



Same Offence. Different Outcome?

Do sentencing outcomes differ
by ethnicity when offence
severity is held constant?

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Disclaimer

IDI Output

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/>.

Inland Revenue tax 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.

Why study sentencing outcomes?



Two offenders commit the same crime.
Should they receive the same sentence?



Sentencing should reflect offence severity.



Criminal records affect employment
and future opportunities.



The identification challenge

Sentencing is difficult to study.

Why?

Offences differ in

- Severity
- Criminal history
- Circumstances
- Victim impact

Differences in sentencing may simply reflect differences in offending.



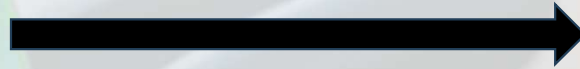
Drink Driving

A natural
test of
judicial
fairness



Drink Driving

Alcohol level

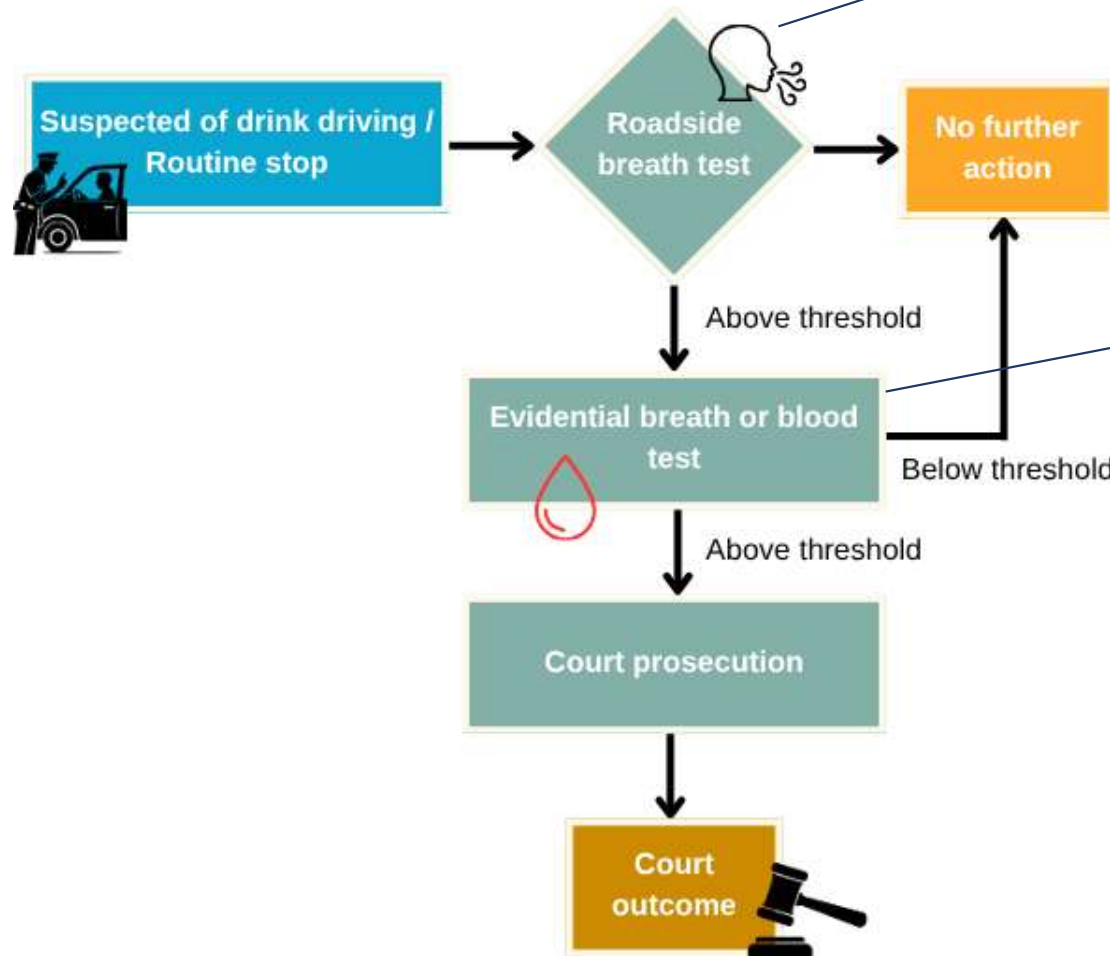


Objective
measure of
offence
severity



- Same offence type
- Precise alcohol readings
- First-time offenders only
- No additional charges
- Guilty pleas only (> 99%)
- Convicted outcomes only (> 99%)

The Process



400 mcg of
alcohol per
litre of breath

80 mg per 100 ml
of blood

The Process

Court
Outcome



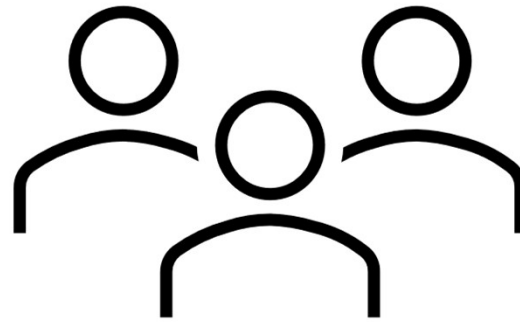
First-time offences

Default fine relative to
alcohol level

Community-based sentence
(more serious)

Disqualification for driving for at least 6 months

Data



IDI Integrated Data
Infrastructure

Data

Offence Characteristics

Ministry of Justice

- Alcohol level
- Offence codes
- Offence history
- Plea type
- Court outcome

Final sample:
> 10,000
individuals

Data from 2005 to 2019

Excess breath / blood
alcohol

- First-time offence
- No prior court appearances
- No additional charges

Guilty plea

Convicted

Individual Characteristics



- Age
- Gender
- Ethnic group
- Wages & salaries
- Benefits / income support

Outcome Variable

Most serious sentence exceeds
monetary penalty

Fine



Community-based sentence



Method

Isolating differences in
sentencing outcomes

NZ European



- Similar offence severity
- Similar background characteristics

Māori



Method

Entropy Balancing

- Keep all observations, retain sample size
- Creates synthetic balanced sample

NZ Europeans



Reweighs individuals



Same characteristics in both groups

Māori



Exact Matching

- Keep only observations that are exact matches, sample size reduced

NZ Europeans



Restricted matched sample



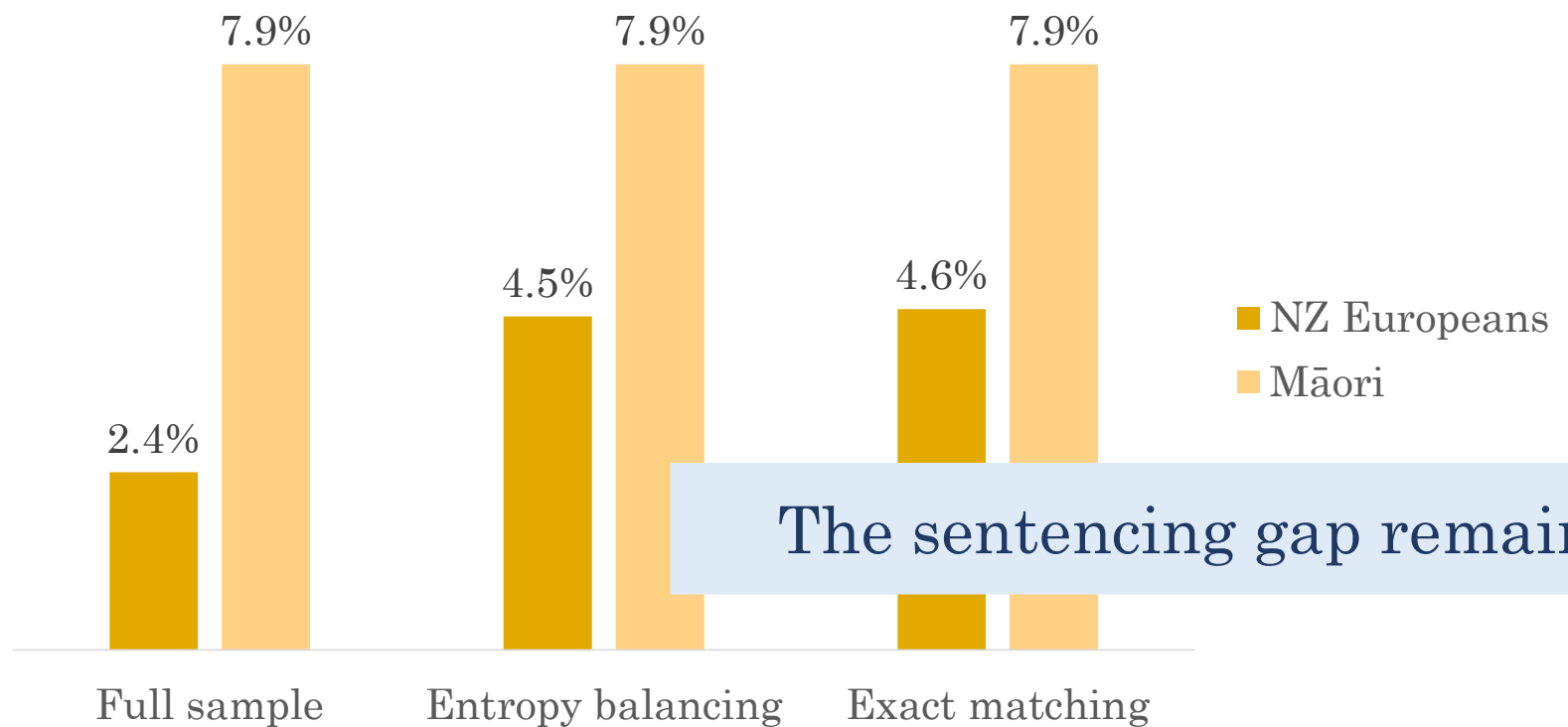
Individuals with identical characteristics

Māori



Descriptive Results

Proportion that received a more serious sentence



The sentencing gap remains

Regression Results

Relative odds of receiving a community-based sentence
(NZ Europeans vs Māori)

Full sample

Entropy balancing

Exact matching

Odds
ratio

1.813***
(0.167)

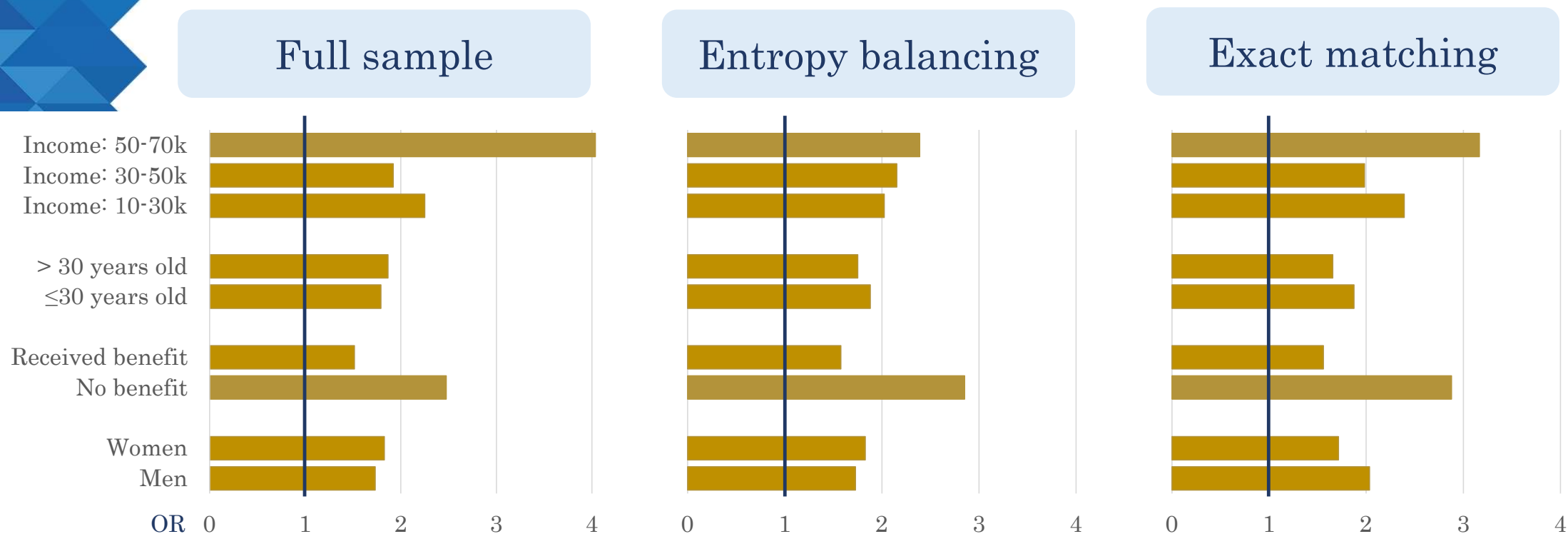
1.808***
(0.288)

1.784***
(0.186)

All estimated odds ratio are significant at the 1% level ($p < 0.01$).

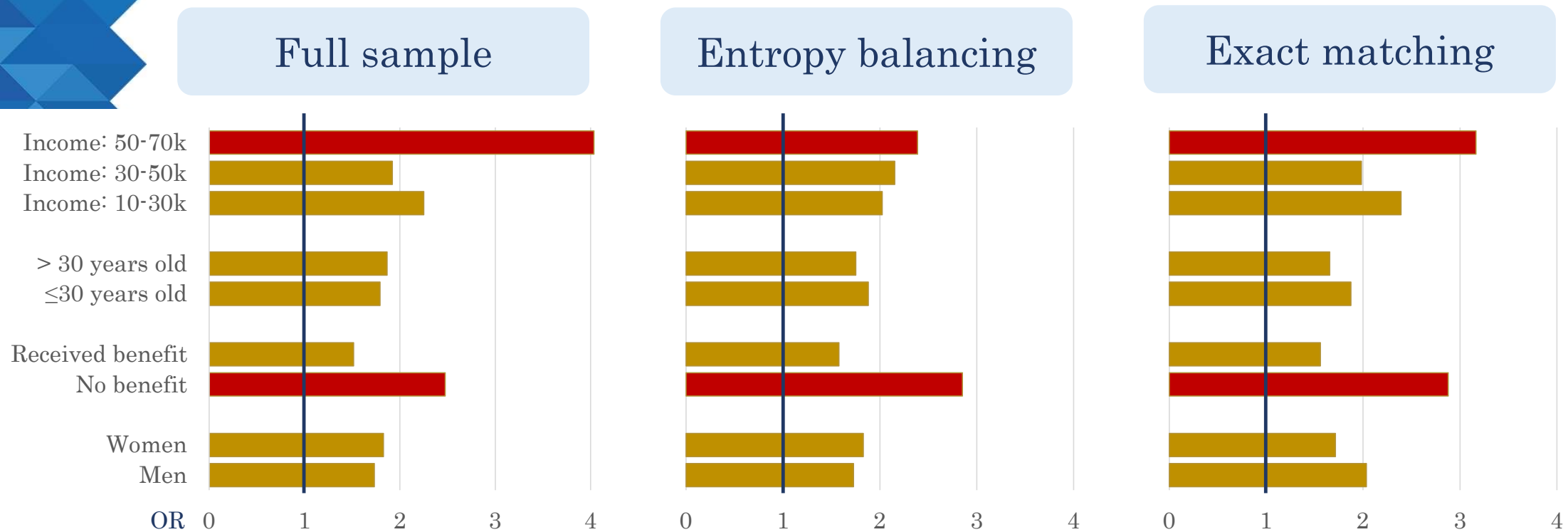
$OR \approx 1.8$

Relative odds of receiving a community-based sentence (NZ Europeans vs Māori)



All estimated odds ratio are significant at the 1% level ($p < 0.01$).

Relative odds of receiving a community-based sentence (NZ Europeans vs Māori)



All estimated odds ratio are significant at the 1% level ($p < 0.01$).

Alcohol level

Previous
court history

Other
charges

Age

Gender

Benefit
status

Income

Courtroom
interactions

Judicial
perceptions

Legal
representation
quality

Remorse

Conviction



Criminal records



Employment
opportunities



Social mobility

WHY IT
MATTERS?



Even when the
facts are
comparable,
sentencing
outcomes are
not.

- Over 10,000 first-time drink-driving convictions
- Multiple balancing methods
- Persistent sentencing disparity

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Ngā mihi nui
Thank you



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