MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
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NEW ZEALAND WORK RESEARCH INSTITUTE

For the Modelling Community of Practice

The Pacific workforce and the impact of COVID-19

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Disclaimer

The results in this paper are not official statistics; they have been created for research purposes from the Integrated Data Infrastructure (IDI), managed by Statistics New Zealand (Stats NZ). The opinions, findings, recommendations, and conclusions expressed in this paper are those of the authors, not Stats NZ.

The results are based in part on tax data supplied by Inland Revenue to Stats NZ under the Tax Administration Act 1994. This tax data must be used only for statistical purposes, and no individual information may be published or disclosed in any other form or provided to Inland Revenue for administrative or regulatory purposes. Any person who has had access to the unit record data has certified that they have been shown, have read, and have understood section 81 of the Tax Administration Act 1994, which relates to secrecy. Any discussion of data limitations or weaknesses is in the context of using the IDI for statistical purposes and is not related to the data's ability to support Inland Revenue's core operational requirements.

Access to the anonymised data used in this study was provided by Stats NZ in accordance with security and confidentiality provisions of the Statistics Act 1975. Only people authorised by the Statistics Act 1975 are allowed to see data about a particular person, household, business, or organisation, and the results in this paper have been confidentialised to protect these groups from identification. Careful consideration has been given to the privacy, security, and confidentiality issues associated with using administrative and survey data in the IDI.

Further detail can be found in the Privacy impact assessment for the Integrated Data Infrastructure available from www.stats.govt.nz.

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Outline of the presentation

- Section 1 – Context and background
- Section 2 – Data
- Section 3 – Model
- Section 4 – Results

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Section 1

Context and background

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Existing labour market disparities

Clear ethnic disparities exist in the New Zealand labour market

Pasifika face **higher unemployment rates** and **benefit recipiency** numbers compared to NZ Europeans

Gender differences exacerbate existing ethnic disparities

Women more likely to be **employed part-time** and have **higher underutilisation rates** compared to men

Disparities even more so pronounced for Pasifika women

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The COVID-19 pandemic

The government imposed far-reaching restrictions…

Such as working from home orders and social distancing

…impacting business and employees

Reduced working hours and wages, increased job losses, uptake of benefit recipiency

Government introduced support schemes, with the labour market bouncing back since…

Falling unemployment rates and increasing labour force participation

…however, recovery rates have been heterogenous across industries, demographics and region

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COVID-19 impacts on Pasifika

Pasifika were adversely impacted during COVID-19

Higher job losses, greater benefit recipiency rates, higher unemployment and underutilisation rates

Pasifika concentrated in industries impacted by COVID-19 restrictions

Such as construction and manufacturing

Pasifika women possibly more impacted due to gender and ethnic differences

- 90% of reported job losses were held by women
- Increased unemployment and underutilisation compared to men

However, studies mostly descriptive in nature or do not focus COVID-19 impact through ethnicity lens

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Our research questions:

Research aim 1:

Quantify the labour market disparities for Pasifika, relative to NZ Europeans, prior to COVID-19

Research aim 2:

Estimate the impact of COVID-19 on Pasifika labour market outcomes

Using administrative data in the IDI on employment, earnings and benefit recipiency

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Section 2

Data

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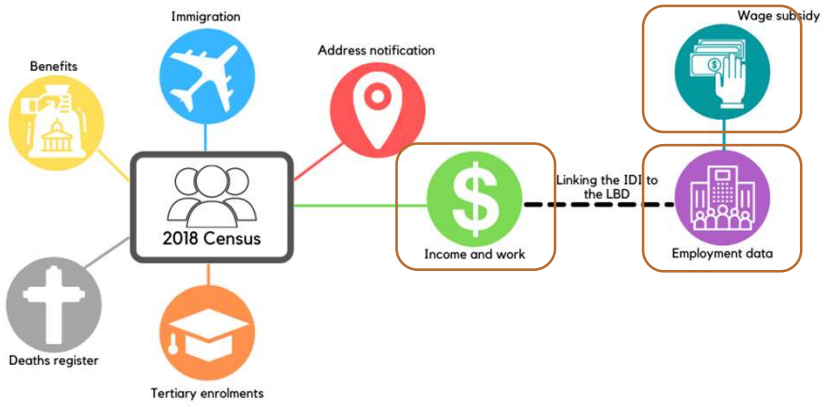
Forming our panel



Pre-COVID time period
Jan 2017– Dec 2019

COVID time period
Mar 2020 – Jun 2021

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Demographic profile of the workforce

Pasifika men

Average age: 38.2

65.5% of population in Auckland

73.4% living in high deprivation areas

Qualifications:

- 31.0% have no qualifications
- 9.7% have a Bachelors Degree
- 11.7% have a post-graduate degree

NZ European men

Average age 43.1

26.3% of population in Auckland

31.5% living in high deprivation areas

Qualifications:

- 20.9% have no qualifications
- 7.0% have a Bachelors Degree
- 23.4% have a post-graduate degree

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Demographic profile of the workforce

Pasifika women

Average age: 38.5

68.8% of population in Auckland

75.7% living in high deprivation areas

Qualifications:

- 24.4% have no qualifications
- 11.1% have a Bachelors Degree
- 13.3% have a post-graduate degree

NZ European women

Average age 43.3

25.8% of population in Auckland

30.7% living in high deprivation areas

Qualifications:

- 18.8% have no qualifications
- 7.8% have a Bachelors Degree
- 12.8% have a post-graduate degree

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Demographic profile of the workforce

Pasifika men

Employment status (if employed):

- 93.3% paid employee
- 6.3% employer or self-employed
- 0.3% unpaid family worker

European men

Employment status (if employed):

- 77.0% paid employee
- 23.3% employer or self-employed
- 0.8% unpaid family worker

Pasifika women

Employment status (if employed):

- 96.0% paid employee
- 3.6% employer or self-employed
- 0.5% unpaid family worker

European women

Employment status (if employed):

- 84.2% paid employee
- 14.2% employer or self-employed
- 1.6% unpaid family worker

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Pre-COVID labour market distribution

Using the 2018 Census and Inland Revenue data

Pasifika men concentrated in…

- Manufacturing (26.9%)
- Construction (13.8%)
- Transport, Postal and Warehousing (10.2%)
- And Wholesale Trade (9%)

…and predominantly employed as:

Machinery operators and drivers (25.8%) and labourers (24.2%)

With mean wage of:

$4859 compared to $5792 for NZ European men

Pasifika women concentrated in…

- Healthcare and Social Assistance (16.1%)
- Manufacturing (13.3%)
- Administrative and support services (9.8%)
- And Retail Trade (9.5%)

…and predominantly employed as:

Clerical and administrative workers (20.6%), labourers (19.9%) and community and personal services workers (19.1%)

With mean wage of:

$3854 compared to $3846 for NZ European women

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Section 3

Model

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Outcomes of interest

Job accession and benefit dependence

Individuals non-employed 12 months before:

- Labour market entry
- Wage scarring
- Low-pay risk entering employment
- Any benefit dependence
- Unemployment – related benefit dependence

Job and wage mobility

Individuals employed 12 months prior and currently:

- Wage progression
- Low-pay risk in employment
- Job stability
- Industry stability

Job separation

Individuals employed 12 months prior and non-employed currently:

- Job separation
- Any benefit receipt
- Unemployment-related benefit receipt

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Our model

$$y_{it} = \beta_1 P_i + \beta_2 COVID_t + \beta_3 P_i \times COVID_t + X'_{it}\gamma + E'_{i(t-12)}\delta + u_{it} \quad (1)$$

with subscript i referring to individual $i = 1, \ldots, N$ and t to the time-point, spanning January 2017 to June 2021 (inclusive).

- y_{it} = dependent variable
- P_i = ethnicity dummy
- $COVID_t$ = binary COVID indicator
- $P_i \times COVID_t$ = interaction effect between ethnicity and COVID time period
- X'_{it} = individual-level explanatory variables
- $E'_{i(t-12)}$ = labour market information
- u_{it} = idiosyncratic shock

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Our model

- We first estimate disparities pre-COVID between Pasifika and European (β_1)
- We then estimate how these disparities changed for the population during COVID (β_2)
- And then measure the Pasifika-specific effect during COVID (β_3)

Controlling for:

- Education
- Age
- Occupation
- Smoking status
- Disability status
- Social marital status
- Region of residence
- Employer characteristics (for those employed at t-12)

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Section 3

Results

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Job accession

Labour market entry

Men			Women		
Pre-COVID (2017-19)	COVID (2020-21)	COVID Change	Pre-COVID (2017-19)	COVID (2020-21)	COVID Change
Labour market entry (in percentage points)					
0.003	0.007***	0.004	-0.004*	-0.010***	-0.006***

Wage scarring

Men			Women		
Pre-COVID (2017-19)	COVID (2020-21)	COVID Change	Pre-COVID (2017-19)	COVID (2020-21)	COVID Change
Wage scarring (in percent)					
-0.225***	-0.250***	-0.024*	0.019*	-0.051***	-0.070***

Drop in likelihood of exiting benefit recipiency during the pandemic for both genders

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Other outcomes

Job and wage mobility

Men			Women		
Pre-COVID (2017-19)	COVID (2020-21)	COVID Change	Pre-COVID (2017-19)	COVID (2020-21)	COVID Change
Wage progression (in percent)					
-0.054***	-0.050***	0.004**	0.001	-0.005***	-0.006***
Low-pay risk (when already employed) (in percentage points)					
0.032***	0.034***	0.003*	-0.043***	-0.042***	0.001

Economically small shifts in job and industry stability due to COVID

Similarly economically small shifts for job separation outcomes

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Sub-population analysis

Restricted samples:

1. Below the age of 30
2. Above the age of 50
3. Individuals without school qualifications
4. Individuals living in Auckland
5. Excluding the year 2020

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Results

Wage scarring

Men			Women		
Pre-COVID (2017-19)	COVID (2020-21)	COVID Change	Pre-COVID (2017-19)	COVID (2020-21)	COVID Change
Below the age of 30					
-0.027*	-0.135***	-0.108***	0.050***	-0.106***	-0.157***
Auckland					
-0.272***	-0.316***	-0.045**	-0.024*	-0.134***	-0.110***
Only considering 2021					
-0.224***	-0.244***	-0.019	0.027***	-0.057***	-0.084***

We find similarly large impacts on wage progression for young Pasifika living in Auckland

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Sub-sample: young and living in Auckland in 2021

Men			Women		
Pre-COVID (2017-19)	COVID (2020-21)	COVID Change	Pre-COVID (2017-19)	COVID (2020-21)	COVID Change
Wage scarring					
-0.053**	-0.198***	-0.145***	0.019	-0.228***	-0.247***
Wage progression					
-0.070***	-0.053***	0.017**	-0.041***	-0.078***	-0.037***

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Employer characteristics

Industry-specific wage progression during the pandemic

$$y_{it} = \beta_1 I_i + \beta_2 COVID_t + \beta_3 I_i \times COVID_t + X'_{it}\gamma + u_{it} \quad (2)$$

Equation (2) measures employee's mean monthly wage

Findings: positive relationship between industries that experienced significantly lower wage growth due to COVID and industries where Pasifika are most prevalent (i.e. manufacturing, construction, accommodation and food services)

For example, 10% of Pasifika women work in Administrative Services which saw a 4.5% drop in wage growth (relative to Agriculture)

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COVID-19 Wage Subsidy Scheme

$$y_{it} = \beta_1 P_i + \beta_2 CWS_t + \beta_3 P_i \times CWS_t + X'_{it}\gamma + E'_{i(t-12)}\delta + u_{it} \quad (3)$$

Equation (3) measures wage-level for CWS firms compared to non-CWS firms

Firms that received subsidy those that experienced at least a 30 percent drop in revenue compared to the same month in the previous year

Sizable impact on both wage scarring and wage progression for employees in firms that received the CWS versus those that did not.

Effects larger in Auckland

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Conclusion

- Significant pre-pandemic labour market disparities between NZ European and Pasifika
- COVID-19 amplified ethnic disparities for some sub populations: women, those below 30, living in Auckland and for 2021
- Largest impacts on wage progression and wage scarring
- Industries hit the hardest by the pandemic positively correlate with where Pasifika are prevalent:
  - Pasifika men: manufacturing and construction
  - Pasifika women: manufacturing and healthcare

Policy needs to tackle recent COVID-impacts and be long-term focussed to address entrenched disparities pre-COVID

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Thank you!

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