



Same Offence. Different Outcome?

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

SERC 2026

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**NEW ZEALAND POLICY
RESEARCH INSTITUTE**
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AUT

A decorative vertical pattern on the left side of the slide, composed of various shades of blue triangles and polygons arranged in a jagged, geometric border.

Disclaimer

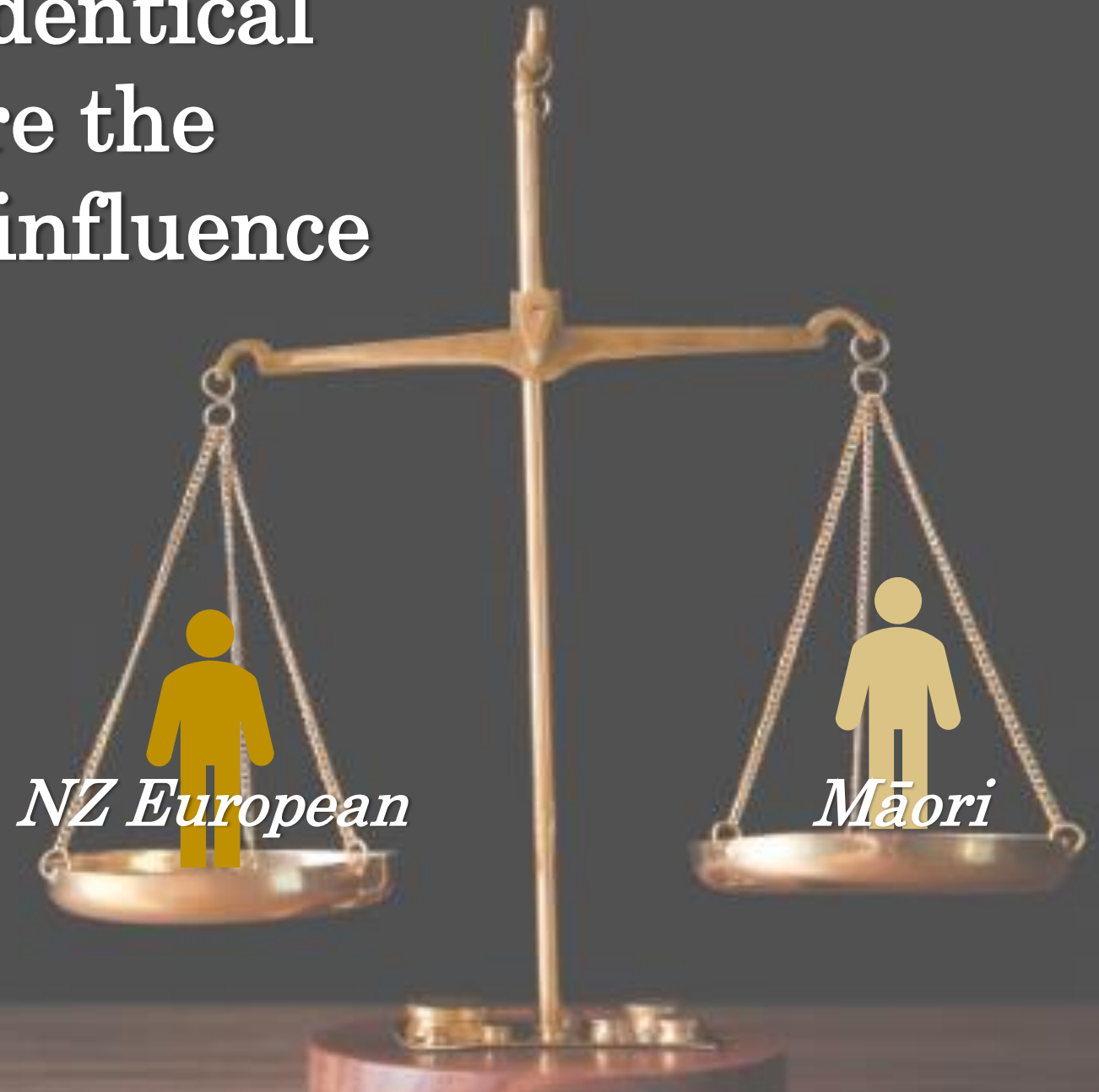
IDI Output

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.

When two otherwise identical offenders appear before the courts, does ethnicity influence sentencing outcomes?



Why study sentencing outcomes?

Court



Justice



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.



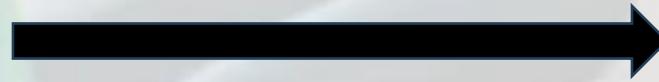
Drink Driving

A useful
setting for
studying
sentencing
disparities



Drink Driving

Alcohol level

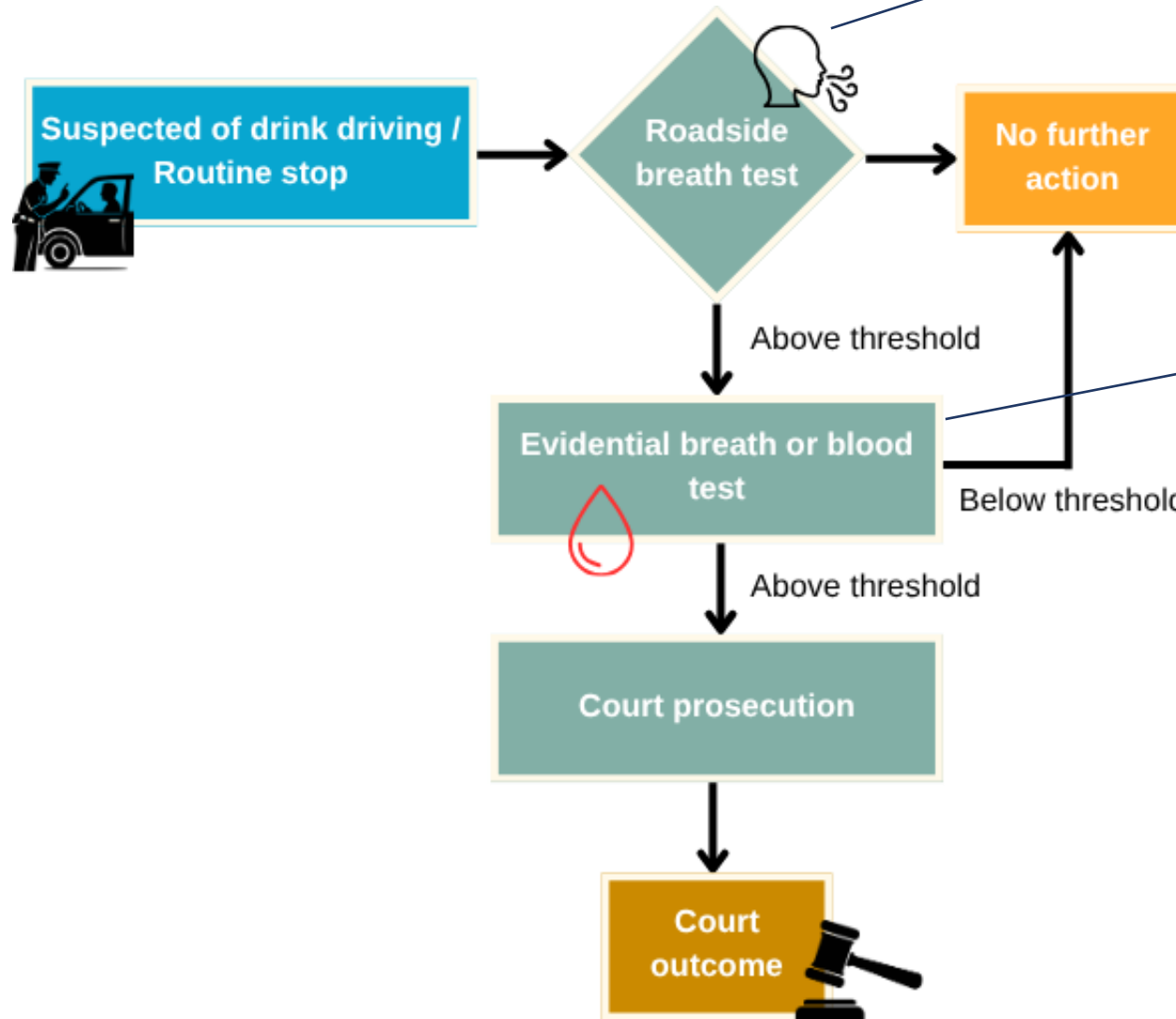


Objective
measure of
offence
severity



- 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



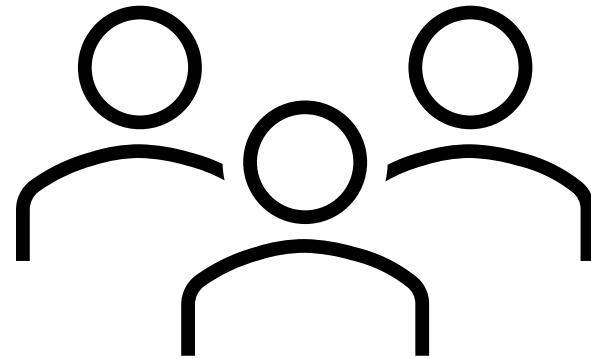
First-time offences

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

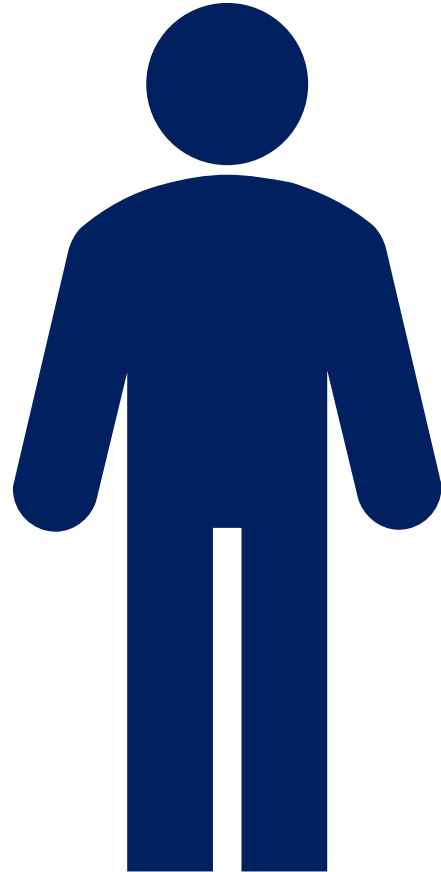
Excess breath / blood
alcohol

- 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



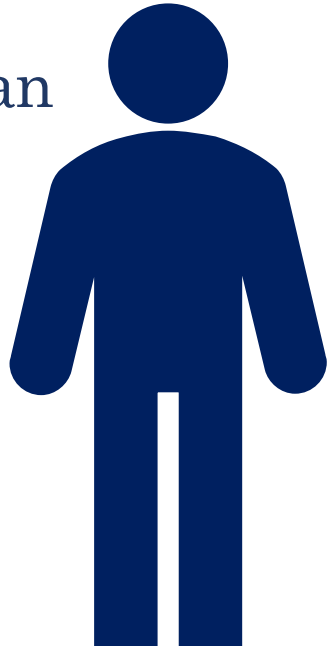
Community-based sentence



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

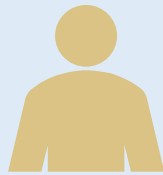
NZ Europeans



Reweighs individuals



Māori



Same characteristics in both groups

Exact Matching

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

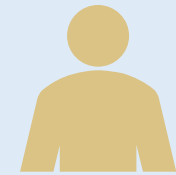
NZ Europeans



Restricted matched sample



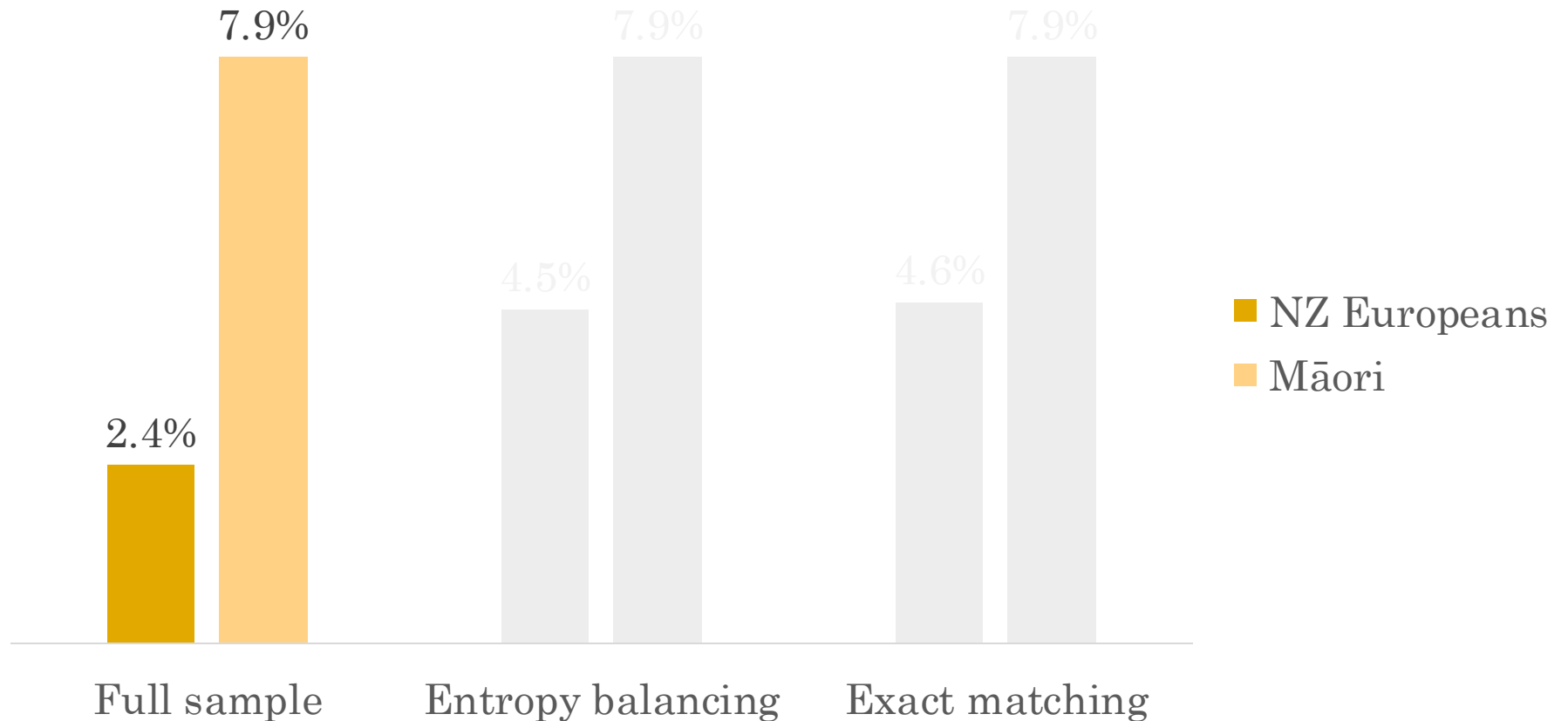
Māori



Individuals with identical characteristics

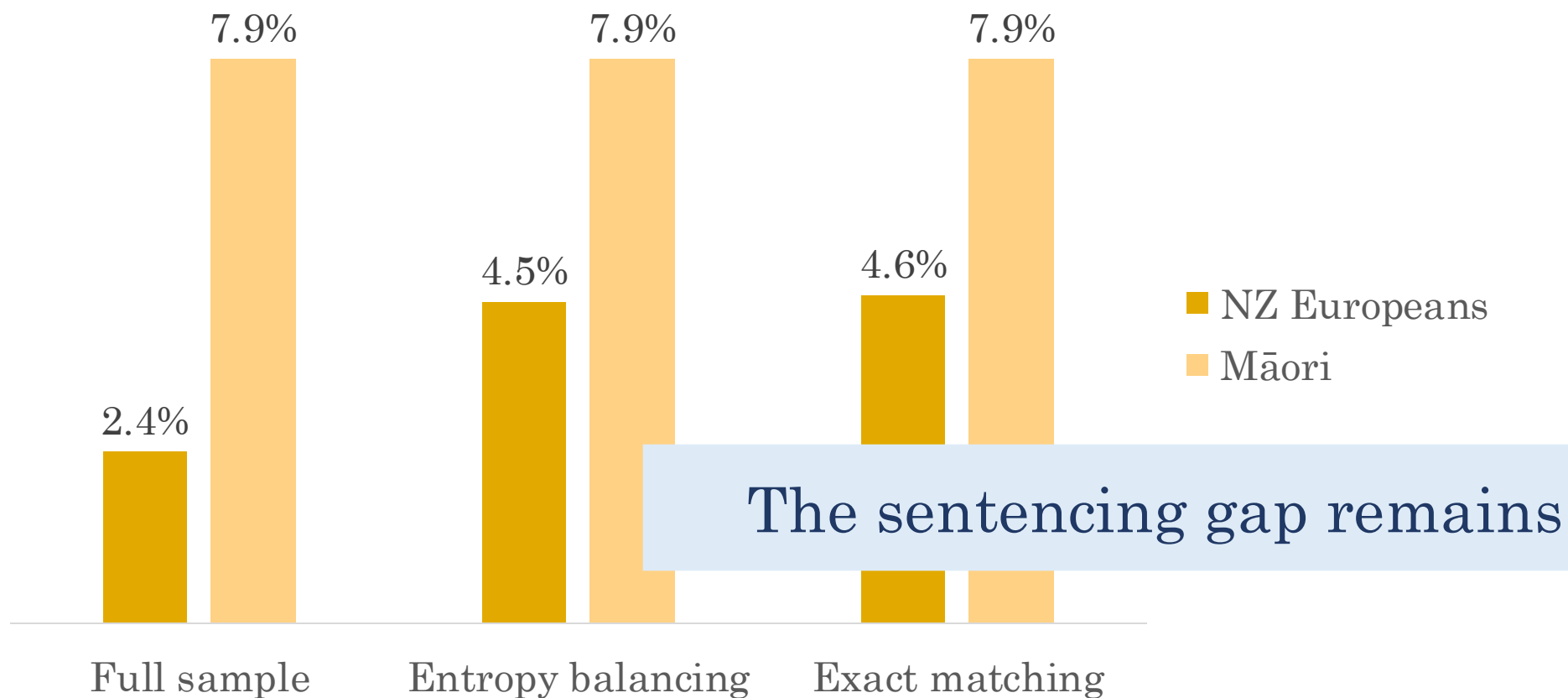
Descriptive Results

Proportion that received a more serious sentence



Descriptive Results

Proportion that received a more serious sentence



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)

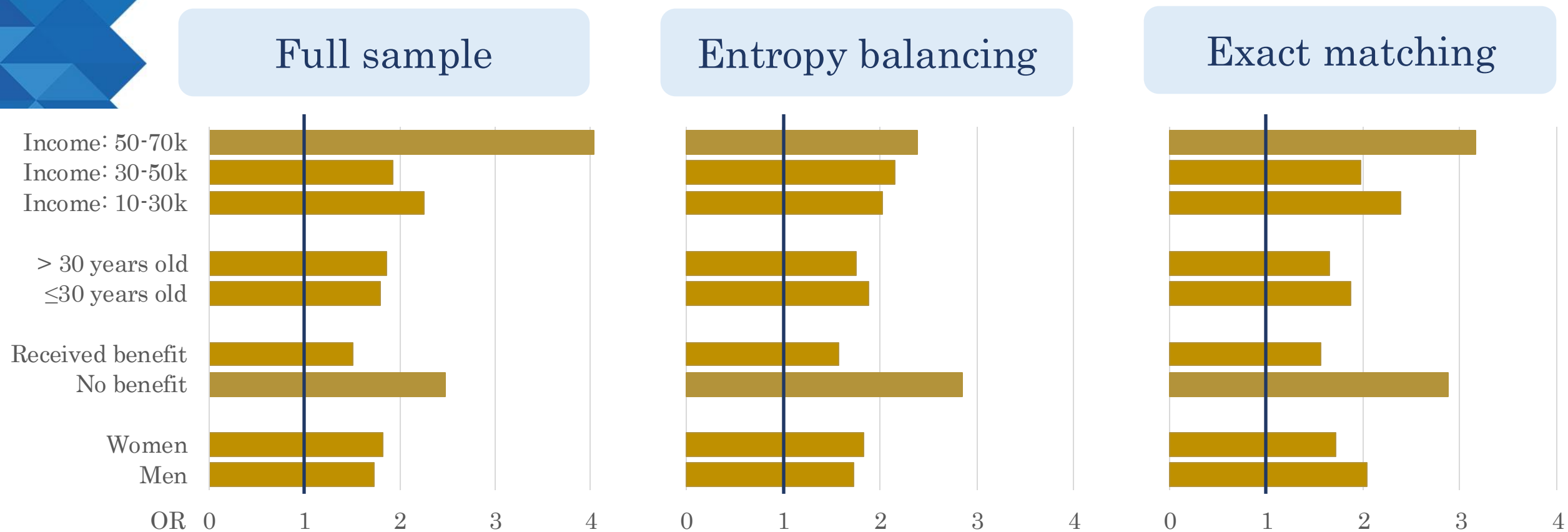
1.808***
(0.288)

1.784***
(0.186)

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

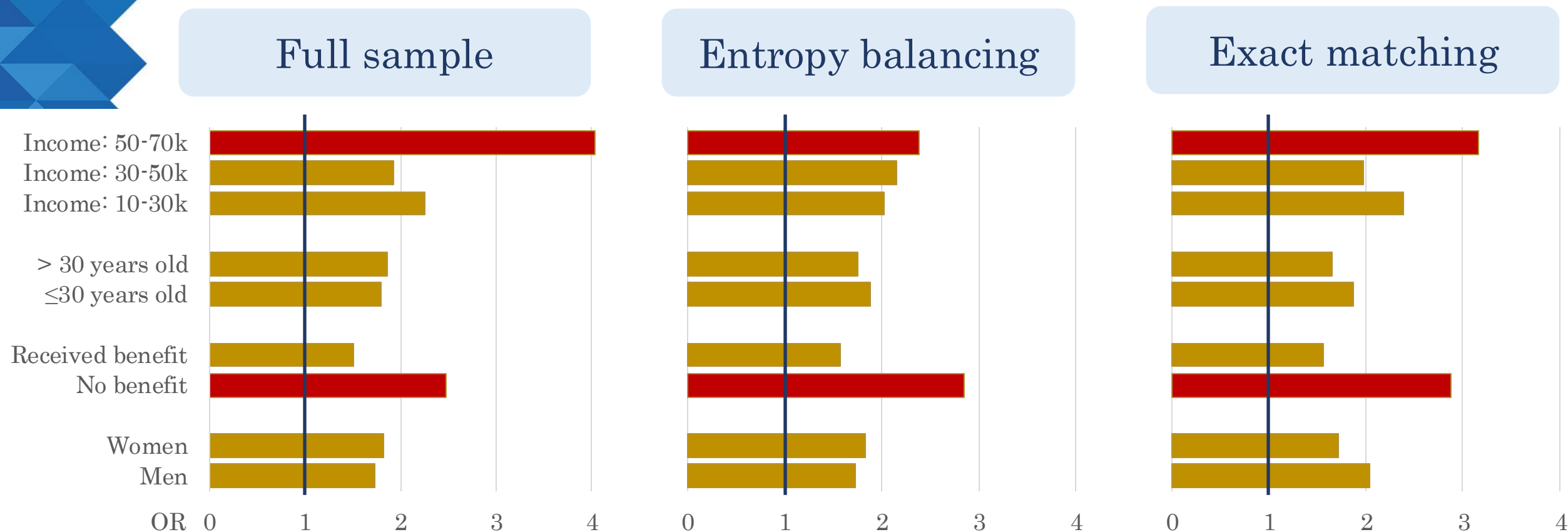
$OR \approx 1.8$

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?

Broader relevance

An empirical approach applicable beyond New Zealand



Administrative
data



Objective
offence severity



Robust
evaluation of
sentencing
outcomes

AUT

Ngā mihi nui

Thank you



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