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# POOR GOVERNMENT AND POOR CHILDREN:

An analysis of government efficiency and severe child deprivation  
in 70 low- and middle-income countries.

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Poor Government and Poor Children: An analysis of government efficiency and severe child deprivation in 70 low- and middle-income countries.

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## ABSTRACT

During the past decades research on governance and quality of government (QoG) has highlighted the detrimental impact of bad governance on peoples' living conditions. At the same time, much thanks to remarkable efforts when it comes to data collection, we have gained new knowledge about global child poverty. In this article these two strands of research are brought together in order to facilitate new and detailed knowledge about the link between QoG and child poverty. We use harmonized micro data measuring seven types of severe deprivation (lack of access to: safe water, food, sanitation, shelter, education, health care, and information) among children in 70 low- and middle-income countries (N=2,120,734). In a series of multi-level regression analysis we estimated the impact of QoG and degree of democratization, controlling for GDP per capita and a set of individual level variables. We show that QoG affected four of the seven deprivation indicators (safe water, food, health care, and information). As a contrast, democratization did not have any impact on child poverty.

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## Introduction

The aim of this paper is to analyse the relationship between democratization and quality of government (henceforth QoG) on the one hand and child poverty or to be more accurate different specific forms of child deprivation in about 70 low- and middle-income countries on the other hand. The paper is a unique contribution as it combines institutional macro level information about QoG with individual micro level data on child deprivation.

Beginning in the mid-1990s, the evidence that corruption and other forms of “bad governance” is a general social ill has been mounting. Included in concepts such as (the lack of) *good governance, control of corruption, administrative effectiveness, and state capacity*, low quality of government not only prevents economic prosperity but also have strong negative implications for population health, people’s access to safe water, access to health care, economic equality, social trust, political legitimacy, intra-state as well as inter-state peace and people’s subjective well-being (Holmberg and Rothstein 2012; Uslaner 2008). Theoretically, the dramatically increased interest in research about corruption is related to the “institutional revolution” in the social sciences that began in the early 1990 that stressed that being able to create a certain type of rules and regulations determined the well-being of societies (North 1990; North, Wallis, and Weingast 2009; Ostrom 1990). Also when it comes to global poverty in general and child poverty in particular there is a growing literature. Thanks to a remarkable development when it comes to data collection we today have information about the distribution of poverty between and within countries and individual explanatory factors (cf. Gordon, Nandy, Pantazis, Pemberton, and Townsend 2003; Lindskog 2011; Nandy 2009; Trani, Biggeri, and Vincenzo 2011) . Ultimately, within both these strands of research the fundamental goal is to better understand how to improve peoples living conditions. However, so far research in QoG and child poverty has largely developed separately.

## Background

### Quality of Government – what we know

Within the QoG genre empirical evidences have been gathered that show the importance of state capacity, administrative effectiveness, impartiality in the implementation of policies, and control lack of corruption for a large set of outcomes. Countries that scores high on various indicators of

QoG also tend to score better than other countries when it comes to poverty reduction, provision of health care, education, and general infrastructure and they do so net of economic development and net of democratic institutions (Holmberg and Rothstein 2010; Rothstein 2011). The importance of QoG indicators can readily be seen if we compare them with measures of democracy. The result is that QoG variables have substantially higher positive correlations with the standard measure of human well-being than has measures of democracy (Holmberg and Rothstein 2011a; Holmberg and Rothstein 2011b) This result goes against what has been taken for granted in theory as well as research about the impact of democracy, namely that representative democracy will lead to economic redistribution that would favour the poor in society (Gerring, Kingstone, Lange, and Sinha 2011). Simply put, democracy through equal voting rights would increase the power of the majority of ordinary citizens and decrease the power of the minority that makes up the economic elite. Competition for votes would induce politicians to provide either direct redistribution or provision of universal public services that would benefit the poor. The problem is that in a large number of countries, this is not happening, at least not to the extent that the theory predicts (Ross 2006). This problem, that democracy does not deliver improved broad based human well-being, was recently pointed out by Nobel Laureate Amartya Sen (2011) who in an article in *The New York Review of Books* compared “quality of life” in China and India. His conclusion is that for all standard measures of human well-being, communist-autocratic China now clearly outperforms liberal and democratically governed India. This applies according to Sen, for infant mortality, mortality rates for children under the age of five, life expectancy, immunization of children, basic education of children, poverty rates and adult literacy.

Thus, even though democracy can be seen as a good in itself democracy will not eradicate poverty if the system nevertheless is incapable of implementing policies in a trustworthy, predictable and impartial way (Charron 2011; Holmberg, Rothstein, and Nasiritousi 2009; Rothstein and Teorell 2008; Råby and Teorell 2011). What is often less clear in this literature is what kind of mechanisms that link QoG to economic and social development, how to understand the direction of causality, and what aspects of QoG – sound policies, efficient administration, control of corruption etc - that are of importance. One way to understand how the causality operates is through a “public goods” approach. Recent theoretical development within development research have pointed out that market economies, in order to produce prosperity, needs a quite large set of “public goods”. By this is meant not only the rule of law type of institutions that safe guard contract or property rights, but a much larger set. As argued by North, Wallis and Weingast (2009:11, 266), this includes universal

systems for the provision of “infrastructure, education, public health and social insurance programs” that enhance human capital. However, such programs will entail relatively high taxes and if the government and the civil service is generally known to be inefficient and corrupt, it is not likely that citizens will accept to pay high taxes even if they would agree that the “public goods” in question would be valuable (Svallfors 2012). The connection to child poverty is obvious – children in low-income families are especially dependent on many of these public goods. For example, free schooling is not only about education but often entails basic medical treatment and food. However, the causality between provision of public goods and poverty is not always given. As has been shown by Krishna (2010) in a very large empirical study, one very important reason for why households in many countries (including the United States) fall into severe poverty is that they now have access to modern health care facilities but they lack health insurance. When a family member gets ill and is then taken to the hospital, this implies that the household will be hit by huge medical costs that drives them into permanent poverty (2010). In the same way access to free schooling can generate costs when it comes to clothing, transports and necessary equipment. Corruption further aggravates these types of processes as seemingly free or strictly regulated public goods in reality have a black market price (Begum 2012). Thus, the lack of “good institutions” (aka. Inefficient administration and high levels of corruption) will make it very difficult to establish publicly financed health care systems, which in its turn will drive many households into severe poverty. Needless to say, children in low-income households are of course dependent on the existence of other social insurance programs as well that suffers from the same political logic as public health insurance (Rothstein, Samanni & Teorell 2011).

The intricate causal relationship between QoG and child poverty highlights the need to get more detailed empirical knowledge about what specific types of child deprivation that are associated with QoG. The typical approach within QoG research is based on aggregated country comparisons, i.e., we know for example if country A has a lower poverty rate than country B and systematic comparisons of large number of countries tells us if this difference can be connected to QoG or not. This approach has proven valuable but it nevertheless has limitations. First, we do not have any detailed information about how, for example, children are affected by poverty, what type of deprivations they are suffering from. It also means that we lack detailed knowledge about what QoG actually are or are not doing. Second, the country approach means that we do not know anything, or at least not much, about the distribution of, say, child deprivation *within* countries. Thus, it could be that even though the general deprivation level is lower in country A than in country B certain minority

sections of the population in country A are more deprived than most people in country B, an outcome that for example could be generated by systematic discrimination of minorities in country A. So, even though there have been great advances within the QoG area we still need to know more about the relationship between QoG and within country distribution of living conditions. We also need to know more about how within country population characteristics explains between country differences.

### **Child poverty – What We Know**

Research on poverty and in this case child poverty has been much focused on describing the distribution of poverty between and within countries, and what types of deprivations children are suffering from (Gordon et al. 2003). Explanatory analyses are mostly country based looking at individual factors that explains poverty risks in different sections of the population (Lindskog 2011; Trani, Biggeri, and Vincenzo 2011).

There are several reasons that warrant the study of child poverty in its own right. One such difference is that children have different needs and capacities not only compared to adults but also depending on the stage of their childhood (infancy, early and middle childhood as well as adolescence) (Sumner 2010). Conditions during early childhood, nutrition, access to education and health care, impacts on the future in basically all aspects including if there will be a future at all (Esping-Andersen 2011). Another reason to focus on child poverty as such is that children are simply more vulnerable than adults. Children have, depending on their age, special needs concerning for example nutrition, care, and education. Malnutrition, disease and infections have more adverse and potentially more deadly consequences for children as compared to adults (Gordon, Nandy, Pantazis, and Pemberton 2010; Gordon et al. 2003) and can affect children's long-term physical and cognitive development (Delamonica and Minujin 2007; Harpham 2002; Minujin, Delamonica, Davidziuk, and Gonzalez 2006; UNICEF 2004b). Hence, children's vulnerability makes it important to analyse child poverty.

Children are also different compared to adults because of their high degree of dependence. They are of course dependent on their parents and the household they live in but they are also highly dependent on a functioning infrastructure that provides basic resources, like for example safe water, health care, and education, necessary to avoid different types of deprivation. Most research have so far have relied mainly on household measures (Maxwell 1999; Nandy 2009) and a poor child has most often been defined as a child that lives in a household where the daily per capita

income is below \$1 (in PPP standard). This measure is often criticised (e.g. Alkire and Santos 2010; Gordon, Nandy, Pantazis, and Pemberton 2010; Minujin, Delamonica, Davidziuk, and Gonzalez 2006; Sen 2009; Trani, Biggeri, and Vincenzo 2011). The criticisms do, from a theoretical perspective, follow the same lines as the discussion about how to measure poverty in richer countries, i.e., that monetary measures do not capture the actual ability to consume goods and services, that it misses the multidimensional aspects of poverty, stressed in, for example, the UN's Millennium Development Goals, and that it conceals differences within the households (Halleröd, Larsson, Gordon, and Ritakallio 2006; Halleröd 1995; Halleröd 2000; Halleröd and Larsson 2008; Sen 2006). These limitations are especially important to highlight in relation to children and given that we accept that child deprivation is different from adult poverty the need for individual measures of child deprivation becomes apparent. Still, systematic analyses of child poverty are, despite recent significant advances, rare.

Less than ten years ago the first global estimates of child poverty in developing countries was undertaken (Gordon et al. 2003; UNICEF 2004a). The studies were based on what has become known as the 'Bristol method'. The method, designed for cross national comparisons of child poverty, is made up of seven indicators of severe deprivation covering: food, safe drinking water, sanitation facilities, health, shelter, education, and information (Gordon et al. 2003; Nandy 2009; UNICEF 2004a; UNICEF 2005). The method relates to several of the basic rights identified by the UN, which means that it is normatively anchored in a widely agreed human rights agenda. For all seven indicators mild, moderate, severe, and extreme deprivation were defined. The Bristol team base their measurement on severe deprivation on all eight indicators in order to '...err on the side of caution' (Gordon et al. 2003 p. 9). In spite of the strict operationalization it was estimated that 56 per cent - more than one billion - children in low and middle-income countries suffered from one or more forms of severe deprivation. More than a third of all children suffered from at least two types of severe deprivations, a state that Gordon and his colleagues defined as absolute poverty. In a more recent study Nandy (2009) analysed change of global child poverty between the mid 1990s and the early 2000. The analysis showed a decrease of the percentage of deprived children. However, due to population increase the number of severely deprived children still exceeded one billion. Both studies also revealed huge differences between different regions. More than 80% of the children in Sub-Saharan Africa and South Asia were severely deprived. The corresponding figure for East Asia and Pacific were 23%. It can also be added that Sub-Saharan Africa was the only region where severe deprivation did not decrease between the mid 1990s and early 2000.

There is a significant difference between urban and rural areas and child deprivation is predominantly a rural phenomena. According to Nandy (2009) around year 2000 in rural areas 45 per cent of all children were suffering from severe deprivation. The corresponding figures for urban areas were 17 per cent. Considering these figures one should also keep in mind that even though the urban population are growing faster than the rural population the large majority of the children are still living in rural areas. One reason for the difference between urban and rural areas is economic, economic growth is generally concentrated to urban areas and, hence, the economic resources necessary to avoid deprivation are more available in urban areas as compared to rural areas. It is also easier to build and maintain a functioning infrastructure in urban areas. Hence, we can assume that child deprivations are less common in urban areas because they are richer and because it is more feasible to build a functioning administration and infrastructure in urban areas.

But, in order to draw conclusions about the direct link between child deprivation and QoG indicators we also need to consider differences in the composition of the population. Fertility rates and as a consequence the average number of children per household differs between countries and is within countries generally higher in rural areas. It is also the case that the educational level is higher in rural areas a circumstance that, beside its impact on parents earning capability, also possibly affects they way they treat their children and are capable of taking advantage of available services such as health care.

## **QoG and Child Poverty – What We Need To Know**

Today we know that QoG is important in its own right to explain countries differences when it comes to population well-being. We also know a great deal about child poverty. We know where on the globe we have the largest concentrations of poor children and what kinds of deprivation they are suffering from. We also know a grate deal about the individual causes to child poverty. What we do not know is: A) to what degree QoG affects the poverty risk among children when we take account for both economic development, political institutions and, not least important, individual circumstances such as urbanisation and family composition. B) What kind of deprivations among children that are linked to QoG, and C) to what degree QoG is related to within country inequality when it comes to child poverty.



In this article we will start to address the two first questions. We will use a unique data set that combines micro-data from representative surveys from 70 low- and middle-income countries with macro-data that contains country information about economic development, political institutions and QoG.

## **Data, Measurements and Method**

The countries included in the analyses, listed in Table 1 covers low- and middle-income countries from all continents. Micro level data comes from the Demographic and Health Survey (DHS) organized by US-AID and UNICEF's Multiple Indicator Cluster Survey (MICS) containing information from 2,120,734 children under the age of 18. We are focusing on seven outcomes listed in Table 2. Table 2 also briefly describe how the indicators are operationalized, which follows the so-called Bristol method (Gordon et al. 2003). Depending on indicator the age span for which data is available differs and for that reason the N varies between indicators. In most cases all children between 0-17 are included but in some case a smaller age span is covered. Data about food- and health deprivation is for example only collected for children under the age of five and education deprivation is confined to children in the age span 7 to 17. Table 2 also show the un-weighted percentages of deprived children in the sample.

While there are now several expert based measures of QoG based on somewhat different conceptualizations of the problem (such as corruption, good governance, quality of government, state capacity), they correlate at a surprisingly high level (Holmberg, Rothstein, and Nasiritousi 2009; Holmberg and Rothstein 2010; Transparency International 2008).<sup>i</sup> In addition, the expert based measures correlate at an equally high level with recent measured based on comparative surveys to representative samples of the population (Bechert and Quandt 2009; Svallfors 2012). There seem thus to be a reasonable level of validity in these measures of QoG. Among the range of available QoG measures we have chosen the measure of government efficiency originally developed by Kaufmann, Kraay, and Zoido-Lobaton (2002; 1999) and their team at the World Bank Institute. This measure is one among a set of World Bank Institute measures, often referred to as KKZ, that in critical review by Arndt and Oman (2006) have been pointed out as not only the most used but also the most carefully constructed indicators of governance. The KKZ measure of government

effectiveness ‘combines into a single grouping responses on the quality of public service provision, the quality of the bureaucracy, the competence of civil servants, the independence of the civil service from political pressures, and the credibility of the government’s commitment to policies. The main focus of this index is on “inputs” required for the government to be able to produce and implement good policies and deliver public goods’ (Teorell, Samanni, Holmberg, and Rothstein 2011). The governance estimates are normally distributed with a mean of zero and a standard deviation of one each year of measurement. This implies that virtually all scores lie between  $-2.5$  and  $2.5$ , with higher scores corresponding to better outcomes.

TABLE 1. COUNTRIES IN THE STUDY. SAMPLE YEAR AND SAMPLE SIZE. PER CENT OF CHILDREN IN THE SAMPLE SUFFERING FROM SEVER DEPRIVATION.

|                          | Year | N       | Water | Food | Educ. | Shelter | Sanit. | Health | Info. |
|--------------------------|------|---------|-------|------|-------|---------|--------|--------|-------|
| Albania                  | 2000 | 6,683   | 4.7   | 19.0 | 3.0   | 6.9     |        | 19.9   |       |
| Azerbaijan               | 2000 | 9,732   | 24.3  | 9.9  | 4.2   | 14.2    | 0.1    | 29.2   | 12.1  |
| Bangladesh               | 2006 | 127,250 | 3.9   |      | 8.7   | 82.6    | 28.1   | 16.7   | 52.9  |
| Armenia                  | 2000 | 8,300   | 9.4   | 3.0  | 1.1   | 1.6     | 0.1    | 12.8   | 1.3   |
| Bolivia                  | 2004 | 37,856  | 10.8  | 9.0  | 1.4   | 48.4    | 36.4   | 18.4   | 4.9   |
| Bosnia and Herzegovina   | 2000 | 9,486   | 2.3   | 4.9  | 4.7   |         | 0.0    | 12.6   |       |
| Brazil                   | 1996 | 22,732  |       | 3.3  | 2.8   | 12.4    | 17.1   | 13.9   | 2.8   |
| Myanmar                  | 2000 | 51,645  | 60.8  | 4.9  | 11.6  | 7.9     | 16.9   | 1.8    |       |
| Burundi                  | 2005 | 22,799  | 51.8  |      | 17.7  | 87.4    | 2.8    | 28.0   | 55.9  |
| Cambodia                 | 2005 | 33,463  | 16.7  | 17.1 | 10.9  | 68.9    | 75.9   | 23.1   | 11.4  |
| Cameroon                 | 2006 | 21,303  | 35.7  | 15.0 | 10.5  | 55.8    | 7.4    | 20.8   | 30.6  |
| Central African Republic | 2000 | 53,056  | 32.7  | 22.3 | 37.1  | 83.2    | 21.1   | 24.4   | 46.3  |
| Chad                     | 2000 | 16,209  | 48.9  | 12.5 |       | 90.7    | 51.2   | 87.6   |       |
| Colombia                 | 2005 | 60,392  | 6.8   | 2.1  | 1.7   | 12.0    | 11.2   | 10.7   | 8.7   |
| Congo BR                 | 2005 | 14,526  | 30.9  | 11.1 | 3.9   | 44.4    | 10.6   | 13.3   | 12.0  |
| Congo DR                 | 2007 | 25,219  | 57.6  | 22.8 | 18.8  | 74.8    | 11.0   | 29.7   | 26.6  |
| Benin                    | 2001 | 16,215  | 24.9  | 13.4 | 36.0  | 42.7    | 70.2   | 18.4   |       |
| Dominican Republic       | 2002 | 47,253  | 9.6   | 1.9  | 2.7   | 11.6    | 8.0    | 15.8   | 5.3   |
| Equatorial Guinea        | 2000 | 10,340  | 56.6  | 23.0 | 0.6   | 51.6    | 9.3    | 75.5   |       |
| Ethiopia                 | 2000 | 34,439  | 81.2  | 23.2 | 57.3  | 87.8    | 77.6   | 44.6   | 59.4  |
| Gabon                    | 2000 | 15,687  | 37.6  | 0.3  | 1.9   | 30.3    | 2.7    | 1.2    | 11.2  |
| Gambia                   | 2000 | 14,191  | 30.9  | 22.4 | 0.1   | 48.5    | 12.4   | 35.5   |       |
| Ghana                    | 2006 | 12,742  | 24.5  | 9.7  | 14.3  | 42.7    | 39.1   | 20.5   | 24.0  |
| Guatemala                | 1999 | 16,239  | 15.5  | 18.0 | 12.2  | 55.4    | 22.7   | 26.1   | 14.6  |
| Guinea                   | 1999 | 18,745  | 40.9  | 7.2  | 54.5  | 52.8    | 32.3   | 29.8   |       |
| Guyana                   | 2000 | 8,733   | 25.2  | 8.2  | 0.1   | 28.8    | 3.2    | 9.9    |       |
| Haiti                    | 2000 | 22,983  | 52.6  | 7.8  | 12.6  | 52.6    | 44.3   | 42.5   | 21.9  |
| India                    | 2006 | 198,294 | 9.8   | 23.2 | 10.8  | 59.6    | 43.8   | 13.3   | 12.5  |
| Indonesia                | 2003 | 56,726  | 18.4  |      | 2.2   | 9.1     | 25.8   | 20.3   | 9.0   |
| Jamaica                  | 2005 | 5,813   | 5.9   |      | 0.2   |         | 1.0    | 7.5    |       |
| Jordan                   | 1997 | 22,114  |       | 2.2  | 1.1   | 14.3    | 1.0    | 12.0   | 1.0   |
| Kenya                    | 2003 | 18,779  | 60.9  | 10.4 | 10.7  | 68.1    | 23.4   | 24.8   | 18.5  |
| Kyrgyzstan               | 2006 | 10,015  | 16.3  | 5.4  | 1.7   | 16.1    | 0.1    | 12.5   | 1.9   |
| Laos                     | 2006 | 16,263  | 26.6  | 20.0 | 14.3  | 34.8    | 58.2   | 43.7   | 32.4  |
| Lesotho                  | 2000 | 14,352  | 46.8  | 30.6 |       | 50.3    | 41.8   | 32.2   |       |
| Madagascar               | 2004 | 37,280  | 44.2  | 25.2 | 12.6  | 13.8    | 38.1   | 24.4   | 20.5  |
| Malawi                   | 2006 | 71,425  | 38.1  | 20.7 | 6.7   | 81.9    | 12.6   | 19.6   | 34.7  |
| Mali                     | 2006 | 40,095  | 7.5   | 22.2 | 51.8  | 79.2    | 23.5   | 24.3   | 10.8  |
| Mongolia                 | 999? | 11,576  | 29.1  | 6.9  | 2.5   | 52.0    | 14.1   | 8.1    | 8.7   |
| Morocco                  | 2003 | 24,439  | 13.1  | 10.1 | 11.6  | 28.0    | 23.1   | 14.5   | 4.9   |
| Mozambique               | 1997 | 23,245  | 48.5  | 8.4  | 26.3  | 72.7    | 52.8   | 17.1   | 57.7  |
| Namibia                  | 2000 | 15,031  | 21.9  | 6.7  | 8.4   | 62.5    | 56.6   | 13.7   |       |
| Nepal                    | 2006 | 19,935  | 18.2  | 20.7 | 7.9   | 81.7    | 55.1   | 12.6   | 4.7   |
| Nicaragua                | 2001 | 29,673  | 13.1  | 7.3  | 13.2  | 62.9    | 21.1   | 16.6   | 7.8   |
| Niger                    | 2006 | 27,180  | 24.6  | 28.6 | 53.0  | 83.2    | 70.7   | 30.7   | 19.8  |
| Nigeria                  | 2007 | 63,188  | 41.7  | 23.8 | 32.9  | 52.5    | 30.3   | 49.1   | 23.4  |
| Pakistan                 | 2006 | 32,994  | 8.7   |      | 24.9  | 52.9    | 28.3   | 19.2   | 24.7  |
| Peru                     | 2004 | 11,040  | 27.3  |      | 0.6   | 52.4    | 23.8   | 15.2   | 3.3   |
| Philippines              | 2003 | 26,768  | 7.5   |      | 2.4   | 14.0    | 12.1   | 17.8   | 4.0   |

|                       |      |           |      |      |      |      |      |      |      |
|-----------------------|------|-----------|------|------|------|------|------|------|------|
| Guinea-Bissau         | 2000 | 18,282    | 27.7 | 17.9 |      | 69.3 | 33.9 | 57.0 |      |
| Sao Tome and Principe | 2000 | 7,255     | 45.4 | 10.7 |      | 9.0  | 74.5 | 41.7 |      |
| Senegal               | 2000 | 35,446    | 12.0 | 7.2  | 38.3 | 44.3 | 24.9 | 20.3 | 2.7  |
| Vietnam               | 2006 | 12,736    | 8.7  |      | 2.3  | 28.7 | 20.1 | 9.1  | 15.8 |
| South Africa          | 1998 | 24,019    | 30.5 |      | 2.0  | 26.0 | 18.2 | 8.9  |      |
| Zimbabwe              | 2005 | 21,218    | 28.1 | 11.3 | 2.0  | 46.1 | 38.2 | 30.0 | 23.9 |
| Sudan                 | 2000 | 81,451    | 34.5 | 31.6 | 30.4 | 90.6 | 40.9 | 39.5 | 57.9 |
| Suriname              | 2000 | 6,603     | 11.4 | 4.8  | 0.2  | 7.5  | 10.5 | 8.1  |      |
| Swaziland             | 2000 | 12,575    | 63.4 | 12.9 | 7.6  | 25.8 | 27.4 | 6.9  |      |
| Tajikistan            | 2000 | 12,711    | 54.9 |      |      | 51.2 | 0.8  | 13.3 |      |
| Thailand              | 2006 | 38,954    |      | 2.7  | 0.6  | 11.3 | 1.1  | 6.9  | 14   |
| Uganda                | 2001 | 21,448    | 74.5 | 11.3 | 6.3  | 73.0 | 11.3 | 24.3 | 28.4 |
| Ukraine               | 2005 | 5,830     |      |      | 0.3  | 2.0  |      |      | 0.4  |
| Egypt                 | 2005 | 45,155    |      | 9.3  | 5.7  | 21.7 | 2.0  | 8.1  | 1.6  |
| Tanzania              | 2004 | 25,022    | 32.9 | 13.6 |      | 75.4 | 19.5 | 11.2 | 14.9 |
| Burkina Faso          | 2003 | 32,831    | 43.0 | 22.1 | 61.3 | 60.0 | 71.0 | 28.4 | 16.7 |
| Uzbekistan            | 2006 | 19,906    | 3.1  | 5.4  | 1.3  | 10.3 |      | 3.6  | 0.9  |
| Yemen                 | 2006 | 13,637    | 28.8 |      | 20.1 | 41.8 | 20.0 | 45.3 | 20.3 |
| Zambia                | 2002 | 20,220    | 28.2 | 24.6 | 21.5 | 66.6 | 28.3 | 17.4 | 30.0 |
| <b>Total</b>          |      | 2,120,734 | 25.9 | 14.1 | 14.0 | 50.3 | 28.1 | 21.8 | 20.3 |

TABLE 2. SEVER DEPRIVATION AMONG CHILDREN YEARS IN DEVELOPING COUNTRIES AROUND 2005.

| Sever Deprivation   | N         | Per cent severely deprived |
|---|-----------|----------------------------|
| Water: Children who only have access to surface water (for example, rivers) for drinking or who lived in households where the nearest source of water was more than 15 minutes away. Children < 18 years old. | 2,060,253 | 25.9                       |
| Food: Children whose heights and weights for their age were more than -3 standard deviations below the median of the international reference, that is, severe anthropometric failure. Children < 5 years old. | 455,268   | 14.1                       |
| Sanitation: Children who had no access to a toilet of any kind in the vicinity of their dwelling, that is, no private or communal toilets or latrines. Children < 18 years old.                               | 2,049,431 | 28.1                       |
| Health: Children who has not been immunised against diseases or young children who had a recent illness involving diarrhoea and had not received and medical advise or treatment. Children < 5 years old      | 578,229   | 21.8                       |
| Shelter: Children in dwelling with more than five people per room and/or with no flooring material. Children < 18 years old.  | 2,105,435 | 50.3                       |
| Education: Children who had never been to school and were not currently attending school, i.e., no professional education of any kind. Children 7 to 17 years old.  | 1,256,750 | 14.0                       |
| Information: Children have no access to radio, television, telephone or newspaper at home. Children 3 to 17 years old.  | 1,614,711 | 20.3                       |

TABLE 3. INDEPENDENT VARIABLES.

| Variable                              | Mean  | Std. | Min   | Max   |
|---------------------------------------|-------|------|-------|-------|
| <b>Country level:</b>                 |       |      |       |       |
| <b>QoG - Government effectiveness</b> | -0.67 | 0.50 | -1.90 | 0.71  |
| <b>Democracy</b>                      | 5.45  | 2.66 | 0.25  | 9.54  |
| <b>GDP (log)</b>                      | 7.56  | 0.75 | 6.25  | 10.31 |
| <b>Individual level:</b>              |       |      |       |       |
| <b>Child – adult balance (log)</b>    | 1.08  | 2.48 | -17   | 62    |
| <b>Number of children (log)</b>       | 4.15  | 2.62 | 0     | 65    |
| <b>Age</b>                            | 8.17  | 5.07 | 0     | 17    |
| <b>Rural (living in rural areas)</b>  | 0.62  |      |       |       |
| <b>Sex (girls)</b>                    | 0.49  |      |       |       |

We will, at the country level, control for two additional variables: degree of democratisation and GDP per capita. As a measure democratisation we use the indicator developed by Freedom House a measure validated (Hadenius and Teorell 2005). The scale ranges from 0-10 where 0 is least democratic and 10 most democratic. We have also crated an interaction variable that catches the combined effect of QoG and democratization. This measure will test the assumption that in order to get anything done a government need to be efficient but in order to get the right thing done they also need to be democratic.

As a measure of GDP per capita we use the logarithm of the UNDP GDP per capita measure. We prefer the logarithm because most of the relationships between GDP per capita and our child deprivation measures are curve linear with a decreasing impact of GDP per capita as countries are getting richer. Hence, a GDP increase has most impact among the poorest countries. Taking account of this curve linear relationship also means that we are exposing our QoG and democracy measures to a harder test.

Our data allow us not only to control for other country level variables but also for a set of individual characteristics. So, in our final model we control for children’s sex, age, if they live in rural or urban area, and family composition. We use two measures to capture household composition: The number of children in the household and the number of children per adult in the household. We include sex because it could be that girls and boys are exposed to different risks and that these differences sometimes are systematic but nevertheless more or less independent from government efficiency, democratization, and economic development. It has for example been shown that girls are more often deprived of education than is the case for boys (Gordon et al. 2003; Nandy 2009). Age could presumably explain not only difference between individuals but also differences between countries when it comes to age structures and also timing of for example the educational system.

Since child poverty is a predominantly rural phenomenon we include a variable that measures whether the children are living in urban or rural areas.

For each child deprivation outcome we estimate a series of mixed model regressions. The analysis is based on the assumption that children are nested within countries and the analysis provides fixed effects that are assumed to be homogenous across countries and random effects capturing differences between countries. We start with a null model, i.e., a model that only estimates country differences. We thereafter include the country estimate for QoG in order to find out if there is relationship between QoG and child deprivation or not. Thereafter we replace our QoG indicator with our democracy measure and in the next step we include the interaction term between QoG and democratization. In our original strategy we now proceeded with a model that included GDP per capita and both our QoG and democracy variables. However, we have, because of the consistently insignificant estimates for our democracy measure omitted this stage and our next model includes measure of QoG and GDP only. Finally we estimate the full model that includes the country-level variables QoG and GDP plus the individual control variables.

The estimated models are so called linear probability models. There are two reasons why we have chosen a linear model instead of a logistic-model. First, the linear model allows a straightforward interpretation of the results in terms of proportions and it has also been shown that a linear model basically do presents identical significant estimates as the logit model (Hellevik 2007). The linear model also produces estimates that are comparable between models which is not the case for the logistic model (Mood 2009; Winship and Mare 1984).

As can be seen from Table 1 we do not have information about all kinds of deprivation in all countries. Hence, the number of countries will vary depending on which outcome we are studying. In the working samples we only include cases that has full information on all the dependent and independent variables discussed above.

## **Results**

Our countries are listed in Table 1. The table also contains information of country sample sizes, i.e., the number of children in each country survey that are between 0 and 17 years old and the percentage in each country that suffers from any form sever deprivation measured by our indicators. As can be seen there are large differences between countries when it comes to child deprivation.

Table 4 shows the estimates for water deprivation, i.e., lack of access to safe water among children. The first model, the null model, only includes the intercept. Since this is a linear probability model the intercept shows the proportion of deprived children. Thus, 29 per cent of all children are suffering from water deprivation. This figure deviates from the figure for the total sample presented in

The main reason for this is that the mixed model disregards differences in sample size. In the random part of the model we get the variance of the intercept, that is, the differences between country intercepts. The variance is significant, which means that the differences we observe between the countries most certainly will be repeated if we substitute our countries to another set of comparable countries. We can also see that the larger share of the total variance is between individuals within countries.

TABLE 4. GOVERNMENT EFFECTIVENESS AND SEVER WATER DEPRIVATION: MIXED MODEL LINEAR PROBABILITY ESTIMATES.

|                           | Null-model | Model 1  | Model 2  | Model 3 | Model 4  | Model 5   |
|---------------------------|------------|----------|----------|---------|----------|-----------|
| <b>Fixed effects:</b>     |            |          |          |         |          |           |
| <b>QoG – Gov. eff.</b>    |            | -0.167** |          | -0.136* | -0.129*  | -0.131**  |
| <b>Democracy</b>          |            |          | -0.023** | -0.009  |          |           |
| <b>GDP (log)</b>          |            |          |          |         | -0.049#  | -0.030    |
| <b>sex</b>                |            |          |          |         |          | -0.002**  |
| <b>age</b>                |            |          |          |         |          | -0.001*** |
| <b>rural</b>              |            |          |          |         |          | 0.220***  |
| <b>Children (log)</b>     |            |          |          |         |          | -0.002*** |
| <b>Childbalance (log)</b> |            |          |          |         |          | 0.008***  |
| <b>Constant</b>           | 0.294***   | 0.184*** | 0.417*** | 0.255** | 0.582*** | 0.308     |
| <b>Var: Constant</b>      | 0.036*     | 0.030*   | 0.032*   | 0.030*  | 0.029*   | 0.026*    |
| <b>Var: Residual</b>      | 0.158*     | 0.158*   | 0.158*   | 0.158*  | 0.158*   | 0.147*    |
| <b>Groups</b>             | 63         | 63       | 63       | 63      | 63       | 63        |
| <b>N</b>                  | 1834957    | 1834957  | 1834957  | 1834957 | 1834957  | 1834957   |

Significance: \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ , # $p < .10$

In model 1 we test if government efficiency is related to lack of safe water among children. The coefficient is negative and significant, i.e., the higher QoG, the less water deprivation. In model 2 we have swapped our QoG measure with our democracy indicator. This model shows that also democracy has an impact on water deprivation – the more democratic, the less deprivation. However, the effect is fairly weak and the degree of democratization explains less of the between country variance than is the case for our QoG indicator. In model 3 both these variables are included and, as can be seen, the QoG indicator wipes out the effect of democracy. Thus, once we control for government efficiency democracy do not affect children’s access to safe water. We have also, as mentioned above, estimated a model that includes the interaction between QoG and democracy.

We could not verify any interaction effect between these two variables. As will be shown in the following analyses, this is not something unique for water deprivation. In fact, apart from water deprivation only health deprivation was related to democracy and also in this case the impact of democracy was wiped out when QoG was added to the model. Also, we could not verify any interaction effects between QoG and democracy. *Thus, our measure of democracy does not affect any of our seven deprivation measures once we control for government efficiency.*

In model 4 we use GDP per capita as control variable. The estimate for GDP is as expected negative, which means that lack of safe water is most common among the poorest countries. The important thing is that the estimate for government efficiency remains significant. This means that QoG is important for children's access to safe water net of the impact of economic development. The fifth model includes the individual variables as well. The difference between boys and girls, girls score somewhat lower, is significant but very small, which is consequence of the very large N. The age difference is also small but significant and most probably generated by the fact that the time distance to safe water is one component of the deprivation measure. The important difference is the one between children in rural and urban areas, water deprivation being much more common in rural areas. The number of children in the household has a negative impact on water deprivation, while the child – adult ratio is positive and four times as large. Hence it is not the number of children per se that is problematic. Instead, it is the number of children per adult in families that increase the risk for water deprivation. These individual level estimates are largely similar to the one obtained in the following analyses, one notable exemption being the estimate of sex on lack of education. The important thing at this stage is to conclude that the impact of QoG, as opposed to GDP per capita, remains significant also when controlling for individual variables.

In Table 5 the same sequences of analysis are repeated but this time the outcome is severe food deprivation, i.e., malnutrition. We basically find the same pattern as we did when analysing lack of safe water, which among other things means that our QoG measure remains significant also in model 5. The difference being that the result of GDP per capita remains significant also in model 5. We can also see that the effect of age is positive, which might reflect that malnutrition is a process that, when measured as height and weight, is easier to spot after the children has reached a few years of age. The difference between urban and rural areas is smaller than is the case with lack of safe water.



TABLE 5. GOVERNMENT EFFECTIVENESS AND SEVERE FOOD DEPRIVATION: MIXED MODEL LINEAR PROBABILITY ESTIMATES.

|                        | Null-model | Model 1  | Model 2  | Model 3  | Model 4  | Model 5   |
|------------------------|------------|----------|----------|----------|----------|-----------|
| <b>Fixed effects:</b>  |            |          |          |          |          |           |
| QoG – Gov. eff.        |            | -0.064** |          | -0.077** | -0.041#  | -0.040#   |
| Democracy              |            |          | -0.003   | 0.004    |          |           |
| GDP (log)              |            |          |          |          | -0.035** | -0.029*   |
| sex                    |            |          |          |          |          | -0.009*** |
| age                    |            |          |          |          |          | 0.011***  |
| rural                  |            |          |          |          |          | 0.053***  |
| Children (log)         |            |          |          |          |          | -0.002*** |
| Childbalance (log)     |            |          |          |          |          | 0.007***  |
| Constant               | 0.135***   | 0.095*** | 0.151*** | 0.064#   | 0.372*** | 0.295**   |
| <b>Random effects:</b> |            |          |          |          |          |           |
| Var: Constant          | 0.007*     | 0.006*   | 0.007*   | 0.006*   | 0.005*   | 0.005*    |
| Var: Residual          | 0.122*     | 0.122*   | 1.122*   | 0.122*   | 0.122*   | 0.121*    |
| Groups                 | 55         | 55       | 55       | 55       | 55       | 55        |
| N                      | 383361     | 383361   | 383361   | 383361   | 383361   | 383361    |

Significance: \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ , # $p < .10$

Lack of education is analysed in Table 6. Here we can see that QoG is associated with education deprivation when analysed alone or together with our democracy measure. But, once we control for GDP per capita the impact of QoG disappears. It is worth to notify that the estimate for sex is positive and substantially larger than in the previous analysis, that is, girls are clearly more exposed to education deprivation than is the case for boys.

TABLE 6. GOVERNMENT EFFECTIVENESS AND SEVERE EDUCATION DEPRIVATION. MIXED MODEL LINEAR PROBABILITY ESTIMATES.

|                        | Null-model | Model 1 | Model 2 | Model 3 | Model 4   | Model 5   |
|------------------------|------------|---------|---------|---------|-----------|-----------|
| <b>Fixed effects:</b>  |            |         |         |         |           |           |
| QoG – Gov. eff.        |            | -0.090* |         | -0.119* | -0.009    | -0.006    |
| Democracy              |            |         | -0.002  | 0.009   |           |           |
| GDP (log)              |            |         |         |         | -0.102*** | -0.090*** |
| Sex                    |            |         |         |         |           | 0.028***  |
| Age                    |            |         |         |         |           | -0.008*** |
| Rural                  |            |         |         |         |           | 0.095***  |
| Children (log)         |            |         |         |         |           | -0.002*** |
| Childbalance (log)     |            |         |         |         |           | 0.008***  |
| Constant               | 0.134***   | 0.079*  | 0.146** | 0.011   | 0.917***  | 0.813***  |
| <b>Random effects:</b> |            |         |         |         |           |           |
| Var: Constant          | 0.025*     | 0.023*  | 0.025*  | 0.023*  | 0.018*    | 0.017*    |
| Var: Residual          | 0.103*     | 0.103*  | 0.103*  | 0.103*  | 0.103*    | 0.100*    |
| Groups                 | 63         | 63      | 63      | 63      | 63        | 63        |
| N                      | 1129602    | 1129602 | 1129602 | 1129602 | 1129602   | 1129602   |

Significance: \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ , # $p < .10$

The general pattern is largely repeated when analysing shelter deprivation. There is an impact of QoG but it becomes insignificant once we control for GDP per capita. It is also clear that shelter is a predominantly rural phenomenon and that is linked to household with a large number of children

(per adult that is). Lack of sanitation is not related to QoG at all and among the macro-variables it is only GDP per capita that reach significance. Again there is a large urban – rural divide.

TABLE 7. GOVERNMENT EFFECTIVENESS AND SEVERE SHELTER DEPRIVATION. MIXED MODEL LINEAR PROBABILITY ESTIMATES.

|                        | Null-model | Model 1  | Model 2 | Model 3  | Model 4   | Model 5   |
|------------------------|------------|----------|---------|----------|-----------|-----------|
| <b>Fixed effects:</b>  |            |          |         |          |           |           |
| QoG – Gov. eff.        |            | -0.215** |         | -0.256** | -0.078    | -0.074    |
| Democracy              |            |          | 0.000   | 0.014    |           |           |
| GDP (log)              |            |          |         |          | -0.157*** | -0.124*** |
| sex                    |            |          |         |          |           | 0.003***  |
| age                    |            |          |         |          |           | 0.003***  |
| rural                  |            |          |         |          |           | 0.293***  |
| Children (log)         |            |          |         |          |           | -0.006*** |
| Childbalance (log)     |            |          |         |          |           | 0.023***  |
| Constant               | 0.454***   | 0.319*** | 0.443*  | 0.221*   | 1.604***  | 1.202***  |
| <b>Random effects:</b> |            |          |         |          |           |           |
| Var: Constant          | 0.071*     | 0.061*   | 0.071*  | 0.060*   | 0.048*    | 0.042*    |
| Var: Residual          | 0.175*     | 0.175*   | 0.175*  | 0.175*   | 0.175*    | 0.153*    |
| Groups                 | 66         | 66       | 66      | 66       | 66        | 66        |
| N                      | 1954443    | 1954443  | 1954443 | 1954443  | 1954443   | 1954443   |

Significance: \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ , # $p < .10$

TABLE 8. GOVERNMENT EFFECTIVENESS AND SEVERE SANITATION DEPRIVATION. MIXED MODEL LINEAR PROBABILITY ESTIMATES.

|                        | Null-model | Model 1  | Model 2  | Model 3 | Model 4  | Model 5   |
|------------------------|------------|----------|----------|---------|----------|-----------|
| <b>Fixed effects:</b>  |            |          |          |         |          |           |
| QoG – Gov. eff.        |            | -0.028   |          | -0.064  | 0.063    | 0.071     |
| Democracy              |            |          | 0.006    | 0.012   |          |           |
| GDP (log)              |            |          |          |         | -0.107** | -0.081*   |
| sex                    |            |          |          |         |          | -0.002**  |
| age                    |            |          |          |         |          | -0.002*** |
| rural                  |            |          |          |         |          | 0.281***  |
| Children (log)         |            |          |          |         |          | -0.015*** |
| Childbalance (log)     |            |          |          |         |          | 0.020***  |
| Constant               | 0.263***   | 0.246*** | 0.231*** | 0.159   | 1.118*** | 0.813**   |
| <b>Random effects:</b> |            |          |          |         |          |           |
| Var: Constant          | 0.046*     | 0.046*   | 0.046*   | 0.045*  | 0.040*   | 0.039*    |
| Var: Residual          | 0.167*     | 0.167*   | 0.167*   | 0.167*  | 0.167*   | 0.149*    |
| Groups                 | 65         | 65       | 65       | 65      | 65       | 65        |
| N                      | 1936085    | 1936085  | 1936085  | 1936085 | 1936085  | 1936085   |

Significance: \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ , # $p < .10$

Table 9 shows the estimates for health deprivation. In this case QoG is clearly important and the estimate remains more or less unaffected as additional variables are added to the model. There is also a bivariate effect of democracy but this effect disappears once we control for QoG. GDP per capita is not significant. Our last child deprivation indicator concerns lack of access to information. Again we can see that QoG is of importance, even though a part of the QoG effect is captured by GDP per capita the effect remains significant also in the model 5.

TABLE 9. GOVERNMENT EFFECTIVENESS AND SEVERE HEALTH DEPRIVATION. MIXED MODEL LINEAR PROBABILITY ESTIMATES.

|                        | Null-model | Model 1   | Model 2  | Model 3 | Model 4 | Model 5   |
|------------------------|------------|-----------|----------|---------|---------|-----------|
| <b>Fixed effects:</b>  |            |           |          |         |         |           |
| QoG – Gov. eff.        |            | -0.149*** |          | -157*** | -148*** | -0.146**  |
| Democracy              |            |           | -0.015*  | 0.003   |         |           |
| GDP (log)              |            |           |          |         | -0.001  | 0.009     |
| sex                    |            |           |          |         |         | -0.001    |
| age                    |            |           |          |         |         | -0.036*** |
| rural                  |            |           |          |         |         | 0.079***  |
| Children (log)         |            |           |          |         |         | -0.000    |
| Childbalance (log)     |            |           |          |         |         | 0.005***  |
| Constant               | 0.226***   | 0.132***  | 0.311*** | 0.114#  | 0.144   | 0.088     |
| <b>Random effects:</b> |            |           |          |         |         |           |
| Var: Constant          | 0.25*      | 0.020*    | 0.024*   | 0.020*  | 0.020*  | 0.020*    |
| Var: Residual          | 0.153*     | 0.153*    | 0.152*   | 0.153*  | 0.153*  | 0.147*    |
| Groups                 | 67         | 67        | 67       | 67      | 67      | 67        |
| N                      | 534518     | 534518    | 534518   | 534518  | 534518  | 534518    |

Significance: \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ , # $p < .10$

TABLE 10. GOVERNMENT EFFECTIVENESS AND SEVERE INFORMATION DEPRIVATION. MIXED MODEL LINEAR PROBABILITY ESTIMATES.

|                        | Null-model | Model 1   | Model 2  | Model 3   | Model 4  | Model 5   |
|------------------------|------------|-----------|----------|-----------|----------|-----------|
| <b>Fixed effects:</b>  |            |           |          |           |          |           |
| QoG – Gov. eff.        |            | -0.193*** |          | -0.196*** | -0.114*  | -0.109*   |
| Democracy              |            |           | 0.014    | 0.002     |          |           |
| GDP (log)              |            |           |          |           | -0.088** | -0.069*   |
| sex                    |            |           |          |           |          | -0.004*** |
| age                    |            |           |          |           |          | -0.002*** |
| rural                  |            |           |          |           |          | 0.150***  |
| Children (log)         |            |           |          |           |          | -0.029*** |
| Childbalance (log)     |            |           |          |           |          | 0.028***  |
| Constant               | 0.183***   | 0.00#     | 0.257*** | 0.049     | 0.777**  | 0.655**   |
| <b>Random effects:</b> |            |           |          |           |          |           |
| Var: Constant          | 0.027*     | 0.020*    | 0.026*   | 0.020*    | 0.017*   | 0.016*    |
| Var: Residual          | 0.137*     | 0.137*    | 0.137*   | 0.137*    | 0.137*   | 0.129*    |
| Groups                 | 50         | 50        | 50       | 50        | 50       | 50        |
| N                      | 1407640    | 1407640   | 1407640  | 1407640   | 1407640  | 1407640   |

Significance: \*\*\* $p < .001$ , \*\* $p < .01$ , \* $p < .05$ , # $p < .10$

## Conclusions

Our results show that the efficiency of the “output” side of the political system – government efficiency - has an impact on four of our seven indicators of child deprivation also when we control of democracy (the input side of the political system) and economic prosperity. Lack of safe water, malnutrition, lack of access to health care, and lack of access to information are all related to QoG net of the impact of democracy, GDP per capita and a set of basic individual level control variables.

If we ask if it is QoG or democracy that is of importance for child deprivation the answer seem straight forward – it is QoG, the degree of democratization does not have any impact on child deprivation. As argued by Sen (2011), it remains somewhat of mystery why people, when given the right to choose their leaders, do not vote for politicians that can be supposed to improve general human well-being, especially for the country’s children. If we understand representative democracy as a system for transforming “the will of the people” into public policy, it is puzzling why this “will of the people” in such a large number of countries does not translate into improved human well-being, especially for children. One reason may be that empirical studies show that democratization is not a sure cure against corruption and other forms of “bad governance” (Montinola and Jackman 2002; Sung 2004). Instead, the curve is U- or J-shaped meaning that the most corrupt countries are often the newly democratized ones. While democratization has been a remarkable success story during the last four decades - more countries than ever are now in standard measures counted as democracies - this has not (yet) resulted in markedly improved human well-being. One of the leading scholars in democratization research, Larry Diamond, had the following to say when the U.S. based *National Endowment for Democracy* celebrated its first twenty-five years of operations:

There is a specter haunting democracy in the world today. It is bad governance—governance that serves only the interests of a narrow ruling elite. Governance that is drenched in corruption, patronage, favoritism, and abuse of power. Governance that is not responding to the massive and long-deferred social agenda of reducing inequality and unemployment and fighting against dehumanizing poverty. Governance that is not delivering broad improvement in people’s lives because it is stealing, squandering, or skewing the available resources (Diamond 2007:199)

Our results support Diamond’s statement but if we ask if its QoG or economic development that matters, the answer is less straightforward. The impact of GDP is even more consistent than the impact of QoG. When it comes to sanitation, shelter, and, more surprising, education we find that GDP per capita matters, while QoG does not. But, when it comes to lack of access to safe water and, especially, health care the results points in the opposite direction, i.e., QoG matters but not GDP per capita. It is important to keep in mind that we are using the logarithm of GDP per capita, which reflects the fact that differences in GDP are especially important in the lower end of the distribution and that improving economic conditions among the poorest countries is a priority if we want to address child deprivation.

The pattern we find when comparing the impact from QoG and GDP per capita is not unambiguous and especially the results when it comes to education deprivation is puzzling. If we look at our outcome measures, the seven different types of child deprivation, education and health care are most directly dependent on public initiative and public administration. Hence, we would expect that both education and health deprivation should be highly dependent on QoG. But, as it seems this is only true for health care, not for education, education is only affected by GDP per capita. However, as has recently been shown by Uslaner & Rothstein (2012) there is a strong historical connection between education and low corruption, which in turn correlates strongly with government efficiency. Using country level data from 78 countries, they show that mean years of schooling 1870 correlate with measures of corruption 140 years later, the more education the less corruption and the better QoG. Our tentative interpretation to our results when it comes to education deprivation is that also countries that scores low on our QoG indicator have managed, provided that they have the basic economical resources, to build educational system that in at least a rudimentary way provides education to most children. It might be that this effort in the long run will improve QoG in the same way that investments in the educational system in the nineteenth-century did. This result also points to the fact that the causality in our models is far from given and maybe especially so when it comes to education. The strong relationship between education and GDP per capita is probably, at least to some degree, a result of human capital investments, i.e., that an educated population is more productive than a less educated population. At the same time a large number of theoretical and empirical analyses have put forward that high QoG is a necessary factor behind economic growth (Acemoglu and Robinson 2012; North 1990).

The analysis presented in this paper is, to our knowledge, the first global study that combines macro-and micro-data in order to analyse the relationship between state level characteristics and specific forms of child deprivation. The analysis points at the importance of good governance and economic growth, it questions the role of democracy and leaves the question of causality open. But, it is a first step and as such it need to be followed by more detailed studies.

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<sup>i</sup> Needless to say, there is a huge conceptual debate of how to define what should count as corruption, good governance, state capacity and corruption – for an overview see Rothstein and Teorell (2008).