

Inter-Industry Wage Differentials in Trinidad and Tobago: A Statistical Investigation

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A stylized silhouette of a mountain range in shades of teal, located at the bottom right of the slide.

Neo-Classical Labour Theory

- ◆ Market Clearing Wage(s)
- ◆ No involuntary Unemployment

$$MRPl_{ij} = W_i \quad \forall j = 1, 2, 3 \dots n$$

Inter-Industry Wage Differentials

- ◆ Stable IIWD has been noted in the US since Slichter (1950) has been re-confirmed by numerous other studies.
- ◆ Stable IIWD has also been confirmed for OECD countries
- ◆ A growing literature mainly from latin America suggest that stable IIWD also existing developing countries

Purpose

- ◆ To demonstrate that the average employee will perceive that temporally stable IIWD exist in Trinidad & Tobago
- ◆ Further that this perception holds true even after adjusting for differences (b/w industry) in labour quality

Data & Methodology

- ◆ CSSP data
- ◆ Earnings of each respondent relative to her occupation's average wage was computed

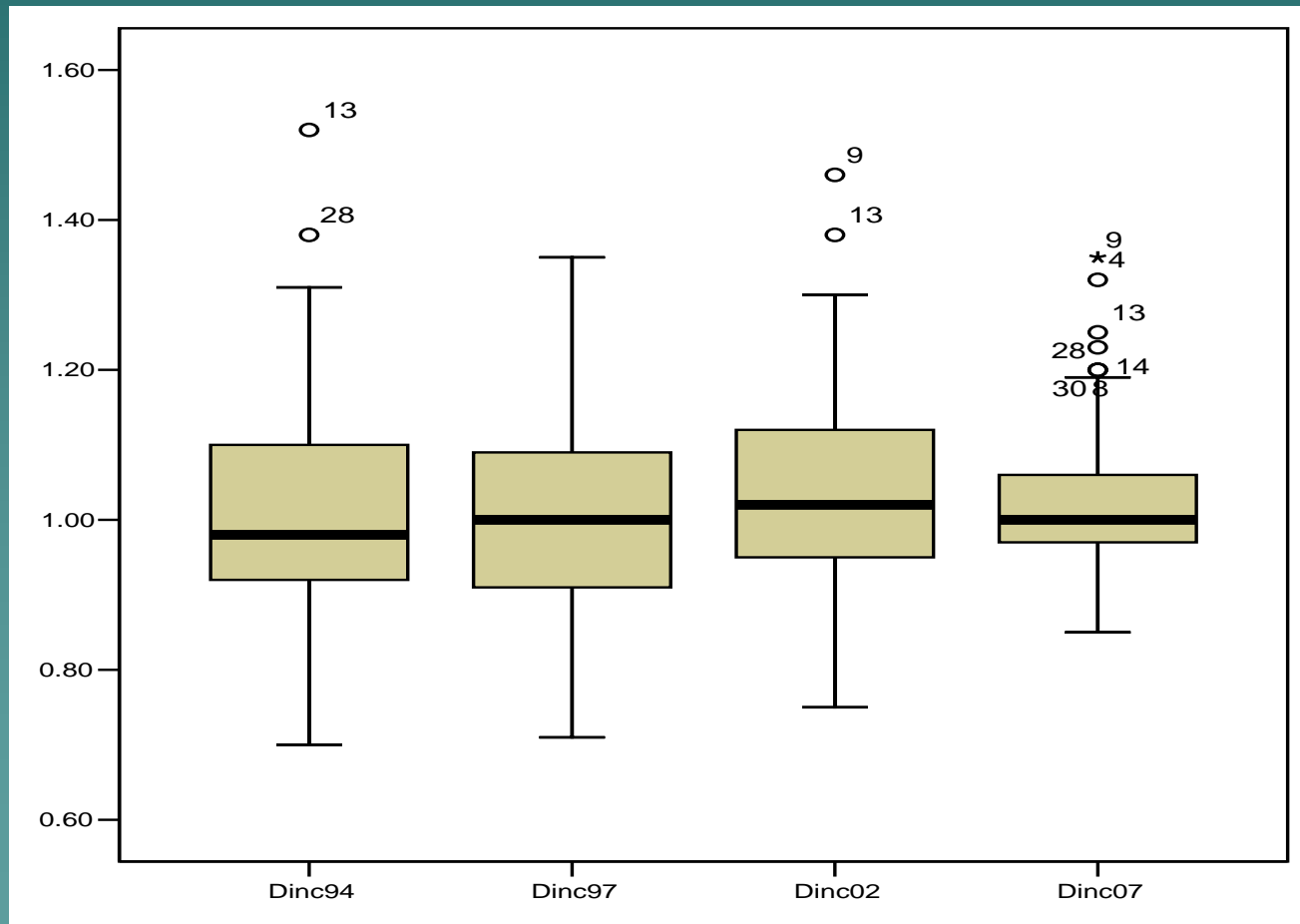
$$Dinc_{ij} = Inc_{ij} / \overline{Inc}_j$$

- ◆ Relative Occupationally Adjusted Wage (ROAW) Calculated

$$Dinc_k = \frac{\sum_{i=1}^N \sum_{j=1}^M Dinc_{ijk}}{N}$$

Inter-Industry Wage Differentials when Accounting only for Differences in Occupation

◆ See Table 1



Inter-Industry Wage Differentials when Accounting only for Differences in Occupation (cont'd)

- ◆ See table 2

Table 3 :Movement in Ranking		1997	2001/02	2007
1993/94	0	5	4	1
	1-3	23	16	16
	>3	13	21	24
	Avg	4.3	5.2	6.8
1997	0		6	7
	1-3		15	12
	>3		20	22
	Avg		4.8	5.1
2001/02	0			3
	1-3			16
	>3			22
	Avg			5.0

Inter-Industry Wage Differentials when Accounting only for Differences in Occupation (cont'd)

◆ Temporally Stable

Table 4: Selected Statistics				
		1997	2001/02	2007
1993/94	Correlation Coefficient	0.839	0.825	0.735
	P-Value (equality of variance)	0.514	0.478	0.091
	Spearman Rank Correlation	0.842*	0.806*	0.700*
1997	Correlation Coefficient		0.880	0.813
	P-Value (equality of variance)		0.955	0.324
	Spearman Rank Correlation		0.839*	0.819*
2001/02	Correlation Coefficient			0.839
	P-Value (equality of variance)			0.297
	Spearman Rank Correlation			0.837*
* significant at the 0.001 percent level				

Inter-Industry Wage Differentials when Accounting only for Differences in Occupation (cont'd)

◆ See Table 5

Figure 2: Summary of Tier 1

3 & 4 Intersections

ID

09. Petroleum Refineries*

04. Crude Petroleum Production*

28. Water Transport*

34. Public Admin & Defense*

13. Elec & other Energy*

14. Waterworks & Supply*

30. Communication*

08. Man. of Industrial Chemicals*

29. Air Transport

31. Financial Institutions

37. Medical & Dental

(* indicates 4intersections)

2 Intersections

ID

22. Mach& Veh & equip (rtl)

10. Man. Of Cem & Con Prod'ts

11. Iron & Steel Basic Industries

20. Min. Fuels & Lubricants (rtl)

26. Hotel & Rooming Houses

03. Agric. Animal Husb. & Horticulture

17. General Contractor

Inter-Industry Wage Differentials when Accounting only for Differences in Occupation (cont'd)

Figure 3: Summary of Tier 3

3 & 4 intersections

ID

- 39. Repair Services*
- 33. Business Services*
- 25. Restuarants& Cafeterias*
- 19. Food Bever & Tobacco (Rtl)*
- 27. Land Transport*
- 40. Domestic Services*
- 12. Man. Fabr. Metal xcpt Mach *
- 15. Construct main& alt of Bldgs
- 21. Textile Apparel & F'tware (Rtl)

(* indicates 4 intersections)

2 intersections

ID

- 24. Miscellaneous retail
- 06. Man. Non -alcoholic Bever
- 23. Chem. Drugs, Pharm & Cos (rtl)
- 01. Field Crop Cultivation
- 05. Man. Of Bakery Products
- 20. Mineral Fuels & Lubricants (rtl)
- 07. Printing Publishing & Allied Serv
- 41. Misc. Personal & Household Serv
- 17. General Contractor
- 02. Growing Fruits & Vegetables

Adjusting for Labour Quality

$$Dinc_{ij} = \alpha + \beta_1 Age + \beta_2 Tert + \beta_3 Sec + \beta_4 Male$$

Table 6: Regression Coefficients

	α	β_1	β_2	β_3	β_4
1993/94	0.368	0.014	0.136	0.109	0.099
2001/02	0.497	0.010	0.172	0.109	0.109

Adjusting for Labour Quality (cont'd)

◆ See Table 7

Table 8: Comparison of Inter-industry wage Distribution with and without Accounting for Differences in Labour Quality

Sample	Tier 1			Tier 2			Tier 3		
	Common	Total unadjusted	Total Adjusted	Common	Total unadjusted	Total Adjusted	Common	Total unadjusted	Total Adjusted
1993/94	12	13	14	11	15	16	8	13	12
2001/02	11	14	12	12	17	17	7	10	12

Theoretic Explanations

◆ Competitive Explanation

- Differentials are result of shifts in demand for specific products
- Wage differentials reflects differing preferences for workers' ability
- Wage differentials compensate workers for asymmetries in working conditions

Theoretic Explanations (cont'd)

◆ Efficiency Wage Theories

- ◆ Central Assumption is that high real wages can thru various mechanisms, result in higher labour productivity

– Monitoring & Shirking Model

- ◆ In circumstances where shirking is costly to firm but difficult monitor, firms will opt to pay above Mkt clearing wages to make it the possibility of job loss more costly to employees.

– Turnover Cost Model

- ◆ Companies for whom the cost of initiating a new worker is high, may opt to pay a wage premium to workers to reduce turnover

– Sociological Model

- ◆ Workers' loyalty is exchanged for high wages, and this loyalty can be translated via effective management into high productivity.