

## **KEEPING THE LIGHTS ON: POWER SECTOR REFORM IN LATIN AMERICA**

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and Jaime Millán (Editors)

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On August 14, 2003, in a matter of minutes, the lights went out, affecting around fifty million people in the northeastern United States (allegedly most powerful nation on the planet), Ontario, and Quebec. This constituted the biggest blackout in North American history. Only a couple of weeks later, commuters in London (UK) were affected by a power outage in the underground. In September in Copenhagen and southern Sweden almost four million users were left in the dark. After alternative explanations were ruled out and the expected political game of passing the blaming around receded, many began attributing these all too common problems of brownouts and blackouts on systemic, underlying conditions. The processes of liberalization and privatization of the power sectors ended up under negative public scrutiny. This is the kind of time in which von-der-Fehr and Millán's book *saw the light*.

The volume describes some of the power sector reforms implemented in Latin America and the Caribbean during the 1990s. It analyzes the always complex process of liberalization of the power supply industry in countries where the dominating institutional structure was not always conducive to a successful reform, where the availability of a legislative framework was often incomplete, and where the state had a high level of interference with the functioning of the economy.

In this region, reforms were led by the sentiment that the privatization of assets and the promotion of market mechanisms were the most advisable route to follow. These intuitions had also driven reforms in other parts of the world, with a relatively high degree of success. However, they largely failed the reformer in Latin American countries. According to the authors, in some occasions, the application of reform recipes suggested by economic theory and that had resulted in welfare improvements elsewhere could have jeopardized the very sustainability of power sector reform in Latin America.

The central thesis defended in this book is that the process of power sector reform may not prove sustainable if not enough attention is paid to building an institutional basis able to support the reform. In the case of Latin American countries, this would have been because the sectoral reform recipes that had worked in other countries failed under an institutional setting that was not conducive to their successful application.

The authors also defend the notion that the effectiveness of reforms that intend to bring economies away from a state-operated system and towards a more competitive market, cannot be judged without consideration of the institutional setting. For example (on page 11) the editors explain that: *the main argument put forth here is that, while reforms have delivered certain expected results and have led to improvements compared to the old regime, lack of fit between the models adopted and the institutional and resource endowments raises questions about reform sustainability.*

As stated in its foreword, this book is the fruit of a two-year research project conducted by the Inter-American Development Bank (IDB) as part of its 2000 Energy Strategy. This mandates that the Bank works with the borrowing countries to identify those reasons that explain the obstacles to the implementation of power sector reforms, particularly in small economies. Von-der-Fehr and Millán have put then together this volume with the objective of responding to the need for explanations on why power sector reforms have failed, or succeeded to the extent that they did in Latin America. The editors explain that their approach focuses on the political economy of power sector reform and the analysis of those problems resulting from a mismatch (lack of harmony) between

institutional and political conditions and the generic reform model applied. They emphasize the notion of an institutional gap, whereby (as explained on page 6) *aspects taken for granted in other countries - rule of law, clear and accepted property rights, independent and competent judiciary, mechanisms for peaceful conflict resolution, contract enforceability, and quality of bureaucracies and competition agencies - are either missing or incomplete.*

The objectives pursued with this book include the identification of both implicit and explicit policy goals of and constraints faced by power sector reforms in Latin America and providing a discussion of their relative importance in different cases. Another objective is the study of whether and to which extent existing regimes are equipped to consider the objectives of sectoral reform and take into account the constraints limiting the scope of that reform and how different institutional platforms will make it possible to deal with the main threats to reform sustainability. Finally, the authors aim at providing suggestions about how to adjust reform strategies in order to improve the sustainability of reforms. In my opinion, the volume successfully meets these objectives.

However, it is important to stress that this book is more about the political science of reform than about power sectors. In parts of the book, some more focus on the commodity at hand rather than on the political process of reform itself would have been welcome.

Electricity is different. The difference has long been ignored, but it is now at last beginning to register. Analysts still preoccupied with electricity's many immediate problems worldwide have yet to appreciate the profound and far-reaching long-term implications of the electric difference. Over time the distinctive difference of electricity is going to alter fundamentally the way we think about energy, the way we use energy, and the way we pay for it.

With this paragraph, Walt Patterson (Senior Research Fellow in the Energy and Environmental Programme of the Royal Institute of International Affairs in London) opens one of his papers (Patterson, 2003) dealing with the idiosyncratic difficulties of power sector reform. He goes on to explain that there are some features of this commodity that make it particularly sensitive to regulation problems. Issues related to its physical properties and the economic constraints they impose are analyzed. Patterson criticizes the common practice of replicating models of power sectors that simply replicate what has worked before or what has worked for other regulated commodities. This type of approach is slightly different than the one adopted by von-der-Fehr and Millán. In general, they deviate substantially from the many other contributions that focus mainly on the economic characteristics of the sector (in terms of production, distribution,

demand characteristics, and so on). In my opinion, this is clearly more a political science treaty than one concerned with Economics. It is also, as explained above, more about sectoral reforms than about reforms of electric markets. In fact, it reminded me to another edited volume resulting from another research project (this time sponsored by the World Bank) but dealing with water sector reform instead of electricity (Shirley, 2002).

Jaime Millán and Nils-Henrik M. von-der-Fehr present in the volume's first chapter (Analytical Framework) the general approach used when analyzing the case studies. First, each study identifies the objectives of the power reform and the main constraints it faces. Then, it analyzes governance and incentive structures and how these are compatible with the sustainability of the reform process. Finally, the study analyzes potential adjustments and further developments that would promote a more successful and sustainable implementation of the reform.

The editors go on to introduce the case studies of Colombia (by Ulpiano Ayala and Jaime Millán) in the second chapter, before those of Honduras, contributed by Ian Walker and Juan Benavides, and Guatemala, contributed by Fundación Solar and Carlos Rufin are introduced in Chapters 3 and 4.

In the case of Colombia, the main thesis is that, although the reform has met with relative success, many implicit assumptions have proven inadequate because of institutional, technological, and political economy limitations. These made the system vulnerable to external factors, such as recessions and, most particularly in this country, terrorist attacks. This is the longest chapter of the book and some readers (if not so interested in Colombia specifically) might find some of the detail unnecessary. These should follow the editors' suggestion of selectivity choosing which parts of the volume to focus on.

Chapter 3 deals with the case of Honduras. Walker and Benavides show how applying the same medicine to different patients might not be all that successful when it comes to sectoral reforms. Honduras lacked internal support for the reform, if compared with Colombia and Guatemala. The authors stress that it is better to gradually implement the reform while gathering support for it.

Finally, in the chapter on Guatemala, Fundación Solar and Carlos Rufin concentrate on the need to take into account from the very beginning the obstacles faced by the reform process, from both a technological and an institutional perspective.

I find the choice of case studies fortunate and appropriate. Rather than looking at examples very disparate in time or space, the case analyzed are reasonably homogeneous, so that a comparison can be made, while the

reform process and its success is different enough as to illustrate the main hypotheses defended by the authors.

In Chapter 5, entitled *Supply Security Solutions: Principles and Practices*, von-der-Fehr deals with the nature of the supply-security problem and offers some potential solutions. The idea of promoting well-defined property rights and solid institutional arrangements able to deal with transaction costs is central. The recommendations about supply-security are illustrated with reference to each of the three countries studied. Von-der-Fehr also stresses the importance of demand-management solutions to the problem of unbalances between supply and demand in hydro-dominated power systems, like those studied in this project. In this respect, the author builds a link between the case of power sector reforms and water sector reforms.

The editors take up Chapter 6 (*Power Sector Reform: Lessons Learned*) to summarize the main conclusions of the volume and to develop further the main theses they defend. They list and analyze a series of lessons drawn from the research project and put forward a set of recommendations for power sector reforms.

To conclude, Ashley Brown (Ashley Brown, Executive Director of the Harvard Electricity Policy Group) provides an insightful epilogue to the book. He analyzes the three case studies and also offers recommendations for further developments of the reforms.

Nils-Henrik M. von-der-Fehr is a professor of Economics at the University of Oslo. A specialist in industrial economics, competition policy, and regulatory economics, he has ample experience in advising regulatory authorities. His research expands through commodities like gas, water, telecommunications, fisheries, and transportation. Dr. Jaime Millán (who holds a Ph.D. in Water Resources Planning from Colorado State University) is the principal energy economist in the Infrastructure and Financial Markets Division of the Inter-American Development Bank. He has published on issues of regulation and sustainability of market reforms in Central and Latin America. He is in charge of coordinating the implementation of the IDB's Energy Strategy and has initiated a program on sustainable energy. He also has experience as consultant and as a professor at the Universidad de los Andes in Bogota, Colombia. The team of additional authors of the contributed chapters include consultants, professors, regulators, and power industry professionals. This background mix results in a richer set of perspectives and writing styles than what might be obtained from a collection of articles written by mainstream economists or political scientists only.

In my opinion, this volume offers a valuable contribution to the literature on energy system reform. Both academic analysts and, probably

to a larger extent, regulatory practitioners are bound to benefit from it. After introducing the analytical framework, the same methodological approach is used consistently throughout the book and this makes the volume, in spite of the detail with which some case studies are presented, very readable. However, some readers might be overwhelmed by the amount of detail with which some case studies are treated, while others will find the inclusion of all of these data particularly useful. Perhaps the level of detail used in the Colombian case is somewhat excessive, but, again, not all readers will be equally interested in all study cases.

It is important to keep in mind that the focus of this volume is less on the technical and theoretical analysis of economic issues as it is on the analysis of the sociopolitical and institutional conditions within which these issues are addressed. The methodology is explicitly placed on the notions of institutional economics, mechanism design theory (Dixit, 1996, 1999), transaction costs economics and so on. Therefore, only some reference is made to the most conventional economic approaches to the problems of regulatory reform. Those looking for a typical neoclassical economics or complex econometric exercises would be disappointed. This type of book should not be expected to contain rigorous analyses in terms of industrial organization or any advanced theoretical developments in mainstream regulatory economics either. Sometimes it seems that the intended audience is the political scientist, the practitioner in the field, rather than what one might understand by "economists".

It should also be noted that after reading the book, the lasting impression is that this is a volume clearly more about reform in general than about reforms in the power sector in particular. The authors might just as well be talking about water utilities. It is only when electricity presents special characteristics affecting the regulation of its supply that the authors remind us about the title of the book. Otherwise, given the approach used, it is sometimes easy to forget which commodity the book is about.

In summary, think the volume presents a clear, thorough, and valuable contribution to the modern literature on power sector reforms in particular and, most of all, to the institutional reform of any kind of sector where public regulation plays a role.

Roberto Martinez-Espineira

**REFERENCES**

- Dixit, Avinash K. 1996. *The Making of Economic Policy: A Transaction-cost Politics Perspective*. Cambridge, MA: MIT Press
- Dixit, Avinash (1999) "Some Lessons from Transaction-Cost Politics for Less-Developed Countries." Mimeo, Princeton University.
- Patterson, W. (2003) *Overview: The Electric Challenge Keeping The Lights On: Working Paper No. 1 Energy and Environmental Programme of the Royal Institute of International Affairs in London*
- Shirley, M. M. (2002) *Thirsting for Efficiency. The Economics and Politics of Urban Water System Reform*. Elsevier Publications, Oxford, UK.