

PS7_K*ontchou*

kevin.kontchou

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1 Introduction

The logwage observations are missing at a rate of 560/2229 observations. The logwage variable seems to be MAR because there is no pattern to the missing values, but we can account for their omissions with variables we have at hand. The first imputation was done under the MAR assumption. When looking at the second table on page 2, the beta coefficient is differs in the third observation. That is also where the coefficient is closest to its true value of 0.093. From analyzing the results, mean imputation seems to be the most accurate way of imputing missing values when they are MAR. The other two observations give the result of 0.146 which is not as close to the true value of beta.

Table 1:

| Statistic | N | Mean | St. Dev. | Min | Max |
|-----------|-------|--------|----------|-------|--------|
| logwage | 1,669 | 1.625 | 0.386 | 0.005 | 2.261 |
| hgc | 2,229 | 13.101 | 2.524 | 0 | 18 |
| tenure | 2,229 | 5.971 | 5.507 | 0.000 | 25.917 |
| age | 2,229 | 39.152 | 3.062 | 34 | 46 |

2 Project Update

I've done some more research on Cameroon's economic situation. There was an economic crisis in the late 1980s to 1990s as a result of global oil prices dropping as well as other factors. I will further investigate those factors as well as comparing Cameroon's economic progress to other CEMAC countries like Chad, Gabon, and Equatorial Guinea using World Bank data. I can use mean imputation to fill in any missing values in my data set.

Table 2: Regression Results

| | <i>Dependent variable:</i> | | |
|-------------------------|----------------------------|--------------------------|--------------------------|
| | | logwage | |
| | (1) | (2) | (3) |
| hgc | 0.062*** (0.005) | 0.062*** (0.005) | 0.049*** (0.004) |
| collegenot college grad | 0.146*** (0.035) | 0.146*** (0.035) | 0.160*** (0.026) |
| tenure | 0.023*** (0.002) | 0.023*** (0.002) | 0.015*** (0.001) |
| age | -0.001 (0.003) | -0.001 (0.003) | -0.001 (0.002) |
| marriedsingle | -0.024 (0.018) | -0.024 (0.018) | -0.029** (0.014) |
| Constant | 0.639*** (0.146) | 0.639*** (0.146) | 0.833*** (0.115) |
| Observations | 1,669 | 1,669 | 2,229 |
| R ² | 0.195 | 0.195 | 0.132 |
| Adjusted R ² | 0.192 | 0.192 | 0.130 |
| Residual Std. Error | 0.346 (df = 1663) | 0.346 (df = 1663) | 0.311 (df = 2223) |
| F Statistic | 80.508*** (df = 5; 1663) | 80.508*** (df = 5; 1663) | 67.496*** (df = 5; 2223) |

Note:

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