

Aid and development

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Summary

■ Foreign aid looms large in the public discourse; and international development assistance remains squarely on most policy agendas concerned with growth, poverty and inequality in Africa and elsewhere in the developing world. The present review takes a retrospective look at how foreign aid has evolved since World War II in response to a dramatically changing global political and economic context. I review the aid process and associated trends in the volume and distribution of aid and categorize some of the key goals, principles and institutions of the aid system. The evidence on whether aid has been effective in furthering economic growth and development is discussed in some detail. I add perspective and identify some critical unresolved issues. I finally turn to the current development debate and discuss some key concerns, I believe should be kept in mind in formulating any agenda for aid in the future. ■

JEL classification: F35, O10.

Key words: Foreign aid, aid impact.

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Foreign aid and its effectiveness in promoting growth and development in developing countries has been an area of intense controversy ever since Rosenstein-Rodan (1943) advocated aid to Eastern and South-Eastern Europe. Early optimism and confidence in the impact of foreign aid have been tempered with time. Browsing through successive editions of a leading text book in development economics provides an illustration. In the first edition of his *Leading Issues in Economic Development*, Meier (1964) dedicated some 18 pages to the issue of foreign aid. He started out by asking: “How much aid?” By the time of the 6th edition (Meier, 1995), the treatment of foreign aid had been cut in half, and the questions raised were: “Why official assistance?”, and “Does aid work?”. In the 2000 edition (Meier and Rauch, 2000), “foreign aid” is not even listed in the index.

Meanwhile the debate about the usefulness and design of foreign aid has continued unabated. Some insist that aid is a waste of resources and even harmful to aid receiving countries, Dichter (2005). In particular, they point to Africa and scores of failed projects and swiftly conclude that aid has been an outright disaster. Others are disappointed and sceptical, a prominent example being Easterly (2001, 2003, 2005, 2006), who highlights aid’s inability to buy growth. Bird-sall, Rodrik and Subramanian (2005) view the potential impact of aid as seriously circumscribed, but remain largely supportive. A complementary approach in the middle ground is that aid has worked in the

** I am grateful to Eva Rytter Sunesen and Christoffer Sonne-Schmidt for research assistance and to colleagues from University of Copenhagen for comments and collaboration. A special thanks to Phil Abbott, Carl Johan Dalgaard, Henning Tarp Jensen and Theo Larsen. Thanks for good comments are also due to participants at (i) the Conference on Foreign Aid Policy organized by the Swedish Economic Council on 15 May 2006, including in particular those of my discussant professor Peter Svedberg, (ii) the Nordic Conference on Development Economics in Oslo on 22 June 2006, (iii) the WIDER Conference on Aid: Principles, Policies and Performance in Helsinki on 16-17 June 2006, and (iv) a departmental seminar at Purdue University on 6 October 2006. Finally, I would like to acknowledge with sincere appreciation the critique and most constructive expert advice received from both an anonymous referee and professor Arne Bigsten. The usual caveats apply.*

past in furthering growth and development, see Tarp (2000). Aid is not equally effective everywhere, and much remains to be learnt about how aid impacts in theory and practice. The focus should therefore be both on ways and means to improve the effectiveness of foreign aid disbursements and on increasing the total flow of resources. A final approach is to emphasize that a doubling of worldwide aid flows is our generation's challenge, a moral obligation of rich countries that will send "forth mighty currents of hope" and lead to "the end of poverty", see Sachs (2005).

The analysis of aid's impact on growth became dominated by macro-econometric frameworks during the second half of the 1990's. Much of this debate has focused on whether the effectiveness of aid is conditional on policy or whether aid can be expected to have a separate and positive impact, independent of policy. This has involved a mixture of concerns, which range from technically demanding econometric modelling issues to fundamentally different approaches to the design and implementation of development strategy and policy. Overall, the view that aid works in promoting growth and development has gained ground in the academic literature in recent years; but disagreement remains characteristic in assessments of the necessary and sufficient conditions for aid to have a positive contribution on the development process. The same goes in relation to (i) different views on what constitutes "good" economic policy and how economic policy and deeper structural characteristics interact with the efficiency of foreign aid, and (ii) the institutional framework through which aid is channelled. Aid has, for example, been subjected to critique for being donor driven, and this has led to repeated demands for new forms of partnership, see Helleiner (2000). One response has been to shift the attention to recipient country "ownership", but what this means in theory and practice remains subject to differing interpretations.

Nevertheless, widespread calls have in the last few years been made for "a big push" or a Marshall Plan for Africa. Sachs (2005) is a passionate spokesman for this approach, which is set out in the UN Millennium Project Report (2002, 2005). The World Economic Forum (2005) and the Commission for Africa (2005) reports can also be consulted. The Commission for Africa was launched by the British Prime Minister Tony Blair in February 2004 with the aim of taking a fresh look at Africa's past and present and the international community's role in its development path. These initiatives have called forth

both praise and critique, with Sachs and Easterly appearing to occupy opposing ends of the spectrum. Viewing their assessments from the perspective of historical developments in foreign aid, on the one hand, and the analytical literature on aid effectiveness, on the other, is a general aim of this paper.

The remainder of this study is structured in six parts.¹ In Section 1, I define what is meant by foreign aid and provide selected data on amounts and trends involved. Section 2 contains a general historical background, while Sections 3 and 4 turn to the allocation and impact of foreign aid. In Section 5, I discuss the current debate, while Section 6 concludes.

1. What is foreign aid?

What is foreign aid? Loosely speaking, it covers governmental transfers to poor countries that are destined for developmental purposes. For a more precise definition, it is useful to turn to the Development Assistance Committee (DAC) of the OECD. DAC is the principal body through which the OECD deals with issues related to co-operation with developing countries. According to DAC, the term “foreign aid” or “development assistance” refers to financial flows that qualify as Official Development Assistance (ODA). ODA is defined as the sum of grants and loans to aid recipients that are: (a) undertaken by the official sector of the donor country; (b) with promotion of economic development and welfare in recipient countries as the main objective; (c) at concessional financial terms, where the grant element is equal to at least 25 per cent.²

¹ In preparing this review, I rely both on field experience and a variety of academic outputs. They include (i) a Routledge book volume on *Foreign Aid and Development: Lessons learnt and Directions for the Future* (see Tarp, 2000); (ii) several articles published over the past five years, in particular including work with Dalgaard, Hansen and Roland-Holst listed in the references; and (iii) the notes from my inaugural lecture held at University of Copenhagen on 29 November 2002 under the heading *Reflections on the Effectiveness of Foreign Aid*. Please see Arndt, Jones and Tarp (2006) for a companion paper to the present article, focusing on what can be said about aid and development in a specific country context—that of Mozambique.

² Conventionally, the market rate of interest used to assess a loan is taken as 10 per cent. Thus, while the grant element is nil for a loan carrying an interest rate of 10 per cent, it is 100 per cent for a pure grant, and lies between these two limits for a soft loan. In calculating total ODA, no adjustment is made to take account of the smaller grant element of loans. The value of grants and the nominal value of loans that qualify are simply added up.

In addition to financial flows, technical co-operation costs are included in ODA; but grants, loans and credits for military purposes are excluded, and transfer payments to private individuals are in general not counted. The same goes for private charity, commercial loans and foreign direct investment (FDI).

While the OECD operates with a consolidated list of recipient countries to capture all aid-like flows, this list was divided into two parts until 2005. Only aid to “traditional” developing countries counted as ODA. For these (Part I) countries, there is a long-standing United Nations (UN) target from 1970 that they should receive 0.7 per cent of donors’ Gross National Income (GNI) as aid. Assistance to the “more advanced” Eastern European and “more advanced” developing (Part II) countries was recorded separately as “official aid” (OA), not included as part of ODA. It can finally be noted that DAC countries account for almost 95 per cent of all aid flows.³

In 2002, the total amount of foreign aid disbursed by donors to developing countries and multilateral organisations reached 61.5 billion USD (Table 1). Table 1 also shows that the average citizen in the OECD-DAC countries contributed less than USD 68 as ODA in 2002. This can be compared to a figure of around USD 52 in 1960-73 and almost USD 77 in 1992.⁴ It is equally clear from the table that the UN target of 0.7 per cent of GNI is, with few exceptions, very far from being reached. In this perspective, it is hardly surprising that some, such as Sach (2005) and many others, find the present levels of aid unacceptably low. It can also be noted that multilateral organisations are now disbursing around 30 per cent of total foreign aid, with the IMF and World Bank being the major channels, followed by the EU, the UN and the regional development banks (Table 2).

³ The OECD decided in 2005 to revert to a single list of ODA recipients, abolishing what is referred to as Part II in what follows. The new DAC list of ODA recipients is with a few exceptions consistent with World Bank practice, see http://www.oecd.org/document/56/0,2340,en_2649_34447_35832055_1_1_1_1,00.html for full details on the rather complicated set of changes that have taken place over the years.

⁴ Note that constant 2002 prices are relied on in Table 1. Only sixteen of the now 22 DAC member countries had joined the DAC before 1970, so the concept of an “average DAC citizen” is not strictly the same over time, see http://www.oecd.org/document/38/0,2340,en_2649_33721_1893350_1_1_1_1,00.html.

Table 1. Net ODA disbursements by donor

	2002 Prices - \$ Billion				Percent of total			
	ODA per capita (2002 Prices - \$)				Percent of donor GNI			
	1960-73	1992	1998	2002	1960-73	1992	1998	2002
US	14.7	14.1	9.4	13.3	47.1	23.0	18.3	21.6
	74.9	55.3	34.8	46.1	0.4	0.2	0.1	0.1
Japan	2.5	10.5	10.4	9.3	8.0	17.1	20.2	15.1
	24.5	84.4	82.2	72.8	0.2	0.3	0.3	0.2
France	3.9	7.2	5.1	5.5	12.8	11.8	9.9	8.9
	80.6	126.2	87.3	92.3	0.8	0.6	0.4	0.4
Germany	2.8	6.6	4.9	5.3	9.1	10.7	9.5	8.7
	48.0	81.4	59.5	64.5	0.4	0.4	0.3	0.3
UK	3.2	3.6	3.8	4.9	10.2	5.8	7.4	8.0
	58.0	61.3	64.7	83.5	0.5	0.3	0.3	0.3
DK, NL, NO and SE	1.3	7.1	7.4	8.7	4.2	11.5	14.4	14.1
	44.6	211.9	217.0	248.2	0.3	1.0	0.8	0.9
Other DAC	2.6	10.9	9.4	11.3	8.5	17.8	18.2	18.4
	23.0	57.9	46.0	53.6	0.3	0.4	0.3	0.3
Non-DAC	..	1.4	1.0	3.2	..	2.2	2.0	5.2
	67.2	..	0.3	0.1	0.4
Total	31.0	61.3	51.5	61.5	100	100	100	100
	51.6	76.9	61.7	67.6	0.4	0.3	0.2	0.2
Bilateral ODA	26.5	41.9	34.9	43.5	85.5	68.3	67.8	70.7
Multilateral ODA	4.9	19.1	16.6	18.0	15.6	31.1	32.2	29.3

Notes: Denmark (DK) since 1978, Netherlands (NL) since 1975, Norway (NO) since 1976, and Sweden (SE) since 1975 have all had ODA in percent of GNI above 0.7. Luxembourg has been above the UN ODA target of 0.7 per cent since 2000.

Source: OECD (2004).

Table 2. Multilateral aid disbursements

	2002 Prices - \$ Billion				Percent			
	1960-73	1992	1998	2002	1960-73	1992	1998	2002
Multilateral, total of which:	2.8	16.3	14.4	17.0	100	100	100	100
UN	0.9	5.3	2.6	3.8	31.4	32.6	17.9	22.1
IMF and WB	0.8	5.3	5.0	6.0	30.0	32.7	35.0	35.1
European Commission	0.6	3.8	4.6	5.1	23.1	23.1	32.3	30.3
Regional development banks	0.4	1.6	1.9	1.8	15.4	10.0	13.2	10.5
Other multilateral institutions	0.0	0.3	0.2	0.4	0.0	1.6	1.6	2.1

Source: OECD (2004).

Table 3 gives an overview of aid per capita and aid in per cent of GNI in aid receiving Part I countries with a population of more than 2 million. It is a widespread perception in, for example, the US that foreign aid amounts to a very significant resource, in both absolute and relative terms, and aid is indeed not an insignificant flow measured relative to developing country production and income. At the same time, aid does not appear that sizeable when measured in relation to GNI or government budgets in the donor countries or in comparison with the population size of aid receiving countries.

Turning to the aid receiving countries, the available data confirm that global aid levels have kept pace with both incomes and population in the developing world during the past three decades. Figure 1 presents ratios of total ODA to GNI and the population in aid receiving countries. ODA per capita almost doubled in real terms; but perhaps the most revealing aspect here is the downturn from 1991-92 after the steady increase in the previous decade. The fact that aid has only remained more or less stable as a share of GNI in recipient countries is also evident.

Table 3. Average annual (1993-2002) aid shares for countries with populations larger than 2 million

Country	Aid per capita		Country	Country	Aid in % of GNI		Country
Malaysia	0.3	23.5	Tunisia	Saudi Arabia	0.0	7.4	Georgia
Saudi Arabia	1.2	24.1	Burundi	Malaysia	0.0	7.6	Papua New G.
Brazil	1.7	24.1	Sri Lanka	Argentina	0.0	8.1	Cote d'Ivoire
India	1.7	26.1	Togo	Venezuela, RB	0.0	8.3	Nepal
Nigeria	1.8	28.1	Zimbabwe	Brazil	0.1	8.4	Togo
Venezuela, RB	1.8	28.2	Madagascar	Mexico	0.1	8.4	Angola
China	2.0	29.2	Niger	Turkey	0.1	9.0	Bolivia
Mexico	2.0	29.3	Chad	Iran, Islamic R.	0.2	9.3	Honduras
Myanmar	2.2	30.6	Somalia	Chile	0.2	9.3	Guinea
Iran, Islamic R.	2.5	30.9	Liberia	Costa Rica	0.2	9.9	Albania
Argentina	3.4	31.1	Egypt, Arab R.	Uruguay	0.2	10.1	Tajikistan
Turkey	3.5	32.0	Tanzania	Colombia	0.3	10.2	Ghana
Korea, Dem. R.	4.1	32.3	Angola	China	0.3	10.9	Serbia and M.
Congo, Dem. R.	5.2	33.1	Uganda	South Africa	0.4	11.3	Madagascar
Uzbekistan	5.2	33.5	Ghana	Oman	0.4	11.6	Senegal
Cuba	5.2	34.2	Cambodia	Panama	0.4	11.7	Haiti
Colombia	5.3	35.1	Central Afric. R.	India	0.4	11.8	Benin
Turkmenistan	7.0	35.3	Cameroon	Croatia	0.5	11.8	Cent. Afric. R.
Costa Rica	7.1	39.6	Burkina Faso	Thailand	0.5	11.9	Cambodia
Indonesia	7.3	40.9	Mali	Algeria	0.6	12.0	Armenia
Chile	7.4	42.7	Eritrea	Dominican R.	0.7	12.5	Congo, Rep.
Kazakhstan	8.6	42.9	Benin	Kazakhstan	0.7	13.5	Chad
Iraq	8.8	43.0	Sierra Leone	Nigeria	0.7	13.7	Uganda
Pakistan	8.8	43.3	Georgia	Peru	0.9	14.2	Kyrgyz R.
Sudan	9.2	44.4	El Salvador	Turkmenistan	0.9	14.2	Ethiopia
Algeria	9.2	44.8	Malawi	Indonesia	1.0	15.1	Tanzania
Bangladesh	9.8	45.2	Haiti	Jamaica	1.0	15.5	Niger
South Africa	10.6	45.2	Kyrgyz Republic	Ecuador	1.1	16.2	Burkina Faso
Thailand	10.8	45.7	Guinea	Philippines	1.1	16.3	W. Bank & G.
Philippines	11.4	55.3	Cote d'Ivoire	Paraguay	1.2	17.0	Mali
Dominican R.	12.2	55.6	Lao PDR	Tunisia	1.2	17.6	Lao PDR
Afghanistan	12.8	56.5	Lebanon	Uzbekistan	1.4	18.2	Burundi
Uruguay	13.0	58.3	Senegal	Guatemala	1.4	19.3	Liberia
Panama	13.2	63.0	Papua N. Guinea	Lebanon	1.7	21.5	Eritrea
Vietnam	14.3	63.3	Serbia and M.	Morocco	1.8	23.1	Mongolia
Ethiopia	14.8	64.1	Rwanda	Pakistan	2.0	23.8	Zambia

Table 3. Continued....

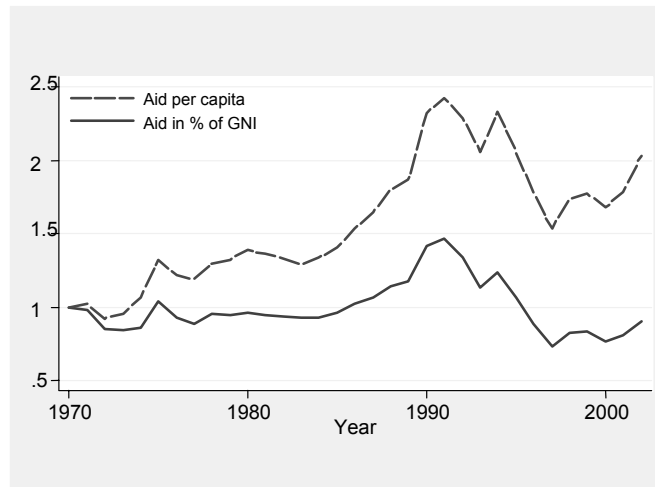
Country	Aid per capita		Country	Country	Aid in % of GNI		Country
Ecuador	16.5	65.1	Congo, Rep.	Syrian Arab R.	2.0	25.4	Malawi
Peru	17.3	65.2	Armenia	El Salvador	2.6	25.7	Bosnia and H.
Syrian Arab R.	17.5	65.6	Mozambique	Egypt, Arab R.	2.8	27.1	Sierra Leone
Tajikistan	18.0	71.9	Honduras	Bangladesh	2.9	27.5	Mauritania
Nepal	18.2	81.6	Bolivia	Sudan	3.1	30.8	Rwanda
Paraguay	18.7	82.6	Zambia	Sri Lanka	3.2	31.6	Nicaragua
Croatia	18.9	85.7	Albania	Azerbaijan	3.8	40.3	Mozambique
Kenya	19.7	87.0	Mongolia	Vietnam	4.3		
Yemen, Rep.	20.4	100.4	Jordan	Congo, Dem. R.	4.9		
Azerbaijan	20.7	103.9	Mauritania	Zimbabwe	5.2		
Morocco	20.9	130.4	Nicaragua	Yemen, Rep.	5.4		
Jamaica	21.4	186.1	Bosnia and H.	Cameroon	5.9		
Guatemala	22.2	233.6	W. Bank & G.	Jordan	6.3		
Oman	22.6			Kenya	6.8		

Figure 2 shows that the allocation of aid from 1993 to 2002 as measured by the aid to GNI ratio in aid receiving countries is highly skewed. Most Part I countries received aid in the order of 3.1 per cent of their GNI per year with a median of 6.8 per cent. This corresponds to a distribution of aid per capita with a mode of 18.5 USD per year and a median of 34.6 USD. Illustrative country examples have been added to Figure 2. They demonstrate that the relative size of the aid inflow varies significantly among countries such as Vietnam, Bolivia, Tanzania and Mozambique.

The 15.1 per cent size of the aid to GNI ratio in, for example, Tanzania may seem high. It should be kept in mind, however, that this share does not only reflect the size of the aid flow, but also the very low level of income. Income per capita in Tanzania has just recently grown to around USD 300 per capita. Tanzania only received about USD 32 per capita per year in foreign aid from 1993 to 2002.

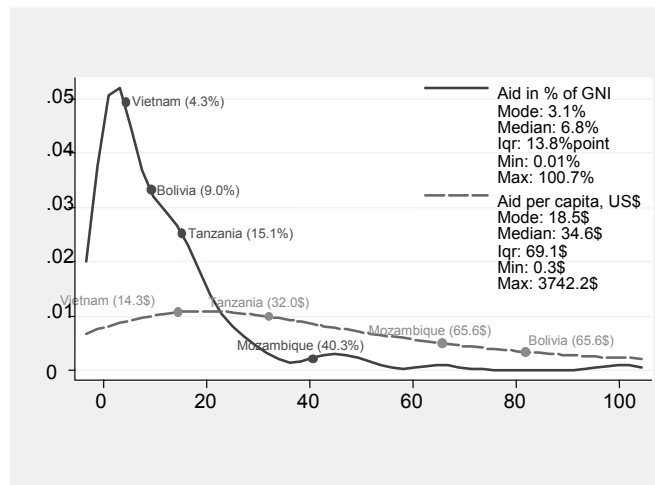
Against this background, modest expectations are advisable when analysing the overall impact of past aid on growth. Many constraints have hampered growth in Tanzania and elsewhere, and aid has been used for a multitude of purposes. They are in many cases only indirectly related to generating economic return.

Figure 1. ODA per capita and as a percent of GNI in the recipient country



Note: ODA and GNI in constant 1995 USD, and shares normalized to 1 in 1970.
Source: World Bank (2004).

Figure 2. Density of average annual (1993-2002) ODA shares



Note: Kernel density using Gaussian kernel. The height of the graph reflects the (weighted) average number of observations in an interval around the midpoint.
Source: World Bank (2004).

2. Historical background

Foreign aid in its modern form emerged out of the disruption that followed World War II. The international economic system had collapsed, and war-ravaged Europe faced a critical shortage of capital and an acute need for physical reconstruction. The response was the European Recovery Programme, commonly known as the Marshall Plan. During the peak years, the US transferred some 2-3 per cent of its national income to help restore Europe. The motives behind the US aid were multifaceted, ranging from the selfish to the generous. Containing communism around the Soviet bloc and trying to secure access to raw materials and gain a leading role in the global trade and investment system were critically important nationalistic concerns. Altruistic aims, on the other hand, helped mobilize support from a wide spectrum of political opinion. The Marshall Plan, which was administered by the Organization for European Economic Cooperation (OEEC), the predecessor of the OECD, was implemented on schedule, and its success fuelled highly optimistic expectations about the future effectiveness of foreign aid.

After the success of the Marshall Plan, the attention of industrialized nations turned to the developing countries, many of which became independent around 1960. Economic growth in a state-led planning tradition became a key objective during the 1950's and 1960's, and it was widely believed that poverty and inequality would quickly be eliminated through growth and modernization ("trickle down"). A major part of the rapidly increasing bilateral flows during the 1950's came from the US, but colonial ties remained strong, and developing regions continued to receive bilateral (country-to-country) support from the former colonial powers, notably France and the United Kingdom. Yet, the 1960's was also the decade where a range of new bilateral donor agencies was established in, for example, the Nordic countries. They accounted for much of the increase in aid flows in the 1970's.

A transition toward more independent, multilateral relations began to emerge during the 1960's. This created a constituency for foreign aid, and the non-aligned movement for some time gave an articulated developing country focus to this voice,⁵ as did the various organs of

⁵ The first official non-aligned movement (NAM) summit was held in September of 1961. Among the prominent developing country leaders, who helped NAM get off the ground, were Tito of Yugoslavia, Nehru of India, Nasser of Egypt and Sukarno

the UN. They accounted for around one third of multilateral assistance during 1960-73 as shown in Table 2. The International Bank for Reconstruction and Development (IBRD) (or World Bank), established at the Bretton Woods Conference in 1944, plays a central role in multilateral development assistance, especially following the creation of the International Development Association (IDA) in 1960. IDA channels resources to the poorest countries on “soft” conditions alongside the regional development banks, formed from 1959 to 1966, and the European Commission.

The original Marshall Plan was built around support to finance general categories of imports and strengthen the balance of payments (i.e. programme aid), but from the early 1950’s, project aid became the dominating aid modality. Some donors continued to supply programme aid, but aid was increasingly disbursed for the implementation of specific capital investment projects and associated technical assistance with support advances in infrastructure and productive sectors.

The multilateralism of aid became somewhat more pronounced after the mid-1970’s, when the UN, World Bank and other multilateral agencies expanded their activities quite considerably, and the share of multilateral aid in total aid has since then remained close to 30 per cent. The 1970’s also saw an increased focus on employment, income distribution, and poverty alleviation as essential objectives of development and foreign aid. The effectiveness of trickle-down was widely questioned, and new strategies referred to as “basic human needs” and “redistribution with growth” were formulated. Nevertheless, the typical project aid modality largely remained unchanged; and micro-economic project evaluation, also referred to as cost-benefit analysis (CBA), was expanded and widely relied on in the aid debate. Many projects were favourably evaluated, and during the 1960’s and 1970’s, economic progress was visible in much of the developing world. Many developing countries borrowed heavily during the 1970’s, and this made eminent sense at the time. Inflation was high and credit exceedingly cheap. After the first oil crisis in 1973, commercial banks started playing a large role in international lending by recycling OPEC petrodollars and issuing general-purpose loans to developing coun-

of Indonesia. Formally speaking, the non-aligned movement is an international organization of over 100 developing countries, which consider themselves not formally aligned with or against any major power bloc. While influential during the 1960’s and 1970’s, NAM started losing influence in the 1970’s.

tries to provide balance of payment support and expand exports. Bilateral donors and the international financial institutions (IFIs) were no longer alone on the lending scene. International lending surged, which permitted high growth with little debt-servicing difficulty.

The “golden era” of the 1960’s and 1970’s came to an abrupt end at the beginning of the 1980’s. The second oil shock in 1979 reversed the economic conditions, and there was a huge increase in interest rates due to the economic stabilization policies in the developed countries. Developing countries were faced with a combination of higher oil prices, import compression and a significant decrease in export opportunities due to slower overall global growth. The international debt crisis erupted, and macroeconomic imbalance became characteristic. It became evident that the downturn was longer lasting, not temporary as in 1973, and numerous debtor countries with depleted foreign exchange reserves, including bigger third world countries such as Mexico, Brazil, Argentina and the Philippines, had to turn to the IMF. On the political scene, Ronald Reagan and Margaret Thatcher came into power in the US and the UK, and in the World Bank, Anne Krueger became Vice President and Chief Economist, replacing Hollis Chenery. This change was symbolic and substantive (Kanbur, 2003). Economic circumstances in the developing countries and the relations between the North and South had changed radically. The crisis hit hard, especially in many African countries. Progress over previous decades ground to a halt, inflation got out of control and the deficit in the balance of payments could not be financed on a sustainable basis. The focus of development strategy and policy shifted to internal domestic policy failure, and achieving macroeconomic balance (externally and internally) became widely perceived as an essential prerequisite for renewed development. In parallel, a series of damaging political and military conflicts broke out, including mass homicides, major refugee problems and famines in a variety of African countries.

“Rolling back the state” turned into a rallying call in the subsequent structural adjustment efforts, and reliance on market forces, outward orientation, and the role of the private sector, including non-governmental organizations (NGOs) were emphasized by the World Bank and others. In parallel, poverty alleviation somehow slipped out of view in mainstream agendas for economic reform, but remained at the centre of attention in more un-orthodox thinking such as the “ad-

justment with a human face” approach of the UN Children’s Fund (Cornia, Jolly and Stewart, 1987).

At the same time, bilateral donors and international agencies struggled with how to channel resources to the developing world. The changing economic context and future perspectives had altered the development scene. Quick-disbursing macroeconomic programme assistance, such as balance of payments support and sector budget support (which were not tied to investment projects, and which could be justified under the headings of stabilisation and adjustment), appeared to be an ideal solution to the dilemma of maintaining the resource flow and the desire to promote policy reform. Financial programme aid and adjustment loans (and eventually debt relief) became fashionable and policy conditionality more widespread. In other words, a rationale, which corresponded well with the orthodox guidelines for good policy summarized by the “Washington consensus” (Williamson, 1997), had been found for maintaining the aid flow.⁶

Total aid continued to grow steadily in real terms until the early 1990’s, and as a rising share of the growing national income of the donor community it more than tripled during 1970–90. After 1992, total aid flows started to decline in absolute terms until the turn of the millennium. Many reasons account for the fall in aggregate flows after 1992, including first of all the end of the Cold War. The same can be said for the weakening patron-client relationships among the developing countries and the former colonial powers. The traditional support of foreign aid by vocal interest groups in the industrial countries receded. Bilateral and multilateral aid institutions were subjected to criticism and, at times, characterized as blunt instruments of commercial interests in the industrial world or as self-interested, inefficient rent-seeking bureaucracies. Moreover, acute awareness in donor countries of cases of bad governance, corruption, and “crony capitalism” led to scepticism about the credibility of governments receiving aid. The potential role of foreign aid in all this attracted attention, and the fear that aid can generate undesirable dependency relationships became clear during the second part of the 1990’s and persisted into the 21st century.

In parallel, the perception that policy conditionality was failing to promote policy reform started to assert itself, see Kanbur (2000) and Svensson (2003). This assessment prompted a keen interest in new

⁶ See Rodrik (2006) for a critical up-to-date review.

kinds of donor-recipient relationships. One outcome was the call for increased national ownership of aid programmes. Another was that the World Bank and independent academic researchers started digging into the aid-growth relationship using modern analytical techniques. More recent attempts to develop randomized programme evaluation also appeared on the scene, see for example Duflo (2004).⁷ Meanwhile, the developing world was hit hard by the Asian financial crisis. It affected development outcomes in a number of countries and modified the framework within which aid is implemented.

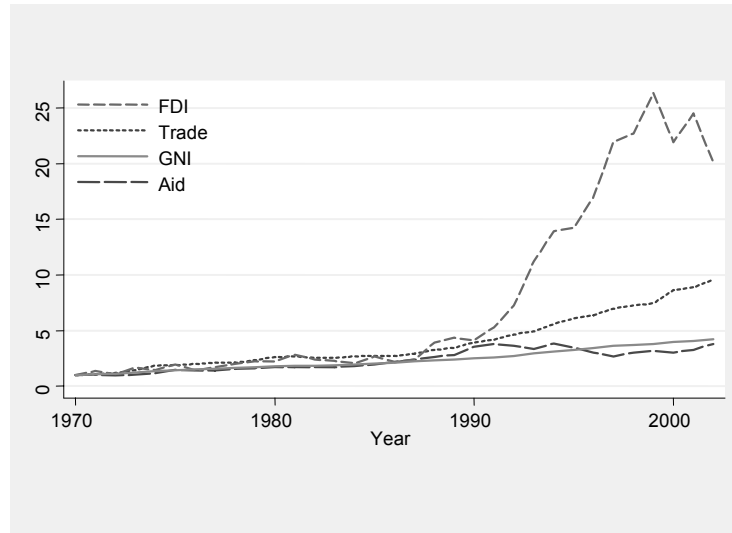
Finally, when reviewing the role and impact of foreign aid, it should be kept in mind that the world economy has during the past few decades seen major changes in international relations that go far beyond the changes in foreign aid. Growth in trade, GDP and the relationship between trade and growth have filled volumes with statistical tables, policy analysis, and academic research. With reference to foreign aid, a few trends are of particular relevance.⁸ Figure 3 shows how global trade as well as ODA, GNI and FDI in aid-receiving countries evolved from 1970 onwards. This figure only reflects the relative changes in flows, not their relative magnitudes,⁹ but it is evident that global trade has been growing faster than both GNI and aid flows to poor countries. This is especially the case from around the mid-1980's, and the importance of FDI started changing very considerably in the early 1990's.

In sum, globalization has modified the context in which foreign aid is implemented. This suggests, on the one hand, that a broader and more refined awareness of the implications of coexistence between public and private investment in developing countries would be beneficial. On the other hand, it implies that aid's role in generating foreign exchange has changed relative to other entries on the balance of payments.

⁷ I will not pursue the set of issues related to this approach to aid impact evaluation here. See Bigsten, Gunning and Tarp (2006) and Thorbecke (2005) for elaboration.

⁸ See also Roland-Holst and Tarp (2004).

⁹ FDI accounted for only 2.3 per cent of GDP in low- and middle-income countries in 2003, and 0.6 per cent in 1990. Trade was 41 per cent in 1990 and 60 per cent in 2003.

Figure 3. Macroeconomic indicators in aid receiving countries

Notes: All variables are expressed as an index equal to one in 1970 and constructed from series in constant 1995 USD. FDI is constructed from net FDI inflows and trade is based on the sum of exports and trade is based on the sum of exports and imports.

Source: World Bank (2004).

3. Aid allocation

Foreign aid has over the years been justified in public policy pronouncements in widely differing ways, ranging from pure altruism to the shared benefits of economic development in poor countries and further on to political ideology, foreign policy and commercial interests of the donor country. Few dispute that humanitarian sentiments have also in practice motivated donors. Action following severe natural calamities, which continue to be endemic in poor countries, is an example. Food and emergency relief also remains an important form of aid. In addition, the data available in Table 3 suggest that donors allocate relatively more ODA to the poorest countries. The broader validity of this casual observation is confirmed in cross-country econometric work, see Alesina and Dollar (2000). While studying bilateral aid only, they conclude that most donors give more aid to poorer countries, *ceteris paribus*. They also stress that there is considerable variation among donors.

Emphasis on the needs of poor countries was a particularly prominent characteristic—and the underlying economic rationale—in much of the policy literature on foreign aid in the 1950's and 1960's. Here, the focus was on estimating aid requirements in the tradition of the two-gap model, (Chenery and Strout, 1966). The two-gap model has been subjected to heavy criticism,¹⁰ and the role of aid has changed to a much more multi-dimensional set of concerns (Thorbecke, 2000). Economic return is by no means the only goal of aid. Nevertheless, growth and economic development in aid receiving countries have continued as a yardstick for the effectiveness of aid, both in their own right and as necessary conditions for the realisation of other development aims, such as the reduction of poverty and the achievement of broader social goals. It is from this perspective that the discussion in Section 4 on aid's impact on growth should be seen.

A second observation from Table 3 is that large, populous and poor countries, such as China and India receive relatively small amounts of aid in per capita terms. Smaller countries such as Mali, Ghana, Bolivia and Sri Lanka are given a more favourable per capita treatment. This finding is confirmed econometrically by Alesina and Dollar, but they stress the critical and complex importance of political and strategic considerations in aid allocations.

It is not new that selfish motives are critical in donor decisions. In the past, the Cold War was used as a powerful justification for providing aid to developing countries to stem the spread of communism. Similarly, aid from socialist governments was motivated to promote socialist political and economic systems. Other strategic interests play a role as well. The US has over the years earmarked very substantial amounts of aid to Egypt and Israel;¹¹ being a former colony is an important determinant in getting access to French aid; and voting behaviour in the UN can affect aid allocation both bilaterally (Alesina and Dollar, 2000) and through the multilateral system (Andersen, Harr and Tarp, 2006). Berthélemy and Tichit (2004) and Berthélemy (2006) offer further valuable insights into how bilateral donors are influenced in aid allocations by their own strategic and commercial interest versus the development motives of aid recipients, and into the fact that not all donors behave in the same way.

¹⁰ See Jones (1995) and Easterly (1999) for two key references.

¹¹ To this list can be added Iraq and Afghanistan. For example, US aid to Iraq amounted to USD 3.5 billion in 2005.

In sum, the donor community has clearly failed to meet the established international target of contributing 0.7 per cent of their national income as ODA. As shown in Table 1, only the group of Nordic countries and the Netherlands has consistently met this target, while the US contributed around 0.1 percent of the US GNI in 2002.¹² Finally, it is well established that total ODA, ODA per capita, ODA as a share of GNI and ODA as a share of total financial inflows vary considerably in real terms among aid receiving countries (see Tarp, 2006). All in all, donor motives are complex and range from equating aid with charity, on the one hand, to strict self-interest and national security, on the other.

4. The impact of foreign aid

Various approaches have been tried to deal with the challenge of measuring the “true” impact of aid on development, as reflected by growth or progress in social indicators, for example.¹³ One is to compare implicit or explicit targets with actual outcomes. The problem with this is that failure or success in reaching a target may be caused by reasons that are related to the provision of foreign aid. Another quite common approach is to rely on before-and-after comparisons, but this line of analysis also suffers from its inherent inability to attribute changes in observed outcomes to foreign aid. In other words, in assessing the impact of aid, it is not satisfactory to casually argue that since growth in Africa is far from satisfactory, aid “does not work”. Similarly, the fact that some aid projects have failed does not in any way prove that aid as a whole is a fiasco. Unsuccessful investment projects and public sector activities abound in even the best of political, social and economic circumstances around the world and few would dream of lambasting private multinational firms for failed initiatives if the bottom line is on average satisfactory. In fact, most people would probably agree that if investments are always successful, then investor behaviour is likely to be too risk averse. Development is and will always be a particularly risky business. Any serious analysis must either (i) try to dig deeper in an attempt to uncover whether foreign aid has on average had a positive impact on development in aid receiving countries or not, or (ii) aim at identifying the mechanisms

¹² This share has increased in the last couple of years, but US aid as a share of US GNI remains small.

¹³ See Bigsten, Gunning and Tarp (2006) for further elaboration of this point.

through which aid impacts on for example growth, including the potential positive and negative effects (i.e. returns) associated with foreign aid.

To be able to measure the effect of aid, the researcher must, in principle, be able to compare the value of a chosen indicator (such as growth or poverty reduction) in two strictly independent situations: with and without aid. To establish the “true” measure of aid impact, the importance of all other circumstances that have affected a given country over time needs to be properly accounted for.¹⁴ Alternatively, if a group of countries is compared (with and without aid), the analyst needs to account for the impact on the chosen indicator of the other differences that exist among the units of observation, like in a controlled experiment. This is the fundamental evaluation challenge and in social science, there is no way of addressing this problem (i.e. the challenge of establishing an appropriate counterfactual) in a broadly acceptable way without making assumptions that are bound to be debatable, in theory and in practice.

In Section 3, it was pointed out that aid has been given for many reasons that have little relation to socio-economic advancement in aid receiving countries. This has undoubtedly constrained the impact of aid on growth and development. The targets for aid have also varied wildly from one decade to the next. The same goes for the general political, social and economic circumstances as discussed in Section 2, and the modalities and sources of aid have changed as well. As a result, the conditions under which aid has had to operate have changed dramatically from one decade to the next. Coming up with simple answers about how aid has worked—or not worked—in promoting development in the past is no easy task. We can draw on history, but we do not have the possibility of perfectly controlled experiments, in providing an answer to questions such as whether aggregate aid has worked or not. There is, to be sure, no simple way of properly accounting for all the many varied and complex factors of daunting size, which have played a role in African development over the past 30 years—alongside foreign aid generally amounting to around USD 35 per capita per year.¹⁵

¹⁴ This includes choosing the length of individual time units and an appropriate overall time horizon, which are by no means simple choices.

¹⁵ Naturally, this does not mean that economics ignores the possibility of using both laboratory and field experiments to generate knowledge. Experimental economics is a sub-discipline that has been advancing significantly in recent years.

In any case, the past decades have witnessed a massive outpouring of studies on the effectiveness of foreign aid. This topic has been a central and recurring theme with which many development economists, subscribing to the different paradigms of development thinking, have grappled and the methodologies have varied. More specifically: (i) the impact of aid has been evaluated at the micro- and macroeconomic level; (ii) cross-country comparisons as well as single-country case studies have been relied on; and (iii) aid effectiveness research includes broad surveys of a qualitative and inter-disciplinary nature as well as more quantitative econometric work.¹⁶ As a point of departure for the remainder of this paper, it is relevant to stress that there is widespread agreement in the literature that aid has in many cases been highly successful at the microeconomic level. The most rigorous project evaluations are done by the World Bank, and reports from the Independent Evaluation Group of the World Bank are generally encouraging. For the period 1993-2002, an average rate of return of 22 per cent has been noted and decent project rates of return have over the years regularly been reported in one survey after the other, including for example Mosley (1987) and Cassen and Associates (1994). Overall, a mass of project evidence has been collected. Few dispute that aid interventions have worked in helping improve social outcomes through better health, helping promote the development of appropriate technology (i.e. the green revolution) etc. Yet, doubts about aid's overall impact on growth and development linger on, and the question is regularly raised whether all this adds up at the macro level.

Therefore, it is relevant to turn to how the empirical literature on aid's macroeconomic impact on growth has evolved. This choice of focus can be justified on several grounds. First, as an extension of the microeconomic evidence, according to the World Bank (1998), numerous case studies support the observation that aid has, at times, been a spectacular success. In establishing causal links, the critical challenge is, as noted above, to pinpoint a credible counterfactual, and it is never straightforward to generalize from case studies. Another reason for the popularity in the past 10-15 years of the cross-country panel data approach is that it makes it possible to move well beyond simplistic aid-growth correlation analysis, where the analysis of causal

¹⁶ The reader may wish to consult for example Cassen and Associates (1994) for a useful survey with a broader scope than the present paper. Other references include World Bank (1998, 2000).

effects is indeed rather primitive. It should, in fact, come as no surprise to the informed observer that the simple correlation coefficient between growth and aid can easily turn out to be insignificant, or negative. As already discussed, donors allocate more aid to poorer countries, subject to difficulties and shocks of many kinds, including natural and man made calamities. When countries have done well for a while so average income has gone up, donors tend to transfer less aid and eventually, they will withdraw (as it happened in for example the case of Korea). While such “graduation” may take a while, simple correlations are against this background likely to show a negative relationship; and they will certainly not reveal the “true” impact of aid.

In modern aid-growth work, the analyst can attempt to control for the impact of a large range of variables, and in this way becomes able to move somewhat closer to the ideal of having a reliable counterfactual.¹⁷ The analyst is, at least in principle, capable of addressing issues such as the identification problem inherent in having aid endogenously allocated in the foreign aid system. Second, a focus on growth makes it, in a wider perspective, possible to draw on both traditional growth theory and new growth models to illustrate how aid can potentially impact through a highly diverse set of channels.¹⁸ Third, macroeconomic studies are required in order to help generalize about the overall impact of aid on growth and economic development. Fourth, the aid-growth literature continues to be highly influential in shaping common perceptions about the significance and impact of foreign aid. Fifth, whether aid helps growth or not is essentially an empirical question.

The quantitative cross-country analyses of the macroeconomic impact of foreign aid on growth, which by now span almost four decades, can be classified into three generations, see Hansen and Tarp (2000). Work in the first two generations (where aid’s impact on growth via savings and investment was in focus) was inspired by the simple Harrod-Domar model and the two-gap Chenery-Strout extension. This framework was, as mentioned in Section 3, extensively used in the past as the analytical framework of choice for assessing aid impact; but from the early 1990’s, a third generation of panel based econometric studies came to dominate the academic and public discourse. This work was in part motivated by the availability of much

¹⁷ The same can be said about the use of randomized programme evaluation, which I do not pursue as already noted above. For perspective, see Thorbecke (2005).

¹⁸ For a pertinent cautioning set of observations, see Solow (2001).

better (panel) data across a range of countries and in part by insights emerging from new growth theory and the rapidly increasing number of general empirical studies of growth. In addition, the endogeneity of aid and other variables is addressed more consistently than before,¹⁹ and the aid-growth relationship is appropriately perceived as non-linear.

The underlying idea behind the Harrod-Domar model was indeed simple. Assume that physical capital is the only factor of production (so investment is the key constraint on growth) and assume as well that all aid is invested. Then, it is straightforward to calculate the growth impact of additional aid. If aid corresponds to six per cent of the gross national product and the capital-output ratio is estimated at 3.0,²⁰ which is a rather typical estimate, then aid adds two percentage points a year to the growth rate. The impact of aid is clearly positive, and aid works by helping fill either a savings- or a foreign exchange gap. The latter gap relates to the argument that aid represents foreign currency and as such, can facilitate imports of goods and services that may in some cases be critically important in output production over and above aid's impact on relieving the savings constraint. This kind of reasoning has, however, led to wildly overoptimistic expectations about aid's potential impact.²¹

First, it is a tall order to expect both a linear relationship between output and capital and that all aid is invested. As discussed in Section 3, aid is provided for many reasons. For example, food aid in famine situations is not intended as an investment. In addition, the share of aid that ends up being invested (rather than consumed) will, in even the very best of circumstances, depend on the degree of fungibility of

¹⁹ The wider ranging and complex econometric endogeneity problems inherent in relying on time averages for aid and growth, typically used in panel data growth regressions are laid out in Dalgaard, Hansen and Tarp (2004). They point out that not only aid but also policy is likely to be endogenous.

²⁰ Note from Figure 1 that the annual median aid to GNI ratio amounted to 6.8 per cent from 1993 to 2002.

²¹ Whether this completely discredits the two-gap model, as argued by some academic economists, including Easterly (1999), or whether it can serve a useful purpose as an admittedly very simplistic analytical framework, if applied with due care, in my view remains to be established. In any case, the fact is that this model continues to be widely used in practice, and whether one believes the two-gap model should be discarded altogether or not, the notion that aid may contribute to growth via investment and capital accumulation remains relevant.

the foreign aid transfer.²² On the other hand, even if aid adds to domestic savings and investment on less than a one to one basis, aid does continue to have a positive impact on growth in the traditional line of thinking—as long as total savings and investment go up.²³

A second line of critique of the Harrod-Domar and two-gap approach has been the argument that growth is less related to physical capital investment (including aid) than what is often assumed (Easterly, 2001). If the key driver of the productive impact of aid is related more to incentives and relative prices and more generally to the policy environment, then it becomes important to consider potentially distortionary effects of aid on incentives and economic policies in the aid receiving system and vice versa. An example is “Dutch disease”, and domestic demand and resource allocation may be twisted in undesirable directions following a large aid inflow if macroeconomic management is weak. One concrete example is that aid donors often pay much higher wages to national experts and staff than equally—and in many cases—more important national institutions.²⁴

Third, a large and growing literature on the political economy of aid, see for example Kanbur (2003), Gunning (2005) and Svensson (2000), has argued that if aid allows a recipient government (local elites) to pursue behaviour that is in any way anti-developmental, then the potential positive impact of aid can be undermined. There are many such examples available in practice, ranging from outright misuse of aid by corrupt governments to more subtle issues such as the potential negative impact of aid on domestic taxation (Adam and O’Connell, 1999).

²² Fungibility arises when the recipient can reallocate its own resources to other ends when aid is provided. There is limited and conflicting evidence on the degree of fungibility of foreign aid, see for example Feyzioglu, Swaroop and Zhu (1998).

²³ This observation goes back to Papanek (1972, 1973) and inspired Hansen and Tarp (2000), who reviewed 131 cross-country regressions produced over three decades. They challenged the widespread perception among academic researchers and aid practitioners that there are no significant macroeconomic links associated with foreign aid as stated by, for example, Michalopoulos and Sukhatme (1989) and White (1992). A re-examination of the then existing literature revealed that (i) aid increases savings, although not by as much as the aid inflow, (ii) aid increases investment, and (iii) aid on average has a positive effect on the growth rate whenever growth is driven by capital accumulation. Hansen and Tarp therefore suggested that the micro-macro paradox identified by Mosley (1987) to which I shall return below is non-existent—even in the context of the traditional aid-growth literature.

²⁴ See Rajan and Subramanian (2005a) for a recent contribution.

The third generation debate about aid's impact on growth is rooted in the above kinds of observations as well as in Mosley's (1987) micro-macro paradox. He suggested that while aid seems to be effective at the microeconomic level,²⁵ identifying any positive impact of aid at the macroeconomic level is harder, or even impossible. In fact, the micro-macro paradox seemed self evident to many at the time it was formulated, where the general atmosphere was one of aid fatigue and lack of belief in a positive impact of aid on growth. Another explanation, sometimes referred to as the "Iron Law of Econometrics", in the terminology of Hausman (2001), received less attention.²⁶ It must never be overlooked that once we try to explain a "dirty" dependent variable with noisy data and weak proxies, it should come as no surprise that the result is biased towards zero, or in this case even towards the negative given the aid allocation behaviour of donors. What Mosley and many after him have struggled with is how to control for the wildly changing circumstances under which aid has been implemented. We can (and should) look to history and try to treat it as a controlled experiment but, at the end of the day, we are limited by the extent to which our proxies capture the massive changes in circumstances under which aid is implemented over time and across countries.

Boone (1994) managed to stir up the aid-growth debate again in the early to mid-1990's. His work was cited in *The Economist* on 10 December 1994 under the colourful heading: "Aid Down the Rathole", and Boone did indeed suggest that aid does neither create, nor correlate with those underlying factors which cause growth. Boone did not, however, occupy the centre stage for long. His underlying theoretical model was qualified by Obstfeld (1999). Moreover, Boone treated the aid-growth relationship as linear and, as is the case with many other aid papers, did not convincingly account for the potential endogeneity of aid.²⁷ Finally, and much more importantly, a highly influential idea spread, in part due to effective backing by the World

²⁵ Dalgaard and Hansen (2005) also discuss the micro-economic evidence on positive ex-post rates of return of World Bank aid projects, referred to above. Median returns range between 10 to 30 per cent for the period 1996 to 2001.

²⁶ Hausman (2001, p. 58) notes: "At MIT I have called this "The Iron Law of Econometrics"—the magnitude of the estimate is usually lower than expected. It is also called "attenuation" in the statistical literature". In what follows I will use the technical term, attenuation bias.

²⁷ In Boone's 1994 aid-growth regressions, he did not instrument for aid, but he did include country-fixed effects.

Bank. This is the idea that while aid on average has no impact on growth, it may still work in some countries or time periods. Burnside and Dollar (1997, 2000) pursued this and argued that “aid has a positive impact on growth in developing countries with good fiscal, monetary and trade policies”, and they added that in “the presence of poor policies, aid has no positive effect on growth”. In other words, aid works, but only in countries with “good policy”. They based this conclusion on an aid-policy interaction term, introduced to capture the non-linearity between aid and growth, which emerged as statistically significant in their panel data analysis. In sum, Burnside-Dollar provided an attractive and very elegant solution to the micro-macro paradox with clear-cut and easy to interpret policy implications. In addition, they are very much in line with orthodox development thinking.

Burnside and Dollar, and more recently Collier and Dollar (2001, 2002), have used the foregoing framework as a basis for suggesting that aid should be directed to “good policy” countries to improve aid’s impact on poverty alleviation. The index meant to capture “good policy” has gradually been expanded from the Burnside-Dollar focus on budget surplus, inflation and openness to the World Bank’s Country Policy and Institutional Assessment (CPIA) index.²⁸ The argument for selectively allocating aid is also, at least partly, justified with reference to the finding that the amount of aid countries receive has no impact on the quality of their macroeconomic policies; a finding that also appeared to emerge from Bank-funded research (Devarajan, Dollar, and Holmgren 2001).²⁹ While the Bank’s Monterrey document (World Bank, 2002) toned down these recommendations, and the World Bank (2005a) strikes a very different line of argument in its interpretation of the policy reform process during the 1990’s, the basic thrust in much of the international aid debate remains that macroeconomic performance evaluation and policy criteria should play a key role in aid allocation.

²⁸ The CPIA index assesses the quality of a country’s present policy and institutional framework in 20 different dimensions, assessed by World Bank experts on a scale from 1 to 6. Each item has a 5 per cent weight in the overall rating. The items are grouped into four categories: “Economic Management”, “structural Policies”, “Policies for Social Inclusion/Equity” and “Public Sector Management and Institutions”.

²⁹ This volume was reviewed by Tarp (2001).

The thorny academic dilemma in all this includes that: (i) Hansen and Tarp (2001) found that the Burnside-Dollar result is far from robust. In fact, at the time, it appeared that diminishing returns where aid squared is introduced into the analysis to capture non-linear effects between aid and growth was the empirical specification with most support in the data. In contrast, the data did not support the Burnside-Dollar aid-policy interaction term;³⁰ (ii) Dalgaard and Hansen (2001) showed the same with the Burnside and Dollar data set, once it had been made available to researchers outside the World Bank, performing a general-to-specific test; (iii) Easterly et al. (2004) found the Burnside-Dollar aid-policy story to be fragile in the face of an expansion of the data set in years and countries; and finally (iv) Roodman (2004) offers a comparative assessment of the large number of stories on the relationship between how much foreign aid a country receives and how it grows, which the contemporary econometric literature has generated. He concludes that the aid-policy link (identified by Burnside-Dollar) proves the weakest, while the aid-tropics link (identified by Dalgaard, Hansen and Tarp, 2004) is most robust.

Dalgaard, Hansen and Tarp argue that aid and policy both depend on the average rate of growth, even though they are predetermined in the original system. Therefore, they take account of this in their empirical testing, which also controls for the potential endogeneity of institutions. In their attempt at assessing the importance of structural characteristics on aid effectiveness, they add the fraction of land in tropical areas as a proxy for climate related variables. This variable and its interaction with aid outperform both the “good policy” and “the diminishing returns” model. In concluding, Dalgaard, Hansen and Tarp make the point that it does appear from the data as if aid has been far less effective in tropical areas over the last 30 years. They

³⁰ The turning point at which increased aid will start having a negative impact on growth was originally estimated at around 25-40 per cent. This is, as is clear from Figure 1, very far above the typical aid country, and Hansen and Tarp (2000) warned that the empirical identification of the turning point should in any case be interpreted with great care. The diminishing returns thesis was not put forward as a definitive statement about how aid impacts, or what would happen if aid was increased, but more as a way of characterizing the data and putting the fragility of the Burnside-Dollar policy story into perspective. When trying to capture nonlinearities in the aid-growth relation, it is advisable to test all respectable alternative economically and statistically meaningful specifications before conclusions are drawn. In sum, the diminishing returns story should not be interpreted as an argument against more aid per se.

also stress that it is hard to believe that aid should, inherently, be less potent in the tropics. The real explanation for the aid-tropics link is in their assessment likely to lie elsewhere; and they call for further research to help disentangle the channels through which aid matters for productivity and efficiency. Their result also highlights that while there is merit in more sophisticated versions of arguments for selectivity, macroeconomic allocation rules critically depend on understanding the complex links in particular country circumstances between aid, growth and development objectives such as poverty reduction.

What this (and the many other studies listed in for example Clemens, Radelet and Bhavnani, 2004) adds up to can in my assessment be summarized as follows:

- It may well be true that “aid pays a growth price” as growth regularly gives way to other concerns as the most important criterion for aid.³¹ Yet, the single most common result of recent empirical aid-growth studies is that aid has a positive impact on per capita growth.³² At the same time, aid is by no means a panacea for growth and poverty reduction.
- The way in which data are dealt with to address the complex issue of identifying the impact of aid on growth is critically important for the conclusions drawn. Methodological choices matter.
- The impact of aid on growth is not the same across aid recipients. There are differences in aid efficiency from country to country; and it remains unclear what drives these differences. In particular, the importance of “deep” structural characteristics in affecting how aid impacts on growth is not yet fully understood.

³¹ Food aid in famine situations geared toward increased consumption is a specific case in point as is, more generally, aid for consumption that is not investment targeted.

³² Dalgaard and Hansen (2005) estimate that the aggregate real rate of return on foreign aid financed investments is in the range of 20-25 per cent. Rajan and Subramanian (2005b) are more critical, and their approach to the use of external instruments in cross-section analysis is potentially interesting, provided that strong exogenous instruments can be found. This remains to be seen. Their account of the panel data literature needs considerable revision to become comparable with the existing studies referred to above.

Furthermore, using “good policy” (in the form of the CPIA index) as a basis for selectively allocating aid is questionable. There are at least three reasons:

- An attraction of the original Burnside-Dollar index was its simplicity. It was controversial but easy to interpret. It is much harder to derive clear cut policy advice based on any positive interaction between aid and the CPIA. The CPIA is, as already noted, a composite index of 20 different variables grouped into four categories. In spite of the descriptive value of the CPIA index, which I do not question, it is from an analytical point of view far from easy to decipher what drives aid efficiency when indicators of “economic management”, “structural policies”, “social policies” and “public sector management and institutions” are aggregated into one measure. In addition, trade-offs between the elements of the index are bound to arise in practice. For example, placing greater emphasis on budget balance (an element in “economic management”) may well be in conflict with improving health care, education etc. belonging to the component “building human resources” which forms part of “policies for social inclusion/equity”. Improved budget balance may also lead to a lower “pro-poor expenditure index” shown to be poverty reducing by Mosley, Hudson and Verschoor (2004).
- The changes in the CPIA index may be caused by the growth performance, in which case the CPIA should not be used as an exogenous variable.³³ Moreover, Mauro (1995) highlights that using expert evaluations may be problematic. The argument is that evaluators are likely to conclude that a particular set of institutions is good if the country in question is growing rapidly.
- The use of “good policy” may lead us to punish countries with unfavourable conditions instead of helping them. There is a very high probability that a country with a low CPIA is in the tropical region. If the variation in aid effectiveness across countries is not policy induced, but rather a result of poor initial conditions, a different approach to allocating aid must, as I see it, be established. At the

³³ Similar concerns are alluded to by Cornia (2005) when he points out that it is far from clear what can be concluded based on a negative correlation between “bad governance/corruption” and “slow/negative growth in GDP per capita”. It may—in Cornia’s formulation—be that other unobserved variables are at work, such as “high illiteracy and low land productivity that simultaneously reduce growth and the salaries of civil servants, who therefore ask bribes whenever possible”.

same time, every effort must, of course, be made to help put in place improved policy, which helps growth and poverty reduction.

In sum, it is advisable to be alert about what is, in fact, unknown. This implies, for example, that in future research on foreign aid and development, more attention should be given to different modalities of aid (such as project versus programme assistance) and their design and application in different types of aid receiving countries. One difficulty in this is that it is by no means straightforward to derive general results across countries with available theory and data.³⁴

To put this in further perspective, it may be useful to take a pragmatic look at the aid-growth data in Table 4 (and the three additional tables in the Annex). They illustrate the difficulties of coming up with simple aid-growth stories. Inherent in this table is the following question: “Does aid above/below average in the 1970’s and 1980’s help determine whether countries were successful in terms of growth in the subsequent decades”? As is clear from the table, there are 16 categories of aid-growth experiences. They can be summarized as follows in four sets of aid-growth experiences:

- 72 countries, a very clear majority, had below average aid in both the 1970’s and 1980’s. Some 21 of these countries moved from having negative growth in the 1980’s to positive growth in the 1990’s and joined the 29 countries in this group that had positive growth in both decades. Moreover, seven of these countries (Burundi, Cameroun, Chad, Kenya, Mongolia, Paraguay and Rwanda) turned from being positive to negative growth performers from the 1980’s to the 1990’s and joined the 15 that had negative growth in both decades.
- 24 countries had above average aid in both the 1970’s and 1980’s. Seven moved from being negative growth performers in the 1980’s and joined the 14 that had positive growth in both decades. Only one country (Guinea-Bissau) moved from positive growth in the 1980’s to negative growth in the 1990’s and joined the two (Djibouti and Gabon) that had negative growth in both decades.
- Only nine countries changed from below average aid in the 1970’s to above average aid in the 1980’s. They include four countries (Costa Rica, El Salvador, Equatorial Guinea and Senegal) that

³⁴ See Clemens, Radelet and Bhavnani (2004) for an attempt, relying on cross-country data.

moved from negative to positive growth and joined two countries (Jamaica and Lesotho) with positive growth in both periods. Two countries (Gambia and Somalia) turned from positive to negative growth and joined the one country in this group (Sao Tome and Principe) with negative growth in both periods.

- Just five countries (Congo, Fiji, Egypt, Swaziland and Tunisia) changed from above average aid in the 1970's to below average aid in the 1980's. Three (Egypt, Swaziland and Tunisia) had positive growth in both periods. One (Fiji) changed from negative to positive growth and only one (Congo) changed from positive to negative growth.

It should be recognized up-front that the implicit 10 year aid-growth impact lag in Table 4 is longer than the four-year lag that is typical in cross-country regression work, and I reiterate that this kind of empirical overview can at best be illustrative. No causality can be implied. It is notable that the two largest boxes are the groups of countries that had (i) positive growth post-1990, but (ii) below average aid pre-1990. On the other hand, among the 24 countries that had above average aid pre-1990, no less than 21 had positive growth post-1990. In other words, below average aid does not seem to prevent growth from occurring (or that countries change growth category). Similarly, above average aid does not come across as harmful to growth or as a factor that makes it difficult to turn a negative growth trend around.

In sum, aid cannot on this basis be claimed to be a highly potent driver of growth and development across the board, but it is equally true that there is little in Table 4 to suggest that aid has done damage.³⁵ Hard and clear cut evidence is difficult to uncover from this kind of analysis. There is no simple answer. We do instead appear to be left with lots of special cases, where country-specific and other circumstances have played a key role in determining the growth outcome and how donors reacted in the allocation of aid. This is one motivation why cross-country regression analysis has been so popular. Data are after all the plural form of anecdotes. But the picture in Table 4 also helps suggest why controversy remains so prevalent.

³⁵ In addition to the results included in the Annex, I have experimented with a series of alternative groupings and classifications, including for example varying growth rates. The overall picture remains the same.

Table 4. Aid and growth, 1970-2000

		Negative growth (1990-2000)		Positive growth (1990-2000)	
		Aid below average (1980-90)	Aid above average (1980-90)	Aid below average (1980-90)	Aid above average (1980-90)
Aid below average (1970-80)	Negative growth (1980-90)	Algeria	Sao Tome and Principe	Argentina	Costa Rica
		Angola		Bolivia	El Salvador
		Cen. African Rep. Niger Congo, Dem. Rep.		Ethiopia	Equatorial Guinea
		Sierra Leone		Ghana	Senegal
		Cote d'Ivoire		Guatemala	
		Ecuador		Guyana	
		Haiti		Iran, Islamic Rep.	
		Honduras		Lebanon	
		Iraq		Malawi	
				Mali	
				Mozambique	
				Fiji	
			Djibouti		Kiribati
			Gabon		Mauritania
					Pa. New Guinea
					Vanuatu
					Samoa
					Suriname
					Syrian Arab Re-public

Table 4. Continued....

		Negative growth (1990-2000)		Positive growth (1990-2000)	
		Aid below average (1980-90)	Aid above average (1980-90)	Aid below average (1980-90)	Aid above average (1980-90)
Positive growth (1980-90)		Burundi Cameroon Chad Kenya Mongolia Paraguay Rwanda	Gambia, The Somalia	Bangladesh Barbados Benin Bhutan Brazil Burkina Faso Chile China Colombia Dom. Republic Guinea India Indonesia Lao PDR Malaysia	Mauritius Mexico Morocco Myanmar Nepal Pakistan Sri Lanka Sudan Tanzania Thailand Turkey Uruguay Vietnam Zimbabwe
	Aid below average (1970-80)				
	Aid above average (1970-80)	Congo, Rep.	Guinea-Bissau	Egypt, Arab R Swaziland Tunisia	Ant. and Bar. Oman Belize Seychelles Solomon Islands Cape Verde St. Kitts and Nevis Dominica St. Lucia Grenada Jordan Tonga

Note: Aid is ODA/capita in constant US\$, and growth is average annual growth in GDP/capita. *Source:* World Bank (2005b).

5. Discussion of the current aid and development debate

Has foreign aid been a success or failure in promoting development? Based on some of the contributions to the foreign aid literature over the past decade, including for example the works of Boone, Burnside-Dollar, Sachs and Easterly, it might appear that “The answer, my friend, is blowin’ in the wind”.³⁶ Boone (2006) has recently reiterated that “the history of large aid flows is, to date, a major failure”, while Burnside and Dollar (2000) found that aid promotes growth, but only when policy is “good”.

Nevertheless, Sachs (2005) and the UN Millennium Project (2005) argue emphatically that aid has worked and should be “scaled up”. Sachs has played a key role as special adviser to the UN Secretary General on the Millennium Development Goals (MDGs), and he makes a concerted effort to reinstate many of the traditional arguments within development economics for believing that aid works in helping poor countries break out of poverty traps. He refers to investments attuned to local needs and uses a vocabulary which is phrased along gap-filling lines of thinking. He also dismisses corruption and domestic policy failure as the fundamental “cause” of Africa’s problems, and argues instead that the causal links originate in poverty and the lack of growth. Sachs furthermore provides (p. 259) “ten dramatic examples that prove the naysayers wrong”. These examples, which are referred to as “clear aid triumphs”, range from aid’s contribution to the Green Revolution of Asia to the eradication of smallpox and polio and on to the mobile phone revolution in Bangladesh. They demonstrate in Sachs’ words (p. 265) some common themes. “First and foremost, scaling up is possible when it is backed by appropriate and widely applicable technology, organizational leadership, and appropriate financing”; and he goes on to state that in “the case of the Millennium Development Goals, the promising technologies exist, but have not been scaled up”.

Cornia (2005) pointedly notes that Sachs deserves a lot of credit for his “passionate advocacy”. Moreover, Sachs does manage to call attention to at least some of the ways in which aid has helped poor people in the past. His suggestion that much more can and should be

³⁶ Bob Dylan song, where the full text is available at www.bodylan.com/song/blowin.html.

done, in my assessment deserves attention together with his menu of initiatives.³⁷ At the same time, as argued by Cornia, it is problematic that so much of the present development debate is being cast in terms of increases in aid flows for the achievement of the MDGs. This is, to quote Cornia, “reductionist”. It ignores that the development process is much more sensitive to macroeconomic, financial and technological changes (or their lack thereof) than to the aggregate volume of aid. In addition, even if it is accepted that aid works, and works well, it is unlikely that the MDGs can be reached if aid is increased to 0.7 per cent of donor GNI, as argued by Sachs. The return will in even the best of circumstances not be big enough. I am afraid that mobilising such optimistic expectations may in a few years in the final analysis lead to frustration and an undesired backlash.

Over the years, Easterly has authored an impressive number of books and papers, a few of which are listed in the references. He is a sharp and articulated critic of foreign aid, and his contributions to the academic and the broader policy literature are influential. In two recent studies, Easterly (2005, 2006), he attacks the UN Millennium Project and the work of Sachs head on. Easterly refers to the white man’s burden and ponders “Why the West’s efforts to aid the rest have done so much ill and so little good”. Easterly deserves a great deal of credit for demonstrating in his many writings that much went wrong in aid in the past, and he is spot on when he argues that a great deal of individual initiative has been stifled under the burden of dogmatic and centralized planning practices and bureaucratic incompetence in many past decades. I believe that human initiative and appropriate incentives are correctly identified by Easterly as two critically important elements in making development happen. Much can—and should—be gained from taking this to heart in thinking about development and the appropriate role of foreign aid in the future.

Sen (2006) has in a similar vein noted that there is much in Easterly’s latest book that offers “a line of analysis that could serve as the basis for a reasoned critique of the formulaic thinking and policy triumphalism of some of the literature on economic development”; and Cornia (2005) argues that Easterly is right on target in arguing that “poverty, mortality and so on are in fact much more sensitive to macroeconomic, financial and technological changes (or their lack

³⁷ The UN Millennium Project (2005) goes on to recommend no less than 449 interventions to end poverty.

thereof) than to the aggregate volume of aid flows”. At the same time, both Sen and Cornia raise a series of critical points. They range from what Cornia calls the “demonisation of world ‘planning’” to Sen stating that “Perhaps the weakest link in Easterly’s reasoning is his almost complete neglect of the distinctions between different types of economic problems”. Space does not allow me to pursue this in detail here. In any case, my experience and reading of the existing analytical evidence does not suggest that aid has on balance “done so much ill” as Easterly seems to suggest, leaving aside the discussion of how much good it has done, except for noting that much of our present knowledge about what works and what does not work in development is based on research sponsored by aid agencies (including much of both Easterly’s and Sach’s work—as well as my own!). Finally, I do sense that Easterly’s sarcastic style, and his rejection of any type of “planning” and coordination, gets a bit in the way of much needed dialogue.³⁸

Summing-up, Easterly and Sachs have done a commendable job in energizing the current debate about foreign aid; but looking ahead it is, in my assessment, important that their respective conflicting approaches do not end up confining a constructive and forward looking search for how to best design and implement aid in the future. Against this background, I would summarize the existing situation of the current aid and development debate by highlighting that there does seem to be a consensus about at least the following three points:

- Much has been learnt from both successes and failures about development and development policy over the past 50 years, and a great deal of disagreement remains as well. On many questions, our profession is still searching for appropriate answers.
- The more than one billion people, who are living in extreme poverty in today’s world, should not be left to themselves. Birdsall, Rodrik and Subramanian (2005) state: “developed countries should not abandon the poor to their plight”; Easterly (2005) notes: “Aid can still do much for the poor”; and even Boone (2006) argues that: “The aid successes with which we are all familiar ... are important”. Much of the controversy in the academic and policy de-

³⁸ It is certainly amusing to read about “Bono, Sachs, the Dalai Lama, and the pope” in Easterly (2001, p. 126), but as I see it, Easterly (2006) creates too many caricatures. While it may be good analytical economics to simplify the world, the real world and the development process are more complicated than that.

bate is about aid's performance in the past. The need and relevance of such action in the future is (ignoring the "pure" ideologists aside) not disputed,³⁹ but whether such action is justified by political, economic or moral considerations varies.

- There are many examples where aid has worked at the micro-level to the benefit of developing countries and their populations. It is also true that aid is far from flawless. There are many cases where aid has not worked to help the poor. Sachs (2006) notes: "Current aid suffers from four inter-related flaws", and goes on to pinpoint these flaws. Whether all this adds up to a positive net impact on growth at the macro level is contentious.

6. Conclusion

Controversy is rampant in the debate about aid and development. This is not particularly surprising. Even a cursory look at history shows that development over the past 30-50 years has been a complex and variegated process. There have been interrelated changes in resource accumulation, population growth, growth in knowledge and improvements in production technology, all operating in an environment, characterized by frequent and dramatic transformations in politics and institutions.⁴⁰ Social science has to rely on interpretations of history in trying to come to grips with these processes, and the analyst must be aware of the dangers of over-simplification. Single-cause theories have not fared well in development economics. This reflects that simple policy recommendations are often inappropriate in a complex world, and this is so whether such recommendations have emanated from the planning tradition of the 1960's and 1970's or from the free market thinking of the 1980's.

In this paper, I have tried to highlight that one cannot conclude that aid has been a failure just because growth in, for example, Africa has been less than desired, or because projects have failed. It is exceedingly easy to arrive at a negative association between aid and growth, but such correlations do not provide a definitive causal an-

³⁹ To illustrate this, I fully acknowledge the key incentive and agency problems associated with aid transfers such as those uncovered by Svensson (2000, 2005), and he does not on this basis conclude that aid is without potential impact on the development process.

⁴⁰ See Tarp (2000), and here especially the summary and synthesis (authored with Sherman Robinson).

swer. There is no logical inconsistency in development terms between little growth and aid inflows of the size experienced in the past. Aid allocation matters for the analysis; and complex development problems and issues are looming in the background. Major changes have taken place in the global economy and affected the environment in which aid is implemented, and targets for aid have been changing from one decade to the next. Simple correlation analysis or story telling cannot—and should not—be allowed to settle the causality debate on their own.

As should be clear from this paper, I also recognize that cross-country econometric studies are associated with critical methodological choices, and that many significant changes have taken place in the world economy over the past decades. Coming up with the “true” aid-growth relationship is far from easy, and aid is of much too limited size to turn the wheels of history. Yet, this does not make it justified to reject aid as a useful instrument in the fight against poverty. If we are agreed that aid works at least somewhere and sometimes, then aid must be outright harmful elsewhere for the average impact to be nil. I can follow that some aid has not done all that much good, and this is a shame. Yet, there is a significant difference between doing little good and doing outright harm. I fail to see that the empirical evidence adds up to a suggestion that a great deal of ill has actually been done across an important sample of countries. Similarly, it is one thing to call attention to problems that should definitely be addressed, it is quite another to dismiss foreign aid as harmful. My overall conclusion is that nuanced and subtle assessments are advisable with the empirical evidence in hand at present.

Burnside-Dollar added a welcome analytical nuance to Boone, as have others; but the Burnside-Dollar solution to the micro-macro paradox has been countered over and over again in the literature and is shown to be highly delicate. Methodological choices do matter. Nevertheless, the single most common result in the modern aid-growth literature is that aid has a positive impact on per capita growth. No excessive claims about parameter sizes and total aid impact should be made on this basis. Yet, this should not be allowed to totally overshadow the established results at hand. I am in this context puzzled that Easterly so often ignores these results and instead tries to use cross-country work as a basis for his critical view of foreign aid. Attenuation suggests that with noisy data, a “dirty” dependent variable and weak proxies results will be biased towards zero. Against this

background, the challenge is to clarify whether the data still have anything meaningful to say. I believe this is indeed the case when sufficient care is exercised, but simple correlations do not uncover this.⁴¹

Turning to the debate about the allocation of aid, there is in my view merit in more sophisticated versions of arguments for selectivity. For example, it makes little sense to do structural adjustment lending when the macro policy environment is “bad” and there is little possibility for policy reform. However, based on the empirical work on aid effectiveness during the past decade, I am convinced that macro criteria cannot—and should not—stand alone in evaluating the effectiveness of most development assistance and determining its allocation. “Good policy” can be dangerously misleading as the fundamental criterion for aid allocation, and simplistic macro rules-of-thumb may reinforce the adversity of those living under substandard governance. It is a regrettable fact that many of the world’s poorest people live in conditions of substandard national, regional, and/or local governance and lack any tenable means of changing these institutions. It would be gravely ironic for aid agencies to compound the misfortunes of these people with discriminatory aid allocation.

Overall, it is in my assessment justified to argue for increased aid, but expectations about its impact on growth should be kept at reasonable levels. This is where the many claims of Sachs and the Millennium Project can, at times, give rise to worry. It would be unfortunate if unrealistic expectations about aid impact are built up much along the lines of what happened back in the 1950’s and 1960’s, at the early stages of aid’s existence. At the same time, asserting that (i) aid has a positive impact; (ii) should be “scaled up”, and (iii) that its impact does not appear to be conditional on “good policy”, is not in any way in contradiction with suggesting that future aid should be carefully redesigned. In this we should draw on the many insights offered by aid critiques, including prominent ones such as Easterly; but it must not be overlooked that much is indeed already happening on the foreign aid scene. Major shifts have taken place in aid modalities over the past 15 years as noted by Adam (2005). He also argues that the general rise of a culture of transparency and accountability is more than superficial, and goes on to point out that the March 2005 Paris

⁴¹ One can also note that conventional wisdom at the end of the 1980’s tended to over-emphasize or misinterpret studies which had found a negative or insignificant relationship (see Hansen and Tarp, 2000).

Declaration of Aid Effectiveness is an attempt to codify some of the best-practice developments observed in a number of countries.⁴²

Trying, in summary, to identify three sets of core, but unresolved, issues and point to where further research is needed, they include as I see it that:

- Foreign aid is associated with development successes and failures, and the fundamental analytical problem in assessing its impact is that nobody has to date identified the underlying development model. We are therefore necessarily working with reduced form models, which are bound to be debatable. In parallel, existing data suggest that foreign aid is far from equally effective everywhere. The necessary and sufficient conditions for aid to have a positive contribution on the development process remain controversial. In other words, how to better come to grips with what actually “drives” existing differences in the impact of foreign aid remains a challenge. This is so, for example, in relation to potential interaction with economic policy but the aim goes for deeper structural characteristics, which play a key role in my assessment.
- We do not at present have the necessary complete and generalized understanding of the complex links in particular country circumstances between aid, growth and development objectives such as poverty reduction to justify selectivity as the basic approach in aid allocation. This does not mean that old-fashioned conditionality should be brought back to rule the way; but I do suggest that a better understanding of the intricacies of the donor-recipient relationship in theory and practice would be valuable. As key elements, this would include addressing issues such as (i) how to best channel resources to the poor, when national governments are not capable and/or willing to take on this task, (ii) how to ensure that aid delivered directly to national governments does not undermine local accountability, and (iii) establishing the appropriate balance between aid going to the government vis-à-vis individuals and others in the private sector. Accordingly, how to best strengthen incentives in support of genuine domestic policy leadership (including the commitment to the learning-by-doing of development policy) is a challenge. The same goes for the fundamental task of furthering accountability and transparency vis-à-vis local populations.

⁴² The text of this forum is available at <http://www.oecd.org/dataoecd/11/41/34428351.pdf>. See also Adam and Gunning (2002) and Adam et al. (2004).

- In the present drive to scale up aid, it is critically important to avoid making the mistake of the past of promising too much, i.e. of contributing to the misconception that aid can turn history on its own. It will be clear from my review that I find, based on history, that aid has much to offer, but managing expectations is far from easy. How to best make sure promises actually made are kept, is demanding. There are many unresolved issues here, including how to best design incentives in aid agencies to meet this challenge alongside topics such as the role of independent evaluation, coordination among multiple donors, and the need to sharpen the incentives for recipients to maximize “reform effort”, which are all alluded to by Adam (2005).

In conclusion, I would like to stress, first, that it would be gravely ironic if we let disagreement about overall development strategy and the macroeconomic impact of aid get in the way of pursuing practical and useful aid funded activities in poor countries. There is much to criticize in foreign aid, but possibilities for constructive and forward looking action should be kept in mind throughout. There are, in my experience, lots of such activities out there in practice. They deserve to be uncovered more precisely and effectively implemented to the benefit of those in need.

References

- Adam, C.S. (2005), Comments on the paper: Absorption Capacity and Disbursements Constraints by Jakob Svensson, EUDN discussion paper (http://www.afd.fr/jahia/webdav/site/myjahiasite/users/administrateur/public/eudn2005/Svensson_Adam.pdf).
- Adam, C.S., Chambas, G., Guillaumont, P., Guillaumont, S., and Gunning, J.W. (2004), Performance based conditionality: A European perspective, *World Development* 33, 1059-1070.
- Adam, C.S. and Gunning, J.W. (2002), Redesigning the aid contract: Donors’ use of performance indicators in Uganda, *World Development* 30, 2045-2056.
- Adam, C. S. and O’Connell, S. (1999), Aid, taxation and development in Sub-Saharan Africa, *Economics and Politics* 11, 225-254.
- Alesina, A. and Dollar, D. (2000), Who gives aid to whom and why?, *Journal of Economic Growth* 5, 33-63.
- Andersen, T.B., Harr, T. and Tarp, F. (2006), On US politics and IMF lending, *European Economic Review* 50, 1843-1862.

- Arndt, C., Jones, S. and Tarp F. (2006), Aid and Development: The Mozambican Case, in S. Lahiri (ed.), *Frontiers of Economics and Globalization: Theory and Practice of Foreign Aid*, Elsevier, Forthcoming.
- Berthélemy, J.C. (2006), Bilateral donors' interest vs. recipients' development motives in aid allocation: Do all donors behave the same?, *Review of Development Economics* 10, 179-194.
- Berthélemy, J.C, and Tichit, A. (2004), Bilateral donors' aid allocation decisions: A three-dimensional panel analysis, *International Review of Economics and Finance* 13, 253-274.
- Bigsten, A., Gunning, J.W. and Tarp, F. (2006), The effectiveness of foreign aid: Overview and an evaluation proposal, Mimeo, Report prepared for SIDA.
- Birdsall, N., Rodrik, D. and Subramanian, A. (2005), How to help poor countries, *Foreign Affairs* 84, 136.
- Boone, P. (1994), The impact of foreign aid on savings and growth, CEP Working Paper 677, London School of Economics.
- Boone, P. (2006), Effective intervention, making aid work, CEP Centre Piece Winter 2005/2006 edition (<http://cep.lse.ac.uk/centrepiece/default.asp>).
- Burnside, C. and Dollar, D. (1997), Aid, policies, and growth, Policy Research Working Paper 1777, World Bank, Washington, D.C.
- Burnside, C. and Dollar, D. (2000), Aid, policies, and growth, *American Economic Review* 90, 847-68.
- Cassen, R. and Associates (1994), *Does aid work?*, Clarendon Press, Oxford.
- Chenery, H.B. and Strout, A.M. (1966), Foreign assistance and economic development, *American Economic Review* 56, 679-733.
- Clemens, M., Radelet, S. and Bhavnani, R. (2004), Counting chickens when they hatch: The short-term effect of aid on growth, Center for Global Development Working Paper 44, Center for Global Development, Washington, D.C.
- Collier, P. and Dollar, D. (2001), Can the world cut poverty in half? How policy reform and effective aid can meet the international development goals, *World Development* 29, 1787-802.
- Collier, P. and Dollar, D. (2002), Aid allocation and poverty reduction, *European Economic Review* 46, 1475-500.
- Commission for Africa (2005), Our common interest, accessible through the internet (www.commissionforafrica.org/english/report/introduction.html).
- Cornia, G.A. (2005), Comments on the paper "How to assess the need for aid? The answer: Don't ask" by W. Easterly, EUDN discussion paper (www.afd.fr/jahia/webdav/site/myjahiasite/users/administrateur/public/eudn2005/Easterly_Cornia.pdf).

- Cornia, G., Jolly, R. and Stewart, F. (1987), *Adjustment with a Human Face: Protecting the Vulnerable and Promoting Growth*, Clarendon Press, Oxford.
- Dalgaard, C.-J. and Hansen, H. (2001), On aid, growth and good policies *Journal of Development Studies* 37, 17-41.
- Dalgaard, C.-J. and Hansen, H. (2005), The return to foreign aid, Discussion Paper 05-04, University of Copenhagen (www.econ.ku.dk/wpa/pink/2005/0504.pdf).
- Dalgaard, C.-J., Hansen, H. and Tarp, F. (2004), On the empirics of foreign aid and growth, *Economic Journal* 114, F191-216.
- Devarajan, S., Dollar, D. and Holmgren, T. (eds.) (2001), *Aid and Reform in Africa*, Oxford University Press for the World Bank, Oxford.
- Dichter, T. (2005), Time to stop fooling ourselves about foreign aid—a practitioner's view, *Foreign Policy Briefing* 86, CATO Institute, Washington, D.C.
- Duflo, E. (2004), Evaluating the impact of development aid programs: The role of randomized evaluation, Paper presented at the 2nd AFD-EUDN Conference, Paris, 25 November.
- Easterly, W. (1999), The ghost of financing gap: Testing the growth model used in the international financial institutions, *Journal of Development Economics* 60, 423-438.
- Easterly, W. (2001), *The Elusive Quest for Growth*, MIT Press, Cambridge, MA.
- Easterly, W. (2003), Can foreign aid buy growth?, *Journal of Economic Perspectives* 17, 23-48.
- Easterly, W. (2005), Reliving the 50's: The big push, poverty traps, and takeoffs in economic development, Working paper 65, Center for Global Development, Washington, D.C. (www.cgdev.org/content/publications/detail/3486).
- Easterly, W. (2006), *The White Man's Burden: Why the West's Efforts to Aid the Rest Have Done so Much Ill and so Little Good*, Penguin Press, New York.
- Feyzioglu, T., Swaroop, V. and Zhu, M. (1998), A panel data analysis of the fungibility of foreign aid, *World Bank Economic Review* 12, 29-58.
- Gunning, J.W. (2005), Why give aid? (http://www.eudnet.net/download/AfD-EUDN04_Gunning-revised.pdf).
- Hansen, H. and Tarp, F. (2000), Aid effectiveness disputed, *Journal of International Development* 12, 375-98.
- Hansen, H. and Tarp, F. (2001), Aid and growth regressions, *Journal of Development Economics* 64, 547-70.
- Hausman, J. (2001), Mismeasured variables in econometric analysis: Problems from the right and problems from the left, *The Journal of Economic Perspectives* 15, 57-67.

- Helleiner, G. (2000), Towards balance in aid relationships: Donor performance monitoring in low-income countries, *Cooperation South Journal* 2, 21-35.
- Jones, C.I. (1995), Time series tests of endogenous growth models, *Quarterly Journal of Economics* 110, 495-525.
- Kanbur, R. (2000), Aid, conditionality and debt in Africa, in F. Tarp (ed.), *Foreign Aid and Development: Lessons Learnt and Directions for the Future*, Routledge, London and New York.
- Kanbur, R. (2003), The economics of international Aid, in C.-K. and J. Mercier-Ythier (eds), *Handbook on The Economics of Giving, Reciprocity and Altruism*, Serge, North-Holland.
- Mauro, P. (1995), Corruption and growth, *Quarterly Journal of Economics* 110, 681-712.
- Meier, G.M. (1964), *Leading Issues in Economic Development*, First Edition, Oxford University Press, Oxford.
- Meier, G.M. (1995), *Leading Issues in Economic Development*, Sixth Edition, Oxford University Press, Oxford.
- Meier, G.M. and Rauch, J.E. (2000), *Leading Issues in Economic Development*, Seventh Edition, Oxford University Press, Oxford.
- Michalopoulos, C. and Sukhatme, V. (1989), The impact of development assistance: A review of the quantitative evidence, in A.O. Krueger (ed.) *Aid and development*, Johns Hopkins, Baltimore.
- Mosley, P. (1987), *Overseas Aid: Its Defence and Reform*, Wheatsheaf Books, Brighton.
- Mosley, P., Hudson, J. and Verschoor, A. (2004), Aid and poverty reduction and the “new conditionality”, *Economic Journal* 114, 217-243.
- Obstfeld, M. (1999), Foreign resource inflows, saving and growth, in K. Schmidt-Hebbel and L. Servén (eds.), *The Economics of Savings and Growth*, Cambridge University Press, Cambridge.
- OECD (2004), Development Assistance Committee: Disbursements and commitments of official and private flows (Table 1) and Development Assistance Committee: Destination of official development assistance and official aid—disbursements (Table 2a) (www.oecd.org/dac/stats/idsoline).
- Papanek, G.F. (1972), The effect of aid and other resource transfers on savings and growth in less developed countries, *The Economic Journal* 82, 934-950.
- Papanek, G.F. (1973), Aid, foreign private investment, savings, and growth in less developed countries, *Journal of Political Economy* 81, 120-130.
- Rajan, R.G. and Subramanian, A. (2005a), What undermines aid’s impact on growth, NBER Working Paper 11657, National Bureau of Economic Research, Cambridge, MA.

- Rajan, R.G. and Subramanian, A. (2005b), Aid and growth: What does the cross-country evidence really show?, NBER Working Paper 11513, National Bureau of Economic Research, Cambridge, MA.
- Rodrik, D. (2006), Goodbye Washington consensus, hello Washington confusion?, *Journal of Economic Perspectives*, forthcoming.
- Roland-Holst, D. and Tarp, F. (2004), New perspectives on aid effectiveness, in B. Tungodden, N. Stern and I. Kolstad (eds.), *Toward Pro-Poor Policies—Aid, Institutions and Globalization*, World Bank and Oxford University Press, Washington, D.C. and New York.
- Roodman, D. (2004), The anarchy of numbers: Aid, development, and cross-country empirics, Working Paper 32, Center for Global Development, Washington, D.C. (<http://www.cgdev.org/Publications/?PubID=36>).
- Rosenstein-Rodan, P.N. (1943), Problems of industrialization of Eastern and South-Eastern Europe, *Economic Journal* 53, 202-11.
- Sachs, J. (2005), *The End of Poverty: Economic Possibilities for Our Time*, Penguin Press, New York.
- Sachs (2006), Why aid does work, BBC news, available at (<http://news.bbc.co.uk/1/hi/sci/tech/4210122.stm>).
- Sen, A. (2006), The man without a plan, *Foreign Affairs* 85, 171.
- Solow, R. (2001), Applying growth theory across countries, *World Bank Economic Review* 15, 283-88.
- Svensson, J. (2000), Foreign aid and rent-seeking, *Journal of International Economics* 51, 437-461.
- Svensson, J. (2003), Why conditional aid doesn't work and what can be done about it?, *Journal of Development Economics* 70, 381-402.
- Svensson, J. (2005), Absorption capacity and disbursement constraints, Paper prepared for the 2005 AFD-EUDN Conference (www.eudnet.net/Download/Svensson.pdf).
- Tarp, F. (ed.) (2000), *Foreign Aid and Development: Lessons Learnt and Directions for the Future*, Routledge, London and New York.
- Tarp, F. (2001), Aid and reform in Africa by S. Devarajan, D. Dollar and T. Holmgren, World Bank, *Journal of African Economies* 10, 341–353.
- Tarp, F. (2006), Foreign aid, in L. Blume and S. Durlauf (eds.), *The New Palgrave Dictionary of Economics*, Second Edition, Palgrave Macmillan, Houndsmills, Forthcoming.
- Thorbecke, E. (2000), The evolution of the development doctrine and the role of foreign aid, 1950–2000, in F. Tarp (ed.), *Foreign Aid and Development: Lessons Learnt and Directions for the Future*, Routledge, London and New York.

- Thorbecke, E. (2005), The evolution of the development doctrine, 1950–2005, Paper presented at the WIDER conference on the future of development economics, Helsinki, (<http://www.wider.unu.edu/conference/conference-2005-3/conference-2005-3.htm>).
- UN Millennium Project Report (2002), The millennium development goals and the United Nations Role. Fact sheet, United Nations, New York (<http://www.un.org/millenniumgoals/MDGs-FACTSHEET1.pdf>).
- UN Millennium Project Report (2005), Investing in Development: A Practical Plan to Achieve the Millennium Development Goals, United Nations, New York.
- White, H. (1992) What do we know about aid's macroeconomic impact? An overview of the aid effectiveness debate, *Journal of International Development* 4, 121-137.
- Williamson, J. (1997), The Washington consensus revisited, in L. Emmerij (ed.), *Economic and Social Development into the XXI Century*, Inter-American Development Bank, Washington, D.C.
- World Bank (1998), *Assessing Aid: What Works, What Doesn't, and Why*, Oxford University Press, Oxford.
- World Bank (2002), *A Case for Aid: Building a Consensus for Development Assistance*, World Bank, Washington, DC.
- World Bank (2004), *World Development Indicators 2004*, World Bank, Washington, D.C.
- World Bank (2005a), *Economic Growth in the 1990's: Learning From a Decade of Reform*, World Bank, Washington, D.C.
- World Bank (2005b), *World Development Indicators 2005*, World Bank, Washington, D.C.
- World Economic Forum (2005), Global leaders call for big push on aid to Africa at World Economic Forum meeting in Davos, Press release (<http://www.csrwire.com/article.cgi/3480.html>).

Table A.1. Aid and growth, 1970-2000

		Negative growth (1990-2000)		Positive growth (1990-2000)	
		Aid below average (1980-90)	Aid above average (1980-90)	Aid below average (1980-90)	Aid above average (1980-90)
Negative growth (1980-90)	Aid below average (1970-80)	Algeria Congo, Dem. Rep. Cote d'Ivoire Ecuador Gabon Haiti Honduras Iraq Madagascar	Liberia Sierra Leone Zambia	Argentina Bolivia Costa Rica El Salvador Fiji Ghana Guatemala Iran, Islamic Rep. Nicaragua	Equatorial Guinea Guyana
	Aid above average (1970-80)			Nigeria Panama Peru Philippines Saudi Arabia Trin. and Tob. Uganda Venezuela, RB	
	Aid above average (1970-80)		Central African Republic Niger Togo	Suriname Syrian Arab Republic	Papua New Guinea Senegal Vanuatu
					Mauritania

Table A.1. Continued....

		Negative growth (1990-2000)		Positive growth (1990-2000)		
		Aid below average (1980-90)	Aid above average (1980-90)	Aid below average (1980-90)	Aid above average (1980-90)	
		Cameroon Kenya Paraguay		Antigua and Barbuda Bangladesh Barbados Brazil Chile China Colombia Dom. Republic India Indonesia Jamaica Malaysia Mexico Morocco Oman	Pakistan Sri Lanka St. Kitts and Nevis St. Lucia Sudan Thailand Tunisia Turkey Uruguay Zimbabwe	Benin Grenada Nepal
	Negative growth (1980-90)					
	Aid below average (1970-80)					

Table A.1. Continued....

	Negative growth (1990-2000)		Positive growth (1990-2000)	
	Aid below average (1980-90)	Aid above average (1980-90)	Aid below average (1980-90)	Aid above average (1980-90)
Positive growth (1980-90)	Congo, Rep.	Burundi Chad Comoros Gambia, The Guinea-Bissau Rwanda Somalia	Belize Botswana Egypt, Arab Rep. Swaziland	Burkina Faso Dominica Jordan Lesotho Seychelles Solomon Islands St. Vincent and the Grenadines
Aid above average (1970-80)				

Note: Aid is ODA share of GNI, and growth is average annual growth in GDP/capita. *Source:* World Bank (2005b).

Table A.2. Aid and growth, 1970-2000

		Negative growth (1980-2000)		Positive growth (1980-2000)		
		Aid below median (1980-90)	Aid above median (1980-90)	Aid below median (1980-90)	Aid above median (1980-90)	
Aid below median (1970-80)		Algeria Angola Congo, Dem. Rep. Cote d'Ivoire Ecuador	Haiti Honduras Iraq Madagascar Sierra Leone	Sao Tome and Principe	Nigeria Peru Philippines Saudi Arabia Trinidad and Tobago Uganda Venezuela, RB	El Salvador
	Negative growth (1980-90)	Central African Republic Liberia Niger Togo Zambia		Djibouti Gabon	Bolivia Fiji Guyana Lebanon Namibia	Costa Rica Equatorial Guinea Kiribati Mauritania Papua New Guinea Samoa Senegal Suriname Syrian Arab Republic Vanuatu
Aid above median (1970-80)						

Table A.2. Continued....

		Negative growth (1980-2000)		Positive growth (1990-2000)	
		Aid below median (1980-90)	Aid above median (1980-90)	Aid below median (1980-90)	Aid above median (1980-90)
Positive growth (1980-90)	Aid below median (1970-80)	Burundi Kenya Mongolia Paraguay		Bangladesh Benin Bhutan Brazil Burkina Faso Chile China Colombia Dominican Rep. Guinea India Indonesia Morocco Swaziland Tanzania Tunisia	Malaysia Mexico Myanmar Nepal Pakistan Sri Lanka Sudan Thailand Turkey Uruguay Vietnam Zimbabwe
	Aid above median (1970-80)	Cameroon Chad Congo, Rep. Rwanda	Gambia, The Guinea-Bissau Somalia	Barbados Egypt, Arab Rep. Lao PDR Mauritius	Ant. and Barbuda Lesotho Oman Seychelles Solomon Islands St. Kitts and Nevis Dominica Grenada St. Lucia St. Vincent and the Grenadines Jamaica Jordan Tonga

Table A.3. Aid and growth, 1970-2000

		Negative growth (1990-2000)		Positive growth (1990-2000)	
		Aid below median (1980-90)	Aid above median (1980-90)	Aid below median (1980-90)	Aid above median (1980-90)
Negative growth (1980-90)	Aid below median (1970-80)	Algeria Congo, Dem. Rep. Cote d'Ivoire Ecuador Honduras Iraq Madagascar	Sierra Leone Zambia	Argentina Bolivia Costa Rica El Salvador Fiji Ghana Guatemala Iran, Islamic Rep. Nicaragua	Nigeria Panama Peru Philippines Saudi Arabia Trin. and Tob. Uganda Venezuela, RB
	Aid above median (1970-80)	Gabon Haiti	Central African Republic Liberia Niger Togo		Equatorial Guinea Guyana Kiribati Malawi Mali Mauritania Papua New Guinea Senegal Vanuatu

Note: Aid is ODA/capita in constant USD, and growth is average annual growth in GDP/capita. Source: World Bank (2005b).

Table A.3. Continued....

		Negative growth (1990-2000)		Positive growth (1990-2000)	
		Aid below median (1980-90)	Aid above median (1980-90)	Aid below median (1980-90)	Aid above median (1980-90)
		Paraguay		Barbados Brazil Chile China Colombia Dominican Rep. India Indonesia Jamaica Malaysia Mexico Morocco	Oman St. Lucia Sudan Thailand Turkey Uruguay Zimbabwe
	Aid below median (1970-80)				
	Positive growth (1980-90)				
		Cameroon Congo, Rep. Kenya	Burundi Chad Comoros Gambia, The Guinea-Bissau Rwanda Somalia	Ant. and Barb. Bangladesh Belize Botswana Egypt, Arab Rep. Pakistan	Sri Lanka St. Kitts and Nevis Swaziland Tunisia
	Aid above median (1970-80)				Benin Burkina Faso Dominica Grenada Jordan Lesotho Nepal Seychelles Solomon Islands St. Vin. and Gren.

Note: Aid is ODA share of GNI, and growth is average annual growth in GDP/capita. Source: World Bank (2005b).

