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The ineffectiveness of development aid on growth: An update

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ABSTRACT

This note deals with a paradox: A literature growing exponentially even though it keeps finding the same (disappointing) results. We draw upon 1217 estimates of aid effectiveness of which 676 are reported in recent years, to examine three subjects: (S1) Has the literature finally overcome the aid ineffectiveness result? (S2) Increasingly studies try to adjust for simultaneity bias. Has the evidence shown the existence of this bias? To these two questions the answer remains "no". However, (S3) new evidence suggests that some aid components may have a positive effect on growth. This is a promising new result, but it is not yet confirmed by independent replication.

1. Introduction

Since 2004, the reported findings on development aid effectiveness have more than doubled. The key question asked is: Does development aid cause development? This note is a brief update of our meta study (Doucouliagos and Paldam, 2008) that covered the literature until January 2005. We do not try to update all dimensions of our study but focus on three aspects of the key question: (S1) Have the new results changed the central finding of aid ineffectiveness? (S2) Has the new standard practice of adjusting for simultaneity bias actually found such biases? (S3) Has the new attempt to divide aid flows into components shown that disaggregation matters?

The aid ineffectiveness result is well-known but remains controversial. About 30% of the new studies claim to have (finally) shown that aid works.[1] The technique of growth regressions allows authors to generate a range of results, which in the case at hand are distributed, with an average that is very close to zero. We have argued elsewhere that this literature has *a reluctancy bias*, so that the distribution of the reported results (over their precision) is asymmetric. The asymmetry is caused by two priors generating observationally equivalent biases[2]: (i) Idealism, aid ineffectiveness disappoints hopes for a more equal world, and (ii) Interests, the 'aid industry' gives many researchers (extra) income and other benefits.[3] Meta-analysis can be used to correct the average result in a literature for such biases, once enough studies exist and all are included.

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[1] The claim the aid works was first made by Papanek (1973). Few of the new studies (as Rajan and Subramanian, 2008a) explicitly say that aid is ineffective. Also, some new surveys by 'insiders' of the 'aid industry', such as Arndt et al. (2009) and Feeny and McGillivray (2010), claim that the (new) literature shows that aid works.

[2] See Doucouliagos and Paldam (2008 and 2009b) for the empirics and a more detailed discussion of the biases.

[3] It is difficult to assess the weight of the two priors as they overlap. Many authors fail to report their conflict of interest and few authors are critical of the ideology of aid, and none, of course, disagree with the stated purpose of aid.

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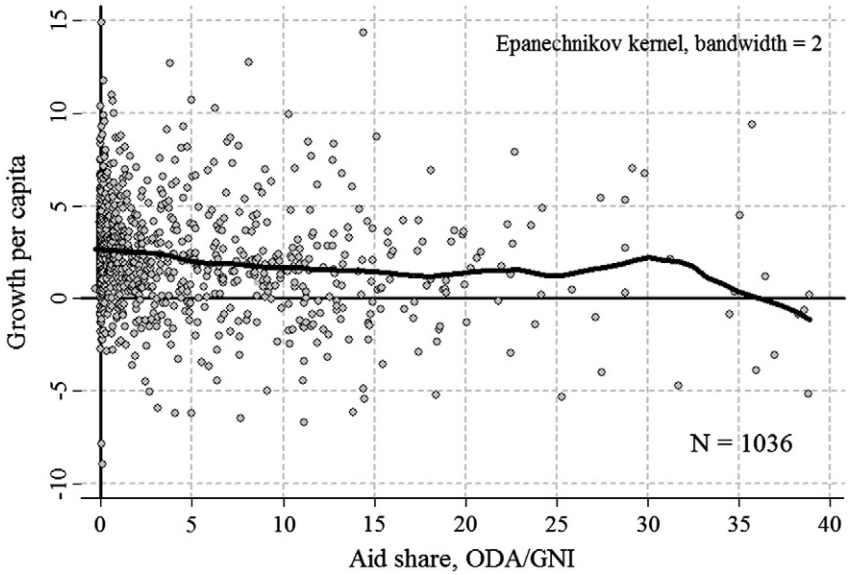

Fig. 1. Development aid and economic growth, 1960–2005. *Notes*: The figure shows 1036 of the 1052 observations available between 1960 and 2005 divided in intervals of 5 years (1960–65, 1965–70, …, 2000–2005). 16 extreme observations (outside the frames) have been removed: They do not change anything of substance. The real growth rate per capita is from the Maddison data and the share of aid (ODA) is in percent of the GNI. The solid line is a kernel regression showing the best "moving average" with a fixed bandwidth.

Our previous study covered a total of 541 published estimates in 68 papers. We now add 676 *new* estimates from the 38 new studies available as of December 2008.[4] It is evident that the research intensity has escalated. The new studies are authored by 65 researchers, 50 of them entirely new to this literature. For these new researchers at least, aid effectiveness remains an unresolved issue. An important driver for the literature seems to be to try out new estimators, while the underlying model specifications are fairly stable. The research effort matches the growth of aid from about $80 billion US in 2004 to $120 billion US in 2009. As regards (S1), Section 2 demonstrates that the aid ineffectiveness result is even *stronger* after recent years of intense scrutiny.

As regards (S2), the old *causality assumption* in this literature was that causality from aid to growth dominated these data, so that simultaneity could be disregarded. The new literature has made a large effort to adjust the aid–growth relation for simultaneity bias. Section 3 shows that this effort has confirmed the old causality assumption. As regards (S3), we find that the literature at present has produced some promising aid effectiveness results, but to date there has been very little independent replication to allow a firm conclusion.

Fig. 1 displays the data used by the 105 studies. It shows a weak (but insignificant) negative correlation between the data. Given the distribution of the data, it is not surprising that empirical studies have failed to produce a strong and robust aid effectiveness effect.[5] We show in this paper that all along the result of this research effort would have been perfectly clear, if the literature had been *quantitatively summarized* by the appropriate tools: According to all the available evidence, total aid was and remains ineffective in generating economic growth.

2. Estimation and results

Empirical studies estimate some variant of a generic growth model:

$$g_{it} = \alpha + \mu h_{it} + \gamma_1 x'_{1it} + \varepsilon_{it} \tag{1}$$

where the variables g and h denote the real growth rate and the aid share, respectively, i and t index country and time, x is a vector of controls, and ε are the residuals. The key measure of interest is aid effectiveness: $\partial g/\partial h = \mu$. Following standard practice in meta-analysis, we collect estimates of μ that are conceptually comparable within and between the 105 studies. These are converted into *partial correlations*, μ_r, in order to reach a common unit of measurement of the strength of the association between aid and growth.[6]

[4] Christensen et al. (2010) provide a bibliography of the 105 papers. It is posted on http://www.martin.paldam.dk together with the coding of the papers. We are aware of newer studies, e.g. Nowak-Lehmann et al. (2009), which use a range of new techniques, but find the usual results.

[5] The estimated kernel-curve shows why the many attempts in the last decade to fit a non-linear curve through the data has produced unstable results, as demonstrated in Doucouliagos and Paldam (2010).

[6] The use of partial correlations is common in meta-analysis; see Djankov and Murrell (2002). Unfortunately, there is insufficient information in many studies from which to calculate elasticities.