

Estimation Results

Table 0.1 shows OLS estimation results of equation ?? run on the whole sample of the RLMS observations. In this subsection, we analyzed separately six years that represent the ends (1994 and 2018), the diffused peak (2003 and 2006), and halfway points to the ends (2012 and 2003) of the available time interval. The idea is to examine the role played by changes in depreciation to explain the observed pattern of variation in the rates of return shown in Figure ??.

Table 0.1: Results of Estimating Human Capital Depreciation for the Whole Sample, RLMS

	1994	1998	2003	2006	2012	2018
	(1)	(2)	(3)	(4)	(5)	(6)
Constant	10.266*** (0.301)	4.720*** (0.258)	6.762*** (0.221)	7.854*** (0.181)	8.889*** (0.128)	9.205*** (0.158)
Educ, years (S)	0.113*** (0.020)	0.116*** (0.017)	0.094*** (0.015)	0.074*** (0.012)	0.054*** (0.008)	0.053*** (0.010)
Educ X Exper (TS)	-0.001* (0.001)	-0.001* (0.001)	-0.00005 (0.001)	0.0003 (0.0005)	0.0003 (0.0003)	0.0001 (0.0004)
Exper(T)	0.053*** (0.015)	0.044*** (0.013)	0.016 (0.011)	-0.001 (0.009)	0.012* (0.007)	0.023*** (0.008)
Exper squared (T^2)	-0.001*** (0.0002)	-0.001*** (0.0001)	-0.0004*** (0.0001)	-0.0002* (0.0001)	-0.001*** (0.0001)	-0.001*** (0.0001)
Observations	3,037	3,100	3,856	4,800	7,417	6,112
R ²	0.043	0.058	0.068	0.078	0.088	0.071
Adjusted R ²	0.042	0.057	0.067	0.077	0.087	0.071
Residual Std. Error	0.934	0.800	0.782	0.715	0.666	0.617
F Statistic	34.062***	47.678***	69.846***	101.053***	177.952***	117.104***

Note:

*p<0.1; **p<0.05; ***p<0.01

Using the coefficient estimates derived from Table 0.1, we compute the depreciation rate during T years applied to schooling as $\pi_1 S$ and the depreciation rate applied to experience as $2\pi_2 T$, evaluating the expression at the mean level of schooling. Table 0.2 reports the depreciation rate values so calculated with the corresponding sample means. The table shows an interesting U-shaped pattern in the depreciation rate for human capital. The depreciation rate associated with education has been declining steadily and did not pick up again as measured with the given data. The depreciation rate associated with experience declined at first and then picked up again.

Further work is required, including computation of the depreciation rates at levels other than the mean values. At this stage, the findings raise some

Table 0.2: Average Depreciation Rates (DR) by Years, RLMS

	Statistic	1994	1998	2003	2006	2012	2018
1	Experience, mean	12.70	12.69	12.79	12.79	12.95	13.27
2	Education, mean	21.41	22.32	22.20	22.24	22.52	22.52
3	DR Experience, %	1.87	1.55	1.04	0.50	1.37	1.63
4	DR Education, %	2.80	2.71	0.11	0.00	0.00	0.00
5	DR Human Capital, %	4.67	4.26	1.15	0.50	1.37	1.63

Table 0.3

	1994	1998	2003	2006	2012	2018
	(1)	(2)	(3)	(4)	(5)	(6)
Constant	9.725*** (0.381)	3.786*** (0.322)	5.464*** (0.301)	6.946*** (0.247)	8.133*** (0.186)	8.767*** (0.242)
Educ, years	0.122*** (0.025)	0.153*** (0.022)	0.158*** (0.020)	0.118*** (0.016)	0.087*** (0.012)	0.066*** (0.015)
Exper	0.074*** (0.019)	0.080*** (0.016)	0.055*** (0.015)	0.013 (0.013)	0.020** (0.010)	0.020* (0.011)
Exper squared	−0.001*** (0.0002)	−0.001*** (0.0002)	−0.001*** (0.0002)	−0.0003** (0.0001)	−0.0005*** (0.0001)	−0.001*** (0.0001)
Educ X Exper	−0.002* (0.001)	−0.002*** (0.001)	−0.002** (0.001)	−0.0002 (0.001)	−0.0001 (0.0005)	0.0004 (0.001)
Observations	1,645	1,667	2,093	2,630	4,057	3,312
R ²	0.051	0.089	0.110	0.139	0.104	0.092
Adjusted R ²	0.049	0.087	0.108	0.138	0.103	0.091
Residual Std. Error	0.853	0.728	0.731	0.664	0.641	0.597
F Statistic	22.179***	40.520***	64.342***	106.385***	117.366***	83.993***

Note:

*p<0.1; **p<0.05; ***p<0.01