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TE KĀHUI RANGAHAU MANA TAURITE

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Gender and ethnic pay gaps:
An industry level portrait for New Zealand

Commissioned by the Ministry for Women

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Disclaimer

These results are not official statistics. They have been created for research purposes from the Integrated Data Infrastructure (IDI) and Longitudinal Business Database (LBD) which is carefully managed by Stats NZ. For more information about the IDI and LBD please visit https://www.stats.govt.nz/integrated-data/.

The results are based in part on tax data supplied by Inland Revenue to Stats NZ under the Tax Administration Act 1994 for statistical purposes. 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.

Research aims

- Aim 1: Estimation of gender, ethnic, and intersectional (gender-ethnic) pay gaps by industry in New Zealand over 2016 to 2022

- Aim 2: Exploration of structural and contextual drivers of pay gaps

- Building on previous work on gender (Pacheco et al., 2019) and ethnic (Cochrane & Pacheco, 2022) pay gaps, our contribution is focus on *industry level* and estimation of *intersectional pay gaps*

- This presentation reports results for:

  - *Gender pay gap*: women vs. men

  - *Māori pay gap*: Māori vs. Europeans

  - *Pacific pay gap*: Pacific vs. Europeans

  - *Asian pay gap*: Asians vs. Europeans

Method

- Data source is Household Labour Force Survey 2016-2022

- Sample is paid employees aged 16 to 64 years pooled over two years (2016/2017, 2017/2018, …. 2021/2022)

- 'Pay' defined as *hourly earnings*

- Industry measured with 14 categories (collapsed ANZSIC)
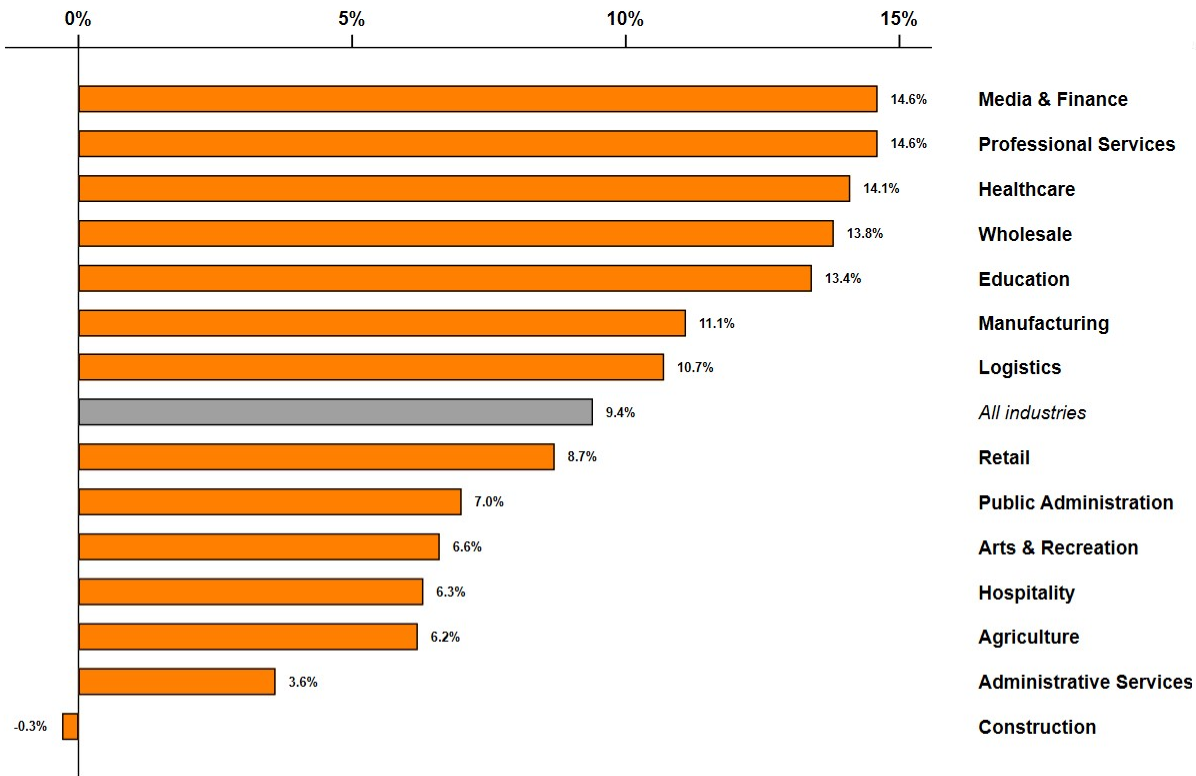
- Pay gaps calculated as:

$$\frac{\text{Men's mean real hourly earnings} - \text{women's mean real hourly earnings}}{\text{Men's mean real hourly earnings}} \times 100$$

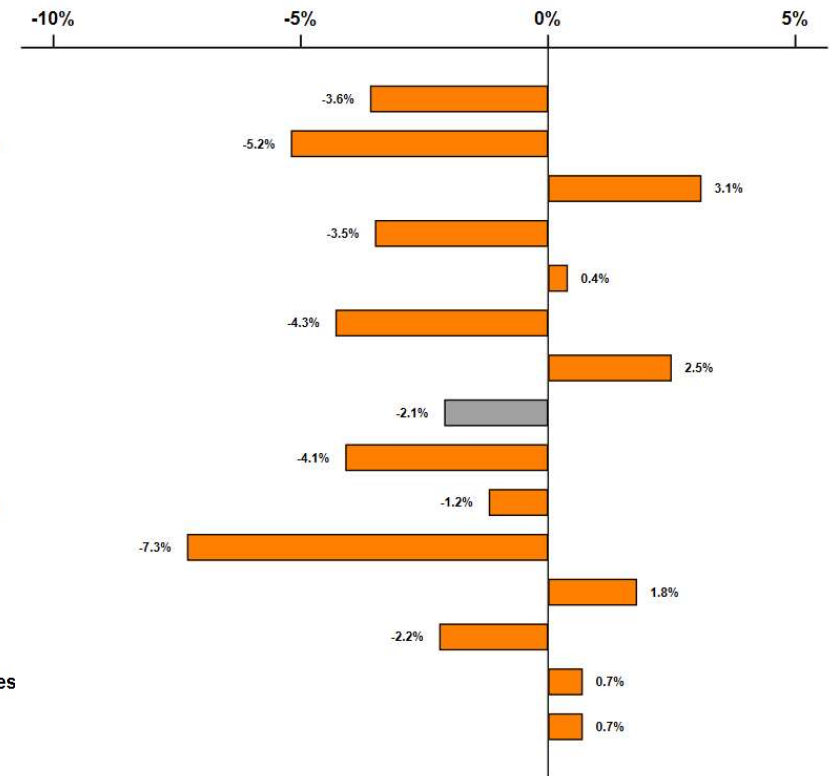- Drivers of pay gaps investigated with Blinder-Oaxaca decomposition

Gender pay gap level and trend

Gender pay gap in 2022

Industry	2022 Gap
Media & Finance	14.6%
Professional Services	14.6%
Healthcare	14.1%
Wholesale	13.8%
Education	13.4%
Manufacturing	11.1%
Logistics	10.7%
All industries	9.4%
Retail	8.7%
Public Administration	7.0%
Arts & Recreation	6.6%
Hospitality	6.3%
Agriculture	6.2%
Administrative Services	3.6%
Construction	-0.3%

Change in gender pay gap 2017-2022

Industry	Change
Media & Finance	-3.6%
Professional Services	-5.2%
Healthcare	3.1%
Wholesale	-3.5%
Education	0.4%
Manufacturing	-4.3%
Logistics	2.5%
All industries	-2.1%
Retail	-4.1%
Public Administration	-1.2%
Arts & Recreation	-7.3%
Hospitality	1.8%
Agriculture	-2.2%
Administrative Services	0.7%
Construction	0.7%

Māori vs. European pay gap level and trend

Māori pay gap in 2022

0% 5% 10% 15% 20%	

Industry	Māori pay gap in 2022	Change in Māori pay gap 2017-2022
Logistics	19.8%	6.8%
Media & Finance	18.0%	7.1%
Administrative Services	16.1%	-4.7%
Healthcare	16.0%	0.9%
Wholesale	15.9%	0.8%
Professional Services	15.8%	-1.4%
All industries	14.6%	-1.1%
Manufacturing	13.7%	-4.9%
Construction	12.2%	-7.0%
Public Administration	10.2%	-1.5%
Arts & Recreation	8.5%	-0.6%
Education	8.5%	0.6%
Retail	7.8%	0.5%
Agriculture	7.4%	-2.6%
Hospitality	1.9%	-4.1%

Change in Māori pay gap 2017-2022

-10% -5% 0% 5% 10%
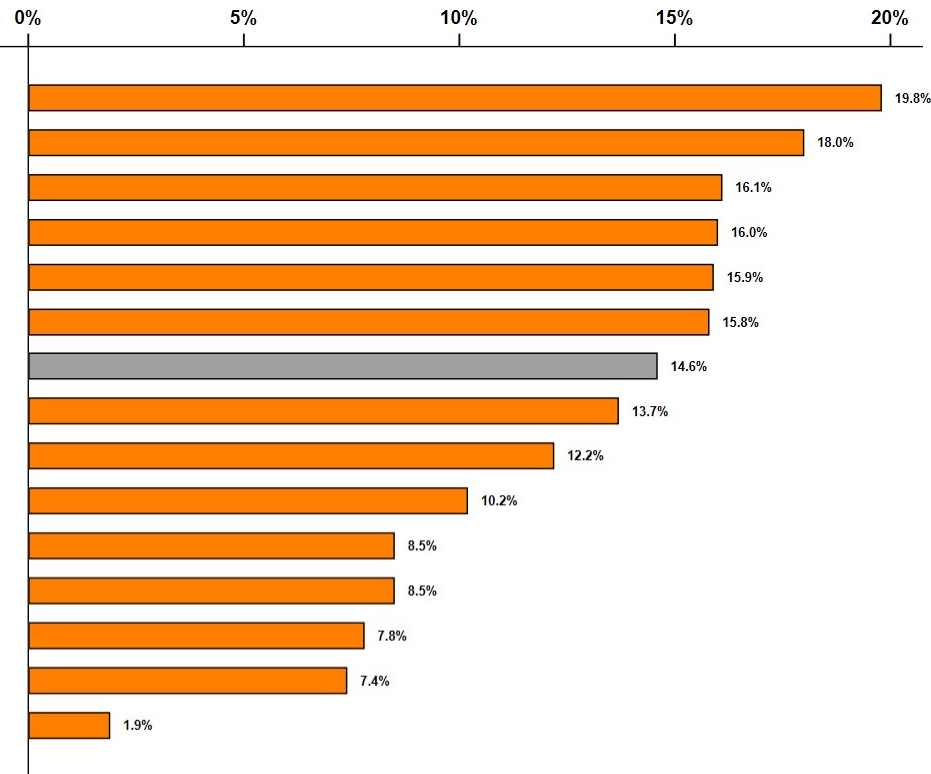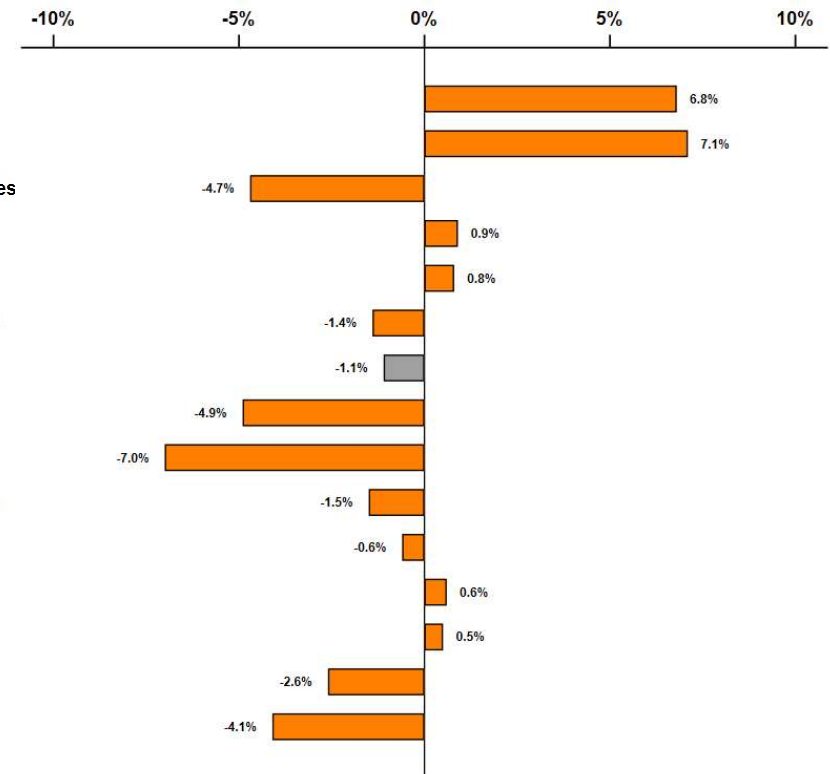
Pacific vs. European pay gap level and trend

Pacific pay gap in 2022

Industry	Pay gap
	27.1%
	25.7%
	25.3%
	24.5%
	21.2%
	18.8%
	17.4%
	17.3%
	16.4%
	13.1%
	12.8%
	12.2%
	7.1%
	6.0%
	2.9%
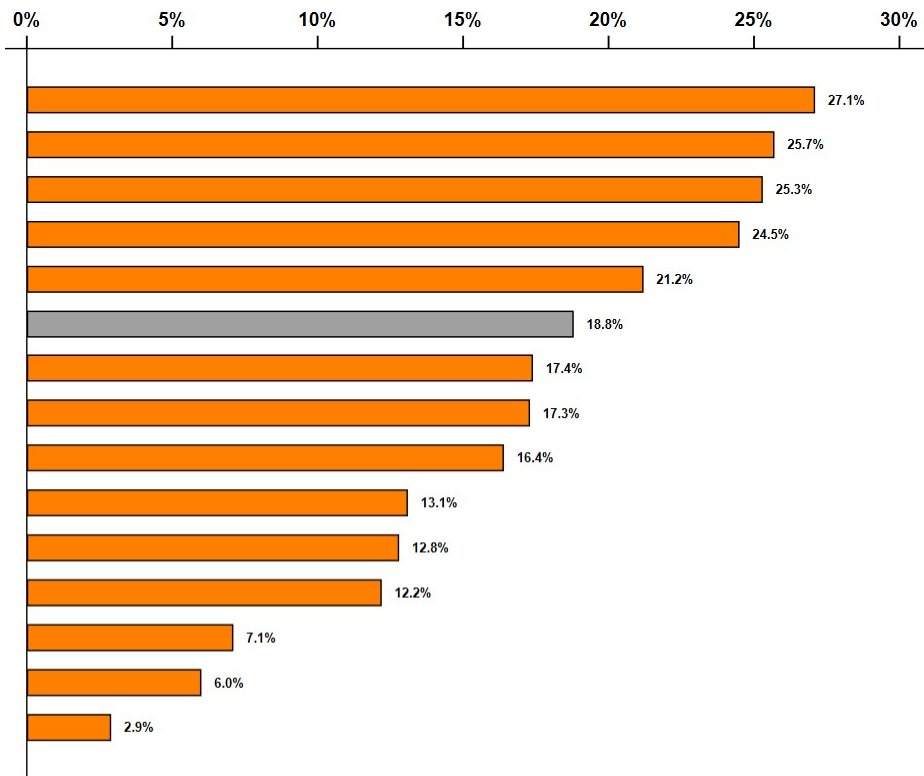
Change in Pacific pay gap 2017-2022

Industry	Change
Media & Finance	0.4%
Manufacturing	-2.7%
Wholesale	-7.2%
Logistics	4.5%
Professional Services	18.9%
All industries	-2.4%
Healthcare	-1.3%
Agriculture	-0.2%
Administrative Services	-5.0%
Construction	1.6%
Public Administration	-10.2%
Arts & Recreation	-2.8%
Retail	-1.1%
Education	-0.1%
Hospitality	-3.5%
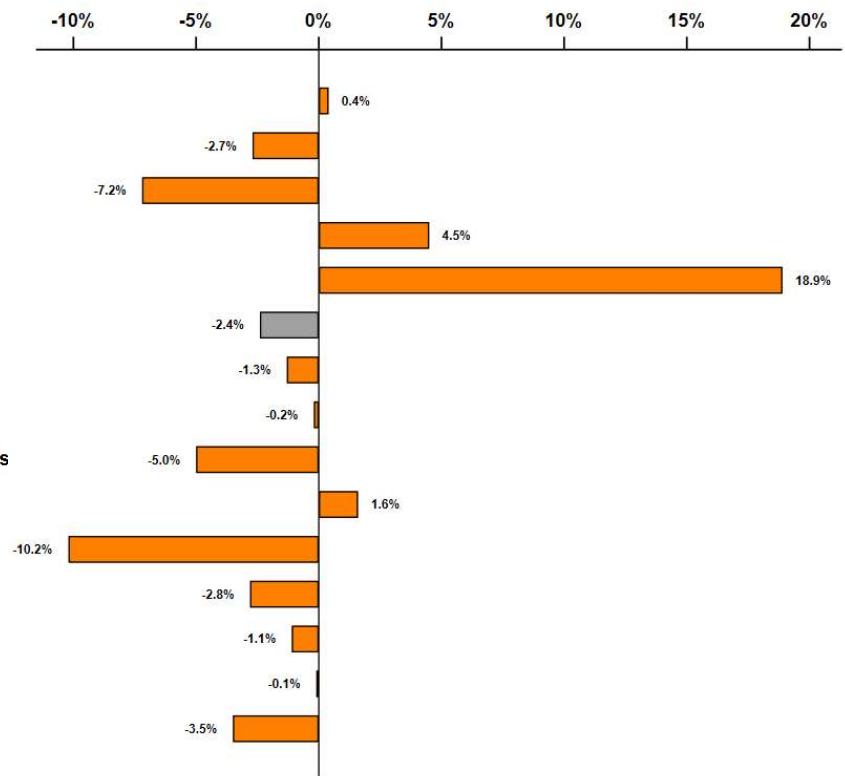
Asian vs. European pay gap level and trend

Asian pay gap in 2022
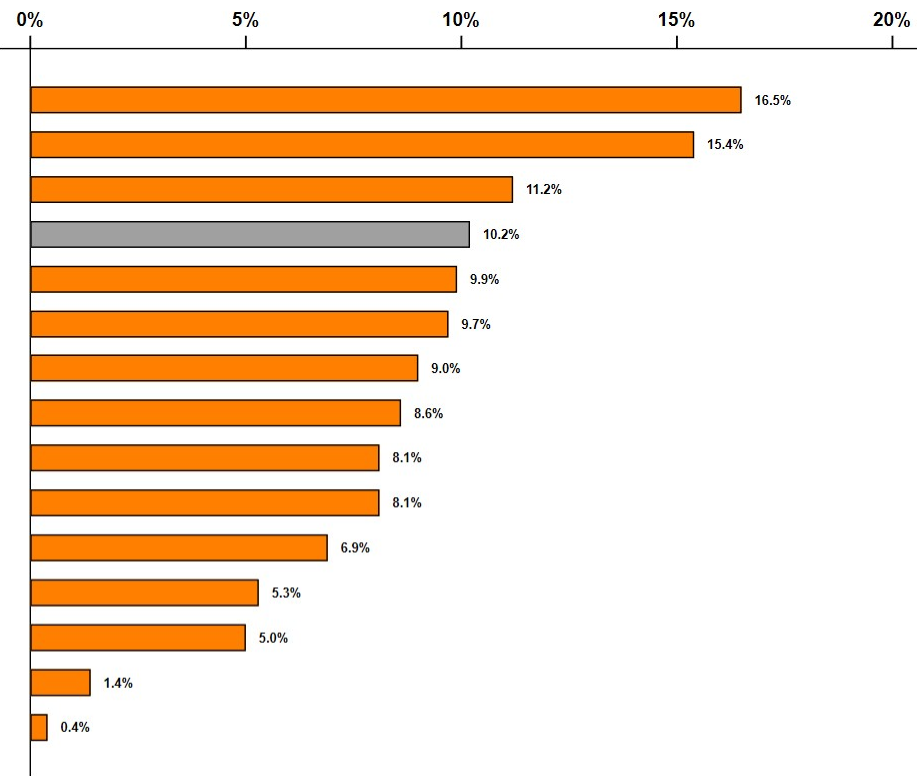
Industry	Asian pay gap in 2022	Change in Asian pay gap 2017-2022
Wholesale	16.5%	-1.8%
Manufacturing	15.4%	0.1%
Logistics	11.2%	4.1%
All industries	10.2%	-1.2%
Arts & Recreation	9.9%	-3.9%
Professional Services	9.7%	3.2%
Administrative Services	9.0%	-5.1%
Public Administration	8.6%	-5.4%
Healthcare	8.1%	4.9%
Media & Finance	8.1%	-0.6%
Construction	6.9%	-3.0%
Agriculture	5.3%	-15.9%
Retail	5.0%	3.5%
Education	1.4%	-2.2%
Hospitality	0.4%	-1.2%

Gender pay gap for *All industries* – Blinder-Oaxaca decomposition

Māori pay gap for *All industries* – Blinder-Oaxaca decomposition

Pacific pay gap for *All industries* – Blinder-Oaxaca decomposition

Asian pay gap for *All industries* – Blinder-Oaxaca decomposition

Conclusions

- In 2022, pay gaps ranged from 9.4% (gender pay gap) to 18.8% (Pacific pay gap)

- High-paying industries (e.g., Media & Finance, Professional Services) tend to have larger pay gaps, while low-paying industries (e.g., Hospitality, Retail) tend to have smaller ones

- Across all industries, gender and ethnic pay gaps have decreased over recent years

- Gender, Pacific, and Asian (all-industry) pay gaps are mostly unexplained, while Māori pay gap is mostly explained

- Provides industry-specific benchmarks against which organisations can compare their own pay gaps

- Monitoring of impact of pay parity initiatives and pay equity settlements

- NZPRI has begun a new research programme looking at what workplace practices/policies are empirically associated with lower pay gaps

Industry variable

	ANZSIC level 1		Collapsed to 14 industries
1	Agriculture, Forestry, and Fishing	1	Agriculture
2	Mining		
3	Manufacturing	2	Manufacturing
4	Electricity, Gas, Water and Waste Services	3	Construction
5	Construction		
6	Wholesale Trade	4	Wholesale
7	Retail Trade	5	Retail
8	Accommodation and Food Services	6	Hospitality
9	Transport, Postal and Warehousing	7	Logistics
10	Information Media and Telecommunications	8	Media & Finance
11	Financial and Insurance Services		
12	Rental, Hiring and Real Estate Services		
13	Professional, Scientific and Technical Services	9	Professional Services
14	Administrative and Support Services	10	Administrative Services
15	Public Administration and Safety	11	Public Administration
16	Education and Training	12	Education
17	Health Care and Social Assistance	13	Healthcare
18	Arts and Recreation Services	14	Arts & Recreation
19	Other Services		

Explanatory variables used in decomposition

- Earnings-related characteristics used in Blinder-Oaxaca decomposition:

Category	Variables
Demographic characteristics	Sex, age, age-squared, ethnicity, country of birth
Household characteristics*	Sole parent, partnered status, number of dependent children, household income
Regional characteristics	Region of residence
Education characteristics	Highest qualification attained
Job-related characteristics	Occupation, part-time work, permanent job, job tenure, employment continuity, union membership
Industry characteristics	Industry of main job

* Household characteristics are excluded from the decomposition in order to identify the Heckman selection model.

Gender pay gap – HLFS vs. Inland Revenue