

Dynamics of low income and deprivation in SoFIE

A descriptive analysis of the Survey of Family Income and Employment

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Te Whare Wānanga o Ōtago

Disclaimer and data access

- Access to the data used in this presentation was provided by Statistics New Zealand under conditions designed to give effect to the security and confidentiality provisions of the Statistics Act 1975
- The results presented are the work of the researchers, not Statistics New Zealand
- We take full responsibility for the results, and Statistics New Zealand will not be held accountable for any error or inaccurate findings within this presentation
- All figures and graphs are based on numbers rounded to base five

Objective of this work

- Much discussion of poverty recently
- Research of temporal dynamics presents a more comprehensive understanding of poverty than point-in-time studies
- UK longitudinal research shows:
 - ◆ people experience different types of poverty
 - ◆ the majority of people who experience poverty move out of poverty
 - ◆ many more people experience poverty over a period of time than they do at any one moment in time

Survey of Family, Income and Employment - “SoFIE”

- Statistics New Zealand
- 8-year longitudinal
- First wave, 1 October 2002
- Collects annual information on demographics, income, labour force participation, education, household and family structure
- Assets and liabilities - waves 2, 4, 6, and 8
- Health - waves 3, 5, and 7

Attrition

- Higher drop out in:
 - ◆ Younger (age 0 to 24) and older (age 65+)
 - ◆ Māori, pacific respondents
 - ◆ Sole parents, not in a family
 - ◆ Lower Income at Wave 1

Low Income

- Equivalised Household Income (nominal)
- Low income = <60% median household income **at each wave**
- Also <50% median household income
- Duration of low income = $\sum \text{lowinc}_t$ (range: 0 to 7)
- Chronic low income = average income below average low income line (\$27,000)

Income Mobility

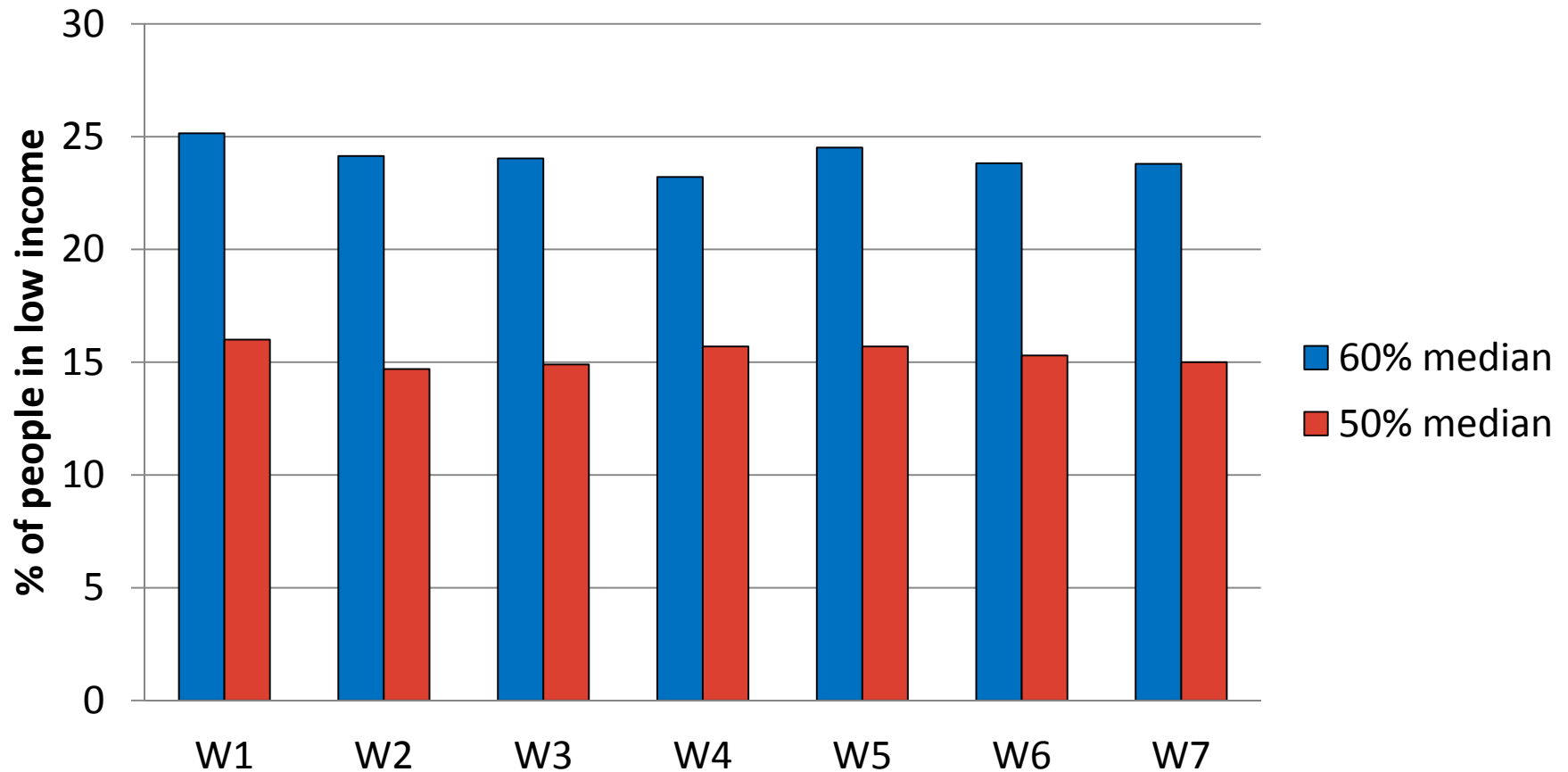
		W+1					Totals
		Q1	Q2	Q3	Q4	Q5	
W1	Q1	0.653	0.226	0.066	0.034	0.021	21330
	Q2	0.198	0.524	0.202	0.053	0.024	21800
	Q3	0.069	0.165	0.504	0.207	0.053	21905
	Q4	0.040	0.058	0.176	0.538	0.187	21855
	Q5	0.031	0.030	0.055	0.169	0.715	21830
Totals		21325	21785	21920	21855	21840	108720

equivalised household income

Income Mobility

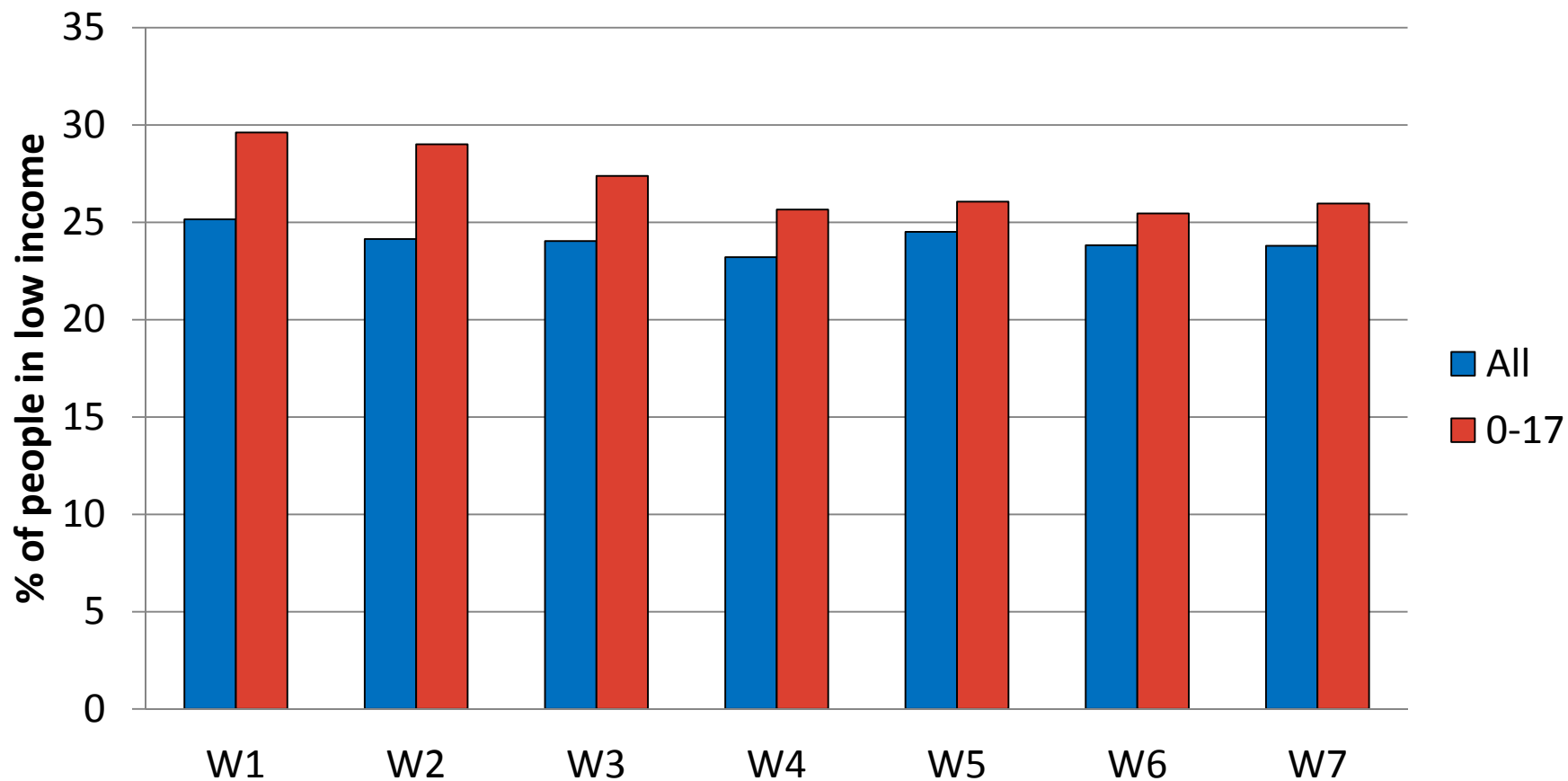
		W7					
		Q1	Q2	Q3	Q4	Q5	Total
W1	Q1	0.450	0.289	0.137	0.087	0.039	3755
	Q2	0.250	0.349	0.228	0.119	0.055	3755
	Q3	0.134	0.185	0.313	0.256	0.112	3765
	Q4	0.096	0.108	0.208	0.337	0.253	3750
	Q5	0.069	0.070	0.114	0.202	0.543	3760
Total		3755	3755	3755	3760	3755	18785

Percentage in low income - Depth



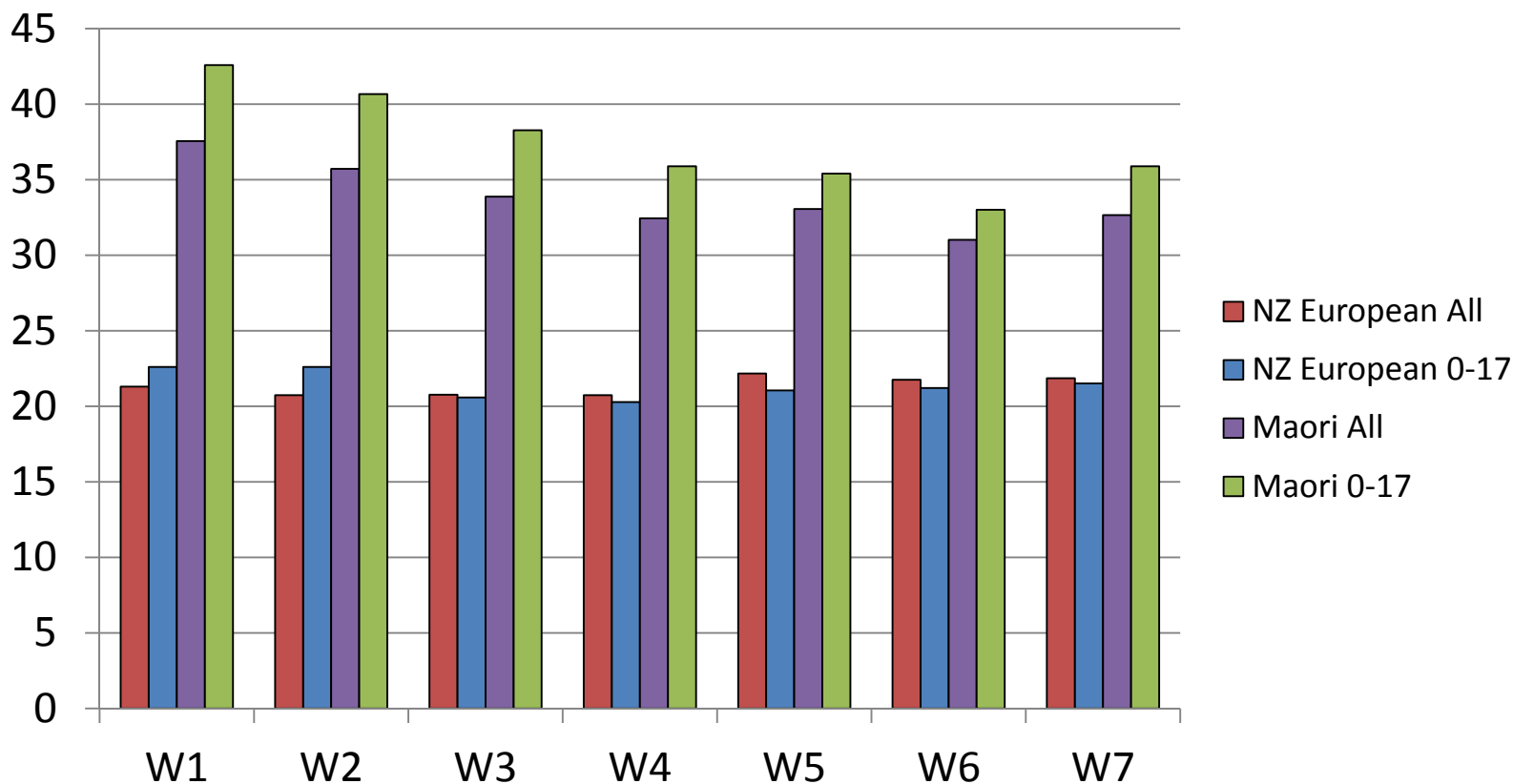
equivalised household income

Percentage in low income – by age



<60% median equivalised household income

Percentage in low income by ethnicity

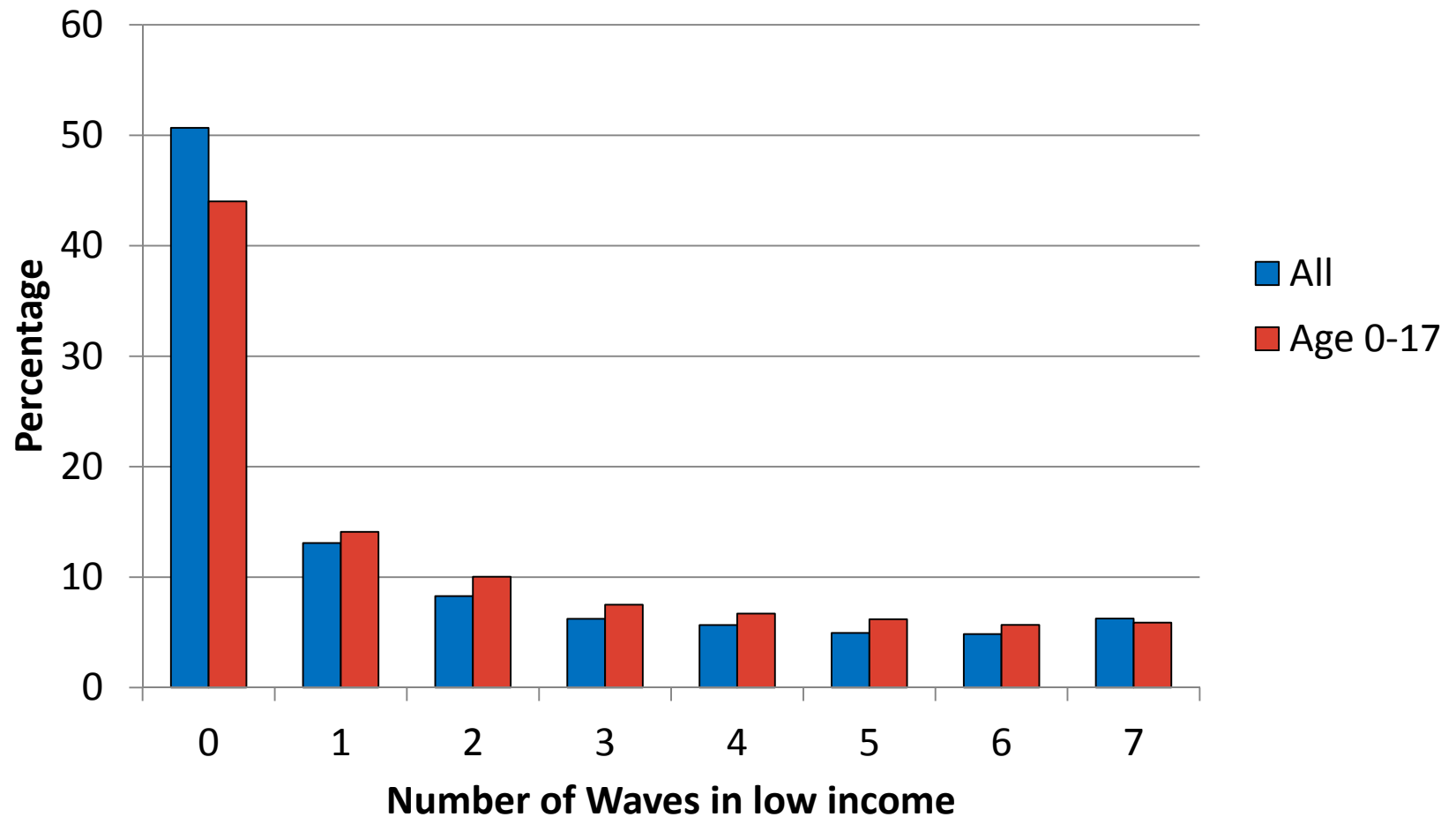


<60% median equivalised household income

Persistence of low income over one year (% whole sample)

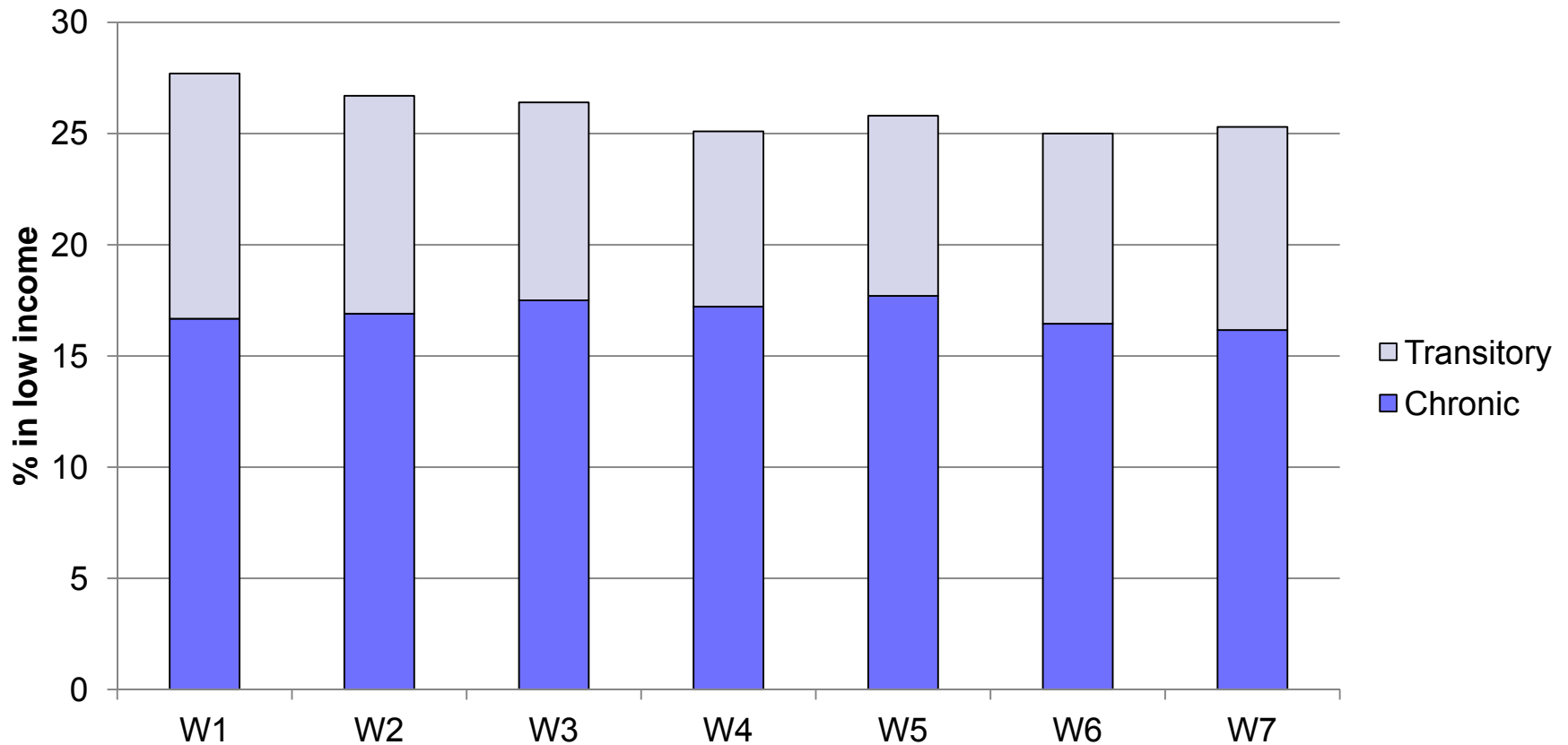
	Low income w1	Low income w2	Low income w3	Low income w4	Low income w5	Low income w6
Low income w2	67					
Low income w3	61	70				
Low income w4	56	61	69			
Low income w5	57	60	65	73		
Low income w6	52	57	59	65	70	
Low income w7	51	54	58	60	64	70

Number of waves in low income



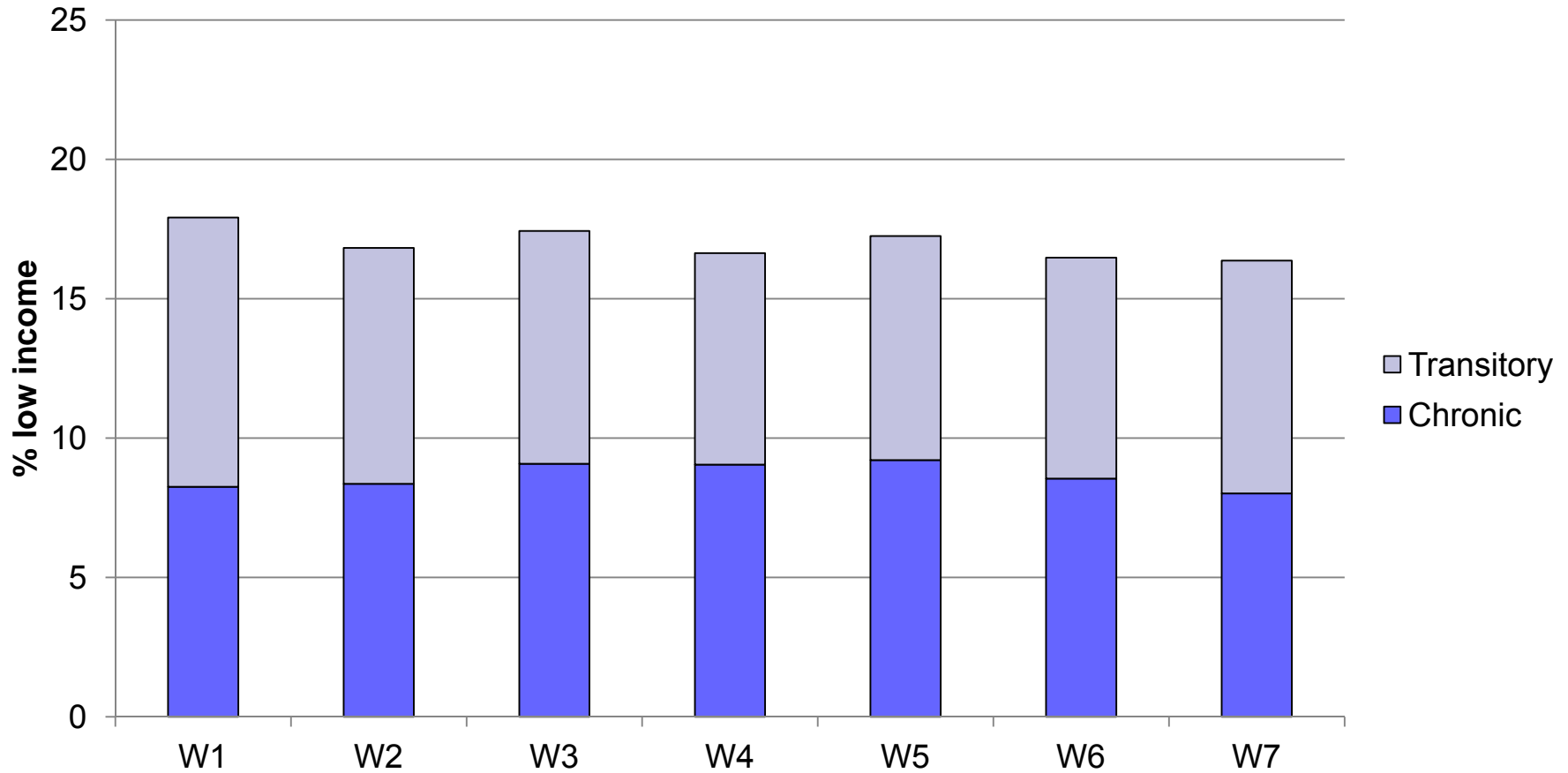
<60% median equivalised household income

Chronic Low Income (<60%)



CPI adjusted equivalised household income

Chronic Low Income (<50%)

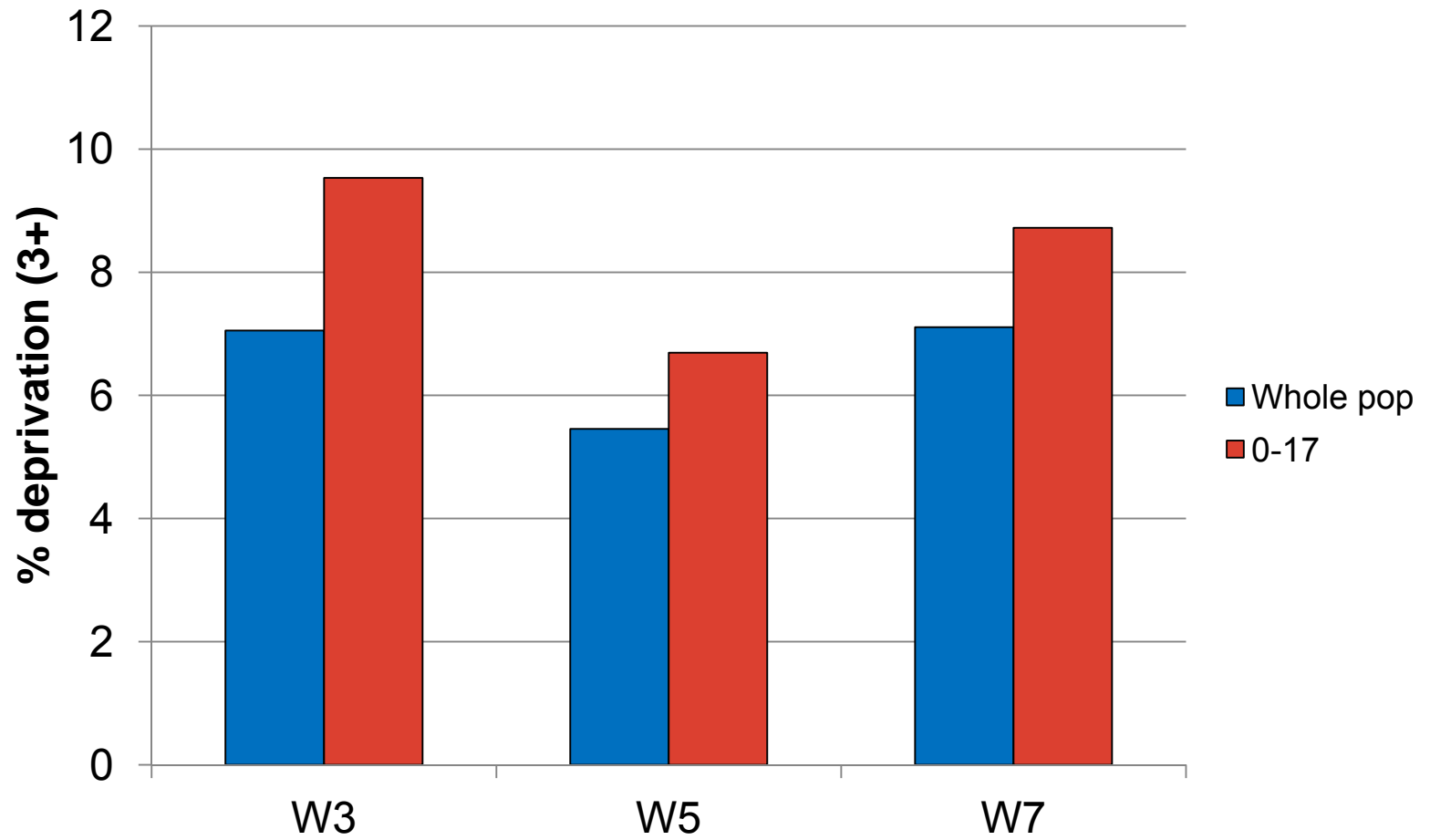


CPI adjusted equivalised household income

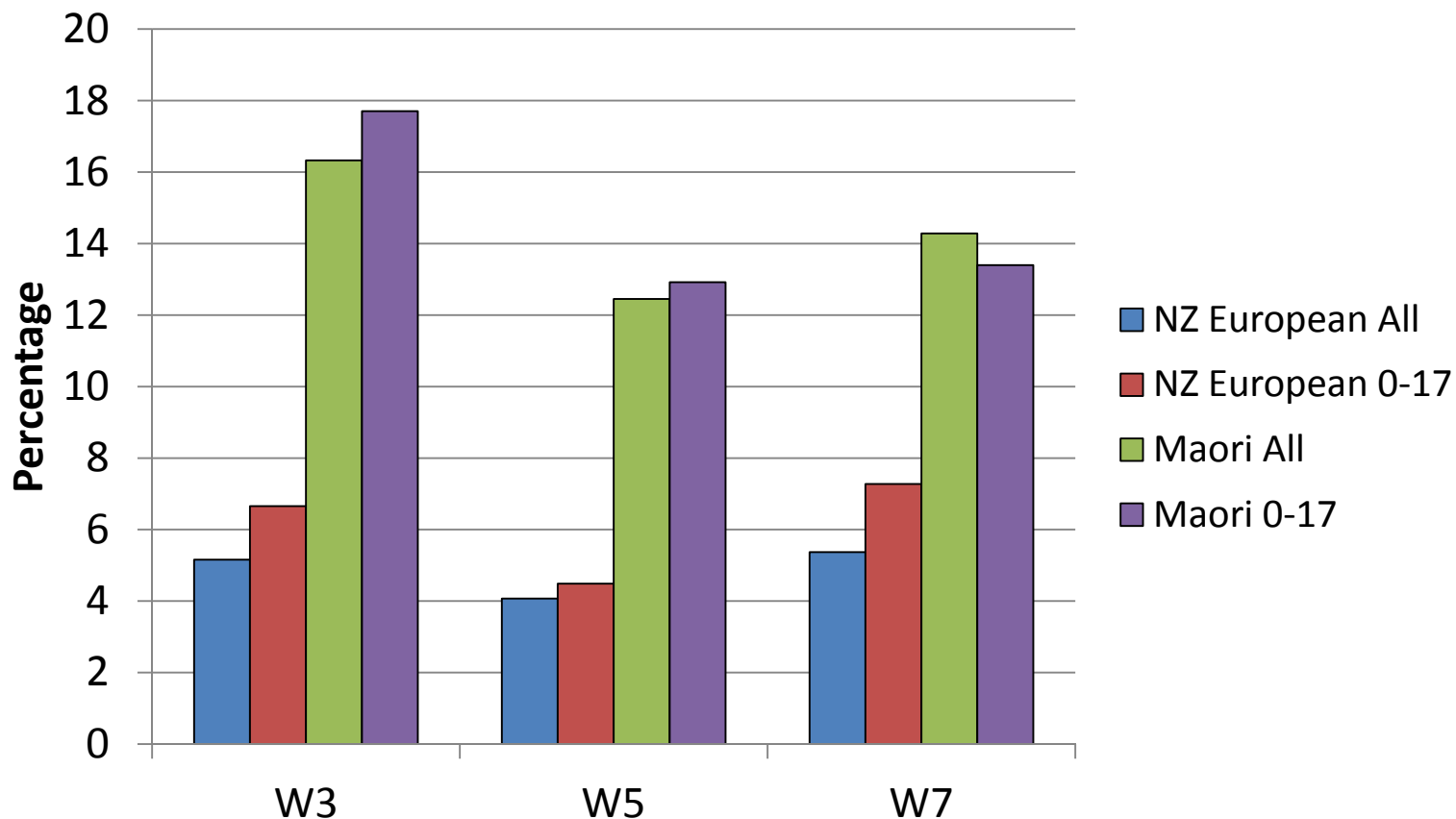
Deprivation

- NZ Individual Index Deprivation (Salmond 2006)
 - ◆ 8 measures of deprivation
 - forced to buy cheaper food, so that they could pay for other things needed
 - been unemployed for 4 or more weeks during the last 12 months
 - put up with feeling cold, to save on heating costs
 - received help in the form of clothes or money from a community organisation
 - gone without fresh fruit and vegetables in the 12 months so that they could pay for other things needed
 - continued wearing shoes with holes in them because they could not afford to replace them
 - received an income tested benefit
 - made use of special food grants or food banks, because they did not have enough money for food.
- “In deprivation” = 3 or more measures
- Deprivation duration = $\sum Dep_t$ (range: 0 to 3)

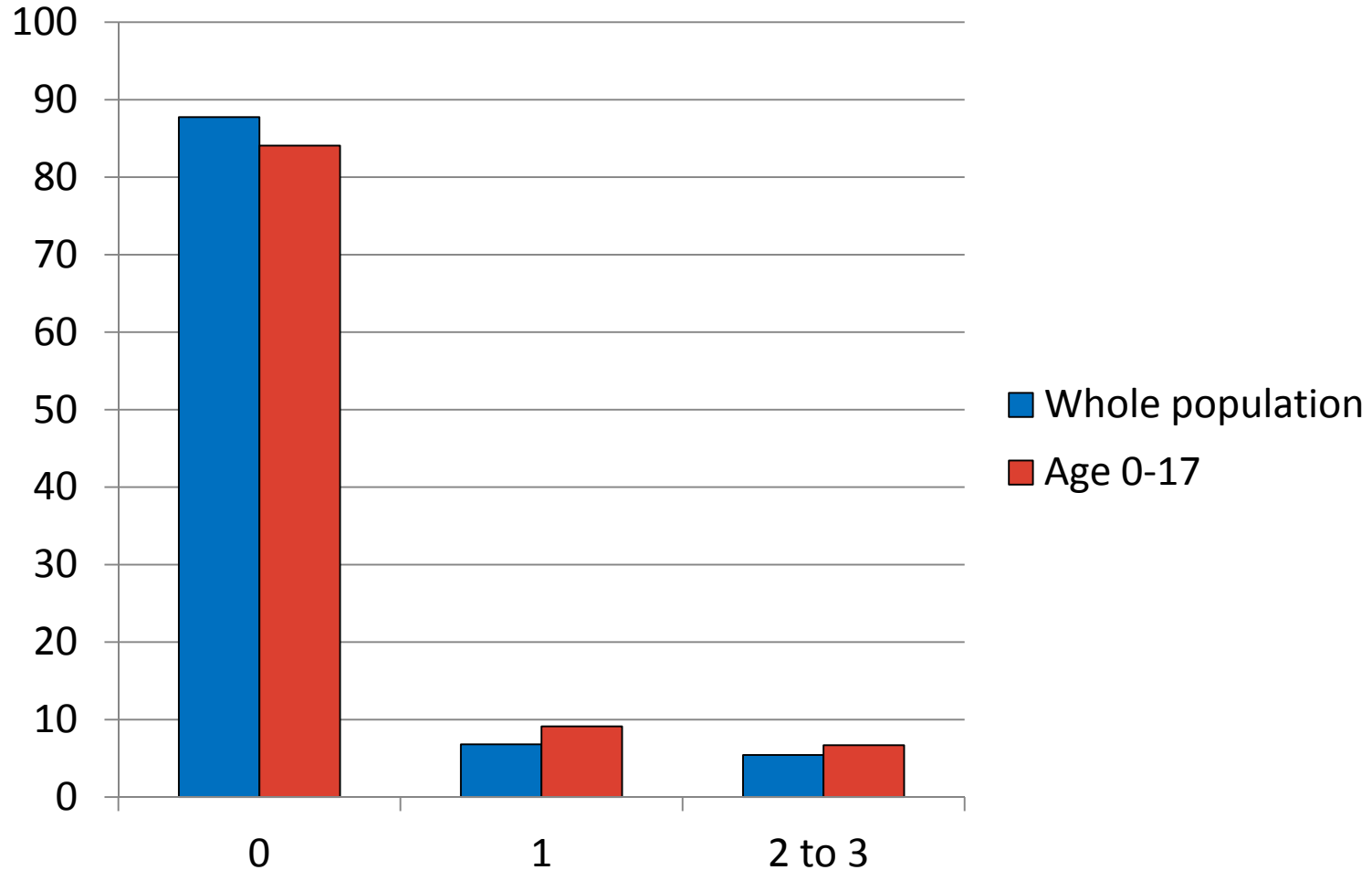
Percentage in deprivation (NZiDep ≥ 3)



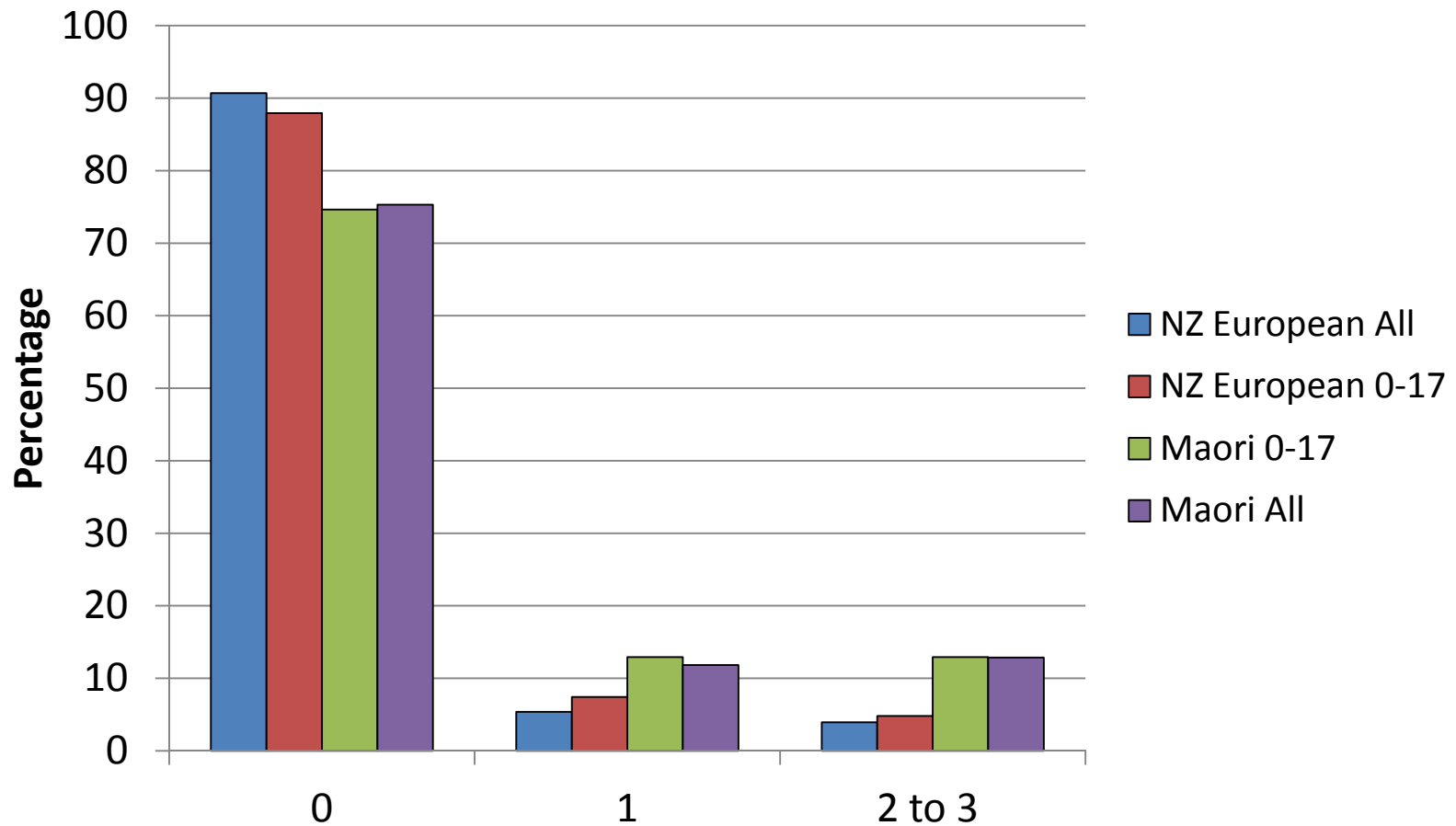
Percentage in deprivation (NZiDep ≥ 3) by ethnicity and age



Waves in deprivation by age



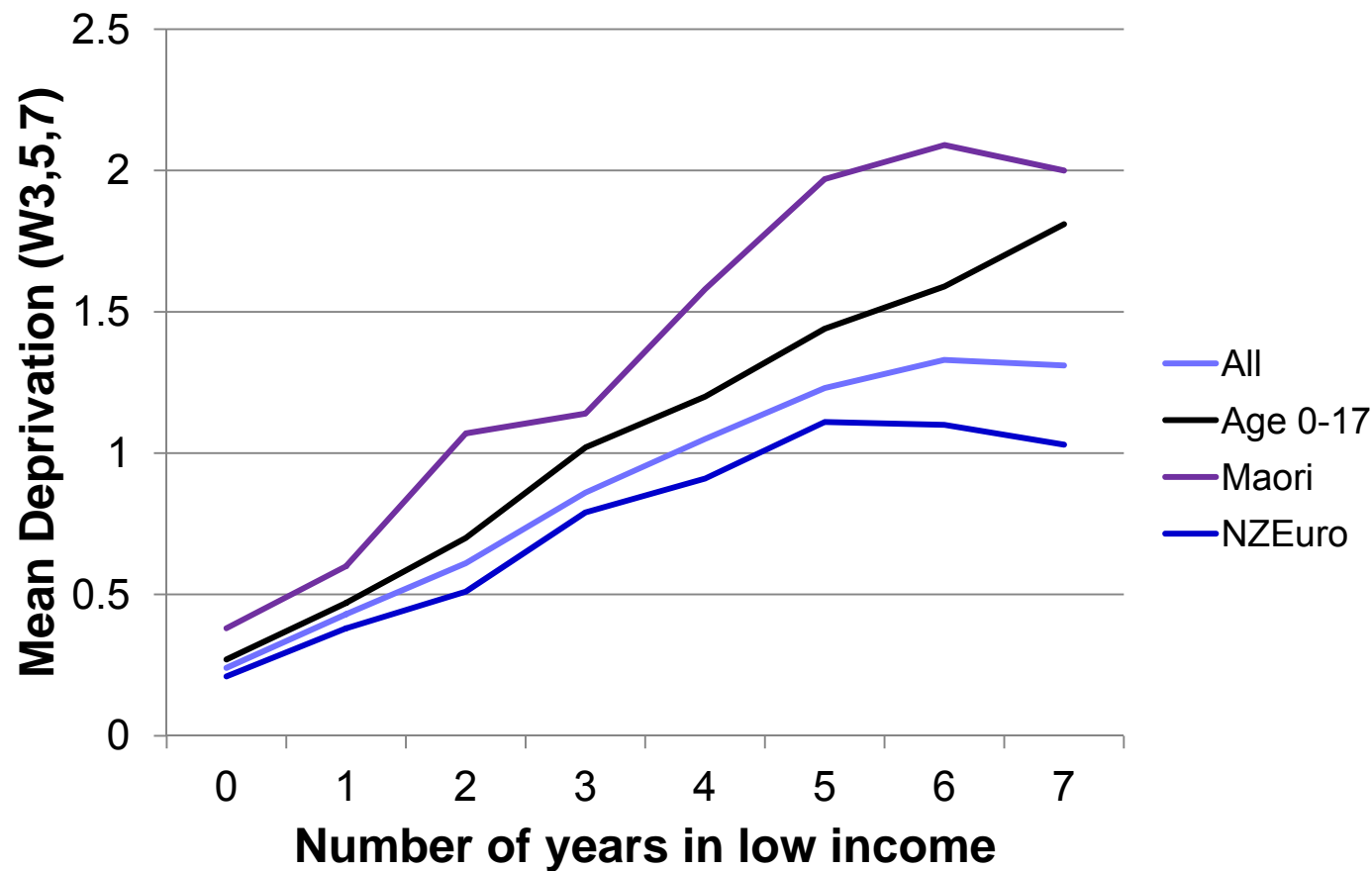
Waves in deprivation by ethnicity and age



Persistence of deprivation over two years (% whole sample)

	In deprivation w3	In deprivation w5
In deprivation w5	44	
In deprivation w7	44	58

Mean deprivation by low income



<60% median income

Impact of changes in individual factors

- Changes in social marital status (becoming not partnered) leads to low income and higher levels of deprivation
- Changes in labour market activity (moving to not working) leads to low income and higher levels of deprivation

Impact on Health

- Increasing numbers of years in low income leads to worsening health
- Increasing numbers of years in deprivation leads to worsening health
- Deprivation has a stronger impact on health than low income

Data Caveats

- Income data issues
 - ◆ Not disposable income, not currently “poverty”
 - ◆ Missing personal income
 - ◆ Measurement error
- SoFIE Attrition
- Counts not weighted to the NZ population

Key Messages

- There is much income mobility
- Point-in-time rates are underestimated
- Over 50% of the population experience low income at least once over 7 years
- Over 20% of the population has chronic low income
- There is increasing deprivation with increasing time spent in low income

Acknowledgements

- Statistics NZ
- Funding
 - ◆ Health Research Council of NZ
- All of the SoFIE participants