

Economic Outcomes of Gender Diverse People: New Evidence from Linked Administrative Data in New Zealand

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Disclaimer

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

Terminology

- ▶ Note that we use “gender diverse” to describe those who chose something other than “male” or “female” because “gender diverse” is the term appearing in the driver license application.
- ▶ However, we recognize that those we describe as “gender diverse” would most likely self-identify as *nonbinary*, *genderqueer*, or other genders that fall outside of the traditional gender binary rather than with the term “gender diverse”.

Motivation

- ▶ Sizable and growing gender minorities in New Zealand
 - ▶ 0.5 percent of the population self-identified as transgender and/or gender diverse in a 2021 survey (Stats NZ 2022)
 - ▶ 0.7 percent of the population self-identified as transgender and/or gender diverse in 2023 Census (Stats NZ 2024)
- ▶ Significant labor market penalties for gender minorities observed
→ greater penalties experienced by transgender women and nonbinary people (Carpenter et al. 2024a, 2024b, Geijtenbeek and Plug 2018, Nettuno 2024, e.g.)
- ▶ But:
 - ▶ Survey data may be subject to misreporting
 - ▶ Administrative data often rely on medical diagnoses and/or do not identify nonbinary people

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Overview

This paper

- ▶ Present demographic characteristics of transgender and gender diverse people of New Zealand
- ▶ Compare economic outcomes of transgender and gender diverse people to those of cisgender people
- ▶ One of the first to estimate earnings gaps faced by those individuals whose gender is not male or female using administrative data

Data

Integrated Data Infrastructure (IDI):

1. Department of Internal Affairs birth record data → Birth record sex includes two options: “male” or “female” (2022 refresh)
2. NZ Transport Agency (NZTA) driver license register → Driver license gender marker includes three options: “male”, “female”, and “gender diverse”

We describe:

- ▶ Those whose driver license gender marker is “male” or “female” and does not match with birth record sex as “transgender women” or “transgender men”
- ▶ Those who chose “gender diverse” in driver license application as “gender diverse”

Changing gender marker in NZ driver license

- ▶ Around 2020-2021, NZTA added “gender diverse” as an option for gender in addition to “male” and “female”
- ▶ More recently (between 2021 and 2022), NZTA replaced the three gender options with a write-in text field
- ▶ When something other than “male” or “female” is entered, NZTA employee asks which of the three options the applicant prefers
- ▶ We restrict our sample to those who had their driver license registration/renewal in 2021 or later

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Limitations

- ▶ We only observe a subset of the population that have a driver license
- ▶ Not all transgender and gender diverse people change their gender marker when applying for or renewing their driver license
- ▶ Not all transgender and gender diverse people had to renew the driver license since 2021

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Descriptive statistics

Table 1a: Descriptive statistics of those aged 18+ Age and Ethnicity

	Birth record sex is “female”			Birth record sex is “male”		
	Cis women	Trans men	Gender diverse	Cis men	Trans women	Gender diverse
Age	39.95	30.12	25.34	40.22	34.60	29.89
Asian	0.027	0.051	0.034	0.027	0.042	0.018
European	0.656	0.556	0.666	0.657	0.522	0.586
Māori	0.247	0.266	0.225	0.235	0.302	0.313
Pacifica	0.049	0.102	0.023	0.049	0.104	0.045
Individuals	800 304	804	834	834 444	741	513

Descriptive statistics

Table 1b: Descriptive statistics of those aged 18+ Marital Status

	Birth record sex is “female”			Birth record sex is “male”		
	Cis women	Trans men	Gender diverse	Cis men	Trans women	Gender diverse
Married/Civil union	0.285	0.098	0.053	0.285	0.082	0.062
One person at address	0.219	0.192	0.203	0.210	0.206	0.171
Any children	0.609	0.175	0.066	0.549	0.132	0.119
Individuals	800 304	804	834	834 444	741	513

Descriptive statistics

Table 1c: Descriptive statistics of those aged 18+ [Spatial information](#)

	Birth record sex is “female”			Birth record sex is “male”		
	Cis women	Trans men	Gender diverse	Cis men	Trans women	Gender diverse
Deprivation Index	5.50	6.02	5.59	5.46	6.21	6.09
AKL/WLG (major urban area)	0.268	0.379	0.403	0.266	0.394	0.403
Individuals	800 304	804	834	834 444	741	513

Descriptive statistics

Table 1d: Descriptive statistics of those aged 18+ Education

	Birth record sex is “female”			Birth record sex is “male”		
	Cis women	Trans men	Gender diverse	Cis men	Trans women	Gender diverse
No post-school qualification	0.138	0.172	0.127	0.181	0.194	0.161
Secondary qualification	0.545	0.653	0.612	0.627	0.611	0.621
Tertiary qualification	0.317	0.175	0.261	0.193	0.195	0.218
Individuals	800 304	804	834	834 444	741	513

Descriptive statistics

Table 1e: Descriptive statistics of those aged 18+ Wellbeing indicators

	Birth record sex is “female”			Birth record sex is “male”		
	Cis women	Trans men	Gender diverse	Cis men	Trans women	Gender diverse
Mental health prescription	0.205	0.272	0.475	0.106	0.253	0.313
Police victimization record	0.043	0.032	0.052	0.042	0.054	0.058
Annual Earnings (NZ\$)	55 454	40 501	31 757	75 691	46 949	38 201
NEET	0.145	0.149	0.162	0.119	0.224	0.210
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*NEET refers to those “Not in Employment, Education, or Training”

Measuring gaps in economic outcomes

Two outcome variables:

- ▶ NEET (Not in Employment, Education, or Training) as an indicator variable from various records measured April 2022 and March 2023
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We estimate the following model:

$$Y_i = \beta_0 + \beta_1 X_i + \beta_2 (\text{TRANSGENDER WOMAN})_i + \beta_3 (\text{GENDER DIVERSE PERSON WITH BIRTH RECORD SEX = MALE})_i + \beta_4 (\text{CISGENDER WOMAN})_i + \beta_5 (\text{TRANSGENDER MAN})_i + \beta_6 (\text{GENDER DIVERSE PERSON WITH BIRTH RECORD SEX = FEMALE})_i + \varepsilon_i$$

Results

NEET

Table 2: Gender minority gaps in employment and annual earnings of those aged 18+

	(1)	(2)
	NEET	Annual Earnings
Excluded category is cisgender men		
Birth record = M, Driver license = F	0.108*** (0.015)	-0.487*** (0.054)
Birth record = M, Driver license = GD	0.119*** (0.017)	-0.579*** (0.060)
Birth record = F, Driver license = F	0.040*** (0.001)	-0.371*** (0.002)
Birth record = F, Driver license = M	0.060*** (0.012)	-0.402*** (0.044)
Birth record = F, Driver license = GD	0.111*** (0.012)	-0.645*** (0.047)
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Summary of findings

Two outcome variables:

- ▶ Transgender and gender diverse individuals (defined as those who chose “gender diverse” rather than “male” or “female”) fare much worse than comparable cisgender people
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Thank you for your attention

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