

Pacific Studies Series

Toward a New Pacific Regionalism

An Asian Development Bank—Commonwealth Secretariat
Joint Report to the Pacific Islands Forum Secretariat

VOLUME 3: WORKING PAPERS

Working Paper No. 18

Aid to the Pacific Past, Present and Future

Thomas Sampson
Research and Analysis Unit
Bank of Papua New Guinea
Port Moresby, Papua New Guinea

Preface

This report was prepared for the Pacific Islands Forum Secretariat (PFIS) in Suva, Fiji Islands. The report is one output of an Asian Development Bank (ADB) technical assistance project (TA 6226 REG): “Developing and Implementing the Pacific Plan for Strengthening Regional Cooperation and Integration.” The Commonwealth Secretariat provided funding to the project.

The lead author of the report was Dr. Roman Grynberg, Deputy Director of Trade and Regional Cooperation at the Commonwealth Secretariat. He was assisted by Michael Hyndman, a cost-benefit analyst contracted by ADB, and Sacha Silva, an economist contracted by the Commonwealth Secretariat. Consultants from PIFS and the Pacific region provided valuable inputs for the report. Bill Costello was the ADB task manager.

The report is published in three volumes. Volume 1 is the Executive Summary. Volume 2 is the main report. Volume 3 contains the working papers commissioned for the report—a series of independent studies assessing potential benefits and costs of implementing a variety of possible regional initiatives. Volume 3 has been printed in hard copy in only limited numbers. However, it is available on the websites of ADB (www.adb.org) and at www.pacificplan.org.

Disclaimer

The views expressed in this book are those of the authors and do not necessarily reflect the views and policies of the Asian Development Bank, or its Board of Governors or the governments they represent.

The Asian Development Bank does not guarantee the accuracy of the data included in this publication and accepts no responsibility for any consequences of their use.

Use of the term “country” does not imply any judgment by the authors or the Asian Development Bank as to the legal or other status of any territorial entity.

CONTENTS

| | Page |
|---|------|
| PREFACE | ii |
| EXECUTIVE SUMMARY | iv |
| I. INTRODUCTION | 1 |
| II. AID FLOWS TO PACIFIC ISLAND FORUM COUNTRIES | 1 |
| 2.1 Overview | |
| 2.2 Real Value of Aid | |
| 2.3 Relative Value of Aid | |
| 2.4 Aid from Australia and New Zealand | |
| 2.5 Aid from Other Donors | |
| 2.6 Type of Aid | |
| III. AID EFFECTIVENESS---A LITERATURE REVIEW | 15 |
| 3.1 Interaction between Aid and Policy | |
| 3.2 Diminishing Marginal Returns of Aid | |
| 3.3 Aid and Vulnerability | |
| 3.4 Summary | |
| IV. FUTURE AID TO PACIFIC ISLAND FORUM COUNTRIES | 21 |
| 4.1 Level of Aid from Australia and New Zealand | |
| 4.2 Increased Aid Flows to Better Governed Countries | |
| 4.3 Increased Targeting of Aid to Mitigate the Adverse Effects of Negative External Shocks | |
| Appendix: Aid Flows by Country | 26 |

EXECUTIVE SUMMARY

1. Relative to their size aid to Pacific Island Forum countries is high by international standards. All developing Pacific Island Forum countries receive per capita aid at least three times the average for all developing countries.
2. Aid receipts per capita vary greatly across Pacific Island Forum (PIF) countries. The smaller countries and the three former United States (US) territories (Marshall Islands, Micronesia and Palau) receive the highest aid per capita. and Papua New Guinea (PNG) receive the lowest.
3. Two-thirds of aid to Pacific Island Forum countries other than the three former US territories comes from Australia and New Zealand. Two-thirds of aid from Australia and New Zealand goes to Papua New Guinea.
4. Total aid to Pacific Island Forum countries other than the three former US territories has fallen by 40% since 1980 and averaged US\$433 million per year during 2000-03. Not all countries have experienced decreases in aid receipts, but the fall is not solely due to the fall of almost 50% in aid to Papua New Guinea.
5. Aid from Australia and New Zealand to Pacific Island Forum countries other than the three former US territories has fallen by a quarter since 1980. The fall was the result of a 40% decrease in aid to Papua New Guinea. Aid to countries other than Papua New Guinea increased slightly.
6. In 2003 Australia gave 0.067% of its gross domestic product (GDP) to Pacific Island Forum countries, compared to 0.19% in 1980. Aid to Pacific Island Forum countries made up 29% of total Australian aid in 2003, compared to 46% in 1980.
7. In 2003 New Zealand gave 0.057% of its GDP to Pacific Island Forum countries compared to 0.12% in 1980. Aid to Pacific Island Forum countries made up 28% of New Zealand's total aid budget in 2003, compared to 38% in 1980.
8. The literature on the effectiveness of aid in promoting growth and reducing poverty cannot be reduced to a single coherent narrative that policy makers can use to inform aid allocation decisions.
9. The dominant theme of the literature has been that aid is more effective in better-governed countries, but this result has not proven robust to different datasets, specifications or estimation techniques.
10. Critiques of the aid-policy interaction hypothesis have argued that aid has the same effect in all environments, but has diminishing marginal returns, that the effectiveness of aid is greater in countries more vulnerable to external shocks and that the estimation techniques used to assess the impact of aid on growth give inconsistent estimates.
11. Policy makers do not have the luxury of waiting for academics to decide between the competing hypotheses before they make aid allocation decisions. Based on the evidence available we suggest the following six principles could form the basis of a "best practice" guide to aid allocation. The first three emerge unambiguously from the aid effectiveness literature; the second three are more contentious.
 - a) Aid can have a positive effect on growth.
 - b) The relationship between aid and growth is non-linear and may be affected by country specific factors.
 - c) There is no causal link from the level of aid flows to the quality of governance in a country.
 - d) Aid has diminishing marginal returns and at sufficiently high levels has a negative marginal effect on growth. The level of aid at which the marginal effect becomes negative is uncertain and may vary across countries.
 - e) Aid is more effective in a good governance environment.

- f) Aid can mitigate the negative effects of adverse external shocks and can increase growth in countries vulnerable to such shocks.
12. Pacific Island Forum countries should seek the following commitments from Australia and New Zealand. If achieved these commitments would ensure an end to the long term decline in aid to Pacific Island Forum countries and would ensure that if Australia's or New Zealand's aid budget were to increase in the future Pacific Island Forum countries would share in the benefits.
 - a) Australia to give at least 0.03% of its GDP and at least 10% of its total aid budget to Pacific Island Forum countries excluding Papua New Guinea.
 - b) Australia to give at least 0.05% of its GDP and at least 15% of its total aid budget to Papua New Guinea.
 - c) New Zealand to give at least 0.08% of its GDP and at least 25% of its total aid budget to Pacific Island Forum countries.
 13. The targets do not represent optimal levels of aid to PIF countries. They are realistic goals based on trends in Australia's and New Zealand's aid to PIF countries since 1980. Targets (b) and (c) are slightly higher than current levels of aid, but are lower than aid flows during the 1980s and the first half of the 1990s. Target (a) is higher than either current or previous levels of aid and is intended to build on the recent increase in Australian aid to PIF countries excluding PNG.
 14. Governance in Pacific Island Forum countries is roughly average by international standards. Samoa and Tuvalu stand out as being well governed and Papua New Guinea and Solomon Islands have the worst levels of governance.
 15. Governance should be one of the criteria that donors consider when deciding how to allocate aid between Pacific Island Forum countries.
 16. Samoa has better governance than otherwise similar Pacific Island Forum countries, but receives similar amounts of aid as them. Based on governance criteria more aid should be allocated to Samoa than is currently the case.
 17. A program should be established to target aid at countries experiencing negative external shocks. Disbursements should be rapid enough to ensure they are anti-cyclical.

I. INTRODUCTION

Aid data is taken from the Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee's (DAC's) International Development Statistics (IDS) Online database.¹ By 'aid' we mean Net Disbursements of Official Development Assistance (ODA) as defined by the DAC. To be counted as ODA loans must contain a grant element of at least 25% (calculated using an interest rate of 10%). Net disbursements are gross disbursements less repayment of principal on loans and offsetting entries for debt relief. We define developing countries as those countries included in Part 1 of the DAC List of Aid Recipients, which lists those countries eligible to receive ODA. Countries in Transition which are eligible to receive Official Aid are included in Part 2 of the List of Aid Recipients.

Gross domestic product (GDP) data is from the World Bank's World Development Indicators (WDI).² Population data is from the WDI for all countries other than Cook Islands, Nauru, Niue and Tuvalu for which it is from the IDS. Regional population and gross national income (GNI) data is from the IDS. Governance data is from the World Bank's Governance Indicators 1996-2004 dataset.³ When we refer to dollars we mean 2002 United States (US) dollars unless otherwise stated.

We use data from 1980-2003. Data for 2004 is not yet available. For analytical purposes we split the data into five sub-periods: 1980-84, 1985-89, 1990-94, 1995-99 and 2000-03. When referring to current values we implicitly mean average values for 2000-03.

When referring to Pacific Island Forum (PIF) countries we always mean PIF countries other than Australia and New Zealand.

II. AID FLOWS TO PACIFIC ISLAND FORUM COUNTRIES

2.1 Overview

Aid flows to the fourteen developing Pacific Islands Forum countries can be characterised by considering them from five perspectives.

- a) Level of aid – PIF countries receive high levels of aid relative to other developing countries. In per capita terms all PIF countries receive at least three times more aid than the developing country average.
- b) Distribution of aid – Aid is heavily concentrated on certain countries. One-third of aid goes to Papua New Guinea (PNG), one-third to the former US territories, namely Marshall Islands, Micronesia and Palau, and one-third to the ten other PIF countries. In per capita terms the largest recipients are the three former US territories and the three PIF members with the smallest populations: Nauru, Niue and Tuvalu. The lowest aid recipients in per capita terms are Papua New Guinea and Fiji Islands.
- c) Source of aid – PIF countries are heavily dependent on Australian and US aid. Half of all aid to PIF countries comes from Australia and New Zealand. Ninety percent of the aid from Australia and New Zealand comes from Australia. Two-thirds of Australian aid to PIF countries goes to Papua New Guinea. A quarter of aid to PIF countries comes from the US, essentially all of which goes to its former territories. Ten percent of aid comes from multilateral donors.

¹ The database can be accessed at: <http://www.oecd.org/dac/stats/idsonline>.

² Available at: <https://publications.worldbank.org/WDI>.

³ Available at: <http://www.worldbank.org/wbi/governance/pubs/govmatters4.html>.

- d) Type of aid – Almost all aid to PIF countries is given as grants. Nearly half of all aid to PIF countries is in the form of technical cooperation.
- e) Evolution of aid – Aid to most PIF countries has fallen. Excluding Marshall Islands, Micronesia and Palau the real value of aid to PIF countries has fallen by forty percent over the past quarter of a century. Aid to Papua New Guinea has almost halved driven by a large fall in aid from Australia. Aid to PIF countries other than Marshall Islands, Micronesia, Palau and Papua New Guinea has fallen by a quarter despite a slight increase in aid from Australia.

Sections 2.2-2.5 below provide the details to support these characterisations.

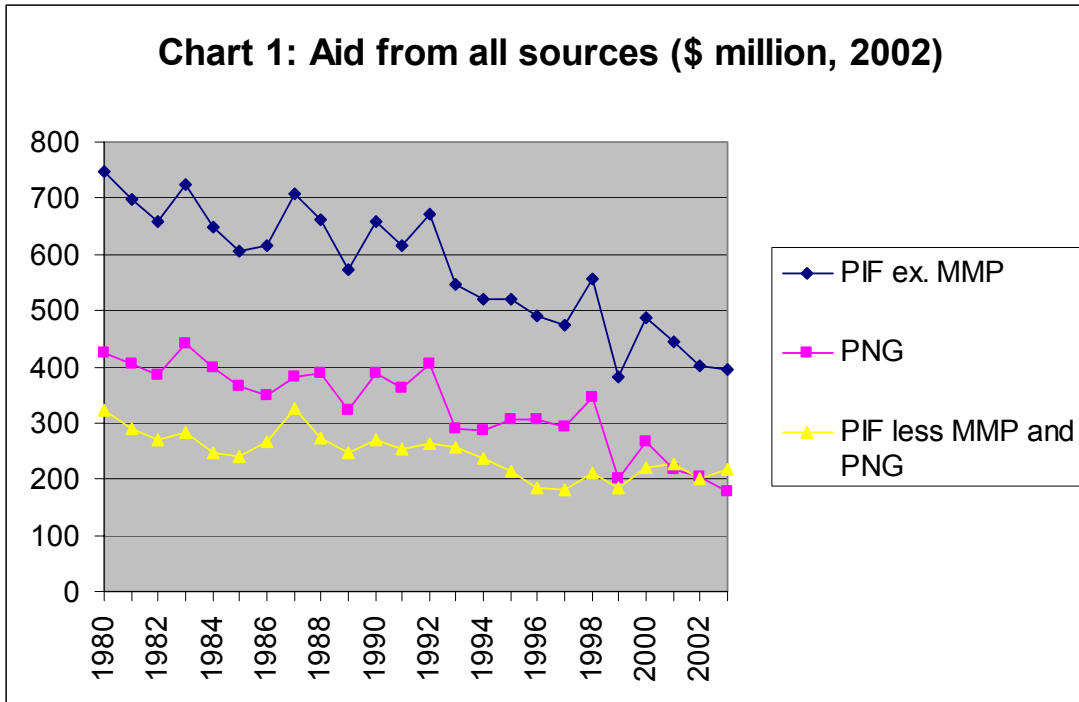
2.2 Real Value of Aid

On average from 2000-03 developing PIF countries received in aggregate \$643 million of aid per year. Total aid to PIF countries has not displayed a definite trend over the last twenty-five years (Table 1). It peaked at \$720 million per year during 1995-99, before declining to its current level.

Table 1: Annual aid to PIF countries (\$ million, 2002)

| | All PIF | MMP | PIF excluding MMP | PNG | Other PIF | PNG/(PIF excluding MMP) |
|---------|---------|-----|----------------------|-----|-----------|----------------------------|
| 1980-84 | 695 | | 695 | 411 | 283 | 59% |
| 1985-89 | 633 | | 633 | 362 | 271 | 57% |
| 1990-94 | 707 | | 603 | 346 | 256 | 57% |
| 1995-99 | 720 | 236 | 485 | 290 | 195 | 60% |
| 2000-03 | 643 | 210 | 433 | 216 | 217 | 50% |

However, it would be wrong to conclude that the level of aid flows to PIF countries has been roughly stable over the past twenty-five years. The figures are distorted by the fact that data on aid flows to Marshall Islands, Micronesia and Palau (MMP) are not available prior to the mid-1990s and that these three countries are all substantial recipients of United States (US) aid. Once MMP are excluded it is clear that there has been a sustained decline in aid to the remaining PIF countries (Chart 1). From 1980-84 PIF countries excluding MMP received \$695 million per year in aid. Since then aid receipts have steadily decreased reaching \$433 million per year during 2000-03.



During 2000-03 50% of aid to PIF countries excluding MMP went to Papua New Guinea (PNG). This was a slight decline from the 1980s and 1990s when the figure was around 60% (Table 1). Consequently we will split our analysis of aid flows to PIF countries excluding MMP into aid to PNG and aid to PIF countries excluding MMP and PNG (Other PIF).

Aid to PNG has been declining rapidly since the 1980s (Table 1, Chart 1). It has almost halved from \$411 million per year during 1980-84 to \$216 million per year during 2000-03. Aid to Other PIF declined from \$283 million per year during 1980-84 to \$195 million per year during 1995-99 before picking up slightly to \$217 million per year during 2000-03. In absolute terms the decrease in aid to PNG accounts for most of the decline in aid to PIF countries excluding MMP, but in relative terms the decrease was, up until 1999, evenly split between PNG and Other PIF. As Table 1 shows the share of total aid to PIF countries excluding MMP going to PNG remained at around 60% throughout the 1980s and 1990s and it was only over 2000-03 that PNG's share declined to 50%. Therefore it would be wrong to simply attribute the decrease in aid to PIF excluding MMP to a decrease in aid to PNG.

From 2000-03 Australia and New Zealand (ANZ) combined gave \$296 million per year to PIF countries (Table 2). This constituted 46% of total aid to PIF countries and 68% of total aid to PIF countries excluding MMP (Table 3). ANZ's aid to PIF countries declined during the 1980s and 1990s from \$400 million per year during 1980-84 to \$282 million per year during 1995-99, before picking up slightly over 2000-03. ANZ give negligible amounts of aid to MMP.

Table 2: Annual aid to PIF countries from Australia and New Zealand (\$ million, 2002)

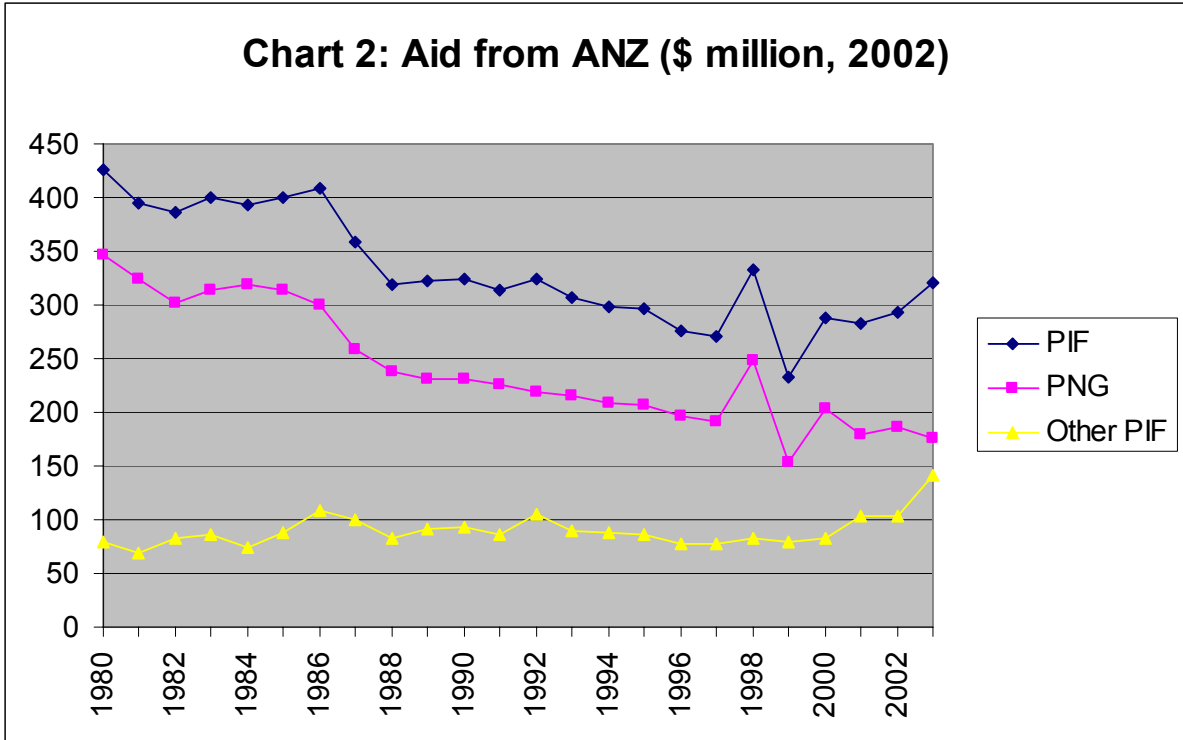
| | All PIF | MMP | PIF excluding MMP | PNG | Other PIF | PNG/All PIF |
|---------|---------|-----|----------------------|-----|-----------|-------------|
| 1980-84 | 400 | | 400 | 321 | 78 | 80% |
| 1985-89 | 362 | | 362 | 268 | 94 | 74% |
| 1990-94 | 313 | | 313 | 220 | 93 | 70% |
| 1995-99 | 282 | 1.6 | 280 | 199 | 81 | 71% |
| 2000-03 | 296 | 2.2 | 294 | 186 | 108 | 63% |

Table 3: Percent of total aid to PIF countries coming from Australia and New Zealand

| | All PIF | MMP | PIF excluding MMP | PNG | Other PIF |
|---------|---------|-----|-------------------|-----|-----------|
| 1980-84 | 58% | | 58% | 78% | 28% |
| 1985-89 | 57% | | 57% | 74% | 35% |
| 1990-94 | 44% | | 52% | 64% | 36% |
| 1995-99 | 39% | 1% | 58% | 69% | 42% |
| 2000-03 | 46% | 1% | 68% | 86% | 50% |

During the 1980s and 1990s ANZ's aid to PIF countries declined in proportion to the decrease in total aid to PIF countries excluding MMP and consequently ANZ's share of aid to PIF countries excluding MMP remained roughly stable at between 50% and 60%. However, the increase in ANZ aid to PIF countries over 2000-03, combined with the continued decline in total aid to PIF countries excluding MMP, meant ANZ's share increased to 68% during 2000-03.

Aid from ANZ to PNG declined steadily from \$321 million per year during 1980-84 to \$186 million per year during 2000-03 (Table 2, Chart 2). The decline in aid from ANZ made up \$135 million of the \$195 million decrease in annual aid to PNG between 1980-84 and 2000-03. However, aid from other sources actually decreased by a proportionately larger amount causing the share of PNG's aid receipts coming from ANZ to increase from 78% during 1980-84 to 86% during 2000-03.



Aid from ANZ to Other PIF was roughly stable at around \$80-90 million per year during the 1980s and 1990s, but increased to \$108 million per year over 2000-03. The increase was partly, but not wholly, caused by the increase in Australian aid to the Solomon Islands (to fund the Regional Assistance Mission to the Solomon Islands (RAMSI)) from \$20 million in 2002 to \$56 million in 2003. With aid from donors excluding ANZ to Other PIF declining throughout, the share of ANZ in aid to Other PIF increased from 28% over 1980-84 to 50% over 2000-03.

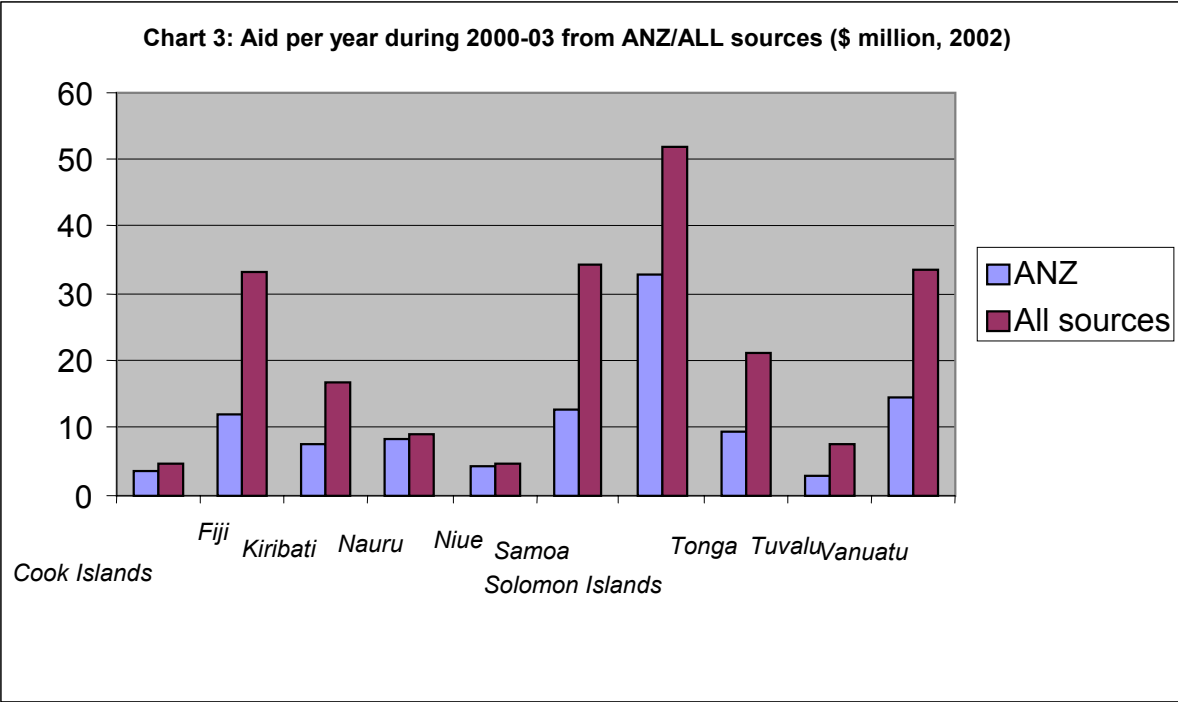
As a consequence of the decline in ANZ aid to PNG and the increase in ANZ aid to Other PIF the share of PNG in aid from ANZ to PIF countries has decreased from its high of 80% during 1980-84. However aid from ANZ to PIF countries is still more heavily biased towards PNG than total aid to PIF countries excluding MMP. While PNG received 50% of total aid to PIF excluding MMP over 2000-03, it received 63% of ANZ aid to PIF.

Aid flows to each of the fourteen PIF countries individually are discussed in Appendix A and summarised in Table 4. Chart 3 shows total and ANZ aid per year over 2000-03 for each of the ten Other PIF countries. We see that Cook Islands, Nauru and Niue receive almost all their aid from ANZ while the other seven countries receive between one-thirds and two-thirds of their aid from ANZ.

To compare aid receipts across countries in a meaningful manner we must take account of the size of the recipient country. Below we consider aid relative to country size by looking at aid as a percentage of GDP and aid per capita.

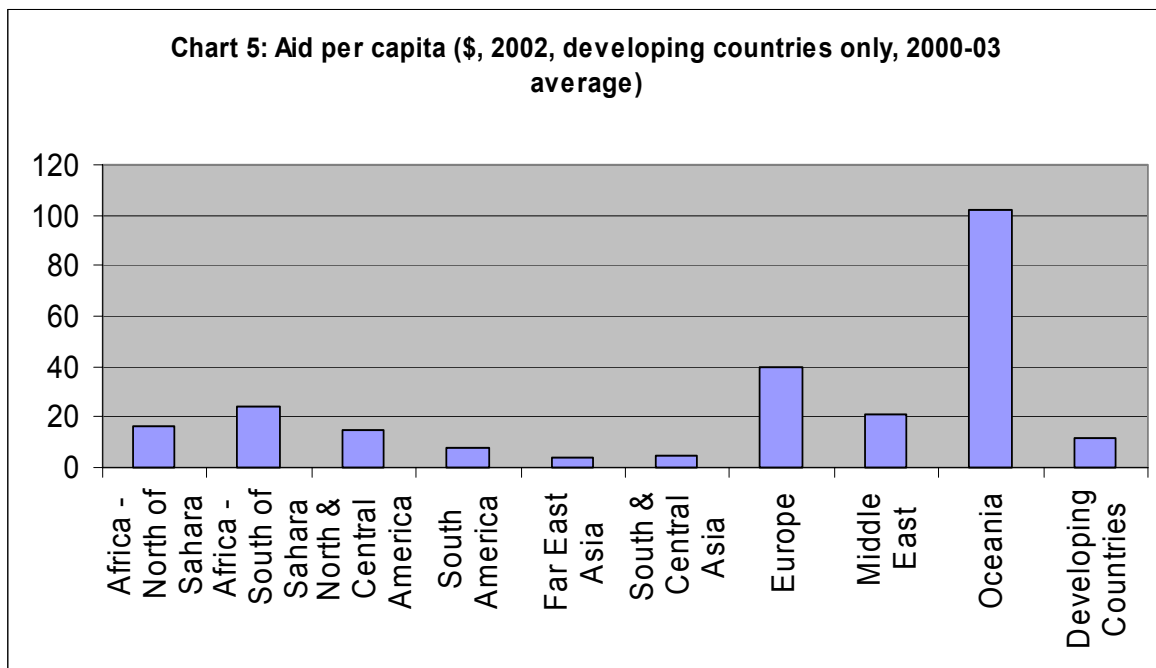
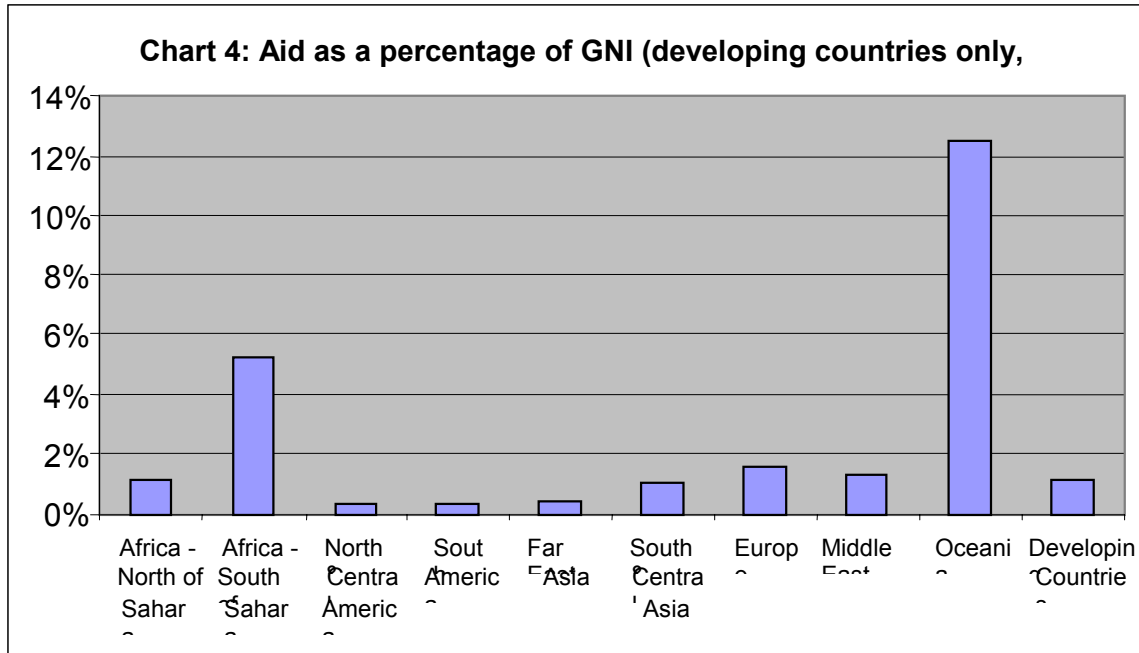
| Country | Annual aid receipts (million \$) | Main donor (percent of total aid) | Percent aid from Australia and New Zealand | Aid/GDP (%) | Annual aid per capita | Trend in total aid | Trend in aid from Australia and New Zealand |
|------------------|----------------------------------|-----------------------------------|--|-------------|-----------------------|------------------------|---|
| Cook Islands | 4.5 | New Zealand (56%) | 78 | n/a | 210 | Decline (substantial) | Decline (substantial) |
| Fiji Islands | 33 | Australia (30%) | 37 | 1.91 | 40 | Decline | Decline |
| Kiribati | 17 | Australia (34%) | 44 | 33.6 | 177 | Decline | Increase |
| Marshall Islands | 63 | US (82%) | 1 | 61.3 | 1,196 | Stable | Increase |
| Micronesia | 116 | US (88%) | 1 | 51.0 | 960 | Increase (marginal) | Increase |
| Nauru | 9.1 | Australia (92%) | 92 | n/a | 718 | Increase (substantial) | Increase (substantial) |
| Niue | 4.6 | New Zealand (85%) | 95 | n/a | 2,350 | Decline (marginal) | Decline (marginal) |
| Palau | 31 | US (50%) | 1 | 27.3 | 1,590 | Decline (substantial) | Increase (marginal) |
| Papua New Guinea | 216 | Australia (83%) | 86 | 7.0 | 41 | Decline (substantial) | Decline (substantial) |
| Samoa | 34 | Australia (23%) | 36 | 14.3 | 197 | Stable | Stable |
| Solomon Islands | 52 | Australia (53%) | 63 | 20.5 | 120 | Increase | Increase (substantial) |
| Tonga | 21 | Australia (28%) | 45 | 14.8 | 210 | Decline (marginal) | Stable |
| Tuvalu | 7.7 | Australia (22%) | 36 | n/a | 667 | Increase (marginal) | Stable |
| Vanuatu | 33 | Australia (32%) | 43 | 14.3 | 165 | Decline | Increase |

All figures are averages for 2000-03.



2.3 Relative Value of Aid

Relative to its size Oceania receives substantially more aid than any other region. Chart 4 shows aid to developing countries in different regions as a percentage of their combined Gross National Income (GNI) averaged over 2000-03. Oceania received aid totalling 12% of GNI. Sub-Saharan Africa received aid worth 5% of GNI. No other region received aid worth more than 2% of GNI. The ratio of aid to GNI for all developing countries combined was 1.1%. A similar pattern emerges if we consider aid flows per capita (Chart 5). On average over 2000-03 Oceania received \$102 per capita. The next largest recipient was Europe at \$39 per capita followed by sub-Saharan Africa at \$24 per capita. The average for all developing countries was \$12 per capita. Thus, in per capita terms, Oceania received two and a half times as much aid as the next largest recipient region and nine times the average for all developing countries.



As one would expect the regional averages discussed above hide substantial inter-country intra-regional variation. Chart 6 shows aid as a percentage of GDP averaged over 2000-03 for PIF developing countries⁴ and also for the two French overseas territories in the South Pacific: French Polynesia and New Caledonia. With the exception of Fiji Islands which has an aid to GDP ratio of 1.9% all countries have significantly higher aid to GDP ratios than the developing

⁴ Cook Islands, Nauru, Niue and Tuvalu are not shown because GDP data was not available.

country average (Table 5). After Fiji Islands, PNG has the next lowest ratio at 7.0%, but these are the only two countries with aid to GDP ratios below 10%. At the upper end of the scale the Marshall Islands and Micronesia have aid to GDP ratios greater than 50%.

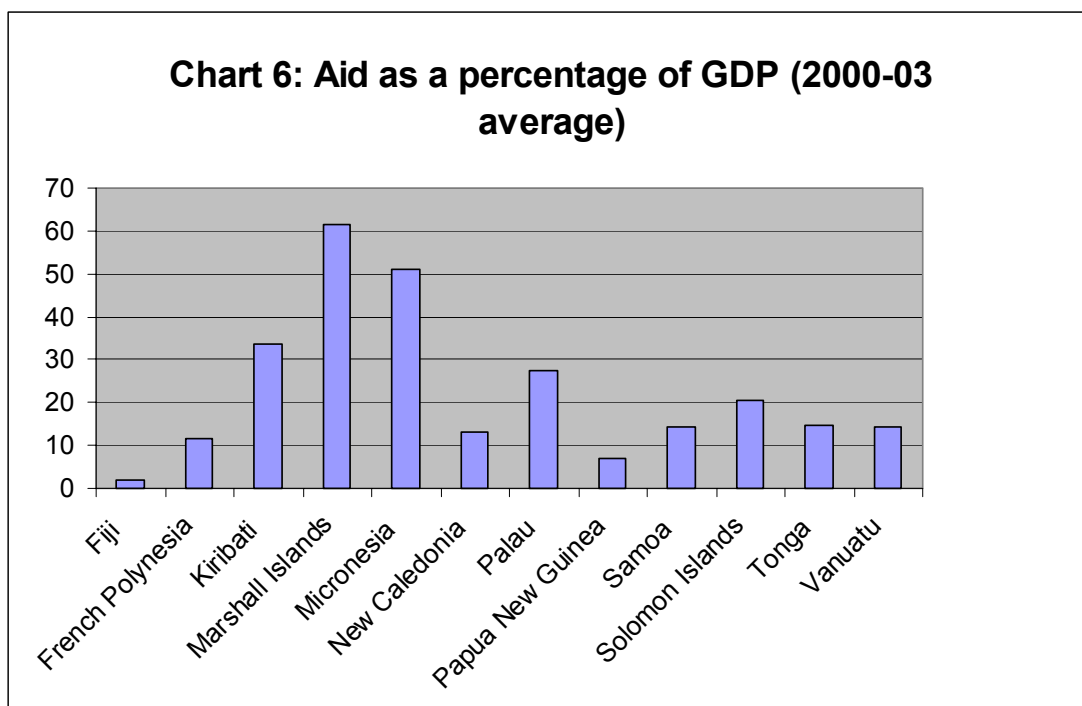


Table 5: Aid as a percentage of GDP

| | Cook Islands | Fiji | French Polynesia | Kiribati | Marshall Islands | Micronesia | Nauru | New Caledonia | Niue | Palau | PNG | Samoa | Solomon Islands | Tonga | Tuvalu | Vanuatu |
|---------|--------------|------|------------------|----------|------------------|------------|-------|---------------|------|-------|------|-------|-----------------|-------|--------|---------|
| 1980-84 | | 3.0 | 12.5 | 54.0 | | | | 17.6 | | | 13.0 | 16.7 | 23.5 | 27.6 | | 28.1 |
| 1985-89 | | 3.3 | 11.4 | 61.9 | | | | 15.7 | | | 10.1 | 17.9 | 23.5 | 22.5 | | 27.2 |
| 1990-94 | | 3.4 | 9.3 | 59.0 | | | | 12.4 | | 80.6 | 9.2 | 27.6 | 18.5 | 20.9 | | 24.4 |
| 1995-99 | | 2.1 | 10.2 | 33.0 | 59.8 | 45.9 | | 10.9 | | 68.8 | 7.5 | 14.6 | 12.1 | 18.0 | | 15.5 |
| 2000-03 | | 1.9 | 11.7 | 33.6 | 61.3 | 51.0 | | 13.1 | | 27.3 | 7.0 | 14.3 | 20.5 | 14.7 | | 14.3 |

Chart 7 shows aid per capita to PIF countries, French Polynesia and New Caledonia averaged over 2000-03. Fiji Islands and PNG receive the lowest annual per capita aid of \$40 and \$41 respectively (Table 6). They also have the largest populations of the sixteen countries shown. All other countries receive annual per capita aid in excess of \$100. Eight of the sixteen countries receive in excess of \$500 per capita per year and five receive more than \$1000.

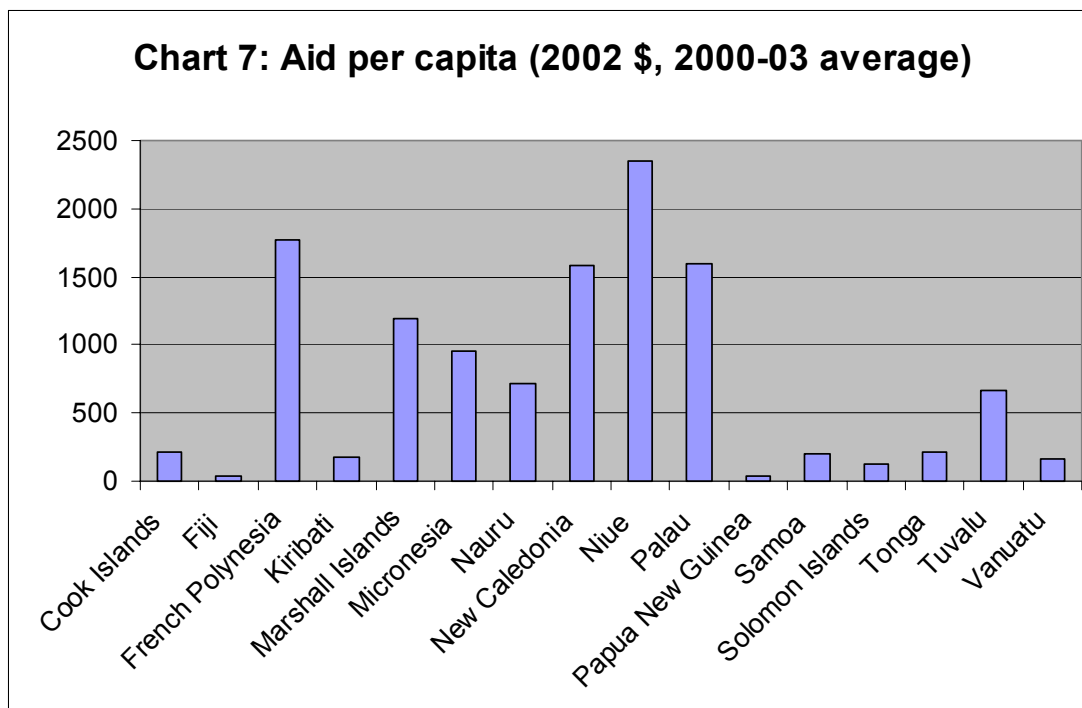


Table 6: Aid per capita (\$, 2002)

| | Cook Islands | Fiji | French Polynesia | Kiribati | Marshall Islands | Micronesia | Nauru | New Caledonia | Niue | Palau | PNG | Samoa | Solomon Islands | Tonga | Tuvalu | Vanuatu |
|---------|--------------|------|------------------|----------|------------------|------------|-------|---------------|------|-------|-----|-------|-----------------|-------|--------|---------|
| 1980-84 | 677 | 85 | 1720 | 462 | | | 6 | 1836 | 2123 | | 127 | 254 | 211 | 287 | 1161 | 423 |
| 1985-89 | 1013 | 73 | 1854 | 309 | | | 8 | 1880 | 2170 | | 98 | 217 | 190 | 240 | 1780 | 339 |
| 1990-94 | 627 | 65 | 1421 | 254 | 510 | 472 | 356 | 1821 | | 4491 | 83 | 296 | 132 | 269 | 530 | 275 |
| 1995-99 | 403 | 46 | 1474 | 170 | 1193 | 889 | 293 | 1550 | | 4321 | 61 | 167 | 98 | 253 | 633 | 175 |
| 2000-03 | 210 | 40 | 1767 | 177 | 1196 | 960 | 718 | 1583 | 2350 | 1590 | 41 | 197 | 120 | 209 | 667 | 165 |

The eight countries receiving in excess of \$500 per capita per year can be split into two groups. Nauru, Niue, Palau and Tuvalu all had populations of 20,000 or less in 2003 and their high per capita aid levels are a result of their small populations rather than of their receiving high levels of aid in absolute terms. Of these four the largest recipient in absolute terms is Palau, which received \$31 million per year during 2000-03. Nauru, Niue and Tuvalu all received less than \$10 million per year on average during 2000-03. Note that the Cook Islands had a population of 22,000 in 2003, but 'only' received \$210 per capita per year of aid over 2000-03.

The second group consists of countries that receive high levels of aid in both relative and absolute terms: Marshall Islands, Micronesia, French Polynesia and New Caledonia. During 2000-03 PNG was the only PIF country to receive more aid than the Marshall Islands and Micronesia, while French Polynesia and New Caledonia both received more aid than any PIF developing country and between them received more aid than all fourteen PIF developing countries combined. We have already noted the dependence of Marshall Islands and Micronesia on US aid. Unsurprisingly French Polynesia and New Caledonia both receive over 99% of their aid from France.

Between Fiji Islands and Papua New Guinea on the one hand and the eight high aid countries on the other there exists a group of six intermediate countries: Cook Islands, Kiribati, Samoa, Solomon Islands, Tonga and Vanuatu. With the exception of the Cook Islands, these countries

had populations of between 100,000 and 500,000 in 2003. They received aid per capita per year during 2000-03 ranging from \$120 (Solomon Islands) to \$210 (Cook Islands).

2.4 Aid from Australia and New Zealand

We discussed above trends in the absolute level of aid from Australia and New Zealand combined to PIF countries. In this section we will consider the individual shares of Australia and New Zealand in ANZ aid and we will look at aid from ANZ as a percentage of their respective GDPs. We will also compare trends in ANZ aid to PIF countries with trends in ANZ aid to the rest of the world.

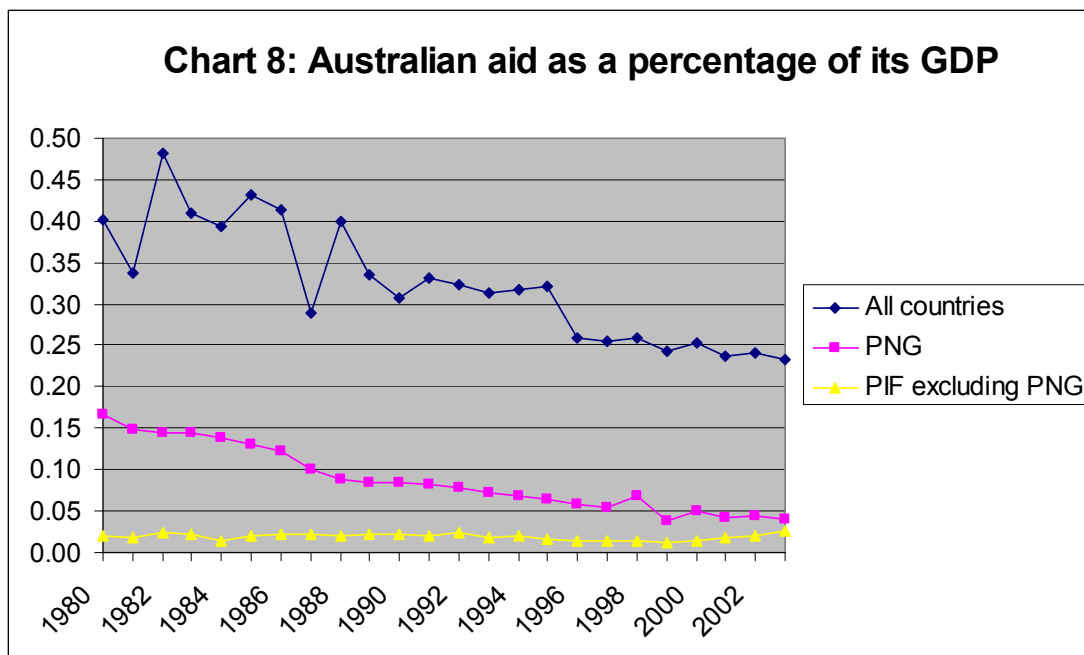
During 2000-03 88% of ANZ aid to PIF countries came from Australia. This share has remained virtually unchanged since the first half of the 1980s. However the share of Australia in ANZ aid to PIF excluding PNG has steadily increased from 53% over 1980-84 to 74% during 2000-03. This increase reflects the combined effect of a shift in Australian aid away from PNG and a shift in New Zealand aid towards PNG. During 1980-84 88% of Australian aid to PIF countries, and 8% of New Zealand aid to PIF countries, went to PNG. Over 2000-03 the figures were 69% and 19%.

Australia

From 2000-03 total Australian aid averaged 0.24% of Australian GDP (Table 7). Australian aid averaged 0.40% of GDP in the 1980-84 period and has been declining ever since (Chart 8). Measured as a percentage of GDP Australian aid has declined by 40% in the last twenty years. A large proportion of this decline is a result of the fall in aid to PNG from 0.15% of GDP over 1980-84 to 0.04% of GDP over 2000-03. Aid to other PIF countries has remained roughly constant over the last twenty-five years at around 0.02% of GDP. By comparison aid to non-PIF countries has decreased steadily from 0.24% of GDP over 1980-84 to 0.18% of GDP over 2000-03. The share of PIF countries excluding PNG in Australia's aid budget has therefore increased from 5% in 1980-84 to 8% in 2000-03. Aid flows connected to RAMSI increased the share of Australia's aid budget devoted to PIF countries excluding PNG from 8% in 2002 to 12% in 2003.

Table 7: Australian aid as a percentage of its GDP

| | All countries | All countries excluding PIF | PIF | PNG | PIF excluding PNG | % aid to PIF | % aid to PIF excluding PNG |
|---------|---------------|-----------------------------|------|------|-------------------|--------------|----------------------------|
| 1980-84 | 0.40 | 0.24 | 0.17 | 0.15 | 0.0196 | 41% | 5% |
| 1985-89 | 0.37 | 0.25 | 0.13 | 0.10 | 0.0217 | 34% | 6% |
| 1990-94 | 0.32 | 0.22 | 0.10 | 0.08 | 0.0209 | 31% | 7% |
| 1995-99 | 0.27 | 0.20 | 0.07 | 0.06 | 0.0147 | 27% | 6% |
| 2000-03 | 0.24 | 0.18 | 0.06 | 0.04 | 0.0198 | 27% | 8% |

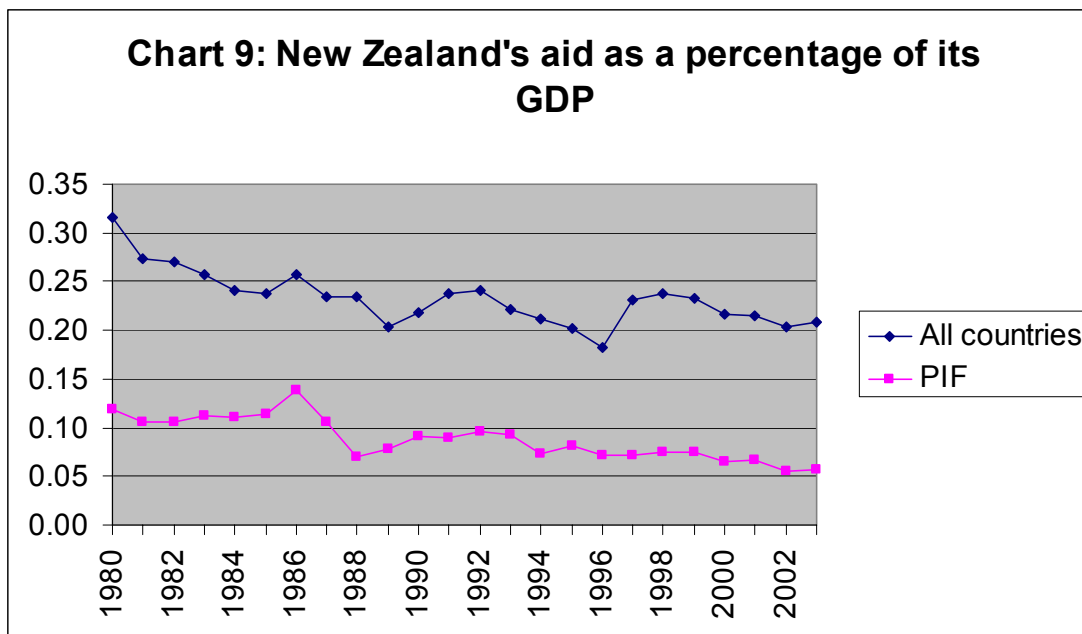


New Zealand

From 2000-03 New Zealand's aid averaged 0.21% of its GDP. (Table 8). This was a marginal decline from 1985-89 when aid was 0.23% of GDP (Chart 9). At that time PIF countries received 43% of New Zealand's aid, a figure that has since steadily declined to reach 29% today. Consequently aid to PIF countries has decreased from 0.10% of GDP over 1985-89 to 0.06% of GDP during 2000-03. Aid from New Zealand is distributed more evenly amongst PIF countries than aid from Australia. During 2000-03 no single country received more than 20% of New Zealand aid to PIF countries. In fact in 2003 the largest recipient of aid from New Zealand amongst the PIF countries was Niue.

Table 8: New Zealand's aid as a percentage of its GDP

| | All countries | All countries excluding PIF | PIF | PNG | PIF excluding PNG | % aid to PIF | % aid to PIF excluding PNG |
|---------|---------------|-----------------------------|------|--------|-------------------|--------------|----------------------------|
| 1980-84 | 0.27 | 0.16 | 0.11 | 0.0092 | 0.10 | 0.41 | 0.37 |
| 1985-89 | 0.23 | 0.13 | 0.10 | 0.0076 | 0.09 | 0.43 | 0.40 |
| 1990-94 | 0.23 | 0.14 | 0.09 | 0.0073 | 0.08 | 0.39 | 0.36 |
| 1995-99 | 0.22 | 0.14 | 0.07 | 0.0107 | 0.06 | 0.34 | 0.29 |
| 2000-03 | 0.21 | 0.15 | 0.06 | 0.0114 | 0.05 | 0.29 | 0.23 |



2.5. Other Bilateral Donors

Currently the largest bilateral donor to PIF countries other than Australia is the US. From 2000-03 US aid averaged \$174 million per year of which \$169 million went to MMP (Table 9). US aid made up 27% of total aid to PIF countries during 2000-03, but accounted for only 1% of aid to PIF countries excluding MMP. Aid from the United Kingdom (UK) to PIF countries totalled \$80 million per year from 1980-84 and was mainly targeted at its former colonies Fiji Islands, Kiribati, Solomon Islands, Tonga, Tuvalu and Vanuatu. Thereafter UK aid rapidly declined and ceased altogether from 1995 onwards following a decision to end UK bilateral aid to the Pacific. French aid to PIF countries has steadily declined since 1980 and during 2000-03 was \$7 million per year. Vanuatu, which prior to its independence was administered jointly by France and the UK, received 85% of French aid.

Table 9: Annual aid to PIF countries from the US, UK and France (\$ million, 2002)

| | | US | | UK | France |
|---------|-----|-------------------|---------|----|--------|
| | MMP | PIF excluding MMP | All PIF | | |
| 1980-84 | | 7 | 7 | 79 | 19 |
| 1985-89 | | 5 | 5 | 50 | 13 |
| 1990-94 | | 4 | 93 | 24 | 12 |
| 1995-99 | 197 | 6 | 203 | 2 | 9 |
| 2000-03 | 169 | 5 | 174 | 0 | 7 |

2.6 Type of Aid

In this section we describe the breakdown of total aid to PIF countries in terms of the percentage of aid given as grants, given as technical cooperation and given by multilateral organisations. Since our main interest is in the level of aid we will only discuss these areas briefly, leaving detailed discussions of the flows of different types of aid to other reports.

The measure of aid we are using includes both grants and loans with a grant component of at least 25%. Grants have made up around 90% of net disbursements of aid to PIF countries from 1980-2003 (Table 10). The percentage of aid disbursed in grant form has displayed no substantial sustained variation across PIF countries, but has tended to increase over time. Grants made up 99% of aid to PIF countries over 2000-03, compared to 86% from 1980-84. The increase in the percentage of aid given as grants may result from two factors: firstly a decision by donors to reduce aid given in the form of concessional loans with the aim of minimising the debt burden of developing countries; secondly an increase in the repayments by PIF countries of the principal on earlier loans.

Table 10: Grants as a percentage of total aid

| | All PIF | MMP | PIF excluding MMP | PNG | Other PIF |
|---------|---------|-----|-------------------|------|-----------|
| 1980-84 | 86% | | 86% | 84% | 90% |
| 1985-89 | 93% | | 93% | 94% | 92% |
| 1990-94 | 88% | | 87% | 86% | 88% |
| 1995-99 | 93% | 96% | 91% | 89% | 94% |
| 2000-03 | 99% | 95% | 101% | 106% | 98% |

From 2000-03 most PIF countries received between one-half and two-thirds of their aid receipts in the form of technical cooperation (Table 11). The exceptions were MMP which received only 7% of their aid as technical cooperation and the three PIF countries with the smallest populations: Nauru, Niue and Tuvalu. Nauru, Niue and Tuvalu all received less than half of their aid as technical cooperation. The share of total aid to PIF countries given in the form of technical cooperation has increased rapidly from 1980-2003, particularly over the last ten years. Technical cooperation made up 59% of total aid to PIF countries excluding MMP during 2000-03, up from 20% during 1980-84. For PNG the share was 5% over 1980-84, rising to 32% for 1995-99 and 63% during 2000-03. For Other PIF the increase was less substantial, from 41% during 1980-84 to 55% during 2000-03.

Table 11: Technical Cooperation as a percentage of total aid

| | All PIF | MMP | PIF excluding MMP | PNG | Other PIF |
|---------|---------|-----|-------------------|-----|-----------|
| 1980-84 | 20% | | 20% | 5% | 41% |
| 1985-89 | 24% | | 24% | 10% | 42% |
| 1990-94 | 26% | | 29% | 16% | 47% |
| 1995-99 | 30% | 5% | 41% | 32% | 55% |
| 2000-03 | 42% | 7% | 59% | 63% | 55% |

The percentage of total aid coming from multilateral organisations varies substantially between countries and across time. At one extreme Palau received only 0.5% of its aid from multilateral organisation during 2000-03, while at the other Solomon Islands received 45% (Table 4). However there is some stability in aid receipts from multilaterals at the aggregate level. Except during 1995-99, when receipts from multilaterals were 18% of total aid, Other PIF countries received around a quarter of their total aid from multilaterals (Table 12). MMP receive 5% of their aid from multilaterals, while the share of multilaterals in aid to PNG has plummeted from 19% during 1990-94 to 2% during 2000-03, after many multilateral organisations scaled back aid programs in 1999.

Table 12: Percent of total aid to PIF countries coming from multilateral organisations

| | All PIF | MMP | PIF excluding MMP | PNG | Other PIF |
|---------|---------|-----|-------------------|-----|-----------|
| 1980-84 | 19% | | 19% | 16% | 23% |
| 1985-89 | 18% | | 18% | 13% | 24% |
| 1990-94 | 18% | | 21% | 19% | 24% |
| 1995-99 | 12% | 5% | 15% | 12% | 18% |
| 2000-03 | 11% | 5% | 13% | 2% | 25% |

III. AID EFFECTIVENESS – A LITERATURE REVIEW

What is the impact of aid on growth in GDP per capita? In the last ten years a new literature has emerged which attempts to answer this question empirically using cross-country growth regressions in which the relationship between aid and growth has a non-linear component.

There are two primary competing strands to the literature. The first strand models the effects of aid on income growth as depending not only on the level of aid, but also on some other 'enabling' variable (e.g. policy, vulnerability to shocks) which modifies its impact. A standard growth regression is modified to include not only aid (typically measured as a percentage of recipient GDP), but also aid interacted with the enabling variable, as regressors. This approach is typified by the work of Burnside and Dollar (2000) who found that the impact of aid on growth increases as the quality of macroeconomic policies improve. Unsurprisingly this result has been the focus of great attention from policy makers and much of the recent literature on aid effectiveness can be viewed as a response to this finding.

The second strand to the literature concerns itself not with the interaction between aid and other variables, but with the possibility of there being an inherently non-linear relationship between aid and growth. Specifically it argues that there are diminishing marginal returns to aid. This is tested by introducing both aid (again usually measured as a percentage of GDP) and aid squared as regressors in cross-country growth models. Lensink and White (1999) estimate regressions of this type and conclude that at levels above 40-50% of GDP aid has a negative marginal effect on growth.

We will look first at the work on the interaction between aid and policy before turning to the research on the diminishing marginal returns of aid. We will then consider work which models the interaction of aid with the vulnerability of a country to external shocks, before finally attempting to draw out some policy implications from the literature.

3.1 Interaction between Aid and Policy

Burnside and Dollar (2000) investigate the impact of policies on the effectiveness of aid by estimating regressions of the following form:

$$g_{it} = \beta_y y_{it} + \beta_a a_{it} + \beta_p p_{it} + \beta_{ap} a_{it} p_{it} + \beta_z' z_{it} + g_t + \varepsilon_{it} \quad (1)$$

where i indices countries, t indices periods, g_{it} is per capita GDP growth, y_{it} is the logarithm of initial GDP, a_{it} is aid as a percentage of GDP, p_{it} is a policy index, z_{it} is a vector of other exogenous variables that may effect growth, g_t is a period dummy and ε_{it} is an error term. Burnside and Dollar measure aid using a variable which adds the grant component of concessional loans to outright grants. By contrast aid as measured by ODA includes all loans

with a grant component of at least 25%. The policy variables included are inflation, the budget surplus and the Sachs-Warner trade openness dummy. They are weighted together to form an index using results from estimating a version of equation (1) excluding aid and the aid*policy interaction, but including each of the policy variables separately. The exogenous variables used include measures of institutional quality and ethnic fractionalisation. The equations are estimated using a panel of 56 countries and six four year time periods: 1970-73 to 1990-93. An observation for a period is the average over that period. There are no PIF countries in their sample. Instrumental variables estimation is used to allow for the possible endogeneity of aid in equation (1), but policy is assumed to be exogenous.

Burnside and Dollar's main finding is that although the aid term has an insignificant effect on growth, when the aid*policy interaction term is added it has a positive and significant impact. Thus there is a relationship between aid and growth, but the nature of the relationship depends critically on the quality of economic policies. The better the policies the stronger the impact of aid on growth. They also find weak evidence of aid squared*policy having a negative effect on growth, which would indicate diminishing marginal returns to aid, but this result depends critically on the inclusion of outlying observations. Evaluating the derivative of growth with respect to aid they find that aid has an insignificant impact on growth in an average policy environment, but increasing the policy index to approximately one standard deviation greater than its mean significantly increases the impact of aid on growth.

In common with most of the growth literature Burnside and Dollar find that the institutional quality variable and the policy index they construct have a positive and significant effect on growth, but although initial income has a negative coefficient it is not significant. Note that this direct impact of policy on growth is in addition to the positive effect of policy on growth through the aid*policy interaction term. In an earlier draft of the paper (Burnside and Dollar (1997)) they test whether the level of aid received affects the quality of policies implemented. They fail to find a relationship.⁵ If aid had a positive effect on policies Burnside and Dollar's estimates of the derivative of growth with respect to aid would be biased downwards.

Burnside and Dollar also estimate an equation for the allocation of aid. They confirm the results of Alesina and Dollar (2000) that the main influences on aid allocation are income (negative), population (negative) and variables capturing donor's strategic interests. They find no significant relationship between the quality of policies and total aid flows. However when they split aid into bilateral aid and multilateral aid they find that policy has a significant positive effect on the later, but not the former. Finally they estimate an equation for government consumption which shows that bilateral aid significantly increases government consumption while there is no significant relationship between multilateral aid and government consumption. Having previously found no relationship between government consumption and growth they conclude that one reason aid may on average have no impact on growth is that bilateral aid, which makes up around two-thirds of total aid, does not reward good policies and results in increased government consumption not increased investment.

Many reasons are put forward to support aid flows, but one of the most often cited is poverty reduction. By concentrating on the effects of aid on income growth economists may not capture its effects on poverty. Is aggregate income growth a good proxy for poverty reduction? Dollar

⁵ This is consistent with the findings of other authors. Collier (1997), Williamson (1994), Rodrik (1996) and Alesina and Dollar (2000) all find no systematic effect of aid on the quality of policies. Knack (2000) finds that aid can weaken institutions. Dollar and Svensson (2000) find no causal relationship from aid programs to policy or institutional change.

and Kraay (2001) find that on average growth of per capita GDP is accompanied by a proportional growth in income of the poorest members of society. Burnside and Dollar (1998) address the impact of aid on poverty reduction directly by estimating equations similar to those discussed above, but with infant mortality as the dependent variable. They hypothesise that maybe the increase in government consumption resulting from increased aid flows leads to poverty reduction without creating aggregate growth. However, using a measure of governance that includes both policy and institutional variables, they find that aid reduces infant mortality only in a good governance environment. This supports the findings of Burnside and Dollar (2000) discussed above, although the significance levels of the infant mortality results are lower than for the growth results.

Chauvet and Collier (2004) consider the effects of aid in a Low Income Country Under Stress (LICUS) defined as a low-income country with consistently weak policies and institutions as measured by the World Bank's Country Policy and Institutional Assessment (CPIA). They find that LICUS status on average reduces peacetime growth by 2.3 percentage points and that in any given year the average probability of a country starting on the path to a sustained turnaround which will result in exiting LICUS status is 1.79%. This probability is increased by education and population size, but unaffected by income and the level of democracy.

They find that aid has a significant and positive effect on the probability of a country starting on the path to a turnaround. Disaggregating aid into its components they find that it is aid other than technical assistance which increases the probability, while technical assistance has no effect. A one percentage point increase in average aid other than technical assistance to LICUS countries would increase the average turnaround probability from 1.79% to 2.50%. Once a country has started on the path to a turnaround both technical assistance and other aid increase the rate at which an incipient turnaround becomes sustained. Given the substantial cost of being a LICUS, which the authors estimate at 4.6 times initial GDP ignoring spillover effects to neighbouring countries, and the small average turnaround probability Chauvet and Collier characterise aid to LICUS countries as a high risk enterprise. Most aid aimed at generating a LICUS turnaround will fail, but the pay-offs to success are enormous.

Chauvet and Collier (2004) suggests that even if we accept the Burnside and Dollar (2000) results there is a case for targeting some aid at countries with very poor governance. Chauvet and Guillaumont (2004) provide further support for this stance with their results which indicate that when policies are initially very poor aid can have a positive impact on them.

3.2. Diminishing Marginal Returns to Aid

Lensink and White (1999) investigate the effects of aid on growth by estimating variants of equation (2):

$$g_{it} = \beta_y y_{it} + \beta_a a_{it} + \beta_p p_{it} + \beta_{aa} a_{it}^2 + \beta_z' z_{it} + g_t + \varepsilon_{it} \quad (2)$$

where variable definitions are the same as in equation (1). Comparing equation (2) to equation (1) we see that the aid*policy interaction term has been replaced by an aid squared term. Using a sample of 138 countries and four time periods they find a positive and significant relationship between aid and growth and a negative and significant relationship between aid squared and growth. This leads them to conclude that not only does aid have diminishing marginal returns, but that at levels of aid above 40-50% of GDP aid starts to have harmful effects. They also introduce an aid*policy interaction term into their specification, but it is insignificant. Note that

they find a significant and positive impact of aid on growth even when the aid squared term is dropped. Lensink and White's dataset includes six PIF countries: Fiji Islands, PNG, Samoa, Solomon Islands, Tonga and Vanuatu. Hadjimichael et al. (1995) and Durberry et al. (1998) also find diminishing marginal returns to aid by introducing an aid squared term.

Hansen and Tarp (2001) attempt to unify the approaches typified by equation (1) and equation (2) by estimating a model containing both an aid squared term and an aid*policy interaction term. Using the same sample as Burnside and Dollar (2000) they find that when both variables are included aid squared is significant, but aid*policy is not.

They then proceed to investigate whether or not specification errors mean their results are inconsistent. As mentioned above Burnside and Dollar (2000) use instrumental variables to control for the possible endogeneity of aid. When they estimate their model they find that the results obtained using Two Stage Least Squares (2SLS) are not significantly different to those obtained using Ordinary Least Squares (OLS). This leads them to suggest that aid is not endogenous to growth, a result used by other authors, including Lensink and White (1999), to justify estimating aid equations using OLS. Hansen and Tarp argue that due to the existence of country specific effects which are not included in the model, and the presence of endogenous regressors other than aid, both OLS and 2SLS are inconsistent. They attempt to obtain consistent estimates by respecifying the equation and using a Generalised Method of Moments (GMM) estimator. They estimate an equation without an aid*policy interaction term and although aid and aid squared are both significant with the expected signs the coefficient estimates are highly sensitive to whether OLS or GMM is used. They conclude that traditional approaches to estimating the effectiveness of aid may lead to inconsistent estimates and that more theoretical work should be done before cross-country aid-growth regressions are used to make policy decisions.

Collier and Dollar (2002) evince greater faith in the policy implications of the aid effectiveness literature. They use an aid-growth regression as the basis for deriving a poverty-efficient allocation of aid that maximises poverty reduction. Using a sample of 59 countries and six four year periods they estimate, by OLS, a growth regression including both aid squared and aid*policy terms where policy is measured using the CPIA. They find a positive and significant impact of aid interacted with policy and a negative impact of aid squared that is borderline significant. They do not find a significant impact of aid on growth when it is also included in the regression.

Collier and Dollar use their results to calculate a poverty-efficient allocation of aid. The two key characteristics of this allocation are that aid should be targeted towards countries that have high levels of poverty and good policy. They estimate that equalising the marginal effect of aid on poverty reduction across all countries would require giving two-thirds of current aid to India. Even constraining India to receive its current level of aid they estimate that whereas aid currently lifts 10 million people out of poverty each year their allocation would lift 19 million people out of poverty. Their results are robust to the use of different measures of poverty.

Burnside and Dollar (2004) is a response to the numerous critiques of their earlier work. Using a cross-section of 124 countries they regress average GDP per capita growth in the 1990s on initial income, a measure of institutional quality and at least one of aid, aid squared and aid*institutions. They estimate their equations using both OLS and 2SLS. When using 2SLS they treat all the independent variables as endogenous. They fail to find a relationship between aid, or aid squared, and growth, but they do find a positive relationship between aid*institutions

and growth, that is significant at around the 10% level. However this result is not robust across all their specifications. Note that whereas Burnside and Dollar (2000) interact aid with a policy measure, Burnside and Dollar (2004) interact aid with an institutions measure. In the aid effectiveness literature policy and institutions are often conflated under the general heading of governance. The results in Burnside and Dollar (2004) suggest that this may be a reasonable working assumption.

Burnside and Dollar also estimate an aid allocation model. Controlling for per capita income and population they find that institutional quality had no effect on aid flows in the 1980s, but during the 1990s aid receipts were positively correlated with institutional quality. This result can be compared with their finding in Burnside and Dollar (2000) that there was no effect of the quality of policies on total aid flows in a dataset covering 1970-93.

Burnside and Dollar argue that these new findings support their original conclusion that the impact of aid on growth is higher in countries with good governance. However they acknowledge that due to the methodological difficulties with cross-country growth regressions it is not possible to definitively prove their hypothesis. They therefore adduce evidence from an opinion poll commissioned by the World Bank and from project and country case studies to support the view that the effectiveness of aid depends critically on the quality of governance.

3.3. Aid and Vulnerability

Burnside and Dollar's findings open up the possibility that the effectiveness of a dollar of aid depends upon the characteristics of the country where that dollar is spent. The characteristic focused on by Burnside and Dollar themselves was policy. Guillaumont and Chauvet (2001) extend Burnside and Dollar's analysis to also include a country's vulnerability to external shocks, be they economic or environmental.

Guillaumont and Chauvet estimate a version of equation (1) including a vulnerability term and an aid*vulnerability interaction term. The vulnerability index is a weighted average of: stability of agricultural value added, which acts as a proxy for exposure to climatic shocks, the stability of the real value of exports, the trend of the terms of trade and the logarithm of initial population. The weights are based on the estimated coefficients of the four variables in a growth regression. The methodology used to construct the index therefore mimics that used by Burnside and Dollar (2000) to construct their policy index.

Using 66 countries, two twelve year time periods and both OLS and 2SLS estimation Guillaumont and Chauvet find that vulnerability reduces growth, but that aid interacted with vulnerability has a positive and significant effect on growth. They also find a positive and significant effect of aid, but find no impact of aid interacted with policy. They further estimate the determinants of aid and policy. They find no relationship between aid and policy in either direction. However they find that vulnerable countries receive more aid and have worse policies. Their results suggest that the vulnerability of countries to external shocks should be taken into consideration when assessing the effectiveness of aid.

Collier and Dehn (2001) estimate a similar specification to Guillaumont and Chauvet (2001), but use a different sample and a different measure of vulnerability. They use the same sample as Burnside and Dollar (2000) and measure vulnerability in terms of extreme export price shocks. Their OLS estimation results show that negative shocks have a negative and significant impact on growth, while both the change in the level of aid interacted with negative shocks and the lagged level of aid interacted with positive shocks have a positive and significant effect on

growth. However positive shocks, the change in the level of aid interacted with positive shocks and the lagged level of aid interacted with negative shocks all have insignificant effects on growth. Unlike Guillaumont and Chauvet they also find that aid*policy has a positive effect on growth, which is significant at the 10% level in their baseline model, but is not robust to variations in the sample.

Finally Collier and Dehn estimate an aid allocation equation to assess whether aid flows have been responsive to negative export price shocks. They find no evidence of countries receiving an increase in aid during periods when they suffered a negative export price shock. This result is not necessarily inconsistent with Guillaumont and Chauvet's finding that vulnerable countries receive more aid. Not only do the two papers use different definitions of vulnerability, but Guillaumont and Chauvet's result applies to the level of aid received by a country, while Collier and Dehn are looking at whether countries receive increased aid in periods when they are exposed to a shock. Collier and Dehn conclude by proposing that aid be targeted to countries suffering negative shocks. They note that this was the aim of the EU's Stabex program, but that because aid disbursements were project based the program was unable to respond sufficiently quickly to shocks. In fact, Herman et al. (1990) show that Stabex was actually pro-cyclical.

3.4. Summary

The existing literature does not provide policy makers with a coherent narrative they can use to determine the optimal poverty reducing/growth inducing aid flows. Results which it was hoped could lay the foundation for such a narrative have been shown to be sensitive to the sample used, the specification estimated and the estimation technique utilised. Successive papers have not built on previous results, but have problematised them, suggested fresh areas for investigation and proposed new policy implications. Hansen and Tarp who offer the most incisive analysis of the failings of the aid effectiveness literature argue that it has yet to attain the maturity necessary for it to be used in policy discussions. They caution the reader to wait for further research before drawing any conclusions.

Unfortunately, policy makers do not have the luxury of suspending their decisions until a consensus is reached. They need a "best practice" guide to aid effectiveness based on existing knowledge. What might such a guide say?

- a) Aid can have a significant positive effect on growth. This result is common to all the papers surveyed above.
- b) The relationship between aid and growth is non-linear and may be effected by country specific factors.
- c) There is no causal link from the level of aid flows to the quality of governance in a country.

The three conclusions listed above emerge unambiguously from the aid effectiveness literature. By contrast the statements below are all open to debate. We present them as policy guidelines based on an informed interpretation of the information available. They should be viewed as being subject to a high degree of uncertainty and being open to revision if and when new evidence emerges.

- d) Aid has diminishing marginal returns and at sufficiently high levels has a negative marginal effect on growth. The level of aid at which the marginal effect becomes negative is uncertain and may vary across countries.
- e) Aid is more effective in a good governance environment.

- f) Aid can mitigate the negative effects of adverse external shocks and can increase growth in countries vulnerable to such shocks.

These six points will form the ideological backdrop to the recommendations we present in section 4. However before we proceed with the recommendations we would like to draw attention to a major difficulty in applying conclusions drawn from the aid effectiveness literature to PIF countries: size. In 2003 half of the fourteen PIF developing countries had populations of less than 100,000 and only PNG had a population of greater than 1,000,000.

Above we drew attention to how infrequently any PIF countries were included in the datasets used in the papers under consideration. It is conceivable that the function of aid in very small states cannot be conceptualised in the same way it is in the larger states which have tended to provide the observations on which the aid effectiveness literature is based. Aid to the smallest PIF countries may be concerned as much with ensuring their continuing viability as with promoting long term economic growth and the criteria that guide aid allocation decisions should reflect this. It is also possible that because of fixed costs in implementing aid programs, increasing returns to scale mean that conventional measures of aid levels overstate the effective amount of aid actually received by very small countries. What is certain is that more work is required on aid to small countries. In the absence of such work we stress the importance of detailed country specific knowledge when discussing aid allocations to the smallest countries.

IV. FUTURE AID TO PACIFIC ISLAND FORUM COUNTRIES

In sections 2 and 3 we considered past aid flows to PIF countries and evidence on the effectiveness of aid. In this section we will put forward three recommendations concerning future aid to PIF countries. The first concerns the level of aid that PIF developing countries can realistically target from their fellow PIF members Australia and New Zealand. The second concerns targeting aid at better governed countries and the third concerns targeting aid at countries vulnerable to negative external shocks.

4.1. Level of Aid from Australia and New Zealand

PIF countries should seek the following commitments from Australia and New Zealand:

- i. Australia to give at least 0.03% of its GDP and at least 10% of its total aid budget to PIF countries excluding PNG.
- ii. Australia to give at least 0.05% of its GDP and at least 15% of its total aid budget to PNG.
- iii. New Zealand to give at least 0.08% of its GDP and at least 25% of its total aid budget to PIF countries.

These targets do not represent optimal levels of aid to PIF countries. They are realistic goals based on trends in Australia's and New Zealand's aid to PIF countries over the past twenty-five years. Targets (ii) and (iii) are slightly higher than current aid flows, but lower than receipts during the 1980s and the first half of the 1990s and are intended to stem the long term declines in Australian aid to PNG and New Zealand's aid to PIF countries. Target (i) is higher than current or past levels of aid and aims to build on the recent increase in Australian aid to PIF countries excluding PNG.

PIF countries excluding MMP currently receive two-thirds of their aid from Australia and New Zealand. If Australia and New Zealand were to make and meet these commitments it would

provide PIF countries excluding MMP with 'aid security' by stemming the long term decline in aid and ensuring predictable flows of aid over the medium term. The aid security of MMP obviously depends on the US and will not be affected by aid commitments made by ANZ.

Aid from Australia should be broken down into aid to PNG and aid to PIF excluding PNG because PNG receives two-thirds of all Australian aid to PIF countries. Considering the two simultaneously would risk disadvantaging countries other than PNG since changes in the level of aid to PNG would swamp changes in the level of aid to other countries. If Australian aid to PNG increased it would be possible for Australia to meet its commitment while drastically cutting aid to 13 of the 14 PIF developing countries.

Australian aid to PIF excluding PNG averaged 0.019% of its GDP over 1980-2003, peaking at 0.027% in 2003 due to the effect of RAMSI. Through a period during which total Australian aid almost halved aid to PIF excluding PNG was roughly stable, but showed no signs of embarking on an increasing trend. The target of 0.03% of Australian GDP is higher than was achieved in any year from 1980-2003, but to meet this target in 2003 would only have required a \$16 million (2003 US\$) increase in aid. The target of 10% of total Australian aid is included to ensure that if the total Australian aid budget were to substantially increase aid to PIF countries excluding PNG would increase commensurately. During 1980-2003 Australian aid to PIF countries excluding PNG averaged 6.15% of Australia's aid budget and exceeded 10% only in 2003. In 2003 Australia gave 0.23% of its GDP as aid, but if total Australian aid exceeded 0.30% of GDP the 10% of total aid target would be higher than the 0.03% of GDP target.

Setting a target for Australian aid to PNG is made more difficult by not knowing whether the Enhanced Cooperation Program (ECP) will be resurrected. If it goes ahead Australian aid to PNG should exceed the current 0.04% of GDP for the foreseeable future. However since our primary interest is in guarding against a further decline in Australian aid to PNG we have recommended a target that is realistic even if the ECP is abandoned. Since 1980 Australian aid to PNG has exceeded 0.05% of its GDP in every year except for 1999 and 2001-03 and has never been less than 15% of its total aid budget. In 2003 meeting the target would have cost Australia an extra \$52 million (2003 US\$).

New Zealand's aid to PIF is not highly concentrated on a single country. Therefore, we do not consider it necessary to have multiple targets for New Zealand's aid to different subsets of PIF countries. The recommendation of 0.08% of GDP and 25% of total aid ensures that Australia and New Zealand are asked for comparable commitments. With the steady decline in New Zealand's aid to PIF countries the 0.08% of GDP target has not been met since 1995, but the 25% of total aid target was met every year from 1980-2003. Achieving the 0.08% of GDP target in 2003 would have cost New Zealand an extra \$18 million (2003 US\$).

4.2 Increased Aid Flows to Better Governed Countries

The quality of a country's governance should be considered when determining how aid is distributed, with preference being given to better-governed countries.

To implement this principle a measure of good governance is required. Donors will have their own means of assessing quality of governance, but if a transparent, internationally recognised benchmark is required the World Bank's Governance Indicators 1996-2004 dataset could be used. This dataset contains data at two year intervals and measures the quality of governance along six dimensions: Voice and Accountability, Political Stability, Government Effectiveness, Regulatory Quality, Rule of Law and Control of Corruption. Country coverage varies across

years and dimensions, but in total 209 countries are covered, including all 14 PIF developing countries. For the Cook Islands, Nauru, Niue and Palau coverage is patchy, but nine of the ten other countries are rated on at least five of the six dimensions from 1998 onwards.⁶

Table 13 provides an indicator of the quality of governance in different PIF countries. For each year and each governance dimension all countries were ranked and then their percentile rank was calculated (lower percentiles indicating better governance). For the PIF countries we then calculated the average percentile rank for each year from 1998-2004. Table 13 only includes those countries rated on at least five of the six governance dimensions in a given year. The figures in Table 13 should be treated with considerable caution. In addition to the difficulties of aggregating across governance measures in the manner we have chosen and the subjective nature of the assessments on which the ratings are based, we should remember that many of the ratings for PIF countries are based on a single source. They are therefore subject to greater uncertainty than the ratings for countries for which more data sources are available.

Table 13: Governance of PIF countries (average percentile rank)

| | 1998 | 2000 | 2002 | 2004 | Average 2000-04 |
|------------------|------|------|------|------|-----------------|
| Fiji | 47% | 56% | 47% | 54% | 53% |
| Kiribati | 59% | 46% | 44% | 46% | 46% |
| Marshall Islands | 58% | 62% | 55% | 51% | 56% |
| Micronesia | 56% | 57% | 50% | 41% | 49% |
| Papua New Guinea | 65% | 67% | 71% | 76% | 71% |
| Samoa | 58% | 40% | 33% | 35% | 36% |
| Solomon Islands | 64% | 81% | 84% | 84% | 83% |
| Tonga | 64% | 60% | 64% | 58% | 60% |
| Tuvalu | | 22% | 27% | 42% | 31% |
| Vanuatu | 57% | 61% | 58% | 52% | 57% |

Subject to the above caveats the first point to note from Table 13 is that by global standards governance in the Pacific is roughly average. If we calculate average percentile rankings based on all available observations from 2000-04 six of the ten countries (Fiji Islands, Kiribati, Marshall Islands, Micronesia, Tonga, Vanuatu) lie between the 45th and 60th percentiles. Two countries stand out as being well-governed: Tuvalu and Samoa. Note that the relative quality of governance in Samoa has increased markedly since 1998, but the relative quality of governance in Tuvalu deteriorated rapidly between 2002 and 2004. Similarly two countries have noticeably lower standards of governance: Solomon Islands and Papua New Guinea.

What is the correlation between aid flows during 2000-03 and quality of governance over 2000-04? We ranked the ten countries included in Table 13 based on their average percentile ranking for governance 2000-04, their aid receipts per capita 2000-03, their aid receipts as a percentage of GDP 2000-03 and their population 2000-03, and then calculated the correlations between the four rankings (Table 14). There is a small positive correlation between aid and governance, but the most important information in Table 14 is the correlation of around -0.8 between population and aid. As discussed previously larger countries receive less aid per capita/aid as a percentage of GDP and this is a key factor driving relative levels of aid receipts across PIF countries.

⁶ Tuvalu is rated on at least five of the six dimensions from 2000 onwards.

Table 14: Aid flows and governance (rankings)

| | Governance 2000-04 | Aid per capita 2000-03 | Aid/GDP 2000-03 | Population 2000-03 |
|------------------------|-----------------------|---------------------------|--------------------|-----------------------|
| Fiji | 5 | 10 | 9 | 2 |
| Kiribati | 3 | 6 | 3 | 8 |
| Marshall Islands | 6 | 1 | 1 | 9 |
| Micronesia | 4 | 2 | 2 | 6 |
| Papua New Guinea | 9 | 9 | 8 | 1 |
| Samoa | 2 | 5 | 7 | 5 |
| Solomon Islands | 10 | 8 | 4 | 3 |
| Tonga | 8 | 4 | 5 | 7 |
| Tuvalu | 1 | 3 | n/a | 10 |
| Vanuatu | 7 | 7 | 6 | 4 |
| Correlations | Governance 2000-04 | Aid per capita 2000-03 | Aid/GDP 2000-03 | Population 2000-03 |
| Governance 2000-04 | 1 | | | |
| Aid per capita 2000-03 | 0.42 | 1 | | |
| Aid/GDP 2000-03 | 0.10 | 0.80 | 1 | |
| Population 2000-03 | -0.58 | -0.84 | -0.80 | 1 |

To assess whether there is a relationship between aid allocation and governance levels we will therefore focus on three similarly sized PIF countries. Samoa, Tonga and Vanuatu had populations in 2003 of 178,000, 102,000 and 210,000 respectively. They all received average per capita aid over 2000-03 in the \$14-15 range. However the governance data indicates that Samoa had by far the highest level of governance of these three countries. It ranked at the 36th percentile, compared to the 57th and 60th percentiles for Vanuatu and Tonga respectively. The clearest policy implication of a decision to allocate aid based on governance criteria would be that Samoa should receive a higher share of aid than it currently does. Tuvalu, the other leading candidate for a high share of aid, received \$667 of aid per capita per year during 2000-03, probably as a consequence of its small population (12,000 in 2003).

The level of uncertainty in the governance data makes us reluctant to draw conclusions on an appropriate governance based allocation of aid amongst the six countries with governance rankings between the 45th and 60th percentiles. The two least well-governed countries, Solomon Islands and Papua New Guinea, already receive lower levels of aid than most of their fellow PIF members; they are also two of the three most populous PIF countries. Since both these countries are frequently characterised as fragile states the results of Chauvet and Collier (2004), which were discussed in section 3.1, should be considered before taking any decision to reduce aid to Solomon Islands and PNG because of their poor governance.

4.3. Increased Targeting of Aid to Mitigate the Adverse Effects of Negative External Shocks

Two of the papers discussed above suggest that aid is more effective when used to mitigate shocks. Guillaumont and Chauvet (2001) find that aid is more effective in countries vulnerable to external shocks and Collier and Dehn (2001) find that countries benefit from receiving increased aid when suffering a negative external shock. By virtue of their size PIF countries are among the group of countries most vulnerable to external shocks. Guillaumont and Chauvet's work suggests that their vulnerability might provide a rationale for PIF countries receiving higher levels

of aid than otherwise comparable countries. Collier and Dehn's findings indicate when a country experiences a severe negative shock the response of donors should be a rapid aid injection.

More work is required to test the robustness of these results and to establish the mechanisms by which any aid-vulnerability synergy may occur. Subject to the findings of any such work we recommend the establishment of a program to target aid at countries experiencing a negative external shock. The program must be able to release funds rapidly if it is to achieve its aim of providing anti-cyclical disbursements.

Appendix: Aid Flows by Country

Cook Islands

The Cook Islands currently⁷ receive around \$4.5 million per year of aid. In the first half of the 1990s the Cook Islands received \$13 million per year, but receipts have rapidly declined over the past ten years. Around 80% of aid to the Cook Islands comes from Australia and New Zealand. Of this 70% comes from New Zealand with which the Cook Islands are in free association. The decline in total aid to the Cook Islands is mainly due to a fall in aid from New Zealand from \$12 million in the first half of the 1980s to \$2.5 million currently.

The Cook Islands currently receive \$210 per capita per year in aid, down from \$627 per capita in the first half of the 1990s. All of the four other PIF developing countries with populations of less than 50,000 currently receive in excess of \$600 per capita per year of aid. No GDP data for the Cook Islands is available.

Fiji Islands

Fiji Islands currently receives around \$33 million per year of aid. Aid to Fiji Islands has gradually declined from \$56 million per year in the first half of the 1980s to its current level. Aid from Australia and New Zealand increased in the first half of the 1990s to \$22 million per year, but has since declined to \$12 million per year leaving the share of Australia and New Zealand in total aid to Fiji Islands at around one-third, roughly what it was during the 1980s. Of the share from Australia and New Zealand about three-quarters comes from Australia.

Aid to Fiji Islands is currently around 2% of GDP, lower than the approximately 3% of GDP Fiji Islands received throughout the 1980s and the first half of the 1990s. Fiji Islands has the smallest aid to GDP ratio of all the developing PIF countries, a fact that has been true throughout the past twenty-five years. Fiji Islands currently receives \$40 per capita per year in aid, a figure that has steadily been falling from a high of \$85 per capita in the first half of the 1980s. This is the lowest aid per capita of all PIF developing countries. The only other country currently receiving under \$100 per capita is PNG at \$41 per capita.

Kiribati

Kiribati currently receives around \$17 million per year of aid of which \$7 million comes from Australia and New Zealand. Total aid to Kiribati dropped by 50% from \$28 million per year in the first half of the 1980s to \$14 million per year in the second half of the 1990s, but has since stabilised. At the same time aid from Australia and New Zealand has steadily increased from \$4 million per year to its current level. Consequently the share of Australia and New Zealand in total aid to Kiribati has increased from 13% to 44%. Australia's share in aid from Australia and New Zealand is around three-quarters.

Aid to Kiribati is currently around 33% of GDP, the same as it was in the second half of the 1990s. However prior to that aid totalled approximately 60% of GDP. Kiribati currently receives \$177 per capita in aid, less than half of the \$462 per capita it received in the first half of the 1980s.

⁷ Average 2000-03.

Marshall Islands

Marshall Islands became independent from the US in 1986 under a Compact of Free Association and its economy is heavily dependent on US aid. Marshall Islands currently receives \$63 million of aid per year, approximately the same level it received in the second half of the 1990s. Reliable data on aid flows to the Marshall Islands is not available for years before 1994. Approximately 80% of aid comes from the US, with Australia and New Zealand combined contributing around 1% of total aid.

Marshall Islands currently has an aid to GDP ratio of 61%, the highest of all PIF developing countries. In per capita terms this amounts to \$1,200 per person per year. Under the terms of the Amended Compact of Free Association, which entered into force in May 2004, the US will provide millions of dollars per year to the Marshall Islands until 2023, at which time a Trust Fund made up of US and Marshall Islands contributions will begin perpetual annual payouts.

Micronesia

Micronesia became independent from the US in 1986 under a Compact of Free Association and its economy is heavily dependent on US aid. Micronesia currently receives \$116 million per year in aid, an increase from \$99 million per year in the second-half of the 1990s. Reliable data on aid flows to Micronesia is not available for years before 1994. Approximately 90% of aid comes from the US with Australia and New Zealand combined contributing around 1%.

Aid to Micronesia is around 50% of GDP or \$960 per capita. In May 2004 an Amended Compact of Free Association entered into force under which the US guarantees Micronesia millions of dollars in annual aid until 2023, and establishes a Trust Fund into which the US and Micronesia make annual contributions in order to provide annual payouts to Micronesia in perpetuity after 2023.

Nauru

Before 1994 Nauru received negligible amounts of aid. In 1994 aid was \$10 million and for the remainder of 1990s it was around \$2.5 million per year. Since 1998 aid receipts have trended upwards reaching \$13 million in 2003. Average aid for 2000-03 was \$9 million per year. Currently around 90% of aid comes from Australia with a negligible amount coming from New Zealand.

Nauru currently receives \$718 per capita of aid a year, more than double the \$293 per capita it received in the second half of the 1990s. GDP data for Nauru is not available.

Niue

Niue currently receives around \$4.5 million of aid per year. This is slightly less than during the 1980s and the first half of the 1990s when it received just over \$6 million per year. Niue is self-governing in free association with New Zealand and New Zealand is the source of 85% of Nauru's aid with Australia providing a further 10%. The decline in total aid to Niue since the first half of the 1990s reflects a similarly sized decline in aid from New Zealand.

Niue currently receives around \$2350 of aid per capita per year. This is the highest per capita aid level of all the PIF countries. This is partly a reflection of the fact that Niue has a population

of only around 3,000, but it is worth noting that in absolute terms Niue receives around the same amount of aid as the Cook Islands which has a population seven times as large. No GDP data is available for Niue.

Palau

Palau became independent from the US in 1994 under a Compact of Free Association and in 1994 and 1995 received \$229 million and \$156 million of aid respectively, over 95% of it from the US. Since 1995 aid flows have been substantially lower and Palau currently receives around \$31 million of aid per year. The US currently donates 50% of Palau's aid with Australia and New Zealand combined contributing around 1%.

Aid to Palau is currently around 27% of GDP, down from 69% of GDP in the second half of the 1990s. Palau currently receives around \$1,590 of aid per capita per year the second highest after Niue amongst the PIF countries.

Papua New Guinea

PNG currently receives \$216 million of aid per year. Aid to PNG has been declining rapidly during the past twenty years and current receipts are a little over half the \$411 million per year PNG received during the first half of the 1980s. Around 85% of aid to PNG comes from Australia and New Zealand and more than 95% of this comes from Australia. The decline in aid to PNG is largely due to a decrease in Australian aid from \$318 million per year during the first half of the 1980s to \$180 million per year currently. However aid from the rest of the world to PNG has actually declined by proportionally more than Australian aid and consequently Australia's share of aid to PNG has increased from 77% during the first half of the 1980s to 83% currently.

Aid to PNG is currently 7% of its GDP. In per capita terms PNG currently receives \$41 per year of aid. On both these measures Fiji Islands is the only PIF country to receive less aid than PNG.

Samoa

Aid to Samoa has fluctuated significantly since the 1980s peaking at \$48 million per year during the first half of the 1990s, before declining to \$28 million per year during the second half of the 1990s. Currently Samoa receives \$34 million of aid per year, of which one-third comes from ANZ. Approximately two-thirds of ANZ aid is Australian aid.

Aid to Samoa is currently 14% of GDP, down from a peak of 28% in the first half of the 1990s. Samoa currently receives \$197 per capita per year in aid.

Solomon Islands

The increase in aid resulting from RAMSI has seen aid to the Solomon Islands return to levels recorded during the 1980s following a decline in aid flows in the 1990s. Currently the Solomon Islands receives \$52 million per year of aid 63% of which comes from ANZ. Aid from ANZ increased from \$11 million per year during the second half of the 1990s to \$33 million per year currently. This increased the share of ANZ in total aid from under 30% to its current level. Around 85% of ANZ aid comes from Australia.

Aid to Solomon Islands is currently 20% of GDP. This is an increase from 12% of GDP in the second half of the 1990s, but is still below the 24% of GDP received during the 1980s. In per capita terms Solomon Islands receives \$120 per year.

Tonga

Tonga currently receives \$21 million of aid per year, a marginal decline from receipts of around \$25 million per year during the 1980s and 1990s. Aid from ANZ to Tonga has been very stable at around \$10 million per year since the 1980s and currently makes up 45% of total aid to Tonga. Around 60% of ANZ aid comes from Australia and the remaining 40% from New Zealand.

As a percentage of GDP aid to Tonga has steadily declined from 28% during the first half of the 1980s to 15% currently. Tonga currently receives \$210 per capita per year of aid.

Tuvalu

Tuvalu currently receives \$7.7 million of aid per year. Aid to Tuvalu has increased marginally since the 1990s, but is still far below the \$15 million per year received during the second half of the 1980s. Just over one-third of Tuvalu's aid comes from ANZ, around two-thirds of which comes from Australia. Aid from ANZ to Tuvalu has been stable at around \$3 million per year since the first half of the 1990s.

Tuvalu currently receives \$667 per capita per year of aid. As with Niue and Nauru Tuvalu's high per capita aid receipts reflect its small population (estimated at 12,000 in 2003) and do not indicate that it is a recipient of high levels of aid in absolute terms. GDP data for Tuvalu was not available.

Vanuatu

Vanuatu currently receives \$33 million of aid per year, a decline from \$51 million per year in the first half of the 1980s. By contrast ANZ aid to Vanuatu has steadily increase from \$6 million per year in the first half of the 1980s to \$14 million per year currently. ANZ now gives 43% of total aid to Vanuatu of which around 70% comes from Australia. The decline in total aid to Vanuatu can be largely attributed to the end of aid from the UK in 1995 and the gradual decline in French aid. From 1980-1995 UK aid to Vanuatu averaged \$13 million per year. French aid has declined from \$18 million per year in the first half of the 1980s to \$6.1 million per year currently.

Aid to Vanuatu is currently 14% of GDP, down from 28% of GDP in the first half of the 1980s. Vanuatu currently receives \$165 per capita per year of aid.

REFERENCES

- Alesina, A. and Dollar, D. (2000). "Who Gives Foreign Aid to Whom and Why?" *Journal of Economic Growth*, 5:1 (March), pp. 33-63.
- Burnside, C. and Dollar, D. (1997). "Aid, Policies and Growth." Policy Research Working Paper 1777, The World Bank, Washington, DC.
- Burnside, C. and Dollar, D. (1998). "Aid, the Incentive Regime, and Poverty Reduction." Policy Research Working Paper 1937, The World Bank, Washington, DC.
- Burnside, C. and Dollar, D. (2000). "Aid, Policies and Growth." *American Economic Review*, 90:4 (September), pp. 847-68.
- Burnside, C. and Dollar, D. (2004). "Aid, Policies, and Growth: Revisiting the Evidence." Policy Research Working Paper 3251, The World Bank, Washington, DC.
- Chauvet, L. and Collier, P. (2004). "Development Effectiveness in Fragile States: Spillovers and Turnarounds." mimeo Centre for the Study of African Economies, Oxford University.
- Chauvet, L. and Guillaumont, P. (2004). "Aid and Growth Revisited: Policy, Economic Vulnerability and Political Instability." In: Tungoden, B. et al., "Towards Pro-Poor Policies." World Bank/Oxford University Press.
- Collier, P. (1997). "The Failure of Conditionality." In: Gwin, C. and Nelson, J. (Eds.), "Perspectives on Aid and Development." Overseas Development Council, Washington, DC.
- Collier, P. and Dehn, J. (2001). "Aid, Shocks, and Growth." Policy Research Working Paper 2688, The World Bank, Washington, DC.
- Collier, P. and Dollar, D. (2002). "Aid Allocation and Poverty Reduction." *European Economic Review*, 46, pp. 1475-1500.
- Dollar, D. and Kraay, A. (2001). "Growth is Good for the Poor." Policy Research Working Paper 2587, The World Bank, Washington DC.
- Dollar, D. and Svensson, J. (2000). "What Explains the Success or Failure of Structural Adjustment Programs?" *Economic Journal*, 110, pp. 894-917.
- Durbarry, R., Gemmell, N. and Greenaway, D. (1998). "New Evidence on the Impact of Foreign Aid on Economic Growth." CREDIT Research Paper 98/8, University of Nottingham.
- Guillaumont, P. and Chauvet, L. (2001). "Aid and Performance: A Reassessment." *Journal of Development Studies*, 37:6 (August), pp. 66-92.
- Hadjimichael, M.T., Ghura, D., Muhleisen, M., Nord, R. and Ucer, E.M. (1995). "Sub-Saharan Africa: Growth, Savings and Investment, 1986-93." Occasional Paper 118, International Monetary Fund, Washington, DC.
- Hansen, H. and Tarp, F. (2001). "Aid and Growth Regressions." *Journal of Development Economics*, Vol. 64(2), pp. 547-570.

Hermann, R., Burger, K. and Smitt, H.P. (1990). "Commodity Policy: Price Stabilisation Versus Financing." In: Sapsford, D.A., and Winters, L.A., "Primary Commodity Prices: Economic Models and Policy." Cambridge University Press.

Lensink, R. and White, H. (1999). "Is there an aid Laffer curve?" CREDIT Research Paper 99/6, University of Nottingham.

Knack, S. (2000). "Aid Dependence and the Quality of Governance: A Cross-Country Empirical Analysis." Policy Research Working Paper 2396, The World Bank, Washington, DC.

Rodrik, D. (1996). "Understanding Economic Policy Reform." *Journal of Economic Literature*, XXXIV, pp. 9-41.

Williamson, J. (Ed.) (1994). "The Political Economy of Policy Reform." Institute for International Economics, Washington, DC.