UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

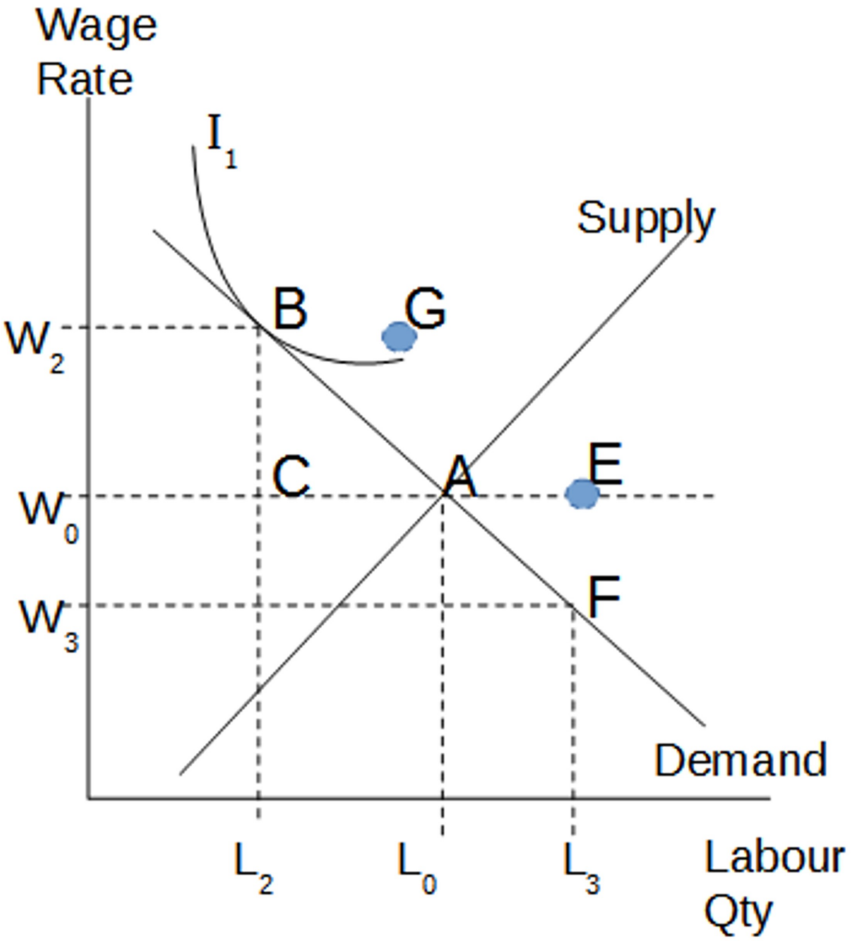
Health Sector Labour Market Dynamics
&
Multi-Employer Collective Agreements

James Hogan
(Masters of Commerce Thesis)

Multi-employer Collective Agreements

- Complex collective agreements between DHBs and workforce collectives
  - Negotiated centrally between unions and DHBs under the Govt's “Tripartite” process
  - Most of the DHB workforce is covered some MECA
    - Junior Doctors (RDA)
    - Senior Doctors (ASMS)
    - Technical workforces (physios / radiation technicians) (Apex)
  - Manditory terms and conditions
    - Fixed salary bands with automatic salary progression
    - Automatic training requirements, automatic leave entitlments

Little bit of labour market theory...



- Unions act as a labour cartel allowing their members to agree and fix their labour prices to an agreed non-competitive level (B).
- The size of the employed workforce falls.
- The high wage rate attracts entrants into market who can't all be employed at that price.
- The unemployed workforce only secure employment at a below competitive price
- Prices are distorted, and allocative inefficiency induced

Conditions for Union Power to Persist

- 2 Key Conditions needed for unions to maintain their power in long run
  - Uncompetitive Output Market
    - Must be market power for price increases to be passed through to some ultimate consumer
  - Uncompetitive Labour Market
    - Must be ablility for collective cartel behaviour to persist

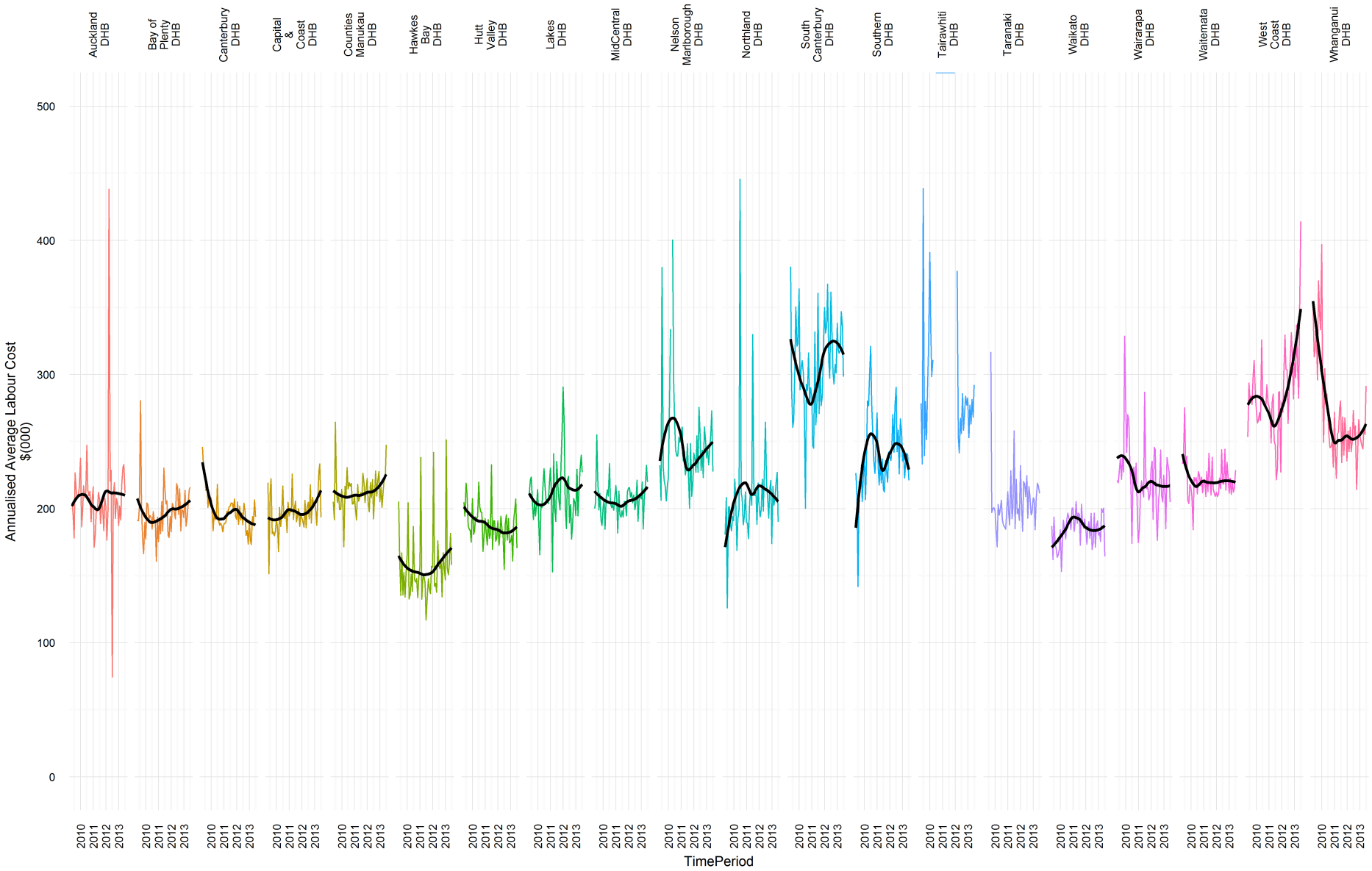
Modelling Everything

- Approached the problem as a system of equations reflecting first order conditions for profit maximisation

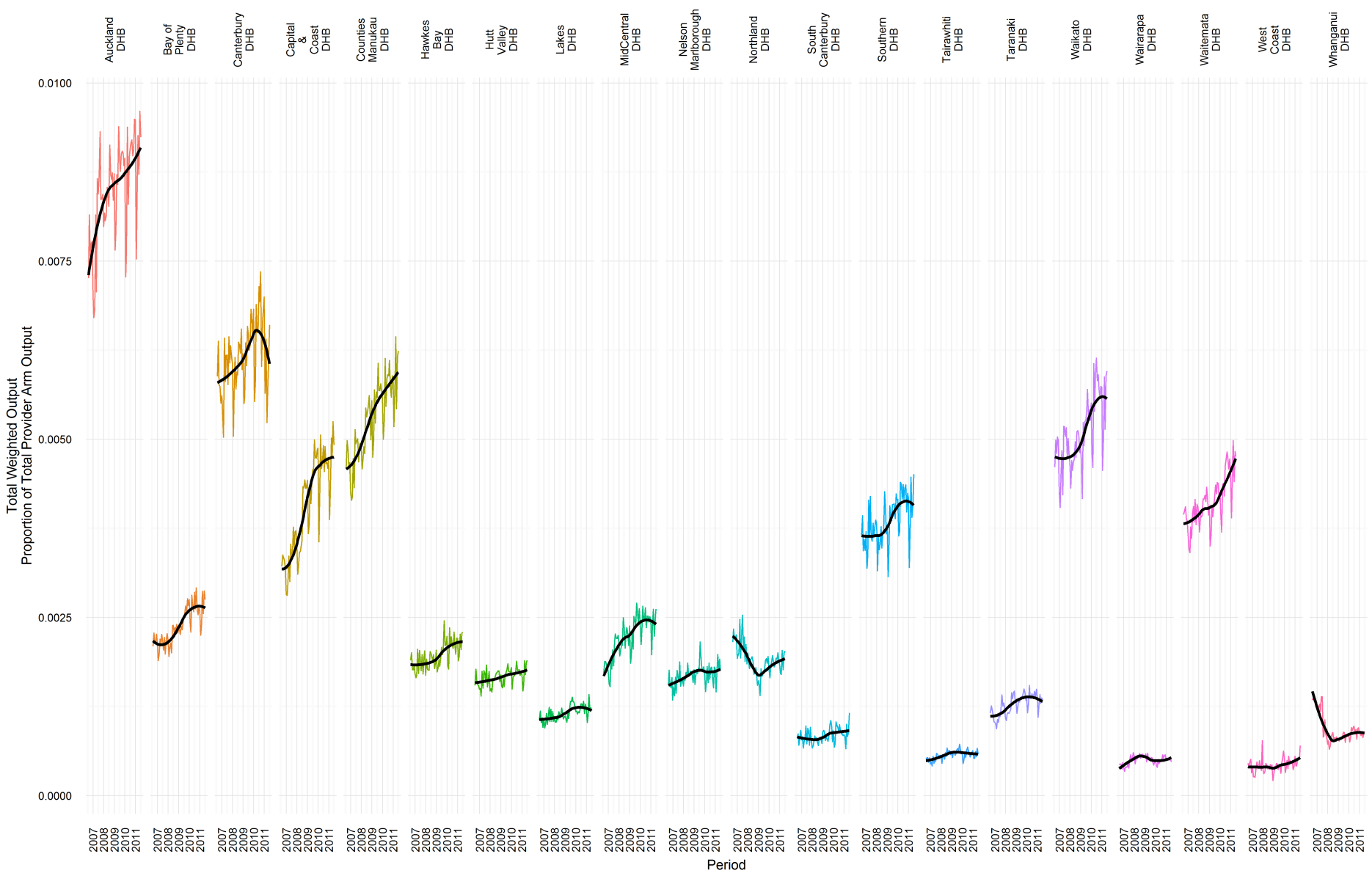
$$
\begin{aligned}
&\text{Health Sector Production:} && log(Y_{ti}) = && log(A_{ti}) + \alpha log(L_{ti}) + \beta log(K_{ti}) \\
&\text{Labour Market:} && \frac{\partial Y}{\partial L} = log(w_{ti}) = && log(A_{ti}\alpha) + (\alpha - 1) log(L_{ti}) + \beta log(K_{ti}) \\
&\text{Capital Market:} && \frac{\partial Y}{\partial K} = log(r_{ti}) = && log(A_{ti}\beta) + (\alpha) log(L_{ti}) + (\beta - 1) log(K_{ti})
\end{aligned}
\tag{60}
$$

- 5 labour inputs (Medical / Nursing / Support / Allied Health / Management) plus a capital measure.
- 20 DHBs, monthly data spanning 2008 – 2012
- Comprehensive health service output measures
- The econometrics is a complex story in itself... read my thesis... :)

Data Example: Medical Labour Prices



Data Example: Output Measures



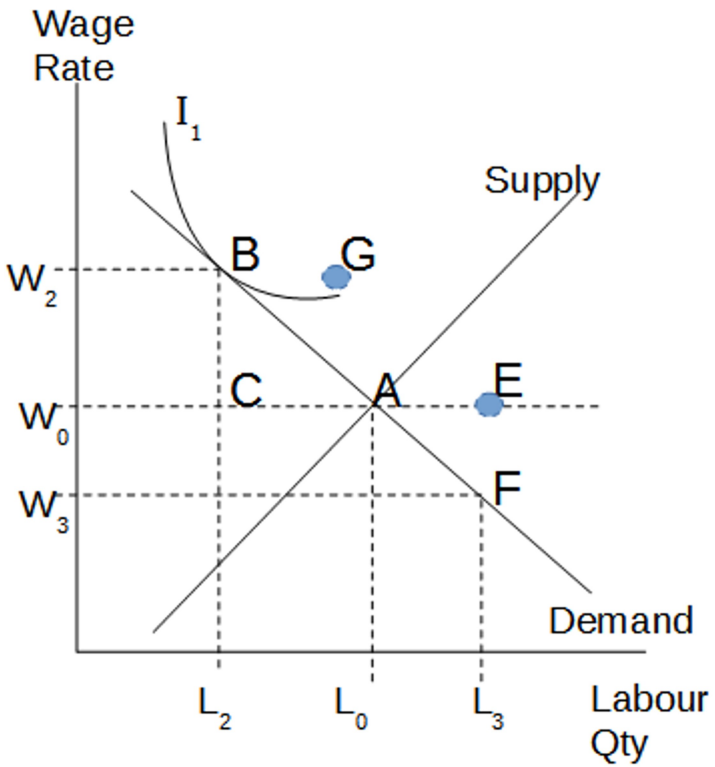
Key Results

- Thesis Table 1
- Turned it into a publicly available interactive website for scenarios and testing implications of model (www.wiltshirehogan.co.nz)
- Input quantities are determining labour Prices
  - HORRAH! Economic theory ACTUALLY works!
- Descending scale of own input labour price elasticities
  - Clear signs of ACTUALLY allocative inefficiency and MECA-induced production distortions

Policy Implications

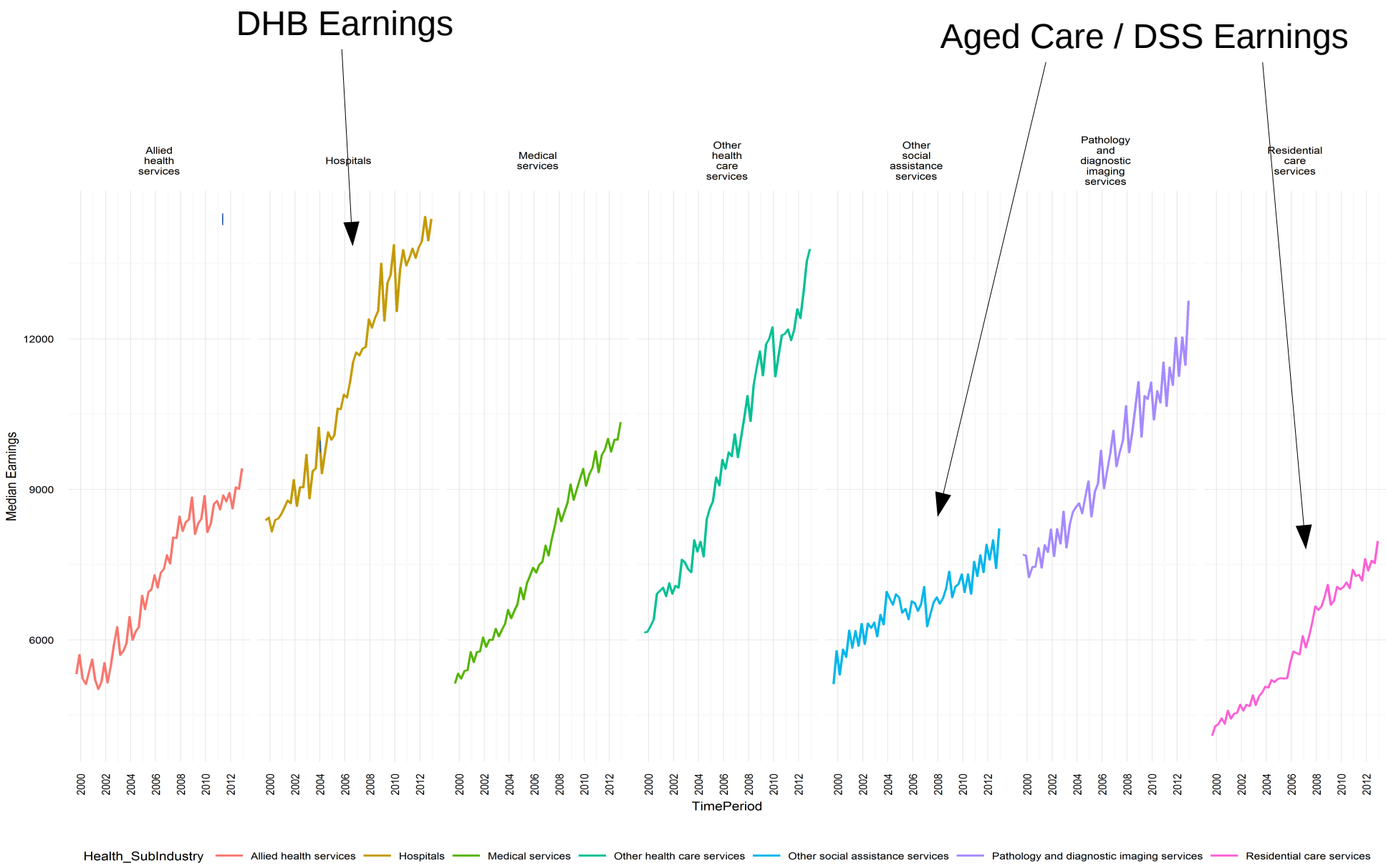
- Overseas trained workforce attracted by high MECA wages excluded by uncompetitive labour market.
- High labour costs passed through to New Zealand taxpayer through uncompetitive output market.
- DHB Providers are induced to become inefficient
- Nursing graduates unable to find employment through smaller affordable workforce
- High medical wage rates attracting talent which might earn the same wage within a competitive market (best and brightest responding to artificial market signal)

Final Passing Thoughts



- Where does the excess workforce go who are attracted into the labour by the high wages, but can't get a MECA job?
- Aged Care and Disability Sector are only private industries experiencing employment growth.

Final Passing Thoughts



Final Thoughts