

3-2007

## The Persistence of Corruption and Slow Economic Growth by Paolo Mauro IMF Staff Papers: A Review

A. U. Musa

*Central Bank of Nigeria*, [aumusa@cbn.gov.ng](mailto:aumusa@cbn.gov.ng)

Follow this and additional works at: <https://dc.cbn.gov.ng/efr>



Part of the [Growth and Development Commons](#)

---

### Recommended Citation

Musa, A. U. (2007). The Persistence of Corruption and Slow Economic Growth by Paolo Mauro IMF Staff Papers: A Review. *CBN Economic and Financial Review*. 45(1), 79-84.

This Article Review is brought to you for free and open access by CBN Institutional Repository. It has been accepted for inclusion in *Economic and Financial Review* by an authorized editor of CBN Institutional Repository. For more information, please contact [dc@cbn.gov.ng](mailto:dc@cbn.gov.ng).

# The Persistence of Corruption and Slow Economic Growth<sup>+</sup>- A review

---

*A.U. Musa\**

---

## I. Introduction

**A**s submitted by the author, corruption and all aspects of poor governance and weak institutions have significant adverse effects on economic growth and welfare. However, many countries, especially developing countries, seemed to have been caught up in a vicious cycle that perpetuates corruption and underdevelopment in their societies. Thus, because bureaucratic, legal, social and other vital institutions are weak and/or inadequate, poverty is widespread, the political class is corrupt, and no effective check for corruption exists. Besides, poverty and lack tend to further weaken the electorate's ability to challenge the corrupt political class. Individuals lack incentives to fight corruption even though everyone is better off without it. The paper's objective is to study, formally, these interactions among the individuals engaged in corruption, and between the individual and the corrupt political class. In doing this, two models involving strategic complementarities that lead to multiple equilibria were used to show these relationships.

## II. Summary of The Paper

The author identified two situations in a corrupt society; (i) the individual bureaucrat who allocates his labour services between productive activity and theft of government resources in a classical case of portfolio adjustment and (ii) the corrupt politician who sets a bribe collection system (a bribe rate) with the maximization of utility as his goal vis-à-vis similar decisions by fellow politicians. Both situations involve strategic complementarities in that the decision of **A** to steal encourages and

---

<sup>+</sup> Published by Paolo Mauro *IMF Staff Papers*, Vol. 51, No 1, 2004

<sup>\*</sup> Musa is an Economist in the Research and Statistics Department, CBN, Abuja

reinforces that of **B** to do the same or the decision of **A** not to steal encourages and reinforces that of **B** to follow suit.

### **Model I**

In the first case, the author employed Barro's model of endogenous growth where government expenditure (**G**) enters as an input. The author reasoned that since not all **G** reaches the production process (some are stolen by corrupt individuals), economic growth would be adversely affected. Given total available **G** and available labour services, which the individual can allocate between productive work (**L**) or theft (**S**) or a combination of both, the author showed that the individual's decision boils down to a comparison between the net wage (**W**) and the Marginal Propensity for Rent Seeking or net gains from theft of **G** (**MPRS**). He analyzed:

Given a unit of labour, which can be allocated to either Productive work (**L**) or Theft of Government resources (**S**), Total labour usage becomes,

$$\mathbf{L + S = 1 \text{ or } S = 1 - L}$$

A good steady state exists when **L = 1** or nobody is stealing since all labour services is allocated to productive work. The other extreme is when **L = 0** and all **G** is simply being stolen while nobody engages in productive work. However, since strategic complementarity leads to multiple equilibria, the author equated the net wage and net gains from corruption functions and solved the resultant quadratic equation. **L<sub>1</sub>** (the upper boundary) was found to be unstable while **L<sub>2</sub>** (the lower boundary) was stable.

He drew four scenarios from the results above.

1. The wage curve lies permanently above the **MPRS** curve (they do not intersect and **L = 1** is the only steady state)
2. The two curves intersect at two points and **L<sub>2</sub> < L<sub>1</sub> < 1**

**L<sub>2</sub>** is stable while **L<sub>1</sub>** is unstable. This is because an increase in the amount of **L** from **L<sub>2</sub>** leads to **W < MPRS** and, thus, the individual supplies less

labour until he returns to  $L_2$  while an increase in  $L$  from  $L_1$  leads to  $W > \text{MPRS}$  and the individual increases his  $L$ , which further reinforces the initial increase.

3. The two curves intersect as in (2) above but  $1 < L_2 < L_1$  (the only steady state is in  $L = 1$ )
4. The two curves intersect as in (2) above but  $L_2 < 1 < L_1$  (only  $L_2$  is stable)

In (2) above,  $e_1(L_2)$  is a “bad” equilibrium while  $e_2(L_1)$  is a “good” one. This is because more  $L$  enters the production process in  $L_1$  than in  $L_2$ . Moreover, while an increase in  $L$  from  $L_1$  leads to higher productive work as against theft, an increase in  $L$  from  $L_2$  is counteracted by individuals supplying less  $L$  so as to force wages back to its initial higher level. Evidently, the former generates more growth than the latter.

## **Model II**

The second model, which also involves strategic complementarity, assumes that a corrupt politician will set up a bribe collection system and a bribe rate (to maximize his utility but which has an upper limit  $t_m$  (a bribe rate higher than this will lead to exposure and punishment). The citizen and the politician both face the problem of maximization of utility.

### *The Citizen's Problem*

- a. If the citizens do not oust the corrupt government, they obtain a lifetime utility that is reduced by the bribe rate  $t_m$ .
- b. If they do oust the government, they obtain utility reduced by an efficiency loss represented by  $I$  (efficiency loss can be as a result of less competent successor government, political instability, social unrest causing production disruption, etc)

The author theorized that the citizens could only oust the government if and only if  $I < t_m$ .

### *The Politician's Problem*

- c. If the government is not ousted, the politician obtains a lifetime utility commensurate with a bribe rate lower than the efficiency loss.
- d. If the government is ousted, however, the politician obtains a utility commensurate with the maximum bribe rate ( $t_m$ ).
- e. The author theorized here that for the cooperative solution, the politician will choose a bribe rate lower than the efficiency loss ( $t < \lambda$ ) if utility is higher in b than in a above while he will choose ( $m$ ) if utility is higher in b than in a.

### **The Bad Equilibrium**

All politicians levy a maximum bribe rate,  $t_m$  and since the government will collapse anyway, any marginal politician would levy,  $t_m$ . Investment, growth and development are seriously hampered and poverty is perpetuated.

### The Good Equilibrium

Here, the author theorized that if utility is higher in a than in b, all politicians will levy a bribe rate lower than the efficiency loss and, thus, the government is not ousted while investment and growth rate are high, at least higher than in the Bad Equilibrium.

### **III. Comments**

The author has done an excellent analysis linking corruption and economic growth through the mechanisms of the Barro's model of endogenous growth. Let me expatiate on two contributions.

- (i) In a succinct way, he showed us formally how an individual bureaucrat's decision to steal from the government results in lower investment and growth. This has implications for several things in African countries. With reference to Nigeria, we focus on two:

1. Poverty: In spite of the enormous resources (about  $\times 12.14$  trillion and  $\times 13.63$  trillion earned and spent, respectively, by the three tiers of government in Nigeria in the last ten years (1995 – 2004), it is not surprising that poverty has not abated and the welfare indices still look gloomy. An empirical research could be conducted to determine the actual proportion of those budgets that ended up in the intended production process and by extension those that did not.
  2. Research: As it is now, research is done primarily by data presented by various government agencies among others. If a more reliable data is not available in the short term, then an index (capturing estimates of how much did not reach the production process) should be factored into all econometric research involving government spending. The issue is even more urgent for research into human development components such as education, health and food security. This would forestall faulty policy design.
- (ii) In his second model, he has also shown us that the citizen faced with corrupt politicians has to determine whether the bribe rate is sufficient enough to warrant ousting the government and incurring an efficiency loss. Thus, Non-Governmental Organizations (NGOs), donor agencies and other developed nations concerned about widespread corruption in developing countries can target their anti-corruption campaign towards a reduction in the bribe rate ( or a reduction in the efficiency loss). In the former, complete transparency in government accounts and activities can help lower the average bribe rate charged and the scope while sensitization campaigns on the rights of citizens can aid them to gauge that actual  $I$  is less than a lifetime  $t$ .

However, the study was silent on some issues concerning the peculiarities of developing countries especially those in the Sub-Saharan Africa:

- (i) The author analyzed the problem while assuming institutional arrangements found only in the developed world. In most African countries for instance, the civil society is sharply divided into those

significantly above the poverty line and those below it. Nothing like a virile middle class. Expectedly, the latter that face economic deprivation seem to lack the will to challenge any corrupt bureaucrat or politician. It does not seem likely that this group (the poor) or the few rich who are mostly "comfortable" would make a choice of ousting a government and, thus, breaking the vicious cycle of corruption. A much stronger support from external and international agencies is required. Examples of such worthy causes that are becoming increasingly prominent are the World Bank anti-corruption campaign, the Transparency International (TI) initiatives, the UN and other international agencies, Good Governance watch, etc.

- (ii) The author also suggested that a politician makes a choice between two bribe rates that offer two different utility levels. He picks the maximum bribe rate if he perceives the government would collapse. Since he is in power (and the legal and constitutional structures are usually weak and full of loopholes), why can't he levy the maximum bribe rate and perpetuate himself for sometime or at worst ensure someone who is his stooge succeeds him? In fact, that is exactly what is happening in most developing countries of Africa and Latin America. The case for a more involved campaign for good governance by all stakeholders cannot be overemphasized.
- (iii) A third issue, which is rather a suggestion than a disagreement, is that of factoring in religion in the fight against corruption. In Nigeria for instance, over eighty per cent of the population profess and practice one of the two major religions both of which fortunately condemn, in the strongest of terms, corruption and in all its ramifications. This, in my opinion, is the strongest and most potent weapon against corruption. Being that corruption is more of a micro issue that culminates in a macro issue, the print media, electronic media, fora, campaigns, churches, mosques, christian and islamic associations, social gatherings, schools, every conceivable medium should be employed to sensitize and remind people of what their religions say about corruption. The age-long defense among researchers that economics should avoid value-laden issues is fast crumbling in the face of stifling socio-economic problems in Africa.