

Variables

GDP/capita (as outcome variable): GDP/capita is an indicator that is generally used for assessing economic performance of a given country.

Compulsory education year (as exploratory variable): Education is probably the most important source of self-improvement. Since the more self-improved people results in the more efficiency, compulsory education year could affect GDP/capita of a given country.

Government expenditure on education, in US\$ (as control variable): Just compulsory education years may not make sense in terms of self-improved. The quality of the education should also be important factor. Therefore, I add the total government expenditure on education to the model as control variable.

Hypothesis: Compulsory education year affects GDP/capita, with controlled for government expenditure on education. The more compulsory education year results in the more GDP/capita.

	Coefficients	Standard Errors	Lower 95%	Upper 95%
Intercept	3337.078806	9092.812340	-14484.833380	21158.990991
Comp. Ed. Year	260.422623	961.197843	-1623.525148	2144.370395
Gov. exp. on ed. in US\$(millions)	0.556755	0.481483	-0.386951	1.500461
n	39			

Results and Discussion

Compulsory education seems to positively affect GDP/capita ($\beta = 260.422623$, CI = (-1623.525148, 2144.370395)). However, 95% lower tail has negative value. This shows that actual effect of compulsory education on GDP/capita either positive or negative in 95% confidence interval. Therefore, I could not state that compulsory education positively affects GDP/capita. Thus, I fail to reject to null hypothesis.

Government expenditure on education also seems to positively affect GDP/capita ($\beta = 0.556755$, CI = (-0.386951, 1.500461)). However, the same case arises here again. Since 95% lower tail has negative value, I could not state that government expenditure on education positively affects GDP/capita. Thus, it seems that choosing government expenditure on education as control variable is not an appropriate preference.

Since there was little data about government expenditure on education in World Bank Database, the final sample size decreased 39, which is not enough for reliable analysis, after listwise deletion. This might also affect the analysis. Gathering more data or replacing government expenditure on education with another variable that has same logic but available more data may change the results.