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# The Limits of Market Efficiency

#### **Abstract:**

The framework rules within which either market or political activity takes place must be classified in the non-partitionability set under the Samuelson taxonomy. Therefore there is nothing comparable to the profit-loss dynamic of the market that will insure any continuing thrust toward more desirable rules. 'Public choice' has at least partially succeeded in getting economists to remove the romantic blinders toward politics and politicians as providers of non-partitionable goods. It is equally necessary to be hard-nosed in evaluating markets as providers of non-partitionable rules.

## 1. Introduction

Economists, along with other observers, were too complaisant during the development and utilization of innovative financial instruments prior to the crises of 2007-9. Although seldom explicitly stated, the 'markets work' attitude was descriptive of a widely shared behavioral stance. This paper explains some of the sources of this attitude. The aim is to identify misconceptions and misunderstandings that allowed economists to neglect elementary presuppositions. In summary, the argument is that 'markets work, but only within limits'. First, it is useful to describe (section 2) the stylized setting in which market organization generates results that are generally evaluated to be positive in an ultimate normative judgment. The means through which markets insure these results warrant attention. Section 3 exposes the limitations of the stylized model, and particularly emphasizes the necessary presupposition that all valued goods are partitionable. Section 4 specifically examines the 'publicness' or non-partitionability of the framework rules within which market exchanges take place. Section 5 challenges the implicit presupposition that the emergence and survival of rules become, in themselves, a justificatory basis for an assessment of 'efficiency'. Finally, Section 6 calls for a fresh start based on a realistic understanding of the status quo.

## 2. The Parameters of Market Success

The usage of the terms 'market success' and 'market failure' implies the existence of some scalar for measurement. What does it mean to say that 'the market' succeeds or fails? 'The market', of course, does nothing; reference is to the structural framework within which economic interaction takes place. To say that 'the market works' or 'the market fails' draws attention to the institutions that allow results to be generated that are assessed positively or negatively. To shift to more analytically useful terminology, we say that market success is interpreted as the attainment of efficiency in the allocation of valued resources. Obversely, market failure imputes inefficiency to allocations.

Questions of definitions remain. What does 'efficiency' mean? Unless normative criteria are drawn from sources beyond the evaluation of participants in the economy, the only meaningful objective becomes the satisfaction of the preferences of those participants, whatever this might be, with no preferences privileged over others. Whether or not preferences exist, or can be postulated to exist, independent of and prior to the exchange process itself, need not be of concern here. Basic epistemological issues emerge only when analysis moves beyond identification.

The whole exercise becomes meaningful, however, only on the presupposition that pre-exchange endowments and capacities to create value are well defined and that separate rights to these endowments-capacities are enforced, along with contracts in exchanges.

Particular attention must be drawn to the seldom recognized requirement that rights to endowments-capacities and to final products must be separable, or partitionable, as among different persons and organizations. Paul Samuelson's 1954 taxonomy becomes applicable. For the market to generate fully efficient results, all valued goods must be 'private', that is, both excludable and rivalrous, in the familiar post-Samuelson categorization.

A critical presupposition for the ultimate question of institutional-organizational comparison is the presumed competence of persons to make their own choices and to do so in systematically meaningful patterns of behavior. In this sense, the whole exercise embodies the imputation of the capacity for rational choice to all participants.

In the setting so described, why do markets generate 'efficient' results? They do so because of the additional presumption that the existence of any opportunity for rents over and beyond 'natural' levels will attract the attention of potential arbitrageurs who will act so as to insure dissipation of the differential opportunity. The market setting facilitates this dissipation of predicted rents because of the multiplier elements in the adjustment process. The prospective arbitrageur who recognizes unexploited rent potential can invest whatever is deemed to be differentially profitable. Adjustments are not limited to prior exchange levels. The classic Chicago-Winnipeg wheat market illustrates. A single arbitrageur can invest any amount aimed to capture the disparity between

transport cost and a price difference. Further, other traders in the market need not have the information that motivates the initiating arbitrageur.

Within the parameters sketched out previously, separate markets for valued inputs and outputs will generate results that meet Pareto-efficiency criteria. Acceptance of this conclusion does not imply that all goods that meet the conditions required are necessarily assigned to the disposition of markets. Collective-political-legal constraints, whether these be deliberately chosen or generated in some evolutionary process, may prevent voluntary exchanges in some inputs and outputs that are positively valued. For such goods whether or not markets would operate to generate efficient results becomes irrelevant. The presuppositions outlined in this section apply only to goods that are produced, traded, and consumed in the 'private' sector.

# 3. Limitations of Stylized Models

By placing the inclusive set of all valued goods into two subsets, Samuelson allows the apparent applicability of the 'market works' judgment to be dramatically restricted to goods that fully meet the partitionability criterion. Unfortunately, Samuelson, along with those with whom he normatively differs, jumps too quickly from the stylized nonpartitionability classification to the inference that collective-political correction is in order. As early as 1962, I demonstrated that nonpartitionability is a necessary feature of politically orchestrated correction, an insight that was developed more completely in the public choice research program (Buchanan 1962).

The Samuelson taxonomy, along with the accompanying analysis, nonetheless remains useful to the extent that traded goods, as observed, may be assigned locations along some provisionally imagined spectrum. Empirically, of course, few goods exhibit full partitionability as they enter markets. In the absence of specific collective action, if the necessary conditions are met, markets will emerge for all valued goods as entrepreneurs are attracted by promised rents. Production and exchange will be more readily organized for goods that more closely resemble the partitionability limit. But entrepreneurial effort will also emerge for other goods, efforts that will be aimed to make some partitionability, and hence exchange, possible.

The default position that would occur in the absence of explicit collective action toward correction for market failure in those goods that are nonpartitionable is not best described by the total absence of production and exchange. Instead, production and exchange will occur that allow some rents to be gained by prospective entrepreneurs. This set of goods exchanged, as observed, may be physically different from any nonpartitionable idealization, but the market order may or may not provide some net value.

Coase's critique of Samuelson's lighthouse illustration is relevant (Coase 1974). Coase considered his historic account that lighthouses had been in part

provided by market activity to undermine the Samuelson organizational inference. He failed to appreciate, however, that the lighthouses that were observed under privately marketed conditions may have been different in kind from those identified to be inefficient in the Samuelson logic. Re-establishment of the Samuelson understanding does not, of course, imply that the Coasian market order for lighthouses is likely to be less or more efficient than any political correction, with its necessary incentive incompabilities. Both Coase and Samuelson, as representatives of conflicting normative stances, were overly anxious to draw organizational conclusions from stylized models.

# 4. Rules as Nonpartitionable Goods

Most of the discussion of market failure and market success has been carried on, often implicitly, within the institutional parameters that include the assignment and enforcement of rights and contracts, along with monetary predictability. Discussion in preceding sections of this paper does not extend beyond these familiar limits. This stance cannot, however, be sustained beyond analytical models. Comparative evaluation of market institutions, on the one hand, and those of political corrective activity, on the other, must attend to the framework itself.

Specifically, the question becomes: Under what conditions do the rules (institutions), either as they are observed to exist or as alternatives that might be imagined, embody attributes that are analogous to the efficiency norms that are applied to the within-rules allocative processes? The central point that must be recognized is that the framework rules within which either market or political activity takes place must be classified in the nonpartitionability set under the Samuelson taxonomy, along with the consequent implications.

This initial step in any analysis is obvious in any society that is described by widespread adherence of the rule of law. The law, as such, is generalizable as it applies for all members of the body politic. The law is both nonexcludable and nonrival. Even if departures from the generality of the rule of law allow different treatment of designated persons or groups, the inclusive structure remains nonpartitionable in the sense that particularized access cannot be 'traded' between members of privileged or nonprivileged groups and others outside defined limits.

Several early contributors, myself included, recognized explicitly that law, or the legal-political framework generally, could be classified as a nonpartitionable 'good' in the Samuelson taxonomy (Buchanan 1975). But we have been remiss in our failure to examine the consequences of this recognition. We did not ask: What does 'law', defined inclusively, embody in the absence of some idealized constitutional contract?

As noted, the potential gains (rents) promised by an implementation of effective order must attract the attention of prospective entrepreneurs. And, as the

lighthouse model illustrates, efforts may be directed toward locating substitutes for the 'good', as ideally stylized. Analogously, the motivation for the market-like provision of services that are yielded by workable constraints imposed on ordinary market dealings is the potential suppliers' rent rather than attention to the general interest.

The interesting but romanticized constitutional convention open to all persons and groups in the putative body politic does not often meet historical standards for accuracy. But, failing some such device, how can discussion and analysis proceed?

By analogous extension, we may again refer to the lighthouse example. In the stylized nonpartitionable setting, as Samuelson postulated it, Coasian entrepreneurs emerged. Lighthouse services were supplied, but these were physically and locationally defined by some prospects of converting nonpartitionable into partitionable value. Mancur Olson (1965) and Dwight Lee (1999), among others, have noted that marketable by-products of nonpartitionable goods may offer one means through which markets may generate value, possibly moving toward the efficiency frontier.

Inattention to the framework rules while concentrating analyses on withinrules allocative processes becomes equivalent to an implicit presumption that all goods and services that are valued are partitionable, and hence amenable to market exchange among separated end users. The Samuelson exercise of classification aimed at assistance in some ultimate organizational assessment remains empty. In this vision, there is no interdependence that both requires and allows for collective action. Unconscious adherence to such a methodological stance does, indeed, prompt acceptance of a generalized 'markets work' attitude.

## 5. Rules as Spontaneously Emergent

What is the effect here when we recognize that elements of law are not chosen, as such, in a legislative or even a constitutional process, but are, instead, generated through some institutional evolution by way of case-by-case adjudication. Does this emergent property of 'the law', at least in part, promote results that are in some sense analogous to those forthcoming from within-rules market exchanges in goods and services?

The 'public', or beyond-exchange interdependence, may be acknowledged in application to 'legislation', in Hayekian terminology, that is to collective-political action aimed explicitly at market failure correction. But the relevance of this within-politics difficulty may seem to be minimized to the extent that the framework rules are not explicitly chosen, as such. This set of rules, this 'law', it can be argued, may be generated through decentralized adjustments made for separate conflicts.

The analogy between the spontaneous emergence of law through case-bycase adjudication and the spontaneous emergence of resource allocation through markets is misleading, however, and its implicit acceptance has surely influenced the thinking of economists, and perhaps especially those who have contributed to the research program in law and economics. Bruno Leoni (1961) and F. A. Hayek (1979), who are the seminal contributors here, are sources of possible confusion, and especially as they extend analysis in support of normative organizational implications. Empirically, of course, many elements of existing law, and notably in societies dominated by common law institutions, are not, and have never been, chosen in some constitutional-legislative process. Such elements have indeed evolved in case-by-case settlement of adversary claims. And the Leoni-Hayek insight that this process is in many respects analogous to the working of the market is indeed useful.

The evolution of law, however, cannot be assessed against a scalar akin to that which informs observation and understanding of market order. At least in the stylized models, the market 'works' to move to move allocation toward the Pareto frontier, which is a meaningful conception. The market does so because participants are presumed to be motivated by their own interests, as Adam Smith recognized. There is no comparable scalar for the judge who must choose among conflicting claims but who has no independently determined criterion that may be invoked.

Consider, somewhat further, the differences between the spontaneous emergence of a body of law, a set of rules, and the allocation of valued resources in the market process. In the latter, because of the presumed partitionability of goods and services that are exchanged, opportunities for securing differential private rents and avoiding differential negative rents are open and available to prospective entrepreneurs-arbitrageurs, whose behavior, in itself, becomes part of the correction that efficiency conditions require. Contrast this process with application to law. Suppose that a law, rule, or convention emerges and exists, one that is recognized, even if by all participants, to be less enhancing to their well-being than a readily imagined alternative. The opportunity cannot, however, be exploited by single entrepreneurs-artibrageurs because of the nonpartitionability of law, as such. There is nothing comparable to the profit-loss dynamic of the market that will insure any continuing thrust toward more desirable outcomes. The rule in question may survive while remaining destructive of potential value, at least in an opportunity cost sense.

## 6. Clearing the Decks

Two separate but related misconceptions have been identified that have surely influenced widespread acceptance of the 'market works' set of attitudes in public, policy, and academic discussion. First, the nonpartitionability of law, or of framework rules more generally, was not recognized, along with consequent implications. Second, the differences between the evolutionary development of law and the spontaneous processes of markets were often overlooked.

Where, then, does the discussion here leave the confrontation before the basic organizational question: Under what conditions will markets work? And when will markets fail? We are brought back to what I have elsewhere referred to as 'old Chicago school thinking', the stance that accepts that markets work, but only within properly defined constraints, but would never claim that markets can effectively generate their own constraints or rules (Buchanan 2010).

Clearly the rules, or the absence thereof, did not work in the crises of 2007–9. Political economists failed in their continuing neglect of the examination of institutional structures. They failed to apply critical insights to the innovations that the revolution in information technology made possible. They simply acquiesced in the implied laissez faire allowed for developments in the financial sector.

What is needed here is extended examination and inquiry into the emergence of both historically observed and imagined rules that are generated from the propelling motivation of separable rents, but rules that necessarily impact on all members of the body politic. What does institutional (constitutional) laissez faire produce?

As a research program, public choice has at least partially succeeded in getting economists to remove the romantic blinders toward politics and politicians. It is equally necessary to be hard-nosed in evaluating markets, and especially when voluntary contracts are made among those who are only subsets of the inclusive set of affected parties.

## References

- Buchanan, J. M. (1975), *The Limits of Liberty: Between Anarchy and Leviathan*, Chicago: University of Chicago Press.
- (1962), "Politics, Policy, and the Pigovian Margin", Economica 29, 17-28.
- (2010), "Chicago School Thinking: Old and New", unpublished paper, Center for Study of Public Choice, George Mason University, Fairfax/Virginia.
- Coase, R. H. (1974), "The Lighthouse in Economics", Journal of Law and Economics 17(2), 357–76.
- Hayek, F. A. (1979), The Political Order of a Free People. Vol. 3. Law, Legislation, and Liberty: A New Statement of the Liberal Principles of Justice and Political Economy, Chicago: University of Chicago Press.
- Lee, D. (1999), "In Defense of Excessive Government: 1998 Presidential Address", Southern Economic Journal 65(4), 675–690.
- Leoni, B. (1961), Freedom and the Law, Princeton: Van Nostrand.
- Olson, M. (1965), The Logic of Collective Action: Public Goods and the Theory of Groups, Cambridge: Harvard University Press.
- Samuelson P. (1954), "The Pure Theory of Public Expenditure", Review of Economics and Statistics 36, 387–89.