

ECONOMIC DEVELOPMENT AND CORRUPTION: A CO-RELATIONAL STUDY IN GLOBAL PERSPECTIVE

Amrita Gupta

PhD Scholar

Mahatma Jyotirao Phule University

Jaipur (Raj.), India

Abstract: Almost every society has been suffering from the evil of corruption globally. The level could be different but the sin of corruption is a worldwide issue which eats up the benefits of the honest people and the real beneficiaries. The countries with good economic growth are also not free from malpractices. The forms and methods of corruption can be different in different societies. Even with the development of technology, corrupt practices have not come to the end. Only the ways have become different. There are numerous negative consequences on the economy and the social setup of a nation due to malpractices. The fair growth is badly harmed. Some experts say that underdeveloped countries are more prone to corruption. This can be a subject for testing this issue. The current study is an attempt to find out whether any relationship exists between the level of corruption and the economic development of a country. This is a study in global perspective.

Index Terms - Corruption, Co-relation, CPI, GDP

INTRODUCTION

Corruption is a widely rampant social evil that causes heavy damage to the economy. All government plans and schemes framed for the welfare and growth of the society are failed badly owing to this factor. Government machinery responsible for executing growth schemes get involved in kickbacks and commissions thereby raising the cost of the schemes. In day-to-day life, people have to give bribes for any work getting done in government and private offices. Economic scams, scandals and frauds are very common internationally. All of us face many forms of corruption. The legitimate rights of people are harmed as a result of such practices. The benefits that citizens deserve to, go to incompetent and undeserving people which creates frustration among good people. Political parties buy votes using various forms of luring offers hurting the root spirit of democracy. Leaders are bought to support unholy parties thereby defeating people's choice. The world over, corruption has intruded the public life irrespective of the economic well being of a nation.

One major perception is that people get corrupt owing to the poor economic conditions. But there is a class that feels that the corruption is an essential evil that comes along with the economic development. Can the economic well being has any influence on the level of corruption? This has to be analyzed.

OBJECTIVES OF THE STUDY

This study aims at the following:

1. Presenting a comparative corruption perception rating for different countries
2. Presenting the size of the economies of the above countries for the same year
3. Analyzing the relationship between the economic development and the corruption

LIMITATIONS OF THE STUDY

Since the underlying research paper has used data only for one year, hence the findings may be true for the relevant year only. To test the issue, data for more years may be taken and analyzed.

METHODOLOGY USED

The study is based on the secondary data belonging to two different aspects for the same year. The first category of data is the Corruption Perception Index (CPI) released by Transparency International, every year. This is an international rating agency that ranks every country on corruption using various factors. The other is GDP of various countries taken from Statistics Times. GDP is accepted as an economic development indicator of a country. The facts and information has been suitably presented in tables and charts to explain the data and findings. A co-relation between the CPI and the GDP has been calculated using statistical method and excel formula. This test has been done based on the data for the year 2018 only.

REVIEW OF LITERATURE

Related literature available on the issue has been reviewed taken from various sources. Academic journals, reports, articles, news papers and web sites have been referred so as to understand the opinion and findings of different research experts. Few chosen literatures have been put here to understand the earlier work done by various researchers and academicians.

Jain, A. (2001) defines that Corruption is an act in which the power of public office is used for personal gain in a manner that contravenes the rules of the game. Furthermore, **Girling, J. (1997)** explains that it has been noted that corruption does not disappear as countries develop and modernise, but rather, takes on new forms. Authors such as **Paldam (2001)** claim that corruption is a poverty driven disease that vanishes when countries develop, so that causality is mainly from the level of GDP to corruption. **Paldam, M. (2001)** also had the same observations regarding the issue. **Blackburn, Bose and Haque (2005)** indicated that the relationship between corruption and economic development is both negative and mutual. Some authors like **Lambsdorff (2007)** claim that corruption is a vice causing low growth, so the causality is mainly from corruption to GDP.

INTERPRETATION

The data taken from two sources have been presented in table-1. The table has two parts. In the first part, the countries with good GDP have been taken. In the second part, the countries comparatively with poor GDP data have been put. The CPI ranking falls between zero (0) to hundred (100). Zero indicates the highly corrupt and hundred indicates very clean.

Table-1: countries with GDP and Corruption Perception Index-2018
(0 Highest Corrupt, 100 Very Clean)

Country	GDP (billion USD)	CPI
Countries with 1000 b \$ or more		
US	20,412.87	71
China	14,092.51	39
Japan	5,167.05	73
Germany	4,211.64	80
UK	2,936.29	80
France	2,925.10	72
India	2,848.23	41
Italy	2,181.97	52
Brazil	2,138.92	35
Canada	1,798.51	81
Russia	1,719.90	28
S. Korea	1,693.25	57
Spain	1,506.44	58
Australia	1,500.26	77
Mexico	1,212.83	28
Indonesia	1,074.97	38
Countries up to 1000 b \$		
Netherlands	945.33	82
Turkey	909.89	41
Saudi Arabia	748.00	49
Switzerland	741.69	85
Argentina	625.92	40
Poland	614.19	60
Taiwan	613.30	63
Sweden	600.77	85
Belgium	562.23	75
Thailand	483.74	36
Austria	477.67	76
Norway	443.25	84
Iran	418.88	28
UAE	411.83	70
Nigeria	408.61	27
Ireland	385.14	73
Israel	373.75	61
S. Africa	370.89	43
Denmark	369.76	88
Malaysia	364.92	47
Hong Kong	364.78	76
Singapore	349.66	85
Philippines	332.45	36
Colombia	327.98	36
Pakistan	324.73	33

Source: GDP-Statistics Times and CPI-Transparency International

CALCULATIONS

The correlation between above tow variables (GDP and CPI) has been established using the following calculations shown in table-2.

Table-2: correlation calculation

GDP (X)	Deviation (x) (X- \bar{X})	Square of Deviation (x ²)	CPI (Y)	Deviation (y) (X- \bar{Y})	Square of Deviation (y ²)	Product of Deviation (xy)
20,412.87	18461.89	340,841,382.37	71	12.73	162.0529	235019.86
14,092.51	12141.53	147,416,750.74	39	-19.27	371.3329	233967.28
5,167.05	3216.07	10,343,106.24	73	14.73	216.9729	47372.71
4,211.64	2260.66	5,110,583.64	80	21.73	472.1929	49124.14
2,936.29	985.31	970,835.80	80	21.73	472.1929	21410.79
2,925.10	974.12	948,909.77	72	13.73	188.5129	13374.67
2,848.23	897.25	805,057.56	41	-17.27	298.2529	15495.51
2,181.97	230.99	53,356.38	52	-6.27	39.3129	1448.31
2,138.92	187.94	35,321.44	35	-23.27	541.4929	4373.36
1,798.51	-152.47	23,247.10	81	22.73	516.6529	3465.64
1,719.90	-231.08	53,397.97	28	-30.27	916.2729	6994.79
1,693.25	-257.73	66,424.75	57	-1.27	1.6129	327.32
1,506.44	-444.54	197,615.81	58	-0.27	0.0729	120.03
1,500.26	-450.72	203,148.52	77	18.73	350.8129	8441.99
1,212.83	-738.15	544,865.42	28	-30.27	916.2729	22343.80
1,074.97	-876.01	767,393.52	38	-20.27	410.8729	17756.72
945.33	-1005.65	1,011,331.92	82	23.73	563.1129	23864.07
909.89	-1041.09	1,083,868.39	41	-17.27	298.2529	17979.62
748.00	-1202.98	1,447,160.88	49	-9.27	85.9329	11151.62
741.69	-1209.29	1,462,382.30	85	26.73	714.4929	32324.32
625.92	-1325.06	1,755,784.00	40	-18.27	333.7929	24208.85
614.19	-1336.79	1,787,007.50	60	1.73	2.9929	2312.65
613.30	-1337.68	1,789,387.78	63	4.73	22.3729	6327.23
600.77	-1350.21	1,823,067.04	85	26.73	714.4929	36091.11
562.23	-1388.75	1,928,626.56	75	16.73	279.8929	23233.79
483.74	-1467.24	2,152,793.22	36	-22.27	495.9529	32675.43
477.67	-1473.31	2,170,642.36	76	17.73	314.3529	26121.79
443.25	-1507.73	2,273,249.75	84	25.73	662.0329	38793.89
418.88	-1532.10	2,347,330.41	28	-30.27	916.2729	46376.67
411.83	-1539.15	2,368,982.72	70	11.73	137.5929	18054.23
408.61	-1542.37	2,378,905.22	27	-31.27	977.8129	48229.91
385.14	-1565.84	2,451,854.91	73	14.73	216.9729	23064.82
373.75	-1577.23	2,487,654.47	61	2.73	7.4529	4305.84
370.89	-1580.09	2,496,684.41	43	-15.27	233.1729	24127.97
369.76	-1581.22	2,500,256.69	88	29.73	883.8729	47009.67

364.92	-1586.06	2,515,586.32	47	-11.27	127.0129	17874.90
364.78	-1586.20	2,516,030.44	76	17.73	314.3529	28123.33
349.66	-1601.32	2,564,225.74	85	26.73	714.4929	42803.28
332.45	-1618.53	2,619,639.36	36	-22.27	495.9529	36044.66
327.98	-1623.00	2,634,129.00	36	-22.27	495.9529	36144.21
324.73	-1626.25	2,644,689.06	33	-25.27	638.5729	41095.34
Mean \bar{X}		Sum		Mean \bar{Y}	Sum	Sum
1,950.98		561,592,667.52	58.27	-0.07	16,522.05	130,131.90

Calculation Equatioans:

- i. Sum of square of x i.e. $SS_{XX} = \sum (x_i - \bar{x})^2$ i.e 561,592,667.52
- ii. Sum of square of y i.e. $SS_{YY} = \sum (y_i - \bar{y})^2$ i.e. 16,522.05
- iii. Sum of the cross products i.e. $SS_{XY} = \sum (x_i - \bar{x})(y_i - \bar{y})$ i.e. 130,131.90

$$r = \frac{SS_{XY}}{\sqrt{(SS_{XX})(SS_{YY})}}$$

$$r = \frac{130,131.90}{\sqrt{(561,592,667.52) (16,522.05)}}$$

$$r = 0.043$$

Where SS = Sum

X = GDP

Y = Corruption Perception Index

Since, the GDP data varies significantly among the countries, the data have been divided in two parts:

- the countries with GDP 1000 b USD or more, and
- the countries with GDP less than 1000 USD

Separate correlation calculations have been done for both the sets of data. The value r , for them are as under respectively:

- $r = 0.12$
- $r = 0.17$

Hence, it is found that there is a very weak or no correlation between the two variables.

Calculation with MS-Excel: To find out the correlation r , Excel function CORREL() can also be used. This also results with the same correlation value .043 which indicates an insignificant relation between the GDP and CPI. In other words, the corruption doesn't relate with the volume of the GDP and the economic development has almost nothing to do with the level of corruption internationally.

CONCLUSION

The study ends up with the conclusion that the level of corruption does not move up or down along with the GDP which is an indicator of the economic development of a country. There is a very poor or no relationship between the both.

REFERENCE

- [1] Jain, A. 2001. Corruption a review. *J. Econ. Surveys*, 15, 71–121.10.1111/joes.2001.15.issue-1.
- [2] Girling, J. 1997. *Corruption, capitalism and democracy*. London: Routledge.10.4324/9780203203064.
- [3] Lambsdorff, J. G. 2007. *The institutional economics of corruption and reform*. Cambridge, UK: Cambridge University Press.10.1017/CBO9780511492617.
- [4] Paldam, M. 2001. Corruption and religion, Adding to the economic model. *Kyklos*, 54, 383–414.10.1111/kykl.2001.54.issue-2-3.
- [5] Blackburn, K., Bose, N., & Haque, M. E. 2005. The incidence and persistence of corruption in economic development. *Journal of Economic Dynamics & Control*, 30, 2447–2467.
- [6] <https://www.transparency.org/cpi2018>.
- [7] *Statistics Times*.

