

# Decomposing the temporary-permanent wage gap in NZ

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## **Falls under the FoW umbrella**

- The participation of older workers in the workforce will continue to grow, moving towards 30% within a decade.
- Businesses will be run by a generation with different values, work preferences and career aspirations to their predecessors.
- We will see a greater representation of women and increasing ethnic diversity
- Technology advancements
- In the workplace of the near future we will see a more flexible, collaborative and increasingly insecure workforce.



# More Flexibility



- ❖ With a notable shift by many economies to promote flexible employment regimes, there is a growing interest in examining disparities between temporary-permanent workers.
- ❖ Standing (2011): “The pursuit of flexible labour relations has been the major direct cause of the growth of the global precariat”
- ❖ Around 10% of the workforce are in temporary jobs in NZ, and there are substantial differences between temporary and permanent employees in terms of:
  - ❖ pay, job security, job satisfaction, training opportunities, etc.

- ❖ This paper will focus on the permanent wage premium
  - ❖ How large is the temporary-permanent unadjusted gap?
  - ❖ How much of this gap can be attributed to observable characteristics of the individual, their occupation, their industry, and any other job characteristics
  - ❖ Evaluating the wage gap across the entire wage distribution (using QR approach)
  - ❖ Does the use of PSM add / change this story?



- Why a rise in the temporary workforce across the OECD?
  - Structural shifts (composition of industries / occupations)
  - Demographic forces
  - Cyclical reasons
- Theoretically....
  - Compensating wage differentials
  - Human capital theory
  - Labour segmentation theory
  - Efficiency wage argument

# Wage premia for permanent contracts – selected European countries

Country	Premium (%)	Country	Premium (%)
Austria	20.1 (***)	Italy	24.1 (***)
Belgium	13.9 (***)	Luxembourg	27.6 (***)
Denmark	17.7 (***)	Netherlands	35.4 (***)
Finland	19.0 (***)	Portugal	15.8 (***)
France	28.9 (***)	Spain	16.9 (***)
Germany	26.6 (***)	Sweden	44.7 (***)
Greece	20.2 (***)	United Kingdom	6.5 (*)
Ireland	17.8 (**)		

Source: Boeri, T. (2011)



## **In NZ**

- Dixon (2010) finds for NZ that temporary workers have fewer opportunities for training, and that perceived wage disparities can in the large part be attributed to observed characteristics of the individual and the job
  - (Except for female casual workers)
- Very little information prior to Dixon's work
  - Campbell and Brosnan (2005) compare casual workforce in Aus & NZ

## In NZ

- OECD indicators on employment protection legislation:
  - Scale from 0 (least restrictions) to 6 (most restrictions)
  - OECD average for regulation on temporary employment is 2.07
  - For NZ = 0.92. Only 3 countries with less restrictions.<sup>1</sup>

<sup>1</sup>Based on latest year of available data,

<http://www.oecd.org/employment/emp/oecdindicatorsofemploymentprotection.htm>



# Disclaimer

Access to the data used in this study 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 in this study are the work of the author, not  
Statistics NZ

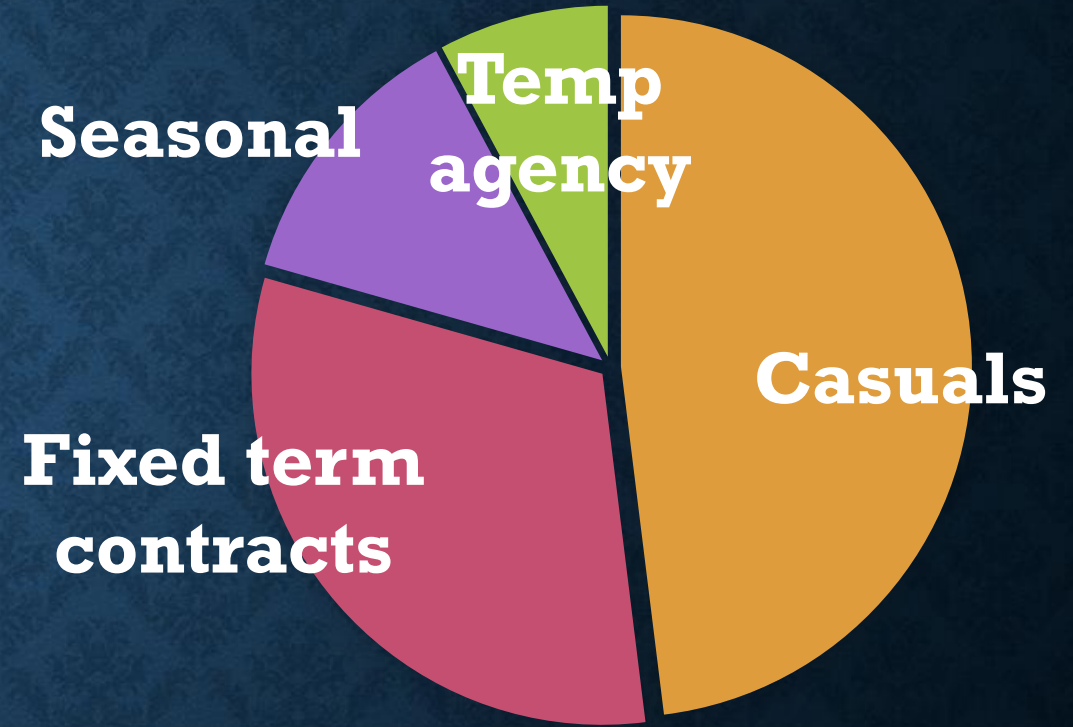
# Data and Descriptives

- ❖ Survey of Working Life – 2008 & 2012 pooled, focus on working age population, those employed; exclude self-employed.
- ❖ Temporary employment  $\approx$  9.2% of workers
- ❖ These workers tend to be:
  - ❖ younger: 36.57 versus 41 years
  - ❖ less educated
  - ❖ Marginally more likely to be a new immigrant (and lived in NZ  $\leq$  5 years)
  - ❖ Sole parent: 6.8% versus 4.9%



# Portrait of temporary workers in NZ

- Approximately 9% of workers  
( $\approx 1/2$  are casuals;  $\approx 1/3$  are fixed term;  
13% seasonal; 8% temp agency)



- In terms of industry: less likely to be in Construction, Wholesale Trade, and Retail trade; more likely to be in Agriculture, forestry & fishing, and Administrative and support services, Education & training.
- In terms of other job characteristics – less likely to be a union member (13.1% versus 17%); and substantially more likely to be part-time (51% versus 20%).

# Decomposing the wage gap

- Total pay penalty of 20.5%
- When only personal characteristics are controlled for:  
8% explained; 12% unexplained
- After controlling for occupation / industry / job characteristics:  
17% explained; 3% unexplained
- Segmentation across the labour market (both horizontal and vertical)  
– driving wage differences, more so than individual characteristics



	<b>Total pay penalty</b>	<b>Explained</b>	<b>Unexplained</b>
All temporary	21.7%	17.3%	3.7%
Fixed term	-1.0%	0.9%	-1.9%
Casual	35.5%	27.3%	6.4%
Temp agency	31.0%	23.6%	6.0%
Seasonal	20.2%	16.4%	3.2%

# Correcting for selection bias

- Sample selection bias (Heckman, 1979) = wage is only observed for those who participate in the labour market; therefore sample doesn't represent true underlying population
- Need a set of instruments to identify selection effects
- Preliminary results indicate selection bias only for the casual workers sub-sample



# Decomposition across the wage distribution

- Quantile distribution
- Evidence of a greater wage penalty at the top (glass ceiling) and/or bottom (sticky floor)???
- Wage penalty at 12.5, 25, 50, 75, 87.5 percentile cutoffs
- Results indicate wage gap increases as we move up the distribution (except for fixed term workers) – in favour of the glass ceiling hypothesis

# Nearest neighbour matching

- Matching observations in the treated group (in this case temporary workers) with the control group (permanent workers).
- Average treatment effect – insignificant for fixed term workers, but large and significant (up to 20%) for casuals
- Insider / outsider argument
- Caveat – unequal unobservables at play



# **SUMMARY:**

## **Focus on unexplained wage gaps**

- Industry, occupation and job-related characteristics explain a sizable proportion of the gap
- Wage gap increases as we move up the distribution
  - Evidence in favour of glass ceiling hypothesis
- Policy implications? Regarding further deregulation and loosening of EPL for temporary workers

**THANK YOU**

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