 2010 is that the ex-post EC FLEX facility failed to achieve its objective mainly because of both the lack of finance to be allocated to these four ACPs as well as delays in disbursement of FLEX payments because it didn't operate on a real time mechanism basis. Contrary to the FLEX, the EC's V-FLEX instrument against vulnerability worked pre-emptively because it was based on forecasts of fiscal losses and other vulnerability criteria, which helped to ease the impact rather than acting after the damage is done as in the case of FLEX. It provided rapid and targeted grants and acted as *a complement to the loan-based assistance* of World Bank, IMF and other regional development banks with whose support it was developed. The V-Flex is demand-driven and targeted at countries with a high degree of economic, social and political vulnerability, the right policies in place to fight the crisis and sufficient absorptive capacity as well as *a financing gap in their budgets* where EU support can make a difference by closing or significantly reducing this gap. This didn't appear to be entirely the case in the four country case studies in 2009 and 2010, although a certain positive correlation seems to be the case when looking at the figures above illustrating the relationship between the total facilities, excluding FLEX, as a share of GDP and government investment (i.e. GPFCF/GDP). Melissa Dalleau(2010) argues that if this well-conceived and, in many ways, innovative mechanism appears promising regarding its capacity to close fiscal financing gaps in beneficiary countries, it is somewhat disappointing to see it undermined by the narrowness of its envelope and its short-term setting. V-FLEX was conceived as a *"global safety net"* aimed at helping the most vulnerable ACP countries safeguard social spending in a context of deteriorated fiscal balances (Dalleau, 2010).

The overall fiscal balance (measured as general government revenue minus general government total expenditure) deteriorated from a surplus of 0.33% of GDP in 2007 to a deficit of 3.16% of GDP in 2009 in Benin; from a fiscal surplus of 1.05% in 2007 to a deficit of 3.14% of GDP in 2010 passing by a huge surplus of 60.13% of GDP in 2009 in Burundi; from 2006 the deficit gradually deteriorated from 1.22% to 4.19% of GDP in 2009 in DRC; and in Mauritius from a fiscal surplus of 3.47% of GDP in 2008 to a deficit of 3.37% of GDP in 2009 (IMF, WEO database). In response, the EU effectively designed and implemented, in a very short time, a well packaged proposal that secured EU member states' support by addressing their concerns (Dalleau, 2010). However, Dalleau (2010) concludes that V-FLEX remains, in terms of budget, a small facility that leaves out many ACP countries. This limited geographical scope is all the more problematic since, in theory, among those countries which cannot be considered eligible are those whose *"residual fiscal financing gap"* is too large to be "substantially" reduced.

Appendix H. Quantitative simulations of trigger options

Table H1: Overview Matrix

Eligibility Criteria	Eligible Developing Countries	Eligible ACP Countries	Eligible LLDCs	Eligible LICs
Export Loss 10%	Algeria; Angola; Argentina; Armenia; Azerbaijan; Bahamas; Bahrain; Barbados; Belarus; Belize; Bhutan; Bolivia; Botswana; Brazil; Cameroon; Central African Rep.; Chad; Chile; China; Colombia; Comoros; DRC; Congo Rep.; Cook Islands; Croatia; Dominica; Dominican Rep.; Ecuador; Egypt; El Salvador; Equatorial Guinea; Fiji; Gabon; Georgia; Guatemala; Guinea; Honduras; India; Indonesia; Iran; Iraq; Jamaica; Jordan; Kazakhstan; Kenya; Kuwait; Lesotho; Liberia; Libya; Macedonia (FYR); Madagascar; Malaysia; Maldives; Mauritius; Mexico; Mongolia; Morocco; Mozambique; Nigeria; Oman; Pakistan; Panama; Papua New Guinea; Paraguay; Peru; Philippines; Qatar; Russia; Rwanda; Saudi Arabia; Solomon Islands; South Africa; Sri Lanka; Sudan; Suriname; Swaziland; Syria; Tajikistan; Tanzania; Thailand; Tongo; Trinidad and Tobago; Tunisia; Turkey; Ukraine; UAE; Uruguay; Venezuela; Yemen; Zambia; Zimbabwe **(95)**.	Angola; Bahamas; Barbados; Belize, Botswana; Cameroon; Central African Rep.; Chad; Comoros; DRC; Congo Rep.; Cook Islands; Dominica; Dominican Rep.; Equatorial Guinea; Fiji; Gabon; Guinea; Jamaica; Kenya; Lesotho; Liberia; Madagascar; Mauritius; Mozambique; Nigeria; Papua New Guinea; Rwanda; Solomon Islands; South Africa; Sudan; Suriname; Swaziland; Tanzania; Tonga; Trinidad and Tobago; Zambia; Zimbabwe **(38)**.	Afghanistan; Angola; Bhutan; Central African Rep.; Chad; Comoros; DRC; Equatorial Guinea; Guinea; Lesotho; Liberia; Madagascar; Mozambique; Rwanda; Solomon Islands; Sudan; Tanzania; Yemen; Zambia **(19).**	Afghanistan; Central African Rep.; Chad. Comoros; DRC; Guinea; Kenya; Liberia; Madagascar; Mozambique; Rwanda; Solomon Islands; Tajikistan; Tanzania; Zambia; Zimbabwe **(16)**.
Export loss 5%	Afghanistan; Albania; Algeria; Angola; Antigua and Barbuda; Argentina; Armenia; Azerbaijan; Bahamas; Barbados; Belarus; Belize; Bhutan; Bolivia; Botswana; Brazil; Cameroon; Central African Rep.; Chad; Chile; China; Colombia; Comoros; DRC; Cook Islands; Costa Rica; Cote d'Ivoire; Croatia; Dominica; Dominican Rep.; Ecuador; Egypt; El Salvador; Equatorial Guinea; Fiji; Gabon; Georgia; Guatemala; Guinea; Honduras; India; Indonesia; Iran; Iraq; Jamaica; Jordan; Kazakhstan; Kenya; Kuwait; Kyrgyz Rep.; Lesotho; Liberia; Libya; Macedonia; Madagascar; Malaysia; Maldives; Mauritius; Mexico; Mongolia; Morocco; Mozambique; Nicaragua; Nigeria; Oman; Pakistan; Panama; Papua New Guinea; Paraguay; Peru; Philippines; Qatar; Russia; Rwanda; Saudi Arabia; Senegal; Sierra Leone; Solomon Islands; South Africa; Sri Lanka; Sudan; Surinam. Syria;	Angola; Antigua & Barbuda; Bahamas; Barbados; Belize; Botswana; Cameroun; Central African Rep.; Chad; Comoros; DRC; Congo, Rep.; Cook Islands; Cote D'Ivoire; Dominica; Dominican Rep.; Equatorial Guinea; Fiji; Gabon; Guinea; Jamaica; Kenya; Lesotho; Liberia; Madagascar; Mauritius; Mozambique; Nigeria; Papua New Guinea; Rwanda; Senegal; Sierra Leone; Solomon Islands; South Africa; Sudan; Suriname; Swaziland; Tanzania; Tonga; Trinidad and Tobago; Zambia; Zimbabwe **(42**).	Afghanistan; Angola; Bhutan; Central African Rep.; Chad; Comoros; DRC; Equatorial Guinea; Guinea; Lesotho; Liberia; Madagascar; Mozambique; Rwanda; Senegal; Sierra Leone; Solomon Islands; Sudan; Tanzania; Yemen; Zambia **(21)**.	Afghanistan; Central African Rep.; Chad; Comoros; DRC; Guinea; Kenya; Kyrgyz Rep.; Liberia; Madagascar; Mozambique; Rwanda; Sierra Leone; Solomon Islands; Tajikistan; Tanzania; Zambia; Zimbabwe **(18)**.

	Tajikistan; Tanzania; Thailand; Tonga; Trinidad and Tobago; Tunisia; Turkey; Ukraine; UAE; Uruguay; Venezuela; Vietnam; Yemen; Zambia; Zimbabwe **(103)**.			
GDP loss 1%	Albania; Algeria; Angola; Antigua and Barbuda; Argentina; Armenia; Azerbaijan; Bahamas; Bahrain; Belarus; Benin; Bhutan; Bolivia; Bosnia & Herzegovina; Botswana; Brazil; Brunei Darussalam; Burkina Faso; Cameroon; Cape Verde; Central African Rep.; Chad; Chile; China; Colombia; Congo, Rep.; Costa Rica; Cote d'Ivoire; Croatia; Equatorial Guinea; Fiji; Gabon; Gambia; Georgia; Grenada; Guatemala; Guinea-Bissau; Haiti; Jamaica; Kazakhstan; Kenya; Kuwait; Kyrgyz Rep.; Lebanon; Lesotho; Libya; Madagascar; Malaysia; Mauritania; Mauritius; Moldova; Mongolia; Namibia; Nepal; Nicaragua; Niger; Nigeria; Oman; Papua New Guinea; Paraguay; Philippines; Qatar; Russia; Rwanda; Samoa; Saudi Arabia; Senegal; Serbia; Seychelles; Sierra Leone; Solomon Islands; St. Kitts and Nevis; St. Lucia; Sudan; Tajikistan; Thailand; Togo; Tonga; Trinidad and Tobago; Tunisia; Turkey; Uganda; Ukraine; Yemen; Zambia **(86)**.	Angola; Antigua and Barbuda; Bahamas; Barbados; Belize; Benin; Botswana; Burkina Faso; Cameroon; Cape Verde; Central African Rep.; Chad; Congo, Rep.; Cote d'Ivoire; Equatorial Guinea; Fiji; Gabon; Gambia; Grenada; Guinea-Bissau; Haiti; Jamaica; Kenya; Lesotho; Madagascar; Mauritania; Mauritius; Namibia; Niger; Nigeria; Papua New Guinea; Rwanda; Samoa; Senegal; Seychelles; Sierra Leone; Solomon Islands; St. Kitts and Nevis; St. Lucia; Sudan; Swaziland; Togo; Tonga; Trinidad and Tobago; Uganda; Zambia **(46)**.	Angola; Benin; Bhutan; Burkina Faso; Central African Rep.; Chad; Equatorial Guinea; Gambia; Guinea-Bissau; Haiti; Lesotho; Madagascar; Mauritania; Myanmar; Nepal; Niger; Rwanda; Samoa; Senegal; Sierra Leone; Solomon Islands; Sudan; Togo; Uganda; Yemen; Zambia **(26)**.	Benin; Burkina Faso; Central African Rep.; Chad; Gambia; Guinea-Bissau; Haiti; Kenya; Kyrgyz Rep.; Madagascar; Mauritania; Myanmar; Nepal; Niger; Rwanda; Sierra Leone; Solomon Islands; Tajikistan; Togo; Uganda; Zambia **(21)**.
GDP Loss 3%	Albania; Algeria; Angola; Antigua and Barbuda; Argentina; Armenia; Azerbaijan; Bahrain; Belarus; Benin; Bhutan; Bolivia; Bosnia & Herzegovina; Botswana; Brazil; Brunei; Cameroun; Cape Verde; Central African Rep.; Chad; Chile; Colombia; Congo, Rep.; Cote d'Ivoire; Croatia; Equatorial Guinea; Fiji; Gabon; Gambia; Georgia; Grenada; Guatemala; Haiti; Jamaica; Kazakhstan; Kenya; Kuwait; Kyrgyz Rep.; Lebanon; Lesotho; Libya; Madagascar; Malaysia; Mauritania; Mauritius; Moldova; Mongolia; Nepal; Nigeria; Oman; Paraguay; Philippines; Qatar; Russia; Rwanda; Saudi Arabia; Senegal; Serbia; Seychelles; Sierra Leone; Solomon Islands; St. Kitts and Nevis; St. Lucia; Sudan; Tajikistan; Thailand; Togo; Tonga; Trinidad and Tobago; Tunisia; Turkey; Uganda; Ukraine; Yemen; Zambia **(76)**.	Angola; Antigua and Barbuda; Benin; Botswana; Cameroun; Cape Verde; Central African Republic; Chad; Congo, Rep.; Cote D'Ivoire; Equatorial Guinea; Fiji; Gabon; Gambia; Grenada; Guinea-Bissau; Haiti; Jamaica; Kenya; Lesotho; Madagascar; Mauritania; Mauritius; Nigeria; Rwanda; Senegal; Seychelles; Sierra Leone; Solomon Islands; St.Kitts and Nevis; St.Lucia; Sudan; Togo; Tonga; Trinidad and Tobago; Uganda; Zambia **(37)**.	Angola; Benin; Central African Rep.; Chad; Equatorial Guinea; Gambia; Guinea-Bissau; Haiti; Lesotho; Madagascar; Mauritania; Rwanda; Senegal; Sierra Leone; Solomon Islands; Sudan; Togo; Uganda; Zambia **(19).**	Benin; Central African Rep.; Chad; Gambia; Guinea-Bissau; Haiti; Kenya; Kyrgyz Rep.; Madagascar; Mauritania; Nepal; Rwanda; Sierra Leone; Solomon Islands; Tajikistan; Togo; Uganda; Zambia **(18).**
Current Account Loss 1%	Algeria; Angola; Azerbaijan; Bahrain; Belarus; Bhutan; Bolivia; Botswana; Brunei Darussalam; Cameroon; China; Ecuador; Egypt; Ethiopia; Kazakhstan;	Angola; Botswana; Cameroon; Ethiopia; Lesotho; Namibia; Nigeria; Papua New	Angola; Bhutan; Ethiopia; Laos; Lesotho; Nepal; Rwanda; Sudan;	Ethiopia; Laos; Nepal; Rwanda; Tajikistan **(5)**.

	Kosovo; Kuwait; Laos; Lebanon; Lesotho; Libya; Malaysia; Namibia; Nepal; Nigeria; Oman; Papua New Guinea; Russia; Rwanda; Saudi Arabia; St.Kitts and Nevis; Sudan; Suriname; Swaziland; Tajikistan; Venezuela; Yemen (**38**)	Guinea; Rwanda; St. Kitts and Nevis; Sudan; Suriname; Swaziland **(13)**.	Yemen **(9)**.	
Current Account Loss 50%	Algeria; Angola; Bahrain; Belarus; Bhutan; Bolivia ; Cameroun ; Ecuador; Egypt; Kazakhstan; Kuwait; Laos; Lebanon; Lesotho; Libya; Namibia; Nepal; Oman; Papua New Guinea; Russia; Rwanda; Saudi Arabia; Sudan; Swaziland; Tajikistan; Venezuela, Yemen **(28)**.	Angola; Botswana; Cameroun; Lesotho; Namibia; Papua New Guinea; Rwanda; Sudan; Swaziland **(9)**.	Angola; Bhutan; Laos; Lesotho; Nepal; Rwanda; Sudan; Yemen **(8)**.	Laos; Nepal; Rwanda; Tajikistan **(4)**.

Note: we have included South Africa as associated ACP member.

Below we report a sample of the simulation results.

Table H2: Financial Pro-Rate Provision, All DCs, Export loss 10%, EUR, (€150 Mn)

Country	Export value y-o-y change (%)		(1.1) Average total exports (N-4+N-3+N-2+N-1 less the extreme value)/3 (USD Mn)	(1.2) Total export loss: export value year N - (1.1), negative if deficit (USD Mn)	Export Loss: 2009-2008 EURO	Financial Provision by country EURO
	2008	2009	2009	2009	2009	2009
Algeria	32.93	-42.82	53550.0	-8310.0	-24366.50	3.55
Angola	66.11	-44.47	32734.9	0.0	-23085.03	3.37
Argentina	26.55	-20.57	47566.1	0.0	-10444.51	1.52
Armenia	-13.28	-34.00	1003.9	-306.1	-258.48	0.04
Azerbaijan, Rep. of	688.29	-69.22	5592.5	0.0	-23772.87	3.47
Bahamas, The	15.51	-10.98	535.6	-37.1	-44.21	0.01
Bahrain, Kingdom of	40.85	-36.13	11705.8	0.0	-4901.35	0.71
Barbados	6.41	-17.24	387.7	-19.0	-55.23	0.01
Belarus	34.17	-34.59	19996.1	0.0	-8102.94	1.18
Belize	14.22	-22.77	270.1	-46.1	-47.51	0.01
Bhutan	15.01	-68.17	735.5	-455.5	-431.28	0.06
Bolivia	58.31	-30.33	3708.0	0.0	-1539.43	0.22
Botswana	-5.08	-28.77	4661.0	-1071.0	-1042.84	0.15
Brazil	23.21	-22.71	138995.0	0.0	-32325.88	4.71
Cameroon	16.00	-28.74	3892.1	-792.1	-899.00	0.13
Central African Rep.	-5.13	-40.54	179.3	-69.3	-53.94	0.01
Chad	-1.42	-24.14	3514.3	-863.8	-606.45	0.09
Chile	-1.79	-21.81	64267.1	-12304.5	-10423.29	1.52
China,P.R.: Mainland	17.32	-15.88	983041.0	0.0	-163164.90	23.80

China,P.R.:Hong Kong	5.27	-12.18	341333.3	-22823.3	-31763.47	4.63
China,P.R.:Macao	-21.44	-51.89	2525.3	-1564.3	-745.38	0.11
Colombia	28.47	-14.32	25106.4	0.0	-3942.15	0.57
Comoros	76.47	-13.33	10.2	0.0	-1.44	0.00
Congo, Dem. Rep. of	51.92	-18.99	2370.0	0.0	-539.40	0.08
Congo, Republic of	48.36	-37.02	5893.3	-193.3	-2409.32	0.35
Cook Islands	-23.11	-30.00	4.8	-2.0	-0.86	0.00
Croatia	14.13	-25.78	10504.4	-30.6	-2616.38	0.38
Dominica	10.03	-14.48	41.0	-6.8	-4.16	0.00
Dominican Republic	-9.15	-29.57	2320.1	-633.9	-509.05	0.07
Ecuador	33.63	-25.45	12226.9	0.0	-3388.58	0.49
Egypt	62.01	-12.13	13515.7	0.0	-2290.22	0.33
El Salvador	15.15	-17.07	3625.5	0.0	-562.31	0.08
Equatorial Guinea	85.64	-50.93	8435.5	0.0	-6868.36	1.00
Fiji	20.31	-32.39	711.5	-97.6	-211.53	0.03
Gabon	40.34	-38.92	5353.3	-253.3	-2337.40	0.34
Georgia	21.53	-24.35	1032.7	0.0	-263.93	0.04
Guatemala	20.54	-29.14	3877.1	-42.5	-1134.35	0.17
Guinea	18.18	-24.62	963.3	0.0	-230.14	0.03
Honduras	35.97	-20.07	2022.1	0.0	-416.01	0.06
India	29.73	-15.22	123792.2	0.0	-21295.51	3.11
Indonesia	18.30	-14.30	102742.6	0.0	-14355.23	2.09
Iran, I.R. of	40.18	-32.92	72088.0	0.0	-27545.36	4.02
Iraq	#VALUE!	-33.95	#VALUE!	0.0	-14599.76	2.13
Jamaica	22.82	-48.10	1814.4	-495.2	-879.32	0.13
Jordan	36.03	-16.14	5067.3	0.0	-903.95	0.13
Kazakhstan	48.85	-39.99	38471.3	0.0	-20700.30	3.02
Kenya	21.87	-10.23	3603.2	0.0	-365.89	0.05
Kuwait	39.49	-42.46	54528.3	-4200.0	-26707.78	3.90
Lesotho	11.03	-27.78	718.7	-68.7	-179.80	0.03
Liberia	30.87	-37.02	163.1	0.0	-69.76	0.01
Libya	37.85	-21.09	27972.7	0.0	-6783.49	0.99
Macedonia, FYR	18.73	-31.37	2580.3	0.0	-884.47	0.13
Madagascar	24.23	-31.10	1061.5	0.0	-373.29	0.05
Malaysia	19.11	-24.89	159156.3	-1672.3	-37534.33	5.47
Maldives	16.81	-39.32	112.4	-36.0	-35.60	0.01
Mauritius	6.53	-18.54	2316.9	-374.9	-317.86	0.05
Mexico	7.27	-21.29	271441.0	-41758.0	-44693.96	6.52
Mongolia	34.43	-25.07	1498.9	0.0	-457.91	0.07
Morocco	32.62	-30.92	13091.2	0.0	-4524.13	0.66

Mozambique	-1.89	-25.00	2543.7	-593.7	-467.48	0.07
Nigeria	23.77	-34.88	59240.5	-6740.5	-20220.52	2.95
Oman	56.28	-25.63	21470.9	0.0	-6951.64	1.01
Pakistan	13.93	-13.78	16939.5	0.0	-2013.76	0.29
Panama	7.16	-23.99	1091.7	-144.0	-215.16	0.03
Papua New Guinea	22.05	-23.09	4064.3	0.0	-948.61	0.14
Paraguay	58.43	-29.04	2137.1	0.0	-932.29	0.14
Peru	13.08	-14.73	27747.0	-862.2	-3340.40	0.49
Philippines	-2.12	-22.15	48963.6	-10655.6	-7837.05	1.14
Qatar	34.68	-26.67	62544.2	-21044.2	-10854.60	1.58
Russian Federation	33.12	-35.69	300709.3	0.0	-121096.74	17.66
Rwanda	45.08	-25.17	145.6	0.0	-46.41	0.01
Saudi Arabia	34.33	-39.86	208448.7	-19948.7	-89847.50	13.10
Solomon Islands	27.18	-22.37	130.2	0.0	-33.86	0.00
South Africa	21.28	-26.02	59861.6	0.0	-15838.65	2.31
Sri Lanka	5.12	-12.93	7587.6	-503.0	-756.73	0.11
Sudan	40.42	-37.35	6449.1	0.0	-3344.28	0.49
Suriname	-53.03	-16.64	1153.3	-640.3	-73.65	0.01
Swaziland	-32.50	-18.99	2468.9	-1018.9	-244.53	0.04
Syrian Arab Republic	22.24	-31.01	44791.3	-1287.5	-14061.58	2.05
Tajikistan	-4.23	-28.18	1424.4	-414.5	-284.95	0.04
Tanzania	32.22	-11.48	1811.2	0.0	-220.77	0.03
Thailand	14.32	-13.59	131613.0	0.0	-17196.79	2.51
Tonga	11.88	-22.22	9.0	-2.0	-1.44	0.00
Trinidad and Tobago	26.56	-50.87	15817.2	-6679.5	-6805.27	0.99
Tunisia	27.41	-25.21	12450.3	0.0	-3502.43	0.51
Turkey	23.08	-22.63	88761.0	0.0	-21492.57	3.13
Ukraine	35.82	-40.70	40630.8	-927.9	-19599.28	2.86
United Arab Emirates	50.36	-24.42	137930.7	0.0	-40670.76	5.93
Uruguay	43.15	-15.63	3947.6	0.0	-721.90	0.11
Venezuela, Rep. Bol.	37.55	-39.46	60077.3	-2482.3	-27000.93	3.94
Yemen, Republic of	17.95	-31.25	5996.0	-1046.0	-1618.32	0.24
Zambia	3.23	-14.73	4573.6	-264.0	-535.63	0.08
Zimbabwe	5.00	-20.93	2071.8	-371.8	-323.64	0.05
Total				**-174520.7**	**-1028405.86**	**150.00**

Table H3: Financial Pro-Rate Provision, ACPs, Export loss 10%, EUR, (€150 Mn)

Country	Export value y-o-y change (%)		(1.1) Average total exports (N-4+N-3+N-2+N-1 less the extreme value)/3 (USD Mn)	(1.2) Total export loss: export value year N - (1.1), negative if deficit (USD Mn)	Export Loss: 2009-2008	Financial Provision by country	Financial Provision by country
					USD	USD	EURO
	2008	2009	2009	2009	2009	2009	2009
Angola	66.11	-44.47	32734.9	0.0	-32098.2	53.36	38.37
Bahamas, The	15.51	-10.98	535.6	-37.1	-61.477	0.10	0.07
Barbados	6.41	-17.24	387.7	-19.0	-76.791	0.13	0.09
Belize	14.22	-22.77	270.1	-46.1	-66.059	0.11	0.08
Botswana	-5.08	-28.77	4661.0	-1071.0	-1450	2.41	1.73
Cameroon	16.00	-28.74	3892.1	-792.1	-1250	2.08	1.49
Central African Rep.	-5.13	-40.54	179.3	-69.3	-75	0.12	0.09
Chad	-1.42	-24.14	3514.3	-863.8	-843.23	1.40	1.01
Comoros	76.47	-13.33	10.2	0.0	-2	0.00	0.00
Congo, Dem. Rep. of	51.92	-18.99	2370.0	0.0	-750	1.25	0.90
Congo, Republic of	48.36	-37.02	5893.3	-193.3	-3350	5.57	4.01
Cook Islands	-23.11	-30.00	4.8	-2.0	-1.2	0.00	0.00
Dominica	10.03	-14.48	41.0	-6.8	-5.7902	0.01	0.01
Dominican Republic	-9.15	-29.57	2320.1	-633.9	-707.8	1.18	0.85
Equatorial Guinea	85.64	-50.93	8435.5	0.0	-9550	15.87	11.42
Fiji	20.31	-32.39	711.5	-97.6	-294.12	0.49	0.35
Gabon	40.34	-38.92	5353.3	-253.3	-3250	5.40	3.89
Guinea	18.18	-24.62	963.3	0.0	-320	0.53	0.38
Jamaica	22.82	-48.10	1814.4	-495.2	-1222.64	2.03	1.46
Kenya	21.87	-10.23	3603.2	0.0	-508.74	0.85	0.61
Lesotho	11.03	-27.78	718.7	-68.7	-250	0.42	0.30
Liberia	30.87	-37.02	163.1	0.0	-97	0.16	0.12
Madagascar	24.23	-31.10	1061.5	0.0	-519.04	0.86	0.62
Mauritius	6.53	-18.54	2316.9	-374.9	-441.97	0.73	0.53
Mozambique	-1.89	-25.00	2543.7	-593.7	-650	1.08	0.78
Nigeria	23.77	-34.88	59240.5	-6740.5	-28115.3	46.74	33.61
Papua New Guinea	22.05	-23.09	4064.3	0.0	-1318.98	2.19	1.58
Rwanda	45.08	-25.17	145.6	0.0	-64.533	0.11	0.08
Solomon Islands	27.18	-22.37	130.2	0.0	-47.083	0.08	0.06
South Africa	21.28	-26.02	59861.6	0.0	-22022.6	36.61	26.33
Sudan	40.42	-37.35	6449.1	0.0	-4650	7.73	5.56
Suriname	-53.03	-16.64	1153.3	-640.3	-102.411	0.17	0.12
Swaziland	-32.50	-18.99	2468.9	-1018.9	-340	0.57	0.41
Tanzania	32.22	-11.48	1811.2	0.0	-306.96	0.51	0.37

Tonga	11.88	-22.22	9.0	-2.0	-2	0.00	0.00
Trinidad and Tobago	26.56	-50.87	15817.2	-6679.5	-9462.28	15.73	11.31
Zambia	3.23	-14.73	4573.6	-264.0	-744.76	1.24	0.89
Zimbabwe	5.00	-20.93	2071.8	-371.8	-450	0.75	0.54
Total				**-174520.7**	**-125467.96**	**208.57**	**150.00**

Note: we have included South Africa as associated ACP member.

Table H4: Financial Pro-Rate Provision, LICs, Trigger: Export loss 10%, EUR, (€150 Mn)

Country	Export value y-o-y change (%)		(1.1) Average total exports (N-4+N-3+N-2+N-1 less the extreme value)/3 (USD Mn)	(1.2) Total export loss: export value year N - (1.1), negative if deficit (USD Mn)	Export Loss: 2009-2008	Financial Provision by country	Financial Provision by country
					USD	USD	EURO
	2008	**2009**	**2009**	**2009**	**2009**	**2009**	**2009**
Afghanistan, I.R. of	36.82	-22.06	429.7	0.0	-150	5.28	3.798
Central African Rep.	-5.13	-40.54	179.3	-69.3	-75	2.64	1.899
Chad	-1.42	-24.14	3514.3	-863.8	-843.23	29.68	21.349
Comoros	76.47	-13.33	10.2	0.0	-2	0.07	0.051
Congo, Dem. Rep. of	51.92	-18.99	2370.0	0.0	-750	26.40	18.989
Guinea	18.18	-24.62	963.3	0.0	-320	11.27	8.102
Kenya	21.87	-10.23	3603.2	0.0	-508.74	17.91	12.880
Liberia	30.87	-37.02	163.1	0.0	-97	3.41	2.456
Madagascar	24.23	-31.10	1061.5	0.0	-519.04	18.27	13.141
Mozambique	-1.89	-25.00	2543.7	-593.7	-650	22.88	16.457
Rwanda	45.08	-25.17	145.6	0.0	-64.533	2.27	1.634
Solomon Islands	27.18	-22.37	130.2	0.0	-47.083	1.66	1.192
Tajikistan	-4.23	-28.18	1424.4	-414.5	-396.2	13.95	10.031
Tanzania	32.22	-11.48	1811.2	0.0	-306.96	10.81	7.772
Zambia	3.23	-14.73	4573.6	-264.0	-744.76	26.22	18.856
Zimbabwe	5.00	-20.93	2071.8	-371.8	-450	15.84	11.393
Total				**-174520.7**	**-5924.55**	**208.57**	**150.000**

Appendix I. Shocks and economic growth: further evidence

This appendix provides further evidence on how shocks affect growth. External shocks, such as commodity price fluctuations, especially if leading to terms of trade declines; natural disasters; volatility of capital flows and remittances; fluctuations of world interest rates, country spreads and exchange rates are often blamed for the poor economic performance of low-income countries (LICs). Fosu (2000) finds that these international shocks all appear to exercise adverse implications for growth in Africa.

Guillaumont et al., (2003) recall the nature of the vulnerability to price shocks, which they believe legitimates making the dampening of these shocks a reasonable goal for the development cooperation policy. By the time of the beverage booms of the late 1970s (coffee, tea, cocoa), there was a clear consensus on the desirability of stabilising taxation. The consensus was based in part on the belief that the private sector (particularly in the case of poor, farmers) was unlikely to respond appropriately to temporary shocks; booms would be squandered rather than saved (Bevan et al., 1993). Consequently, trade and aid relations between the EU and the ACP countries became first governed by a series of Lome treaties from 1975 to 1999 which had led to the establishment of a Stabex scheme set up to 'mitigate the harmful consequences of instability'. Under Stabex whenever an ACP country experiences a fall in export revenue for a set of specific agricultural commodities then Stabex funds were allocated by the Commission to the government concerned. Initially the purpose was seen as compensating the farmers producing the commodities for their income loss. The principle was eroded over time. Increasingly Stabex came to be seen as an additional source of funding for Structural Adjustment Programes (SAPs) so that, while only terms of trade losses would entitle a government to Stabex funds, the link with compensating producers became increasingly tenuous. The scheme was therefore severely criticised including by Collier et al., (1999).

In spite of an extensive literature, the behaviour of the prices of primary commodities remains poorly understood. The long-run stagnation, or even secular decline, of the prices of tropical commodities has been attributed to the exercise of market power by Northern manufacturers, and to the supposed low elasticity of demand for primary commodities (Prebisch, 1959; Singer, 1950). In response to this long debate a paper by Hadass and Williamson (2003) fills part of an empirical gap by constructing a country-specific panel data base covering the period from 1870 to 1940, by documenting terms of trade trends by country and region, and, finally, by estimating the impact of the price shocks on long run economic performance. They find the impact to have been asymmetric between center and periphery. By using the same new panel database for 35 countries, Blattman et al., (2004) also estimate the impact of terms of trade volatility and secular change on country performance between 1870 and 1939. They find that volatility was much more important (in the sense that those commodities with more volatile prices have grown slowly relative both to the industrial leaders and to other primary product exporters) for accumulation and growth than was secular change. Dehn (2000a) finds that a positive and highly significant relationship between commodity export concentration and commodity price uncertainty is found for all the measures. The variability of commodity prices has been attributed to supply shocks confronting inelastic demand, and to the behaviour of speculators (Deaton and Laroque, 1992).

However, none of these accounts are fully satisfactory, either theoretically or empirically according to Deaton and Laroque (2003). Deaton and Miller (1995) discusses whether poor macroeconomic results should be attributed to the inherent difficulty of predicting commodity-price fluctuations, or, rather, to flawed internal political and fiscal arrangements. Their results support the conclusions of Bevan, Collier, and Gunning (1991) on the diversity of experience across different African countries, but unlike their work and more in accord with the results of Collier and Gunning (1995), the Deaton & Miller (1995) study finds no strong evidence for the general applicability of what has become the conventional wisdom, that commodity booms are generally harmful. Similarly, Raddatz (2007) finds that external shocks can only explain a small fraction of the output variance of a typical LIC. Internal factors are the main source of fluctuations. As Raddatz (2007) shows, the majority of shocks experienced by developing countries are of domestic origin – and in the past have often derived from weak macro policy discipline. Moreover, by comparing external and internal shocks as sources of macroeconomic fluctuations in African countries in the 1963-1989 and 1990-2003 periods, Raddatz (2008) shows an increase in the relative importance of external shocks as sources of output instability in African countries in the last 15 years. He argues that this is the result of two factors: (i) a decline in the variance of internal shocks, and (ii) an increase in the vulnerability of output to external shocks.

Hoffmaister, Roldos & Wickham (1998), based on a 1971-1993 VAR, find that 77% of output variance is due to supply shocks. On the other hand, Broda (2004) based on a 1973-1996 VAR finds that terms of trade shocks account for 33% of output variance in fixed exchange rate regimes and even 15% in floating exchange rate regimes. Kose (2002) analyses the role of world price shocks – fluctuations in the prices of capital, intermediate, and primary goods, and in the world real interest rate – in the generation and propagation of business cycles in small open developing countries. He constructs a stochastic dynamic multi-sector small open economy model. He utilizes variance decomposition methods to quantitatively evaluate the impact of world price shocks. The results indicate that world price shocks account for a significant fraction of business cycle variability in developing countries. Mendoza (1995) analysed the quantitative importance of terms of trade shocks in driving business cycles using a dynamic stochastic small open economy model. The paper focuses on aggregate output fluctuations and finds that terms of trade disturbances explain 56% of output variation. Kose's (2002) paper extends Mendoza's work by developing a richer production structure that captures several empirically relevant features of developing economies. Kose find that world price shocks play an important role in driving business cycles in small open developing economies: roughly 88% of aggregate output fluctuations can be explained by world price shocks. These shocks are able to account for 90% of investment variation. Moreover, world price shocks, with their significant impact on factors of production, such as capital goods and intermediate inputs, are able to explain the majority of the other variables' fluctuations.

Drummond and Ramirez (2009) find that a nonfuel-commodity-prices export revenue reduction by 10% reduces growth in SSA by 1.9 percentage points after 2 years. Collier and Dehn (2001) found that negative shocks have substantial adverse effects on output, which even over a period of four years or less are around twice as large as the direct loss of export income. Moreover, Collier and Dehn (2001) argue that the adverse effects of negative shocks on growth can be mitigated through offsetting increases in aid. Indeed, targeting aid to countries experiencing negative shocks appears to be even more important for aid effectiveness than targeting aid to countries with good policies. But the authors show that, overall, donors have not used aid for

this purpose. The adverse effects of negative export price shocks can, however, be mitigated by broadly contemporaneous increases in aid. The implied pay-off to aid targeted to shock compensation is large relative to its normal growth-enhancing effects, and is also large relative to the improvements in aid effectiveness achievable from targeting aid onto better policy environments.

Incorporating shocks into the Alesina-Dollar model (2000) of aid allocation, which examines various donor country aid allocation in pooled regressions covering the period from 1970 to 1994, Collier and Dehn (2001) found no evidence that donors had been responsive to countries suffering large negative terms of trade shocks. Thus, both policy and adverse export price shocks should influence aid allocations but have not in the past done so. As donors adjust their allocation rules to take these circumstances into account, the effectiveness of aid in reducing poverty can be expected to increase. By examining the duration and magnitude of cycles in commodity prices Cashin et al. (2002) find that for the majority of commodities, price slumps last longer than price booms. How far prices fall in a slump is found to be slightly larger than how far they tend to rebound in a subsequent boom.

Bevan, Collier and Gunning (1993) conclude that policy responses to trade shocks vary widely. There is evidence of policy changes in either direction in response to positive external shocks. In the case of negative shocks there is a case for government stabilisation. However, a government dissaving policy will usually be considered as incredible and private sector responses will then make the policy infeasible. It is unlikely that the policy will be considered as credible unless government dissaving is accompanied by rapid fiscal retrenchment.

Dupasquier and Osakwe (2006) suggest that policymakers can reduce macroeconomic instability and vulnerability to shocks by diversifying their export structures, using fiscal policy in a countercyclical manner, and improving the functioning of the financial sector. Indeed increases in aid and other compensatory flows can open the space for allowing countries that are foreign exchange and/or fiscally constrained to pursue counter-cyclical policies.

Winters et al.(2010) argues that there are two routes to stronger LIC growth, namely: (1) Mitigating downturns; and (2) Raising underlying growth rate. A notable feature of developing country growth is volatility so, as Easterly (1993) points out, long run growth averages mask distinct periods of success and failure. For example, growth in Africa has increased significantly since the mid 1990s and became less volatile, and there has been a substantial reduction in the frequency and severity of growth declines in all African economies (Arbache and Page, 2009). Moreover, growth volatility is higher in developing countries than developed ones (Pritchett, 2000).

Winters et al. (2010) come to a similar result, namely that the highest growth volatility is in LICs and the lowest is in high income countries. They arrived at this result by using two measures of income growth volatility: (i) The first is a measure of the standard deviation of each country's growth rate about its own mean growth, averaged by income categories; (ii) the second measures the absolute values of the first differences in growth rates, and is thus focused on year- to-year volatility. Winters et al., (2010) analysis of the countries that started off in the LIC group suggests that the higher growth volatility that they face does not preclude their growing.

Winters et al. (2010) show that a 1962 sample of LICs managed pretty steady growth since 1960. Because they had both less frequent and shallower growth declines than a 2008 sample, mitigating those declines offers less spectacular returns. Using the countries that were LICs in 1962 to guide the expectations about the future growth of today's LICs Winters et al., suggests that we should invest in both raising underlying growth rates and in mitigating downturns. They find that the returns to focussing exclusively on halving the severity of downturns are just over half a percentage point on the average growth rate.

Winters et al.'s (2010) analysis of LIC growth suggests that strategies: (i) to raise the underlying rate of growth and (ii) to mitigate downturns are needed and, that the effectiveness of such strategies in any given country will be determined by the strength and effectiveness of their institutions and governance. By contrast, in those countries with low quality institutions disturbances tend to lead to crises and stagnation and they manage only 15% of years in the stable growth regime. These results correspond to Rodrik's (1999) arguments that solid institutions are the key to coping with and emerging from external shocks (Winters et al., 2010).

Hausmann et al (2005) use the most demanding criteria to define a growth acceleration in the literature they surveyed. According to them the significant triggers for accelerations e.g. include positive terms of trade shocks, which are conducive only to unsustained episodes of growth. Openness to world trade and investment flows often helps countries to ameliorate domestic macro-economic shocks, but it can also open them up to a new source of shocks from outside. One important contributor to macro stability then can be the ability to save in good times and borrow in bad. Winters et al. (2010) believes that the IMF's flexible counter-cyclical response to the recent global slowdown has been extremely successful in enabling LICs to maintain public sector spending and investment.

Subject to the quality of spending decisions and the sustainability of debt levels (greatly aided by recent debt relief (e.g. DRC) and most LICs' fiscal conservatism over recent years) the ability to use fiscal policy anti-cyclically is valuable both in macro-economic terms and in terms of social welfare (Winters et al., 2010).

Winters et al., (2010) concludes that there is nothing that G20 can do to force macro-stability on LICs, but, along with international institutions, it can encourage local efforts through a supportive narrative and leading by example. International financial institutions, particularly the IMF, have moved towards more flexible approaches to macro management and policy advice for LICs which G20 can continue to support. It can also create conditions in which managing shocks is easier and continue to support IMF surveillance and monitoring of LICs that experience high levels of macro instability (Winters et al., 2010).

Appendix J. Shock measures based on IMF forecasts

Table J1 GDP shock (2009 forecast for GDP growth in 2009 minus 2008 forecasts for GDP growth in 2009), ACP countries

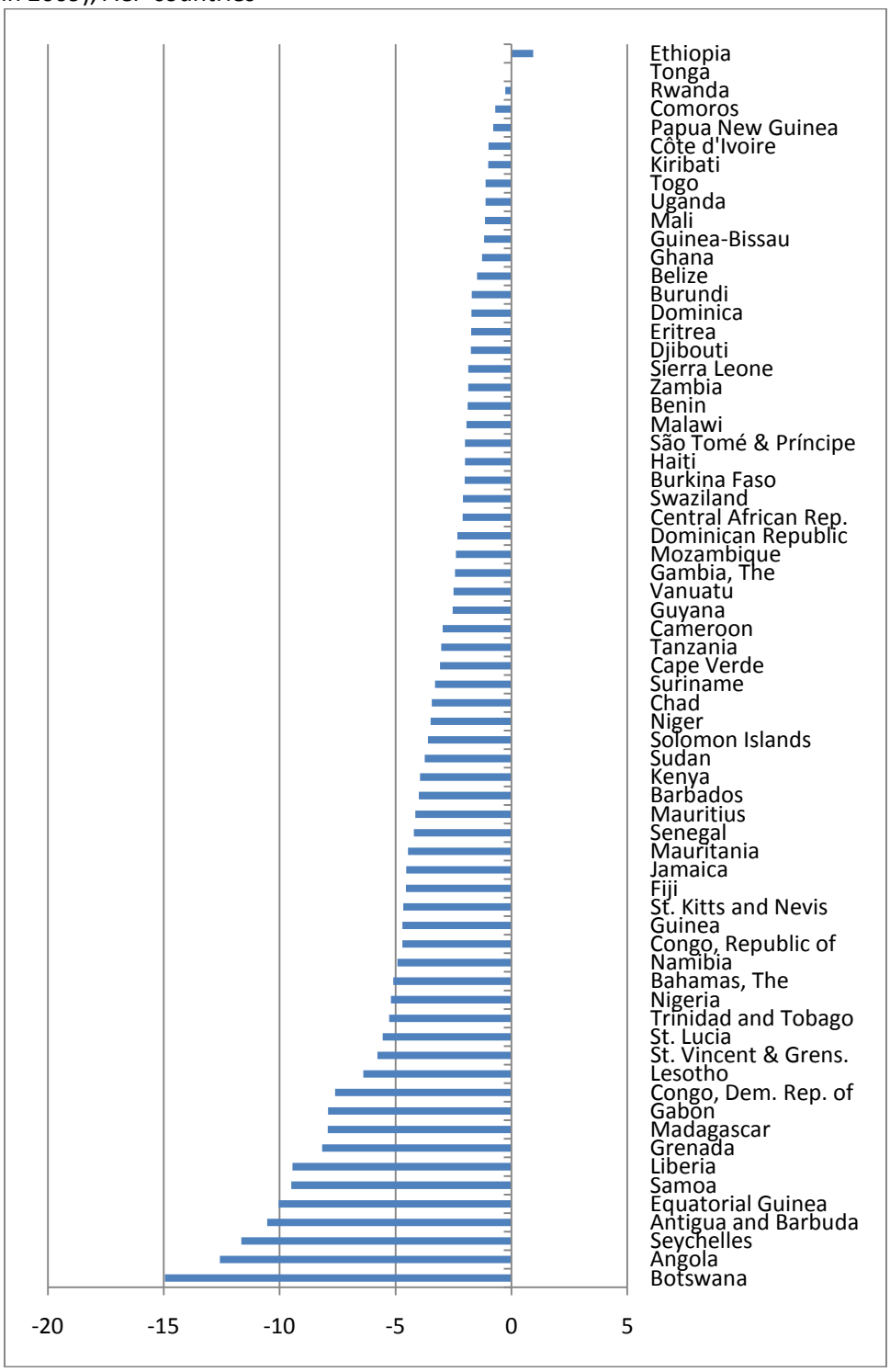
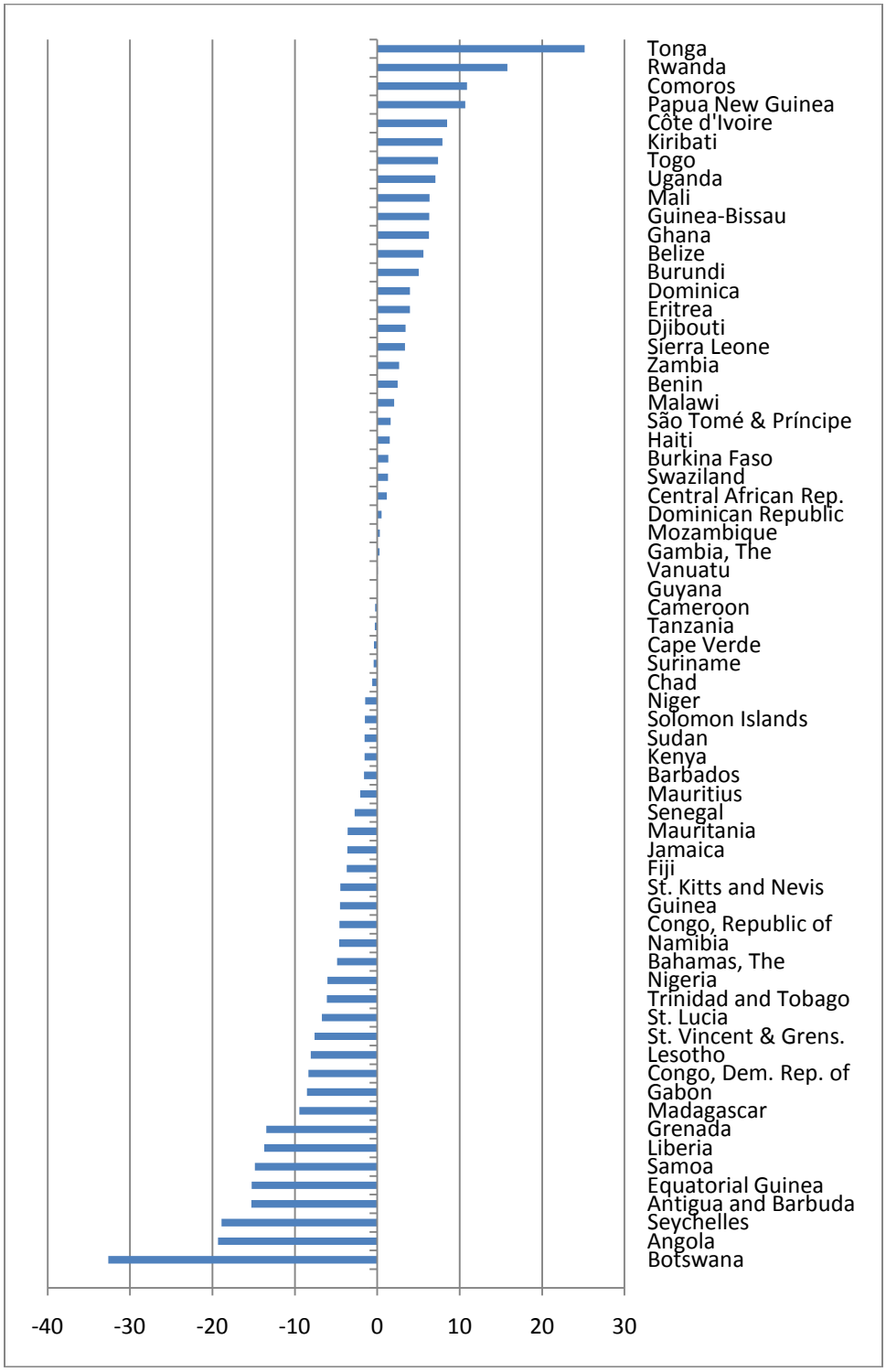


Table J2 Current account shock (2009 forecast for current account as % of GDP in 2009 minus 2008 forecasts for current account as % of GDP in 2009), ACP countries



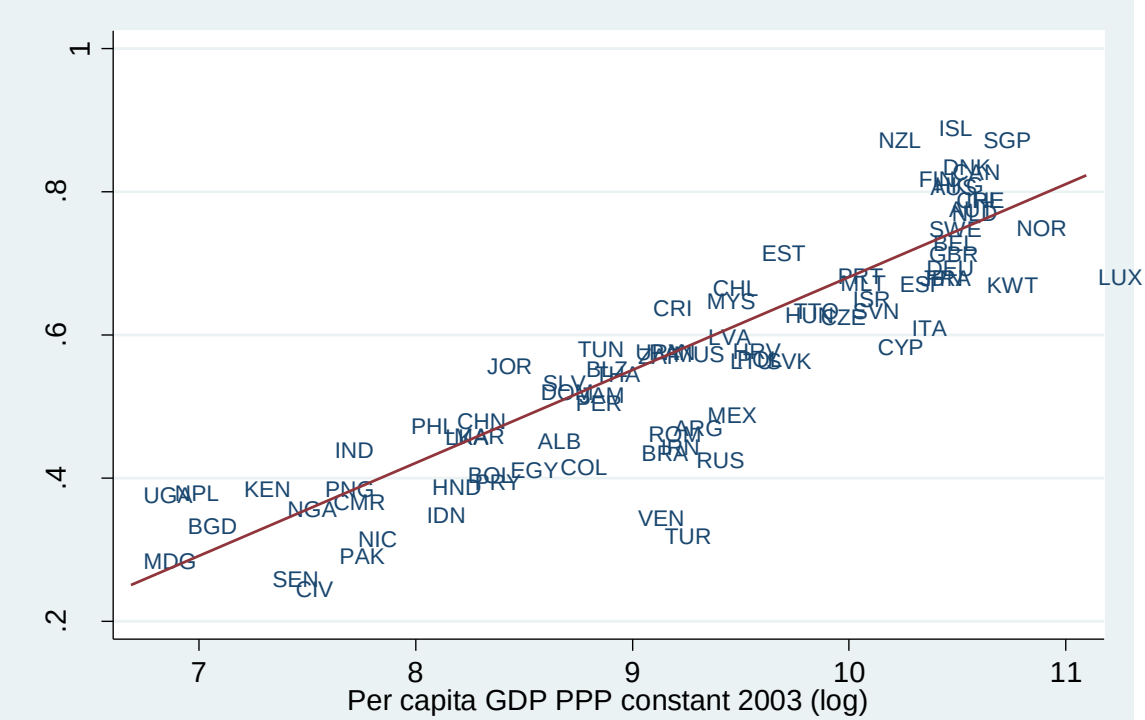
Appendix K. Resilience measures

	Reserves (months of imports), 2009 (or 2008)	Goverment debt (% of GDP) (2009)	Population (mn, 2009)	EVI index (Guillaumont, 2008	Reslience index (Briguglio, 2008)	GDP per capita International dollars
Angola	3.36	38.28	17.31	43.44		5873
Antigua and Barbuda	1.72	118.27	0.09			20566
Bahamas, The	3.04	41.45	0.34			
Barbados	4.45	104.90	0.28		0.72	19188
Belize	2.83	80.24	0.33		0.55	6796
Benin	6.17	27.52	9.38	51.95		1485
Botswana	17.85	14.54	1.82			13971
Burkina Faso	3.78	27.86	14.37			1175
Burundi	7.21	52.30	8.11	59.88		386
Cameroon	6.45	54.06	19.93	33.08	0.37	2191
Cape Verde	3.95	70.77	0.51	57.92		3561
Central African Rep.		26.90	4.44	50.80		747
Chad		31.41	9.97	62.83		1344
Comoros		56.94	0.67	63.60		1179
Congo, Dem. Rep.		138.26	64.77	42.62		316
Congo, Republic of		57.60	3.76	49.60		3976
Côte d'Ivoire	3.95	65.01	21.39	33.52	0.25	8923
Djibouti	4.89	59.68	0.80	60.16		2228
Dominica	3.13	83.84	0.07			8923
Dominican Republic	2.13	28.44	9.70		0.52	8189
East Timor		n/a	1.12			808
Equatorial Guinea		5.07	1.28	70.71		34166
Eritrea		134.97	5.16	63.99		562
Ethiopia	2.35	32.12	82.81	39.32		874
Fiji		53.50	0.88			4652
Gabon		26.07	1.48			37625
Gambia, The	7.42	58.29	1.67	55.68		1386
Ghana		66.48	23.11	41.50		1500
Grenada	3.89	122.30	0.10			8923
Guinea		77.01	10.08	34.58		1066
Guinea-Bissau	5.00	163.31	1.61	66.18		1054
Guyana	2.75	60.53	0.77			3088
Haiti	3.35	24.77	9.92	56.81		1126
Jamaica	3.43	133.96	2.70		0.52	7837
Kenya	4.00	49.18	35.88	24.24	0.39	1560

Kiribati			0.10	83.65		2463
Lesotho		44.03	2.50	50.53		1454
Liberia	0.84	224.13	4.13	67.95		391
Madagascar		33.74	20.75	41.57	0.29	1062
Malawi		42.44	13.93	48.83		812
Mali	3.08	23.93	13.67	42.63		1153
Mauritania		102.95	3.11	40.56		2000
Mauritius	5.05	49.28	1.28		0.58	12519
Micronesia						3115
Mozambique	3.69	29.31	21.16	43.56		844
Namibia	4.44	15.27	2.08			6527
Niger	4.22	15.78	14.19	49.99		688
Nigeria	9.27	15.49	151.87	44.76	0.36	2116
Papua New Guinea	5.76	n/a	6.34	44.15	0.39	2215
Rwanda	5.82	20.19	9.79	59.33		1035
Samoa	6.36		0.18	64.65		4620
São Tomé & Príncipe		65.78	0.16	58.15		1762
Senegal	2.63	31.96	12.82	41.80	0.26	1808
Seychelles	1.93	127.35	0.09			21255
Sierra Leone	7.20	61.28	5.70	63.74		789
Solomon Islands	3.68	28.28	0.52	56.89		2643
Somalia				68.40		
St. Kitts and Nevis	3.87	184.71	0.05			15781
St. Lucia	2.84	74.67	0.17			10007
St. Vincent & Grens.	2.43	74.96	0.11			9336
Sudan	0.96	80.60	39.12	49.85		2142
Suriname	5.39	20.35	0.52			7459
Swaziland	4.17	14.49	1.03			4966
Tanzania	5.29	45.53	40.54	34.12		1311
Togo	3.96	55.22	6.79	45.81		842
Tonga	3.87		0.10			4460
Trinidad and Tobago	9.94	32.39	0.00		0.64	26225
Tuvalu				91.85		
Uganda	6.44	22.22	32.80	47.42	0.38	1164
Vanuatu			0.24			4336
Zambia	4.14	27.20	11.97	46.19	0.35	1365
Zimbabwe		89.66	11.73	47.90		

Source: IMF WEO October 2010 for 2009 Government debt, WDI for population and reserves for 2009 (or 2008 where available). The EVI and resilience index from Guillaumont (2008) and Briguglio (2008)

Figure K1: Resilience index and income levels



Reported in Cali et al (2009) and based on Briguglio et al. (2008) and WDI.