

# 19 Healing Sick Institutions

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## 1 INTRODUCTION

A small body of evidence and a large body of assertion – both bodies growing – support the vague idea that ‘institutions matter for economic development’. This affirmation is intelligible first for what it negates. Many economists, in their models if not in their advice, bracket out institutions. Standard macroeconomic models, for example, do not include changes to property rights or improvements in contract law. In the limiting economic simplification of perfect markets and perfect information, there is no role for firms as institutions. As Joan Robinson once joked, the job of the manager of a firm is to look up in the book of blueprints the correct page corresponding to current (and future) factor markets. But new research asserts that institutions are both approachable in economic terms and important in their effects on efficiency and equity. What is the evidence? There are no exact studies, in part because there is no exact model. Indeed, exactly what ‘institutions’ might mean is vague and unclear, and in sober moments adherents admit that there is as yet no accepted paradigm. But useful statistical evidence does exist. As shown in other chapters in this volume, some cross-country studies show significant relationships between economic growth and a variety of variables that might be labelled institutional: ‘economic rights’ (in some studies and specifications, political rights as well), ‘contract-intensive money,’ corruption, and a number of socio-cultural indicators.<sup>1</sup> Analyses of development projects show that ‘institutional development’ is correlated with ‘project success’.<sup>2</sup>

Experience in a variety of poor countries indicates that institutions are crucial. With the clear understanding that proof is out of the question, I am willing to advance the admittedly vague idea that ‘sick institutions’ characterize the most backward and depressing places on the planet. I distinguish *inefficient institutions* that do not fulfil their purported aims of service delivery, fair judgement, and efficient allocation, from *sick institutions*, a phenomenon prevalent in (though not

confined to) Africa, the former Communist world, some parts of Asia and parts of Latin America. In this chapter I shall focus on public-sector institutions.<sup>3</sup> When they become sick, economic management is handicapped, social service delivery enfeebled, legal institutions endangered and democracy put at risk.

Before defining sick institutions – the best way would be to provide detailed descriptions of some institutions in such places as Nicaragua, Bolivia, the Gambia and Haiti, which I am trying to do in a work in progress – I will present the logic of the argument.

When public institutions are sick, policy reforms, whether economic, political or legal, will tend not to live up to expectations. Moreover, conventional efforts in institutional development, with their focus on ‘capacity building’, will tend to fail. The reason: they tend to overlook incentive and information problems, which are at the heart of institutional sickness.

The way out? Analogies to economic adjustment are needed for institutions, which I call ‘institutional adjustment’. The informational environment is improved radically. The legal framework enables experiments with incentives and credible commitments to their modification depending on the results. Vague terms, these: informational environment, legal framework, credible commitments, and I am afraid they will remain so even at the chapter’s end. True, I will cite some (stylized) examples of successful reforms that seem to have healed sick institutions by following a logic of institutional adjustment, but I am not trying to sell a self-evident case, and at the end of this chapter I suggest needed lines of research.

## 2 WHAT ARE ‘SICK INSTITUTIONS’?

Sick institutions, I suggest, are characterized by weak information, ineffective incentives, and chronic shirking and malfeasance. Sick public agencies are those where a substantial number of employees do not come to work, or do other work (or nothing at all) while there; where corruption and favouritism are not isolated instances but the corrosive norm; where pay-scales in real terms have collapsed so that low- and middle-level employees cannot feed and house their families on their official pay; where employees therefore seek other forms of compensation, including travel, study allowances, and non-wage benefits (which have exploded in many countries), as well as illicit payments for doing (or not doing) their public duties.<sup>4</sup>

Why are there sick institutions? I think several economic causes can be identified.

Incentives in many poor countries have collapsed. In Latin America, real wages in the public sector have fallen by 30–40 per cent since the early 1980s, and even more dramatic numbers emerge from Africa and the former Communist countries; (Klitgaard, 1989). In 1983, real wage rates for ‘highly skilled’ members of the civil service were 11 per cent of what they had been in the mid-1970s in Ghana, 5 per cent in Uganda, 30 per cent in Nigeria, and 45 per cent in Zambia (Nunberg and Nellis, 1989). Another study found that in 1985 the base civil service salary rate at the ‘highest grade’ was 4 per cent of what it was in 1975 in Somalia, 16 per cent in Sierra Leone, 19 per cent in Tanzania, and 22 per cent in Nigeria (Robinson, 1990). All the fifteen countries surveyed by Robinson (1990) fell below 60 per cent of the figure of a decade before. In his review, Berg (1993, p. 204) found that government wage bills divided by the number of employees tend to show sharp reductions during the 1980s – 40 per cent is not an uncommon rate of decline over the decade. Using more recent data at the national level, Ul Haque and Sahay (1995) confirm plummeting salary levels.

Moreover, incentives are also weak in the sense that good performance goes relatively unrewarded and bad performance relatively unpunished. Salaries have grown more compressed. Information and evaluation are scarce and expensive, which inhibits internal and external controls and makes performance-based pay virtually impossible. Economic and political transformations sometimes encourage shirking and corruption. The old rules of the game, whatever their weaknesses, provided conventions for the transmission and verification of important information. During transition, information can become more difficult to assess, and incentives both positive and negative may fluctuate wildly.

When institutions grow sick, credible commitments to change are difficult to make. People simply do not believe all the words any more. *Information, incentives, and credible commitments*: note that sick institutions can be approached in economic terms, without immediately invoking other factors that may be important, such as political leadership, socio-cultural settings, and so forth. Economic metaphors also suggest solutions, which must be tailored to local political, social, and cultural realities.

## 3 INCENTIVE REFORMS WITH SICK INSTITUTIONS?

Consider the problem of collapsed incentives. A simple economic model can help us think through what might be done to heal them.

Suppose you are the principal, I am your agent. Your profits are a function of my efforts: Profit =  $P(e)$ . But my efforts are costly to me: Cost =  $C(e)$ . Ideally, you would pay me a wage equal to the value of my marginal product. But you do not know my effort  $e$ , at least not perfectly. You observe an indicator of my effort, which is:  $z = e + x$ , where  $x$  is a random variable representing measurement error.

You also observe a variable  $y$ , which is not correlated to  $e$  but is correlated to  $x$ . For example, suppose  $z$  is sales of the product for this month. It is some function of my effort but also depends on industry demand  $y$ . You might take  $y$  into account to enable a more precise estimate of my effort.

The wage you pay me can be analysed as having two parts, one fixed and one dependent on your assessment of my effort:

$$w = \alpha + \beta(e + x + \gamma y).$$

$\beta$  measures the *incentive intensity* of our wage contract. When  $\beta = 0$ , you pay me a fixed wage  $\alpha$ .

What contract is socially optimal for both you and me? For convenience, set expected values of  $x$  and  $y$  to zero and assume no wealth effects. Your certain equivalent as a risk-neutral employer is the expected profit – expected wage. My certain equivalent is equal to expected income – cost of effort – a risk premium for the income risk I bear because  $(x + \gamma y)$  is a random variable. That risk premium turns out to be approximated by  $1/2r \beta^2 \text{Var}(x + \gamma y)$  (Milgrom and Roberts, 1992, p. 247).

Both our certain equivalents depend on  $\alpha$ ,  $e$ ,  $\beta$ , and  $\gamma$ . Without wealth effects, an efficient contract maximizes the sum of the certain equivalents. But there is also an incentive constraint, which says that I, as your agent, will set my effort level such that the marginal benefit = marginal cost. So an employment contract is efficient if, and only if, the choices  $\alpha$ ,  $e$ ,  $\beta$ , and  $\gamma$  maximize the total certain equivalent among all ‘incentive compatible’ contracts, where  $\beta - C'(e) = 0$  (Milgrom and Roberts, 1992, pp. 222–3). Equation (1) shows the solution.

$$\beta = P'(e)/\{1 + r[\text{Var}(x + \gamma y)]C''(e)\}. \quad (1)$$

The optimal intensity of incentives is a function of the marginal social

Table 19.1 Conditions favouring and not favouring pay-performance links

<i>Dimension</i>	<i>Favourable to intense incentives</i>	<i>Unfavourable to intense incentives</i>
$P'(e)$ = marginal social benefits of more effort by agent	Additional efforts by public servants lead to big gains in effectiveness	Because of other constraints, additional efforts by public servants yield no gains in effectiveness
$r$ = agent's risk aversion	Employees are almost risk-neutral, perhaps because plentiful opportunities exist and they are already well-off	Employees are very risk averse, perhaps because poor
$\text{Var}(x + \gamma y)$ = how accurately agent's effort can be measured	Effort and results are easy to measure	Effort and results are almost impossible to measure
$C''(e)$ = responsiveness of agent's effort to incentives	Effort is very responsive to incentives (for example, high discretion)	Effort is not responsive to incentives (for example, fixed-pace activity)

benefits of more effort by agent  $P'(e)$ , the agent's risk aversion  $r$ , how accurately agent's effort can be measured  $\text{Var}(x + \gamma y)$ , and the responsiveness of the agent's effort to incentives  $C''(e)$ .

Under some conditions it is optimal to have highly intense incentives. Under others, a flat wage is the right choice. Table 19.1 shows the conditions favouring and not favouring performance-based pay. In many public bureaucracies, especially in developing countries, the conditions seem to resemble those in the right-hand column of Table 19.1. No wonder, then, that two propositions are often simultaneously true:

- Incentives are terrible and capacity building will not be sustainable unless they are reformed; and
- Reforming incentives is almost impossible because the environment resembles the right-hand column of Table 19.1.

#### 4 WHAT MIGHT THEN BE DONE?

The four parameters of Equation (1) are not immutable. Healing sick institutions means changing them. This, in turn, means addressing a host of difficulties, some economic (for example, the sheer difficulty of measuring outcomes in many areas of the public sector, game theoretic problems, ratchet effects, the possible creation of adverse incentives) and some, for want of a better word, 'non-economic' (for example, an organizational culture or ideology of horizontal equity). The complexities of real cases outstrip available models, as discussed by numerous economists, including Laffont and Tirole, (1993), Milgrom and Roberts (1992) the National Research Council (1991) and Klitgaard (1996a). None the less, in my experience a framework that builds on the model in Equation (1) can help stimulate creative rethinking by policy makers as set out in Table 19.2.

Do leaders of sick institutions wish to change them? It is a separate and interesting question to understand the political and economic conditions under which a new president or mayor or minister will wish to heal sick institutions. My feeling is that the recent wave of democratic and free market reforms has brought in many new leaders who do wish to change. The task is daunting, but it is not impossible, as is testified by an exciting array of efforts around the world – for example, Christopher and Thor (1993) and Maguire and Wood (1992). For examples from the private sector, see the Hay Group (1996); Schuster and Zingheim, (1992) and Blinder (1990).

In the mid-1980s Indonesia resuscitated a sick, bankrupt, rural credit programme. First, information was developed about the savings generated from each village unit, the repayment rates, and who was receiving loans. Second, authority was decentralized to local bank managers. Third, local bank staff were paid according to their results in giving loans to the poor, ensuring their repayment, and generating savings at local levels. Within three years, 82 per cent of the village units were making money. The rural banking system tripled its loan volume in three years. By 1990, it was the second biggest rural credit programme in the world (Snodgrass and Patten, 1989; Patten and Rosengard, 1991).

Another success story is the Bolivian Social Emergency Fund (SEF). Its first year of existence was one of institutional paralysis. Then in 1986, businessman, Fernando Romero, took over the SEF and introduced better systems of information and incentives. The SEF set up a process that asked the communities, working with the private sector constructors of schools, road, sewers and so on, to submit proposals

Table 19.2 A (partial) framework for policy analysis

**1. Strengthen the links between employee effort and the agency's value-added**

- (a) Make sure employees understand what value-added is and how it is produced. What are the 'key tasks' of the organization? What does it take to perform them better?
- (b) Incentive reforms require the participation of employees in the specification of each agency's objectives, performance measures, and incentives. This incidentally helps to educate everyone on the links between effort and value-added.
- (c) Help employees to improve the quality of their efforts (training, information on performance).
- (d) Sometimes  $p'(e)$  is close to zero for any individual but is large for groups of employees. In such cases, group incentives are more feasible and desirable than individual incentives. (Free-rider problems may then emerge, which demand another iteration of solutions).

**2. Reduce the risk aversion of employees**

- (e) Raise the level of pay.
- (f) Help remove employees' uncertainties about pay-for-performance by running transparent experiments where employees (and clients) help to design quantitative and qualitative measures of performance, appropriate incentive schedules, and ways to evaluate the experiment's results in a relatively short time.
- (g) Make credible commitments about the evolution of pay-performance formulas over time, to avoid the 'ratchet effect'. Again, a process is often important. For example, if employees, management, and clients help to appraise progress and set new incentive schemes, along with a guarantee to return to *status quo ante* under agreed-upon conditions, this may engender the confidence to enable an experiment with incentive pay to begin.
- (h) Avoid incentive master plans for all agencies and all time. Learn by doing. Make sure affected parties take part in the evaluation of the incentive experiments.
- (j) Facilitate employee self-selection into different jobs and different pay schemes.

**3. Improve measures of performance**

- (j) Include information from clients.
- (k) Empower clients. Seek analogies to market power or joint management. Experiment with user charges and analogies to them such as in-kind contributions, sharing them with employees.
- (l) Quantitative and qualitative outcome measures can be used. So can peer ratings, as long as ratings are forced to be 'on a curve', (that is, not everyone can be rated as 'excellent').
- (m) Extraneous variables can be taken into account in the design of incentive schemes. Examples are controlling for students' social backgrounds in estimates of school contributions to learning, and controlling for the tax base of a local district in estimating the

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*Table 19.2 (continued)*


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efficiency of the district office in raising revenues. An incentive scheme may employ measures of relative performance, analogous to tournaments, which help to 'control for' extraneous variables that affect everyone's performance, up or down.

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**4. Reduce the costs of additional employee effort and of incentive reforms**

- (n) Begin with the easiest cases. In particular, try reforms in areas where performance is relatively easy to measure objectively and where the revenues raised or costs saved can make the experiment self-financing.
  - (o) Through training and better equipment, shift the cost-of-effort curve.
  - (p) Reduce the costs of providing incentives, for example, through legal reforms that make experiments easy.
  - (q) Incentives include money, but also other things, which may be less expensive: promotions, training, travel, special assignments, transfers, awards, favourable recognition, and simple praise. Even information about how well one is doing turns out to function as an incentive.
  - (r) Remember the principle of the sample: incentives can be based on samples of performance. Especially in an experiment, there is no need for the comprehensive measurement of each and every outcome of each and every action.
  - (s) Cultivate political support, particularly from unions and foreign donors. The idea of an experiment reduces their worries and involves them in design and evaluation.
  - (t) Challenge technical assistance by foreigners. For example, learn by doing rather than by attempting comprehensive studies that often end up being inconclusive or unsatisfactory. For example, use technical assistance (TA) funds to finance experiments where local experts and even government officials carry out the required 'studies' based on the participatory diagnosis of what is already known about problems and possible solutions.
  - (u) Privatize creatively. This can mean experimenting with hybrids of public and private sectors working together to provide services. Information about performance may be enhanced incidentally.
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that were vetted centrally through a comparison process. In a second round some technical assistance was given to the weaker communities that did less well in preparing projects. A centralized information process included estimates of costs per unit of things like rural roads and schools, so that officials were able to tell when proposals came in requesting outrageous amounts. The process included incentives for employees to evaluate operations in rural areas, and rapid promotion based on performance. Within two and a half years the SEF moved millions of US\$ and created thousands of jobs. And it did so efficiently. De-



spite salaries considerably in excess of government norms, the SEF's administrative cost per dollar moved to rural areas was less than 4 per cent. This, as Klitgaard (1991) shows, compared favourably with the 7 per cent figure charged by the United Nations Development Programme (UNDP) to administer projects in Bolivia.

The diagnosis and prescription must often go beyond an individual agency. In some settings, economic analysis predicts that 'capitulation wages' (Besley and McLaren, 1993) and overlooking corruption may be 'rational', even though they engender sick institutions. What may be needed is analogous to structural adjustment: a change in the rules of the game; a new enabling environment. 'Efficient organizational design', writes Paul Milgrom (1988, pp. 58–9), 'seeks to do what the system of prices and property rights does in the neoclassical conception: to channel the self-interested behaviour of individuals away from purely redistributive activities and into well-coordinated, socially productive ones'. There are interesting parallels between the free-market reforms that have swept the world since the mid-1980s and incentive-based institutional reforms that, I believe, will sweep the world in the next two decades. There are important differences as well, two of which are worth mentioning.

First, the importance of *experimentation*. The idea of designing an incentive master plan is misguided. Performance measures are so problematic in the many senses we have uncovered that, especially in difficult cases, we are well advised to begin with the partial, incomplete experiments and then to learn from the experience.

Second, the importance of *process*. It is wise to involve employees and clients in the design of the performance measures, the design of incentive schemes, and the evaluation of performance–pay experiments. The dynamics and political economy considerations of incentive reforms – such as the danger of manipulation and attempts to influence, and the threat of ratchet effects later denying employees the benefits of their improved performance – can in many cases only be mitigated through a transparent process that builds trust, creates quasi-objective measures, and enables credible commitments. Thus, in comparison with free-market reforms, institutional reforms will be slower, involve more participation by employees and clients, and will vary according to the conditions of different countries and ministries.

Doing this requires an approach that is at once bolder and more humble than conventional efforts. It must be bold in taking on corruption as a central issue. In thinking about incentive reforms and better information, there must often be changes in the civil service rules of

the game to allow *experiments* with new performance measures and performance-based pay. Clients and citizens must be involved in the design of incentive experiments. This requires humility on the part of both political leaders and foreign donors, a move away from grand studies and centralized planning to experimentation, participation, and learning-by-doing.

Moreover, civil service reform should not be comprehensive from the start. Poor countries face budget constraints. Incentive experiments should begin with ‘low hanging fruit’, namely, areas where performance is relatively easy to measure and where incentive experiments can pay for themselves (revenue, public works, procurement). Once success is demonstrated, one can help the experiments spread to more difficult-to-measure areas of the public service.

Tables 19.1 and 19.2 indicate that incentive reforms are not a panacea. The environment may be such that performance-based incentives will not by themselves lead to an improvement. But I believe that incentive reforms are part of a package of therapies for the sick institutions that constrain development in many of the poorest parts of the world. I believe that in the decade ahead we shall take sick institutions seriously and rethink institutional development accordingly. The principles of *healing sick institutions* will include measures to:

- Enhance information and evaluation. Put it in the hands of clients, legislators, and those with official oversight.
- Improve incentives. Link incentives to information about the attainment of agreed-upon objectives.
- Promote competition and countervailing forces – including civil society, the media, the legislature and the courts, and political parties – and procedures that allow them to make a difference in policy and management.
- Harden budget constraints.
- Create and utilize national and international mechanisms to enable credible commitments to rules and policies.
- Systematically attack systematic corruption (Klitgaard, 1988 and 1995).

## 5 QUESTIONS FOR RESEARCH

I admit that these measures are still speculation, indeed a hope, rather than anything like firm empirical findings or theoretical derivations. Let me close by suggesting several topics for research:

1. As in medicine and psychiatry, 'sickness' and 'health' are contested terms with no natural meaning. Is it possible to develop a typology of sick institutions? How might various institutional maladies be measured? Consider recent work on dysfunctional institutions and 'sick societies', as for example, Edgerton (1992).
2. How important are sick institutions? How widespread are various institutional maladies, and what are their effects? Are there examples of changes in institutional health from which we can learn? Consider, for example, the growth of corruption since the early 1980s in Tanzania, Zimbabwe and Mozambique.
3. What are the causes of institutional sickness? What are the political and economic conditions that seem conducive to healthy institutions? More narrowly, are there limits below which public-sector wages should not fall, in absolute terms or relative to the private sector? Are there key functions which have a particularly low resistance or a particularly large effect on an institutional epidemic's spread?
4. What cures exist for sick institutions in highly constrained, impoverished, dependent environments with low human capital? What conditions and policy changes help to ensure the permanence and sustainability of these cures?
5. What processes are best suited for broaching the issue of institutional sickness; for identifying the alternatives and their pros and cons; and for experimenting with remedial measures?

## Notes

1. A new empirical paper by Johannes Fedderke and myself, 'Economic Growth and Social Indicators: contains many references to the relevant literature.
2. See, for example, World Bank (1994); Schacter (1995); Berg (1993); Israel (1987); and Rondinelli (1989).
3. This focus should not be read as an assertion that only public institutions matter nor that they matter more than other institutions. In other work I touch on private-sector institutions (Klitgaard, 1991, chs 3–5) and what might be called indigenous institutions (Klitgaard, 1995), referring there to some of the voluminous literature.
4. I leave aside here another category of sick institutions, those that function effectively but serve ends that are sick – for example, an apartheid state or a secret police. At the end of the chapter I call for help in developing a typology of institutional illnesses.

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