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BA thesis

# Icelandic Development Assistance

A Comparative Assessment

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**Abstract**

This paper seeks to provide a performance-based assessment of the Icelandic authorities' effort in development aid distribution over the past two decades. Both scale and quality issues are studied empirically by means of simple grading systems and then ranked accordingly. We find that although the cumulative scale effort of the Icelandic authorities has been bleak compared with other donors, they have displayed considerable progress through time. Our results indicate that the Icelandic authorities choose a closer donor-recipient relationship by concentrating on bilateral aid distribution rather than multilateral. Finally, we find clear evidence of better aid quality than is apparent among larger donors, and a clear direction of its bilateral aid towards poorer recipients.

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# 1 Introduction

The unequal distribution of economic growth in the world has been apparent for several decades. The Western world, taken to be Europe and North-America, has benefitted greatly over the past 300 hundred years from technological innovations, cheap African labor and discoveries of unfettered natural resources in America. Since the end of World War II, more emphasis in the global political sphere has been placed on poverty alleviation in the poorer regions of the world in the name of income convergence. The emphasis and implementation of the so-called "poverty alleviation" through the mechanism of aid has gone through several stages and developments itself though the effort can in most cases not be disputed.

The more detailed aspects of aid are hardly clarified as of yet. Generally, yet impresicely, we may speak of (1) development aid in the name of poverty alleviation and general social development, (2) foreign aid in the name of political and possibly development aspirations, and (3) humanitarian aid associated mostly with emergency reliefs. However, development aid, according to its definition given earlier, must be based on humanitarian grounds, and responses to unforeseeable crisis such as hurricanes, earthquakes, tsunamis, and more predictable crisis such as droughts and famines, are by all means imperative to future development of affected areas. Furthermore, development aid can easily be used as a disguise to service strategic interests of donors, and transfers of financial resources hardly based on development aspirations, such as U.S. military assistance to Israel,are sometimes mistakenly taken into account when dealing with strictly development aid. In this paper, we wish to focus on aid in a strict development sense, though we must put some faith in our data.

The distribution of aid is normally through domestically-regulated government bilateral institutions and inter-governmental multilateral institutions. Private institutions working on development and/or humanitarian projects also receive funding from their respective authorities, as well as charity donations directly from the public. A question remains what to make of aid stemming from private sources. Of course, governments should receive credit for encouraging private charity donations aimed

at developing countries, but should they receive credit for not standing especially in the charity organization's way? How should such issues be quantified? In section 5.1 we seek to find answers questions on the quantification of private charity donations using similar methods as the Center for Global Development.

When aid is assumed to be exogenous in the model at hand, its influences on a subset of endogenous economic and socio-economic variables, most notably economic growth, are estimated for significance. Aid's influence on economic growth has met with some ambiguity in the literature, especially when unconditional influences are assumed; see a thorough literature overview in Radelet (2006). A much cited paper in the literature is Burnside and Dollar (2000), where they condition the influences of aid on sound economic policies in the recipient countries. Almost needless to say, aid's effects on economic growth are positively related to that particular condition.

In contrast, at least two non-exhaustive approaches can be applied when development aid is studied as an endogenous variable. One is by literally taking aid as being endogenous and estimating how economic variables or indicators affect aid donations. Another approach is not treating aid donations as endogenous as such, but rather to rank development effort and performances, be it in terms of aid quantity and/or quality with panel and/or cross-section data, of donor countries and agencies for an internationally comparative assessment. Recent works include most notably Easterly and Pfutze (2008) on aid agency performances and the Commitment to Development index, CDI (2009), by the Center for Global Development (CGD) on quality-adjusted aid performances by donors. This latter approach of ranking a panel of donor countries in terms of aid effort shall be taken in this paper. The simple goal of this paper is to place Iceland - one of the richest per capita nation in the world, yet unaccounted for in papers on aid rankings - among the big players in the world of development aid, as perhaps understandably, more emphasis in the current existing literature is given to aggregate economic influences than corrections for population developments. We will deal with this apparent block-out by looking at several indicators of development effort by the Icelandic authorities in an internationally comparative aspect.

The paper is organized as follows: A short literature overview is presented in section 2 and data origin is set out in section 3. In section 4, we turn to quantity

matters of aid donations, whereby ranks are presented in section 4.1. Deterministic trends of donations are presented and analyzed in section 4.2 and we narrow our analysis in section 4.3 by looking at donor ratios of bilateral to total aid. In section 5, we turn to matters of aid quality, whereby we extract information the Icelandic authorities' development effort from the CDI index in section 5.1 and present our own quality assessment by looking at a single selectivity factor over a slightly longer era in section 5.2.

## 2 Literature overview

A pioneering attempt to combine scale and equity into one index began with Mcgillivray (1989). The definition of equity in this paper is rather inaccurate. We nonetheless present it as fairness in aid donations such that relatively wealthier recipients do not receive aid ahead of poorer recipients if income per capita is taken to be the yardstick of need. (Rao, 1997, p. 948), on the other hand, followed up on Mcgillivray (1989) by making his index satisfy three attributes of equity: 1) Horizontal equity, such that "total aid should differ proportionally with their [recipient's] populations" 2) Vertical equity, such that "reallocation of aid from a richer recipient to a poorer one raises the value of index". 3) Neutrality, such that "the index must provide comparisons across donors irrespective of the scale of total aid given by each". On the other hand, Clark (1992) was more concerned with equity issues of donations than its scale. McGillivray and White (1993) then sought to construct an index in a more sophisticated approach of penalizing donors for deviating away from utility-optimizing allocations subjected to recipient's need, development potential, commercial and geopolitical values. None of these works include data or calculations on the historical effort of Icelandic authorities, an exclusion we wish to remedy in forthcoming sections and sections.

On an institutional level, Easterly and Pfutze (2008) sought to rank bilateral and multilateral aid agencies while excluding ICEIDA. A much more appreciated initiative, however, is the Commitment to Development Index by the CDI (2009). The ambitious CDI initiative is a yearly, static, thorough index originating in 2003 that seeks to provide a general picture of the rich world's effort in development related issues by quality-adjusting aggregate aid statistics of donor countries. Aid in the CDI index is only one of the components of our interest, with the others being trade, investment, migration, security, environment and technology. The CDI index also incorporates multilateral quality-adjusted aid donations and relates them to bilateral donor distributions, so as not to ignore completely a large portion of a donor's total aid budget.

As before, Iceland is not listed on the CDI index despite being and having for

some time been one of the richest nations in the world in terms of per capita income. Table 1 shows that Iceland's average rank 1985 to 2007 has been little less than sixth. On the CDI website it even says: "These 22 countries are the richest, most developed countries in the world, leaving out tiny nations such as Iceland and Luxembourg." The balance on country picks is clearly somewhere between per capita income, economy size and data availability, much like the works previously cited. Due to Iceland's limited capacity in maintaining a sustained interaction with the developing world in accord with larger nations, we confine our discussion on aid and not the other equally important dimensions of development effort as listed by the CDI index.

Table 1: GDP per capita rank, annual, current prices and current PPP's in USD

| Donor | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Australia | 10 | 10 | 10 | 8 | 11 | 17 | 16 | 16 | 14 | 14 | 14 | 14 | 13 | 10 | 10 | 13 | 12 | 12 | 8 | 10 | 9 | 8 | 8 | 11.609 |
| Austria | 8 | 8 | 8 | 6 | 7 | 6 | 5 | 4 | 5 | 5 | 5 | 5 | 7 | 7 | 7 | 8 | 10 | 9 | 9 | 9 | 10 | 9 | 9 | 7.2174 |
| Belgium | 11 | 11 | 11 | 9 | 9 | 9 | 9 | 8 | 10 | 11 | 11 | 11 | 11 | 11 | 13 | 12 | 11 | 10 | 12 | 14 | 14 | 14 | 16 | 11.217 |
| Canada | 5 | 5 | 5 | 4 | 5 | 5 | 10 | 11 | 9 | 8 | 8 | 9 | 8 | 8 | 6 | 10 | 9 | 11 | 7 | 8 | 7 | 7 | 7 | 7.4783 |
| Denmark | 7 | 6 | 7 | 7 | 8 | 10 | 11 | 9 | 11 | 7 | 7 | 7 | 6 | 6 | 9 | 7 | 8 | 8 | 11 | 11 | 11 | 10 | 11 | 8.4783 |
| Finland | 14 | 14 | 13 | 13 | 12 | 13 | 17 | 18 | 18 | 18 | 18 | 19 | 19 | 19 | 18 | 16 | 18 | 17 | 16 | 16 | 16 | 16 | 13 | 16.13 |
| France | 16 | 17 | 17 | 16 | 17 | 16 | 15 | 15 | 16 | 16 | 16 | 17 | 17 | 18 | 19 | 19 | 17 | 15 | 18 | 18 | 18 | 18 | 18 | 16.913 |
| Germany | 12 | 12 | 12 | 11 | 13 | 11 | 7 | 6 | 8 | 9 | 10 | 10 | 12 | 13 | 14 | 15 | 16 | 16 | 15 | 15 | 15 | 15 | 15 | 12.261 |
| Iceland | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 5 | 4 | 4 | 6 | 6 | 5 | 4 | 5 | 6 | 7 | 7 | 10 | 6 | 8 | 11 | 12 | 5.7391 |
| Ireland | 21 | 21 | 21 | 20 | 21 | 21 | 21 | 21 | 20 | 20 | 19 | 18 | 18 | 14 | 11 | 9 | 6 | 5 | 4 | 4 | 4 | 4 | 4 | 14.217 |
| Italy | 17 | 16 | 15 | 14 | 15 | 15 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 16 | 17 | 18 | 15 | 19 | 19 | 19 | 19 | 20 | 20 | 16.391 |
| Japan | 15 | 15 | 14 | 12 | 10 | 8 | 6 | 7 | 6 | 10 | 9 | 8 | 9 | 15 | 16 | 17 | 19 | 18 | 17 | 17 | 17 | 17 | 17 | 13 |
| Luxembourg | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Netherlands | 13 | 13 | 16 | 15 | 16 | 14 | 13 | 13 | 12 | 13 | 13 | 12 | 10 | 9 | 8 | 5 | 5 | 6 | 6 | 7 | 6 | 6 | 6 | 10.304 |
| New Zealand | 18 | 18 | 19 | 18 | 19 | 19 | 20 | 20 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 21 | 19.957 |
| Norway | 9 | 9 | 9 | 10 | 14 | 12 | 12 | 10 | 7 | 6 | 4 | 4 | 4 | 5 | 4 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 5.8696 |
| Portugal | 22 | 22 | 22 | 21 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 22 | 21.957 |
| Spain | 20 | 20 | 20 | 19 | 20 | 20 | 19 | 19 | 21 | 21 | 21 | 21 | 21 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 19 | 19 | 20 |
| Sweden | 6 | 7 | 6 | 5 | 6 | 7 | 8 | 12 | 13 | 12 | 12 | 13 | 14 | 12 | 12 | 11 | 13 | 13 | 13 | 12 | 13 | 12 | 10 | 10.522 |
| Switzerland | 2 | 2 | 2 | 22 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 4.0435 |
| United Kingdom | 19 | 19 | 18 | 17 | 18 | 18 | 18 | 17 | 17 | 17 | 17 | 16 | 16 | 17 | 15 | 14 | 14 | 14 | 14 | 13 | 12 | 13 | 14 | 15.957 |
| United States | 3 | 3 | 4 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2.7391 |

Authors computations. Source: OECD (2010).

# 3 Data definitions, sources and origins

The main data used in this paper stem from the OECD (2010) database. Aid is taken to consist of grants and low-interest bearing loans with a grant element of at least 25%, net of principal payments. Income is taken to be Gross National Income (GNI) in accord with the OECD calculations.

Since Iceland is not yet a member of the Development Assistance Committee (DAC) at the time of this writing, some aggregated and itemized development related data are missing for the country. In section 4.1, OECD data on GNI values are missing for several years, but we use GNI values from Statistics Iceland,as supplements for a certain transformation to be explained in section 4.1. Although Iceland began implementing bilateral aid projects around 1970 in cooperation with the Danish International Development Agency (DANIDA), and ICEIDA having been founded in 1981,[1] OECD data on Icelandic aid per income are only reported from year 1997 and onwards, so we employ corresponding data from 1985 to 1997 found in Haralz (1997), Appendix 1. In section 5.2, data on allocations according to income groups of recipients are missing for several years, but we suffice to study only those years where data is available.

The chosen group of donors contains the DAC countries[2] in addition of Iceland, bar Greece, South-Korea and the Commission of the European Communities. In section 5.1, however, we allow ourselves include Greece as no data is missing. Donors were chosen according to per capita income and data availability. That way, China and Russia are left out, despite being major influences on the international economic playground, while Luxembourg and, of course, Iceland are included.

[1] See two general discussions on the history of Icelandic development activities in Haralz (1997) and Ingolfsson and Haralz (2003).

[2] The DAC countries, at the time of this writing, consist of Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, South-Korea, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom, United States and the Commission of the European Communities.

# 4 Scale issues

## 4.1 Aid per income ranks

The common measure on donor effort, albeit in a static manner, is aid donations per unit of income, $\frac{A_{it}}{Y_{it}}$, for donor $i$. $Y_{it}$ is generally either Gross National Product (GDP) or Gross National Income (GNI) in our case. In this section we will look at a similar measure dynamically through time in a panel context. The time interval from 1985 to 2007 was chosen mainly in light of data availability but we leave out the year 2008 because of the depression and consequently the risk of unreliable data.

The year 2008 has further implications for the preceding years under study. When looking at raw OECD data on aid per income in Table 2, we see how Iceland jumps from being ranked 17th in aid generosity in 2007 to the 8th place the following year. The jump, however, was entirely due to sharp decreases in the denominator rather than increases in the numerator, as aid donations were not liable to discretion until 2009. The implication is clear: because of business cycle asymmetries of donor economies[3], the raw OECD data provide an imprecise view. Therefore, we correct each entry in the panel by measuring aid per last period's income. The transformation of $\frac{A_{it}}{Y_{it}}$ for donor $i$ at time $t$ is thus $(1 + g_t)$, resulting in

$$\frac{A_{it}}{Y_{it}}(1 + g_t) = \frac{A_{it}}{Y_{it}} \frac{Y_{it}}{Y_{i,t-1}} = \frac{A_{it}}{Y_{i,t-1}}. \tag{1}$$

Another inconsistency difficulty regards missing values on Icelandic income, GNI, in the OECD database. We circumvent that problem for Iceland by transforming according to GNI data obtained from Statistics Iceland.

Calculating cumulative scores by inverse ranking and estimating trends of per income donations for all donors - both of which we shall be doing - would be straightforward, if not for the fact that ranks during years with high variations in donations are more informative than ranks during years with low variations. The reason is that

[3]Several studies have been conducted to test for business cycle correlations, most notably due to the euro circulation. To name only a few, some studies, such as Zervoyianni and Anastasiou (2009) find that correlation has increased, while Camacho et al. (2006) report insignificant results. In any case, a significant break (positive or negative) in business cycle correlation due to the euro circulation would be justified as our approach in this section overlaps with the euro era.

Table 2: Raw data on aid per income, net disbursements

| Donor | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Rank for 2008 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Australia | 0.48 | 0.47 | 0.34 | 0.46 | 0.38 | 0.34 | 0.38 | 0.37 | 0.35 | 0.34 | 0.34 | 0.27 | 0.27 | 0.27 | 0.26 | 0.27 | 0.25 | 0.26 | 0.25 | 0.25 | 0.25 | 0.3 | 0.32 | 0.32 | 17 |
| Austria | 0.38 | 0.21 | 0.17 | 0.24 | 0.23 | 0.11 | 0.18 | 0.11 | 0.11 | 0.17 | 0.27 | 0.23 | 0.24 | 0.22 | 0.24 | 0.23 | 0.34 | 0.26 | 0.2 | 0.23 | 0.52 | 0.47 | 0.5 | 0.43 | 12 |
| Belgium | 0.55 | 0.48 | 0.48 | 0.39 | 0.46 | 0.46 | 0.41 | 0.39 | 0.39 | 0.32 | 0.38 | 0.34 | 0.31 | 0.35 | 0.3 | 0.36 | 0.37 | 0.43 | 0.6 | 0.41 | 0.53 | 0.5 | 0.43 | 0.48 | 7 |
| Canada | 0.49 | 0.48 | 0.47 | 0.5 | 0.44 | 0.44 | 0.45 | 0.46 | 0.45 | 0.43 | 0.38 | 0.32 | 0.34 | 0.3 | 0.28 | 0.25 | 0.22 | 0.28 | 0.24 | 0.27 | 0.34 | 0.29 | 0.29 | 0.33 | 16 |
| Denmark | 0.8 | 0.89 | 0.88 | 0.89 | 0.93 | 0.94 | 0.96 | 1.02 | 1.03 | 1.03 | 0.96 | 1.04 | 0.97 | 0.99 | 1.01 | 1.06 | 1.03 | 0.96 | 0.84 | 0.85 | 0.81 | 0.8 | 0.81 | 0.82 | 4 |
| Finland | 0.4 | 0.46 | 0.5 | 0.6 | 0.64 | 0.65 | 0.8 | 0.64 | 0.45 | 0.31 | 0.31 | 0.33 | 0.32 | 0.31 | 0.33 | 0.31 | 0.32 | 0.35 | 0.35 | 0.37 | 0.46 | 0.4 | 0.39 | 0.44 | 10 |
| France | 0.61 | 0.56 | 0.6 | 0.58 | 0.61 | 0.6 | 0.62 | 0.63 | 0.63 | 0.62 | 0.55 | 0.48 | 0.44 | 0.38 | 0.38 | 0.3 | 0.31 | 0.37 | 0.4 | 0.41 | 0.47 | 0.47 | 0.38 | 0.39 | 14 |
| Germany | 0.47 | 0.43 | 0.39 | 0.39 | 0.41 | 0.42 | 0.39 | 0.37 | 0.35 | 0.33 | 0.31 | 0.32 | 0.28 | 0.26 | 0.26 | 0.27 | 0.27 | 0.27 | 0.28 | 0.28 | 0.36 | 0.36 | 0.37 | 0.38 | 15 |
| Iceland | 0.05 | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.07 | 0.12 | 0.12 | 0.1 | 0.11 | 0.08 | 0.1 | 0.09 | 0.09 | 0.1 | 0.13 | 0.15 | 0.17 | 0.18 | 0.18 | 0.27 | 0.27 | 0.47 | 8 |
| Ireland | 0.24 | 0.28 | 0.19 | 0.2 | 0.17 | 0.16 | 0.19 | 0.16 | 0.2 | 0.25 | 0.29 | 0.31 | 0.31 | 0.3 | 0.31 | 0.29 | 0.33 | 0.4 | 0.39 | 0.39 | 0.42 | 0.54 | 0.55 | 0.59 | 6 |
| Italy | 0.26 | 0.4 | 0.35 | 0.39 | 0.42 | 0.31 | 0.3 | 0.34 | 0.31 | 0.27 | 0.15 | 0.2 | 0.11 | 0.2 | 0.15 | 0.13 | 0.15 | 0.2 | 0.17 | 0.15 | 0.29 | 0.2 | 0.19 | 0.22 | 20 |
| Japan | 0.29 | 0.29 | 0.31 | 0.32 | 0.31 | 0.31 | 0.32 | 0.3 | 0.27 | 0.29 | 0.27 | 0.2 | 0.21 | 0.27 | 0.27 | 0.28 | 0.23 | 0.23 | 0.2 | 0.19 | 0.28 | 0.25 | 0.17 | 0.19 | 21 |
| Luxembourg | 0.17 | 0.16 | 0.17 | 0.2 | 0.19 | 0.21 | 0.33 | 0.26 | 0.35 | 0.4 | 0.36 | 0.44 | 0.55 | 0.65 | 0.66 | 0.7 | 0.77 | 0.78 | 0.86 | 0.79 | 0.79 | 0.89 | 0.92 | 0.97 | 2 |
| Netherlands | 0.91 | 1.01 | 0.98 | 0.98 | 0.94 | 0.92 | 0.88 | 0.86 | 0.82 | 0.76 | 0.81 | 0.81 | 0.81 | 0.8 | 0.79 | 0.84 | 0.82 | 0.81 | 0.8 | 0.73 | 0.82 | 0.81 | 0.81 | 0.8 | 5 |
| New Zealand | 0.25 | 0.3 | 0.26 | 0.27 | 0.22 | 0.23 | 0.25 | 0.26 | 0.25 | 0.24 | 0.23 | 0.21 | 0.26 | 0.27 | 0.27 | 0.25 | 0.25 | 0.22 | 0.23 | 0.23 | 0.27 | 0.27 | 0.27 | 0.3 | 18 |
| Norway | 1.01 | 1.17 | 1.09 | 1.13 | 1.05 | 1.17 | 1.13 | 1.16 | 1.01 | 1.05 | 0.86 | 0.83 | 0.84 | 0.89 | 0.88 | 0.76 | 0.8 | 0.89 | 0.92 | 0.87 | 0.94 | 0.89 | 0.95 | 0.88 | 3 |
| Portugal | 0.05 | 0.08 | 0.11 | 0.21 | 0.25 | 0.24 | 0.3 | 0.35 | 0.28 | 0.34 | 0.25 | 0.21 | 0.25 | 0.24 | 0.26 | 0.26 | 0.25 | 0.27 | 0.22 | 0.63 | 0.21 | 0.21 | 0.22 | 0.27 | 19 |
| Spain | 0.1 | 0.09 | 0.08 | 0.07 | 0.14 | 0.2 | 0.24 | 0.27 | 0.28 | 0.28 | 0.24 | 0.22 | 0.24 | 0.24 | 0.23 | 0.22 | 0.3 | 0.26 | 0.23 | 0.24 | 0.27 | 0.32 | 0.37 | 0.45 | 9 |
| Sweden | 0.86 | 0.85 | 0.88 | 0.86 | 0.96 | 0.91 | 0.9 | 1.03 | 0.99 | 0.96 | 0.77 | 0.84 | 0.79 | 0.72 | 0.7 | 0.8 | 0.77 | 0.84 | 0.79 | 0.78 | 0.94 | 1.02 | 0.93 | 0.98 | 1 |
| Switzerland | 0.31 | 0.3 | 0.31 | 0.32 | 0.3 | 0.32 | 0.36 | 0.45 | 0.33 | 0.36 | 0.34 | 0.34 | 0.34 | 0.32 | 0.35 | 0.34 | 0.34 | 0.33 | 0.37 | 0.4 | 0.43 | 0.39 | 0.38 | 0.44 | 10 |
| United Kingdom | 0.33 | 0.31 | 0.28 | 0.32 | 0.31 | 0.27 | 0.32 | 0.31 | 0.31 | 0.31 | 0.29 | 0.27 | 0.26 | 0.27 | 0.24 | 0.32 | 0.32 | 0.31 | 0.34 | 0.36 | 0.47 | 0.51 | 0.35 | 0.43 | 12 |
| United States | 0.24 | 0.23 | 0.2 | 0.21 | 0.15 | 0.21 | 0.2 | 0.2 | 0.15 | 0.14 | 0.1 | 0.12 | 0.09 | 0.1 | 0.1 | 0.1 | 0.11 | 0.13 | 0.15 | 0.17 | 0.23 | 0.18 | 0.16 | 0.19 | 21 |

Authors computations. Source: OECD (2010).

Table 3: Summary statistics, OECD aid per income data

| Donor | Obs | Mean | Var | StDev | Min | Max |
|---|---|---|---|---|---|---|
| Australia | 24 | 0.32458 | 0.00507 | 0.07120 | 0.25 | 0.48 |
| Austria | 24 | 0.26208 | 0.01398 | 0.11825 | 0.11 | 0.52 |
| Belgium | 24 | 0.42167 | 0.00610 | 0.07811 | 0.30 | 0.60 |
| Canada | 24 | 0.36417 | 0.00829 | 0.09103 | 0.22 | 0.50 |
| Denmark | 24 | 0.93000 | 0.00767 | 0.08758 | 0.80 | 1.06 |
| Finland | 24 | 0.43500 | 0.01872 | 0.13683 | 0.31 | 0.80 |
| France | 24 | 0.49125 | 0.01259 | 0.11222 | 0.30 | 0.63 |
| Germany | 24 | 0.34250 | 0.00381 | 0.06173 | 0.26 | 0.47 |
| Iceland | 24 | 0.13000 | 0.00912 | 0.09551 | 0.05 | 0.47 |
| Ireland | 24 | 0.31083 | 0.01523 | 0.12339 | 0.16 | 0.59 |
| Italy | 24 | 0.24417 | 0.00848 | 0.09207 | 0.11 | 0.42 |
| Japan | 24 | 0.26042 | 0.00216 | 0.04648 | 0.17 | 0.32 |
| Luxembourg | 24 | 0.52375 | 0.07919 | 0.28141 | 0.16 | 0.97 |
| Netherlands | 24 | 0.84667 | 0.00534 | 0.07305 | 0.73 | 1.01 |
| New Zealand | 24 | 0.25250 | 0.00055 | 0.02345 | 0.21 | 0.30 |
| Norway | 24 | 0.96542 | 0.01600 | 0.12649 | 0.76 | 1.17 |
| Portugal | 24 | 0.24833 | 0.01147 | 0.10708 | 0.05 | 0.63 |
| Spain | 24 | 0.23250 | 0.00801 | 0.08950 | 0.07 | 0.45 |
| Sweden | 24 | 0.86958 | 0.00876 | 0.09360 | 0.70 | 1.03 |
| Switzerland | 24 | 0.35292 | 0.00183 | 0.04278 | 0.30 | 0.45 |
| United Kingdom | 24 | 0.32542 | 0.00407 | 0.06379 | 0.24 | 0.51 |
| United States | 24 | 0.16083 | 0.00228 | 0.04772 | 0.09 | 0.24 |

Source: OECD (2010).
Authors computations.

donors can switch places in ranks because of rounding differences or measurement errors, not because of differing effort. One way of partially circumventing such a bias is to multiply or weigh each rank by the cross-section variance, $\sigma_t^2$, of donations of each corresponding year. That way, ranks in years with low variations are given less weight and the converse is true for years with more variance.

The procedure lists as follows:

1. Transform according to equation 1;
2. for donor $i$, inverse rank (i.e. grade) each panel entry $\frac{A_{it}}{Y_{i,t-1}}$ through all donors;[4]
3. weigh each score in the previous item by $\sigma_t^2$.

Each entry in Table 4 is thus Equation 1 multiplied by $\sigma_t^2$, or

$$\frac{A_{it}}{Y_{it}}(1+g_t)\sigma_t^2 = \frac{A_{it}}{Y_{it}}\frac{Y_{it}}{Y_{i,t-1}}\sigma_t^2 = \frac{A_{it}}{Y_{i,t-1}}\sigma_t^2. \tag{2}$$

As we now have a more informatively weighted score in Table 4, we can extract the cumulative score for each donor. The score in the last column from Table 4 reveals

[4]In OpenOffice Calc 3.1.1, the rank function assigns equally ranked numbers of a list the higher rank, not the lower or the average. For example, a list of numbers (1,2,3,3,4,5,6) would rank as (7,6,4,4,3,2,1).

Table 4: Time-variance weighed aid per income rank, post-transformation

| | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | Total score | Total score rank |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Australia | 1.33 | 1.50 | 1.12 | 1.32 | 1.08 | 1.27 | 1.12 | 1.21 | 1.14 | 1.21 | 0.98 | 0.72 | 0.73 | 0.73 | 0.71 | 0.62 | 0.43 | 0.47 | 0.66 | 0.53 | 0.25 | 0.54 | 0.62 | 20.2801 | 12 |
| Austria | 1.00 | 0.50 | 0.46 | 0.62 | 0.63 | 0.20 | 0.17 | 0.09 | 0.08 | 0.26 | 0.49 | 0.57 | 0.37 | 0.27 | 0.35 | 0.39 | 1.00 | 0.40 | 0.27 | 0.33 | 1.01 | 0.89 | 1.25 | 11.587 | 19 |
| Belgium | 1.41 | 1.70 | 1.49 | 1.05 | 1.45 | 1.56 | 1.21 | 1.30 | 1.22 | 0.95 | 1.19 | 1.15 | 0.95 | 1.07 | 0.92 | 1.31 | 1.22 | 1.13 | 1.13 | 0.99 | 1.08 | 1.02 | 1.17 | 27.6525 | 6 |
| Canada | 1.25 | 1.60 | 1.39 | 1.41 | 1.36 | 1.47 | 1.29 | 1.48 | 1.38 | 1.46 | 1.12 | 0.79 | 1.17 | 0.80 | 0.85 | 0.54 | 0.36 | 0.73 | 0.60 | 0.59 | 0.57 | 0.48 | 0.55 | 23.2287 | 9 |
| Denmark | 1.58 | 2.00 | 1.77 | 1.67 | 1.72 | 1.95 | 1.81 | 1.95 | 1.78 | 1.81 | 1.47 | 1.58 | 1.61 | 1.47 | 1.55 | 1.70 | 1.57 | 1.47 | 1.39 | 1.32 | 1.20 | 1.23 | 1.40 | 36.9984 | 2 |
| Finland | 1.08 | 1.40 | 1.58 | 1.58 | 1.63 | 1.76 | 1.55 | 1.58 | 1.30 | 0.86 | 0.77 | 1.08 | 1.02 | 0.87 | 0.99 | 1.08 | 0.86 | 0.93 | 0.86 | 0.79 | 0.89 | 0.82 | 1.09 | 26.3625 | 7 |
| France | 1.49 | 1.80 | 1.67 | 1.49 | 1.54 | 1.66 | 1.47 | 1.67 | 1.46 | 1.55 | 1.26 | 1.29 | 1.24 | 1.13 | 1.20 | 0.93 | 0.79 | 1.00 | 1.00 | 0.92 | 0.82 | 0.95 | 1.01 | 29.3561 | 5 |
| Germany | 1.16 | 1.30 | 1.30 | 1.14 | 1.18 | 1.37 | 1.38 | 1.11 | 0.97 | 1.03 | 0.70 | 0.86 | 0.80 | 0.47 | 0.49 | 0.69 | 0.64 | 0.60 | 0.73 | 0.66 | 0.63 | 0.68 | 0.94 | 20.8528 | 11 |
| Iceland | 0.08 | 0.10 | 0.09 | 0.09 | 0.09 | 0.10 | 0.09 | 0.19 | 0.16 | 0.09 | 0.14 | 0.07 | 0.15 | 0.07 | 0.07 | 0.08 | 0.14 | 0.13 | 0.20 | 0.20 | 0.06 | 0.34 | 0.39 | 3.11186 | 22 |
| Ireland | 0.42 | 0.70 | 0.56 | 0.26 | 0.36 | 0.29 | 0.34 | 0.28 | 0.32 | 0.43 | 0.84 | 0.93 | 0.88 | 0.93 | 1.13 | 1.00 | 1.14 | 1.07 | 1.06 | 1.05 | 0.70 | 1.16 | 1.33 | 17.1956 | 14 |
| Italy | 0.66 | 1.20 | 1.21 | 1.23 | 1.27 | 0.98 | 0.60 | 0.93 | 0.65 | 0.52 | 0.21 | 0.22 | 0.22 | 0.20 | 0.21 | 0.23 | 0.21 | 0.20 | 0.13 | 0.07 | 0.51 | 0.14 | 0.23 | 12.0187 | 17 |
| Japan | 0.75 | 0.90 | 1.02 | 0.97 | 0.99 | 1.08 | 0.86 | 0.74 | 0.49 | 0.69 | 0.56 | 0.29 | 0.29 | 0.53 | 0.64 | 0.85 | 0.29 | 0.27 | 0.33 | 0.26 | 0.44 | 0.27 | 0.16 | 13.6628 | 15 |
| Luxembourg | 0.33 | 0.40 | 0.37 | 0.35 | 0.45 | 0.59 | 0.95 | 0.56 | 1.05 | 1.38 | 1.05 | 1.22 | 1.32 | 1.20 | 1.27 | 1.47 | 1.29 | 1.20 | 1.33 | 1.45 | 1.14 | 1.29 | 1.72 | 23.3719 | 8 |
| Netherlands | 1.74 | 2.10 | 1.95 | 1.85 | 1.81 | 2.05 | 1.72 | 1.76 | 1.54 | 1.64 | 1.40 | 1.44 | 1.46 | 1.33 | 1.41 | 1.62 | 1.50 | 1.27 | 1.20 | 1.19 | 1.26 | 1.36 | 1.48 | 36.0898 | 3 |
| New Zealand | 0.50 | 0.80 | 0.74 | 0.70 | 0.54 | 0.68 | 0.52 | 0.46 | 0.41 | 0.34 | 0.28 | 0.36 | 0.58 | 0.60 | 0.78 | 0.46 | 0.50 | 0.33 | 0.53 | 0.40 | 0.32 | 0.41 | 0.47 | 11.7197 | 18 |
| Norway | 1.83 | 2.20 | 2.05 | 1.93 | 1.99 | 2.15 | 1.90 | 2.04 | 1.70 | 1.89 | 1.54 | 1.51 | 1.53 | 1.40 | 1.48 | 1.39 | 1.36 | 1.40 | 1.46 | 1.38 | 1.39 | 1.43 | 1.64 | 38.5986 | 1 |
| Portugal | 0.17 | 0.20 | 0.28 | 0.53 | 0.72 | 0.78 | 0.78 | 1.02 | 0.73 | 1.12 | 0.42 | 0.43 | 0.51 | 0.33 | 0.57 | 0.77 | 0.57 | 0.67 | 0.40 | 1.12 | 0.13 | 0.20 | 0.31 | 12.7575 | 16 |
| Spain | 0.25 | 0.30 | 0.19 | 0.18 | 0.18 | 0.39 | 0.43 | 0.65 | 0.57 | 0.60 | 0.35 | 0.50 | 0.44 | 0.40 | 0.28 | 0.31 | 0.72 | 0.53 | 0.46 | 0.46 | 0.38 | 0.61 | 0.86 | 10.0419 | 20 |
| Sweden | 1.66 | 1.90 | 1.86 | 1.76 | 1.90 | 1.86 | 1.64 | 1.86 | 1.62 | 1.72 | 1.33 | 1.36 | 1.39 | 1.27 | 1.34 | 1.54 | 1.43 | 1.33 | 1.26 | 1.25 | 1.33 | 1.50 | 1.56 | 35.6704 | 4 |
| Switzerland | 0.83 | 1.00 | 0.93 | 0.79 | 0.81 | 1.17 | 1.03 | 1.39 | 0.89 | 1.29 | 0.91 | 1.01 | 1.10 | 1.00 | 1.06 | 1.23 | 1.07 | 0.87 | 0.93 | 0.86 | 0.76 | 0.75 | 0.78 | 22.4683 | 10 |
| United Kingdom | 0.91 | 1.10 | 0.84 | 0.88 | 0.90 | 0.88 | 0.69 | 0.84 | 0.81 | 0.78 | 0.63 | 0.65 | 0.66 | 0.67 | 0.42 | 1.16 | 0.93 | 0.80 | 0.80 | 0.73 | 0.95 | 1.09 | 0.70 | 18.7968 | 13 |
| United States | 0.58 | 0.60 | 0.65 | 0.44 | 0.27 | 0.49 | 0.26 | 0.37 | 0.24 | 0.17 | 0.07 | 0.14 | 0.07 | 0.13 | 0.14 | 0.15 | 0.07 | 0.07 | 0.07 | 0.13 | 0.19 | 0.07 | 0.08 | 5.46347 | 21 |

Authors computations. Source: OECD (2010).

Figure 1: Variance trend of transformed aid per income


the Icelandic government, during the time period from 1985 to 2007, have cumulatively done worst of all countries under scrutiny. What partially worked against the Icelandic authorities was how their aid per income trend was positive while the variance trend, shown in Figure 4.1, was negative. So the Icelandic authorities, in addition of donating sparely, were punished for small scale donations at a period of time when they could have scored relatively more than in the latter part of the era.

## 4.2 Deterministic time trends

We know the cumulative transformed ranks of aid per previous period's income, but it does not convey any information on the "dynamics" of donor generosity during the time interval. In order to get a clearer picture, we model deterministic time trends of $\frac{A_{it}}{Y_{i,t-1}}$ by employing a simple OLS time series regression with constant on each donor,

$$\frac{A_{it}}{Y_{i,t-1}} = \alpha_i + \beta_i t + \epsilon_{it} \tag{3}$$

where $t$ measures time. We follow Rao (1997) by assuming donations are independent across donors for each time period, and we rank trend coefficients significantly different from zero with a confidence level of $\alpha = 10\%$[5]; all other coefficients are

[5]Portugal was the only donor rejected at the $\alpha = 5\%$ significance level yet "accepted" at the $\alpha = 10\%$ level. Knowingly at the risk of being to subjective, we use $\alpha = 10\%$ significance level

Table 5: Deterministic trends

| Donor | Slope | Std.error | t-statistic | p-value | Significant slopes | Donor |
|---|---|---|---|---|---|---|
| Australia | -71.987 | 11.0713 | -6.5021 | 1.9E-06 | -71.987 | Australia |
| Austria | 31.5752 | 10.5552 | 2.99145 | 0.00696 | 31.5752 | Austria |
| Belgium | -2.8373 | 18.4599 | -0.1537 | 0.87931 | 0 | Belgium |
| Canada | -64.329 | 7.03512 | -9.1439 | 9.1E-09 | -64.329 | Canada |
| Denmark | -8.5758 | 16.1112 | -0.5323 | 0.60011 | 0 | Denmark |
| Finland | -27.569 | 9.72664 | -2.8344 | 0.00993 | -27.569 | Finland |
| France | -45.785 | 7.92788 | -5.7752 | 9.9E-06 | -45.785 | France |
| Germany | -63.949 | 16.0932 | -3.9736 | 0.00069 | -63.949 | Germany |
| Iceland | 90.7853 | 10.8022 | 8.40433 | 3.7E-08 | 90.7853 | Iceland |
| Ireland | 51.0700 | 5.77167 | 8.84839 | 1.6E-08 | 51.0700 | Ireland |
| Italy | -49.496 | 10.8033 | -4.5816 | 0.00016 | -49.496 | Italy |
| Japan | -106.04 | 20.0937 | -5.2774 | 3.1E-05 | -106.04 | Japan |
| Luxembourg | 23.2797 | 1.15218 | 20.2050 | 3.1E-15 | 23.2797 | Luxembourg |
| Netherlands | -65.120 | 12.6413 | -5.1514 | 4.2E-05 | -65.120 | Netherlands |
| New Zealand | 63.6699 | 76.4844 | 0.83246 | 0.41452 | 0 | New Zealand |
| Norway | -38.973 | 7.97092 | -4.8893 | 7.8E-05 | -38.973 | Norway |
| Portugal | 23.2997 | 12.4359 | 1.87359 | 0.07497 | 23.2997 | Portugal |
| Spain | 68.6691 | 10.7920 | 6.36299 | 2.6E-06 | 68.6691 | Spain |
| Sweden | -2.8189 | 17.6935 | -0.1593 | 0.87494 | 0 | Sweden |
| Switzerland | 97.4135 | 30.6676 | 3.17643 | 0.00455 | 97.4135 | Switzerland |
| United Kingdom | 53.1066 | 20.3193 | 2.6136 | 0.01623 | 53.1066 | United Kingdom |
| United States | -57.895 | 26.7781 | -2.1620 | 0.04231 | -57.895 | United States |

Source: OECD (2010).
Authors computations.

set to zero. Since we are only interested in the significance of the trend coefficients and not in performing forecasts based on the results, we are free to ignore cases of heteroskedasticity and autocorrelation.

We see from Table 5 how five donors display zero progress in generosity. Three of them, Denmark, Sweden and the Netherlands, belong in the upper half in the cumulative aid per income rank in Table 4, while Portugal and Belgium belong below middle. Iceland displays a clear and significant positive trend throughout the era as $\frac{A_{it}}{Y_{i,t-1}}$ was one a steady upward trend, starting from a rather low point. Only Switzerland has a larger trend coefficient. Clearly, although the Icelandic authorities displayed significant progress over the time period, it was not enough to pull the nation up in the cumulative score table, seen in 4.

Inconsistencies in donations at the microlevel should rightly be penalized, so a possible shortcomings of the preceeding "trend-rank" methods is how an increasing variance over time for a donor is ignored in the rank. We suffice, however, to rank the significant time trend coefficients and assume that a donor pulling himself out of

since Portugal started from a low point and ended at a low point.

a project can weigh himself up perfectly, only if he corrects the pull-out towards the trend in later periods.

## 4.3 Bilateral vs. multilateral aid

Aid can be distributed either through multilateral aid agencies, whereby donors receive little or no influence over the operation, or through their own bilateral aid agencies, where they receive most or all influence. An assessment of whether one method of distribution is generally more effective than the other would make little sense. However, it can very well be the case that the optimal allocation between bilateral and multilateral aid is not even. Looking from the viewpoint of bilateralism, arguments can be made both for and against.

Bilateralism is consistent with the decentralization argument in political economy, though far from identical to the contrast of central planning, the pure market based solutions. Instead of only "few" central oriented multilateral aid agencies (in a hypothetical world), we have "several" smaller bilateral aid agencies operating mostly independently from each other, resembling the market system in terms of decentralization.

The downside of decentralization in the aid context is the threat of project proliferation, except in the case of substantial cooperation with multilateral and bilateral aid agencies, possibly at the cost of decentralization. The difference is how the aid system, in its current general form, requires the exemption of its counterpart, the market system. Prices thus fail to signal the true costs and benefits related to development operations and projects, so welfare decreasing project proliferations will not become adjusted.

Project proliferation is not the only downside to the decentralization argument. Donor governments, especially the larger ones, also find themselves in prime position to impose restrictions and conditionalities on recipients through their bilateral agencies. [6]. Close examples would be aid tying and premature democratic reforms. Selectivity bias in favour of strategic interests, historical, political, demographic re-

[6]Fully untied aid per total aid has, however, been on the retreat for the past decade. See Clay et al. (2009).

lations is another widely employed method. As (Ram, 2003, p. 97) puts it, citing Cassen (1994):

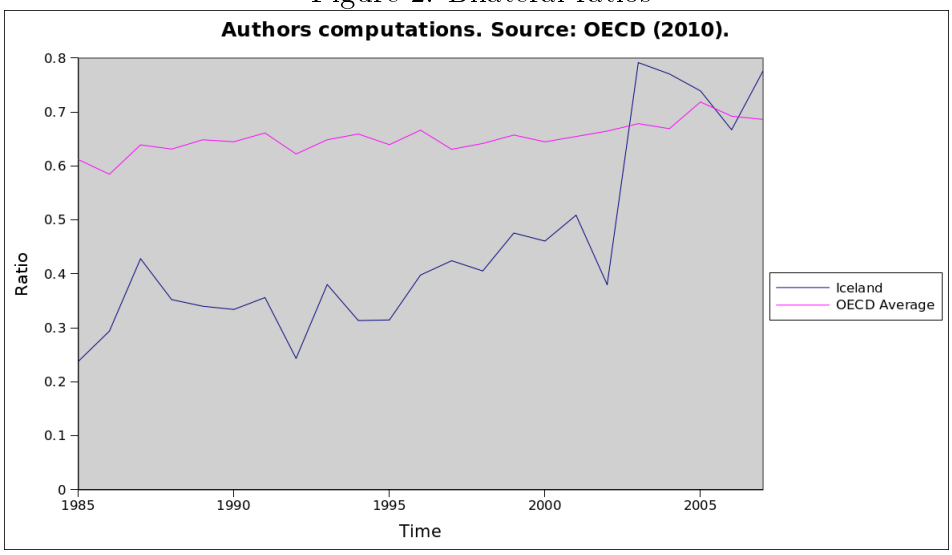
> Japan concentrates its aid in the Asian region; Britain and France give much of their aid to former colonies; political and cultural relations are evident in OPEC's aid allocations; and strategic motives dominate the bilateral aid programs of the United States.

The above discussion centred somewhat on large donor governments with more substantial trade and political relations with the developing world. The smaller donors, however, seem less likely to be subjected to selectivity bias or impose restrictions and conditions on their donations, not because of altruism, but rather capability. Smaller donor's influence on the operations and directions taken within multilateral aid agencies are also less substantial. All of the above suggests a relatively larger portion of a smaller donor's aid budget should be allocated towards bilateral aid projects where conditions and restrictions cannot be imposed so easily, rather than towards multilateral agencies where little influence can be exercised.

A first trivial step would be constructing a time series graph of bilateral ratios, defined as bilateral aid per total aid, to see where the Icelandic authorities fit. Such a graph is given in Figure 2, based on data from OECD (2010). We can clearly see in the former part of the era from 1985 to 2008 how the Icelandic authorities allocated a relatively smaller portion of their aid budget to ICEIDA, well below average among donors, but then take a jump around 2003. The reason for the jump makes an international comparison of the Icelandic bilateral ratio somewhat difficult.

Because of Iceland's application to DAC around the mid of current decade, the Icelandic authorities submitted an unofficial "not-for-quotation" report on the itemization and description of Icelandic aid donations. After reviewing the report, the DAC staff concluded that a substantial part of Icelandic multilateral aid was in fact bilateral according to the DAC guidelines. The author of this paper verified the existance and content of the report, but was understandibly not allowed to draw any quotes. The source of the miscategorization concerns the development projects administered by the Icelandic Ministry for Foreign Affairs. The staff at the ministry

Figure 2: Bilateral ratios




considered the United Nations University Fisheries and Geothermal training programs partially administered in Iceland, the Icelandi Crisis Response Unit (ICRU), as well as its funding to Non-Governmental Organizations (NGO), to be a part of its multilateral aid contributions; see Icelandic Ministry for Foreign Affairs (2006). However, the DAC guidelines are clear on the distinction between bilateral and multilateral aid:

> Bilateral transactions are direct transactions between a donor country and a developing country. They also include transactions between national or international non- governmental organisations active in development [...]
>
> Multilateral assistance takes the form of contributions to funds managed by multilateral agencies [...] Multilateral contributions are those made to a recipient institution which [...] [p]ools contributions so that they lose their identity and become an integral part of its financial assets. If, however, the donor specifies the recipient or other aspects of the disbursement (e.g. purpose, terms, total amount, reuse of any repayments), effectively controlling the disposal of the funds they contributed, then the contribution is considered to be bilateral. (Thioléron et al., 2009, p. 48)

As seen from the quote, only those contributions that are pooled together and lose their identity before the act of eventual distribution can be considered multilateral,

Table 6: Comparison of Ministry and OECD bilateral ratios in Iceland

| Year | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|---|---|---|---|---|---|---|---|
| Bilateral aid | 260.1 | 425.2 | 648.3 | 646.3 | 752.9 | 934 | 928.7 |
| Total aid | 583.1 | 799.3 | 1102.1 | 1268.1 | 1352 | 1481.6 | 1711.2 |
| Ministry bilateral ratio | 0.44606 | 0.53197 | 0.58824 | 0.50966 | 0.55688 | 0.6304 | 0.54272 |
| OECD bilateral ratio | 0.47585 | 0.46092 | 0.50889 | 0.38015 | 0.79165 | 0.77063 | 0.73919 |

Sources: OECD (2010) and the Icelandic Ministry for Foreign Affairs (2006). Authors computations.

all other donations are bilateral. Since the administrative costs associated with the before mentioned training programs along with the ICRU do not exactly lose their identity, and fundings to NGO's fall directly under bilateral aid, Icelandic bilateral aid in proportion to total aid, according to the strict OCED definition, appear to be underestimated pre-2003.

The OECD data for Icelandic aid has been partially revised since this became apparent, but pre-2003 data remain biased. This means we now have at least a partial reason to believe the opposite of what Figure 2 informs us on the pre-2003 era, namely that the Icelandic authorities somewhat shied away from taking more responsibility for the implementation of their development aspirations. In fact, it has been mentioned in (Haralz, 1997, p. 28-9) how the Icelandic authorities in the past have donated little in excess of their "mandatory" donations to multilateral institutions, preferring instead to concentrate on its own bilateral aid projects.

Not having a publicly available source is unfortunate, but we may gain a further perspective on the jump by looking at bilateral ratios obtained from a document posted on the webpage of the Icelandic Ministry for Foreign Affairs (2006). Had there been no misgategorization of development aid by the staff at the ministry, the jump in Figure 2 would have been entirely due to a policy shift from multilateral aid to an almost bilateral aid concentration, and we would see mostly identical jump in the ministry's own data. Table 6, however, reveals no significant jump. Furthermore, Table 7 reveals directly how Icelandic bilateral aid unallocated by income in 2003 took a familiar jump in level. The jump, again, is due to projects by the Icelandic Ministry for Foreign Affairs now categorised as bilateral by the OECD.

If the 2003-spike is thoroughly explained by means of the DAC "revelation", we must conclude that the Icelandic authorities have indeed followed the more optimal

Table 7: Iceland bilateral aid itemization

| Income category | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|---|---|
| LDCs, Total | 4.29 | 4.51 | 4.85 | 7.52 | 11.89 | 11.88 | 15.91 |
| Other LICs, Total | .. | .. | .. | .. | .. | .. | 0.36 |
| LMICs, Total | 1.62 | 2.58 | 2.92 | 3.56 | 4.75 | 5.87 | 9.56 |
| UMICs, Total | .. | .. | .. | .. | 0.16 | 0.4 | 0.94 |
| MADCTs, Total | .. | .. | .. | .. | .. | .. | .. |
| Unallocated by income | 0.7 | 8.93 | 8.98 | 6.87 | 8.34 | 11.34 | 9.3 |

Constant prices, 2008 USD in millions. Source: OECD (2010).

aid path throughout its short lived history as aid donors. In any case, the most recent bilateral ratios are the most significant and happen to be more relevant from a contemporanous viewpoint.

# 5 Quality issues

## 5.1 Iceland and the Commitment to Development Index

Even though Iceland is not included in the aggregation of the Commitment to Development index, it is still included in several of the quality adjustments from the simple OECD definition of Official Development Assistance (ODA) to quality-adjusted pure aid money transfers. The quality adjustments, described in Roodman (2009), include netting out debt forgiveness and debt service charges, discounting tied aid and project proliferation, allocating multilateral quality-adjusted aid to bilaterals and rewarding tax policies supporting private charity giving. This means most of the work has already been done for us and we are not all that constrained from installing Iceland into the aid component's index, if we can only justify how leaving out the last two adjustments wouldn't affect Iceland's rank significantly.

Firstly on multilateral adjustments from (Roodman, 2009, p. 29), as "bilaterals receive credit for the aid programs of multilaterals in proportion to the bilaterals' contributions to those multilaterals during the same year,"we know Iceland's multilateral contribution to be negligible compared to, say, US or UK, even though exact itemized data on Iceland's proportional contribution to multilateral institutions (that is per total contributions to multilaterals from all donors) are difficult to obtain. For example, in 2007, total Icelandic multilateral contribution reached only 0.4% of total contributions from all donors to the International Development Association (IDA) alone. Clearly, the small scale donation can be explained by pointing out Iceland's relative size, but Icelanders have in the past focused their development aid effort in bilateral aid, while skipping most "voluntary" multilateral cooperation, as previously mentioned; see (Haralz, 1997, p. 28-9).

The second missing quality adjustment regards private charitable giving, the incentives and capacity rewarded to private agents by fiscal policy. The impact on the general index, however, was small, except in the case of US; see (Roodman, 2009, p. 36). So even though the installment of Icelandic quality-adjusted aid - without the two possibly insignificant adjustments previously mentioned - into the final aid component of the CDI index does not reduce inaccuracies in place, it does not inhibit

us from interpreting the results with a critical mind.

In the forthcoming "calculations", we utilize available data from an online spreadsheet file published on the CDI webpage; see CGD (2009). Throughout sheets *Aid 2009*[7] to *Aid 2003*, we gather column ten on Quality-adjusted aid per GNI from the first table into one particular table, likewise with column sixteen where private charitable giving is included in the numerator. Then we install data for both Iceland and Luxembourg from column nine in the second table, in addition of un-adjusted multilateral aid, for each of the aforementioned sheets. We continue to leave out South-Korea since they were only included from post-2007, but we allow Greece since no data are missing for this relatively shorter time interval than in Section 4. Finally, in both tables, we follow Section 4.1 by (1) grading donor's generosity with an inverse rank so the donor with the highest quality adjusted aid per income, with or without private charitable giving, receives the highest rank, (2) compute total scores and (3) rank in descending order. The results are given in Tables 8 and 9 and we see how Iceland places in either 16th or 17th place out of 23 donors, a rather thin confidence interval. We can thus be most certain of Iceland's rank and how marginal the private charitable contribution really is.

Next in line is bilateral aid quality, considering neither multilateral aid nor private charitable giving for any donor, defined by the CDI index as quality-adjusted aid per net aid, which we gather into one Table 10 entirely from column ten in second table for each of the aforementioned sheets. As before, Iceland, Greece and Luxembourg are included at the expense of South-Korea. We then grade and rank aid quality according to the same procedures from the previous paragraph. The results indicate a favourible outcome for Iceland as it ranks in fourth place out of 23 donors with Ireland topping the list. We reason the high rank of smaller donors by pointing to the same argument from section 4.3, namely how smaller donor skip most quality-adjustments regarding aid tying and other restrictions.

[7]Indices for all years use data with two year lags, so the CDI initiative began in 2003 with 2001 data. As such, the CDI index does not attempt to pinpoint donor performances in a given year, rather to update annually the most recent statistics and provide the most recent donor comparative assessment.

Table 8: (Quality-adjusted aid) / GNI

| Donor | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | Total | Rank |
|---|---|---|---|---|---|---|---|---|---|
| Australia | 7 | 6 | 8 | 6 | 6 | 6 | 8 | 47 | 19 |
| Austria | 12 | 6 | 11 | 8 | 6 | 6 | 7 | 56 | 15 |
| Belgium | 16 | 16 | 14 | 18 | 18 | 14 | 18 | 114 | 9 |
| Canada | 3 | 7 | 8 | 11 | 13 | 11 | 14 | 67 | 12 |
| Denmark | 23 | 23 | 22 | 22 | 22 | 22 | 22 | 156 | 2 |
| Finland | 14 | 18 | 18 | 17 | 18 | 15 | 18 | 118 | 7 |
| France | 13 | 14 | 13 | 14 | 14 | 13 | 14 | 95 | 11 |
| Germany | 11 | 6 | 11 | 12 | 6 | 6 | 8 | 60 | 13 |
| Greece | 2 | 6 | 9 | 6 | 2 | 2 | 2 | 29 | 20 |
| Iceland | 5 | 8 | 2 | 6 | 6 | 14 | 14 | 55 | 17 |
| Ireland | 18 | 19 | 19 | 19 | 19 | 19 | 19 | 132 | 6 |
| Italy | 4 | 2 | 2 | 2 | 6 | 2 | 2 | 20 | 22 |
| Japan | 6 | 6 | 2 | 2 | 2 | 2 | 1 | 21 | 21 |
| Luxembourg | 22 | 23 | 24 | 24 | 24 | 24 | 24 | 165 | 1 |
| Netherlands | 21 | 20 | 20 | 20 | 22 | 22 | 22 | 147 | 5 |
| New Zealand | 10 | 2 | 6 | 6 | 11 | 6 | 8 | 49 | 18 |
| Norway | 19 | 21 | 22 | 21 | 22 | 21 | 22 | 148 | 4 |
| Portugal | 9 | 13 | 11 | 7 | 6 | 6 | 6 | 58 | 14 |
| Spain | 8 | 6 | 6 | 6 | 7 | 9 | 14 | 56 | 15 |
| Sweden | 20 | 22 | 21 | 22 | 22 | 22 | 23 | 152 | 3 |
| Switzerland | 17 | 14 | 18 | 18 | 14 | 13 | 14 | 108 | 10 |
| United Kingdom | 15 | 14 | 19 | 18 | 15 | 19 | 15 | 115 | 8 |
| United States | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 13 | 23 |

Source: CGD (2009).

Table 9: (Quality-adjusted aid + charity) / GNI

| Donor | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | Total | Rank |
|---|---|---|---|---|---|---|---|---|---|
| Australia | 9 | 7 | 11 | 7 | 8 | 7 | 11 | 60 | 14 |
| Austria | 12 | 6 | 8 | 7 | 6 | 6 | 7 | 52 | 18 |
| Belgium | 16 | 15 | 15 | 17 | 18 | 15 | 17 | 113 | 7 |
| Canada | 5 | 7 | 10 | 11 | 14 | 11 | 14 | 72 | 12 |
| Denmark | 23 | 23 | 22 | 22 | 22 | 22 | 22 | 156 | 2 |
| Finland | 14 | 15 | 16 | 15 | 16 | 15 | 18 | 109 | 10 |
| France | 13 | 13 | 11 | 14 | 14 | 12 | 14 | 91 | 11 |
| Germany | 11 | 7 | 11 | 12 | 6 | 6 | 9 | 62 | 13 |
| Greece | 2 | 6 | 7 | 6 | 2 | 2 | 2 | 27 | 20 |
| Iceland | 4 | 7 | 2 | 6 | 6 | 14 | 14 | 53 | 16 |
| Ireland | 18 | 19 | 19 | 19 | 19 | 19 | 19 | 132 | 6 |
| Italy | 3 | 2 | 2 | 2 | 6 | 1 | 2 | 18 | 22 |
| Japan | 6 | 6 | 2 | 2 | 2 | 1 | 1 | 20 | 21 |
| Luxembourg | 22 | 23 | 24 | 24 | 24 | 24 | 24 | 165 | 1 |
| Netherlands | 21 | 19 | 21 | 20 | 22 | 22 | 22 | 147 | 5 |
| New Zealand | 10 | 3 | 6 | 6 | 11 | 7 | 8 | 51 | 19 |
| Norway | 20 | 22 | 22 | 21 | 22 | 21 | 22 | 150 | 4 |
| Portugal | 7 | 11 | 10 | 7 | 6 | 6 | 6 | 53 | 16 |
| Spain | 8 | 7 | 6 | 6 | 7 | 7 | 14 | 55 | 15 |
| Sweden | 19 | 22 | 21 | 22 | 22 | 22 | 23 | 151 | 3 |
| Switzerland | 17 | 15 | 18 | 18 | 14 | 14 | 16 | 112 | 8 |
| United Kingdom | 15 | 14 | 18 | 16 | 16 | 18 | 15 | 112 | 8 |
| United States | 1 | 2 | 2 | 2 | 3 | 2 | 2 | 14 | 23 |

Source: CGD (2009).

Table 10: Aid quality

| Donor | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | Total score | Rank |
|---|---|---|---|---|---|---|---|---|---|
| Australia | 6 | 5 | 4 | 7 | 7 | 6 | 5 | 40 | 19 |
| Austria | 3 | 10 | 10 | 4 | 5 | 4 | 4 | 40 | 19 |
| Belgium | 8 | 8 | 6 | 12 | 11 | 11 | 13 | 69 | 14 |
| Canada | 10 | 9 | 11 | 16 | 15 | 14 | 16 | 91 | 8 |
| Denmark | 18 | 19 | 21 | 18 | 22 | 22 | 21 | 141 | 2 |
| Finland | 14 | 14 | 14 | 15 | 18 | 15 | 18 | 108 | 7 |
| France | 2 | 2 | 3 | 3 | 13 | 16 | 14 | 53 | 16 |
| Germany | 4 | 4 | 5 | 5 | 3 | 3 | 3 | 27 | 21 |
| Greece | 5 | 15 | 12 | 14 | 9 | 12 | 7 | 74 | 11 |
| Iceland | 22 | 22 | 19 | 19 | 14 | 17 | 17 | 130 | 4 |
| Ireland | 21 | 20 | 22 | 22 | 21 | 20 | 22 | 148 | 1 |
| Italy | 1 | 1 | 2 | 1 | 1 | 2 | 2 | 10 | 22 |
| Japan | 20 | 21 | 1 | 2 | 2 | 1 | 1 | 48 | 17 |
| Luxembourg | 19 | 18 | 19 | 22 | 19 | 20 | 21 | 138 | 3 |
| Netherlands | 13 | 13 | 13 | 17 | 19 | 19 | 19 | 113 | 6 |
| New Zealand | 16 | 3 | 8 | 9 | 16 | 9 | 11 | 72 | 12 |
| Norway | 12 | 12 | 16 | 13 | 12 | 13 | 12 | 90 | 9 |
| Portugal | 9 | 11 | 15 | 11 | 8 | 10 | 8 | 72 | 12 |
| Spain | 11 | 7 | 9 | 8 | 10 | 7 | 6 | 58 | 15 |
| Sweden | 15 | 16 | 18 | 20 | 17 | 18 | 20 | 124 | 5 |
| Switzerland | 17 | 17 | 17 | 10 | 4 | 8 | 10 | 83 | 10 |
| United Kingdom | 19 | 18 | 20 | 21 | 20 | 21 | 15 | 134 | 3 |
| United States | 7 | 6 | 7 | 6 | 6 | 5 | 9 | 46 | 18 |

Source: CGD (2009).

## 5.2 Need-based aid

One aspect of aid is donating in the first place; another aspect is donating to recipients that are in the most need for aid. Although not an unreasonable assumption in relevant cases, donations and development projects are not evenly distributed in reality; some recipients have more appeal to donors than others and receive more aid, with selectivity being based on, for example, democratic status, geopolitical attributes, cultural and/or historical relations, institutional infrastructure and poverty rates. For example, Alesina and Dollar (2000) find strategic considerations to be anything but a marginal contributor to aid distrution relative to economic needs.

One of the most popular types of selectivity is the income categorization of a country. That is, the lower a country's income, the more deserving it is of receiving aid. While anything but a perfect indicator of aid effectiveness because of rent seeking, corruption, neighborhood effects etc., the effort of relatively larger donations to recipients in the lowest income groups cannot be discredited for the sake of our doings. In this section, we abstract ourselves from comparative quantity and consider comparative selectivity weights of donors, whereby we rank donors according to a rather simple grading system.

OECD data is used where bilateral donations are itemized according to income

Table 11: Income group itemization

| Income category | Abbrev. | Grade |
|---|---|---|
| Least Developed Countries | (LDCs) | 5 |
| Other Lower Income Countries | (LICs) | 4 |
| Lower to Middle Income Countries | (LMICs) | 4 |
| Upper to Middle Income Countries | (UMICs) | 3 |
| More Advanced Developing Countries and Territories | (MADCTs) | 2 |
| Unallocated by income | | 1 |

Abbreviations in line with OECD (2010).

group in Table 11.

Bilateral donations to each income group are given grades and then assigned weights according to their proportion of total bilateral donations of a donor. In a more formal manner, the score of a donor $d$ at time $t$ is

$$S_{dt} = \sum_c G_c \frac{B_{cdt}}{\sum_c B_{cdt}} = \sum_c G_c \frac{B_{cdt}}{T_{dt}} \tag{4}$$

where $G_c$ refers to the grade given for donating to income category $c$ and $\sum_c B_{cdt} = T_{dt}$ is total bilateral aid for donor $d$ at time $t$. We only consider years where data is available on Icelandic donations to income groups other than Unallocated by income, that is 1992, 1994 and 1997-2008.

The results are clear from Table 12 as Iceland scores highest of all donor nations. In other words, the results indicate the Icelandic authorities do indeed award development aid to those recipient countries that are in most need of aid, and much less, if anything at all, to recipient countries in Eastern Europe, East Asia or South America that are relatively wealthier and in less need of aid.

Table 12: Selectivity based score

| Donor | 1992 | 1994 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | Total score | Rank |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Australia | 0.7273 | 0.7394 | 0.7542 | 0.7566 | 0.7492 | 0.9852 | 0.9727 | 0.7829 | 0.96 | 0.9801 | 0.9698 | 0.7399 | 0.9429 | 0.9683 | 12.028 | 11 |
| Austria | 1.5405 | 0.6934 | 0.6588 | 0.6656 | 0.6294 | 0.6658 | 0.6502 | 0.6866 | 0.6978 | 0.6477 | 0.6304 | 0.6123 | 0.6618 | 0.7871 | 10.227 | 16 |
| Belgium | 0.8069 | 0.8321 | 0.8236 | 0.8238 | 0.798 | 0.818 | 1.0396 | 0.81 | 0.9379 | 1.1047 | 0.9611 | 1.0281 | 1.0707 | 1.045 | 12.9 | 7 |
| Canada | 0.7824 | 0.7471 | 0.7847 | 0.7579 | 0.7457 | 0.7604 | 0.7597 | 0.7353 | 0.9031 | 0.8047 | 0.7617 | 0.7963 | 0.8447 | 1.0551 | 11.239 | 15 |
| Denmark | 0.865 | 0.8527 | 0.811 | 0.8378 | 0.8425 | 1.0447 | 1.0438 | 1.0245 | 1.1122 | 1.0514 | 1.0605 | 1.0639 | 1.0941 | 1.0764 | 13.78 | 4 |
| Finland | 0.8053 | 0.8086 | 0.9698 | 0.9938 | 0.9318 | 0.9702 | 0.9788 | 0.9906 | 0.9922 | 0.964 | 0.9268 | 1.0197 | 1.0527 | 1.0378 | 13.442 | 5 |
| France | 0.685 | 0.6669 | 0.6519 | 0.6205 | 0.6243 | 0.7558 | 0.7372 | 0.7675 | 0.8055 | 0.8085 | 0.7077 | 0.7152 | 0.6822 | 0.8313 | 10.059 | 19 |
| Germany | 0.6871 | 0.7358 | 0.7052 | 0.7151 | 0.7117 | 0.7199 | 0.7017 | 0.702 | 0.7816 | 0.7319 | 0.7021 | 0.7444 | 0.6793 | 0.8571 | 10.175 | 17 |
| Iceland | 1.984 | 1.7119 | 1.7924 | 1.8262 | 1.9176 | 2.1341 | 2.2771 | 2.2257 | 2.1359 | 2.1234 | 2.1792 | 1.4683 | 1.4287 | 1.0418 | 26.246 | 1 |
| Ireland | 1.1894 | 1.1884 | 0.9126 | 1.1509 | 1.1194 | 1.1562 | 1.1669 | 1.1462 | 1.1319 | 1.1513 | 1.1311 | 1.1411 | 1.1455 | 1.1479 | 15.879 | 2 |
| Italy | 0.712 | 0.6752 | 0.8274 | 0.8907 | 0.7296 | 0.8558 | 0.8873 | 0.9463 | 1.152 | 1.0524 | 0.8789 | 0.8808 | 0.8651 | 0.8686 | 12.222 | 10 |
| Japan | 0.6565 | 0.6836 | 0.7101 | 0.6861 | 0.6711 | 0.6921 | 0.6954 | 0.6933 | 0.6985 | 0.704 | 0.6717 | 0.7477 | 0.804 | 0.9136 | 10.028 | 21 |
| Luxembourg | 0.7609 | 0.9315 | 0.7149 | 0.7061 | 0.8514 | 0.9056 | 0.9413 | 0.7576 | 0.9498 | 0.9627 | 0.9732 | 0.9827 | 1.0026 | 0.9998 | 12.44 | 9 |
| Netherlands | 0.7278 | 0.7411 | 0.7237 | 0.7265 | 0.6977 | 0.7785 | 0.7738 | 0.803 | 0.8259 | 0.8593 | 0.7965 | 1.0314 | 1.0513 | 1.0648 | 11.601 | 13 |
| New Zealand | 0.6771 | 0.6932 | 0.7257 | 0.7356 | 0.7407 | 0.7771 | 0.7734 | 0.9419 | 0.9427 | 0.9923 | 0.944 | 0.9719 | 0.9524 | 0.9874 | 11.855 | 11 |
| Norway | 0.859 | 1.0252 | 1.0121 | 1.0085 | 0.9433 | 0.7685 | 0.7753 | 0.8056 | 0.8116 | 1.0341 | 1.0253 | 0.8355 | 1.022 | 1.0731 | 12.999 | 6 |
| Portugal | 0.9706 | 0.9524 | 0.9663 | 0.9189 | 0.9453 | 0.923 | 0.9225 | 1.1807 | 1.4493 | 1.2154 | 1.0374 | 1.0509 | 0.9949 | 0.9285 | 14.456 | 3 |
| Spain | 0.5857 | 0.5801 | 0.6959 | 0.6537 | 0.6517 | 0.6357 | 0.6247 | 0.6522 | 0.7964 | 0.7986 | 0.8831 | 0.794 | 0.8357 | 0.8501 | 10.038 | 20 |
| Sweden | 0.8014 | 0.7482 | 0.9644 | 0.7946 | 0.765 | 0.7706 | 0.7793 | 0.7951 | 1.038 | 1.0083 | 1.0146 | 0.9738 | 1.0057 | 1.044 | 12.503 | 8 |
| Switzerland | 0.7923 | 0.7884 | 0.799 | 0.7786 | 0.7212 | 0.752 | 0.7526 | 0.7639 | 0.9525 | 0.9532 | 0.9041 | 0.9205 | 0.9644 | 0.9429 | 11.786 | 12 |
| United Kingdom | 0.8307 | 0.7711 | 0.7532 | 0.773 | 0.7583 | 0.8006 | 0.8318 | 0.7145 | 0.8146 | 0.843 | 0.7729 | 0.8187 | 0.9183 | 1.0132 | 11.414 | 14 |
| United States | 0.5691 | 0.6468 | 0.7343 | 0.6961 | 0.7351 | 0.7174 | 0.7043 | 0.7139 | 0.759 | 0.7309 | 0.6938 | 0.7464 | 0.7499 | 0.9645 | 10.161 | 18 |

Source: OECD (2010).

# 6 Conclusions

The results of our study on Icelandic development aid do not show exactly the same bleak picture as is often painted in the media, at least not when the effort of Icelandic authorities are claimed to be lacking behind of the rich Western donor nations. To sum up: (1) Cumulative scores on aid per income from 1985 are low, true enough, but (2) progress clearly has been significant over the time period; (3) Iceland scores below average on the CDI index Aid component, but (4) its aid budget is concentrated mostly through its bilateral aid agency where more accountability *can* be exercised, and (5) its bilateral aid is indeed directed towards the poorer recipients of the world.

Even though the effort of Icelandic authorities has not been sub par in a comparative sense, the question whether the effort was sub par in an absolute sense remains to be answered. In such a case, we must first come to terms with "the" optimal amount of aid per income that would increase the rate of income convergence between the current rich donor nations and the current poor recipient nations. A rather arbitrary benchmark that donations should exceed 0.7% of donor income has been created, though it is not to be taken as some threshold value above which economic growth in the developing world would finally spur. We cannot possibly be certain how much aid it would take to push the developing world into sustainable economic growth, neither can we be certain if more amount of aid is necessary in the first place.

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