

### Question 3 What Influences Growth

#### Multiple Linear Regression

Table 1: Table 2. Regression Results.

	Dependent variable:					
	All (1)	Brazil (2)	Per Capita Rate of Change (dN/Ndt) India (3)	Japan (4)	Mexico (5)	South Korea (6)
Years of Education	-0.0022489*** (0.0000871)	-0.0024205*** (0.0003427)	-0.0015234*** (0.0002867)	-0.0038341*** (0.0002543)	-0.0022801*** (0.0002600)	-0.0027568*** (0.0003569)
Food Calories Per Person Per Day	0.0000001 (0.0000002)	-0.0000012** (0.0000005)	-0.0000004 (0.0000017)	-0.0000020** (0.0000009)	-0.0000053*** (0.0000007)	-0.0000004 (0.0000010)
Constant	0.0297466*** (0.0009831)	0.0363112*** (0.0019296)	0.0260048*** (0.0037913)	0.0506058*** (0.0027957)	0.0588777*** (0.0021538)	0.0385817*** (0.0011457)
Observations	205	41	41	41	41	41
R <sup>2</sup>	0.7702826	0.9259760	0.6185119	0.9150605	0.9638313	0.9518230
Adjusted R <sup>2</sup>	0.7680082	0.9220800	0.5984336	0.9105900	0.9619277	0.9492874
Residual Std. Error	0.0036645 (df = 202)	0.0013327 (df = 38)	0.0013202 (df = 38)	0.0013266 (df = 38)	0.0013046 (df = 38)	0.0012854 (df = 38)
F Statistic	338.6707000*** (df = 2; 202)	237.6735000*** (df = 2; 38)	30.8049700*** (df = 2; 38)	204.6885000*** (df = 2; 38)	506.3163000*** (df = 2; 38)	375.3790000*** (df = 2; 38)

Note:

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

#### Description of Variables

- Years of Education:
  - All: For every increase in one year of education, we would expect the rate of change for the population to decrease by 0.0022489 if all other variables in the model remain the same.
  - Brazil: For every increase in one year of education, we would expect the rate of change of the for the population to decrease by 0.0024205 if all other variables in the model remain the same.
  - India: For every increase in one year of education, we would expect the rate of change of the for the population to decrease by 0.0015234 if all other variables in the model remain the same.
  - Japan: For every increase in one year of education, we would expect the rate of change of the for the population to decrease by 0.0038341 if all other variables in the model remain the same.
  - Mexico: For every increase in one year of education, we would expect the rate of change of the for the population to decrease by 0.0022801 if all other variables in the model remain the same.
  - South Korea: For every increase in one year of education, we would expect the rate of change of the for the population to decrease by 0.0027568 if all other variables in the model remain the same.
- Food Calories:
  - All: For every additional calorie consumed per person per day, we would expect the rate of change of the population to decrease by 0.0000001, all other factors remaining equal.
  - Brazil: For every additional calorie consumed per person per day, we would expect the rate of change of the population to decrease by 0.0000012, all other factors remaining equal.
  - India: For every additional calorie consumed per person per day, we would expect the rate of change of the population to decrease by 0.0000004, all other factors remaining equal.
  - Japan: For every additional calorie consumed per person per day, we would expect the rate of change of the population to decrease by 0.0000020, all other factors remaining equal.
  - Mexico: For every additional calorie consumed per person per day, we would expect the rate of change of the population to decrease by 0.0000053, all other factors remaining equal.
  - South Korea: For every additional calorie consumed per person per day, we would expect the rate of change of the population to decrease by 0.0000004, all other factors remaining equal.