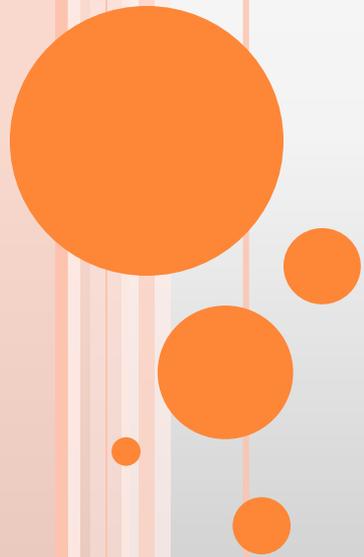


Are there any long-run commercial benefits for Australia associated with its aid to Asian countries?

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1. INTRODUCTION

- The primary objective of official development assistance (ODA) is to promote sustainable economic development and welfare of developing countries.
- But the political, strategic and commercial interests of donors have also been recognized as important determinants of aid allocation (Alesina and Dollar 2000).
- Donor commercial benefits from aid could accrue through the following channels:
 1. Directly, through donors tying aid to exports.
 - This practice was once widespread, and continues to be used by some donors. Australia fully “untied” its aid in 2006 (it had previously untied aid to LDCs in 2001)
 2. Indirectly, by creating goodwill (as argued by Arvin and Baum ,1997) or through ‘habit formation’, including enhanced networks between donor and recipient.



1. INTRODUCTION (CONT.)

Most studies focus on the development impact of aid. There are only a few that focus on the commercial impact of that aid for donor countries.

- There are several studies on trade impact of European aid; fewer on aid to Asia. These have produced mixed results:
 - positive impact of own-country aid on trade.
 - negative impact of other-country aid on trade.
- Nowak-Lehmann's (N-L, 2009) paper on the impact of German aid on German exports is the model for this paper.
- N-L find:
 - \$US1 of German aid has a return of \$US 1.04-1.50 in exports.
 - Aid from other European countries crowds out German exports.
 - ODA causes exports, but not *vice versa*.



1. INTRODUCTION (CONT.)

- We use the same methods as N-L to explore the impact of Australian aid on Australian exports to Asia.
- To date, Wagner (2003) is the only study to examine the impact of Australian aid on Australian exports.
 - That paper finds returns from aid on trade of \$US3.92
 - But it only looks at short-run, and the study is now out of date.



2. RESEARCH QUESTIONS

Our study investigates:

- Long-run effects of Australian aid on Australian exports to Asia. Long-run effects include:
 - short-run effects or immediate effects (the same period effects), which are often direct and associated with tied aid, and
 - additional effects in the next period and beyond, effects which are often indirect.
- If the commercial benefits from Australia's aid to Asia have been affected by the Australian Government's 2006 decision to completely untie its aid program from domestic procurement requirements.
- Long-run effects of DAC aid (excluding Australian aid) on Australian exports to the Asian countries



3. METHODOLOGY

In this study, we use a gravity model of international trade, and apply two groups of dynamic panel econometric techniques :

- ❑ Pool Mean Group PMG, Mean Group (MG) and Error Correction Model (ECM): to get long-run estimates, and
 - ❑ Dynamic Ordinary Squares (DOLS): to get long-run estimates, to provide a robustness test, and to test for Granger causality
-
- ❑ Data covers Australian aid to 17 recipient countries in Asia (excluding West Asia) during the period between 1980 and 2013
 - ❑ The sample includes: Afghanistan ,Bangladesh, Bhutan , Cambodia, China, India, Indonesia, Lao, Malaysia , Maldives, Myanmar, Nepal, Pakistan, Philippines, Sri Lanka, Thailand, Viet Nam.
 - ❑ The study is limited to these countries given data limitations



3. METHODOLOGY (CONT.)

- The gravity model states that the trade between two countries is explained by their gross domestic product (GDPs), or gross national product (GNPs) and populations, by the distance between their two economic centres, and by country-pair fixed factors that impede or facilitate trade such as whether two trading partners have trade agreements, common language, and common border; and whether one or both of them have had a colonial history
- However, in order to estimate the impact of aid on Australian exports the following multivariate long-run relationship is considered:

$$\log(EXP_{ijt}) = \beta_0 + \beta_1 \log(TGDP_t) + \beta_2 \log(TPOP_t) + \beta_3 \log(EXCH_{jit}) + \beta_4 \log(AIDAUS_{ijt}) + \beta_5 \log(AIDDAC_{kjt}) + \phi_{ij} + \pi_t + \varepsilon_{ijt}$$



4. RESULTS

TABLE (1): LONG-RUN ESTIMATES THE PMG, MG AND DFE

Technique	PMG	MG	DFE
Log of total GDP	0.15 *** (0.05)	-1.39 (0.87)	0.10 (0.16)
Log of total population	-2.89*** (0.78)	52.40 (53.25)	-1.82 (2.08)
Log of bilateral exchange rate	0.06 (0.07)	-1.32 (3.00)	0.02 (0.16)
Log of Australian aid	0.26*** (0.05)	2.60** (1.27)	0.28** (0.13)
Log of other DAC aid	0.20** (0.08)	0.38 (1.39)	0.62** (0.27)
TREND	0.06*** (0.01)	-0.90 (0.92)	0.05 (0.03)
Error correction term	-0.65*** (0.01)	-1.57*** (0.22)	-0.61*** (0.07)
Lon-run return on Australian aid	US\$8.10	US\$80.96	US\$8.72
Lon-run return on other DAC bilateral aid (Australia excluded)	US\$0.28	US\$0.52	US\$0.87
Husman test	1.00		1.00
Obs	510	510	510

Notes: The dependent variable is log Australian exports to Asian countries. Robust standard errors are in parentheses. ***, ** and * indicate statistical significance at the 1%, 5% and 10% level respectively.



4. RESULTS (CONT.)

TABLE (2) LONG-RUN ESTIMATES OF THE DOLS MODEL

	(1) DOLS (with FE)	(2) DOLS (with D-K)	(3) DOLS (with FE)	(4) DOLS (with D-K)
Log of total GDP	0.44 (0.40)	0.71*** (0.12)	0.31 (0.40)	0.81** (0.30)
Log of total population	-2.32* (1.25)	-1.77 (1.43)	-2.77** (1.26)	-1.85 (1.76)
Log of bilateral exchange rate	-0.02 (0.15)	-0.00 (0.13)	-0.01 (0.15)	-0.02 (0.14)
Log of Australian aid	0.17** (0.09)			
Log of Australian aid		0.21** (0.08)		
Log of Australian aid*post2006 (= 0 if year < 2006 and =1 if year => 2006)			-0.24 (0.18)	-0.04 (0.04)
Log of Australian aid (if year =<2006)			0.24*** (0.09)	0.20** (0.08)
Log of Australian aid (if year >2006)			-0.00 (0.19)	0.15** (0.07)
Log of Australian aid (if year >2006)			-0.00 (0.19)	0.15** (0.07)
Log of other DAC's aid	1.06** (0.20)	0.97*** (0.30)	1.10*** (0.20)	1.04** (0.38)



TABLE (2) (CONT.)

Trend	0.05 (0.05)	0.00 (0.02)	0.14* (0.07)	0.00 (0.06)
Long-run return on Australian aid For all years	US\$5.4	US\$6.4		
Long-run return on Australian aid for pre-1992			US\$7.5	US\$6.1
Long-run return on Australian's aid for post-2006			US\$5.7	US\$5.8
Long-run return on other DAC bilateral aid (Australia excluded)	US\$1.5	US\$1.4		
Country and year fixed effects	yes 572.20*** (0.00)	yes	yes 537.20*** (0.00)	yes
Breusch-Pagan LM test of independence				
Adj R ²	0.93		0.93	
R ²	0.92		0.92	
R ² (within)	0.63	0.60	0.64	0.61
Obs	495	495	495	495

Notes: The dependent variable is log of Australian exports to Asian countries. Models (1) and (3) were regressed using DOLS with Fixed-Effect technique; while Models (2) and (4) were regressed using Driscoll-Kraay (D-K) with Fixed-Effect technique to general forms of cross sectional-dependence as well as temporal dependence. . DOLS estimations were conducted using 2 leads and 4 lags. ***, ** and * indicate statistical significance at the 1% %5 and 10% respectively.



4. RESULTS (CONT.)

TABLE (3) SUMMARY RESULTS: THE RETURN OF AUSTRALIA AND OTHER DAC AID ON AUSTRALIA EXPORTS (USD)

Technique	(1) PMG	(2) DFE	(3) DOLS (with FE)	(4) DOLS (with D-K)	(5) DOLS (with FE)	(6) DOLS (with D- K)
Long-run return on Australian's aid For all years	US\$8.10	US\$8.72	US\$5.4	US\$6.4		
Long-run return on Australian's aid for pre-1992					US\$7.5	US\$6.1
Long-run return on Australian's aid for post-2006					US\$0.0	US\$5.8
Long-run return on other DAC bilateral aid (Australia excluded)	US\$0.28	US\$0.87	US\$1.5	US\$1.4		



4. RESULTS (CONT.)

Table (4) Tests for Granger causality show that in the long-run, Australian aid causes exports and *vice versa*.

Dependent variable	Source of causation (independent variable)				
	Short run		Long run		
	LEXPAUS	LAIDAUS	ECT	Joint (ECT and LEXPAUS)	Joint (ECT and LAIDAUS)
LEXPAUS	-	3.14 **	-0.55 ***	-	7.06 ***
LAIDAUS	0.65	-	-0.19 **	5.55 ***	-



5. CONCLUSION

Now to conclude:

- Australian aid has positive and significant impact on Australian exports to Asian countries
- Our long-run estimated results are much larger compared to the short-run estimates of Wagner of (2003) for Australia (Wagner: \$US 3.92; Otor-Dornan: US\$6.4 for the whole period, and \$US 6.1 for pre-2006 and \$US 5.8 for post-2006)
- These results are also much larger than those of N-L for Germany (cf: N-L, Germany: \$US 1.04-1.50 vs. Australia: \$US6.4 for the whole period[for long-run]) – even though we used the same approach
- Australian's aid causes an increase in Australian's exports, and vice versa. This suggests that Australia's government and Australia's agencies do in fact allocate aid as a reward and cement for existing commercial ties in the long-run



5. CONCLUSION (CONT.)

- ODA from other DAC donors also has positive and statistically significant impacts on Australian exports to Asian countries.
- These results are different to those of N-L for Germany.
- This suggests that aid money from DAC countries (excluding Australia) in Asia increases these countries foreign exchange holdings, thereby facilitating the purchase of goods from Australia.



5. CONCLUSION (CONT.)

Policy Implications

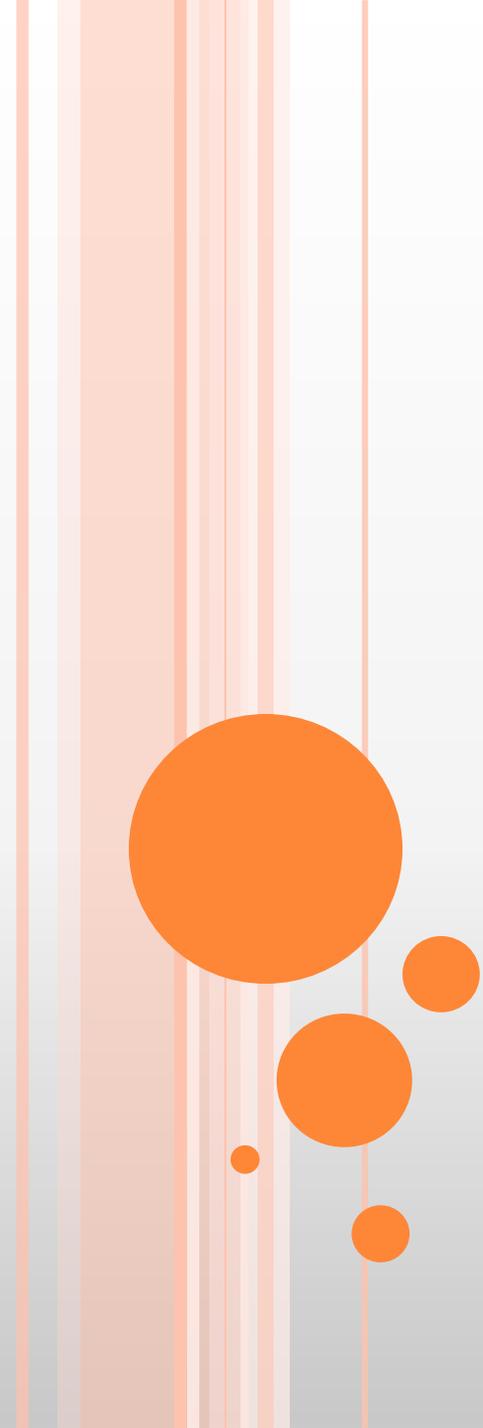
- Finally to summarize, I want to leave you with five points.
- First, this research supports other findings and demonstrates that there are commercial benefits that accrue to Australia as a result of Australian aid. These benefits could be in term of higher foreign reserves from exports and growing domestic export industries.
- Second, that other-country aid increases Australian's exports. Note, however, that this seems to vary from country to country. It is not a general result.
- Third, these benefits have been largely unaffected by the Australian government's decision in 2006 to untie aid from domestic procurement requirements. In other words, untied aid produces much larger commercial benefits to Australia than tied aid.
- .



CONCLUSION (CONT.)

- Fourth, the point suggests the goodwill effects outperform tied ones, and tying aid is unimportant and inefficient instrument for promoting the donor's exports.
- Fifth, as argued by Arvin and Baum (1997) that the stock of goodwill is subject to depreciation; so, Australia should be careful not erode this intangible asset



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THANK YOU

And happy to take your comments
and questions