

BOOK REVIEWS

The Extra Mile: Rethinking Energy Policy for Automotive Transport by PIETRO S. NIVOLA AND ROBERT W. CRANDALL. (Washington, DC: Brookings Institution, 1995) pp. 180. ISBN 0-8157-6092-2.

Pietro Nivola and Robert Crandall's book, published jointly by Brookings and the Twentieth Century Fund, is a highly readable entry in the continuing debate on motor fuel taxation. Their main thrust is that a higher Federal gasoline tax would be more efficient than current U.S. fuel efficiency standards in furthering what they see as desirable policy goals. Thus, in comparing the U.S. experience with selected other industrial nations, they see higher fuel taxes, reduced travel, and lower fuel consumption as desirable objectives for the U.S. to imitate. Missing in the book, in the view of this reviewer (and detailed further below), is a serious look at the soundness of these policy goals. Furthermore, the book seems quick to name gasoline excise taxes as the "solution" without first weighing the alternatives for achieving the stated goals.

Nivola and Crandall begin by outlining the arguments for a higher motor fuel tax. They see potential benefits, if at times only incremental, for energy security, environmental quality, and the trade balance—not to mention tax revenue. They discount potential harm to economic growth, tax progressivity, and geographic equity, and they challenge concerns that new tax revenue would only be wasted.

Following this, a chapter details the intended and unintended effects of the fuel efficiency standards. The authors present evidence that, while the CAFE standards have brought substantial increases in fuel efficiency since they were first implemented in the 1970s, they have been partially offset by increased driving. The standards, they find, had unintended effects on vehicle pricing; delayed the purchase of newer, more efficient vehicles; boosted growth in light-duty trucks and vans; altered the competitive balance among auto makers both domestically and internationally; shifted large car production overseas; and reduced safety.

The authors then analyze the effects of highway fuel taxes on consumption. They conclude that an additional tax on the order of 25 cents per gallon beginning in 1985 would have cut fuel use by as much as the government CAFE standards had over the 1978-92 period. While the authors concede that such a tax would reduce consumer welfare, they maintain that the economy would have suffered a substantially smaller deadweight loss than under the CAFE requirements.

Much of the remainder of the book compares the politics of fuel taxation in the U.S. with those of a selection of other developed countries. The authors are quick to admit that the higher fuel taxes in Europe and Japan have had less to do with energy or environmental policy goals than with the need for revenues to support large government sectors, peculiarities of the political systems, or both. In fact, they note that the U.S. leads other major developed countries in air quality initiatives, as demonstrated in its environmental standards for vehicle engines and fuels.

They examine the roles played in fuel taxation by a more centralized budget process in the U.K. and France, the interplay between the central and state governments of Germany, and the unique budget process of Japan. In addition, they argue that fuel taxes are usually less visible in these countries than in the U.S. (However, in this reviewer's experience, U.S. consumers, too, consistently underestimate the share of state and Federal taxes in the U.S. pump price of gasoline.)

In the U.S., the authors say, the enactment of new taxes is a more politically visible, less centrally-administered process, and there exist diverse sentiments against higher fuel taxes coming from both conservatives and liberals. The authors seem to equate the reluctance to raise highway taxes with a lack of political courage, and they believe that tying excise tax revenues to transportation spending blocks a potential source of additional government revenues. Finally, in their view, a more centrally-controlled, national level of land-use planning might have led to less vehicle usage and thus less of a constituency for personal vehicle mobility.

The main shortcoming of the book for this reviewer is that, advocacy piece or not, the analysis seems incomplete. The book chooses to leave the policy goals largely unexamined, and occasionally even seems a bit ambivalent about them. Even with the stated policy goals, the approach often seems designed to justify a gasoline tax more than to evaluate the spectrum of alternatives for achieving those goals.

If cutting oil imports were the goal, for example, easing restrictions on access to domestic hydrocarbon prospects might be evaluated. If slowing the growth in oil consumption were the goal, the usage of petrochemical feedstocks, diesel for highway freight transport, and jet fuel—all of which have grown more rapidly than gasoline consumption over the past ten years—might enter the analysis. If improved air quality were the goal, more targeted policies (e.g., emissions standards, vehicle inspections, etc.) might be compared with the exceedingly blunt instrument of fuel taxation; if cutting emissions of greenhouse gases were the goal, it would make little sense to target only highway fuel use while not considering sources such as coal burning.

Perhaps the inattention to alternatives springs from an implicit assumption that, whatever the alternatives, the high value Americans place on mobility is morally suspect. Indeed, Richard Leone's foreword states that, where

the automobile is concerned, there is a heightened question of "values." He hints that Americans seem to have it wrong, and that government could promote superior values through higher fuel taxes.

Despite what this reviewer sees as some analytical missing links, this book provides an interesting history and analysis of CAFE standards and highway fuel taxation. It also sheds light on some of the politics of fuel taxation in selected developed nations in a lively, to-the-point style.

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Competition in the Electricity Supply Industry: Experience from Europe and the United States by OLE JESS OLSEN (ED.). (Copenhagen: DJØF Publishing, 1995), pp. 250, ISBN 87-574-7321-8.

The structures and markets for the provision of electricity are changing dramatically in several countries of the Western world, and many other countries are planning to introduce similar changes. Historically, electricity suppliers have been seen as natural monopolies and are heavily regulated. Technological changes combined with shifts in the political economic environment have created the impetus for major reforms to the electricity industry. This process has begun in several nations already, and proof of its potential success has provided fuel for reforms in other countries. These changes are far greater than any previously seen in the electricity industry.

Ole Jess Olsen presents papers that resulted from a conference conducted by the Nordic Energy and Society Program in Copenhagen, in 1994, on competition in the electricity industry in Western countries. These papers are by speakers at this conference. Most of the authors discuss the historical perspective and changes occurring in the electricity industry related to the introduction of competition within a particular Western country.

Some of the speakers were academics, while others were policy researchers or policymakers. This provides the book with a mix of perspectives. The papers cover historical and present situation descriptions, policy analysis, and relevant economic theory discussions. Problems are identified in the application of policies, given socioeconomic history in a country's electricity sector, and as seen from relevant economic theories. This allows the material to be useful to both policymakers and academics.

The broad perspectives presented and countries examined, however, do not allow either the theoretical analysis or country-specific policy analysis to be presented thoroughly. Yet, the material is a useful starting point for policymakers and academics alike. It also provides a broad perspective to initiate

a comparative philosophy for framing further specific investigations. These papers generally present well-rounded policy discussions with enough political-economic history to place the current situation in proper perspective and create an understanding as to what information might be transferable.

The editor, Ole Jess Olsen, is a professor from Roskilde University and the Organizational Committee Chairman for this conference. He provides a brief introduction relating all the papers to each other. He also is the author for the last chapter, "The Danish Electricity Supply Industry and the European Internal Market." His paper examines the likely competitiveness of the Danish electricity sector in a more open Northern European marketplace and what this means to needed Danish regulatory reforms. The chapter provides an interesting differing perspective, international competitive analysis, and policy implications for competitiveness, which follows well with the other papers in the book.

The first paper by Paul Joskow of the Massachusetts Institute of Technology is on the competitive developments in the U.S. and is entitled "Competition in the U.S. Electric Power Sector: Some Recent Developments." Joskow presents an overview of U.S. electricity and electricity regulatory structure that is essential to understanding the competitiveness changes and their issues, occurring in the United States. The U.S. experience is more of a longer-term process through several different legislative and regulatory rulings than that being seen in other Western countries. A large amount of depth is compacted from this chapter. Yet, Joskow also provides explanations to aid comprehension for U.S. and non-U.S. audiences.

The second paper, "Markets for Electricity: Economic Reform of the Norwegian Electricity Industry," was written by Einar Hope, Linda Rud, and Balbir Singh, of the SNF Foundation for Research in Economics and Business Administration, Bergen. The SNF Foundation provided several research efforts important to the design of the restructuring. The Norwegian reforms are an expansion of the wholesale market that already existed and, yet, contain significant restructuring due to legislation by the Norwegian Parliament. Each of the seven areas being reformed is overviewed. These include organizing domestic and foreign power markets (including spot markets, future markets, contract, and foreign power concessions), reorganizing state-owned entities, changing incentive structures, establishing a national grid company, and changing the vertical integration structure.

The reorganization and deregulation taking place in England and Wales are discussed in the third paper, "The English Electricity Industry in the 1990s," by Richard Green of the Department of Applied Economics and Fitzwilliam College, Cambridge. In addition to providing background on the situation in England and Wales prior to reform and description of the reforms as of Vesting Day in 1990, this paper presents the subsequent price impacts. Green also provides a discussion of potential future modifications.

The paper by Mils-Henrik Mørch von der Fehr, SNF Foundation for Research in Economics and Business Administration, Department of Economics, University of Oslo, and David Harbord, London Economics Limited, is the most theoretical of those included. It does, nonetheless, provide an important piece of information to be considered by policymakers when designing these types of reform. They conclude that there is a tradeoff between optimal short-run pricing and providing the appropriate long-term investment decisions in spot markets that are imperfectly competitive.

"The 'New' Electricity Market in Sweden: Competition and Prices" by Lars Bergman and Bo Andersson from the Stockholm School of Economics, presents an analysis of the Nash-Cournot Equilibria pricing based upon the concentrated nature of the Swedish electricity sector. Forecasted impacts are presented for alternative structures. This provides information for the reforms to produce the necessary incentive conditions for the development of "futures" and "options" markets.

Osmo Rännäri, from the Helsinki Energy Board, describes the Finnish electricity sector and its situation regarding competitive reforms. This policy paper, "Reform of the Finnish Electricity Market: Plans and Expectations," is within Part Two. The Bergman and Andersson paper and this paper comprise those describing countries where reform is being planned.

Rolf Künneke, from the Faculty of Public Administration and Public Policy of the University of Twente, presents the historical background and theoretical support for the current position of The Netherlands. The Netherlands is coming into the changing international environment with a central-planning cooperative electricity structure. From application of Boyer and Orléan's non-cooperative game theories with location impacts, The Netherlands' position as a follower is expected.

"Restructuring the Electricity Market: A German View" by Walter Schulz, from the Department of Energy Economics of the University of Cologne, presents the more conservative German stance. Schulz provides discussion and evidence that conclude a conservative stance does not mean that the situation for electric utility entities is remaining as it has been in the past.

This book provides an excellent combination of situation descriptions, policy analyses, and application of various economic theories to the issues of competition in the electric sector. It presents the current situation, and discusses the rapid reforms occurring in several Western countries. As such, the book will need to have significant revisions at least every three to four years to remain current and useful. It is, today, a very informative and useful background reading for policymakers and academics.

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