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WORLD BANK ECONOMIC INSTITUTE

SPEECH DELIVERED AT THE

INTERNATIONAL CONFERENCE ON FIGHTING CORRUPTION

PLENNARY SESSION:

Economic Governance, the Private Sector
and Corruption

PRESENTATION BY DANIEL KAUFMANN

Wednesday, February 24, 1999

[TRANSCRIPT PREPARED FROM A TAPE RECORDING.]

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PROCEEDINGS

MR. STUART EIZENSTADT [US Under-Secretary of State, who chaired this plenary session in the Conference]:

Let me introduce the speaker, Daniel Kaufmann, who heads the Governance, Finance and Regulatory Reform Group at the World Bank Institute. He will speak about demand side of structural reforms and the use of these new diagnostic surveys.

He is considered a leading expert and advisor in the field of governance. He has published widely on academic and policy issues and [inaudible] new empirical methodologies with his colleagues at the World Bank and with academics.

He previously served in a number of positions for the World Bank and was a visiting scholar at Harvard University where he provided policy advice to emerging economies and concentrated his research on empirical assessments of causes and consequences of corruption and methods to improve governance.

A Chilean national, he received his PhD and Master's degree of economics at Harvard and a BS degree in economics and statistics from Hebrew University in Jerusalem.

We really have the pleasure of hearing one of the genuine experts in this area who again has developed some very innovative diagnostic tools along with his colleagues at the World Bank.

Daniel.

MR. KAUFMANN: Actually I am humbled, not only by your comments, but because much of what we have done has really been done in partnership with many others. I see many faces here. I am particularly encouraged to see that there are people here today who represent some of the work that we have been doing in partnership with emerging economies.

I think that what I am going to say could be said more eloquently by some of my friends, whom I see among the well-recognized faces.

I am going to be very frank, and I am known in general as being quite frank. So I hope you won't mind, and for the sake of stimulating the discussion, I will start with two quick anecdotes. One just happened to me.

Let me start by saying that I truly believe that we are making progress in the struggle against corruption. I came here by cab and when we arrived here the driver asked me "What is going on here? All these huge cars and big guys? Who is in town?" When I explained what the conference was about he couldn't stop laughing--he thought it was totally ridiculous. This is a good example of the credibility issue we all face. The regular man in the street feels a great deal of skepticism about the topic.

And I have also been recently humbled about my own emphasis on empirics. I am a big believer in empirics and fully realize that it is a complementary tool to many others. But here we look at data all the time and we analyze it profoundly.

As Steve said before, I am from Chile and I am very proud of it. Usually, I refer to Chile as an example of an emerging country that is doing better in terms of corruption and incidences of bribery than are many OECD countries. The data speaks for itself. Botswana and Chile appear better statistically than do many OECD countries. However, I was humbled recently when a Chilean Olympic official was named during the Olympic scandals. It was a tough reminder that there is, after all, no country without corruption, including the United States. There is no room for complacency.

I am now going to go through the list of causes and costs of corruption that have been mentioned before. They are well-known already. But I am going to be much more focused on a number of points, and only mention that one of the consequences of corruption that we are becoming more and more painfully aware of is how it corrodes particular institutions both in the public sector as well as outside of it.

But, in particular, given the topic of the conference today, I would like to suggest the importance of also looking at the consequences of corruption in general in a country in which there is institutional corrosion of the judiciary and of the security apparatus.

Why is that important? In my view, it is important because before we can think of the judiciary and security institutions as part of the solution, we have to acknowledge that in many parts of the world they are also part of the problem.

By first acknowledging that, we have to begin thinking about how to address the fact that they are part of the problem. Before we do that, we cannot think about them as part of a solution.

That leads me to three quick interrelated points that I wanted to make from this perspective, coming from one who works on and originally comes from an emerging economy.

In terms of issues of enforcement, where much of the emphasis is today, tomorrow, and the day after, enforcement issues are obviously very, very important. But let me suggest three points for debate.

One is lateness. Enforcement comes late in the stages of a corrupt transaction. So instead of focusing on catching a few big fish that bite a lot, we have to first think that in a place where many people are breaking the law, how can that be prevented in the first place? How can we make sure that the people, citizens, and officials are not breaking the law?

This immediately suggests that the task at hand in terms of prevention and education is at least as daunting and as important as the enforcement process and should complement it.

Second, is the issue of complementarity. So, the first issue is lateness. The second is the complementarity with large fundamental political and public sector management reforms. Let's face it, the notion of working to improve judiciary and security institutions is predicated on two assumptions, two premises -- first, a transparent and effective political process, an open political process, and second, an effective and functional public sector management system as a whole.

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Let's be frank, in many settings these assumptions do not hold. So as long as these assumptions do not hold, the overly-narrow focus on security and the judiciary is not going to work. One has to begin by looking at broader challenges in terms of a need for institutional, economic, and political reform.

In terms of our institution, the World Bank, we do not get involved in the political reform process, but we do get involved with institutional economic reforms. There are a number of programs in many countries that assist the reform efforts.

A third interrelated point is one of privatization and sequencing. It is relatively easy nowadays with all we have learned about corruption to set-up a powerful presentation with seven main components of an action program on corruption, with each component having six sub-components, and that makes forty-two, a list of forty-two daunting tasks which need to be done in the next fifteen months. That is not doable, that is not implementable. And at the end, because of the political and institutional constraints, nothing happens.

So it is extremely important to be realistic in this area and suggest the four or five key priorities in each country that one has to start with. And from my experience of working with so many partners, one thing is very clear -- those priorities change from country to country. One needs a country-specific type of work and prioritization as a result.

That leads to the next point-- getting beyond these general remarks and saying these are the main components of a strategy—and instead asking a much tougher question: What is meaningful process that would lead to real action, to real results?

And from our experiences where we have been observing and working with partners in emerging economies, let me suggest three interrelated aspects. Once again, this comes from the perspective of an emerging economy.

One point was mentioned before-- coalitions, coalitions of civil society involvement, the need for some combination of political will, at least a few champions within government that want reforms to happen. The private sector also needs to be involved.

An interesting example of a coalition in this case is the far-reaching reform that has taken place with the police force in Colombia under General Serrano. He has basically achieved an enormous amount not only by internal reforms within the public sector, by using civil society in a very effective way, but by creating more monitoring boards and utilizing services in other ways.

So even police forces in some areas of the world are using a broad and participatory process to engage in reforms.

The second point I want to make is the power of aid and the power of empirics-- that has been mentioned before. I will elaborate a little bit in a second. But let me just say that this is not a managed research tool, but it is a very proactive tool not only for awareness but for real action as well.

And third is the need to think in each particular setting of the type of innovative institutional response needed to complement the conventional response, going beyond traditional rule of law type of approaches, like alternative dispute resolution

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mechanisms adapted to particular countries. This seems to work in countries where the official rule of law in institutions is dysfunctional, for instance.

Television programs throughout Latin America are the equivalent of people's courts here, but are much more adaptive, and show the population what a court's proper function is in a highly disseminated, powerful way.

Vice President Gore mentioned public procurement mechanisms this morning. In one Latin American country, the Governor of a particular province undergoing reform was very, very nervous about seeing a particular contract bid for a major procurement contract for computers. He decided to have a public audience, and brought in experts on computers and on that type of technology, and the costs, not of the bidding process itself, but the costs of setting-up the rules of the game in a proper fashion.

After the public audience took place, after the rules of the game were completely redrafted, the costs went down by about 80 percent. There was an enormous difference in terms of results once the public got involved.

That is certainly an example of a marriage between the power of data, civil society involvement, and innovative institutional approaches-- which we very much need in this area.

Let me move forward now to the particular tools that have been mentioned in terms of new diagnostics utilized within countries. First of all, I would like to emphasize the point that this is only one tool kit and one approach and one input within a much broader set of instruments and goals and it should by no means be used in isolation. That won't work.

And secondly, it is very much done in partnerships. We suggest the methodological approaches, a set of questionnaires; we can provide technical assistance but ultimately the partners in the countries themselves, the partner institutions and the others involved completely take over the implementation of the process which we support to the extent needed. But it is very much a demand driven process led by the country itself. The countries request that.

Let me make five points about the new diagnostic empirical tools. We first start by looking at the worldwide database and at an analysis of the worldwide database that we already have at our disposal before we even do the in-depth diagnostics within a country.

We have been gathering a lot of data that already exists from surveys, from international comparisons and so on, also data on the correlates in an institutional environment, regulatory areas and so on.

That allows us to begin seeing what a country is like in a comparative sense within the region, mixed with the other regions and so on. And it allows us to identify what we call the early warning flag. Is the problem in this area as opposed to that area, at least in a comparative sense?

That is not enough for action, but it at least provides a very important guide for what should be the focus during the in-depth diagnostic.

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In some countries one already knows beforehand that the regulatory environment that acts as a constraint in some countries and is related to corruption, is not actually a constraint in this particular country. It is, rather, the judiciary. So one can already direct the diagnostics in that country.

Then, the in-depth diagnostics take place in conjunction with a lot of field work and adaptation within the country itself. After that -- and I will say something about the diagnostic -- but after that a major workshop takes place, with hundreds of people from civil society, government, NGOs, and so on. After the data has been analyzed, working groups prepare draft action programs in each area of reform. The objective is that by the end of the workshop an announcement is to be made by the leadership, as has been done in the case of Bolivia, about the types of action programs the leadership is committing itself to and that will be implemented. It is in general a very integrated civil society participatory process.

What do these diagnostics try to measure? First, they not only measure the type, extent, and cause of corruption -- misappropriation and diversion of public assets and resources, how much corruption in cases of procurement, for instance, how much for bribery, for obtaining licenses or regulations and other goodies like telephones and so on, the cost of public positions and jobs, judicial outcomes, and then bribes for public service delivery of the most basic nature, as we heard from Jeremy Pope of Transparency International.

That leads us to analyze the causes of corruption in a number of areas. For instance, we have found that in a number of Eastern European countries the poor bear a disproportionate cost of corruption in terms of public service delivery. They end up paying more for bribes as a proportion of their income, than do better-off people. The same holds true with firms.

Also, one can measure the tax equivalent cost, as was suggested in the morning. In some countries we have seen that enterprises are paying between 15 to 20 percent of their total revenue, which is an enormous amount if the government were instead to get rid of corruption.

That not only suggests the cost of corruption for those firms, but it is also a powerful message for Ministers of Finance as to how much revenue they may be foregoing because of the existence of corruption.

We can send the same message by asking a lot of questions about how much they would be prepared to pay if regulations were streamlined. So it is a way of measuring costs throughout the public sector, and not only about corruption.

In terms of the types of surveys that are done, there are three independent types of surveys. One, for households and citizens; a second for firms; and a third for public officials.

This is complemented by harder data, harder data that can come from customs analysis in terms of customs receipts and a comparison of procurement prices which reveals enormous differences, for example in different types of hospitals. This is then complemented by focus-group discussions to find out what is behind many of the problems identified by the empirical diagnostics.

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Just a few more characteristics of this approach, in terms of the rigorous questionnaires that are given out as opposed to the old-style questionnaires which used to be used. They asked for opinions and general questions, like "In your country do you believe that there is a lot of corruption or a little corruption and please answer on a scale of one to five?" This is interesting, but it is not very useful for policy.

Here, the questions are often exponential in nature. Firms, citizens, and public officials are asked about actual experiences using dollars, and cents, and with percentages. Basically they relate to actual expenses that they have been observing, without incriminating anyone--it is totally anonymous and the question is never "How often did you do this?" But rather, in a situation like this, where you work, how prevalent is A, B, C or D?

Very rigorous technical requirements for implementation and analysis of quality control are important for successfully implementing this approach. We have had good experience with local partners who are very quick in absorbing this technology and we expect that over time they basically will run with this alone and will do many more surveys, and will monitor them over time.

There is also a conceptual framework behind it, with a much broader focus on corruption. I mean, ultimately, one wants to understand the incentive structure, and the sets of carrots and sticks that drive this type of behavior. Sometimes in the public sector there are obviously many official rules of restraint that come from the procedures, from the guidelines, from the laws. But they are weakly enforced, if enforced at all, and instead what prevails are more informal rules and other rules of behavior both in the public sector and outside.

And so the challenge is to understand through this type of study the driving force behind this actual behavior and from that to suggest what makes sense in terms of reform.

For further details, there are papers available on that topic outside. And I would like to just move to a summing-up of the overall points that were made here.

First, what is important is coalition, of the civil society, the private sector, and the government. And as Maria Lavanastao [ph.] mentioned before, what comes out very clearly from the data itself is that there is a logic of collective action. Basically, everyone is saying very, very, clearly how much they are losing collectively because of corruption. That does not mean that each individual firm has reacted alone in saying no to bribery. There is a real logical collection action between themselves and the different groups.

The second point here is the importance of rigorous empirics as a powerful tool to empower coalitions that function as an input to the action programs. The expression in English is "sunlight is the best disinfectant." And much funnier, but I don't know if there is an appropriate expression in Spanish, the equivalent one I found is that if corruption could sign, we will need electricity.

[Laughter.]

MR. KAUFMANN: It sounds better in Spanish, but it serves to suggest how much of a problem we still have in some other places.

The third point here in summing up is the crucial importance of focusing on prevention—by looking at the incentive structure, and systemic reform of an institution, as was mentioned before by Stuart Eisenstadt and others.

Fourth, the importance of institutional innovations. Not just traditional approaches alone or Western implants of taking the same type of agency that has worked in a country in the OECD and transplanting it to an emerging economy. In many cases an implant will not work in isolation for the reasons we discussed before.

And fifth, we need to think beyond diagnostics itself. Basically, let's look at the diagnostic tools as one of a number of inputs. We heard this morning also from the President, Mr. Wolfensohn, that it is absolutely crucial to start with real actions and credible reforms and then to move beyond diagnosis. Actions and reforms start at home. I was very pleased to hear how he announced very, very frankly that there are also problems in that context within the World Bank, a few cases, but even a few cases is a few too many.

Ultimately we have to recognize that corruption is a symptom; it is a very important and damaging symptom but is a symptom of an underlying systemic weakness of the state. We think that it is very important to recognize that ultimately the assistance that we can give to countries may not be yet another anti-corruption campaign.

There have been so many anti-corruption campaigns around the world, and each time with a number of people locked up, and then not much happens, and obviously that is insufficient. So I think we have to also concentrate on serious institutional reforms like setting examples for procurement, deregulation and the whole program of institutional reform in Bolivia.

Indeed, in Ecuador we found customs administration reform; in Latvia tax administration reforms, civil service reforms in Albania, Yemen, and in Uganda; procurement reforms in five other countries; and deregulation in seven or eight other countries we are working on where it is made explicit in the loans, that one of the main objectives is to address corruption, however, it is mainly addressed to the systemic weaknesses.

I think it is very important to have a note of humility and sober expectations again. I think -- and I detect that a lot of progress has been made compared with only two or three years ago -- but it is only the beginning.

The problem of corruption around the world is daunting. Smashing success cases basically don't exist, not recently, maybe they do in particular institutions but there are no major countries that have made enormous, enormous progress in a short period of time. That is impossible, to begin showing results even with the utmost political will which is absolutely crucial, taking our assessment between five and ten years.

So for the long haul, we have to have realistic expectations and, above all, ultimately the responsibility in terms of political will to sustain these reforms, and continuously work towards that and to involve civil society. We believe that it is also a politically smart type of approach.

I am encouraged to see that there are some very important members of civil society here, but I am very curious to see the breakdown, because I understand that

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for each country it was voluntary how many civil society members to bring. I detected that a number of countries see civil society as the opposition rather than as a potential partner in fighting this problem.

This problem is not like building a dam or another type of project. It is absolutely crucial to involve the population, but, more specifically, particular groups outside the government and the private sector that can be enormously powerful in helping address this problem.

Thank you.

[Applause.]

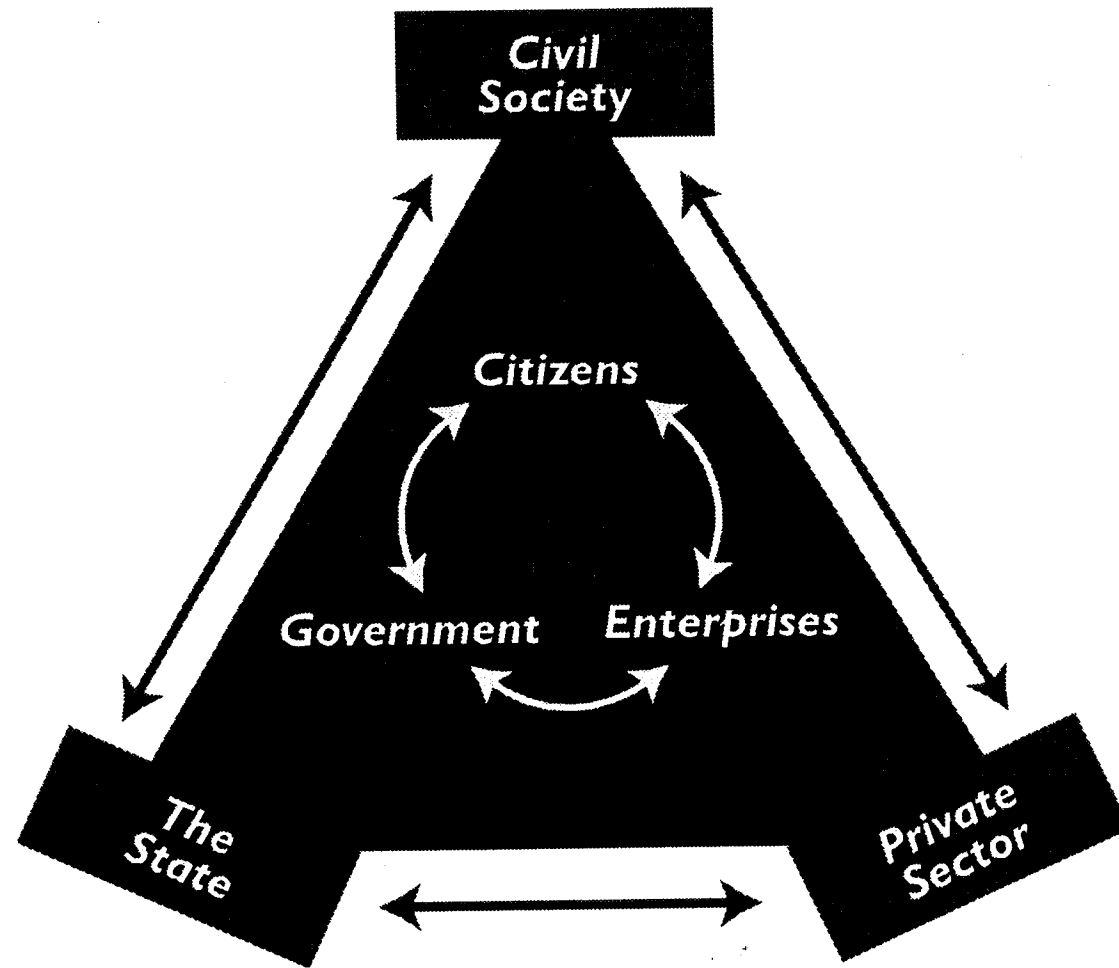
New Diagnostic Empirical Tools to Address Corruption:

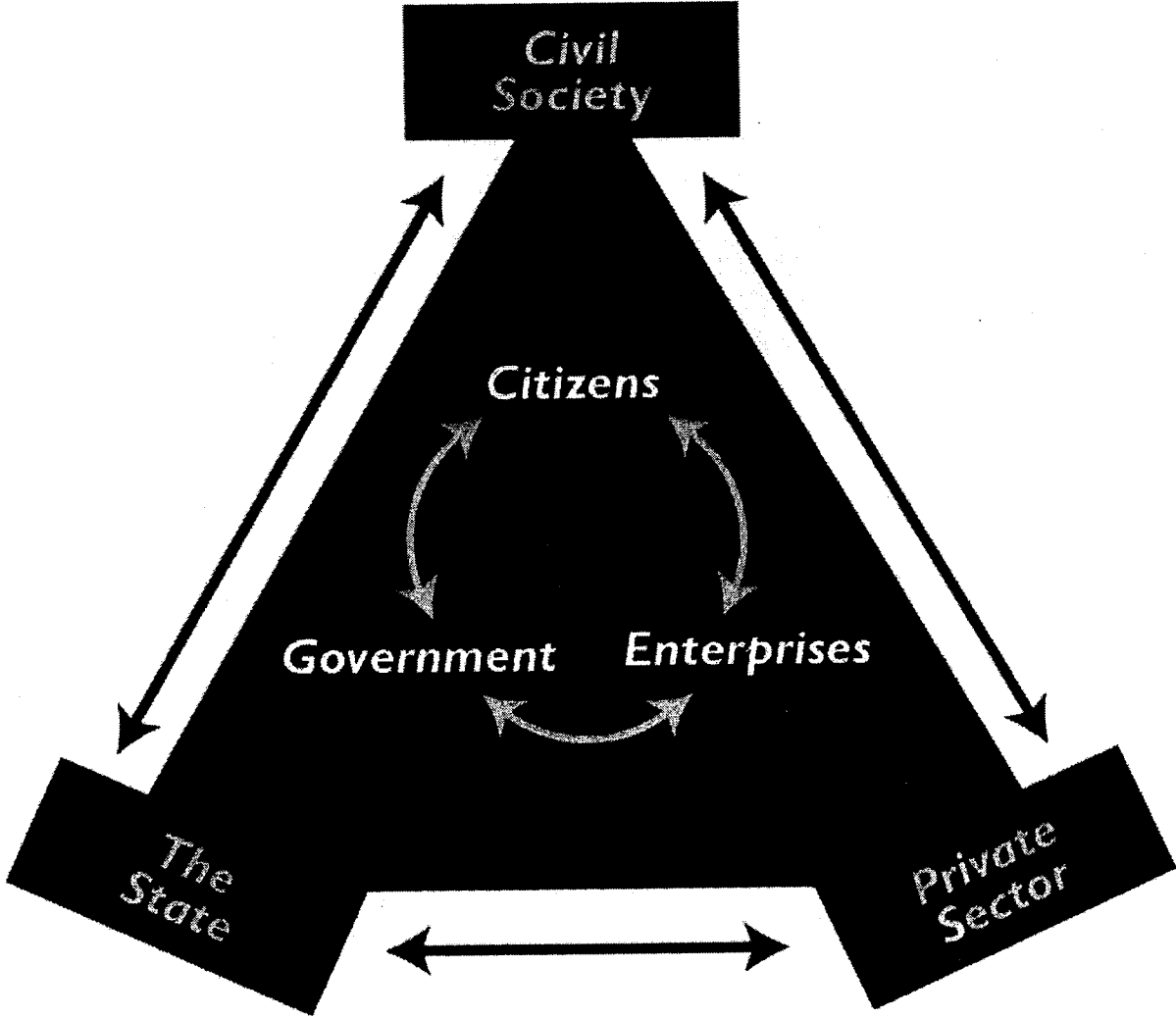
Methodology, Data, Knowledge Sharing, and Coalition-Building

**Background for Plenary Presentation
at VicePresident Gore AntiCorruption Conference
February 24th, 1999
Washington, DC**

Daniel Kaufmann and Colleagues
**World Bank Institute in Collaboration with
DEC-ECA Prem LAC**

Coalition-Building and Diagnostics for Addressing Corruption





New Diagnostic Empirical Tools: Basic Approach

- Worldwide Database and Analysis as departure**
- Determinants of Corruption: Cross-country “flags”**
- In-Depth Diagnostics and Analysis within country**
- Workshops and Action Program Design**
- Integration with Civil Society Participatory process**

Salient Features of the New Diagnostic Tools

- ***Multi-pronged***: households, firms and public officials [*‘triangulation’*], complemented by hard data.
- ***Experiential*** (vs. ‘opinions’/generic)
- ***Specially designed*** and tested *closed* questions
- ***Conceptual framework***: broader focus than corruption
- ***Rigorous technical*** requirements for *implementation and analysis*: how to work with *partners* in implementing, etc.

Country Governance Empirical Assessment

Measuring the type and extent of corruption:

- **Theft of public assets and resources**
- **Sale of licenses and regulations**
- **Sale of judicial outcomes, law enforcement**
- **Bribes for service delivery**

Data sources:

- **Firm-level, household, and public officials surveys**
- **Estimates of unofficial economy**
- **Customs data, procurement prices**

Developing and Implementing an Anti-Corruption Strategy

- Top-level political support
- High-level Steering Committee
- Working Groups for key areas
- Diagnostic work (nature & extent of corruption)
- Workshop to develop anti-corruption strategy
- Multipronged action program

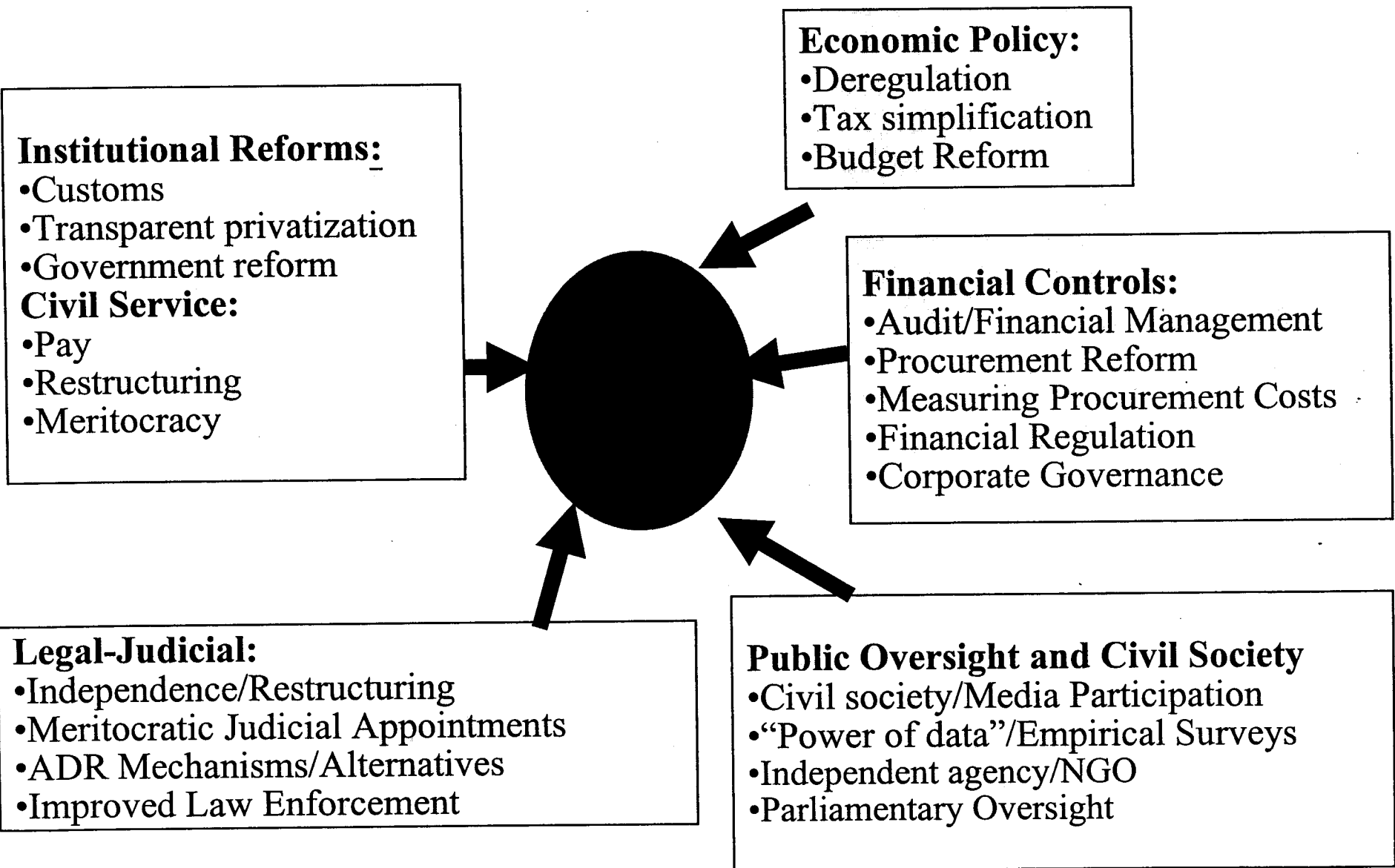
Beyond Mapping, Costing and Diagnosing Corruption:

How to elicit Operational Data for Program Design?

In Surveys of Public Officials, focus on Measuring:

- *Incentive Structure*
- *Official Rules of Restraint and their Weaknesses*
- *Informality within the Public Sector: actual rules of behavior*
- *Actual Performance of Public Sector Agencies*
- *Public Service Delivery*

A Multi-pronged Strategy for Combating Corruption



Summing Up

1. *Collective and Participatory Action*: Logic
2. Rigorous *Empirical Evidence* Does Empower
3. Focus on *Prevention and Systemic* Weaknesses
4. Institutional *Innovations* (non-western...)
5. Beyond Diagnostics: *Prioritized* Action Program
6. *Institutional*, Regulatory and Financial *Reforms*
7. *Humility and Realism*

Examples of Ongoing Bank-assisted Reform Programs:

- *Customs Administration* (Guinea-Bissau, Ecuador)
- *Tax Administration* (Latvia)
- *Judicial Reform* (Albania, Guatemala, Morocco)
- *Civil Service Reform* (Albania, Yemen, Uganda)
- *Procurement reform* (Benin, Georgia, Colombia)
- *De-licensing* (Georgia)
- *'Institucionalidad'* (Bolivia)

Challenges in the Next Stage of Anti-corruption

Daniel Kaufmann

It is a Thursday in October 1994, at the Kiev World Bank Resident Office weekly roundtable debate with the media, public officials and civil society. The topic this afternoon in this participatory post-Soviet fora is the ever-latent potential for economic reform and recovery. The newly appointed Vice-Premier in charge of the Economy, a reformist, is engaged in a heated discussion on the government intentions to reform, arguing that this time it is in earnest. The skepticism among many of the roundtable participants is palpable, and made rather explicit when one participant reminds the group of the continued poor record in implementing reforms—since independence in late 1991, in fact.

One of the most prominent journalists in the country challenges the Vice-Premier by pointing out that no matter what macroeconomic reforms the new Cabinet manages to implement, the prospects for growth remain dim. This, the journalist eloquently states, is because growth will only come from a thriving private sector. Yet no such prospects exist, he says, because of Ukraine's private Mafia, which extracts a high toll on any private enterprise.

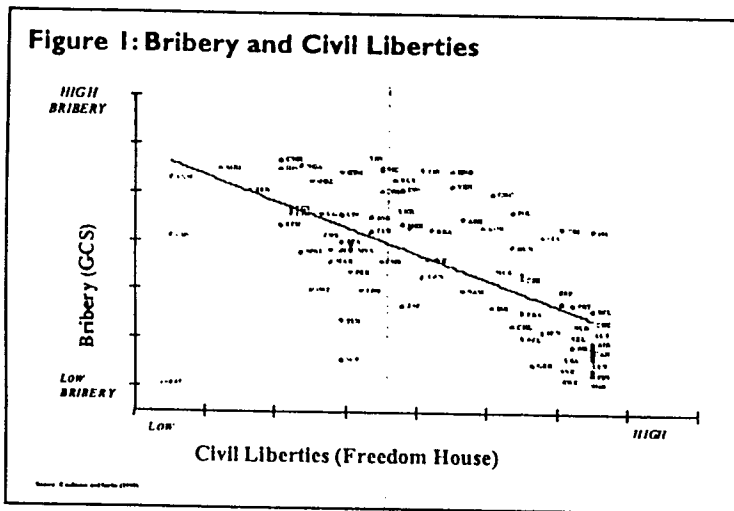
The new Vice-Premier calmly concurs with the need to focus on small enterprises in the emerging private sector. Furthermore, he agrees that there is a private Mafia, which extracts a "tax" from pri-

vate businesses. But he then takes an exception of sorts, stating that he has made "back of the envelope" calculations suggesting that on average such "tax" extracted privately by the Mafia is about 10 percent of a firm's revenues. This, while far from negligible, he continues, pales in comparison with the predatory behavior of the "government Mafia." His quick calculations indicate that such a "tax" by government officials and politicians on the private sector exceeds 50 percent!

Four years have since elapsed. Unfortunately, recent accounts suggest that such a depiction may still be relevant, and not only in Ukraine. The challenge of addressing government predation is not universal, but it is ubiquitous. At a much deeper level, however, it is worth pausing to consider the subtle wisdom in that Thursday's roundtable response by the then Vice-Premier and ask whether the hidden advice has been heeded, or whether much of the challenge still remains to be addressed.

Upon reflection, there was a basic wisdom in his understanding of the power of transparency in a participatory public forum¹, admitting to such basic government fallibility so early in the post-Soviet era in the context of an open debate with civil society and the media. He also showed unusual foresight in conceptualizing corruption as a public sector developmental challenge, rather than merely as a private criminal activity. Additionally, he implicitly challenged us to quantify the problem at hand; generalized pronouncements on harm inflicted by one factor or another would not suffice. He had exemplified that non-empirical assertions diverted attention from the true problem—such as blaming the private Mafia instead of predatory politicians and bureaucrats.

And last, yet not least, he was hinting at the desirability of anchoring the understanding of corruption within a seemingly unconventional discipline, namely public finance—perhaps unwittingly challenging the many prevailing writings on institutional and legal "fixes," or the myriad of soft ethical exhortations. In one bold stroke, by framing the problem in terms of "tax burden," he suggested that we examine taxation, bribery, dwindling public revenues, and absence of rule of law in an integrated fashion. He was challenging us all to address corruption on a sounder analytical basis.



Undoubtedly, there has been progress in the struggle to combat corruption in many corners of the world, particularly due to the leadership and concerted awareness-raising efforts by organizations such as Transparency International, complemented by many domestic groups and other organizations over the past few years. As the writings in this compendium illustrate, knowledge on this crucial issue has advanced in recent times. Yet the lion's share of the broad challenge posed by the Ukrainian Vice-Premier's "salvo" four years ago is still before us. Participatory approaches still require more rigorous integration with concrete reforms of incentives, systems and institutions. And the role of in-depth and detailed empirical work needs to be furthered, while bribery and corruption need to be examined within a broader analytical framework—be it within public finance or other free-standing established disciplines, or through an interdisciplinary approach.

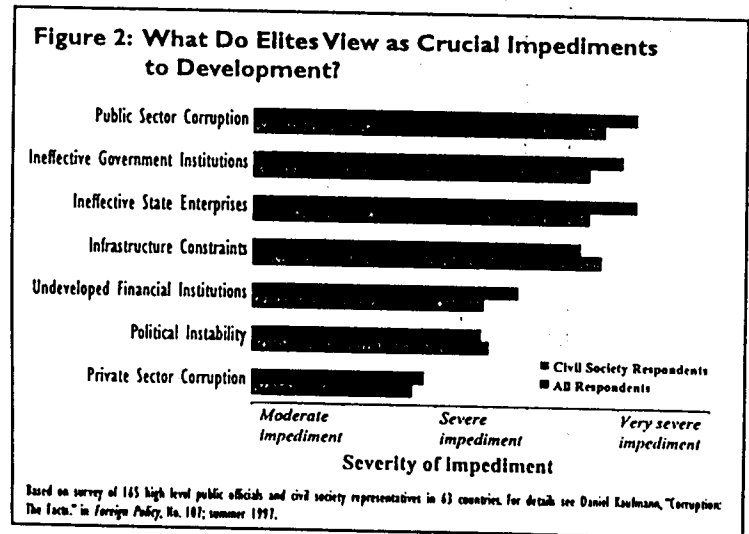
In this article, we discuss four broad challenges emerging from the lessons of our recent collaborative work, and illustrated in the above anecdote. These challenges share in common the "primacy of empiricism." Yet since the growing field of empirical investigation into causes, consequences and "cures" to corruption is still in its in-

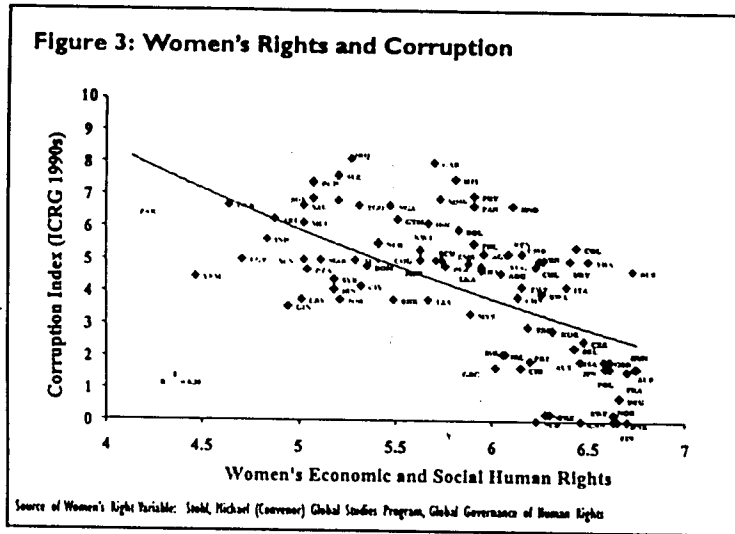
fancy, the intention here is not to present definitive answers, but to raise questions and issues on upcoming challenges in the field.

I. The Unfinished Agenda of Civil Society Participation

The growing involvement of civil society and NGOs in the fight against corruption is an undisputed fact, as is their role in increasing awareness and mobilizing support. But the progress is far from universal. The problem is that such involvement presumes a certain level of organization of civil society as such, i.e. the existence of civil society as a partnership or community sharing a common good or goal. Further, it is often taken for granted that civil society is not only sophisticated, but that it also operates in an environment where civil liberties are safeguarded. In many countries neither of these assumptions holds. Yet the evidence is clear about the importance of civil liberties: current empirical research indicates that countries with improved civil liberties are significantly more successful in addressing corruption (see Figure 1)—even after controlling for other determinants (Kaufmann and Sachs 1998).

Consequently, a major challenge for the next stage will be to promote approaches for civil society to operate more effectively where





there has been little tradition of so doing, and where civil liberties have not been fully guaranteed. In this paper we do not provide a full-fledged answer to such a challenge. Empirics help us, however, to raise six particular dimensions for further debate.

First, the need to recognize and fully utilize the "power of data and technology" as crucial instruments to help mobilize civil society and apply pressure on political structures. Technology today allows for sophisticated and rapid dissemination of data and empirical analysis. For instance, well presented and simple comparative charts illustrating findings on corruption can help mobilize and give voice to previously silent and disparate citizenry groups. The impact can be even greater where data dissemination is based on in-country, in-depth diagnostic surveys of enterprises, households and public officials. The follow-up to such technocratic diagnostic work are often public workshops and focus group discussions held in the country. When complemented by the involvement of the media and various societal stakeholders, these events serve to build momentum and spearhead new levels of activity by civil society and NGOs.²

Second, and seemingly paradoxical, many in the public sector

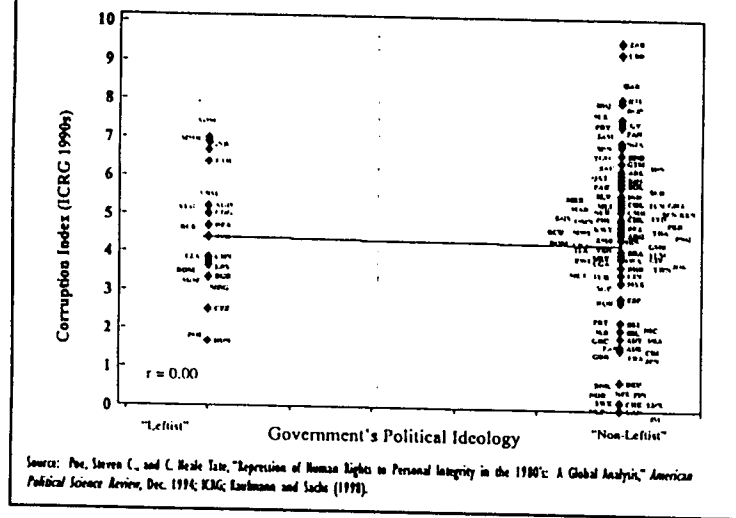
can become significant allies—however silently at first—in addressing corruption. Many public institutions may be afflicted by corruption, yet within them are caring and honest individuals—including some in high positions—who, with the right encouragement and support, are prepared to address the corruption in their midst. Particularly in settings where civil society is not fully developed, collaboration between reformist public officials and NGOs may be particularly productive.

In fact, survey results from over sixty countries, does suggest a remarkable degree of consensus between civil society and the public sector regarding the severity of the corruption challenge (Figure 2). Both civil society representatives and government officials were of the view that public sector corruption, and related to it, ineffective government institutions and state enterprises, pose the severest obstacles to development and growth in their countries. They both also concurred on the need and feasibility to take action to combat corruption, and explicitly agreed on what particular measures, if taken, are most likely to help control corruption.³ Indeed, incipient NGOs and activist citizens can build coalitions with reformists within government who are prepared to take action. The international donor community can in turn support their pursuit of common objectives.

Third, the empowerment of women to mobilize civil society, and particularly in the context of anti-corruption, needs further attention. Data analysis suggests that where women's rights are restricted, corruption is more prevalent (figure 3). While the statistical significance of this relationship requires further testing, this link may prove to be important. Is it that the lack of women's rights is an important "proxy" for the absence of overall civil liberties in a society? Or is it that women's participation can have a particularly inhibiting effect on society's tolerance for corruption?

Fourth, new tools and insights are emerging regarding participatory approaches to awareness raising and mobilization of support for governance and against corruption. A number of these tools, insights and approaches have recently been explored by others, such as Transparency International national chapters, NGOs in India (such as the citizens "scorecard" approach), etc.

Figure 4: Government's Ideology and Corruption



Fifth, the intricate links between politics and civil liberties needs to be better understood in order to deepen our understanding of the roots of corruption. The degree of political liberties, i.e. democracy, is found to have a positive correlation with improved control of corruption, yet the relationship may be less potent than in the case of civil liberties. Where executive political will exists, the role of NGOs and civil society may be akin to being partners with government in the implementation of anti-corruption programs. Where such political will is absent, civil society's role takes a different dimension; it may need to engage in strategies fostering the politicians' and leaderships' willingness to reform.

Finally, how relevant is it to consider the political ideology of the ruling government in addressing corruption? Just as empirics can educate us in what may be important linkages to corruption, such data analysis also helps debunk notions conventionally held but rarely submitted to empirical tests. In fact, reviewing the evidence we find that a government's ideology is not a relevant parameter; on average there is no difference in the extent of corruption whether the govern-

ment is classified as having a left or right wing ideology (see Figure 4). The challenges lie elsewhere, as suggested previously.

II. The Challenge of Convergence between Process and Substance: Integrating the Participatory Process with Concrete Institutional Reforms

For too long we economists underestimated the central importance of participation in development. We regarded it as a "soft" notion, not subject to rigorous treatment or measurement, and at times driven by "politically correct" agendas. We proved mistaken. The evidence is clear that participation in developmental projects is key. Furthermore, there have been advances in the analytical understanding of participatory processes. In the context of anti-corruption efforts, major strides are taking place in developing and applying a well-structured "technology" to grass-roots participation. Such "technology" continues to develop as the process of awareness-raising and mobilizing of civil society spreads.

Parallel strides have been made in the understanding of economic and institutional reforms. Further, there is growing awareness of the relevance of such broad economic and institutional reforms in controlling corruption. Even compared with a few years ago, there is a much better grasp today of the extent to which corruption is a symptom of fundamental institutional weaknesses. Thus, instead of tackling such a *symptom* with a narrow intervention designed to "eliminate" (or suppress) it, increasingly it is understood that the approach ought to address a broad set of fundamental institutional determinants.

However, in spite of these important advances in both *process* and *substance*, these have largely proceeded in parallel, each one promoted by different groups with different views (and expertise) on what is important for anti-corruption. The challenge of convergence between both views has barely begun. Yet in reality these two approaches are essential complements to each other, not substitutes. Any participatory process, however sophisticated, ought to lead to concrete results beyond enhanced participation and heightened awareness. Equally important, the implementation of institutional reforms can benefit significantly from the particular participatory process that has been developed for anti-corruption.

It would be easy to pay "lip service" to integration by merely having the "process" advocates be responsible for the first stage of any given anti-corruption initiative, whereby awareness-raising workshops are carried out first—and only subsequently the institutional reform experts are brought in. This would be a mistake: the challenge of convergence and integration necessitates the work of interdisciplinary teams from the outset. Such teams ought not necessarily be stacked with "anti-corruption fighters", but with experts in participatory approaches, survey techniques, legal and institutional reforms, customs and tax administration, and the like.

Identifying the key institutional reforms in each particular country that undertakes this challenge, and mobilizing support for such reforms, ought to be fully integrated into the participatory process from very early on. Such early integration is likely to promote a better balance between prevention and enforcement measures in addressing corruption. Until recently, the pendulum was firmly in the "enforcement" corner. The gradual swing towards the middle ground has taken place due to the recognition of the limitations of ex post legalistic enforcement measures—particularly in societies where rule of law institutions themselves are currently part of the corruption problem.⁴

Increasing attention on prevention within a country requires a detailed review of the incentives and opportunities that lead to corrupt activities. This will include carrying out in-depth empirical diagnostic surveys and broader institutional analysis. In turn, this would promote an internal debate, early on, to identify and initiate the design of key institutional and structural reforms, as well as define implementation priorities and optimum sequencing. And to be effective, this internal discussion and program preparation—which would include identification of priorities for and substance of the agency-specific reforms, implies a time-consuming, participatory process. The preparation of prevention measures, therefore, by definition cannot be initiated at a late stage in this process.

Further, a sustainable participatory process, extending far beyond the initial awareness-raising and "mobilization" stages, is likely to prove crucial during the implementation of reforms. The experience of the scorecard method pioneered by Sam Paul, the public sector reform

specialist heading a local NGO in Bangalore, India, illustrates how powerful such integration can be. The periodic application of the scorecard evaluation of local public services by the citizenry (including reporting on bribery and extortion), as well as the discussion and dissemination following each survey, provides continuous input for governance improvement and reform at the municipal level.

Another example is provided by the reformist initiatives of the governor of Mendoza, Argentina. Among other innovations, civil society became involved in both the design of new public procurement approaches (participating in the decision-making on transparent rules that would govern public procurement), as well as in the execution of such institutional reforms regarding procurement (open public meetings and bidding procedures, transparent data dissemination, etc). Similarly, a number of localities throughout the world have embraced a participatory process in the adoption of municipal budgets, one which involves open public meetings, community decision-making and transparent and pro-active disclosure of information through electronic and print media.

III. Towards Methodological Rigor Relevant for Action: Insights from Public Finance?

Practitioners in the field of anti-corruption often feel that researchers tend to be removed from the real world, operating in a universe of abstract concepts—in contrast to the urgent needs for practical actions on the ground. The often abstract and non-empirical nature of much research in governance and related fields has perpetuated the notion of a "divorce" between researchers and practitioners. Yet recent empirical investigations into the causes of corruption provide new insights informing and influencing policy.

Further, advances in the field of survey diagnostics provide a bridge between research and action. Admittedly, this progress is still nascent; refining such instruments while additional countries are surveyed is an important short-term goal. This refinement promises to enhance our ability to translate such in-depth diagnostic tools and data analysis into concrete anti-corruption program and policy options. Such empirical progress in the study of corruption does not suffice, however: analytical frameworks backing such data analysis

are important for enriching and detailing the link between data and policy recommendations.

It may at first appear unrealistic to aim for such concrete and direct operational results from research on corruption. Some argue that operational program design is best left to "policy wonks" or enforcement experts with long operational experience. Yet, particularly in the field of corruption, such a view may amount to missing an opportunity. Serious "anti-corruption" action programs are in their infancy, still populated by a number of myths and misconceptions regarding strategies and policy implications. Such misconceptions often result from the absence of in-depth analytical and empirical underpinnings for the proposed anti-corruption actions. The prevalence of advice given to governments to create Commissions Against Corruption (whether modeled after Hong Kong ICAC or not), is just one example.

On the other extreme of the spectrum, many analytical papers on corruption conclude with only a perfunctory paragraph with rather generic "policy implications" (which often are also debatable, such as "caution" against rapid liberalization, "care" in sequencing reforms, "tailoring" programs to country culture, "warning" against privatization, etc.). Thus, a more explicit linkage between empirical research and practical and implementable policy actions in the field is called for.

Past advances in the research areas of commercial trade and in macroeconomics may help place the nexus with the more practical "what to do" about corruption in some perspective. From the late seventies through the late eighties there was a "revolution" in research and thinking about trade policy, resulting in a consensus on the benefits of fairly liberalized trade regimes. A similar consensus emerged during the eighties and early nineties on the benefits of austere stabilization policies, that is, on the interplay between disciplined fiscal and monetary policies, a stable exchange rate regime and low inflation.⁵ Research played a critical role in developing the consensus on policy advice, in turn influencing economy-wide reforms in these areas throughout the world over the past dozen years. Moreover, it was often the academic researchers who played a pivotal role in promoting this new policy consensus.⁶

To an extent, the parallel may apply here: the state of the art in terms of "what to do" about corruption is today where our understanding of policy options stood in macroeconomics and international trade about fifteen years ago. At such an incipient stage, the value added of rigorous research can be considerable. Yet in an important sense, the parallel with the economic fields is far from perfect: corruption is more complex and more difficult to address given its interdisciplinary nature, its historical and political roots, and the wide range of topics and issues that are usually subsumed under the umbrella of "corruption." Consequently, for it to be relevant, research in corruption will need to probe further not just into empirics from an economic standpoint, but also into its multi-disciplinary facets.⁷

Furthermore, a rather basic challenge—not addressed yet—refers to how best to approach corruption as a *field of inquiry*. Should it aim to be a freestanding field of investigation and academic training, consistent with its belated yet acknowledged importance for development and social welfare? Or, since corruption is increasingly recognized as an important *symptom* of fundamental institutional weaknesses, should it be integrated within existing fields of inquiry—which heretofore have not paid sufficient attention to corruption? If the latter, into which fields of inquiry should corruption be mapped?

Among others, Institutional Economics, Sociology, Political Science, Public Choice and Microeconomics have provided some tools and intellectual space for studying corruption. Yet, as suggested by the Ukrainian Vice-Premier's remarks, there is also a strong case to be made for deepening the treatment of corruption within a Public Finance framework. By so doing, a better understanding is likely to emerge on a variety of important questions:

- How onerous is corruption as a "tax" (on the citizen or enterprise), and, more concretely, what types of corruption are more costly than others? In this context, the tax burden literature can provide tools and insights, and help us distinguish between prevalence of corrupt transactions of particular types and their costs to society.
- How can the costs and benefits from different government interventions be rigorously evaluated, particularly those that may increase or reduce the opportunities and incidence of corruption?

- What are the losses to public finances (revenue leakages and expenditure waste) resulting from corruption? How do such losses undermine the provision of rule of law, and in turn further fuel corruption and loss of public revenues?
- How can we deepen our understanding of the relationship that exists among different regulatory regimes and corruption and governance? Public finance provides powerful tools to understand the role, costs and benefits of regulatory interventions, which in turn have been shown to interrelate with corruption in many settings.
- What type of incentives can be used to complement OECD and other such international treaties and resolutions that discourage bribery by foreign investors? Eliminating the tax deductibility of bribes incurred abroad, and its criminalization by fiat may constitute the easier first stage, analytically speaking (although not in terms of execution). The upcoming challenge is to devise and put in place more comprehensive incentive structures against transnational bribery. This may include, for instance, differential penalties to the party involved in a corrupt transaction who reports first, and structuring incentives for collective action among business associations, NGOs and government agencies to reduce bribery.
- What is the link between the level and arbitrariness of taxes and regulations, the resulting corruption and bribery, and the evolution of the shadow economy? What is the relationship between such a shadow economy, the soundness of the public finances in a given country, and the country's ability to provide official rule of law?
- How can public finance agencies best be reformed? Much of the challenge of implementation in the next phases of anti-corruption work will need to focus on concrete action within such agencies. Revamping customs and tax administration has emerged as a priority in anti-corruption action programs developed by a number of countries. While there is some clarity regarding what type of improved agency is desired; there is considerably less understanding on how to make this happen.
- What kind of budgetary instruments can be used to effectively combat corruption? Particularly where rule of law institutions

are woefully inadequate, anti-corruption initiatives that circumvent such legal institutions are needed. Public finance institutions provide some opportunities for "circumvention"; for instance in-depth study of unit costs in publicly procured goods give the ministry of finance a powerful tool to identify waste and diversion of funds, and thus to restructure budgetary allocations.

- Decentralization, "Municipalization," and Fiscal Federalism are related areas where key challenges also abound. What is the appropriate set of incentives and allocation of fiscal and public expenditure responsibilities between the center and the localities, and how do different modalities affect efforts to control corruption?

Further, tools from newer academic fields (related to public finance) are also likely to provide important insights in delving deeper into the analytics of corruption. Recent theoretical breakthroughs in the areas of corporate finance and contract theory (Grossman and Hart) provide new approaches to understand the theory of the firm and its applications. Such a framework and tools deals *inter alia* with the firm's control rights, as well as its cash flow rights, incentives to optimize performance, and the role and alternative arrangements of supervisory boards and shareholder rights.

With the appropriate modifications, this framework can also be applied to governance in the public sector, to understanding why bureaucrats and politicians behave the way they do (and not always in the broader public interest, see Shleifer and Vishny), and to further our analytical understanding of how "supervisory board" and "activist shareholding" functions can (to a significant extent) be performed by civil society and also specialized institutions such as Parliamentary audit agencies. In turn, this overall corporate governance framework may help us understand more specifically which public sector governance incentive structures are more prone to face high corruption and weak performance, and thus to evaluate in a technocratic fashion the various policy reform options.

The recent advances in the field of auction theory and its applications (e.g. for telecommunications spectral bands in the US) may also offer opportunities to optimize transparency and minimize rent seeking in bidding processes. Similarly, new approaches being developed to bid for infrastructure concessions by way of the private sec-

tor (e.g. highway construction franchising in Chile—see Engel, Fisher and Galetovic), utilizing cost-benefit tools, suggest that there may be payoffs to collaboration between those involved in anti-corruption and researchers working on frontier analytical issues related to design of auctions, procurement and concessions.

IV. The Empirical Challenge: The Empowerment of Data.

It was not long ago when the notion that corruption by its “intrinsic nature” was impossible to measure was accepted as a truism. This view delayed the emergence of serious empirical analysis on corruption. As a result many myths were perpetuated about its prevalence (“Africa as a continent is hopelessly corrupt”), about its causes (“cultural,” “absence of anti-corruption law,” “privatization and liberalization”), and about its consequences (“the grease that oils the wheels of commerce in over-regulated developing countries”).

Furthermore, the absence of sound empirical work provided corrupt governments with a convenient “cover,” since the plethora of writings and reports on corruption were relatively easy to refute or ignore as long as empirical evidence was lacking. With the advent of a myriad of new surveys and other data gathering techniques and approaches, such an era is over. A rich empirical body of data is emerging on governance variables and government performance in general, and on corruption in particular.

The challenge ahead is to substantially broaden and deepen the gathering, analyzing, and disseminating of this body of new data. During the awareness-raising anti-corruption stage the reliability and rigor of data on corruption was not scrutinized. Whether the estimates provided by a particular corruption index were accurate (or methodologically sound) or not was of lesser concern during this recent period—as long as it was put to use sensitizing civil society to the corruption challenge, and mobilizing heretofore indifferent or disparate groups.

The expectations of methodological and empirical rigor, however, have been raised. Increasingly, the media and opposition politicians are utilizing and interpreting these indices as if they provide an accurate account of a worldwide corruption ranking (even though typically only about fifty countries or so are covered by most indices,

and the margin of error in the ranking of a particular country can be very large). Thus, sounder survey data and methodologies are called for in order to concretely and responsibly assist in making choices on detailed action programs to control corruption. Where the methodologies and measurements lack rigor the data has proven too general to build relevant programs.

Fortunately, improvements are possible in the measurement of corruption, in the construction of composite corruption indices, and in the design and implementation of surveys. Additional surveys containing more specific and better framed questions about bribery and corruption are becoming available. Therefore, in the near future we can expect to have an improved and more reliable data bank on these governance indicators. Yet the challenge of continuing to improve in this area, while transparently acknowledging the shortcomings of the data and methodologies at hand, still remains.

Indeed, the recognition of the limits of each single corruption indicator or index does point to the desirability (for researchers and policy-makers alike) of always applying a multi-pronged empirical approach in investigations and informed advice in this field. A finding based on a lone indicator, regardless of its prominence, cannot suffice. An initial research finding linking women rights to controlling corruption (as discussed above), for instance, requires further support using various independent measures (and appropriate statistical controls).

Similarly, it does not suffice to obtain only citizen perception data on public service delivery in order to infer that a particular judiciary or tax institution ought to be the first priority in an anti-corruption campaign. Instead, the consistent finding of similar (yet more detailed) data results identifying corruption in, say, the judiciary through the use of additional surveys of enterprises and public officials, and complemented by “hard data” collected through jurimetric analysis of processing time and backlogs in courts (Buscaglia), significantly enhances the reliability of the empirical evidence and the credibility of the actions it suggests.

Furthermore, we need to move beyond the challenge of merely attaining improved empirics through a multi-pronged approach to surveys, to one of constructing a framework linking the analytical

and empirical research with operationally relevant utilization. We need to effectively utilize empirical analysis in the design and implementation of action programs. So far we have merely suggested some of the elements in this empirical framework for concrete policy-making; much of the challenge still lies ahead. At present, with colleagues at the World Bank-EDI (and in collaboration with TI and local NGOs) we are developing and field-testing a particular methodological approach integrating within one empirical framework the various components. This framework is being applied in select transitional economies—starting with Georgia, Albania and Latvia, soon to be expanded to other countries. Given the limitations of space here, and the ongoing nature of such investigation, the details of the proposed framework and of the ongoing implementation challenges will be presented in detail elsewhere⁸. As a diagrammatic synthesis of the overall empirical approach being developed, see Annex A below, which depicts its various interlinked components.

Conclusion: The Challenge of Concrete and Informed Action

The challenges discussed here are by no means exhaustive. Further debate and writings will focus on other challenges, such as the related yet broader challenge to understand why there is a relative dearth of successful public sector reform in developing countries. And where it appears that successes have taken place, the challenge becomes one of identifying what particular measures and institutions account for the lion's share of such success. Poland may be an interesting case study to undertake in this context: a country where governance and economic performance have been rather remarkable during the transition, particularly so in contrast to many other countries in the region. Reform was courageously undertaken in some areas, but which were in fact the specific areas that produced the lion's share of the remarkable results? In other areas reform efforts lagged; how were the potentially negative effects of so doing attenuated? Indeed, what actually accounts for the remarkably superior governance performance of Poland as compared to neighbors to the East, including the former Vice-Premier's home, Ukraine?

A comparative study of Poland and Ukraine could answer some of these questions. Similarly, elsewhere, there are many possible pair-

wise country comparisons where a rigorous study of governance may provide valuable insights. Extending the concept of "pairing" to a micro-institutional level also holds promise. Why is it, for example, that one country manages to run an honest and effective customs service, while a similar country suffers a customs service rife with corruption? This same in-depth comparative case study approach can be used to compare the institutional performance of ports, judicial institutions, or public watchdog agencies, where effectiveness differs notably. Similarly, comparisons between two contrasting public institutions within the same government, one that has successfully reformed, the other which has not, can yield insights.

More generally, in this paper we have made a case for significantly expanding the overall empirical approach in furthering the goals of controlling corruption and improving governance. We need to continue to probe, explore, and innovate, recognizing that we are only in the midst of a fast pace learning process. What we do know is that working in partnership with local institutions and experts is essential. Citizens of the country—be they in or out of government—know their context better than outsiders. At the same time, the data and lessons gathered from experience worldwide are beginning to provide some very clear insights that need to be disseminated confidently and widely. These insights, if effectively adapted to country conditions and complemented by political will, could prove decisive in yielding concrete results. The challenge of successful results on the ground is still largely ahead of us.

In order to address such challenge, we need to embrace new expertise into this field, collaboratively joining forces with institutional experts, as well as statisticians and other skilled professionals within and outside government. The time is ripe for this technocratic expertise to make an important contribution—even if they were not involved during the first generation of anti-corruption. Indeed, these technocrats may not be "anti-corruption experts." Yet their potential impact in the next stage may be as important as that of the first generation anti-corruption visionaries and activists—whose enormous accomplishments so far would multiply *many fold* in the next phase through a close partnership with technocrats. We submit that in the next stage of anti-corruption, reform of key judiciary institutions, or

in public procurement, or of a dysfunctional regulatory agency (or, say, demonopolization of telecommunications), will be worth much more than many "high level" (and generic) corruption conferences or anti-corruption papers. The challenge regards concrete and informed action on difficult institutional reforms. ❖

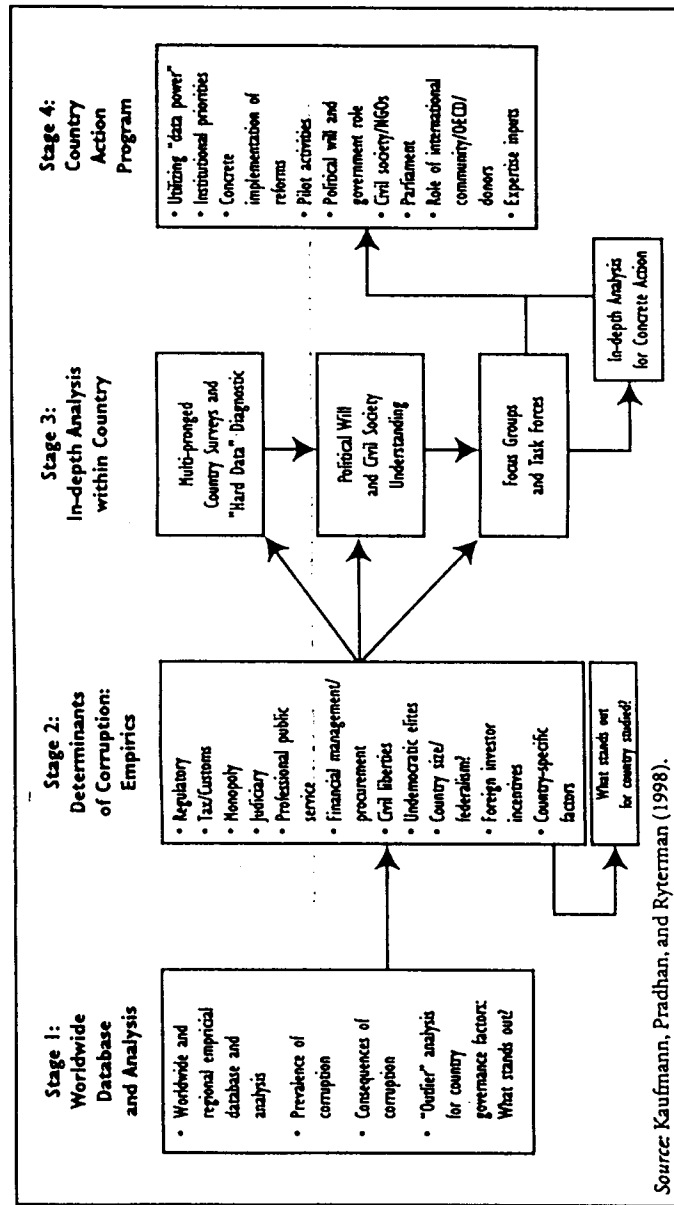
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The use of outside agency indices and data in no way constitutes official World Bank endorsement of their precise country ratings in the variables enclosed herein.

Notes

1. The political economy circumstances (and poor policy-making) that prevailed in Ukraine since until late 1994 were not consistent with IFI lending. Thus, a conscious effort to carry out a (non-lending) public education effort took place; it involved all stakeholders in society in a participatory fashion. The weekly roundtables with the media, policy makers and civil society was one of many components in this effort.
2. Data is far more than a passive research tool. When well gathered, analyzed and presented, survey data complemented by hard financial information, is virtually impossible for authorities to ignore (see details below).
3. See figure 2 and explanatory text in Kaufmann and Gray chapter in this Volume.
4. For an eloquent exposition of the limitations of enforcement measures, see the writings of Luis Moreno Ocampo, as well as Roberto de Michele. Their knowledge and role in assisting the province of Mendoza in their transparency-oriented reforms is also noteworthy. See also this author's "Beyond Rule of Law: New Anti-Corruption Initiatives" (1998).
5. The broad consensus of the first stage has not been fundamentally challenged in spite of the fact that second-generation issues have emerged in both fields—such as the mild and sporadic interventionist implications of "strategic" trade policy, fixed versus floating exchange rate regimes, and the precise degree of fiscal "austerity" and interest rate levels desired (particularly controversial in the case of the recent East Asia crisis).
6. B. Balassa, A. Kruger, J. Bhagwati, and M. Corden, for example, on the opening of trade regimes, M. Bruno and S. Fischer on macro-fundamentalism, J. Sachs and R. Dornbush on both areas the above issues as well as on the exchange rate regime linkages.
7. Among other things, improved rigor in understanding what constitute corruption, its costs and consequences are likely to reveal that improvement in the measurement of corruption indicators is much needed.
8. See Kaufmann, Pradhan and Ryterman (1998) for further details. This work is of an interdisciplinary nature, involving close collaboration between researchers, economists, public sector management, civil society and political economy experts throughout the World Bank and other agencies. Many in addition to the paper authors have contributed to this ongoing work, particular mention is due to ACER institute in Albania, GORBI in Georgia, as well as A. Mukherjee, P. Keefer, N. Manning, P. Zoido-Lobaton, S. Paul, J. Anderson, S. Bloemenkamp, K. Henderson, Z. Preci, M. O'Donnell, E. Sutch and others.

Annex A: New Empirical Frontiers in Anti-corruption: Diagnostics and Action Programs



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GOVERNMENT IN TRANSITION*

Regulatory Discretion and the Unofficial Economy

By SIMON JOHNSON, DANIEL KAUFMANN, AND PABLO ZOIDO-LOBATÓN*

Politicization of economic activity means the exercise of control rights over firms by politicians and bureaucrats. In most countries politicians maintain property rights in firms, typically in the form of residual control rights as defined by Sanford Grossman and Oliver Hart (1986). These control rights may have served an ideological agenda in the past, but they are often used to further the private agenda of politicians and bureaucrats. A recent literature has established the presence of these problems in countries as diverse as Peru, France, Russia, and Ukraine (Hernando de Soto, 1989; Andrei Shleifer and Robert Vishny, 1993, 1994; Kaufmann and Paul Siegelbaum, 1997; Shleifer, 1997). But how widespread are these rights and how damaging are their effects around the world?

The usual presumption in the economics literature is that a predatory government simply leads to lower total economic activity, but for Eastern Europe and the former Soviet Union since 1989, Johnson et al. (1997) showed that businesses have responded to politicization by going "underground." Instead of registering their activities, managers prefer not to pay taxes and not to benefit from key publicly pro-

vided services, such as legal enforcement of contracts. For these economies in transition from communism, there is evidence of a downward spiral, in which firms leaving the official sector reduce state revenue, which reduces publicly provided services and further reduces the incentive to register in the official sector.¹ Most of the former Soviet Union has thus ended up in a "bad" equilibrium with low tax revenue, high unofficial economy as a percentage of GDP, and low quality of publicly provided services.

This previous work on transition economies suggests that, while formal rules may matter in some instances, what really matters is how regulations and tax rules are actually implemented. If the rules are fine on paper but officials have a great deal of discretion in interpretation and implementation, this leads to a higher effective burden on business, more corruption, and a greater incentive to move to the unofficial economy. This general idea leads to three specific propositions. First, the share of the unofficial economy in GDP should be higher when there is more regulation and more discretion for officials regarding how the regulatory system operates. Second, the unofficial economy should be larger when there is a bigger tax burden on firms in the official sector, where "burden" on the firm is the outcome of how the tax system is administered as well as what the rates are. Third, a larger unofficial economy should be correlated with weaker publicly provided services, as measured by corruption and the "rule of law" (particularly the legal protection provided to private-sector business investments).

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¹ Norman Loayza (1995) has similar theoretical results for Latin America. In his model, unregistered firms use but do not pay for public services, thus leading to congestion costs for public goods, such as roads, and lower growth.

This paper finds support for these propositions in a broad set of countries for which there exist at least roughly comparable estimates of the unofficial economy in the 1990's. We have measures for the unofficial economy for 49 countries in three regions of the world: Latin America, the OECD, and the former Soviet bloc. A different methodology is used for each region, but the numbers appear to be comparable; see Johnson et al. (1998) for the detailed estimates. The sample for our regressions varies between 32 and 49 countries, depending on the coverage of right-hand-side variables. We have not found comparable data for the unofficial economy in East Asia or for Africa, so these countries are excluded from the regressions. We use Brazil and Russia as illustrative regional benchmarks throughout and also report on OECD-specific countries where relevant.

L. Regulation and Bureaucracy

The Heritage Foundation's measure of regulation is higher, on a scale of 1 to 5, for countries that had regulations that are worse for business in 1996 (Bryan Johnson and Thomas Sheehy, 1997). This measure includes both the formal rules and the way they are enforced. The Czech Republic actually receives the top score; it is the only country in our sample to get a perfect 1. Most OECD countries score 2. Russia scores 4, while Brazil scores 3. Table 1 shows that a one-point increase in this index is associated with a 14.7-percentage-point increase in the share of the unofficial economy. Controlling for log GDP per capita reduces the coefficient on the regulation variable to 8.1, but it remains significant.

The Global Competitiveness Survey reports results from a 1997 survey of executives on the extent of regulatory discretion and lax enforcement of rules, on a scale of 1 to 7 (World Economic Forum, 1996). Russia has the lowest score of 2.01, while Brazil rates better with 3.46. Most of the OECD countries score 4.5 or higher; Switzerland has the highest score with 5.64 in our sample. Singapore had the highest score worldwide in the survey, with 6.36. Table 1 shows that a one-point-higher score for this index is correlated with a 9.2-percentage-point fall in the share of the unof-

TABLE 1—REGRESSIONS OF UNOFFICIAL ECONOMY (AS PERCENTAGE OF GDP) ON MEASURES OF REGULATION

Independent variable	Regression					
	(i)	(ii)	(iii)	(iv)	(v)	(vi)
Log GDP per capita		-7.4*		-7.4*		-1.0
		(1.6)		(2.3)		(2.9)
Measures of regulation						
Regulation*	14.7*	8.1*				
	(2.5)	(2.6)				
Regulatory discretion*			-9.2*	-2.9		
			(1.7)	(2.5)		
Bureaucratic quality†					-8.5*	-7.7*
					(1.0)	(2.3)
R ²	0.43	0.62	0.47	0.60	0.65	0.65
Number of observations:	47	47	34	34	39	39
Independent variable	Regression					
	(vii)	(viii)	(ix)	(x)	(xi)	(xii)
Log GDP per capita		-7.4*		-7.3*		-7.0*
		(2.0)		(1.5)		(1.6)
Measures of regulation (continued)						
Economic freedom*	-2.5*	-0.8				
	(0.5)	(0.6)				
Measure of taxation						
Tax burden†			-11.7*	-6.5*		
			(2.4)	(2.1)		
Tax rules†					3.5*	1.9*
					(0.7)	(0.7)
R ²	0.38	0.54	0.43	0.68	0.37	0.57
Number of observations:	42	42	34	34	42	42

Notes: Standard errors are in parentheses.

* A higher value for this variable stands for a better score for private business.

† A higher value for this variable stands for a worse score for private business.

* Statistically significant at the 5-percent level.

ficial economy. However, this measure is not significant once we control for log GDP per capita.

The 1996 International Country Risk Guide of Political Risk Services measures expert opinion of "bureaucratic quality" on a scale of 1 to 6, where a higher score means that bureaucrats operated in a more efficient and predictable way between 1990 and 1997. Guatemala and Panama have the lowest score of 1.44; Russia scores 3.19; and Brazil scores 4.0. The best OECD countries, such as the United Kingdom score 6.0. Table 1 shows that

a one-point increase in this index implies an 8.5-percentage-points decrease in the share of the unofficial economy. Controlling for log GDP per capita reduces the coefficient only slightly to -7.7 , and it remains highly significant.

Freedom House's 1995-1996 measure of economic freedom is higher for countries with "better" regulation (i.e., more pro-business), on a scale of 0 to 16 (Richard E. Messick, 1996). The United Kingdom, the United States, Denmark, Sweden, and Holland tie for top position with a score of 16, while Azerbaijan has the lowest score of 1. Russia and Brazil score 7. Table 1 shows that a one-point increase in this scale is associated with a 2.5-percent fall in the share of the unofficial economy, but this coefficient loses significance when we control for GDP per capita.

In summary, we find strong evidence that less regulation (i.e., a regulatory regime that is more business-friendly and presumably represents less political control rights) is correlated with a lower share of the unofficial economy. However, countries with a higher income level also have a lower level of the unofficial economy, so when we control for income level two out of four regulation variables become insignificant at the 5-percent level. The effect of bureaucratic quality and the way regulations are administered appear to be particularly strong. This supports the idea that regulatory discretion is an important cause of unofficial activity.

II. Taxation

The 1997 Global Competitiveness Survey rates tax burden from the firm's standpoint; a higher score was given when executives considered the tax system to be better for business, on a scale of 1 to 7 (World Economic Forum, 1997). This measure captures not just tax rates, but also the way the tax system is administered (e.g., if tax officials abuse higher levels of discretion, this would likely translate into a worse score). Ukraine has the lowest score in our sample, with 1.58, and the United Kingdom has the highest score, with 4.60. Russia scores 1.80, and Brazil scores 2.22. A one-point increase in this variable reduces the share of the unofficial economy by 11.7 per-

centage points. Controlling for log GDP per capita reduces the coefficient to -6.5 but it remains significant.

The Fraser Institute measure of top marginal tax rates is higher for countries that had lower tax rates, on a scale of 1-10, in 1995 (James Gwarney and Robert Lawson, 1997). In this case the index captures formal rates, but not the way the system is administered. The "best" tax rates are in seemingly unlikely places: Bolivia and Uruguay both score a perfect 10.² The worst (i.e., highest) tax rates are in Italy, Belgium, Sweden, Denmark, and Romania, all of which score the lowest attainable value of 1. The United States scores 7, and the United Kingdom scores 5, while Russia and Brazil both score 8. Chile scores 4, which is the best in Latin America. Table 1 shows that a one-point increase in this index is actually associated with a 3.5-percentage-point increase in the share of the unofficial economy (i.e., countries with lower marginal tax rates actually have a larger share of the unofficial economy). Controlling for log GDP per capita reduces the coefficient on this index to 1.9, but it remains significant.

The contrast between the results of these two tax variables points to the importance of how the tax and regulatory system operates, rather than the nature of the formal rules. Countries with high marginal tax rates but a low tax burden (as evaluated by executives) actually have a low share of the unofficial economy as a percentage of GDP (e.g., Scandinavia; see Fig. 1). Russia has relatively low marginal tax rates but was rated with a high tax burden because of the way the tax system operates, and thus it is associated with a relatively high share of the unofficial economy in GDP.

III. Rule of Law and Corruption

Political Risk Services' 1996 International Country Risk Guide contains a "rule-of-law index" which is higher where the law-and-order tradition was stronger during 1990-1997, on a scale of 0-6. The United States

² Bolivia's recent tax reform is presumably reflected in this rating.

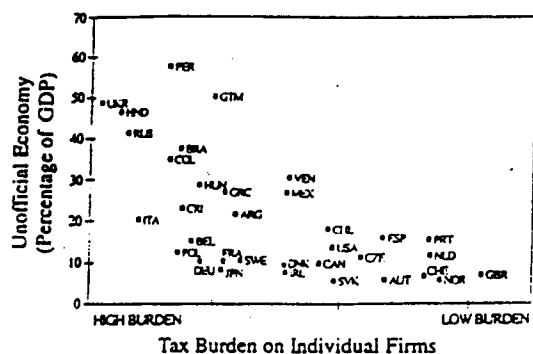


FIGURE 1. UNOFFICIAL ECONOMY AND TAX BURDEN ON INDIVIDUAL FIRMS

Notes: Unofficial economy estimates are from Johnson et al. (1998); the tax burdens on individual firms are from World Economic Forum (1997).

and several other OECD countries achieve the highest level of 6. In our sample, Colombia has the lowest score of 1.4. Russia scores 3.5, and Brazil scores 3.4. Table 2 shows that a one-point increase in the value of this index is associated with a 10.6-percentage-point fall in the share of the unofficial economy. In this case log GDP per capita is not significant, and including this control variable reduces the estimated coefficient on the index only to -9.3 .

The Heritage Foundation's index of property rights is lower where property rights were more secure, on a scale of 1–5, in 1996 (Johnson and Sheehy, 1997). The only non-OECD country to score a perfect 1 is Chile. Four previously communist countries have the worst score of 4: Romania, Ukraine, Georgia, and Azerbaijan. Russia and Brazil score 3. Table 2 shows that a one-point increase in this index is associated with a 13.4-percentage increase in the share of the unofficial economy. Controlling for log GDP per capita reduces the coefficient to 8.0, but it remains significant.

In the Fraser Institute measure of "Equality of Citizens Under the Law and Access of Citizens to a Non-discriminatory Judiciary," a higher score means a "better" legal system during 1995–1996, on a scale of 0–10 (Gwarney and Lawson, 1997). Only Belgium, Holland, Sweden, Norway, Denmark, and Switzerland get the top score of 10. Italy, the United Kingdom, and the United States score

TABLE 2—REGRESSION OF UNOFFICIAL ECONOMY (AS PERCENTAGE OF GDP) ON LEGAL ENVIRONMENT AND CORRUPTION

Independent variable	Regression					
	(i)	(ii)	(iii)	(iv)	(v)	(vi)
Log GDP per capita		-1.9 (1.7)		-4.8* (2.6)		-5.2* (1.9)
Legal environment						
ICRG rule-of-law index, 1990–1997*		-10.6* (1.0)	-9.3* (1.5)			
Property rights*				13.4* (1.8)	8.0* (3.4)	
Equality of citizens before the law*					-3.8* (0.6)	-2.3* (0.8)
R ²	0.77	0.78	0.55	0.58	0.53	0.60
Number of observations:	39	39	47	47	43	43
Independent variable	Regression					
	(vii)	(viii)	(ix)	(x)	(xi)	(xii)
Log GDP per capita		-4.0* (2.3)		-5.8* (2.5)		-6.5* (1.9)
Corruption						
Transparency International (extended)*		-5.1* (0.7)	-3.5* (1.1)			
World Economic Forum*				-8.0* (1.3)	-3.9* (2.1)	
Impulse's exporter bribery index ³					1.7* (0.4)	0.8* (0.4)
R ²	0.57	0.60	0.55	0.62	0.36	0.50
Number of observations:	43	43	34	34	44	44

Notes: Standard errors are in parentheses.

* A higher value for this variable stands for a better score for private business.

* A higher value for this variable stands for a worse score for private business.

* Statistically significant at the 10-percent level.

* Statistically significant at the 5-percent level.

7.5. Russia scores 2.5, and Brazil scores 0.³ Table 2 shows that a one-point increase in this index implies a 3.8-percentage-point fall in the unofficial economy's share of total GDP. Con-

³ In most Asian countries, this index is highly correlated with measures of corruption. Thus, Hong Kong and Korea score 7.5 on this Fraser Institute measure, while Thailand, Malaysia, and Indonesia score 2.5. Singapore is again an anomaly because it scores 0 on this measure, despite having very little corruption.

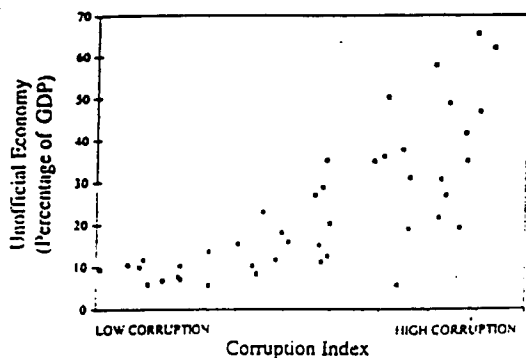


FIGURE 2. UNOFFICIAL ECONOMY AND CORRUPTION

Notes: Unofficial-economy estimates are from Johnson et al. (1998); the corruption index is from Lambsdorff (1998).

trolling for log GDP per capita reduces the coefficient to -2.3 , but it remains significant.

The extended Transparency International measure of corruption, prepared by Johan G. Lambsdorff (1998), scaled 0–10, covers 43 of the countries in our sample for 1997.⁴ It is higher for countries with less corruption. In our sample, Denmark has the highest score with 9.94 and Bolivia has the lowest in our sample with 2.05. Russia scores 2.27 while Brazil scores 3.56. The best Latin American country is Chile with 6.05. In Table 2 a one-point increase in this index implies a 5.1 percentage point fall in the unofficial economy, and a 3.5-percentage-point fall when the log GDP per capita control is included.

In the Global Competitiveness Survey measure of bribery, scaled 1–7, a higher score means less corruption in 1997 (World Economic Forum, 1997). Among countries for which we also have data on the unofficial economy, the highest score is Sweden with 6.61. The lowest scores (under 3) are for several Central American countries, as well as Russia, which scores 2.72. Brazil scores 3.75. Table 2 shows that a one-point increase in this index implies a reduction in the share of the

unofficial economy by 8.0 percentage points (without the control variable) and by 3.9 percentage points (if we control for log GDP per capita).

In the Impulse index of corruption, a higher score means more corruption (Peter Neumann, 1994).⁵ Russia and Brazil are both awarded 4 out of 5. The best score of 0 is awarded to the usual OECD countries plus Lithuania. As usual, Chile is the best-ranked Latin American country, awarded a score of 1. As Table 2 shows, a one-point increase in this index is associated with a 1.7-percentage-point increase in the share of the unofficial economy. However, controlling for GDP per capita reduces the coefficient by more than half and makes it significant only at the 10-percent level.

In summary, the relationship between share of the unofficial economy and rule of law (including corruption) is strong and consistent across seven different measures. Countries with more corruption have higher shares of the unofficial economy (see Fig. 2). This is true even when we control for income level.

IV. Conclusion

The model of Johnson et al. (1997) has three predictions that find support in the available cross-country data. First, countries with more regulation tend to have a higher share of the unofficial economy in total GDP. Second, a higher tax burden, as perceived by business, leads to more unofficial activity. Third, countries with more corruption tend to have a larger unofficial economy.

This evidence suggests, although it does not prove, that the extent of regulatory discretion is a key determinant of underground activity. Lax regulations in settings with undisciplined bureaucracies and weak rule of law allow officials to decide individual cases without effective supervision. This creates conditions ripe for corruption (see Kaufmann and Jeffrey Sachs, 1998). Under such circumstances, many firms choose to operate underground.

⁴ This index requires that countries have had only two (rather than four) surveys. Even in the extended sample, apart from Hong Kong and Singapore, all the other countries that score above 6.5 are long-standing democracies.

⁵ Among the 103 countries surveyed, the worst score is awarded to Bangladesh, Myanmar (Burma), Indonesia, Iran, Nigeria, Pakistan, the Philippines, and Thailand.

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