

# THE PLACE PREMIUM: EVIDENCE FROM THREE PACIFIC LABOUR MOBILITY SCHEMES

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# RESEARCH QUESTIONS

1. How different are Pacific migrants and their households compared to non-migrants and their households?
2. How much more do Pacific migrants earn from working in Australia or New Zealand compared to at home?
3. How much do Pacific migrants typically remit back home, and what is it usually spent on?

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**This paper** ⇒ Introduces the **Pacific Labour Mobility Survey** and presents **preliminary findings from the Tonga** household component, focusing on individual earnings gains and remittance behaviours

# WHAT WE DO

1. **Field the first round** of the first country, Tonga, of the **Pacific Labour Mobility Survey**, in person, Nov 2021–Jan 2022 (pandemic)
2. Use the new survey to **understand the differences between Tongans who participate in the schemes and those who do not**
3. Use these differences as the basis to **estimate the earnings gains** from moving to Australia or New Zealand to work
  - How much of this is sent home as remittances?
  - What are the remittances spent on?
  - Differences between the PLS and SWP? i.e., scheme type
  - Differences between the SWP and RSE? i.e., country

# WHAT WE FIND

- **Migrant and non-migrant households** appear to be generally quite **similar** (e.g., assets, children, housing)
- Migrating individuals are typically **younger, male** (particularly PLS), and more likely to be **single** (particularly RSE) than non-migrants.
- All three schemes deliver **significant earnings gains for workers**, but **relative** gains are largest for **SWP** and for **Australia**
- **Remittances alone** are typically **larger than earnings at home**
- SWP households typically receive more remittances and **everyday expenses, education, and donating back to churches and schools** are their most common uses.

# CONTRIBUTIONS

1. **New estimates of the income gains from moving (place premium)**
  - McKenzie, Gibson, and Stillman 2010 (Tonga-NZ)
  - Clemens, Montenegro, and Pritchett, 2008, 2019 (42 countries-US)
  - Parey et al 2017 (Germany + 20 recipient countries)
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## 2. New comparative evidence across time, skill, and country

- SWP is largely modelled on RSE (Gibson and McKenzie, 2014) but there remain no credible empirical comparisons of the two
- PLS developed as longer, higher-skill alternative scheme to the SWP, now dominated by men and certain sectors
- Here  $\Rightarrow$  PLS-RSE/SWP (time, sector), SWP-RSE (country)

# REST OF THIS TALK

1. Introducing the Pacific Labour Mobility Survey
2. Understanding selection: documenting the quantitative differences between migrants and non-migrants
3. Descriptive evidence on the earnings gains across schemes
4. Causal evidence on the earnings gains across schemes
5. Descriptive evidence on remittance levels and behavior
6. Summary and next steps

# THE PACIFIC LABOUR MOBILITY SURVEY

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**Household surveys** in Tonga (1st round completed, presented here), Kiribati, and Vanuatu (currently in the field), covering migrant and non-migrant households and members.

**Worker surveys** of PLS, SWP, and RSE workers (currently in the field).

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Some key features and points of differentiation:

- **Longitudinal:** tracking migrants and their families over time
- **Control group:** non-migrant households and detailed information on selection, migration history, and networks
- **Omnibus nature:** covers a wide range of issues from consumption, to education, to labour, to migration, to gender
- **Open-access:** will be made freely available to anyone anywhere

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Individual data for all household members, including migrants

**How.** Migrant household sample: selected from a **worker list** developed from multiple sources (e.g., PLF, LSUs, past WB surveys, and employers, with support from DFAT and MBIE)

Non-migrant household sample: selected using **probability proportional to size sampling** based on the **latest census** listing.

# MODULES: OMNIBUS NATURE IN COVERAGE

- Household roster
- Sociodemographics
- Education
- Children
- Labour
- Non-work income
- Expenditures
- Housing
- Assets
- Remittances, HH members
- Remittances, non-HH members
- Remittances, channels
- Temporary migrant HH details
- Non-temporary migrant household details
- Gender
- Follow-up and tracking
- Worker details

UNDERSTANDING SELECTION:  
DIFFERENCES BETWEEN MIGRANTS AND  
NON-MIGRANTS

# HOUSEHOLD ASSETS

	Non-migrant	SWP	PLS	RSE
TV	0.75	0.71	0.80	0.78
Solar panel	0.02	0.01	0.00	0.02
Power generator	0.07	0.05	0.09	0.04
Electric fan	0.53	0.51	0.68	0.51
Air conditioner	0.01	0.02	0.02	0.01
Landline phone	0.20	0.19	0.27	0.22
Mobile phone	0.98	0.98	1.00	0.99
Tablet	0.18	0.17	0.30	0.25
Computer/Laptop	0.40	0.35	0.57	0.44
Refrigerator	0.63	0.58	0.66	0.64
Freezer	0.59	0.58	0.68	0.65
Gas or electric oven	0.81	0.79	0.80	0.80
Microwave oven	0.24	0.22	0.25	0.22
Sewing machine	0.23	0.21	0.27	0.25
Washing machine	0.91	0.91	0.93	0.94
Poultry (chicken, duck, goose)	0.30	0.19	0.25	0.28
Cow	0.18	0.06	0.14	0.24
Pig	0.60	0.54	0.57	0.72
Goat	0.02	0.01	0.00	0.01
Observations	617	317	44	179

\* Proportion of households who own

\*\* Note how RSE workers appear to be from more agricultural areas.

# HOUSEHOLD CHARACTERISTICS

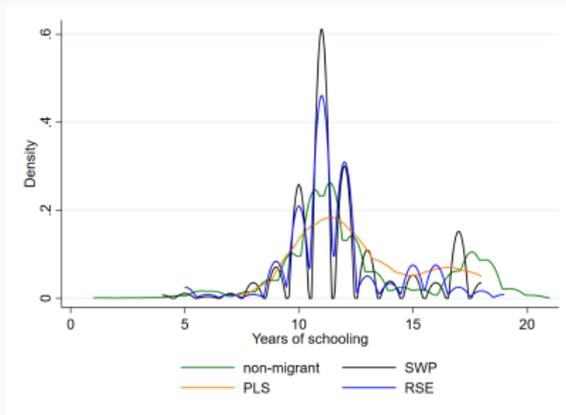
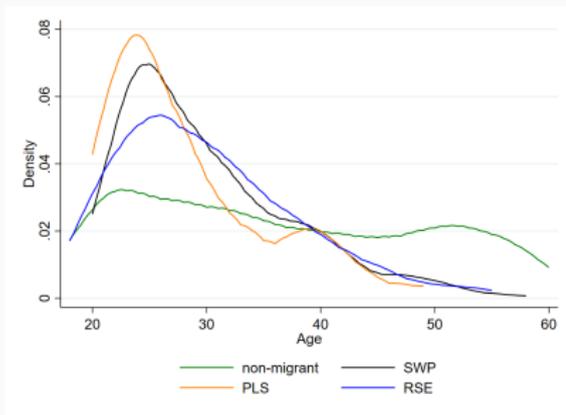
	Non-migrant	SWP	PLS	RSE
Household Size (N members)	5.47	7.43	8.14	6.91
Number of Children	1.93	2.35	2.16	2.06
Owned with debt	0.02	0.03	0.05	0.04
Owned, no loan	0.80	0.75	0.80	0.78
Rented	0.02	0.03	0.00	0.02
Occupied without payment	0.15	0.18	0.16	0.16
Family house detached	0.81	0.74	0.75	0.85
Family house, >1 structure	0.18	0.25	0.20	0.13
Building with 2+ apartments	0.00	0.01	0.05	0.01
Dwelling attached to shop etc.	0.00	0.00	0.00	0.01
2+ HH sharing kitchen/toilet	0.00	0.00	0.00	0.01
Total	618	317	44	179

\* Proportion of households

# INDIVIDUAL CHARACTERISTICS

	Non-migrant	SWP	PLS	RSE
Age (years)	36.72	30.09	28.17	30.10
Sex (=1 if female)	0.57	0.22	0.25	0.11
Years of schooling	12.52	11.87	12.70	11.64
Single (never married) (=1)	0.31	0.47	0.57	0.62
Legally Married	0.61	0.45	0.38	0.32
Customary married	0.01	0.00	0.01	0.01
Divorced/separated	0.04	0.07	0.04	0.05
Widowed	0.03	0.01	0.00	0.01
Observations	2914	490	76	167

# MIGRANTS ARE YOUNGER, SIMILARLY EDUCATED



# EARNINGS GAINS FROM WORKING ABROAD

# METHODS—SUMMARY

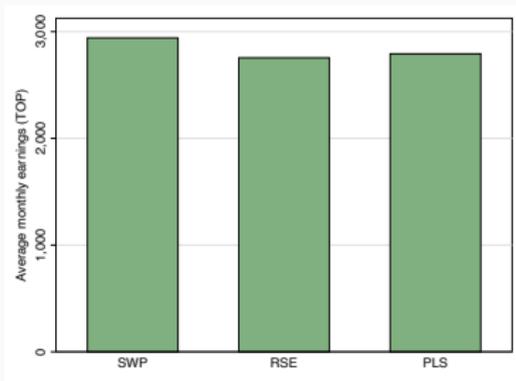
1. Review new data on migrant earnings abroad at the individual level, as reported by household head in Tonga
2. Predict each migrant's counterfactual earnings in Tonga using augmented Mincer regressions; compare predicted earnings at home to average earnings abroad (Parey et al 2017 RESTAT)
3. Use the variables quantitatively important for selection to match migrants to more comparable non-migrants and identify the gains from moving (Gibson and McKenzie 2014 RESTAT)
4. Estimate the importance of variables we don't observe in explaining these gains, placing reasonable bounds on estimates (Rosenbaum, 2002; Oster 2019 JBES) \*

\*Still to be added

# AVERAGE EARNINGS ABROAD BY SCHEME

Question answered by the household head in Tonga:

How much did [name] earn last month from wages, salaries, commissions, and non-agricultural business income, before taxes and other deductions?



Household head reporting could be incorrect (e.g., taxes/deductions) but clearly in the right ballpark, as 3000 Tongan Pa'anga (TOP) is around 1900/mth AUD, or 500/wk.

Earnings also rise with hours worked: SWP average is 48/wk, and PLS 40.

Knowing awards, consider as lower bounds then check in worker survey/admin data.

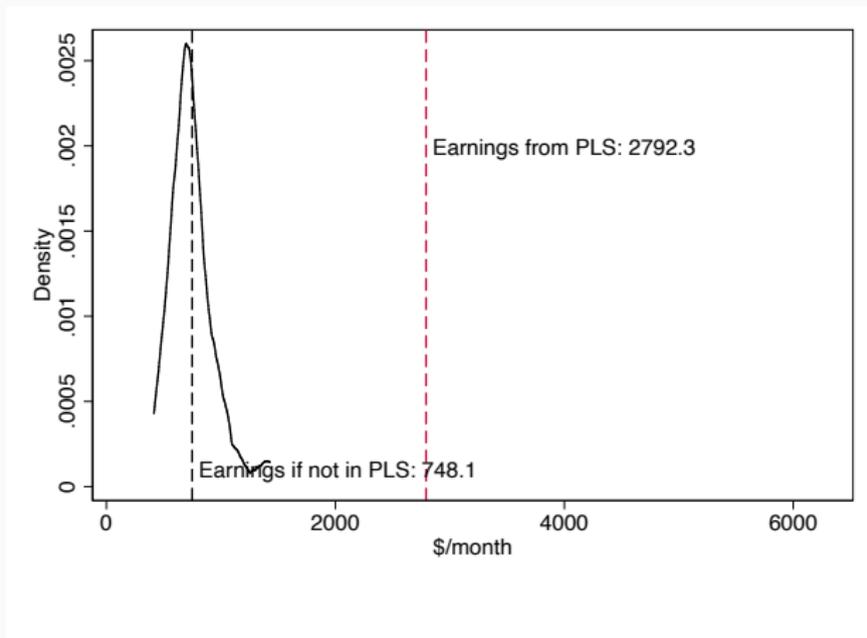
HOW MUCH WOULD PALM AND RSE  
WORKERS EARN AT HOME?

# AUGMENTED MINCER REGRESSION RESULTS

	Log of earnings
Log of age	4.932** -3.27
Log of age squared	-0.622** (-2.94)
Years of schooling	0.0762*** -12.93
Sex (=1 if female)	-0.157*** (-3.86)
Legally Married	0.0655 -1.18
Customary married, live-in, de facto, engaged	-0.119 (-0.50)
Divorced/separated	0.0313 -0.27
Widowed	-0.132 (-0.95)
Observations	1596

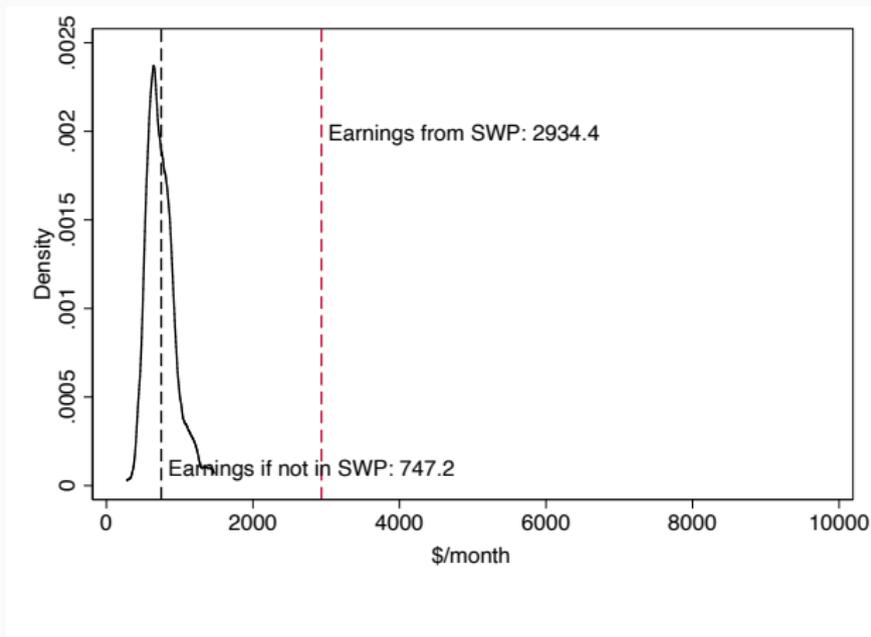
\* Regression is of non-migrant working individuals in Tonga. t statistics are in parentheses. Average and median pre-tax earnings in Tonga for individual non-migrants were 1106 and 800 respectively. Currency is Tongan Pa'anga (TOP), where 1 TOP = 0.61 AUD (26/6/2022)

# PREDICTED EARNINGS AT HOME C.F. PLS



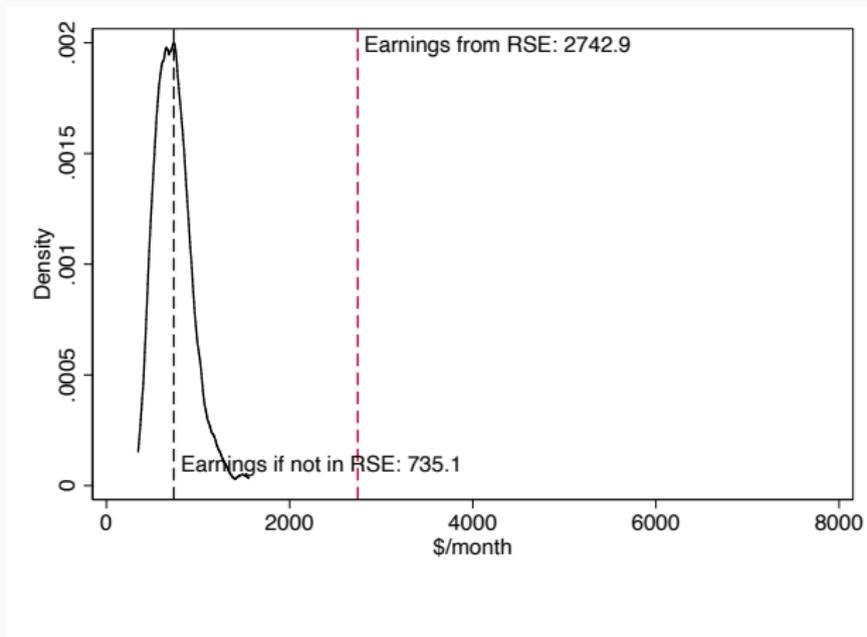
\* Monthly earnings, before taxes/deductions, as reported by household heads (likely a lower bound).  
Average monthly PLS remittances are 711.5 TOP  
Average and median pre-tax earnings in Tonga for individual non-migrants were 1106 and 800 respectively.

# PREDICTED EARNINGS AT HOME C.F. SWP



\* Monthly earnings, before taxes/deductions; average monthly SWP remittances are 1055 TOP

# PREDICTED EARNINGS AT HOME C.F. RSE



\* Monthly earnings, before taxes/deductions; average monthly RSE remittances are 863 TOP

# IMPACTS OF PARTICIPATION ON EARNINGS

	Log of monthly earnings		
Participate in SWP	1.244***		
	(10.73)		
Participate in PLS		0.961***	
		(6.5)	
Participate in RSE			0.890***
			(7.9)
Observations	1766	1434	1497

\* t statistics are in parentheses.

Impact estimates are based on matching migrants to non-migrants in terms of age, education, sex, and marital status using a simple propensity score-based matching estimator.

Interpretation: earnings roughly double from participation after accounting for observable determinants of scheme participation.

# REVERSING THE GENDER PAY GAP

	Log of monthly earnings			
	SWP		RSE	
Participation	1.048*** (0.00)	1.195*** (0.00)	1.001*** (0.00)	1.193*** (0.00)
Female	-0.101** (0.01)	-0.116*** (0.01)	-0.101** (0.02)	-0.119*** (0.01)
Participation*Female	0.174* (0.08)	0.184* (0.08)	-0.163 (0.45)	-0.115 (0.61)
Log age		0.502*** (0.00)		0.529*** (0.00)
Log years of schooling		1.185*** (0.00)		1.254*** (0.00)
Observations	2136	1766	1819	1497

\*p-values in parentheses. OLS estimation. Insufficient variation in PLS by gender to do the same.

# REMITTANCES

# REMITTANCE LEVELS—LAST 6 MONTHS

	SWP	PLS	RSE
Remittance value in TOP	6329.2	4269.12	5176.3
Remittance value in AUD	3904.8	2633.83	3193.52
Proportion of senders	0.92	0.895	0.949
Share of (pre-tax, deductions) earnings abroad	0.36	0.25	0.31
Share of (pre-tax) earnings at home	1.41	0.95	1.17
Remittances in goods	1466.18	2114.29	1449.08
Proportion of senders	0.069	0.092	0.228
Observations	490	76	167

\* Currency is Tongan Pa'anga (TOP). 1 TOP = 0.61 AUD (26/6/2022)

\* Puzzle: RSE workers are twice as likely to send goods...

# REMITTANCE BEHAVIOURS

	SWP	PLS	RSE
Paying everyday expenses (e.g. food/bus	0.82	0.83	0.85
Paying school fees or other educational	0.25	0.25	0.31
Paying for health expenses	0.06	0.08	0.14
Buying durable goods (e.g. TV, car,boat)	0.02	0.05	0.03
Buying livestock, fertilizers, or equipment	0.03	0.05	0.03
Buying or starting a small business	0.03	0.03	0.04
Building or renovating dwelling	0.05	0	0.09
Repaying loans from banks, money lenders	0.08	0.08	0.04
Putting into a savings account or other	0.16	0.08	0.16
Donating to church	0.38	0.3	0.51
Donating to schools	0.13	0.08	0.18
Other	0.15	0.15	0.2
Observations	203	40	108

\* Proportion of remittance receivers who use remittances for these things

\*\* Consistent with WB COVID report, Demurger and Wang (2016), and Adams and Cuecuecha (2010)

# CONCLUSION

# SUMMARY

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**Limitations.** Preliminary findings from the broader Pacific Labour Mobility Survey. Data are a cross-sectional, for now, and households have highly imperfect knowledge of family members' earnings abroad. Selection issues potentially biasing estimates cannot be perfectly addressed in a non-experimental setting.

# NEXT STEPS

Data collection is still underway and this presentation shared some preliminary findings from the Tongan data. Next steps include:

1. Refine design and estimate impacts on other important outcomes
2. Compare results across countries when other household data collected this year, increasing precision and generality
3. Better understand the experience of workers in Australia and New Zealand with the worker survey, also this year. Compare worker information here with the self-reports and administrative data.
4. Use these surveys as a baseline to measure the impacts of new policy interventions to improve migrant/development outcomes
5. Estimate medium and long term impacts, exploiting the longitudinal nature, after the next round (next year)

# THANK YOU

Please send any comments and suggestions to

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