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Fragility and MDG Progress: How useful is the Fragility Concept?

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**Abstract** 

While it is widely presumed that development progress in so-called fragile states is lagging behind,

only very limited empirical analysis exists that investigates to what extent the levels and trends in the

MDGs differ significantly between fragile and other developing countries, and between different de-

finitions of fragile states. The purpose of this paper is to analyze levels and progress of the MDGs

between 1990 and 2008 of fragile and non-fragile developing countries. It shows that fragile countries

are, indeed, performing worse in terms of MDG levels. In terms of MDG progress, progress is, on

average, not slower in fragile states using most definitions of fragility. Lastly, the heterogeneity of

MDG performance among fragile states is so large that it is not very useful to treat them as a group;

the problems they face, as well as the solutions required, differ greatly and have to be developed and

treated sui generis.

**Key words:** Fragile States, MDGs, Growth.

**JEL:** I00, I30, O10.

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# Fragility and MDG Progress: How useful is the Fragility Concept?

## 1 Introduction

In 2008, the midpoint for reaching the Millenium Development Goals (MDG) passed. During the last decade, many regions, particular in East and South Asia, experienced major economic and social progress towards the achievement of the goals set for 2015, and many households and individuals have moved out of poverty.<sup>1</sup> As is well-known (e.g. World Bank 2009, Bourguignon et al, 2008), progress towards the MDGs has been highly uneven. In particular, a group of countries, variously referred to as fragile states of low income countries under stress appear to lag behind in levels of MDG achievement (e.g. World Bank, 2009).<sup>2</sup>

Initially, fragile states largely referred to conflict and post-conflict countries, following the pioneering work of Collier and his co-authors on the economic costs of conflicts (for example, Collier and Hoeffler, 1998). To this, a group of countries was added, in which the state had basically ceased to function, or in which the writ of the state did not extend much beyond the capital city. Lastly, this discussion began to relate to an overlapping (but larger) group of countries, which the World Bank referred to as "low income countries under stress" (LICUS). The identification tool for this particular group of countries was the World Bank's Country Performance Institutional Assessment (CPIA) rating, the confidential multi-component institutional performance index of the World Bank, which is also used to decide upon IDA allocations. Recently, these concepts have all been merged into the term "fragile states", which were held to be the states most in difficulty in making any MDG progress, states in which particular approaches are needed, and states for which special attention is critical. The concept is akin to the "bottom billion" (Collier 2007) applied to states.

Apart from posing challenges for MDG progress, fragile states also pose challenges for development and aid policies as traditional models of engagement often do not work in fragile states. Consequently, in recent years, the international community has made a significant effort in attempting to develop strategies and instruments that effectively address the particular problems of fragile states (for example, World Bank, 2004; ODI, 2006). This increasing effort can be explained by the need to find new ways for donors to engage with fragile states, as the traditional models of aid delivery do not

appear to work in many fragile states. For example, the capacity to absorb aid is found to be lower in fragile states than in non-fragile states (McGillivray and Feeny 2007), while the need for aid is, at the same time, considerably greater in fragile states than in non-fragile states. Hence, the main challenge for the donor communities is not only to provide more aid to fragile states, but also to provide it in a different manner relative to other developing economies (Dollar and Levin 2005).

While the amount of literature on how to engage with fragile states is rapidly accumulating (for example, World Bank, 2004, 2006; DFID, 2006, OECD 2008, 2009), only very limited analysis exists that investigates to what extent the levels and trends in the MDGs differ significantly between fragile and non-fragile states.<sup>3</sup> Undoubtedly, fragile countries within this category are, indeed, likely to face serious development challenges. But the question is whether the concept of "fragile" states, which combines different sets of countries, is a useful one, in the sense that their performance in terms of the levels and trends with regard to the MDGs is, indeed, relatively homogenous, and clearly distinguishable from the group of non-fragile countries. It is important to address this rather straightforward question regarding the usefulness of the fragility measure as a predictor of development outcomes in terms of the MDGs, because, regardless of the definition of fragile states, these countries are generally characterised by a poor performance of policies, institutions and governments, which might worsen their prospects for achieving the MDGs. Thus, "fragility" is commonly associated with poor MDG levels and trends, but this is never carefully scrutinised. Nor is it clear that grouping a rather heterogeneous set of countries under one label is a helpful characterisation.

The purpose of this paper is to investigate the usefulness of the fragile state concept in tracking the levels and progress of the MDGs. In doing so, this paper applies several definitions of fragility (from DFID and from several based upon the World Bank's CPIA) to study the MDG progress between 1990 and 2008. It will both compare average performance in levels and trends of MDG progress between fragile and non-fragile countries as well as compare within-group heterogeneity. The main regional focus in analysing fragile states in this paper is Sub-Saharan Africa, since this is the region that is most strongly affected by poverty, and many of its countries suffer from fragility and macro-economic vulnerability. The paper will show that fragile countries are, indeed, performing worse in terms of MDG levels. In terms of MDG progress, progress is not necessarily slower in frag-

ile states (and sometimes even better). Only a rather small number of countries suffering from compound disadvantages are doing significantly worse in terms of MDG progress. Lastly, the heterogeneity of the MDG performance among fragile states is so large that it is not very useful to treat them as a group; the problems they face, as well as the solutions required, differ greatly and have to be developed and treated *sui generis*.

This paper is organized as follows. First, this paper provides a short overview of the concept of fragile states used for the analysis. Second, it investigates the levels and progress in the MDGs separately by fragility status and by various fragility definitions in order to capture the country-specific heterogeneity of "fragile countries" in MDG performance. Third, it discusses possible explanations of the heterogeneity in the levels and progress towards the MDGs in terms of fragility status.

## 2 Concepts, definitions and lists of Fragile States

Fragile states are generally characterised by weak institutions and by their vulnerability to violent conflicts, and have increasingly become a central focus of the development community. The factors which lead to state fragility are diverse and manifest themselves in a variety of forms. Hence, the fragile states agenda is very broadly-defined in terms of the emphasis on human security and peace-building, the concern with poor development performance and state effectiveness, and the concern for the relationship between under-development and insecurity.

In recent years, a large body of literature has attempted to conceptualise and to define fragile states (for example, Stewart and Brown, 2009; World Bank 2006; ODI, 2006). However, a uniform approach is hindered by both a lack of data and a suitable framework to classify "fragile states". In addition, many definitions do not take account of the structural causes for fragility, nor do they differentiate between short-term shocks and long-term persistence in individual fragile states.

As a rather new concept, it has generated a host of definitions, which, according to an ODI (2006) report, can be grouped into definitions that focus on weak capacity or will, weak output, or difficult donor relationships. This report also includes several lists of countries which are deemed as fragile by some of the institutions listed below, some of which will be used in the present analysis. These lists

sometimes use objective criteria, sometimes value-judgement seems to be involved, and, sometimes, a set of proxies is used to generate the list (see, also, Bourguignon *et al.*, 2008).

Since 2006, the World Bank generated a list of fragile states using the Country Policy and Institutional Assessment (CPIA) rating of countries, thereby renaming countries previously referred to as low income countries under stress (LICUS). The CPIA rates countries against a set of 16 criteria grouped into four clusters: (a) economic management (3 indicators); (b) structural policies (3 indicators); (c) policies for social inclusion and equity (5 indicators); and (d) public sector management and institutions (5 indicators). In these lists, each indicator receives a subjective score of 1 to 6 from the World Bank staff members. The overall CPIA is generated by taking the unweighted average of the four components, which, in turn, are averages of the sub-components. Countries that score less than 3.2 on the averaged indicator are defined as fragile states.

One advantage of this approach is that it is particularly transparent in how fragility is defined. Also, as noted by the World Bank IEG Assessment of the World Bank's work in fragile countries (World Bank 2006), it is focused on the institutional and structural features of countries, rather than on ex post outcomes. At the same time, there are serious problems with this approach to defining fragility, some of which have also been raised by the IEG Report (World Bank 2006). First, as the CPIA data has only been publicly available from 2006 and lists of fragile countries only available from 2003, it is not possible to backtrack the fragility definition prior to 2003. Second, the CPIA does not include any components relating to security issues, which seems to be an important issue for many conflict and post-conflict countries. Third, it is unclear whether the weights used for the CPIA and its intended purpose, namely, allocations of aid funds from the IDA soft loan window of the World Bank, are also the right ones for defining fragility. Fourth, with this, as with other definitions of fragility, there is considerable change from year to year in the CPIA of two types: there are the marginal cases, in which the CPIA hovers around 3.2, and then there are the cases in which the CPIA moves rapidly in one or other direction (it moves downwards usually faster than upwards; see the discussion in World Bank 2007a). The former case, in particular, presents a problem. One possible solution would be to think about the depth of fragility, rather than just its incidence, similar to the FGT poverty measures. Lastly, since it is a 16 component index, there are many ways to obtain an average score which is below 3.2, and not all of them might be as harmful to the MDG progress as others. This paper considers the different components separately in order to see whether they show different correlations with MDG progress.

Clearly, these different lists also have different purposes in mind, so it might not be surprising that they differ in both approach and result. But the implication of these lists is usually that these countries are particular laggards in MDG levels and progress, as suggested again in the World Bank's Global Monitoring Report (World Bank 2009a). There is also some empirical evidence from the World Bank (World Bank 2007a, b), which was produced as part of the research programme on IDA allocations, that suggests that the CPIA as a measure is, indeed, a good predictor of development outcomes, and, thus, that a low CPIA in fragile states should imply poor MDG levels and progress. Thus, it is, indeed, worthwhile examining to what extent the "fragile" category is, indeed, useful for predicting MDG levels and progress.

## 3 Differences in Lists of fragile states across definitions and across time

Typically, the fragility status persists for a long period of time. Once a country reaches the cut-off point and is considered as a fragile state, it remains in this condition for a considerable length of time. This has important consequences for the development of the country. Looking, for example, at countries that have recently become fragile states, such as Sierra Leone and Djibouti, it is unlikely that they will emerge from this condition within the next few years.

A useful pre-requisite for examining the utility of the fragile states concept is that there should be some agreement as to how countries come to be placed on this list and a certain stability of these lists over time. However, one should not take this point to the extreme. Clearly, lists will differ as they try to measure different aspects of fragility (as discussed above), and, ideally, we would all want the lists of fragile states to become smaller as time goes on, maybe also as a result of donor efforts. But it should not be mainly arbitrary which countries are on such a list; also, in addition, very high fluctuations might also make such lists not very useful, as international and donor engagement with a rapidly shifting target is somewhat challenging.

Mata and Ziaja (2009) provide a comprehensive overview on existing lists of 'fragile states' and on the differences and similarities in the conceptual dimensions covered by each list. Besides the World Bank's CPIA and the DFID list, two other often used fragility indices are the Index of State Weakness in the Developing World which is published by the Brookings Institution (CIFP 2008) and the Country Indicators of Foreign Policy Frailty Index (Rice and Patrick 2008). Although some differences between the lists and the CPIA list used for this paper exist, in general, the overlapping is high. The Index of State Weakness in the Developing World ranks countries according to their state of weakness and classified 141 countries in quintiles. Among the 28 countries of the bottom quintile all countries from the CPIA 2008 appear on the 2008 list with the exception of Comoros, Djibouti and Solomon Islands which are in the second quintile and Kiribati, Timor-Leste and Sao Tome and Principe, which are in the third quintile. Among the top 30 most fragile states of the 2008 Country Indicators for Foreign Policy Lists are all countries from the 2008 CPIA with the exception of the small countries Sao Tome and Principe, Kiribati, Solomon Island, and Timor-Leste. As data on MDG level and progress for many of the very small countries are lacking, considering these lists would essentially boil down to the list we are already using; we also tried some robustness checks and all our results are robust to considering those lists (where data are available).

The different classifications and definitions of fragile states have been criticised for several reasons. Countries that score poorly in one dimension, but better in others, often fail to be listed as fragile. For example, some countries are completely missing from the lists even though there is a high risk on conflict. The current situation in Pakistan might be a good case in point. Furthermore, the current existing classifications do not account for important basic characteristics of fragile states, such as their conflict history, *i.e.*, whether countries are currently at conflict or whether countries are in a post-conflict re-construction phase, which might have important implications for their performance capacity to reach the MDGs.

Table 1 below shows different lists using definitions by DFID and various versions and years of the World Bank's CPIA. In particular, Table 1 presents the CPIA lists of fragile states for the years 2007 and 2008, for each sub-indicator (Economic Management, Structural Policies, Social Inclusion/Equity, Public Management), core fragile states (those that appear on the list every year between

2003 and 2008, and temporary fragile states (those that appeared at least once on the list between 2003 and 2008). In addition, Table 1 also shows the countries that fall short of the CPIA score in all sub-categories.

While, for eight countries, all definitions converge, and these countries were also classified as fragile every year between 2003 and 2008, there are plenty of countries that appear on different lists. In particular, the DFID list (based upon ODI, 2006) as well as the social inclusion component of the World Bank's CPIA both yield particularly large lists.

Concentrating first on the CPIA list 2007, around three-quarters of the 30 countries on the list in 2007 are "affected by an on-going armed conflict" (World Bank 2006, Uppsala Conflict Database<sup>5</sup>). Armed conflicts are one of the major reasons why fragile stages lag behind the MDGs. The cost of conflicts can be very high, both in terms of the deaths of the current living population, and in terms of physical damage which negatively affects the growth perspective of such economies (Chauvet and Collier 2004).

Of the 22 countries on the CPIA list 2008, sixteen countries are African countries (Angola, Burundi, Central African Republic, Chad, the Republic of Congo, Congo, Dem. Rep., Côte d' Ivoire, Djibouti, Eritrea, Guinea, Guinea-Bissau, São Tomé and Principe, Sierra Leone, the Sudan, Togo, and Zimbabwe). The longest list is that based upon the DFID classification, which contains 42 countries. However, regardless of which classification is taken as a basis, all countries on the lists have common characteristics: weak state policies and institutions, which result in a limited capacity to provide public goods and services, and, even if not at conflict right now, at high risk of conflict and/or political instability.

The group of countries that are most affected by state fragility, with regard to these lists, are the two groups of countries that are either fragile based upon poor CPIA performance every year between 2003 and 2008, or show a CPIA score below 3.2 in every single sub-dimension of the CPIA classification (Economic Management, Structural Policies, Social Inclusion/Equity, Public Management) in 2007. These two groups show a clear common pattern: most are from Sub-Saharan Africa. With the exceptions of Afghanistan, the Solomon Islands, Timor-Leste, Haiti, Laos PDR, and Myanmar, all of the fragile states that fall below the cut-off point in all CPIA categories or are classified as

"core" fragile states are Sub-Saharan African countries. Specifically, the group of "all categories" fragile states includes Angola, the Central African Republic, Chad, Comoros, the Republic of Congo, Congo, Dem. Rep., Eritrea, the Solomon Islands, the Sudan, and Zimbabwe. The group of "core" fragile states includes the African countries: Angola, Burundi, the Democratic Republic of Congo, Guinea-Bissau, Liberia, Somalia, the Sudan, and Zimbabwe. Also striking, with regard to the regional concentration of fragile states, is the list of countries that appears on all the lists of fragile states, where, once again, countries from Sub-Saharan Africa dominate.

To analyze the relationship between the classifications of fragile states and the MDG outcomes, this paper concentrates particularly on the countries that were "core" or "severely" fragile in every year between 2003 and 2008 (*i.e.*, they had a CPIA below 3 in each of those years; see the World Bank, 2006); those that were fragile in each sub-component (*i.e.*, scored 3.2 on average in the four components), or were fragile using any of the four components. The shortest list is the one in which a country scores poorly on all components of the CPIA and this list includes almost only countries that are included on all the other lists, suggesting a somewhat robust categorisation. Regarding time trends, they can only be considered using the CPIA. Taking the years 2003-2008, 12 countries are on the list in all these years (and this excludes marginal cases in which the CPIA was around 3.2), while another 23 were considered fragile at one point during those four years. Thus, here, too, there is an inter-temporally robust core which, as to be expected, is quite similar to the core using all 4 CPIA components, while there is large amount of fluctuations surrounding this core. This could well affect the assessment of MDG progress by category.

Table 1 about here

## 4MDG levels and fragile states

One of the main reasons why Sub-Saharan African countries show the lowest levels in the MDG indicators is that this region shows the highest share of fragile states in the developing world. This was shown in the previous section when looking at the lists of various definitions of the concept of fragile states (see Table 1). There is a strong negative correlation between fragility and the MDG levels in

the fragile states, especially in Sub-Saharan Africa countries furthest away from achieving the MDGs by the year 2015. Typically, fragile states in Sub-Saharan Africa started from very low levels in the MDGs. In fragile states, the MDG levels are lower, compared to all other developing countries. Sub-Saharan Africa fragile states have grown more slowly than non-fragile states in Sub-Saharan Africa, and, although the average GDP *per capita* growth of fragile states has accelerated in recent years, it still lags far behind the average of the region.

To take a closer look at the differences in the levels of MDGs for fragile states and non-fragile states, Figure 1 shows, based upon the World Development Indicators 2009 the levels of selected MDGs for several groups of fragile and non-fragile states in the year 2008 In particular, it focuses on poverty, in childhood under-nutrition, education expansion, and under-five mortality as the indicators that are probably best-measured among the MDG indicators. In addition, Figure 1 also presents PPP-adjusted GDP per capita levels.

## Figure 1 about here

Figure 1 compares fragile states for the following groups of countries: fragile states included in the CPIA 2008 list, all non-fragile developing countries, African fragile states based upon the CPIA 2008 list, the "core" fragile states, the list of countries that show a CPIA score of less than 3.2 in all sub-indicators of the CPIA classification, the fragile states based upon the DFID list, all Sub-Saharan African countries, and all non-Sub-Saharan African developing countries.

Comparing fragile states with non-fragile states, Figure 1 shows quite clearly that fragility, using the World Bank or DFID definition, is clearly associated with much poorer levels of development outcomes in 2008. Fragile states based upon all the lists have much lower *per capita* incomes. The poverty headcount in 2008 for the CPIA list of fragile states is more than 3 times higher than for the non-fragile states. Also, for primary education completion rates, the share of children who are underweight, and under-five mortality, Figure 1 reveals that fragile states are typically doing worse than non-fragile states, and that some systematic difference between fragile and non-fragile states exists. One explanation for this is that their low levels of the MDG indicators are often accompanied by low

institutional and state capacity, and linked to internal conflicts, which hinders the state providing basic public goods and services to the population.

Comparing the levels of MDGs of the Sub-Saharan African countries in 2008 in Figure 1 with the various "fragile states" lists confirms the close relationship between Sub-Saharan Africa and "fragility". As a result of the fact that, in all the lists, the majority of countries are from Sub-Saharan Africa, the levels of poverty in these classifications are all quite similar.

Zooming in on the important sub-groups of fragile states, we now concentrate on the more restrictive classifications from Table 1. In the figure, it appears that the "core" fragile states and the "CPIA all" fragile states indicator definitions seem to be correlated with particularly poor outcomes, but this is not invariably the case. For example, the poverty headcount ratio was quite similar in 2008 between the "core" fragile lists and the total CPIA list. Moreover, this is not surprising as these definitions yield the shortest (and somewhat similar) lists. However, fragile states from Sub-Saharan Africa are overall worse off than other groups of countries in terms of MDG levels. For example, the fragile states from Sub-Saharan Africa top the list of under-five mortality. In addition, the "core" fragile states and the "CPIA all" fragile states are more clearly distinguishable in terms of their MDG levels than the Sub-Saharan average.

To confirm the findings from Figure 1 and to provide a closer look at the "CPIA all" list of fragile states, Table 2 presents the numbers for MDG levels by fragility status in 2008 for the overall CPIA list and also by each CPIA component.

## Table 2 about here

The components of the CPIA address the different performance capacities of a country, economic management, structural policies, social inclusion/equity, and public sector management. Focusing on the four sub-components of the CPIA, Table 2 shows interesting heterogeneities between different MDGs by sub-components and by fragility status. First, Table 2 confirms that MDG achievements are generally worse for fragile states than for non-fragile states, regardless of which component of the CPIA is examined. An interesting exception is the poverty headcount ratio. Although income levels

are lower where the CPIA score is lower than 3.2, the poverty headcount is lower for fragile states than for non-fragile states using most sub-components of the CPIA. Only for structural policies is the poverty headcount higher for the fragile states than for the non-fragile states. Similarly, fragile states are not doing invariably worse in terms of underweight. Table 2 shows no clear pattern to relate a specific MDG to a specific sub-component of the CPIA, *i.e.*, none of the sub-components of the CPIA tracks MDG levels invariably better than another, while the combined CPIA (either using the average score or the score below 3.2 in each component) invariably shows a stronger distinction between fragile and non-fragile countries. This indicates that the total CPIA, which uses the average score of the four sub-components, capture the heterogeneity of countries in terms of their MDG levels quite well.

To summarise, regardless of the classification of fragile states used, fragile states lag behind all other developing countries in terms of MDGs levels and the situation is considerably worse in Sub-Saharan Africa.

## 5 MDG progress and fragile states

The Global Monitoring Report 2009 (World Bank 2009a) shows a fairly strong relationship between progress in the MDG indicators and fragile states. Compared to middle-income countries and low-income countries, fragile states based upon the CPIA classification are shown to have a considerably lower progress towards the MDGs between 1990 and 2008. This sub-section takes a closer look at several classifications of fragile states (Table 1) to investigate whether a systematic difference between fragile and non-fragile states exists in terms of progress performance towards the achievement of the MDGs, and how useful the classification of fragile states is to monitor progress towards the MDGs for this particular group of countries.

Figure 2 presents the changes in MDGs between the years 2000 and 2008 for the eight groups of countries presented in Figure 1.9 Given the overall clear pattern that fragile states show a considerably lower *level* of MDG achievements than non-fragile states, Figure 2 shows a different picture in the relationship between MDG *improvements* and *fragility*. In this figure, we use percentage point changes in MDG achievements rather than percentage changes for all indicators except GDP per capita. Thus the 11.38 in the CPIA column for primary completion rates refers to the percentage point

improvement in primary completion rates (e.g. from 30% to 41.38% completion rate). We use these percentage point changes as this is arguably the more interesting indicator, while percentage changes are strongly affected by the base year (e.g. an improvement in completion rates from 1 to 2% is a 100% improvement Below and in the figures in the appendix, we will show that the results are not qualitatively affected if we use relative (percentage changes) or a longer time period (1990-2008).

Given the findings of Figure 1, it is thus very surprising that Figure 2 shows little or no correlation between fragility and MDG progress, regardless of whether we consider the period of 2000-08, or the longer period of 1990-2008 (see Appendix). While it is clear that non-fragile countries and non-Sub-Saharan African countries did experience higher growth rates, for the other indicators the results are less clear. Sometimes, the results are actually exactly the opposite of what one would expect. For example, poverty reduction was faster in the fragile countries using the CPIA definition, and educational progress was remarkably similar between fragile and non-fragile countries using most fragility definitions. The only fragility indicators that seem to be reasonably strongly correlated with poorer MDG progress is the *CPIA-All* indicator, *i.e.*, the one in which fragility is defined as scoring less than 3.2 on *all* components of the CPIA, as well as the core fragility indicator which refers to countries that were deemed fragile every year from 2003 to 2008. The two indicators do this to different extents. Thus fragility alone does not sufficiently differentiate countries in terms of MDG progress, but these two measures of intense fragility appear to do be correlated with poorer MDG outcomes.

## Figure 2 about here

Figure 3 presents the trends on MDGs for the period 1990 to 2008 for the various classifications of fragile states. Figure 3 confirms that the fragility definition, using all four components of the CPIA, seems to show a markedly different pattern from the other ones, particularly in the post-2000 period, which is the period to which the fragility definition referred.

# Figure 3 about here

The findings from Figures 2 and 3 are confirmed by a number of selected MDGs for the years 2000 and 2008 for three sub-groups: Sub-Saharan Africa, the CIPA 2008 fragile states, and the Sub-Saharan African fragile states based upon the CPIA 2008 list (see Table 3). Comparing Figure 2 and Table 3, the only somewhat-clear trend that was observed for the level in MDGs is that progress towards reaching the MDGs in Sub-Saharan Africa is quite similar to the progress of the overall CPIA fragile list, and that the Sub-Saharan African countries are worse off both in terms of MDG levels as well as in terms of MDG progress. The rather surprising overall result is that most fragility definitions do not seem to track MDG progress very well.

#### Table 3 about here

To obtain a better impression of the country-specific heterogeneity of the progress towards the MDGs with regard to the fragility status, Figure 4 examines MDG progress by countries, and lists the number of times a country has been defined as fragile in Table 1 (ranging from 1 to 7 times). The heterogeneity of MDG performance within this group of fragile countries is bewildering. Some countries seem to have done rather well in terms of growth, poverty reduction and MDG progress, while others perform poorly in most of them. It is not easy to detect clear patterns, and progress in one MDG seems to be only weakly correlated to progress in others, a finding already discussed at length in Bourguignon *et al.*, (2008). It appears that some African fragile countries, such as Côte d'Ivoire and Central African Republic, do rather well on most MDGs, while Zimbabwe is one of the few countries reliably faring worse than many others.

## Figure 4 about here

The low correlation between the fragility classification and the progress in the MDGs raises the question of the appropriateness of the MDGs to capture the heterogeneity of fragile states. In addition, it might also be the case that the MDGs fail to take into account some important common basic features of fragile states, which are important for an appropriate classification. For example, the MDGs

do not take into account any characteristics that provide information on political variables such as democracy, political stability, or rule of law. Low effectiveness of state institutions and a weak government are strongly associated with fragile states, and are, therefore, more likely to be a good indicator for fragile states. To investigate this question, Figure 5 shows the correlation of three political variables, two Freedom House indicators, the political rights score, and the civil liberty score, and the corruption perception index (CPI) provided by Transparency International for countries in Sub-Saharan Africa by their status of fragility (measured by the 2008 CPIA index), and their level of GDP *per capita*. <sup>13</sup>

Figure 5 sorts these indicators by GDP per capita and fragility. Looking at the Freedom House indicators, both for the political rights scores as well as for the civil liberty scores, there appears to be a relatively small differential between fragile and non-fragile countries; again heterogeneity within each group (which is only partly related to GDP per capita) is more important. The relationship is clearer when one looks at the corruption index. Here, a clear negative relationship between fragility and corruption is observable, *i.e.*, fragile states are affected by higher levels of corruption than non-fragile states in Sub-Saharan Africa. <sup>14</sup> However, although a slight relationship is observable, the heterogeneity among countries remains generally high, so that it is not clear whether the fragility concept clearly captures the political dimensions when controlling for GDP *per capita*. On the other hand, when directly comparing the means of the political indictors of fragile and non-fragile states, fragile states, on average, show a significantly poorer performance than non-fragile states (see Table 4).

Figure 5 about here

Table 4 about here

## 6 Possible explanations of the heterogeneity of fragile countries in MDG progress

The previous section has shown that fragile states are not inherently worse off in MDG progress, compared to other developing countries, especially in the Sub-Saharan Africa region. Thus it is unclear whether grouping countries into "fragile" versus "non-fragile" is useful when tracking progress

towards the MDGs, particularly since the heterogeneity of performance within each group is quite large.

This section briefly provides some possible explanations for this heterogeneity, and discusses some possible factors that drive the somewhat surprising results. First, there could be many possible reasons for this lack of a bivariate correlation. One of the most important ones may be that there are confounding factors that weaken this relationship. To examine this, one ought to estimate a proper empirical model of factors affecting MDG progress, which would include different variables for different MDG indicators. This would go beyond of the scope of this paper so we do a somewhat simpler assessment. In the spirit of the World Bank (2007a, b) papers that assessed the predictive power of the CPIA for the human development performance of countries, we provide a simple regression model to analyse the impact of the CPIA score on MDG outcomes.

To examine the effect of the CPIA on changes in MDG outcomes, a very parsimonious regression model of the following form is estimated:

$$dMDG = a + b MDG(initial) + c CPIA + dSSA + eHIV + fCPIA*SSA + g,$$
(1)

in which dMDG refers to MDG progress, MDG(initial) refers to the initial level of the MDG indicator, CPIA refers to the CPIA score, SSA refers to a Sub-Saharan Africa Dummy, ADIS to the HIV infection rate and CPIA\*SSA to an interaction term of the CPIA score and the Sub-Saharan Africa dummy The model is estimated for the two time-periods 1990-2008 and 2000-2008, both for absolute (percentage point) as well as for relative changes in GDP *per capita*, poverty headcount, underweight of children under five, and the under-five mortality rate.

### Table 5 about here

Exemplarily, the results are presented for the time-period 2000-2008 for relative changes in the MDG indicator. The results for percentage point changes and the longer time period are qualitatively the same. <sup>15</sup> All coefficients show the expected signs. The results sometimes show "conditional conver-

gence" and usually a negative coefficient for SSA and AIDS-affected countries. The results show the occasional significant effects of the CPIA score. Only for the income related development indicators is the overall CPIA effect significant, while, here, the interaction term of the CPIA score and the Sub-Saharan Africa dummy is also significant and large in magnitude. For non-income indicators, the CPIA score shows no significant impact. These mixed results underline our finding of the limited usefulness of the existing classification of fragile states for tracking progress in the MDGs.

Second, another possible explanation is the problem of measurement errors and data availability when tracking the progress of the MDGs. One major limitation in analysing the levels and progress in the MDGs remains the availability of data and cross-country comparison shortcomings. For example, newly available income poverty estimates have changed the levels of poverty in many countries (ICP 2005, World Bank 2007c). In addition, the indicator of hunger is sometimes difficult to interpret (Klasen 2008a). Besides problems of definition of the MDG poverty indicators, only limited standardised data are available for both the developing region as well as for the developed countries, such as the Living Standard Measurement Surveys (LSMS) provided by the World Bank, the Demographic and Health Surveys (DHS) provided by USAID, or the Multiple Indicator Cluster Survey (MICS) provided by UNICEF. And even these standard surveys do not provide annual information. For fragile states, in particular, it is hard to obtain precise estimates on, for example, child mortality rates, and access to water and sanitation, since many of the fragile states do not participate in these survey programmes. And even if data are available, cross-country comparability problems remain a concern. One main reason for this is that information on the MDGs often becomes available only with a considerable time-lag, which makes a cross country comparison at a given year very difficult.

Third, there is the issue of absolute *versus* relative changes in the MDGs. This is particularly relevant for MDG1 (reduction of poverty and underweight children) and MDG4 (the reduction of underfive mortality). Since, fragile countries are performing worse in terms of MDG levels, the same absolute level of MDG progress will be smaller in relative (*i.e.*, percentage) terms. Reducing under-five mortality from 180 to 162 is "only" a 10% reduction, while reducing it from 80 to 62 is a 22.5% reduction. As shown in the appendix, it is, indeed, the case that, using a larger set of definitions, the relative progress of these MDG indicators is slower in fragile states. But three points are worth not-

ing. First, even when considering relative change, the differences in MDG progress between fragile and non-fragile states are not very clear, while it remains the case that the clearest distinction is between the "core" fragile and the remaining countries. Second, relative progress in education (goal 2) looks even more impressive in fragile countries, as they are starting from a lower base. Third, there is the real question of whether absolute or relative changes are the right concept. This goes to the heart of Easterly's critique of the MDGs as being "unfair" to Africa (Easterly, 2009). He argues that demanding a halving of poverty and of the incidence of underweight children, and a reduction of underfive mortality by two-thirds is much harder to do when one starts with very high levels of deprivation in these areas; to the extent that one agrees with this line of argument, using absolute changes might be more relevant.<sup>16</sup>

A fourth reason might be that the state of being fragile is not as damaging to MDG progress as the risk of falling into the state of fragility, *i.e.*, becoming fragile is worse than being fragile. This is possible, though not easy to verify, since the time series information on fragility is rather limited at present. In the extreme, it is certainly the case that a country in which a large-scale violent conflict erupts will face great difficulties in sustaining MDG progress. On the other hand, the fact that those countries that are fragile in all dimensions of the CPIA do worst in terms of MDG progress suggests that the cumulative state of remaining fragile is, indeed, a more serious problem than that of slipping or sliding into fragility.

Closely related to this is a fifth reason. Most of the MDG indicators display a great deal of inertia. Even if economic and governance conditions deteriorate, it may take a while before life expectancy or enrolment figures budge significantly as households will still want to invest in health and education, and public delivery systems often continue to function even in an environment in which the economic conditions and governance are deteriorating. Thus, it is unlikely that a country that has slipped below 3.2 in the CPIA for one or two years will quickly or immediately display a deteriorating MDG performance. To the extent that this is the case, one would either expect these negative effects to appear with a longer lag and thus be harder to capture. Also, this could explain the relevance of the core fragile concept for MDG progress.

A sixth reason for the surprisingly good MDG progress in many fragile states could be related to donor initiatives. Donors have been very active and supportive in many fragile states, especially in post-conflict countries, and the resources which they poured into these countries might have played a role in accelerating MDG progress. Particularly in post-conflict countries, there can be high pay-offs from just getting the education and health systems to function again. But this is a hypothesis which, at the present moment, would require much more detailed analysis.

Lastly, it may, indeed, be the heterogeneity of the country conditions in fragile states that drives the heterogeneous performance regarding MDG progress. Among the heterogeneities to consider are the different causes that determined why the countries ended up in the fragile category, the heterogeneous capacities of states (and donors) to pursue an MDG focused policy agenda, and the presence or absence of natural resources, to name some of the most important heterogeneities.

Although all of the reasons cited above are likely to play a role in accounting for the low correlation of the fragile/non-fragile distinction with MDG progress, and the large heterogeneity within that group, it seems likely that this last reason is the most important one, as it can, in particular, explain the very large heterogeneity in the MDG progress among fragile states. To the extent that this is the case, it appears that the fragile category is not as useful as it has been made out to be, when trying to focus on priority countries in order to accelerate MDG progress. Instead, one should either look for a smaller sub-set of this group of fragile countries (the ones that do poorly in all four dimensions of the CPIA) or develop other more homogeneous sub-groups (for example, post-conflict countries, failed states, poor governance countries, *etc.*,) of fragile states. Whether this will end up as being more illuminating is, however, unclear. Maybe, each of these fragile countries is a case unto itself, which does not lend itself to easy categorisation.

## 7 Conclusion and Policy Issues

This paper has shown that the recent creation of the "fragile" states concept has generally created more confusion than clarity. There is a plethora of definitions, with many lists that change in definition and over time. While it is clear that this group of countries, regardless of the definition used, is doing worse in terms of MDG achievements, there is no clear correlation with MDG progress, and the

heterogeneity of the performance among fragile states is vast. Two ways out of this dilemma are possible. The first is to look for more robust categorisations of fragile states, such as one in which a country is deemed fragile if it has been on a list for several years or in several categories (for example, the four categories of the CPIA). The second is to move towards treating each of these countries *sui generis*, requiring a different analytical and policy approach.

This tremendous heterogeneity of performance in fragile states poses a great challenge to policy-making not only in the countries but also in the international community. Given the tremendous heterogeneity of this group, a very flexible approach to policy-making that is able to respond to the specific country-specific challenges is more urgent here than elsewhere. Moreover, this policy approach has to respond quickly to rapidly-evolving situations, as the political, security, economic, and governance situations in these states will change more quickly than in other countries. Often, quick short-term action is required to address longer-term challenges. Such short-term action can be required to safeguard MDG achievements and to invest in order to initiate and to sustain progress, both of which will be visible only years later.

This poses a major challenge not only to the policies to be considered, but also to the policy-making processes of national governments as well as of donors. In fragile states, timely country-specific analytical work is needed to develop and adapt policies rapidly to an evolving situation. The rather slow-moving processes of policy-making (via national planning agencies, multi-year budgeting or PRSP processes) or multi-year donor programming are usually unable to respond with the speed and specificity required. Instead, there is a need for rapid analytical work followed by quick policy formulation and implementation. While these types of approach are well-known in security discourses, the challenge of heterogeneous forms of fragility will require similar approaches to respond effectively in these situations, in order to sustain MDG achievements and progress.

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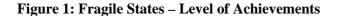
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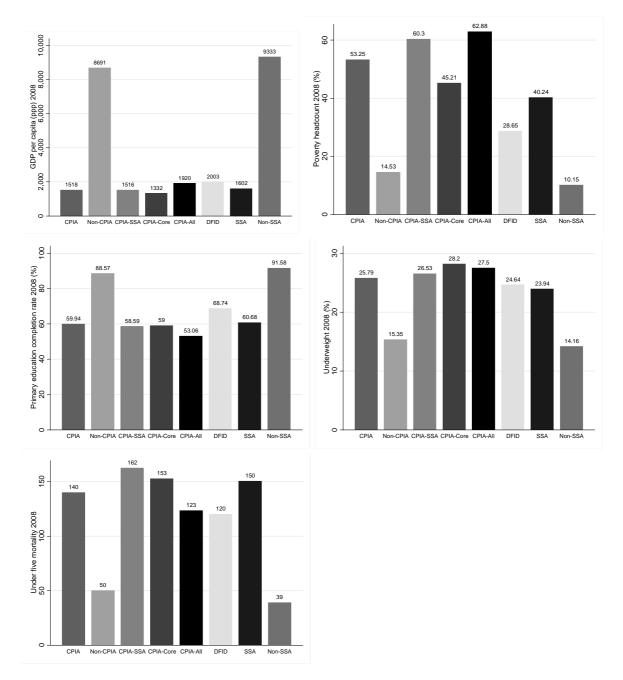
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Tables and Figures: Table 1: Lists of Fragile States using different definitions.

Fragile States CPIA 2007	Fragile States CPIA 2008	Fragile States CPIA (Economic Manage- ment)	Fragile States CPIA (Structural Policies)	Fragile States CPIA (Social Inclusion/Equity)	Fragile States CPIA (Public Sector Manage- ment)	Fragile States CPIA (All categories)	Core Fragile (2003-2008, CPIA)	Temporary Fragile (2003- 2008, CPIA)	Erosi	le States DFID
Afghanistan	Afghanistan	Angola	Afghanistan	Afghanistan	Afghanistan	Angola	Afghanistan	Cambodia	Afghanistan	São Tomé and Principé
Angola	Angola	CAR	Angola	Angola	Angola	CAR	Angola	Cameroon	Angola	Solomon Islands
Burundi	Burundi	Chad	Burundi	Cameroon	Bangladesh	Chad	Burundi	CAR	Azerbaijan	Timor Leste
Cambodia	CAR	Comoros	CAR	CAR	Burundi	Comoros	Congo, Dem. Rep.	Chad	Burundi	Tonga
CAR	Chad	Congo, Dem. Rep.	Chad	Chad	Cambodia	Rep. of Congo	Guinea-Bissau	Rep. of Congo	Cambodia	Vanuatu
Chad	Rep. of Congo	Côte d'Ivoire	Comoros	Comoros	Cameroon	Congo, Dem. Rep.	Haiti	Côte d'Ivoire	Cameroon	vanuata
Rep. of Congo	Congo, Dem. Rep.	Djibouti	Congo, Dem. Rep.	Congo, Dem. Rep.	CAR	Eritrea	Liberia	Djibouti	CAR	
Congo, Dem. Rep.	Comoros	Eritrea	Rep. of Congo	Rep. of Congo	Chad	Solomon Island	Laos PDR	Eritrea	Chad	
Comoros	Djibouti	Guinea-Bissau	Eritrea	Côte d'Ivoire	Comoros	Sudan, The	Myanmar	Gambia, The	Republic of Congo.	
Côte d'Ivoire	Côte d'Ivoire	Grenada	Kiribati			,	Somalia	,	Côte d'Ivoire	
Djibouti	Eritrea	Mongolia	Laos PDR	Djibouti Eritrea	Congo, Dem. Rep.	Timor-Leste Zimbabwe	Sudan, The	Guinea Guinea-Bissau	Comoros	
-		_			Rep. of Congo	Zimbabwe			Diibouti	
Eritrea	Guinea Guinea-Bissau	Pakistan	Solomon Island	Guinea Guinea-Bissau	Côte d'Ivoire		Zimbabwe	Kyrgyz Republic	Dominica	
Gambia, The		São Tomé and Principe	Sudan, The		Djibouti			Niger		
Guinea	Haiti	Solomon Islands	Timor-Leste	Haiti	Eritrea			Nigeria	Gambia, The	
Guinea-Bissau	Kiribati	Sri Lanka	Uzbekistan	Kiribati	Gambia, The			Sierra Leone	Guyana	
Haiti	São Tomé and Principe	Sudan, The	Zimbabwe	Niger	Guinea			São Tomé and Principe	Kiribati	
Laos PDR	Sudan, The	Timor-Leste		Papua New Guinea	Guinea-Bissau			Papua New Guinea	Eritrea	
Liberia	Solomon Island	Togo		São Tomé and Principe	Guyana			Tajikistan	Ethiopia	
Myanmar	Sierra Leone	Tonga		Sierra Leone	Haiti			Territory of Kosovo	Georgia	
Nigeria	Timor-Leste	Zimbabwe		Solomon Island	Kiribati			Timor-Leste	Guinea	
Papua New Guinea	Togo			Sudan, The	Kyrgyz Rep.			Togo	Haiti	
São Tomé and Principe	Zimbabwe			Timor-Leste	Laos PDR			Uzbekistan	Indonesia	
Sudan, The				Togo	Mauritania			Yemen, Rep.	Kenya	
Solomon Island				Vanuatu	Nepal				Laos PDR	
Sierra Leone				Zimbabwe	Nigeria				Liberia	
Timor-Leste					Pakistan				Mali	
Togo					Papua New Guinea				Nepal	
Tonga					São Tomé and Principe				Niger	
Uzbekistan					Sierra Leone				Nigeria	
Zimbabwe					Solomon Island				Papua New Guinea	
					Sudan, The				Sierra Leone	
					Tajikistan				Somalia	
					Timor-Leste				Sudan	
					Togo				Tajikistan	
					Uzbekistan				Uzbekistan	
					Yemen, Rep.				Yemen, Rep.	
					Zimbabwe				Zimbabwe	

Note: Countries in bold appear on all lists.





Note: CPIA: the fragile states included in the 2008 CPIA list (with a CPIA score of less than 3.2); Non-CPIA: non-fragile developing countries; CPIA-SSA: Sub-Saharan African countries included in the 2008 CPIA list; CPIA core: countries that appear on the CPIA list every years between 2003 and 2008; CPIA-All: countries that show a CPIA score of less than 3.2 on any of the CPIA sub-lists (economic management, structural policies, social inclusion/equity, public sector management) in 2008; DFID: countries on the 2007 DFID list; SSA: all Sub-Saharan African countries; Non-SSA: Non-Sub-Saharan African developing countries.

Source: World Development Indicators (2009); own calculations.

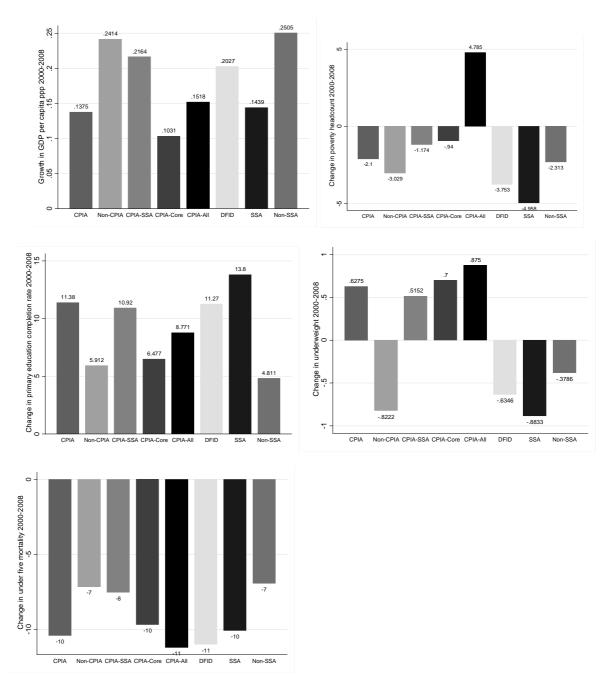
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**Table 2: Poverty Indicators for Fragile States Definitions (CPIA)** 

		Underweight 2008	Poverty head- count 2008	Primary education 2008	Under five mortality 2008	GDP per capita (ppp) 2008
CODY 1 2005	non-fragile	25.87	15.31	82.73	72.74	4832
CPIA 2007	fragile	28.92	66.03	61.41	171.81	1410
	non-fragile	36.41	32.12	77.63	92.79	1995
Economic management	fragile	26.55	26.01	63.89	115.37	2258
G	non-fragile	22.48	6.76	84.48	70.12	6518
Structural Policies	fragile	36.11	32.03	78.73	89.86	2051
	non-fragile	31.66	29.86	48.26	145.25	1470
Social inclusion/equity	fragile	22.48	6.76	84.48	70.12	6518
Public sector manage-	non-fragile	37.00	33.52	80.83	86.86	2052
ment	fragile	29.33	19.19	54.77	132.04	1777
A.W	non-fragile	22.48	6.76	84.48	70.12	6518
All categories	fragile	37.15	29.37	80.17	83.28	2190

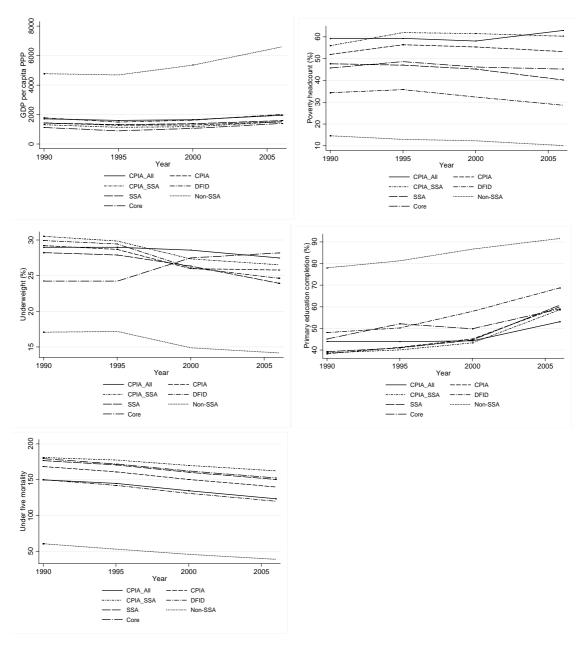
Source: World Development Indicators (2009); own calculations.





Note: CPIA: fragile states included in the 2008 CPIA list (with a CPIA score of less than 3.2); non-CPIA: non-fragile developing countries; CPIA-SSA: Sub-Saharan African countries included in the 2008 CPIA list; CPIA core: countries that appear on the CPIA list every year between 2003 and 2008; CPIA-All: countries that show a CPIA score of less than 3.2 on any of the CPIA sub-lists (economic management, structural policies, social inclusion/equity, public sector management) in 2008; DFID: countries included in the 2007 DFID list; SSA: all Sub-Saharan African countries; Non-SSA: Non-Sub-Saharan African developing countries.





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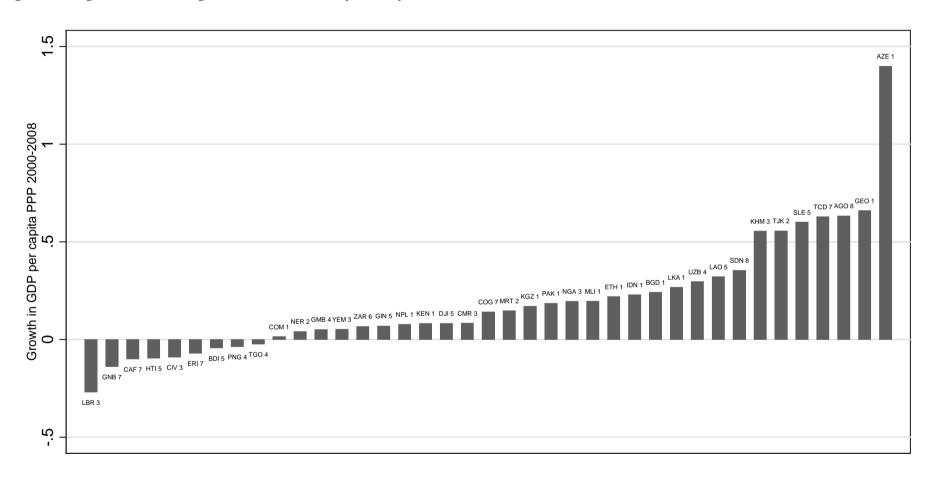
Source: World Development Indicators (2009); own calculations.

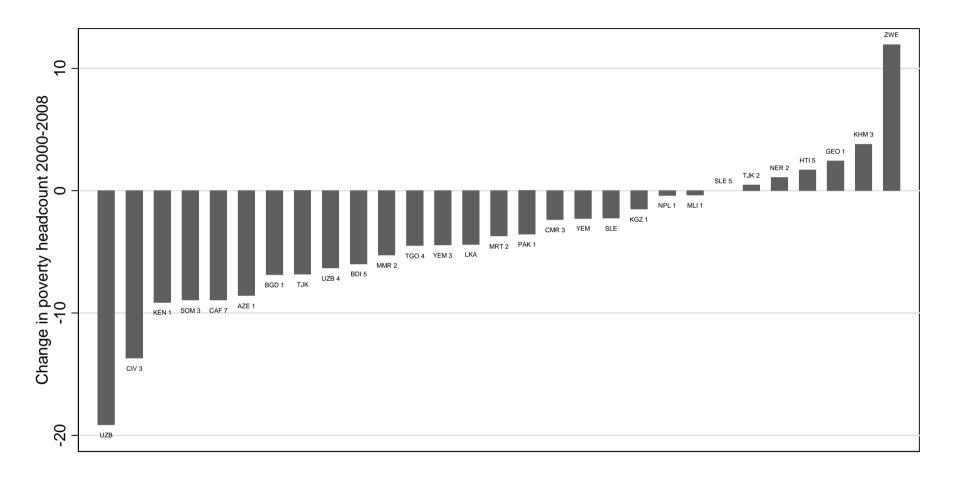
Table 3: Development of selected MDGs in Africa between 2000 and 2008  $\,$ 

	Sub-Saharan Africa		Fragile States (CPIA)		Fragile States (CPIA) Sub- Saharan Africa	
	2000	2008	2000	2008	2000	2008
Goal 1: Poverty and Hunger						
Employment to population ratio, ages 15-24, total (%)	53.33	51.94	48.26	47.97	46.26	45.38
Prevalence of under-nourishment (% of population)	28.88	26.05	30.90	31.29	22.20	21.50
Poverty headcount ratio at \$1 a day (PPP) (% of population)	46.63	41.16	70.94	66.33	73.39	68.77
Goal 2: Achieve universal primary education						
Primary completion rate, total (% of relevant age group)	45.73	67.08	42.81	61.29	44.13	67.17
Total enrolment, primary (% net)	58.91	73.85	58.27	65.27	57.97	64.75
Goal 3: Promote gender equality and empower women						
Ratio of female to male primary enrolment	83.28	89.27	82.20	83.82	80.41	83.62
Goal 4: Reduce Child Mortality						
Mortality rate, infant (per 1,000 live births)	93.61	87.04	105.25	99.68	101.73	95.76
Mortality rate, under-5 (per 1,000)	157.56	145.52	182.81	172.57	182.93	171.58
Goal 5: Improve maternal health						
Births attended by skilled health staff (% of total)	45.06	41.85	49.56	56.84	48.70	50.07
Goal 6: Combat HIV/AIDS, malaria and other diseases						
Prevalence of HIV, total (% of population ages 15-49)		5.69		3.93		4.24
Goal 7: Ensure environmental sustainability						
Improved sanitation facilities (% of population with access)	36.05	37.91	34.69	36.63	37.09	38.39
Improved water source (% of population with access)	55.00	56.93	52.94	53.64	54.50	55.15
Goal 8: Develop a global partnership for development						
Aid per capita (current US\$)	18.30	49.48	9.05	55.80	7.66	59.49
Other						
Fertility rate, total (births per woman)	5.57	5.13	5.88	5.39	5.80	5.30
GNI per capita, Atlas method (current US\$)	490.73	876.98	262.36	562.32	291.99	664.27
Life expectancy at birth, total (years)	49.41	50.83	48.09	49.06	48.29	48.88
Population, total (1000)	673,000	782,000				

Source: World Development Indicators (2009); own calculations.

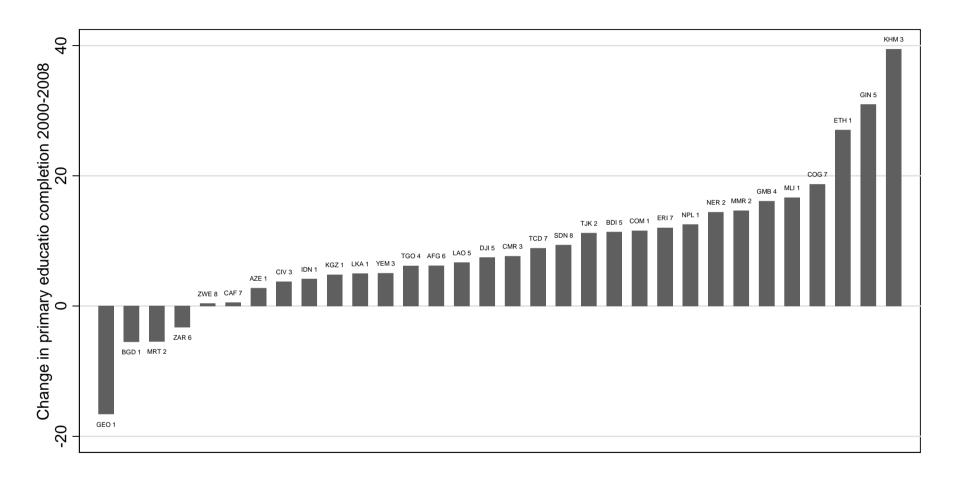
Figure 4: Fragile States – Change in MDG indicators by country and definition (2000-2008)





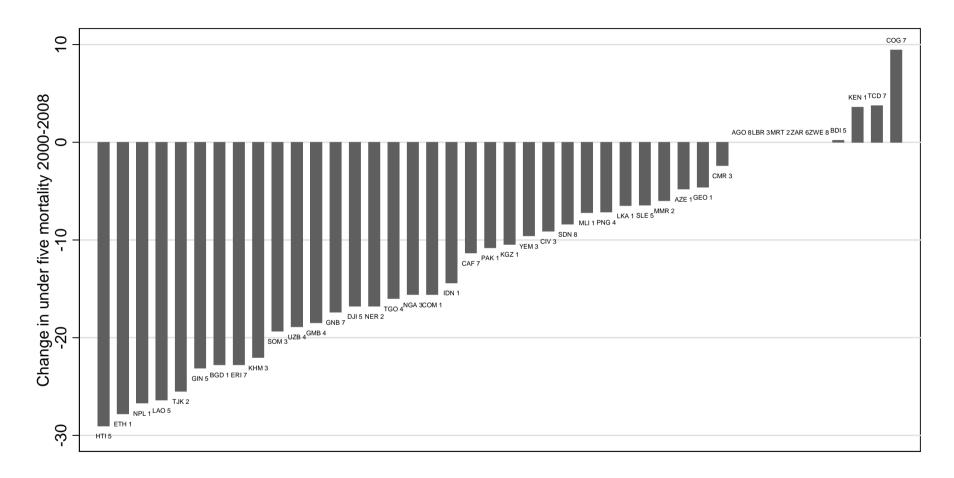
Note: Country abbreviations: Afghanistan (AFG), Angola (AGO), Azerbaijan (AZE), Bangladesh (BGD), Burundi (BDI), Cambodia (KHM), Cameroon (CMR) Central African Republic (CAF), Chad (TCD), Congo, Dem. Rep. (ZAR), Congo, Rep. (COG), Côte d'Ivoire (CIV), Eritrea (ERI), Ethiopia (ETH), Georgia (GEO), Guinea (GIN), Haiti (HTI), Indonesia (IDN), Kenya (KEN), Kyrgyz Republic (KGZ), Laos PDR (LAO), Liberia (LBR), Mali (MLI), Mauritania (MRT), Myanmar (MMR), Nepal (NPL), Nigeria (NGA), Pakistan (PAK), Papua New Guinea (PNG), Sierra Leone (SLE), Somalia (SOM), Sri Lanka (LKA), the Sudan (SDN), Tajikistan (TJK), Togo (TGO), Uzbekistan (UZB), Yemen, Rep. (YEM), Zimbabwe (ZWE).

Source: World Development Indicators (2009); own calculations.



Note: Country abbreviations: Afghanistan (AFG), Angola (AGO), Azerbaijan (AZE), Bangladesh (BGD), Burundi (BDI), Cambodia (KHM), Cameroon (CMR) Central African Republic (CAF), Chad (TCD), Congo, Dem. Rep. (ZAR), Congo, Rep. (COG), Côte d'Ivoire (CIV), Eritrea (ERI), Ethiopia (ETH), Georgia (GEO), Guinea (GIN), Haiti (HTI), Indonesia (IDN), Kenya (KEN), Kyrgyz Republic (KGZ), Laos PDR (LAO), Liberia (LBR), Mali (MLI), Mauritania (MRT), Myanmar (MMR), Nepal (NPL), Nigeria (NGA), Pakistan (PAK), Papua New Guinea (PNG), Sierra Leone (SLE), Somalia (SOM), Sri Lanka (LKA), the Sudan (SDN), Tajikistan (TJK), Togo (TGO), Uzbekistan (UZB), Yemen, Rep. (YEM), Zimbabwe (ZWE).

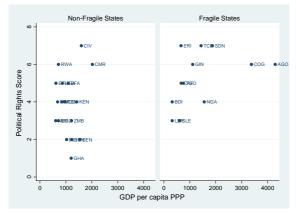
Source: World Development Indicators (2009); own calculations.

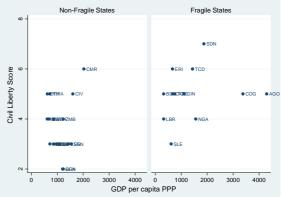


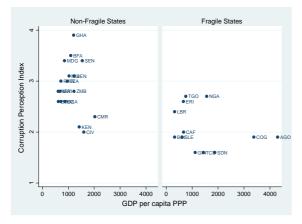
Note: Country abbreviations: Afghanistan (AFG), Angola (AGO), Azerbaijan (AZE), Bangladesh (BGD), Burundi (BDI), Cambodia (KHM), Cameroon (CMR) Central African Republic (CAF), Chad (TCD), Congo, Dem. Rep. (ZAR), Congo, Rep. (COG), Côte d'Ivoire (CIV), Eritrea (ERI), Ethiopia (ETH), Georgia (GEO), Guinea (GIN), Haiti (HTI), Indonesia (IDN), Kenya (KEN), Kyrgyz Republic (KGZ), Laos PDR (LAO), Liberia (LBR), Mali (MLI), Mauritania (MRT), Myanmar (MMR), Nepal (NPL), Nigeria (NGA), Pakistan (PAK), Papua New Guinea (PNG), Sierra Leone (SLE), Somalia (SOM), Sri Lanka (LKA), the Sudan (SDN), Tajikistan (TJK), Togo (TGO), Uzbekistan (UZB), Yemen, Rep. (YEM), Zimbabwe (ZWE).

Source: World Development Indicators (2009); own calculations.

Figure 5: Fragile States in Sub-Saharan Africa – Heterogeneity in political indicators







Note: The CPI ranks 180 countries by their perceived levels of corruption, as determined by expert assessments and opinion surveys. It takes values between 0 and 10, while 0 indicates the highest level of corruption and 10 the lowest level of corruption. The political rights and civil liberties categories contain numerical ratings between 1 and 7, with 1 representing the most free and 7 the least free. Source: World Development Indicators (2009); own calculations.

Table 4: Means of Political Indicators of Fragile versus Non-Fragile States

	Fragile States	Non-Fragile States	T Test of differences
Political Right Score	3.88	5.50	1.62**
Civil Liberty Score	3.65	5.21	1.57**
Corruption Perception Index	2.88	1.97	0.91**

Note: \*\* denotes a one percent significant level.

Source: World Development Indicators (2009); own calculations.

**Table 5: Results of regression model** 

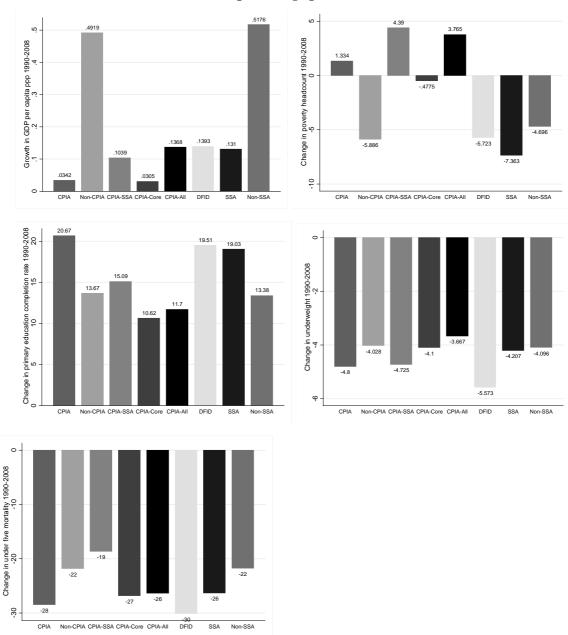
Dependent Variable	GDP per capita (relative change) (2000-2008)	Poverty headcount (relative change) (2000-2008)	Underweight (relative change) (2000-2008)	Under 5 mortality (relative change) (2000-2008)
MDG (initial level)	-0.001	0.002	-0.019*	0.003
CPIA score	0.485**	1.376*	0.156	1.451
Sub-Saharan Africa	-1.551**	8.865**	4.074*	8.115*
HIV infection rate	-0,003	0.059	038	-0.048*
CPIA score*SSA	-0.491**	-2.640**	-1.128	-2.274*
Constant	-1.321**	-6.064**	-0.652**	-7.551*
R-squared	0.274	0.283	0,328	0.094
N	53	44	17	54

Note: A reduction in underweight and under 5 mortality is coded as a negative number.

Source: World Development Indicators (2009).

# **Appendix**

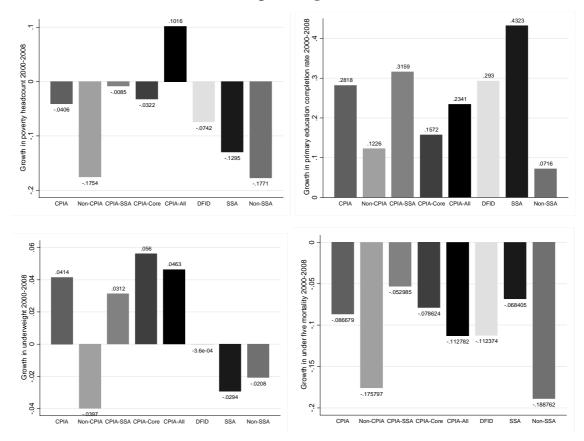
Figure A1: Fragile States – Change in MDGs (1990-2008) (percentage points)



Note: CPIA: fragile states included in the 2008 CPIA list (with a CPIA score of less than 3.2); non-CPIA: non-fragile developing countries; CPIA-SSA: Sub-Saharan African countries included in the 2008 CPIA list; CPIA core: countries that appear on the CPIA list every year between 2003 and 2008; CPIA-All: countries that show a CPIA score of less than 3.2 on any of the CPIA sub-lists (economic management, structural policies, social inclusion/equity, public sector management) in 2008; DFID: countries included in the 2007 DFID list; SSA: all Sub-Saharan African countries; Non-SSA: Non-Sub-Saharan African developing countries.

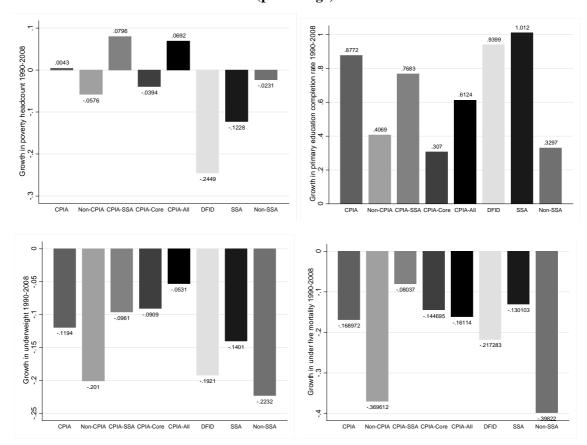
 $Figure\ A2:\ Fragile\ States-Growth\ in\ MGDs\ (2000-2008)$ 

## (percentage)



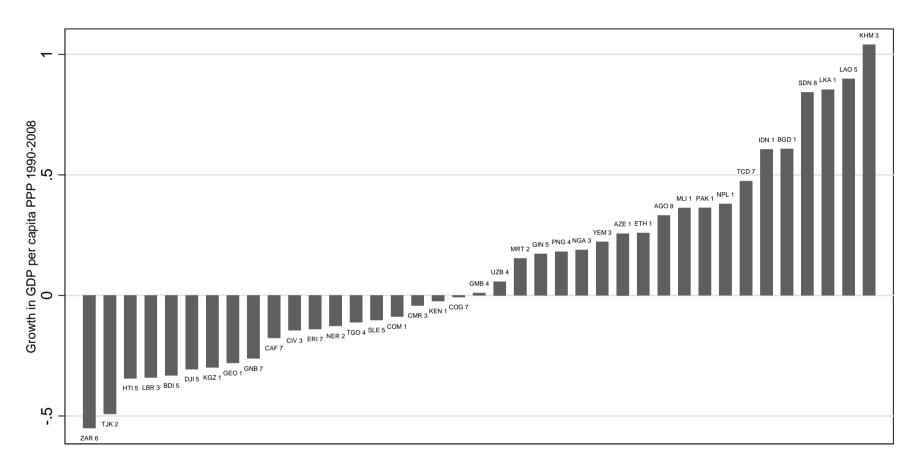
Note: CPIA: fragile states included in the 2008 CPIA list (with a CPIA score of less than 3.2); non-CPIA: non-fragile developing countries; CPIA-SSA: Sub-Saharan African countries included in the 2008 CPIA list; CPIA core: countries that appear on the CPIA list every year between 2003 and 2008; CPIA-All: countries that show a CPIA score of less than 3.2 on any of the CPIA sub-lists (economic management, structural policies, social inclusion/equity, public sector management) in 2008; DFID: countries included in the 2007 DFID list; SSA: all Sub-Saharan African countries; Non-SSA: Non-Sub-Saharan African developing countries.

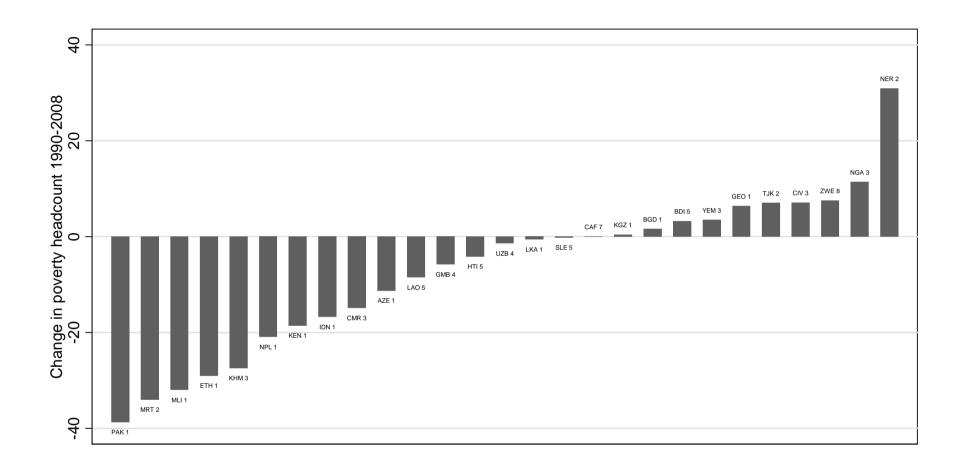
Figure A3: Fragile States – Growth in MGDs (1990-2008) (percentage)

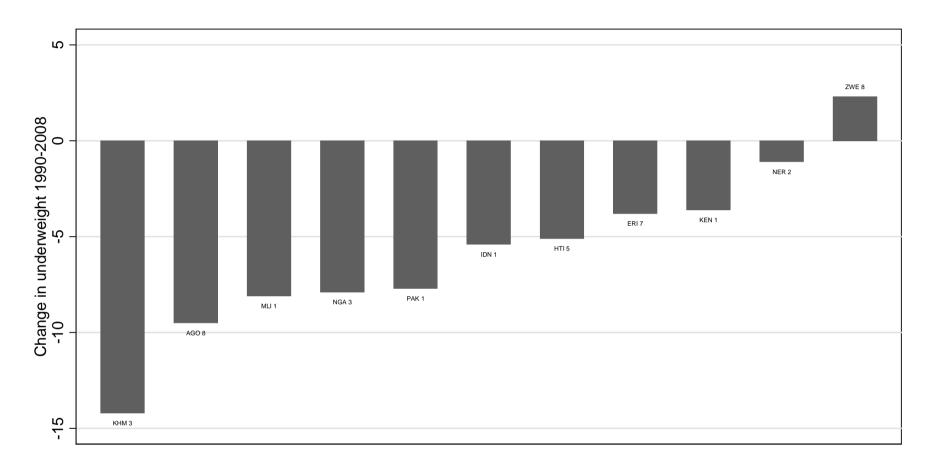


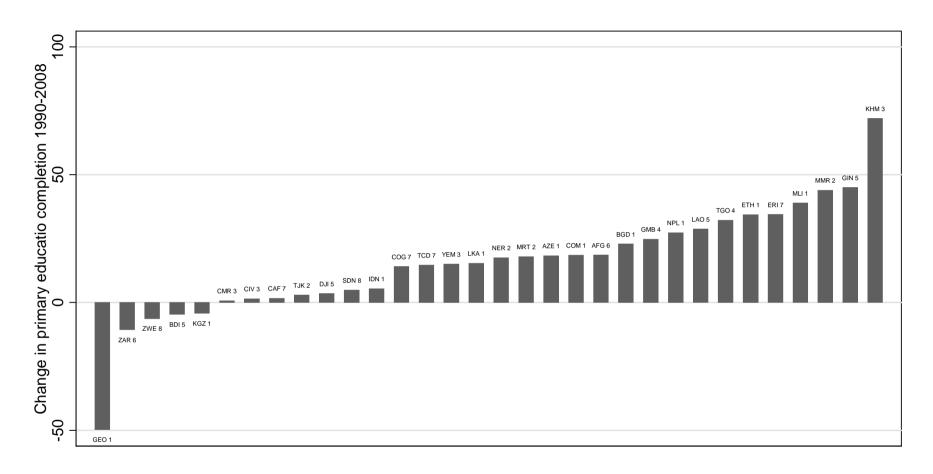
Note: CPIA: fragile states included in the 2008 CPIA list (with a CPIA score of less than 3.2); non-CPIA: non-fragile developing countries; CPIA-SSA: Sub-Saharan African countries included in the 2008 CPIA list; CPIA core: countries that appear on the CPIA list every year between 2003 and 2007; CPIA-All: countries that show a CPIA score of less than 3.2 on any of the CPIA sub-lists (economic management, structural policies, social inclusion/equity, public sector management) in 2008; DFID: countries included in the 2007 DFID list; SSA: all Sub-Saharan African countries; Non-SSA: Non-Sub-Saharan African developing countries.

Figure A5: Fragile States – Change in MDG Indicators by country and definition (1990-2006)









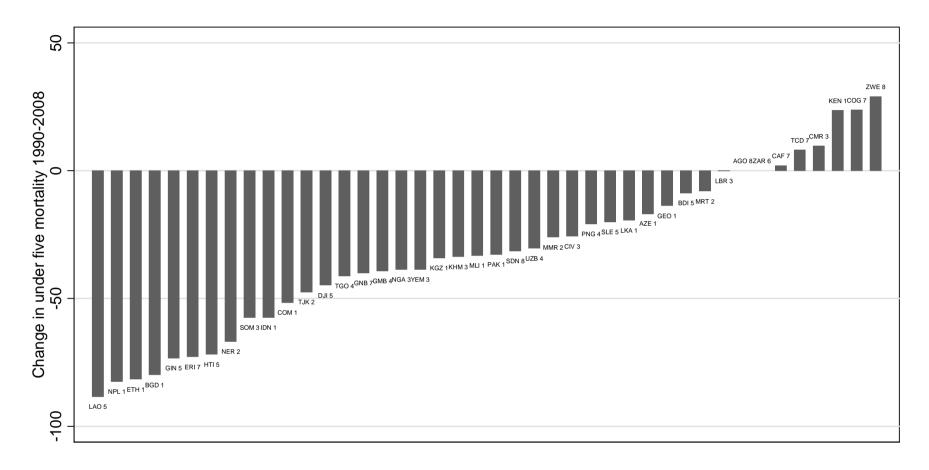


Table A1: Results of regression model (relative changes)

Dependent Variable	GDP per capita (relative change) (2000-2008)	Poverty headcount (relative change) (2000-2008)	Underweight (relative change) (2000-2008)	Under 5 mortality (relative change) (2000-2008)
MDG (initial level)	-0.001	-0.005	0.006*	0.002
CPIA score	1.001**	0.339*	-0.127	0.021
Sub-Saharan Africa	-2.991**	2.361**	0.130*	0.384*
HIV infection rate	-0.010	-0.011	0.018	0.019*
CPIA score*SSA	-1.003**	-0.7176**	0.053*	-0.093*
Constant	-2.427**	-1.656**	-0.652**	-0.609*
R-squared	0.303	0.121	0.384	0.121
N	60	44	18	63

Note: A reduction in underweight and under 5 mortality is coded as a negative number. Source: World Development Indicators (2009).

### **Notes**

The current financial crisis might undermine some of that progress. Up to date, the effects have been surprisingly small in most developing countries and also the effects on poverty reduction are rather small and are not predicted to endanger the overall positive trends on average MDG achievements (e.g. IMF, 2010; Ravallion, 2009). Depending on how the crisis develops further, this assessment could, of course, change.

The GMR 2009 (nor the one in 2008) does not provide any definition of the term fragile state and none is available after 2007 on the World Bank website. Presumably, fragility is defined using the CPIA score (see below).

This is apart from the mention of the differences in MDG performance in the Global Monitoring Reports (World Bank 2008, 2009). There, neither the definitions of fragility nor the precise calculations of MDG progress are available. See, also, a brief discussion on MDG progress in the IEG Report (World Bank 2006) in which also a relatively large amount of heterogeneity in MDG performance is shown.

The two papers from the World Bank (2007a, b) differ in three respects from the study here. First, they treat the CPIA as a continuous variable. Second, they drop some observations from their analysis, including some small states and transition countries. And, finally, they focus on the HDI and project performance ratings as the main outcome measures.

http://www.pcr.uu.se/gpdatabase/search.php.

The DFID list is not such a dissimilar approach from the CPIA as it defines countries as fragile if they were in the worst and second worst quintile of the CPIA between 1999 and 2003.

For a discussion of measurement issues surrounding the MDGs, see Bourguignon et al., 2008, and Klasen (2007, 2008).

However, one possible explanation for this is the limited data availability to obtain estimates for the poverty headcount for the year 2008, which is not available for all countries.

For respective relative changes (percentage) and also for the period 1990-2006, please see Figures A1- A3 in the Appendix.

<sup>&</sup>lt;sup>10</sup> See Figure A5 in the appendix for MDG progress by fragility status for the period between 1990 and 2008,

See, also, Ndulu et al., (2009) who tried to come up with country categorisations of the growth experience in Africa and found that within-group heterogeneity was often larger than between groups.

http://www.freedomhouse.org/template.cfm?page=213&year=2002.

<sup>13</sup> http://www.transparency.org/policy\_research/surveys\_indices/cpi.

Given that fragility (using the CPIA definition) is partly based on governance indicators (though not the ones from Freedom House), a relationship between fragility and governancy is expected. <sup>15</sup> See Table A1.

See, also, Klasen and Misselhorn (2007) for a related discussion.