

# Identifying the Impact of Corruption on Inflation in Developing Countries

Md Al Amin

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## Abstract

It is theoretically stated that the growth of the money supply causes inflation. However, the effect of the money supply is weakened in the long run. This study aims to evaluate whether corruption in the public sector affects inflation in the economy. The secondary panel data have been used to estimate the three linear regression models using two-way effects and within models. Four relevant variables - annual GDP growth, broad money growth, trade openness, and exchange rate- have been included in the model as regressors to measure the bias of the estimator of the parameter associated with the corruption perception index (CPI). Based on the within model results, it is found that corruption significantly and economically affects inflation at the traditional 5% level of significance. Given other things same, if the corruption level increases by 1 unit, inflation increases by, on average, about 3%. So, the higher the corruption level, the higher the inflation rate in the economy.

## Appendix

**Figure 1 Inflation rate over the time**

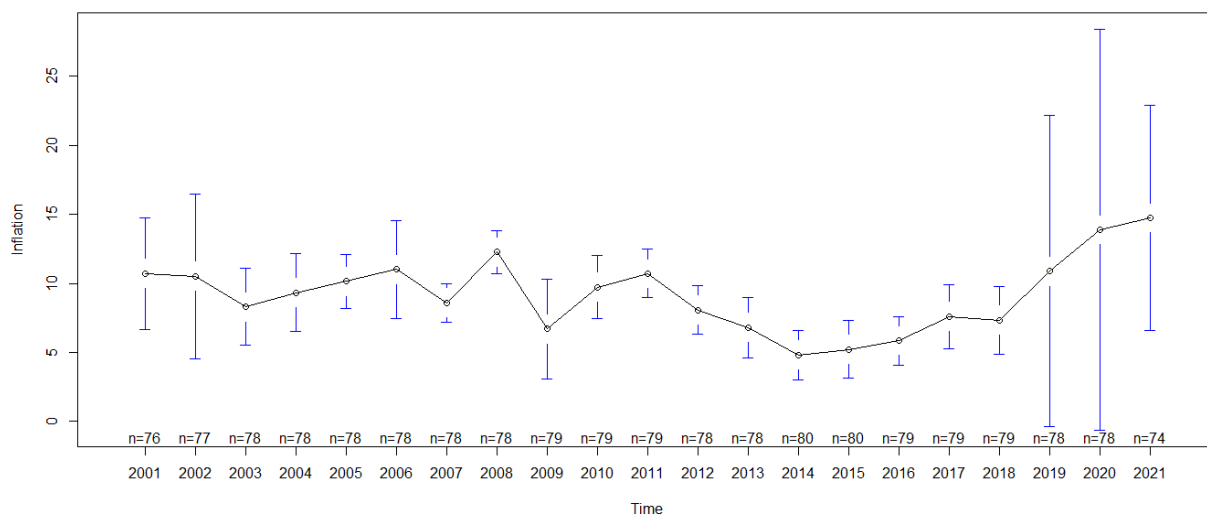


Figure 2 Inflation across countries

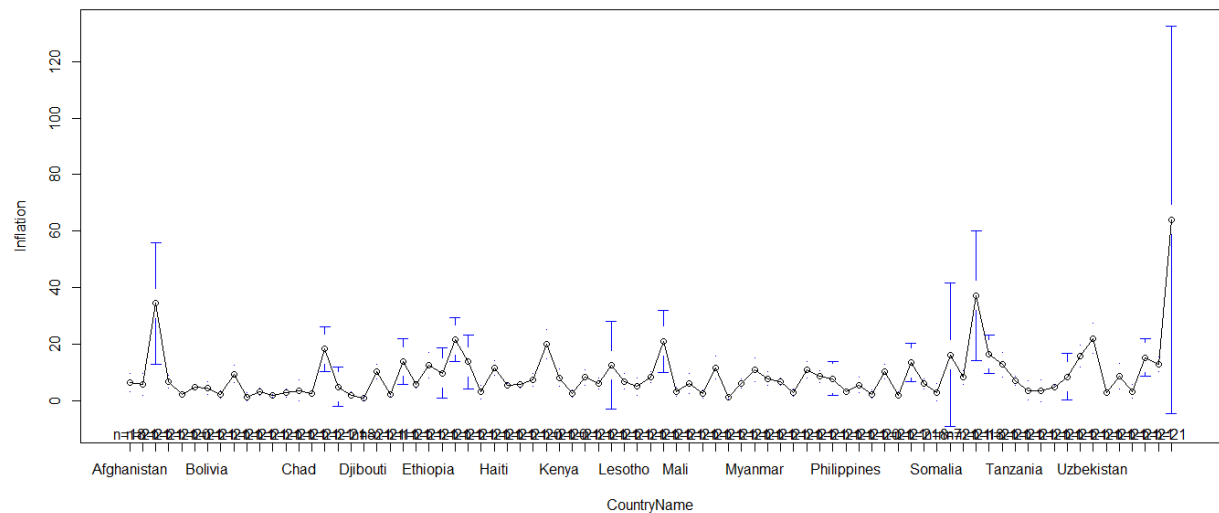


Table 1: Descriptive Statistics

	Inflation	CPIAT	GDP	Mt	OPENNESS	ER
Minimum	-26.70	1.00	-46.08	-99.86	0.78	0
Maximum	558.56	4.50	33.63	485.55	348.00	6723052000
Mean	9.17	2.77	4.03	17.20	70.58	4154018
Median	5.62	3.00	4.46	14.31	63.68	89
Standard Deviation	22.40	0.65	5.02	21.57	34.19	167087100
Number of Observations	1662	1103	1662	1487	1662	1640

**Table 2 Estimated Models with Robust Confidence Intervals**

	<i>Dependent variable:</i>		
	Inflation		
	(1)	(2)	(3)
CPIAT	3.46** (0.15, 6.77)	3.25* (-0.03, 6.52)	2.99* (-0.30, 6.27)
GDP	-0.14 (-0.35, 0.06)	-0.21** (-0.41, -0.004)	-0.18* (-0.37, 0.02)
Mt	0.69*** (0.35, 1.03)	0.67*** (0.62, 0.72)	0.66*** (0.61, 0.71)
OPENNESS	-0.06* (-0.11, 0.003)		
log (ER)	5.93* (1.19, 10.67)	6.83*** (2.87, 10.78)	5.69*** (2.79, 8.59)
Wald Statistic	715.53 ***	26.59 ***	15.34 ***
Heteroscedasticity Test	2027.08 ***	2573.75 ***	2568.53 ***
Autocorrelation Test	17.86 ***	22.64 ***	22.6 ***
Country fixed effects and time effect?	YES	YES	NO
Only country effect?	NO	NO	YES
Observations	813	906	906
R <sup>2</sup>	0.49	0.47	0.47
Adjusted R <sup>2</sup>	0.44	0.42	0.43

Note: P-values: \*<0.1, \*\*<0.05, \*\*\*<0.01. Robust Confidence Intervals are between parentheses.