

## **Law and Economics and the electricity sector**

### **Becker**

- Whereas Stigler had put scarcity at the center, for Becker “the basis of economics is choice”.
- Economics is said to be the study of (1) the allocation of material goods to satisfy material wants, (2) the market sector, and (3) the allocation of scarce means to satisfy competing ends.
- The definition of economics in terms of material goods is the narrowest and the least satisfactory. The production of tangible goods now provides less than half of all the market employment in the United States, and the intangible outputs of the service sector are now larger in value than the outputs of the goods sector.
- The definition of economics in terms of scarce means and competing ends is the most general of all. It encompasses far more than the market sector. Scarcity and choice characterize all resources allocated by the political process (including which industries to tax, how fast to increase the money supply, and whether to go to war); by the family (including decisions about a marriage mate, family size, and the allocation of time between sleeping and waking hours); and so on in endless variety.
- None of the three definitions outline the essence of what economics is and what economists do. They only define the scope of economics and not what it means. These do not distinguish economics from, say, sociology, defined as a study of social aggregates and groups in their institutional organisation.
- What distinguishes economics as a discipline from other disciplines in the social sciences is not its subject matter but its approach.
- Assumes maximizing behavior more explicitly and extensively than other approaches do [utility and wealth functions].
- Assumes the existence of markets that with varying degrees of efficiency coordinate the actions of different participants.
- Assumes that preferences do not change substantially over time. These

- Prices allocate the scarce resources within a society and thereby constrain the desires of participants and coordinate their actions. In the economic approach, 'price' performs the functions assigned to "structure" in sociology.
- The combined assumptions of maximizing behavior, market equilibrium, and stable preferences form the heart of the economic approach. Thus, competitive markets satisfy consumer preferences more effectively than monopolistic markets, be it the market for aluminum or the market for ideas; a tax on the output of a market reduces that output, be it an excise tax on gasoline that reduces the use of gasoline, punishment of criminals (which is a "tax" on crime) that reduces the amount of crime
- Prices, be they the money prices of the market sector or the "shadow" imputed prices of the nonmarket sector, measure the opportunity cost of using scarce resources. Shadow prices refer to the price for something that is not normally priced or sold in the market.
- The economic approach does not assume that all participants in any market necessarily have complete information or engage in costless transactions. Incomplete information or costly transactions should not, however, be confused with irrational or volatile behavior.
- According to this approach, people don't have to consciously act to maximize their gains or be able to provide detailed explanations for why they behave in certain ways. This idea mirrors modern psychology that emphasizes the role of the subconscious mind in shaping behavior. It acknowledges that much of our decision-making happens below the level of conscious awareness, driven by various cognitive biases, emotions, and ingrained habits. In other words, it studies only revealed preferences.
- Does not draw conceptual distinctions between major and minor decisions, such as those involving life and death in contrast to the choice of a brand of coffee.
- In similar fashion, a person may be a heavy smoker or so committed to work as to omit all exercise, not necessarily because he is ignorant of the consequences or "incapable" of using the information he possesses, but because the lifespan forfeited is not worth the cost to him of quitting smoking or working less intensively.
- Similarly, a married person terminates his (or her) marriage when the utility anticipated from becoming single or marrying someone else exceeds the loss in utility from separation, including losses due to physical separation from one's children, division of joint assets, legal fees, and so forth.

- Finally, the economic approach also implies that higher-income persons marry younger and divorce less frequently than others, implications consistent with the available evidence (see Keeley 1974) but not with common beliefs. Still another implication is that an increase in the relative earnings of wives increases the likelihood of marital dissolution, which partly explains the greater dissolution rate among black than white families.
- Becker has applied the economic approach to fertility, education, the uses of time, crime, marriage, social interactions, and other “sociological,” “legal,” and “political” problems. This tradition has a long history in social thought : Adam Smith used this approach to understand political behavior. Jeremy Bentham painted all human decisions, without restriction to monetary decisions, on the pleasure-pain calculus: “Nature has placed mankind under the governance of two sovereign masters, pain and pleasure.”
- Marx applied an “economic” approach to politics, marriage, and other non market behavior. But he places much emphasis upon material goods, processes, and ends and how these affect non market processes.
- The value of other social sciences is not diminished even by an enthusiastic and complete acceptance of the economic approach.
- The modest yet radical claim is that the economic approach provides a valuable unified framework for understanding all human behavior, although I recognize, of course, that much behavior is not yet understood, and that noneconomic variables and the techniques and findings from other fields contribute significantly to the understanding of human behavior.
- All human behavior can be viewed as involving participants who maximize their utility from a stable set of preferences and accumulate an optimal amount of information and other inputs in a variety of markets.

### **Posner**

- Rational maximization should not be confused with conscious calculation.
- Self-interest should not be confused with selfishness; the happiness (or for that matter the misery) of other people may be a part of one’s satisfaction.
- The concept of man as a rational maximizer of his self-interest implies that people respond to incentives — that if a person’s surroundings change in such a way that he could increase his satisfactions by altering his behavior, he will do so. Two conclusions follow.
- First, the inverse relation between price charged and quantity demanded (the Law of Demand). The Law of Demand doesn’t operate just on goods

with explicit prices. Unpopular teachers sometimes try to increase class enrollment by raising the average grade of the students in their classes.

- Second, the maximization of utility/profit. For consumers, the cost of the product must be less than or equal to the next best alternative or substitute of that product, for them to buy the product. Sellers seek to maximize the difference between their costs and their sales revenues. This discussion of cost may help dispel one of the most tenacious fallacies about economics — that it is about money. On the contrary, it is about resource use, money being merely a claim on resources.
- “Utility” is used in two quite different senses in economics, and it is essential to distinguish them.
- First, it is used to mean the value of an expected cost or benefit as distinct from a certain one. Suppose you were asked whether you would prefer to be given \$1 million, or a 10 percent chance of getting \$10 million. Probably you would prefer the former, even though the expected value of the two choices is the same: \$1 million (= 0.10 X \$10 million). Probably, then, you are risk averse. Risk aversion is not a universal phenomenon; gambling illustrates its opposite, risk preference.
- Second, utility can refer to what that expected cost or benefit is worth to someone, meaning happiness.

**Haryana Power Purchase Center v. Sasan Power Ltd. Civil Appeal No. 11826 of 2018**

<b>Issue</b>	<b>Change in Law as per Sasan’s Claim, leading to enhancement of capital cost, dated 20.02.2013</b>	<b>Relevant Clause in Power Purchase Agreement (PPA)</b>	<b>APTEL 20.11.2018</b>	<b>SC 06.04.2023</b>
1	<b>Whether the respondents ought to be granted compensation for the</b>	Clause 1.4(v) of the RFP, and Article 13.1.1(iv)(a) of the PPA.	The increase in the cost of the Water Intake System did not qualify as change in law under Article 13.1.1 of the PPA. However, also noted that although the bidders were	The impugned order found the first report of the WAPCOS grossly inaccurate. However, there was no basis for rendering such a finding. In any case, there were

	<b>increase in cost of the Water Intake System?</b>		responsible for conducting due diligence and confirming the accuracy of the information in the bid documents, the procurers could not simply justify furnishing a grossly incorrect report by citing disclaimer clauses. Hence remanded back to CERC.	enough disclaimers that implored the bidders to independently verify inputs, information etc.
2	<b>Whether the respondent is eligible for exemption of custom duty on mining equipment</b>	Article 13.1.1 of the PPA	Argued by Sasan that its captive coal mines formed an integral part of the UMPP and any equipment imported either for the power plants or for captive coal mines, should be treated as goods imported for setting up of the UMPP in terms of O.M. of the Govt. of India. Held that Sasan rightly assumed that custom duty exemption was to be available for coal mining equipment. Hence, claim allowed.	For change in law under Article 13.1.1 to be successfully invoked by Sasan, it ought to have demonstrated that there was an interpretation earlier to, or as on, the cut off date which was advantageous to it and that there has been a change in the said interpretation thereafter. The O.M. dated 17.06.2011 did not indicate that it is a case of a change or shift in interpretation.
3	<b>Whether the compensation formula under Article 13.2(a) serves the restitutionary function spelled out in Article 13.2?</b>	Article 13.2 of the PPA	Article 13.2 of the PPA clearly stated that the purpose of Article 13 was to ensure that the party affected by a change in the law is placed in the same economic position as if the change in law had never occurred. Article 13.2(a) of the PPA contained the formula for computing compensation. However, the formula was not sufficient to compensate Sasan to the same economic position as they would have been if the	Article 13.2(a) was a specific provision providing for a specific formula and would accordingly, override the general provision of the opening portion of Article 13.2. The Commission had no plenary power under section 79 of the Electricity Act to disregard the express words of the contract and devise a new formula for calculating compensation. No regulation on compensation existed under the law meaning the

			change in law had not occurred.	matter was governed only by the contract.
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**Issue 1**

Before overturning the Tribunal’s peculiar order, the Supreme Court noted two obstacles before Sasan’s case.

The Court noted that the present appeal was one under Section 125 of the Electricity Act. Section 125 allows filing of appeal based only on the grounds specified in section 100 of the Code of Civil Procedure. Section 100 of the CPC, in turn, requires a substantial question of law for an appeal to be admitted. Both the Commission and the Tribunal, noted the Court, have rendered the concurrent finding that there was no change in law. These could not be taken lightly.

The second obstacle was that Sasan was the respondent before the Supreme Court. It did not independently challenge the finding of the Tribunal that there was no change in law. No doubt, the Court has the power to permit the respondent to impugn a finding against it even though it may not have filed an appeal or cross petition. However, this was to be used sparingly, and could, nonetheless, be used to draw an adverse inference against the respondent in a given case.

Sasan pressed into service the theory of incomplete contracts to argue that the PPA was a long term contract containing incomplete clauses. It did not describe all possible contingencies nor did it foresee low-probability events. This incompleteness was argued to have equipped the courts with the regulatory power to ensure a fair and equitable deal to both sides in case of disputes. Another related argument raised by Sasan was that the case called for the rule of contra proferentem to be applied.

Both these arguments too were rejected by the Court. It held that Sasan had failed to plant any doubt in regard to the interpretation of the clauses to begin with. The rules cited by Sasan were rules essentially of legal effect - of construction, rather than interpretation.

By deciding the matter against the procurers and in favor of Sasan, the Tribunal had effectively reassigned property rights in deviation from the bargain. This was

impermissible and liable to be set aside, as the Court indeed held. It is important to note that the factum of the Tribunal having effectively re-written the contract was writ large on the Court's mind and played an important part in its judgment.

## **Issue 2**

The SC proceeded with the assumption that Sasan was indeed eligible to claim the exemption on the ground that the goods imported for their captive mine should be considered as goods utilized in the power project. However, it pointedly noted that Sasan could not be the only entity entitled to seek exemption. As the historical context of the notifications reveals, these exemptions have been in force since 2002. Numerous power plants have emerged over time and all of these rely on captive mines for power generation. Yet, not one instance of a project receiving an exemption for the use of imported goods in a captive mine was presented before the Commission, the Tribunal, or the Supreme Court. This was taken to demolish Sasan's argument that what was once exempt is no longer exempt.

The Tribunal had adopted a subjectivist approach to contractual interpretation and held that Sasan rightly assumed that custom duty exemption was to be available for coal mining equipment. In contrast, the Court started by looking at the plain text of Article 13.1.1. The Article required that there should be a favorable interpretation earlier to, or as on, the cut off date and which later changed. In the absence of such an interpretation, the Article could simply not spring into action.

## **Issue 3**

The SC held that Article 13.2 qualifies itself by the expression "to the extent contemplated in this Article". This necessarily brings in clause (a) of Article 13.2 into the picture. Therefore, any appeal made to the general part in Article 13.2 which states that the affected party should be restored to the same economic condition as if no change in law had taken place cannot lead to deviating from the specific formula captured in clause (a).

The Court held that the Tribunal cannot make a new bargain for the parties. The power to vary a written contract cannot be located in the general power to regulate under section 79. The Court held that if there is a regulation, then the measure under section 79 has to be in conformity with such regulation. No regulation existed in the present case. The matter was governed only by the

terms of the contract. Therefore, it was not open to the Commission to go beyond the terms of the contract.

The holding is significant. Admittedly, the Commission performs, under the Electricity Act, adjudicatory, advisory, as well as legislative functions. However, the Court held that in the course of its adjudicatory power, the Commission can not alter or override the terms of the contract under the garb of regulation. Only a regulation under section 178, which is in the nature of subordinate legislation can override private contracts including power purchase agreements.