

Handout on HK calculation

Weil : Table 6.2 and Figures 6.9 and 6.10

According to Table 6.2 labor has seven different skill levels: Raw Labor (zero schooling) and 4 -8-10-12-14-16 years of schooling.

Let w_i be the wage paid to a worker with i years of schooling, L_i the number of such workers and L the total number of workers. Then:

HK wages paid to worker with i years of schooling = $w_i - w_0$

Total wages paid to HK = Total HK W =

$$=(w_4 - w_0) L_4 + (w_8 - w_0) L_8 + (w_{10} - w_0) L_{10} + (w_{12} - w_0) L_{12} + (w_{14} - w_0) L_{14} + (w_{16} - w_0) L_{16}$$

Total wages paid = Total W =

$$= w_0 L_0 + w_4 L_4 + w_8 L_8 + w_{10} L_{10} + w_{12} L_{12} + w_{14} L_{14} + w_{16} L_{16}$$

Share of wages paid to HK = Total HK W / Total W

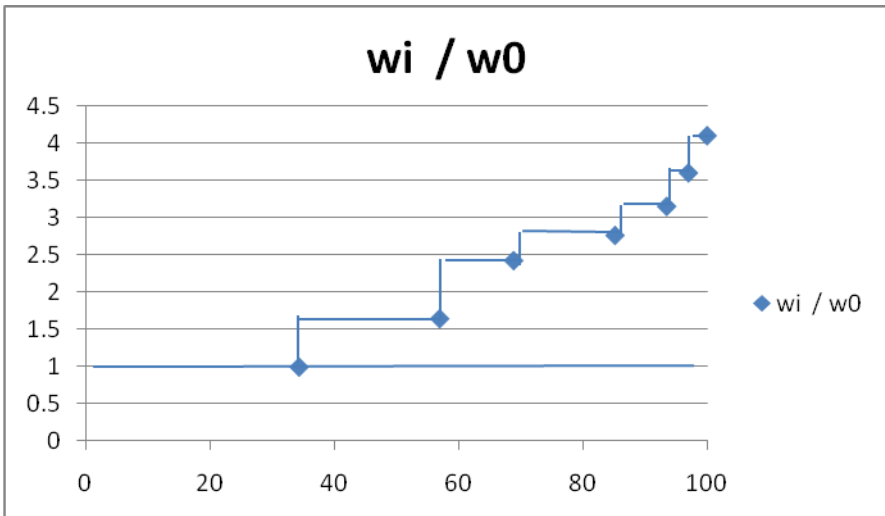
Or dividing numerator and denominator by L

$$= (\text{Total HK W/L}) / (\text{Total W/L})$$

$$\frac{(w_4 - w_0) (L_4/L) + (w_8 - w_0) (L_8/L) + (w_{10} - w_0) (L_{10}/L) + (w_{12} - w_0) (L_{12}/L) + (w_{14} - w_0) (L_{14}/L) + (w_{16} - w_0) (L_{16}/L)}{w_0 (L_0/L) + w_4 (L_4/L) + w_8 (L_8/L) + w_{10} (L_{10}/L) + w_{12} (L_{12}/L) + w_{14} (L_{14}/L) + w_{16} (L_{16}/L)}$$

Remark: In table 6.2 w_0 is equal to 1.

Using data from Table 6.2 Weil						
LDC's	Fig.6.9					
Years schooling (i)	w_i / w_0	L_i / L	$w_i \cdot L_i / L$	$(w_i - w_0) \cdot L_i / L$	Cumul L_i / L	
0	1	34.4	34.40		34.4	
4	1.65	22.6	37.29	14.69	57	
8	2.43	11.9	28.92	17.02	68.9	
10	2.77	16.3	45.15	28.85	85.2	
12	3.16	8.3	26.23	17.93	93.5	
14	3.61	3.5	12.64	9.14	97	
16	4.11	3	12.33	9.33	100	
Sum			196.95	96.95		
% payments to HK (96.96/196.95)						49%
% payments to raw labor						51%



Using data from Table 6.2 Weil

DC's **Fig. 6.10**

Years schooling (i)	w_i / w_0	L_i/L	$w_i \cdot L_i/L$	$(w_i - w_0) \cdot L_i/L$	Cum L_i/L
0	1	3.7	3.70		3.7
4	1.65	11.7	19.31	7.61	15.4
8	2.43	13.4	32.56	19.16	28.8
10	2.77	26.5	73.41	46.91	55.3
12	3.16	16.6	52.46	35.86	71.9
14	3.61	15.1	54.51	39.41	87
16	4.11	13	53.43	40.43	100
Sum			289.37	189.37	
% payments to HK (189.37/289.37)					65%
% payments to raw labor					35%

