ECONOMIC DEVELOPMENT IN THE PACIFIC

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May 2024

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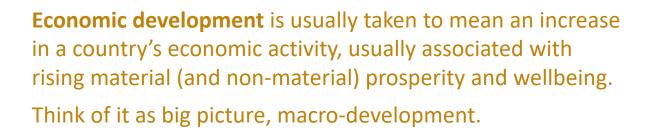


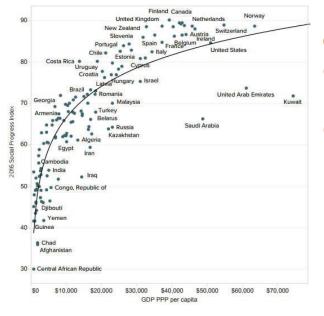
Today	01	Macro-development primer
	02	Describing Pacific economies
	03	Explaining poor Pacific growth
	04	Micro-development primer

05 Opportunities looking forward

There are lots of things we can't cover. What we are covering, we cannot cover particularly deeply. I'm happy to recommend some of our excellent graduate courses at the Crawford School.

What is economic development?

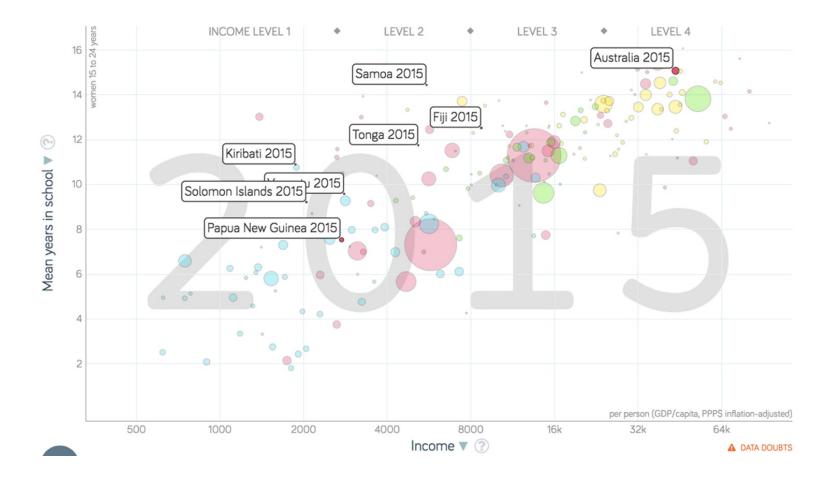




GDP per capita is a useful measure of economic development although it does not tell us about how broadbased it is, nor does it tell us about whether the development will be sustained.

"GDP per capita is not a measure of social progress. It just happens to be extraordinarily closely correlated with social progress." Harford, Sept 2022 <u>https://www.ft.com/content/08a7134c-7a40-4bfd-b85d-a8f52208143c?shareType=nongift</u>

See <u>https://ourworldindata.org/economic-growth</u>

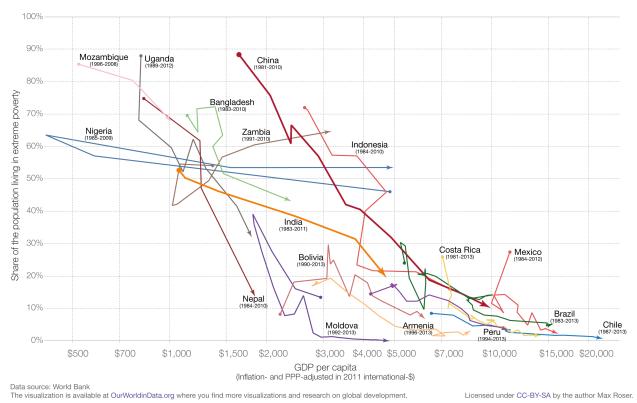


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Share living in extreme poverty vs GDP per capita over time



Extreme poverty is defined as living with less than \$1.90/day. Both, poverty and GDP per capita are measured by adjusting for price changes over time and for price differences between countries (purchasing power parity (PPP) adjustment). Shown are selected countries for which data is available for longer periods of time.



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https://devpolicy.org/fewer-adjectivesmore-focus-on-economic-growth-20220728/

Figure 2: Median income/consumption of a country completely predicts the level of poverty

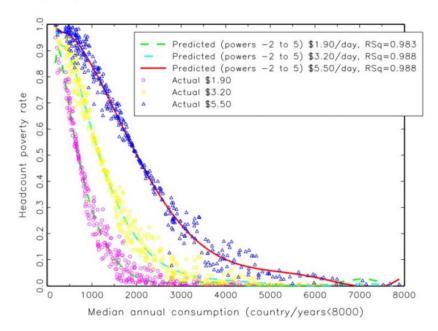
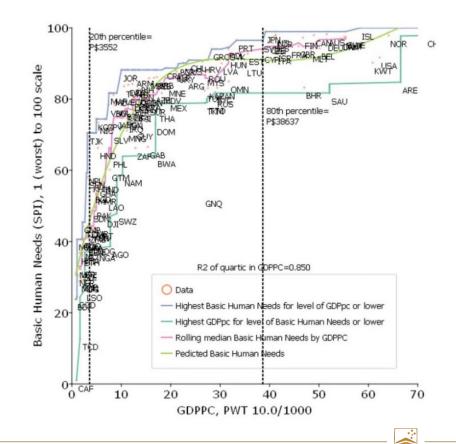


Figure 3: GDP per capita and the basics of human wellbeing





GROWTH GENERALISATIONS:

THREE STYLISED FACTS ABOUT ECONOMIC DEVELOPMENT

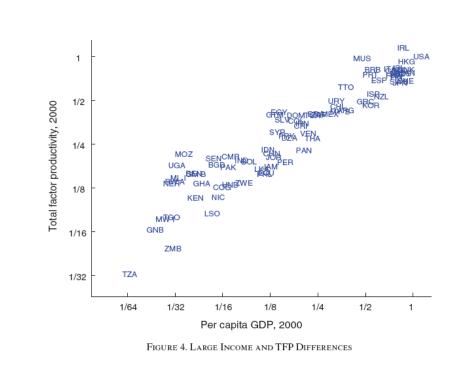
Economic development is driven by productivity growth

Low income countries tend to be poorer because they have:

Less physical capital per worker (machines, roads)

Less human capital per worker (education, skills)

And because they combine their different inputs much less efficiently



Low-income countries *can/do* grow faster

Lower income countries do have the *potential* to grow faster than developed economies

Far from the technology frontier, they can adopt technology and practices used elsewhere (e.g., patterns are particularly stark in global health)

Underpins the idea of economic convergence

Everything you know about cross-country convergence is (now) wrong

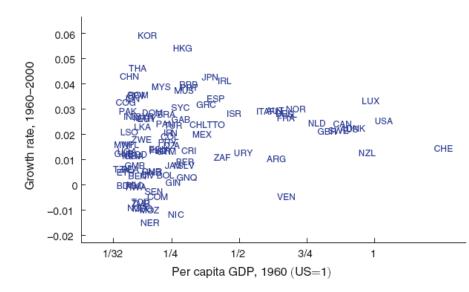


FIGURE 3. GROWTH VARIATION AND DISTANCE FROM THE FRONTIER



Urbanization is a key part of development

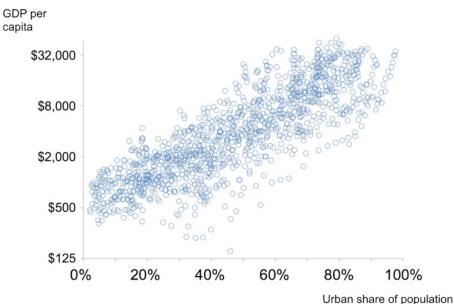
Labour in rural areas (i.e., agriculture) tends to have low productivity

Upon moving to urban areas, labour moves to activities with higher productivity, thus increasing national productivity

The result is economic growth and structural transformation.

Development = fewer farmers in the world

Urbanization passes the Pritchett test



Various Countries, 1955-2010



Journal of Urban Economics Volume 121, January 2021, 103301



Do urban wage premia reflect lower amenities? Evidence from Africa ☆

Douglas Gollin ^a ⊠, Martina Kirchberger ^{Ab}⊠, David Lagakos ^c⊠

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Abstract

In most developing countries, wages are substantially higher in cities than in rural areas. One possible explanation is that the higher wage levels of urban areas are offset by lower nonmonetary amenities. This paper draws on new high-resolution evidence to document how non-monetary amenities vary between urban and rural areas within 20 Sub-Saharan African countries. We focus on measures of public goods, crime and pollution. We find that in almost all countries, and for almost all measures, the quality of amenities is at least as high in cities as in rural areas. This finding casts doubt on the hypothesis that urban wage premia in the developing world represent a compensation for lower amenities. Table 5. Public goods by density quartile.

	Populatio	Population Density Quartile		
	Q1	Q2	Q3	Q4
Electricity grid	0.39	0.42	0.48	0.72
		1-0	0-4	0–10
Piped water system	0.36	0.35	0.42	0.67
		0-0	0–2	0–11
Sewage system	0.14	0.13	0.18	0.37
		0-0	0-0	0–7
School	0.91	0.90	0.90	0.90
		0-0	0-0	0-0
Health Clinic	0.59	0.58	0.62	0.73
		1-0	0-0	2–4
Police Station	0.29	0.30	0.33	0.47
		0-0	0-0	1–4
Market Stalls	0.62	0.64	0.64	0.76
		0–1	0-0	0–4
Paved Road	0.27	0.30	0.35	0.54
		1-0	1–2	0–6

Table 2. Housing quality by density quartile.

	Populatio	Population Density Quartile		
	Q1	Q2	Q3	Q4
Constructed floor	0.33	0.38	0.52	0.82
		1–5	0–12	0–19
Flush toilet	0.02	0.05	0.12	0.31
		0–3	0–10	0–19
Water collection (min)	29.4	24.3	20.7	12.2
		4-0	6-0	17-0
Finished roof	0.41	0.5	0.67	0.88
		2–8	1–14	0–19
Finished walls	0.35	0.42	0.53	0.82
		0–6	1–14	0–20
Sleeping rooms per person	0.61	0.62	0.61	0.61
		0–2	1–5	4–6
Cook inside with solid fuel	0.63	0.64	0.58	0.38
		0-4†	5-3†	$15-1^{\dagger}$

Table 3. Child health characteristics by density .

	Populati	Population Density Quartile		
	Q1	Q2	Q3	Q4
Anemic [†]	0.69	0.68	0.64	0.6
		0-0	3-0	7-0
Stunted (low height for age)	0.4	0.4	0.38	0.29
		0-0	3-1	11-0
Wasted (low weight for height)	0.1	0.1	0.09	0.09
		1-0	3-1	6-1
Below minimum diet	0.93	0.91	0.9	0.87
		1-0	2-0	5-0
Malaria [†]	0.35	0.32	0.29	0.13
		1-0	4-0	9-0

Structural change

As incomes rise and countries develop, agriculture's share falls

As incomes rise and countries develop, the share of workers in the agriculture falls faster

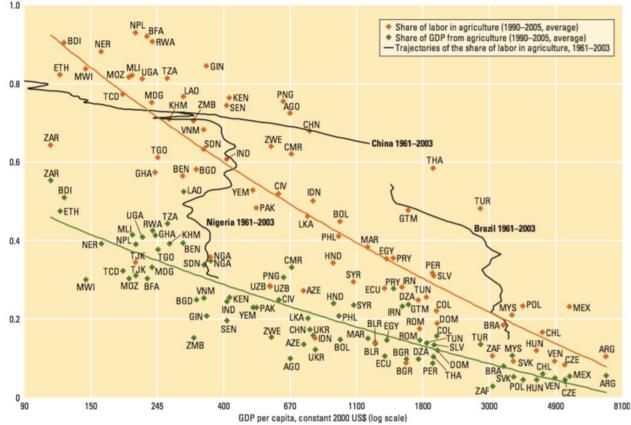
Agriculture becomes more productive Workers move to other sectors Other sectors are increasingly urban

Countries follow diverse trajectories

Figure source: 2008 WDR

Figure 1.2 As countries develop, the shares of GDP and labor in agriculture tend to decline, but with many idiosyncrasies

Share of labor and GDP in agriculture



CHARACTERISING PACIFIC ECONOMIES

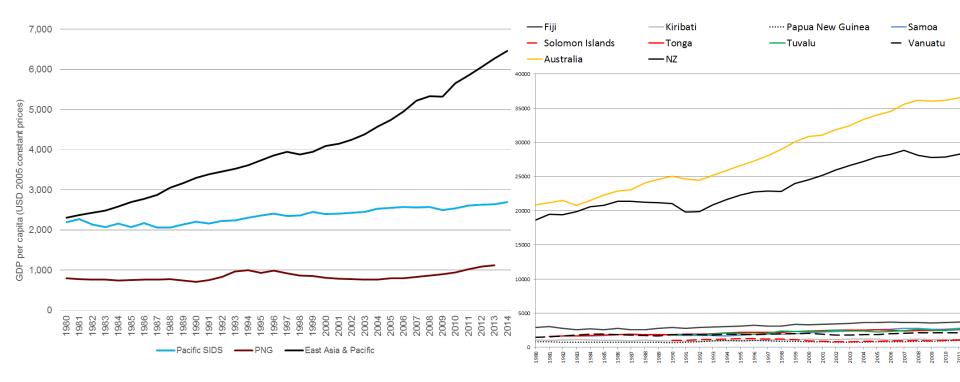
Gross national income per capita in the Pacific:

levels of development vary considerably

High income (> \$12,235)	Upper middle income (\$3,956 - \$12,235)	Lower middle income (\$1,006 - \$3,955)
New Caledonia - \$38,896*	Nauru - \$10,750	FSM - \$3,550
Cook Islands - \$14,331*	Tuvalu - \$5,090	Vanuatu - \$3,170 (2014)
Palau - \$12,330	Fiji - \$4,780	PNG - \$2,680
	RMI - \$4,630	Solomon Islands - \$1,880
(USA - ~\$62,000)	Samoa - \$4,120	Kiribati - \$1,140
(Australia - ~46,000)	Tonga - \$4,060	(note: mostly 2016)



Forty years of disappointing growth



A very simple typology of Pacific island economies

	Countries	Source of income
Resource export-led economies	PNG, Solomon Islands, Timor Leste	Minerals, oil, gas, timber, fisheries
Relatively diversified economies	Fiji, Samoa, Tonga, Vanuatu	Tourism, agriculture, remittances, aid, fisheries
Tourism economies	Cook Islands, Palau	Tourism, aid
Small island economies with limited resources	Kiribati, Marshall Islands, FSM, Nauru, Tuvalu, Timor Leste	Aid, fishing license revenues, offshore processing



EXPLAINING RECENT PERFORMANCE

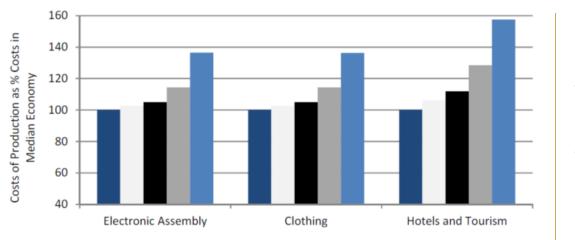
GEOGRAPHY VERSUS INSTITUTIONS



"Economic growth and diversification has been very limited in the Pacific islands because of the barriers imposed by smallness and distance, and these barriers will not be quickly overcome. Policy tweaks to the business environment aimed at fostering the emergence of an export-oriented private sector are unlikely to be effective in generating substantial employment growth."

World Bank 2012





"... there may be some very small economies that face such great absolute disadvantages that exporting at world prices is either impossible or generates factor incomes that are too low to subsist. In the limit free trade could mean no trade for these economies."

Median economy (10 million)

Small economy (4 million)

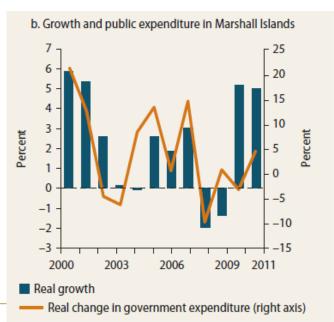
- Threshold (1.6 million)
- Very small economy (200,000)
- Micro economy (12,000)

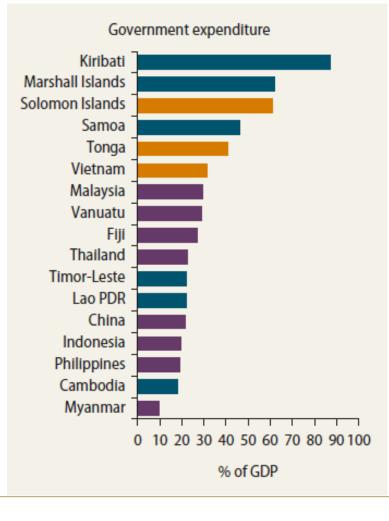
Winters and Martin 2004

Geography led to the "MIRAB" "model"

Migration, Remittances, Aid, Bureaucracy

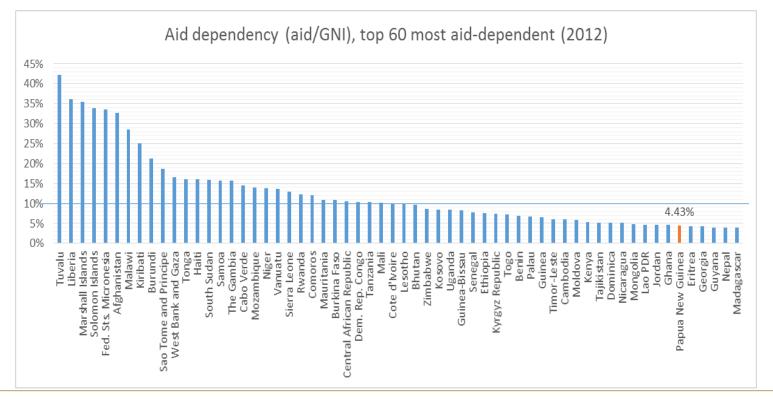
Below: economy is largely government Right: government is "big"





The Pacific is also quite aid-dependent

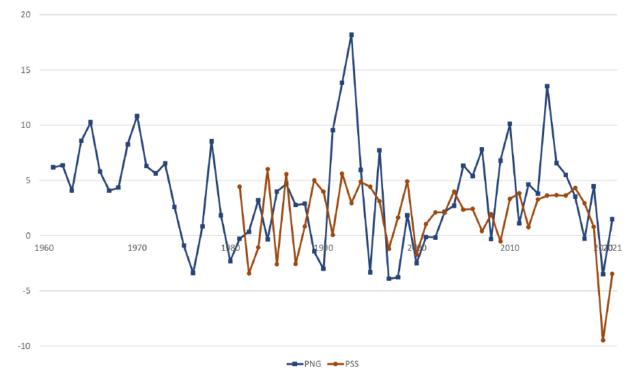
PNG: not so much, and below average for lower middle income countries (6.55%)





Incredibly volatile economies

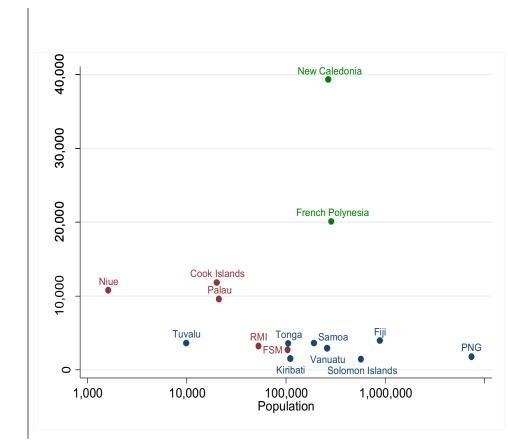
Figure 1. Annual real gross domestic product growth in the Pacific island countries, 1960-2021



Notes: PNG = Papua New Guinea; PSS = Pacific island small states = Fiji, Kiribati, Marshall Islands, Micronesia, Nauru, Palau, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu Source: Author, based on World Bank Open Data.

We do see that countries with better ties to larger, richer metropolitan countries are more developed

Green = Integrated Red = Associated Blue = Independent



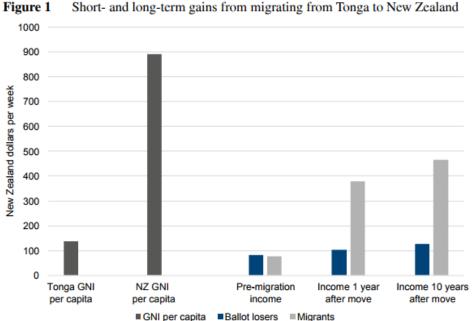


We also see that countries do better when they have greater labour mobility opportunities

C C	/	8	<u></u>	N/ C
Source:	Emigrants/	Remittances	GDP per	Years of
ANU-WB (2017)	population	/GDP	capita	school
Open labour market				
access				
Marshall Islands	22.4%	13.8%	\$4,630	10.9
FSM	39.2%	9.1%	\$3 <i>,</i> 550	8
Palau	32.8%	5.6%	\$12,330	10.4
High mobility				
Fiji	21.5%	6.2%	\$4,780	10.8
Samoa	46.2%	28.2%	\$4,120	10.3
Tonga	50.6%	45.8%	\$4,060	11.2
Low mobility				
PNG	0.2%	0.2%	\$2 <i>,</i> 680	4.6
Solomon Islands	0.3%	2.8%	\$1,880	5.5
Vanuatu	0.9%	5.9%	\$3,170	6.8
Climate affected atolls				
Kiribati	4.0%	11.1%	\$1,140	7.9
Tuvalu	18.4%	16.2%	\$5,090	~10



Why? Migration is simply the most effective development intervention

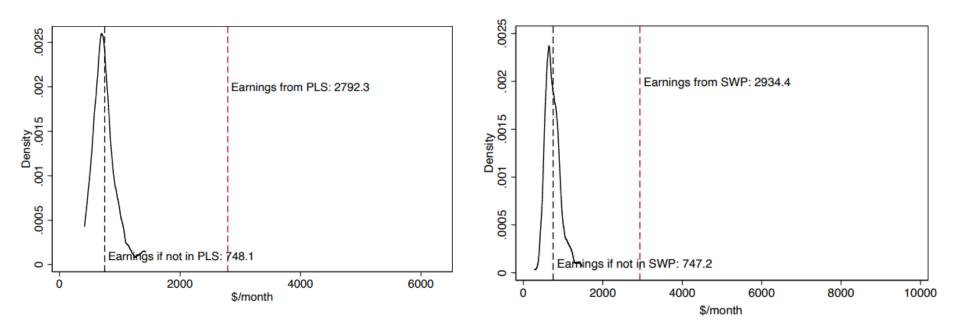


Short- and long-term gains from migrating from Tonga to New Zealand

Note: GNI per capita data are from the 2015 Human Development Report, and are converted into current weekly New Zealand dollars using a PPP to local currency exchange rate of 1.42 and dividing by 52 weeks.

Sources: Pre-migration income from 2002-2004, and income 1 year after move are from McKenzie et al. (2010); income ten years after move is from Gibson et al. (2015).

Pure income effect here, but there are many other channels



Whither a so-called brain drain?



A dynamic private sector is necessary to promote inclusive growth that results in formal employment, investment, and entrepreneurship. The quality of countries' institutions is the most important determinant of prosperity and growth."

ADB

The lack of economic growth and development in the Pacific ... is the result of inappropriate economic policies... Aid is not the solution to Pacific development, but a major part of the problem.

Helen Hughes

Institutionalist perspectives

Sources of Growth Spurts in Pacific Island Economies

Ron Duncan

Asia and the Pacific Policy Studies, 2016

Attempts to identify episodes of growth and non-growth, and understand factors behind

Pritchett (1998) methodology

Eight small and micro-states of the Pacific

FSM, RMI, Palau, Samoa, Tonga, Kiribati, Tuvalu, Vanuatu

Samoa and Vanuatu experience suggests that economic reform can lead to growth spurts

See also the Cook Islands

Unless aid leads to changes in institutions and policies, no long-lasting growth impacts

FSM and RMI experienced suggests aid can prop up GDP in the short run

But can have adverse impacts over the long run

Link to article



	Economic geography	MIRAB	Institutionalist
Productivity	Constraints to trade & FDI limit opportunities for the technology transfer needed for such growth	Migration can help with transfer of technology. Incomes in PICs can still rise as a result of remittances + aid	Barriers to business and exchange rates limit opportunities for such growth
Convergence	Normally, yes. But constraints to trade & FDI in PICs limit opportunities for such growth	Geography a constraint, but can be overcome	Such growth depends on institutions that facilitate investment
Urbanisation	Small size prevents urban areas of sufficient size from being established. Growth suffers.	Migration can address the geographical constraints suffered by PICs	Institutional bias against rural areas (high exchange rate + unequal service delivery) must stop



Both views are obviously not mutually exclusive, and in many ways correct.

See Pacific Possible, which I'll return to at the end. Link to Pacific Possible

Most importantly, economics is an increasingly empirical discipline, putting the science back in social science

While it is still challenging to predict sustained economic growth, there is an abundance of credible empirical evidence on most more precise development and aid questions

(e.g., aid absolutely can be effective, geographic and institutional constraints can be overcome, and migration is usually great.)

MODERN DEVELOPMENT ECONOMICS

I.E., DEVELOPMENT MICRO

Development economics is not all about economic development and growth.

Modern economics is more about tools and their applications, not the topic

These applications are helpful for understanding so much more than these massive questions, and are increasingly micro

The best way to think of and evaluate aid and policy interventions for effectiveness

Development macroeconomics:

Why are some countries poor and others rich? How do we achieve long-term economic growth? How does public debt affect the economy?

How to achieve Potential Dev. Macro Chu (OS Dev Micro Certainly about Conclusions

Development microeconomics examples?

Just a few development microeconomics examples

How can poor families get out of poverty?

Do anti-poverty and social protection programs actually work?

Why do some children get an education and others not?

Does giving out textbooks (or, free fees) improve learning?

Why do people underinvest in health?

Why are early childhood investments so important, and how can they be promoted?

How can we improve vaccine take-up?

How can child labour in developing countries be reduced?

Why is there so much informal and self employment, and are formal jobs better?

Why do farmers not adopt productivity improving technologies?

Why do people migrate, and what prevents people from moving?

Why do the poor borrow (or remit) at such high rates?

How can corrupt behaviour be reduced?

"for their experimental approach to alleviating global poverty."

"for his empirical contributions to labour economics" (Card)

"for their methodological contributions to the analysis of causal relationships."



III. Niklas Elmehed. © Nobel Media. Abhijit Banerjee Prize share: 1/3



© Nobel Prize Outreach. Photo: Paul Kennedy David Card Prize share: 1/2



Prize share: 1/3

© Nobel Prize Outreach, Photo:

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Joshua D. Angrist



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Economics is increasingly empirical micro, particularly development

We have seen a "credibility revolution" across the social sciences, which has transformed the way research is done and how we assess causal claims, attribution, and what evidence is credible.

Standard economics tools are critical for good policy design in many areas

(e.g., COVID response and debate in Australia: trade-offs, cost-benefit, behavioural responses, optimal contract designs, externalities, public finance issues, evidence on what interventions work etc.)

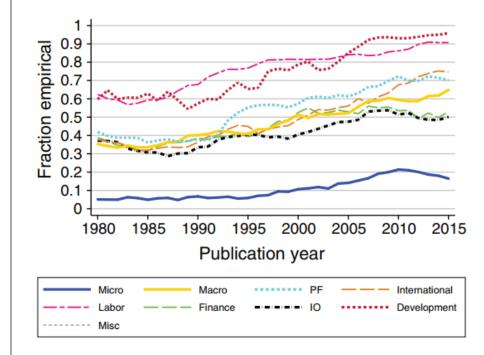
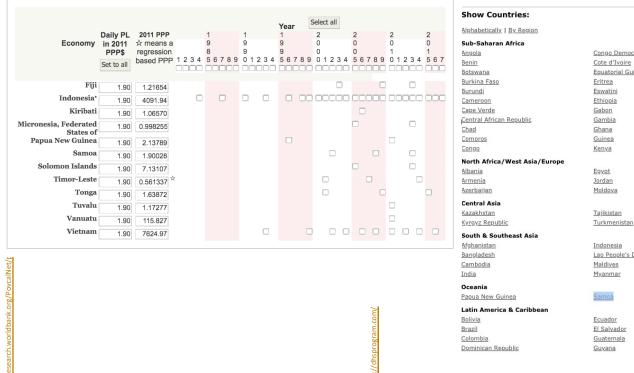


FIGURE 4. WEIGHTED FRACTION EMPIRICAL BY FIELD

The credibility revolution has not yet reached the Pacific

dhsprogram.com/Where-We-Work/Country-List.cfm



ntries:			
By Region			
Africa			
	Congo Democratic Republic	Lesotho	Rwanda
	Cote d'Ivoire	Liberia	Sao Tome and Principe
	Equatorial Guinea	Madagascar	Senegal
	Eritrea	Malawi	Sierra Leone
	Eswatini	Mali	South Africa
	Ethiopia	Mauritania	Sudan
	Gabon	Mozambigue	Tanzania
Republic	Gambia	Namibia	Togo
	Ghana	Niger	Uganda
	Guinea	Nigeria	Zambia
	Kenya	Nigeria (Ondo State)	Zimbabwe
West Asia/Europe			
	Egypt	Morocco	Ukraine
	Jordan	Tunisia	WestBank/Gaza
	Moldova	<u>Turkey</u>	Yemen
	Tajikistan	Uzbekistan	
<u>c</u>	Turkmenistan		
heast Asia			
neast Asia	Indonesia	Nepal	Thailand
	Lao People's Democratic Republic	Pakistan	Timor-Leste
	Maldives	Philippines	Vietnam
	Myanmar	Sri Lanka	<u>viction</u>
	<u>Hydrifter</u>	SITEURKU	
nea	Samoa		
& Caribbean			
	Ecuador	Haiti	Paraguay
	El Salvador	Honduras	Peru
	Guatemala	Mexico	Trinidad and Tobago
ublic	Guyana	Nicaragua	

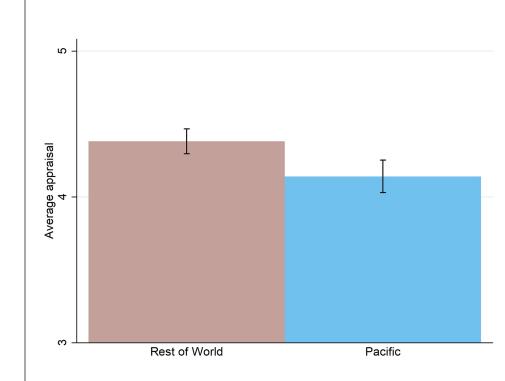
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Australian aid projects: what works, where projects work, and how Australia compares

Wood et al 2020

Asia and the Pacific Policy Studies

Link to article





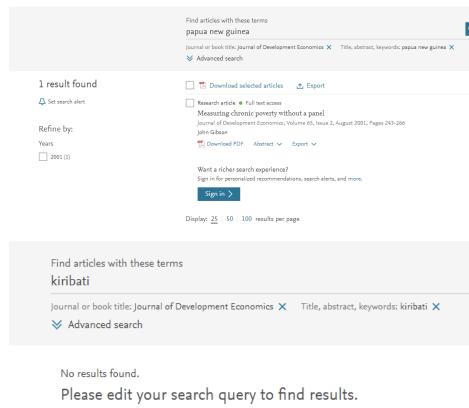
How can anyone prioritize, track progress, or make policy decisions without data or credible evidence on policy impacts?

Donors, governments, and contractors **cannot credibly be held to account** without data or and credible (c.f., MEL consultants) evaluations (institutional view here), and it is left to ideology, connections, anecdotes, and pet projects.

<u>Why do we care?</u> Australia is the main donor responsible for the region, which is **lagging the rest of the world** in this regard (data existence and availability, evidence-to-policy, and quality of evidence) and home to several fragile states.

Is this part of the reason for reasonably weak performance of development (domestic policy) and aid in the Pacific?

Very likely, if we think that governance or informed decision making is important!



Your search was: kiribati pub: Journal of Development Economics cid: 271688 tak: kiribati

Good aid and policy evaluation is feasible

Example: Pacific Early Age Readiness and Learning Program Correctly
b out of 10 of the most
frequently printed words
in their language.Correctly
cored 67-70% on reading
tests with PEARL (2018)

In Tonga, PEARL carried out a randomized control trial impact evaluation to provide evidence of what works for school readiness and early reading in the Pacific and why, as illustrated below. Results from monitoring and evaluation show that PEARL is successfully increasing children's school readiness and early grades reading skills.

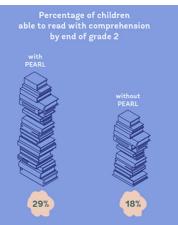
There are nascent regional developments, with a lot of promise, and lots of interest in countries

J-PAL Social Protection Initiative and K-CAI

Innovations for Poverty Action new Pacific projects

ANU-ADBI Pacific Research Partnership

Devpol Pacific Research Program projects and engagement



The Development Impact of a Best Practice Seasonal Worker Policy

John Gibson and David McKenzie

The Review of Economics and Statistics 2014

Rigorous casual impact evaluation of NZ's RSE scheme

Famous as "best practice" program, due to large stream of highly impactful casual studies

Together with our early and continue work at Devpol, arguably responsible for much growth in the SWP, the PLS, and the entire labour mobility agenda today.

Keys to success in research-to-policy impact?

Abstract Authors Supplemental Material

Seasonal migration programs are widely used around the world, yet there is little evidence as to their development impacts. A multiyear prospective evaluation of New Zealand's Recognised Seasonal Employer (RSE) seasonal worker program allows us to measure the impact of participating in this program on households in Tonga and Vanuatu. Using a propensityscore prescreened difference-in-differences analysis based on surveys fielded before, during, and after participation, we find that the RSE has indeed had positive development impacts that dwarf those of other popular development interventions. It has increased income, consumption, and savings of households; durable goods ownership; and subjective standard of living. The results also suggest that child schooling improved in Tonga.

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Keys to success in research-to-policy impact?

You need a rigorous quantitative casual design people believe.

Government must be committed to high qualiy evidence informing their policies, and champion independent research with with various stakeholders to make it happen.

Here, NZ government and stakeholders workers closely with researchers in terms of data access and program administration. Building in an equitable partnership from design stage.

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Induced sharp increase in discrimination against Indians Large emigration wave, mostly by skilled Indians What designs are available here?

Result: Increase in skill investment saw net skill stocks rise

Rather than general increase (e.g., from repatriated incomes), **heavy** investment in migration-specific skills (max. points!)



Sitiveni Rabuka talks to journalists after declaring himself head of state on 1 October 1987. *Steve Holland/AP Photo*



(a) Population of Fiji

(b) Permanent emigration from Fiji

(c) Fiji Islander settlers in Australia

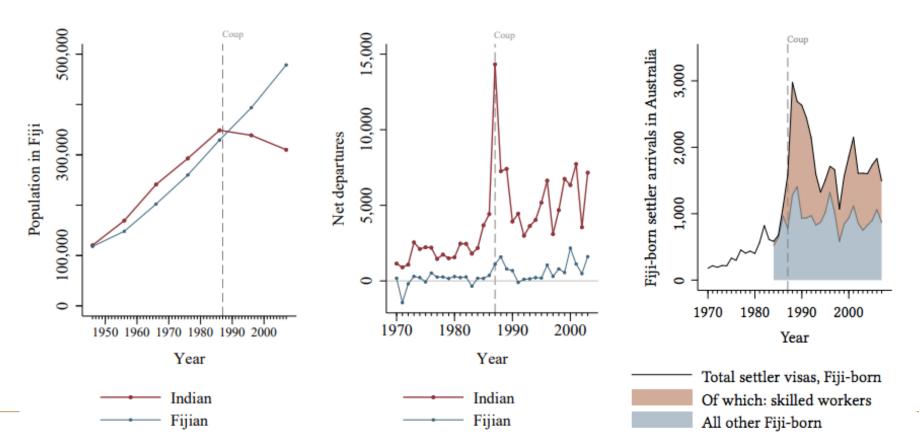
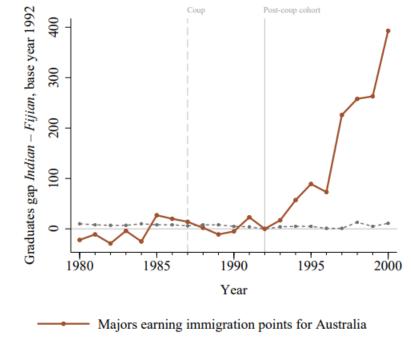


Figure 6: Event study coefficients: Graduates' majors at the University of the South Pacific in Fiji





What are the opportunities?



"<u>Pacific Possible recognizes</u> the constraints that geography imposes, but asks the question as to what would be possible if the few existing opportunities for economic growth were fully exploited and what reforms would be necessary to unlock these opportunities."

Five key areas of opportunity in Pacific Possible:

- 1. Tourism, the main opportunity for many countries
- 2. Labour mobility, up to \$13 billion additional net income
- 3. ICT, for jobs and productivity
- 4. Fisheries, additional \$300 million in revenue (Kiribati, Tuvalu, FSM)
- 5. Deep sea mining, although many risks and knowledge gaps.

<u>Plus:</u> agricultural productivity and rural development, market access and integration (locally and internationally), introducing more social protection, and improving service delivery and governance.



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