

[研究ノート]

Inflation, Corruption, and Growth

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Abstract

This short paper investigates the relation between corruption and inflation. We find a significant association between corruption and inflation; however corruption is not found to lower investment, thereby lowering economic growth. Corruption does not relate to economic growth as stated in most previous studies.

1. Introduction

Recently there has been much research on the consequences of corruption. Most of the research on this subject focuses on macroeconomic conditions, for example, investment and economic growth. However, they are missing the effects of corruption on inflation. Our main focus is to investigate the relationship between corruption and inflation.

There are a lot of reasons why inflation and corruption are linked. In developing countries there are many cases in which governments issue money in front of inflation. They may have a motive for creating inflation. Because inflation contributes to the resolving of large fiscal deficits. Also, to avoid tax evasion and to collect tax, governments sometimes rely on the

inflation tax as a source of government revenue. Finally, governments in developing countries have less developed financial markets, so they have less opportunity to issue bonds and increase public spending.

The impact of corruption on inflation is almost an empirical problem. We cannot decide the judgment from the theoretical view, and there are sometimes political aspects that stem from corruption. Following Al-Marhubi (2000) etc., this paper provides empirical evidence to the extent that corruption can explain inflation differentials.

We can also judge whether corruption raises economic growth or not. The debate on the effects of corruption has been particularly fervent. For example, Huntington (1968) suggested that corruption might raise economic growth; however, Shleifer and Vishny (1993) argued that corruption tended to lower economic growth. We analyzed the relationship between corruption and economic growth, and we could not find empirical evidence of such relationship.

This paper is organized as follows: Section 2 describes the data we used in the following sections, section 3 explains our empirical methodology, section 4 presents empirical evidence on the relationship between inflation and corruption and between corruption and economic growth, and section 5 is the brief conclusion.

2. Data

Our analysis is based on cross-country data consisting of 30 countries for which data is available on two alternative indexes of corruption⁽¹⁾. The first index is from Mauro's (1995) Business International Measure (BI⁽²⁾ overseas correspondents). The second index is from Mauro's (1995) bureau-

cratic efficiency index. All indexes range from 0 (maximum corruption) to 10 (no corruption). We used some variables as explanatory variables. They are as follows: 1) the relation of investment to GDP as one of them, 2) openness is measured by the ratio of imports and exports to GDP, and 3) per capita real GDP as the index of the level of economic development. They are all from IFS (IMF). The turnover of central bank governors is the index of central bank's independence from Cukierman et al. (1992).

3. Methodology

We empirically analyzed the links between inflation and corruption, as well as other factors. And we also analyzed corruption and economic growth including other equal variables.

The significance of the inflation-corruption link is evaluated using the positive political-economy approach to inflation. The dependent variable is inflation, the logarithm of average annual inflation. Variables that seem important to inflationary pressures are used as control variables listed in section 2. They are openness, per capita real GDP, and turnover of central bank governors. Dummy variables for Asia were also included to capture other elements influencing inflation that were not captured in our analysis. The estimation we used is OLS (and 2SLS). The sample period is from 1980 to 1998.

Another purpose of this paper is also to identify the channels which corruption and other factors affect economic growth. We used the same method and estimated the relationship between corruption and economic growth. The explanatory variables we used were the same as our previous examination. The sample period was also same.

4. Empirical results

Corruption is not found to lower investment. We found that there was a significant association between corruption and the investment rate (both in OLS and in 2SLS)⁽⁹⁾. So we omitted the variable. The possibility for multicollinearity makes it difficult to tell which of the factors examined is crucial. The table is the results. Most of the coefficients have the expected sign, even though all are not statistically significant. The prediction is that more open economies and countries with more independent central banks will have lower inflation. For per capita real GDP, we didn't get the results we had thought. Finally, the significantly negative estimates on the Asian dummy suggested that there are other variables determining inflation. We

<Table>

	(1)	(2)
Constant	2.56** (3.09)	3.05** (3.57)
Openness	-1.99E-03* (2.12)	-2.09E-03 (1.88)
Per capita real GDP	6.77E-03 (0.12)	-1.23E-03 (0.07)
Turnover of central bank governors	3.43** (4.85)	3.47** (5.08)
Asia	-1.31** (4.03)	-1.23** (4.11)
Corruption (1)	-0.19** (2.99)	
Corruption (2)		-0.27** (3.65)
Adj. R ²	0.68	0.70

Note) Figures in parentheses are t statistics. *and **denote significant at 5%, 1%, respectively.

couldn't analyze the elements of determining inflation in this area in our estimation⁽⁴⁾.

We also estimated the relationship between corruption and economic growth. We do not show this result, however, the coefficient was negative but not significant. We could not find positive results between them against most previous studies.

5. Conclusion

Corruption has been blamed for poor macroeconomic outcomes such as low investment and slow growth. We extended the consequences of corruption. The empirical evidence suggests that higher corruption is associated with higher inflation, including the openness of the economy, political instability⁽⁵⁾, and other characteristics. However, we could not get positive results between corruption and economic growth.

Footnotes

- (1) There were many more countries studied in Mauro (1995) or BI ; however, not all of them included the two indexes. Indexes have significant drawbacks. See, for example, Bardhan (1997), Tanzi (1998).
- (2) BI is a private firm that sells these indices typically to banks. It publishes indices on country risk factors for many countries.
- (3) Mauro (1995) says that a one-standard-deviation increase in the corruption index is associated with an increase in the investment rate by 2.9% of GDP. Other studies propose the similar results. See De Long and Summers (1991), Barro (1991).
- (4) For example, currency crises in these areas cannot be explained only by inflation.
- (5) The inflation and corruption link is important to the inclusion of political instabil-

ity. See Barro (1991).

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