



Operationalizing political analysis: the Expected Utility Stakeholder Model and governance reforms

Rigorous stakeholder analysis tools like the Expected Utility Stakeholder Model can help the World Bank factor political realities into the design of operational programs.

Changes in public sector institutions and governance systems in developing countries may be relatively easy to achieve technically, but very tough to implement politically. Such reforms create winners and losers, so understanding the political realities that shape the incentives of key stakeholders in a given program or policy is vital to securing consensus—and may mean the difference between a well-designed intervention that mobilizes critical support and a failed initiative that alienates crucial clients. This realization has increasingly become part of mainstream thinking at the World Bank (Haggard and Webb 1994; World Bank 1997, 2000). But even if the importance of politics is now recognized, is there an operationally useful way of applying political analysis?

Bank instruments for political analysis have been blunt-edged, coming mainly through retrospective research or through broad analytical and advisory activities (such as Institutional and Governance Reviews) that provide informative contextual understanding but do not have immediate, decisive impact on Bank investment decisions. Another variant, stakeholder analysis, has looked more specifically at the behavior of interested groups and actors with regard to specific reforms (Haggarty and Matsuda 1999). But stakeholder analysis methodologies have been soft and intuitive. While sensible, they have not consistently met the rigor threshold needed to justify confident judgments about policy rec-

ommendations, much less program design or lending. Sharper, more robust approaches that tap into cutting-edge political science methods could help guide the design of reforms to optimize stakeholder support—or signal when to jettison programs that are going nowhere politically.

The Bank's East Asia and Pacific Public Sector Cluster has sought to elevate the sophistication, accuracy, and operational relevance of its political analysis by piloting a game-theoretic approach to analyze public sector governance reform issues in two of its client countries. The pilot study tested the Expected Utility Stakeholder Model to understand the preferences and behaviors of key stakeholders in civil service and corruption reforms. Because of the sensitivity of the findings, specifics about the countries and details about the issues examined are not included in this note.

But the note does draw general lessons from the experience. And it shows how the model has worked in "Anyland," a pseudonymous East Asian borrower country. More broadly, the note explores how the Expected Utility Stakeholder Model could more systematically feed into Bank decisions about operational priorities and program designs.

Modeling stakeholder preferences

Until now the Bank's stakeholder analysis has relied on qualitative assessments of stakeholder preferences as the basis for intuitive forecasts

Successful
public sector
reforms require
understanding—
and addressing—
political realities

The Expected Utility Stakeholder Model predicts how bargaining dynamics play out over time

of how stakeholders are likely to behave in forming coalitions in favor of or in opposition to reforms. The Expected Utility Stakeholder Model goes a step further, providing a consistent, systematic “modeled” framework for analysis of stakeholder perceptions and potential policy outcomes. For a given reform issue, the model uses expected utility forecasting techniques to simulate round-by-round negotiations among stakeholders with different interests in and varying influence over the reform process. The model is able to predict—with considerable accuracy—how these bargaining dynamics play out over time. The result is an empirical assessment of the likely extent of reform and of the degree of stakeholder support for that outcome.

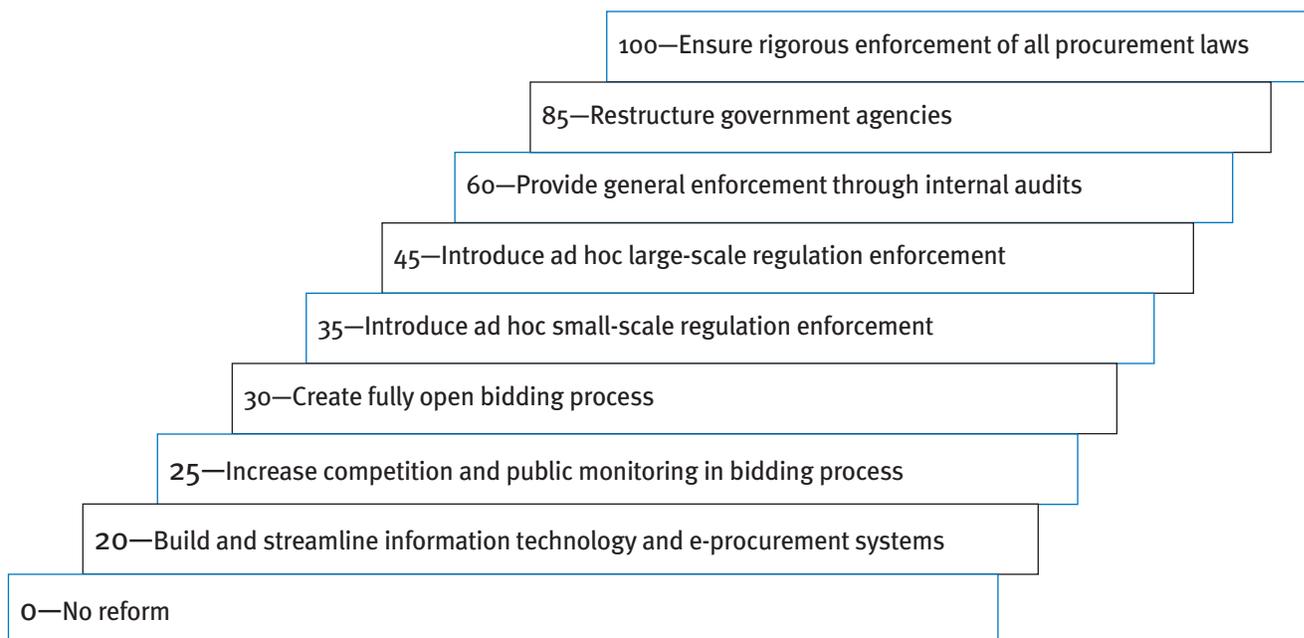
The case of governance reform in Anyland shows how the model works. This middle-income country had traditionally been highly centralized, but the emergence of a vocal civil society began to change that. Due in part to media attention, the country’s extensive corruption became a high-profile issue. National surveys indicated that corruption was particularly pervasive in government procurement. Individual government agencies exercised significant

discretion over the awarding of contracts, and loopholes in procurement regulations made it easy for agencies to give preferential treatment to politically connected firms. Because control over procurement processes afforded government officials important political clout, it was important to understand the stakeholder dynamics of this issue in order to design politically feasible reforms.

Applying the Expected Utility Stakeholder Model to procurement reform in Anyland began with rigorous data collection through interviews of country experts, including academics, donor institution staff, and policy officials with deep understanding of both the country and the policy issues involved. These experts were not asked to provide opinions or predictions but rather to characterize and explain the context for reform and provide information about relevant players.

The first goal of the interviews was to establish a continuum of options for procurement reform. These steps are shown in figure 1, coded with scores indicating the relative political difficulty of each. For example, in Anyland implementing internal audits (score of 60) was perceived to be roughly twice as hard, politically, as initiating open bidding for contracts (score of 30). Quantifying responses

FIGURE 1 POLICY STEPS IN PROCUREMENT REFORM



in this way allowed for consistency among the expert interviews and formed the basis for the model's expected utility calculation.

The interviews also provided a list of stakeholders with an interest in reform—including domestic leaders, interest groups, and international organizations—as well as stakeholders with veto power over reform negotiations. A veto stakeholder could prevent other stakeholders from implementing an outcome he or she did not support, even if that view ran counter to majority opinion. In Anyland, for example, the prime minister was identified as a veto player. Finally, the interviews yielded the following information, with assigned numerical values:

- Policy stance of each stakeholder, or position along the reform continuum.
- Relative power of each stakeholder on the reform. This can be thought of in terms of the resources available to stakeholders in defending their policy positions.
- Importance, or salience, each stakeholder attaches to the reform outcome.

Mapping coalitions

This information was then mapped along the policy continuum to display the coalitions that supported varying levels of

reform and the distribution of power among them. As shown in figure 2, stakeholder opinions varied widely on procurement reform in Anyland.

The most powerful coalition was aligned against any reform. This group included large businesses, major political parties, and ministry staff, all of whom enjoyed significant discretion over procurement. They had little interest in giving up their control of this powerful political instrument.

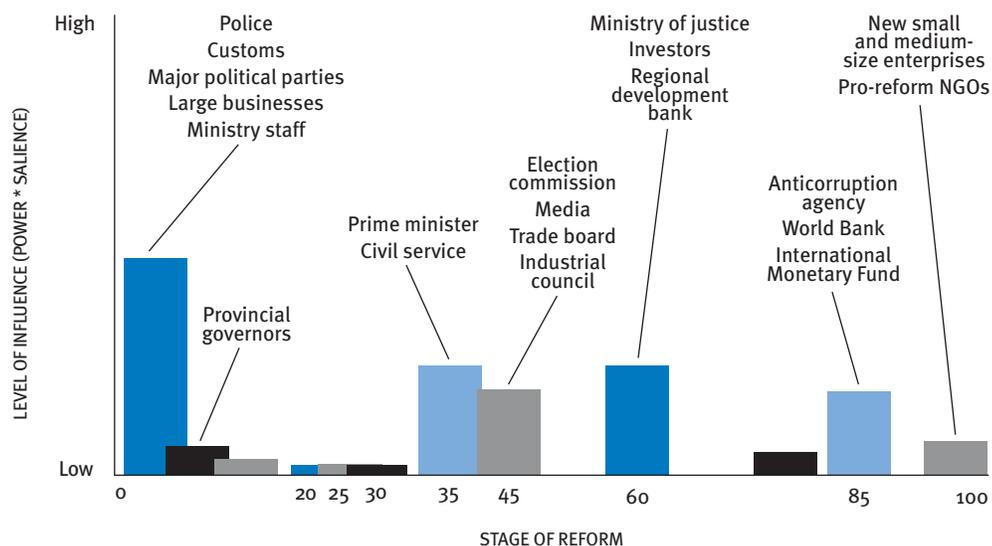
The prime minister advocated a system of ad hoc enforcement. While this may have been a step forward, it still allowed for political manipulation of the enforcement of procurement regulations. Among the most reform-minded stakeholders were new small and medium-size enterprises, which stood to be hurt most directly by unfair procurement practices.

Analyzing bargaining dynamics

Taking these stakeholder positions as the starting point, the Expected Utility Stakeholder Model was used to simulate the ensuing negotiations among stakeholders by iterating a series of “games” to predict the level of reform that would be most feasible politically. With the help of sophisticated

The model relies on rigorous data collection

FIGURE 2 LEVELS OF INFLUENCE AMONG KEY STAKEHOLDERS IN PROCUREMENT REFORM



Note: Stakeholders are listed according to their level of support for reform, with the least support coming from those on the left-hand side of the figure and the most from those on the right.

computer software, the relationships between each pair of stakeholders were examined in terms of each player's policy stance, power, salience, perceptions of other players' values, and expectations. What emerged was a clear picture of which players would challenge others to accept their viewpoints and which players would acquiesce. These bargaining dynamics were carried forward to the point at which no stakeholder could see a potential policy gain from challenging other players or shifting positions. That was the likely reform outcome. (See World Bank 2002 for a more thorough discussion of the model's expected utility calculations.)

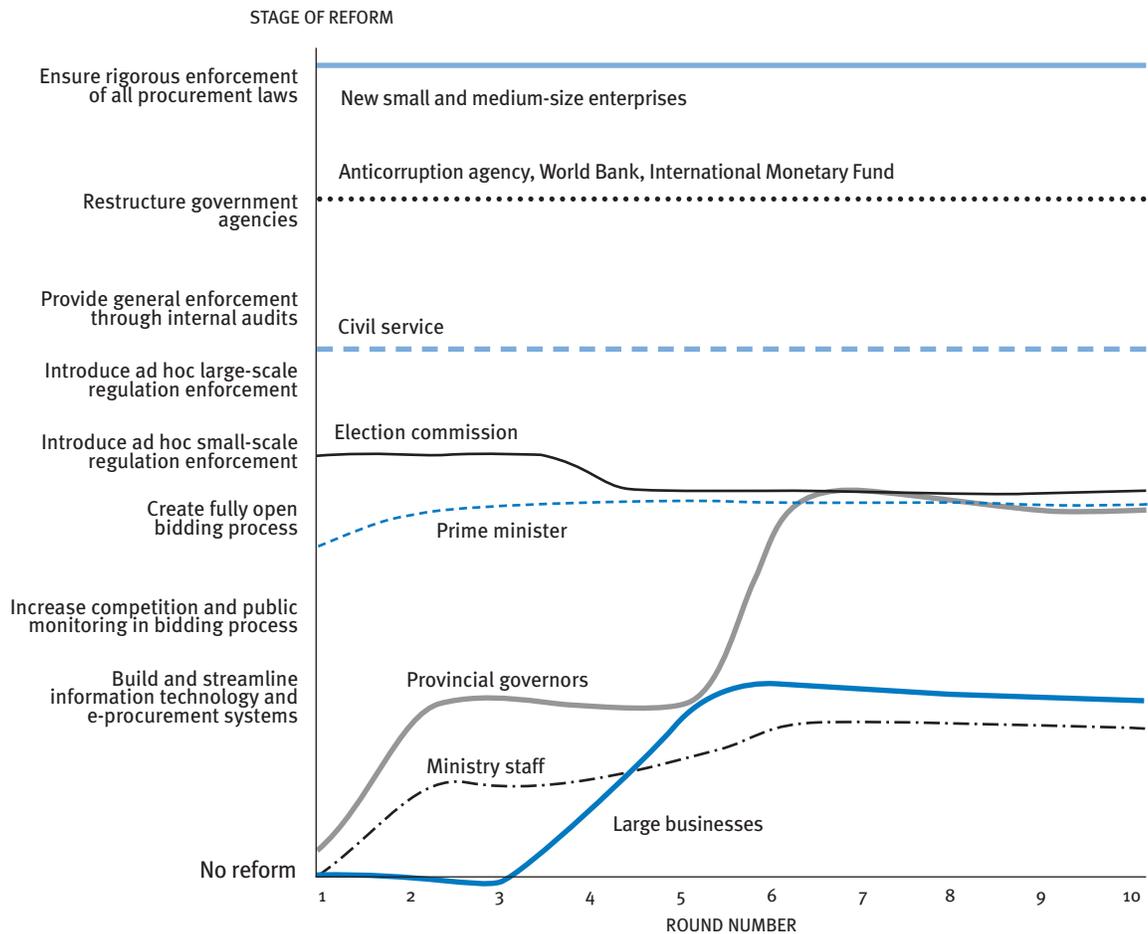
The anticipated policy dynamics in Anyland, depicted in figure 3, suggest a slight convergence of hardliners toward initial reforms, enhancing access to the procure-

ment process for a broader selection of firms. But no overall consensus could be expected in favor of significant procurement reforms.

Determining potential for further reform

In addition to analyzing current support for policy reform, the Expected Utility Stakeholder Model can probe how a change in a particular stakeholder's initial policy position might affect either the likelihood of reform or the level of consensus going forward. For example, the analysis can be re-run using different initial policy stances for pro-reform stakeholders to determine whether a change in position might foster momentum for further reform. This dynamic feature of

FIGURE 3 ANTICIPATED POLICY DYNAMICS AMONG KEY STAKEHOLDERS IN PROCUREMENT REFORM



Note: Stakeholders are listed according to their level of support for reform, with the most support coming from those at the top of the figure and the least from those on the bottom.

the model allows reform sponsors, such as the Bank, to explore ways to more effectively manage and target reform resources where they will have the greatest impact.

For Anyland the model was recalibrated to see what would happen if the Bank's initial reform position of 85, advocating the restructuring of government agencies that dealt with large procurement items, was adjusted to 60, which supported a more moderate policy position of internal audits within ministries to enforce procurement regulations. This sensitivity analysis indicated that, in scaling back its initial demand for full-throttle reform, the Bank could win support from more stakeholders. In Anyland, the analysis cautioned, the "best" would be the enemy of the "good."

Harnessing stakeholder analysis for operational work

The Expected Utility Stakeholder Model has been applied to thousands of cases since 1981, analyzing a wide variety of negotiated issues from corporate mergers to political elections. Its real-time predictions have been accurate about 90 percent of the time—more than twice as often as less systematic methods using only expert opinions (Feder 1995). The structured data collection format lends value added to this methodology relative to more traditional forms of stakeholder analysis.

Another source of value added is the model's dynamic nature. By design, it allows analysts to change the players involved or alter their preferences to model varying scenarios. This brings the analysis closer to the conditions of policymaking in the real world. Furthermore, the ability to analyze the effects of a change in an individual stakeholder's policy position gives donor organizations such as the World Bank a format for determining whether their policy positions are likely to bring about optimum levels of reform success and policy consensus.

This flexible modeling tool provides more sophisticated information for Bank program design and lending decisions. Targeting of reforms can be improved through dual analysis, in which a macro issue is examined alongside its component policies to determine

where the most progress is likely to occur. For example, in looking at a country's overall anticorruption agenda, the macro-level analysis permits a systematic view of the range of anticorruption initiatives, showing the relative political difficulties of individual measures as well as the feasibility of pursuing the entire agenda. These insights can form the basis for decisions about the kinds of reform actions to support and the strategy and sequence reforms should follow. The micro-level analysis, on the other hand, may be helpful in informing choices about where to invest resources and in helping to identify where technical assistance is most likely to succeed.

The Expected Utility Stakeholder Model also has the capacity to analyze the tradeoffs involved in reforms with interrelated but conflicting policy priorities. For example, civil service reform is often complicated by the tension between salary increases and employment reductions. Using this model, the conflicting issues can first be examined separately and then combined to determine the possibility for successful compromise.

As in any attempt to quantify perceptions, there are limitations to the use of this model. Most important is its dependence on timely, accurate information. Successful application of the methodology and interpretation of results in the context of Bank programs require more extensive contextual knowledge than do other uses of the model. But in some cases there may be a shortage of qualified experts with in-depth knowledge of both the technical aspects of the policy issue and the political and institutional realities of the country.

Internal Bank concerns about the sensitivity of findings can pose a real dilemma in undertaking such explicit, operationally relevant political analysis. Circumstances may require that findings be kept confidential to respect sensitivities and maintain impartiality on delicate issues. This may mean that results will be disseminated narrowly, possibly only at high decisionmaking levels. Under other conditions this type of political stakeholder analysis could be carried out openly and transparently, with full country partici-

**The Expected
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Model is highly
accurate and
dynamic**

The model could be an effective analytical tool for a broad range of Bank issues and sectors

pation (including government and citizens) and broad dissemination of findings.

The operational utility of stakeholder analysis depends on how closely it is integrated with country program tasks. To reap the greatest benefit from using this model in Bank work, it will be important to establish a framework within country operations for prioritized and ongoing applications of this technique. The East Asia and Pacific Region plans to adapt the model more specifically to regional operational requirements.

Finally, the model's forecasting capability has not been tested on Bank-related policy issues. Further pilot studies will be required to determine the robustness and predictive value of this approach in Bank work.

Still, the Expected Utility Stakeholder Model offers a comparatively rigorous methodology for analyzing the effects of political incentives on the feasibility and sustainability of policy reforms. Given its ability to condense complicated negotiations into a clear mapping of feasible targets and the coalitions that support them, the model is well suited for application to issues of governance. It could also be an effective analytical tool more broadly for the wide range of issues and sectors of Bank engagement where politics and stakeholder support play a crucial role in reform outcomes.

Further reading

- Abdollahian, Mark A. "Understanding Expected Utility Results." Decision Insights, Irvine, Calif.
- Bueno de Mesquita, Bruce. 1997. "A Decision-Making Model: Its Structure and Form." *International Interactions* 23 (3-4): 235-66.

Feder, Stanley. 1995. "FACTIONS and Policon: New Ways to Analyze Politics." In Bradford Westerfield, ed., *Inside the CIA's Private World: Declassified Articles from the Agency's Internal Journal, 1955-1992*. New Haven, Conn.: Yale University Press.

Kugler, Jacek, and Yi Feng, eds. 1997. "The Expected Utility Approach to Policy Decision Making." *International Interactions* 23 (3-4): 233-394.

Haggard, Stephan, and Steven Webb, eds. 1994. *Voting for Reform: Democracy, Political Liberalization and Economic Adjustment*. New York: Oxford University Press.

Haggarty, Luke, and Yasuhiko Matsuda. 1999. "Assessing Clients' Commitment to Sectoral Reforms: A Reform Readiness Analysis." World Bank, Washington, D.C.

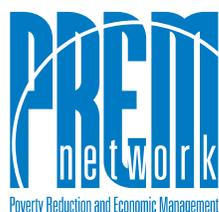
World Bank. 1997. *World Development Report 1997: The State in a Changing World*. New York: Oxford University Press.

———. 2000. *Reforming Public Sector Institutions and Strengthening Governance: A World Bank Strategy*. Washington, D.C. [<http://www1.worldbank.org/publicsector/Reforming.pdf>].

———. 2002. "Operationalizing Political Analysis for Governance Reform: A Pilot of the Expected Utility Stakeholder Model." World Bank, East Asia and Pacific Region, Poverty Reduction and Economic Management Unit, Washington, D.C.

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