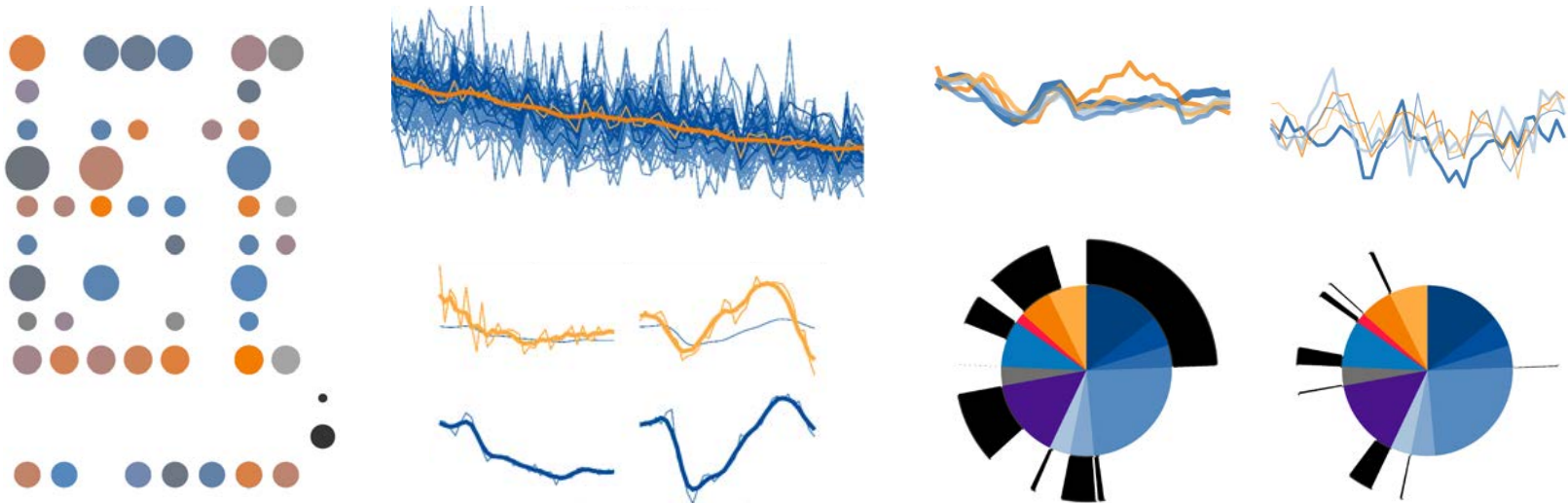


Towards a big data CPI for New Zealand

Paper presented at the Ottawa Group 2017, Eltville, Germany

Alan Bentley and Frances Krsinich



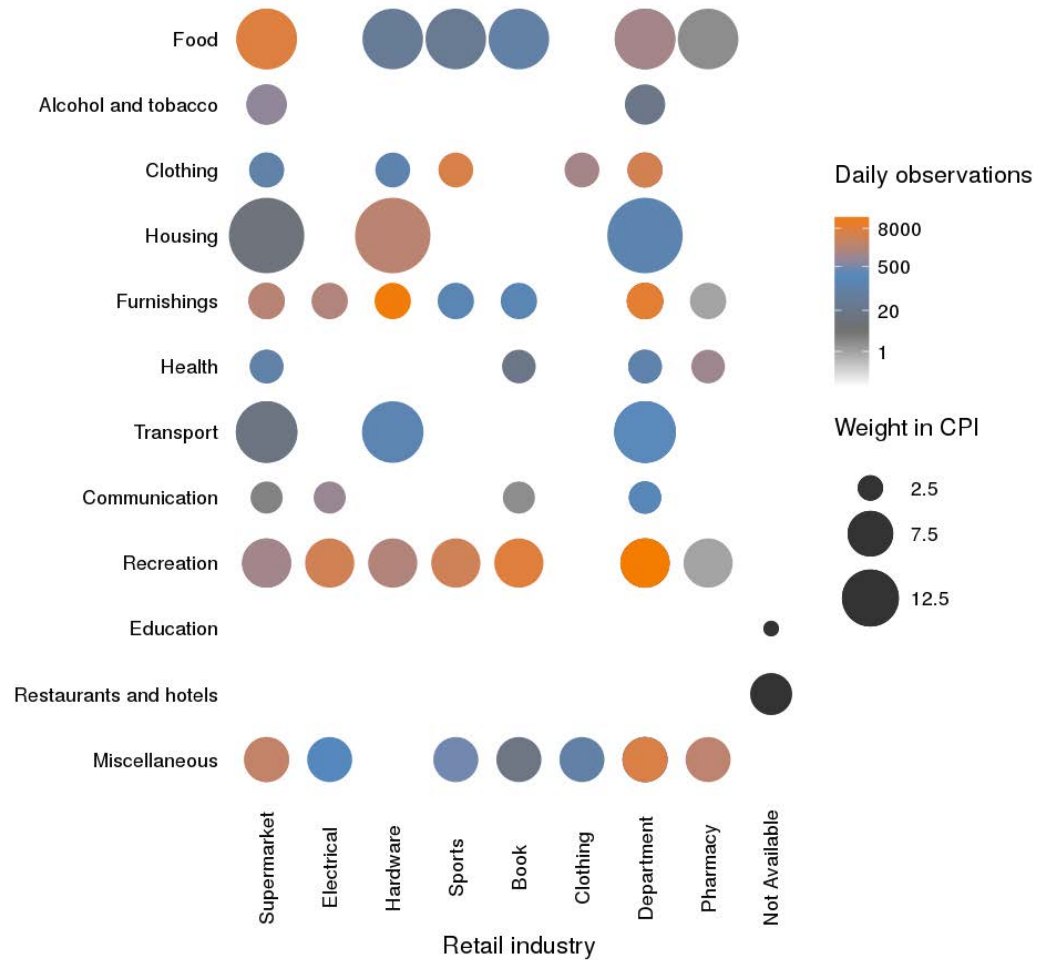
The century-old inflation measurement paradigm



KARANGAHAPE RD
NEWTON 846

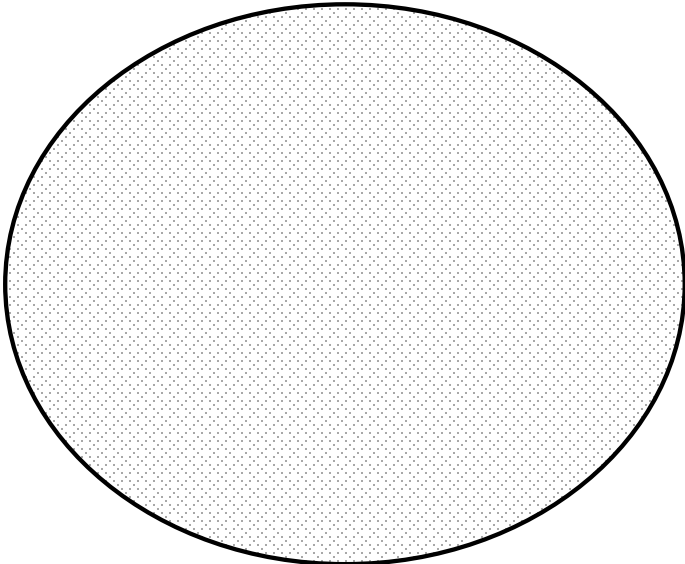
New data sources

Online data trial:
Spread across products and outlets

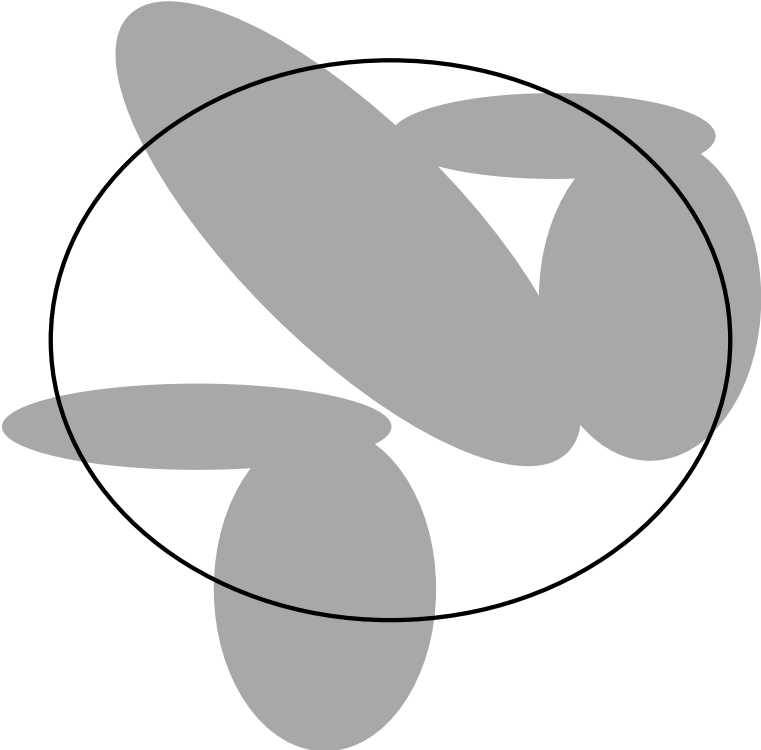


Paradigm shift

Traditional data
Designed sample surveys



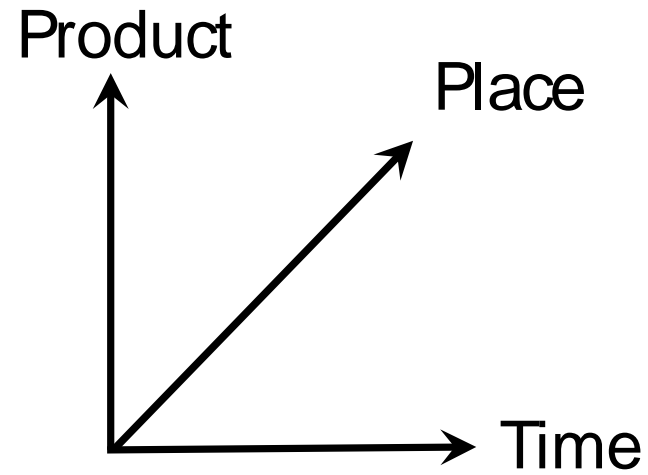
Big data
Found digital footprints



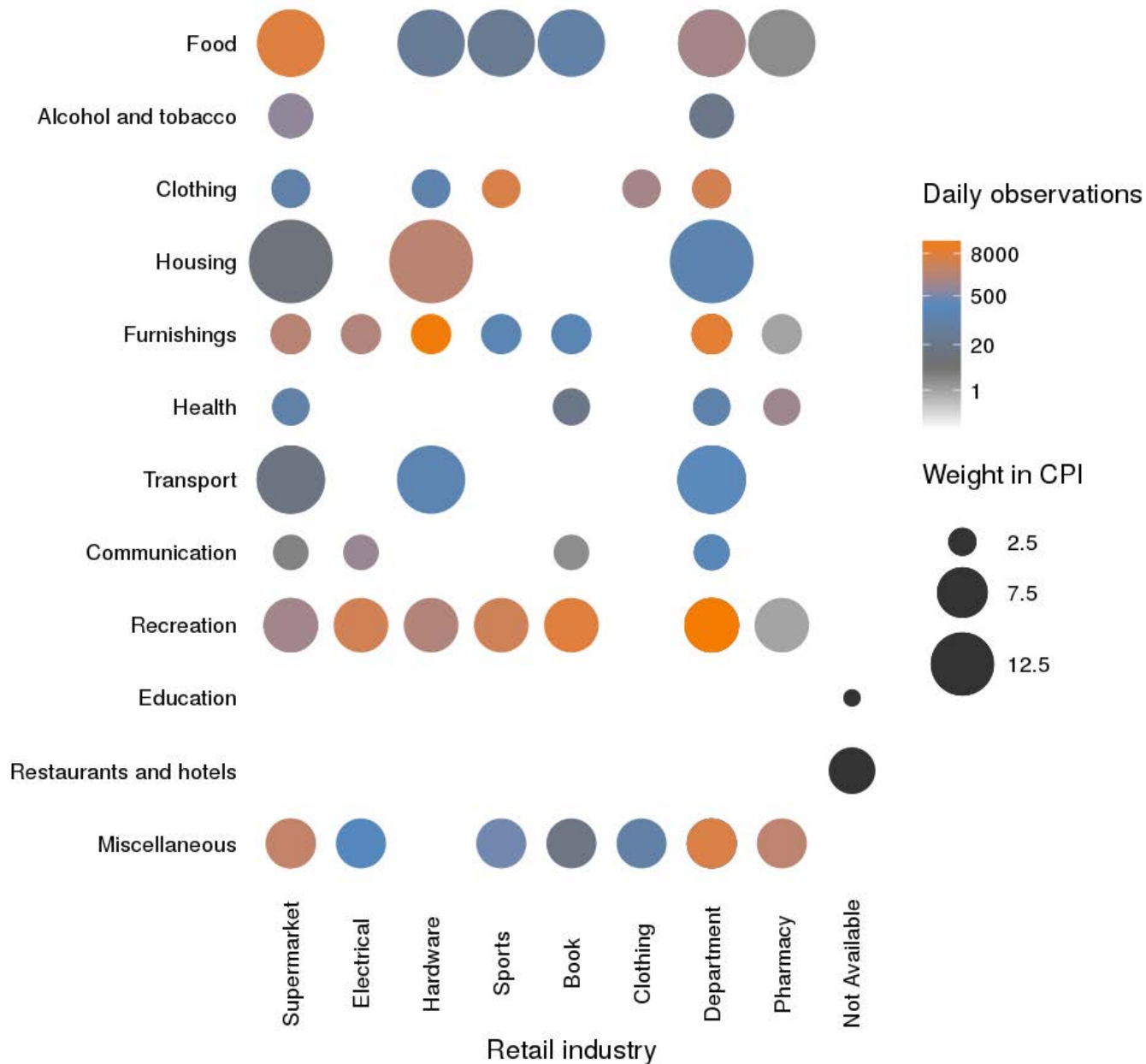
Target population 

Data available 

Assessing coverage

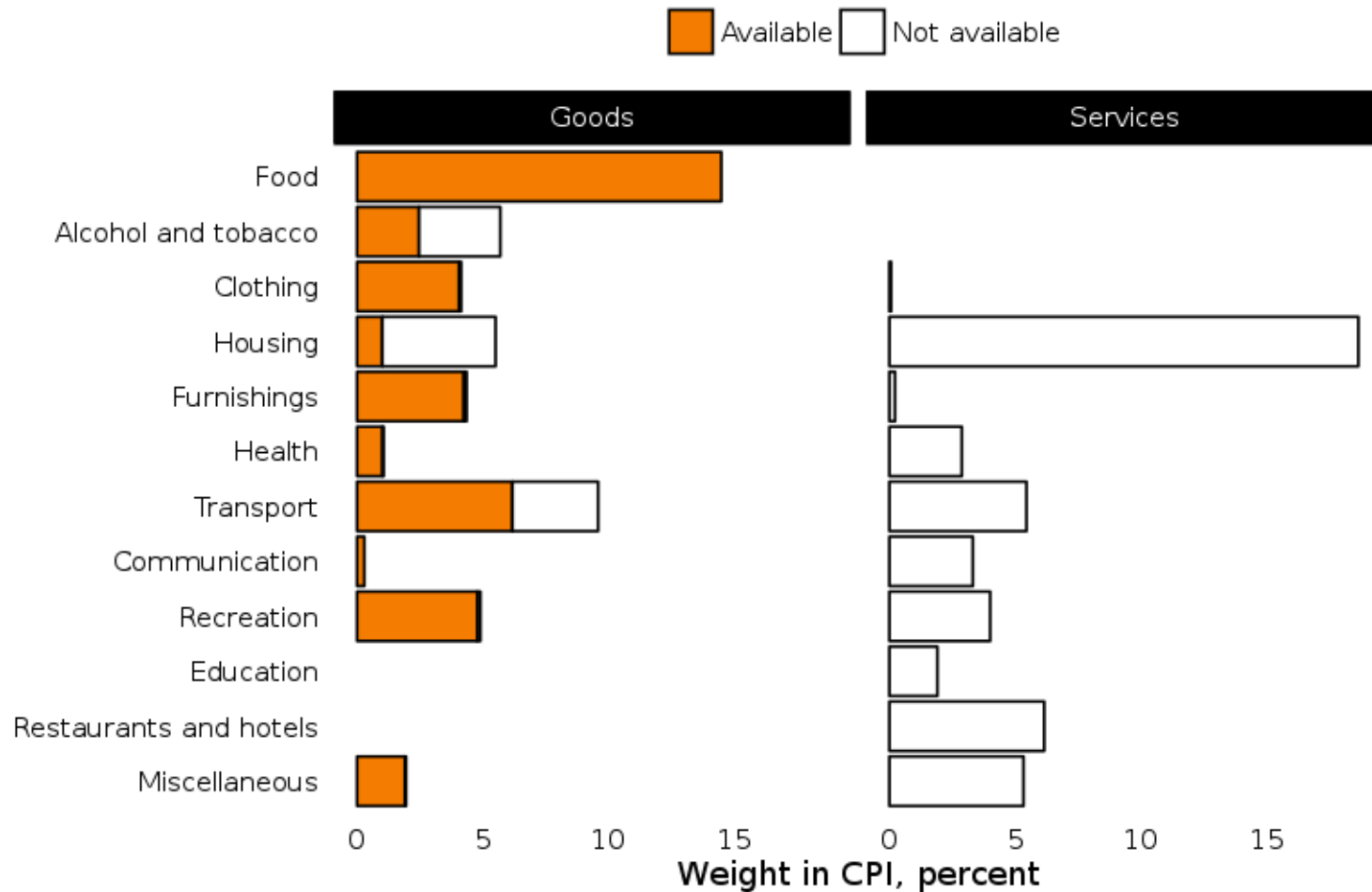


Online data trial: Spread across products and outlets



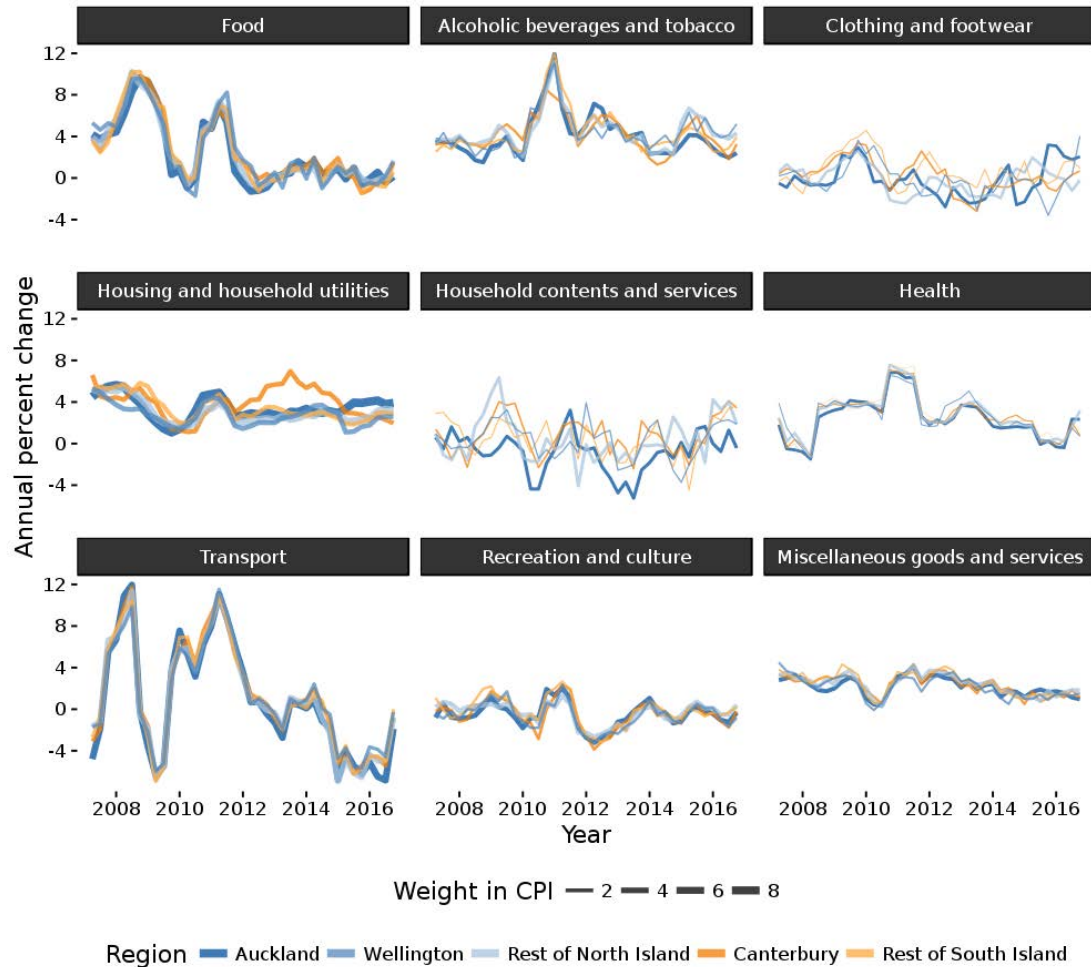
Product coverage

Online data trial:
Better coverage of goods than services



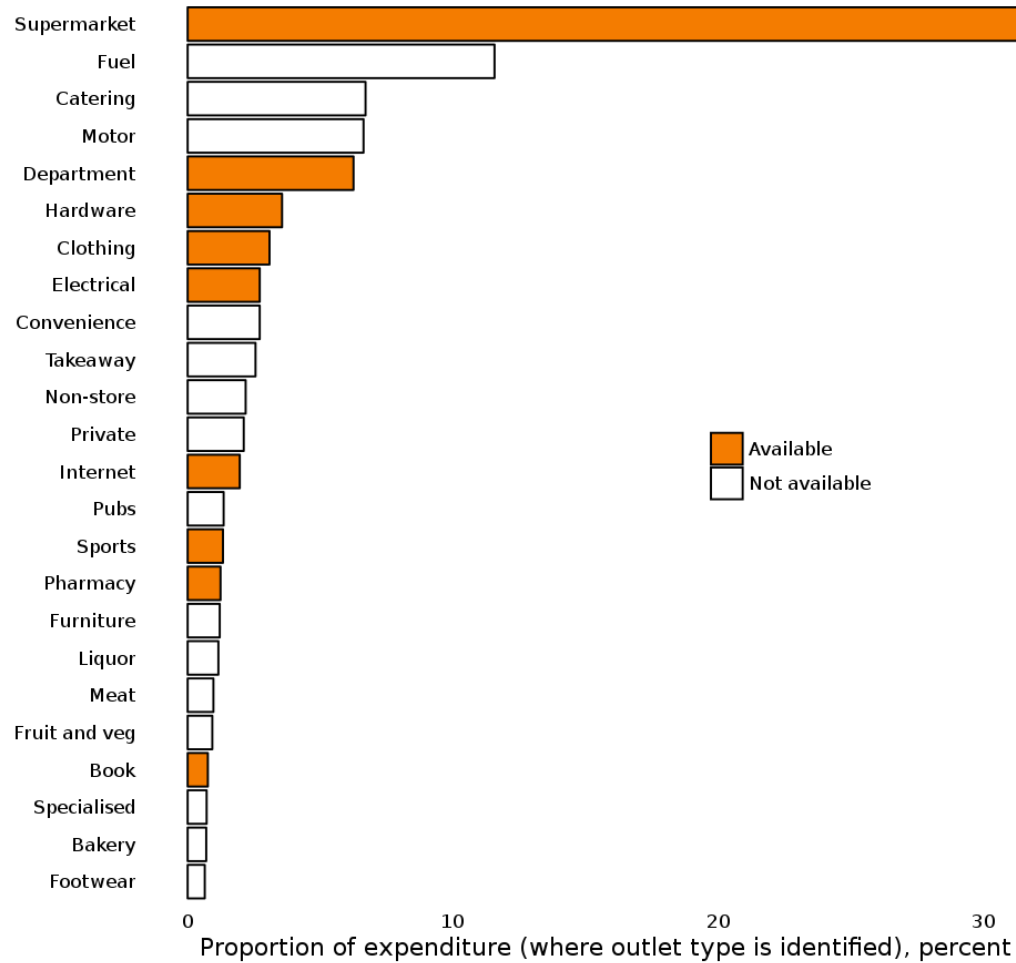
Regional coverage

Little significant regional variation



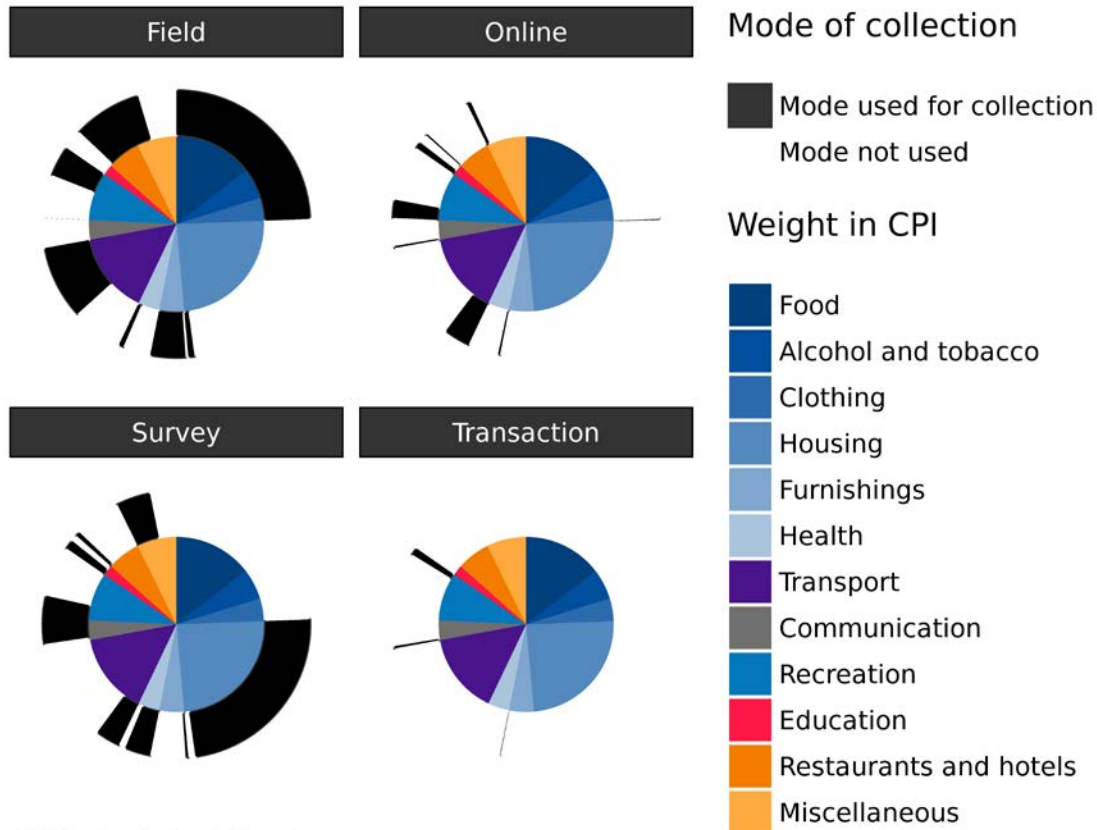
Outlet coverage

Online data trial:
Coverage of top 20 outlet types



Implementation

Current data sources



Field: physically visiting shops

Online: using web browsers

Survey: directly from businesses

Transaction: point-of-purchase scanner data

Rent



Cottages in Pulham Road, Warkworth part of Cottages in Pulham Road, Warkworth.

Price, William Archer, 1866-1948 :Collection of post card negatives.

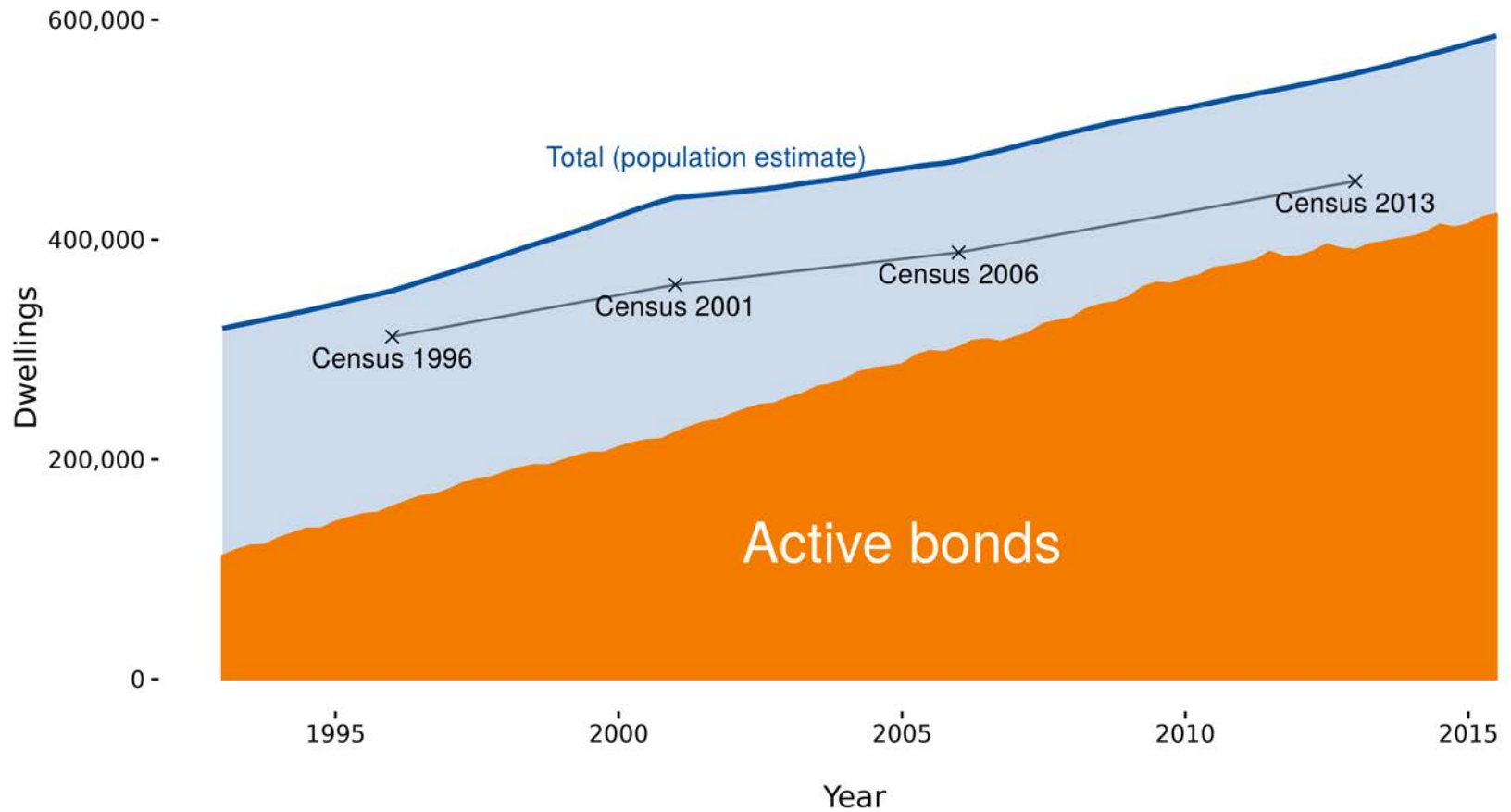
Ref: 1/2-001796-G. Alexander Turnbull Library, Wellington, New Zealand.

/records/23190869

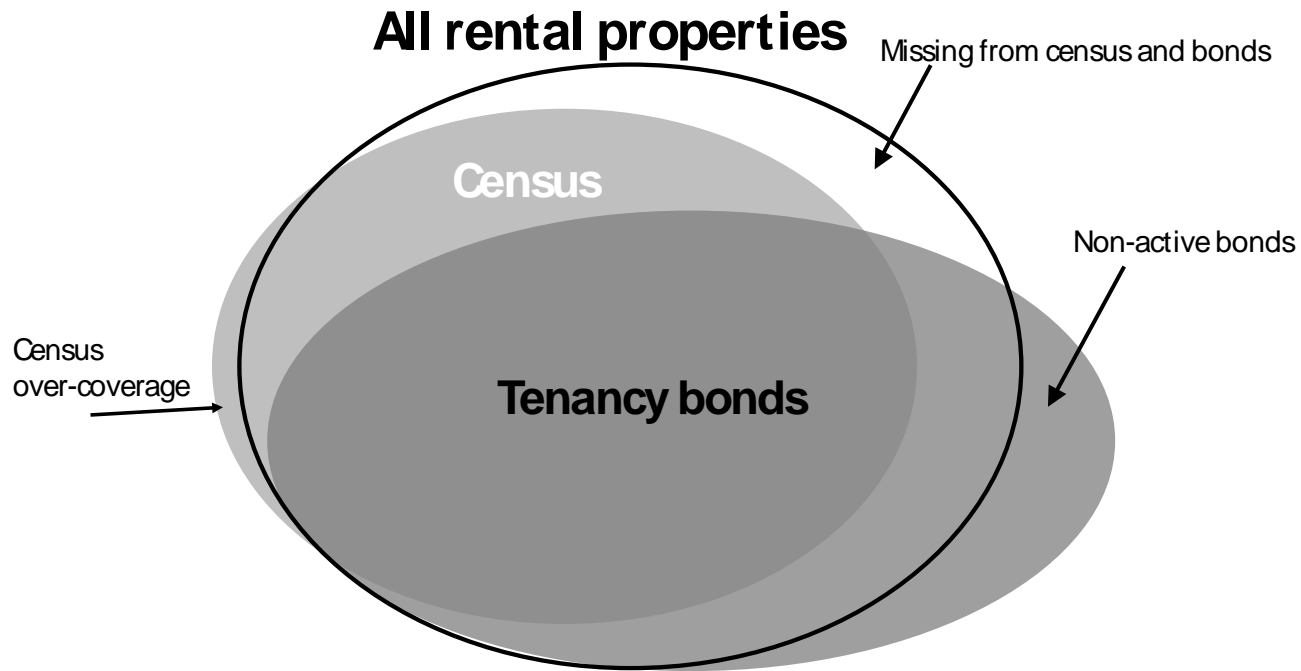
PULHAM ROAD
WARKWORTH. 1410.

Rent

Growing coverage of tenancy bond data

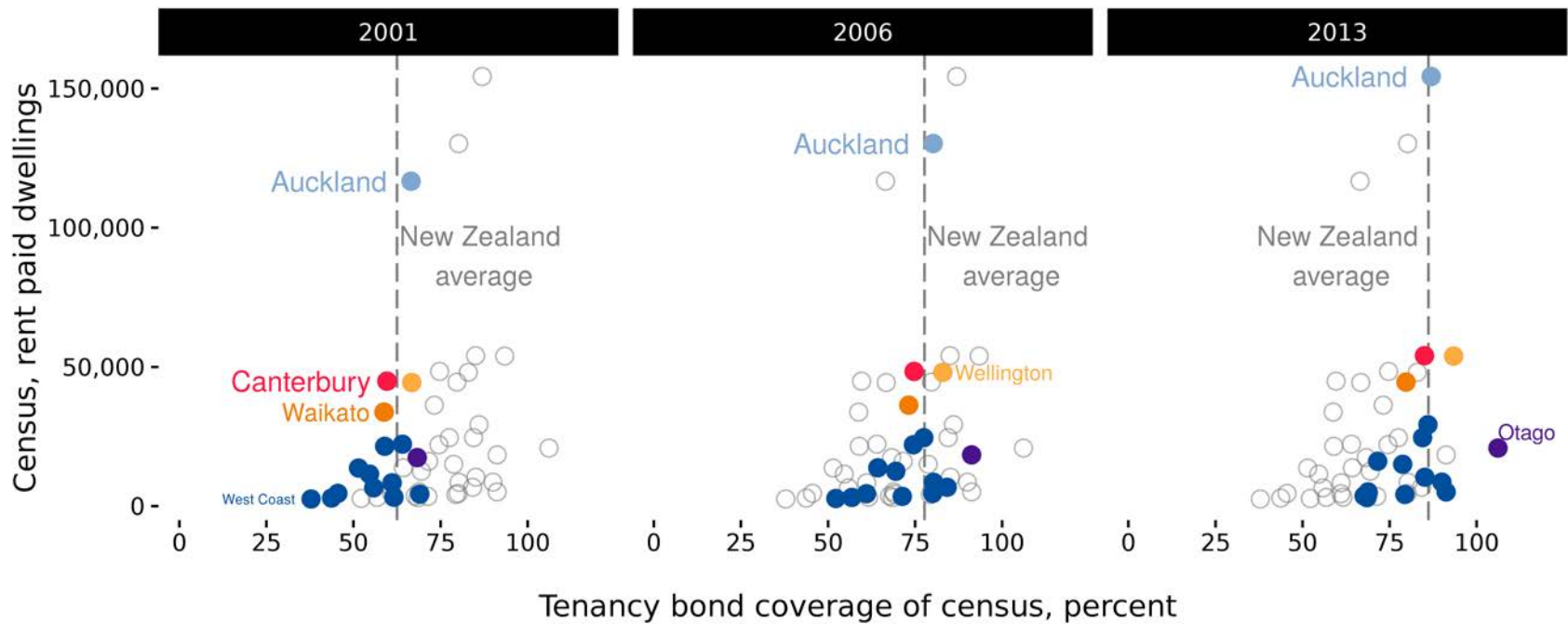


Rent: data sources



Rent: regional coverage

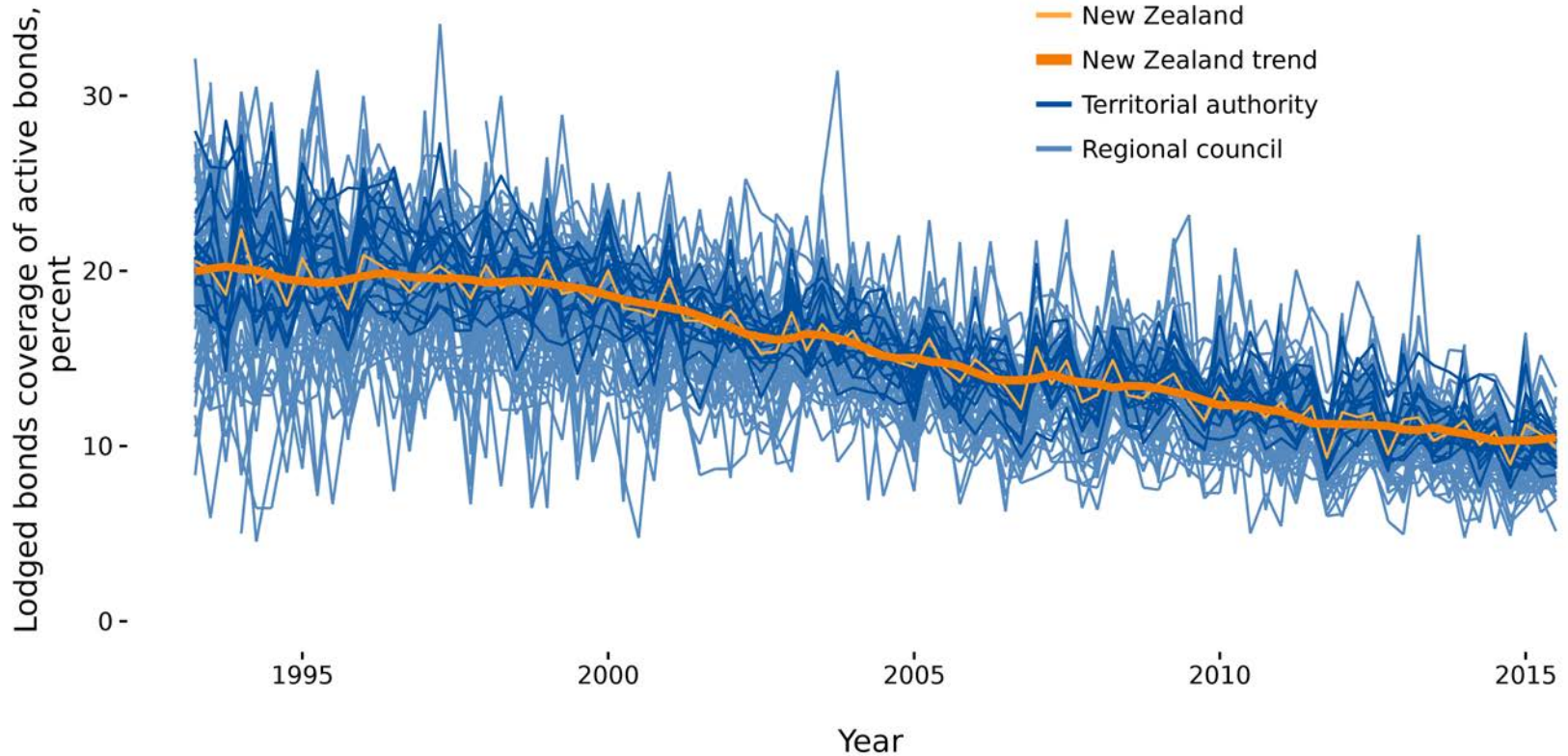
Better coverage of main centres



Source: Stats NZ | Ministry of Business, Innovation and Employment

Rent: temporal coverage

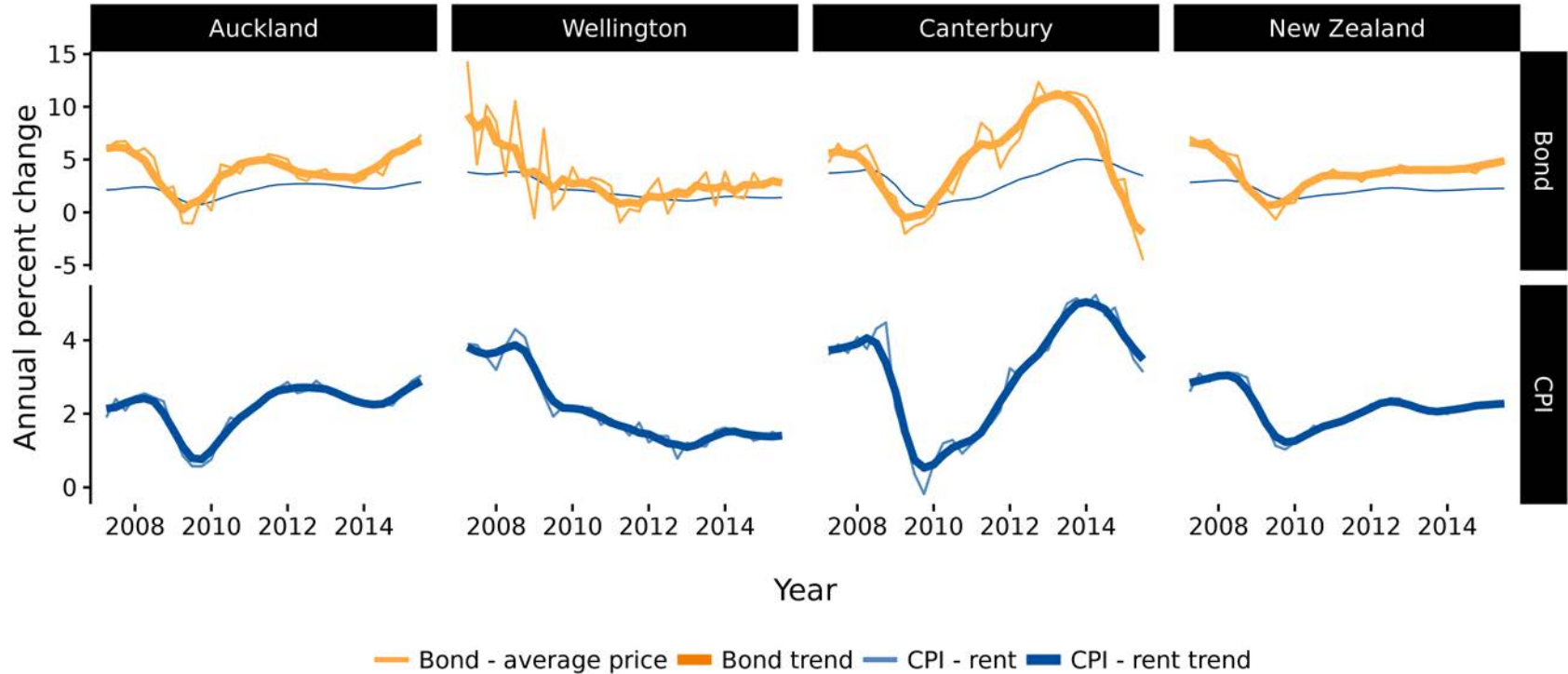
Stabilising coverage of lodged bonds



Source: Ministry of Business, Innovation and Employment

Rent: timing

Tenancy bond data appears a leading indicator, but does not account for quality change



Source: Stats NZ | Ministry of Business, Innovation and Employment