

# MARKET FAILURE AND POLITICAL FAILURE

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## I. Introduction

On several occasions, I have summarized the theoretical welfare economics of the mid-century decades as “theories of market failure” and the public choice economics of the post-middle decades as counterpart “theories of political failure.” This statement captures the central thrusts of the two research programs, but, nonetheless, the statement is confusing because it suggests that both positive analyses of institutional operation and criteria for operational failure are comparable over the two applications.

The criterion for success, and hence, failure, applied to the operation of a market order by the practitioners of theoretical welfare economics is widely recognized to be efficiency in the utilization of economic resources. But both the meaning and the normative appropriateness of the efficiency criterion can be questioned. If “efficiency” is attained only through the working of the market process, how can it be set up as an independent criterion with which to evaluate the workings of the process itself? Even if this basic question is somehow finessed, justificatory arguments must be advanced in defense of the efficiency norm.

In extension to politics and political process, can something akin to allocative efficiency be invoked at all? Or is a totally different success criterion appropriate here? If so, how is it to be defined? And, once defined, how can the two potential institutional “failures”

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be assessed on some comparable bases until and unless the evaluative norms are themselves reduced to a common scalar?

The paper is organized as follows. In Section II, I briefly examine some of the basic issues that arise in assessing market or political failure. The heart of the paper is contained in Section III in which an attempt is made to assess the prospects for political correctives for a single particular example of market failure, utilizing the standard efficiency criterion. Section IV is very short, but it introduces a discussion of changes in the basic structure of rules, in the constitution, that seem to be suggested if any prospect for attaining the efficiency gains promised upon diagnosis of either market or political failure is to be realized. Section V is also brief; it introduces the alternative of setting up some distributional ideal to evaluate the performance of market and political structures. The discussion in both Sections IV and V is severely restricted in this paper, since adequate treatment of either of these two areas of inquiry would require full-length treatment quite apart from the main thrust of the argument here.

## II. Ideal Points and Feasibility Sets

Even if we remain within the confines of political economy, when we examine either market or political failure (or success), we must confront issues that have been centerpieces of philosophical argument for many centuries. Can an ideal be defined independently from that which can be observed? And if this question is answered affirmatively, can an ideal state that lies admittedly beyond the limits of the set of feasibly attainable states serve as a standard of evaluation for an observed state?

These questions may be examined with specific reference to the identification of market failures stemming from theoretical welfare economics. Consider efficiency in the utilization of an economy's resources—can idealized efficiency be defined in other than conceptually formal terms? We can, of course, state specifically the necessary conditions that must be met in order to satisfy the ideal. Resources are placed in their most highly valued uses when units of each homogeneous resource yield identically valued returns in all uses to which they are put. Values are equalized on all margins of adjustment; marginal rates of substitution in final use are equalized with marginal rates of transformation in production.

But what is homogeneity among units of any resource? Do we define homogeneity by an observed equalization of market prices? If we do, how can any observed differences in prices be employed as a criterion for an absence of allocative efficiency? Until and unless

the economist presupposes independent knowledge about preference functions and production functions, he cannot define idealized efficiency. And if this epistemological limit to analysis is acknowledged, how can any market be judged to fail? Quite apart from this epistemological barrier to the very definition of efficiency, there remains the necessary dependence of the value-maximizing allocation of resources on the premarket distribution of endowments among persons. Acceptance of efficiency as a norm for success or failure carries with it implied normative support for (or at least acquiescence in) the initial distribution of endowments, or else it requires that corrective steps embody distributional objectives over and beyond those defined by the efficiency norm itself.

For purposes of discussion here, I shall assume, with the theoretical welfare economists, that the required information about preference and production functions may be presupposed, and that the premarket distribution of endowments be accepted as the basis from which value-enhancing changes are to be evaluated. Idealized efficiency can then be defined independently of any observation of market adjustment processes, and it would seem proper that this norm be used as a success indicator. Even within these limits, however, is it appropriate to use this idealized efficiency norm as a means of evaluating that which is observed? If the norm is so employed, market "failure" may be readily identified. Almost all observed market arrangements generate results that fall short of achieving the ideal. The reasons are familiar. Such an assessment of failure does not, however, carry any implication for ultimate institutional or policy change until and unless a pattern of results from an alternative set of arrangements demonstrated to be feasible can be shown to exist. If the attainment of the idealized efficiency norm is shown to require technological-institutional and/or behavioral characteristics that cannot be incorporated within the feasibility set, how much help is provided by resort to the norm as a criterion of success or failure?

### III. Political Correctives for Market Failure: The Case of External Diseconomies

The theoretical welfare economists of mid-century did not raise this question because they assumed, implicitly, that the political alternative to the unimpeded operation of the market itself operated ideally. That is to say, it was simply presumed that "failures" in market arrangements could be ideally corrected by politically directed adjustments in the rules guiding market participants.

The prospect that any feasible political corrective for market failure might also fail when compared against the ideal standard of efficiency was not examined. Some positive theory of the workings of observed political process is required before this essential step in a comparative institutional analysis can be taken. The theory of public choice has, in a sense, made such an analysis possible. It remains nonetheless surprising that public choice economists have not concentrated more attention on the identification and analyses of political failures for purposes of making more specific comparisons with familiar market failure propositions.<sup>1</sup>

I propose to introduce a single, highly stylized, simplified, and familiar model of market failure. There exists a small, but fully competitive, industry that produces a final good, X, which trades at price,  $P_x$ , in full equilibrium. No resources are specific to this industry, and there are no rents received by owners of resource inputs, even short-run quasi-rents. Consumers secure some rents from the availability of this product on the market at the competitive price. The production of X, however, generates spillover or external damages on many persons. The producing firms do not take these external diseconomies into account in their decisions. Hence, relative to the idealized efficiency norm, there are too many resources devoted to the production of X. In traditional Pigovian language, marginal private costs faced by the firms are less than marginal "social costs."

The question then is: Will politicization of this external diseconomy ensure correction? For purposes of simplicity in exposition, I shall initially assume that the control instrument is a per unit tax or subsidy on the industry's output. The constitution is altered to allow such a tax or subsidy to be imposed by the workings of a political decision rule.

I shall assume that all persons in the economy and polity have full information as to the incidence and effects of the tax, and, also, that all persons vote or otherwise act politically to further their own measured economic interest. In the market failure setting postulated, under these restricted assumptions, politicization of the externality

<sup>1</sup>I raised the issue in an early paper, but there my primary concern was with the presence of externalities in the political decision process generally and not with attempted political correctives for specific market failures. See my "Politics, Policy, and the Pigovian Margins" (1962).

In a second early paper, Gordon Tullock and I analyzed comparative market and political failure under reciprocal external economies. The analysis was, however, largely concentrated on a world-of-equals model, and we did not examine the politics of distribution that accompany attempts to correct for market failures. See Buchanan and Tullock, "Public and Private Interaction under Reciprocal Externality" (1965).

## MARKET AND POLITICAL FAILURE

will ensure that the efficiency norm is satisfied only under an extremely narrow set of circumstances. If *all* persons in the polity are damaged by the external diseconomy, and are also *equally* damaged; if *all* persons are also consumer-buyers of the industry's product, and also purchase *equal* quantities; if the revenues from the tax are shared *equally* among *all* persons, and without pass-through loss, then politicization will ensure full correction for the market failure, regardless of the political decision rule. In this setting, it will be in each and every person's interest to impose the idealized Pigovian tax. Market price will rise precisely by the amount of the tax; production will fall; some resources will shift to other uses. Revenues from the tax will be shared equally by all persons. Each person will gain an amount measured by the size of the familiar welfare triangle.<sup>2</sup>

Once we move beyond the world-of-equals restrictions on the model, politicization will *not* operate to correct for the efficiency loss imposed by the nonpoliticized operation of the market. Distributional effects must enter the calculus of individuals, and their interests must include these effects as well as the potential gains and losses in efficiency, as usually measured. And *distributional* effects necessarily introduce potential conflicts of interests among persons. Hence, the predicted results of the operation of any political decision rule will depend both on the rule itself and on the relative sizes of those persons in the sets that secure distributional gains and losses under the imposition of a tax on the industry's product, along with the disposition of revenues.

The political economist might be prompted to inquire into prospects for working out some structure of compensations such that, even in the setting that violates the highly restricted equality assumptions, general agreement might be reached on the idealized solution dictated by the efficiency norm. Suppose that all relevant members of the polity can be classified into three sets: (1) buyers of the industry's product; (2) sufferers of the external damage generated by production; and (3) persons totally unaffected by the industry, neither buyers nor sufferers of damage.

We know that, if the external diseconomy is Pareto relevant, the members of (2) should be able to compensate fully the members of (1) for the losses incurred in the price change consequent on the

<sup>2</sup>The result depends on the presumption that the unit tax will modify behavior in purchasing the good, but that the return of tax revenues in the form of transfers will *not* influence behavior, despite the direct relationship between the size of an individual's transfer payment and his rate of purchase. In other words, only the tax exerts a substitution effect.

reduction of industry output.<sup>3</sup> Note, however, that this compensation will require payment over and above the return of all revenues collected under the efficiency-inducing unit tax rate to members of (1). Such a return of revenues will still leave purchasers with net losses measured by the familiar welfare triangle. The restriction to the single control instrument must be dropped if general agreement on the Pareto-superior shift to the idealized efficiency solution is to be attained.

Note, further, and more importantly, however, that even if political implementation is limited to the "exchange" between members of (2) and (1), and if some payments above and beyond return of tax revenues are arranged, the structure of compensations (return of revenues plus subsidies) must include individualized adjustments among persons in (1) to allow for variations in the quantities of the good purchased and in the elasticities of demand over the relevant range of price change. These purchase-related differentials in transfer payments would be required to ensure that income effects be neutral for all members of (1), quite apart from the arbitrary assumption that there is no substitution effect of the transfer payments, despite the required direct relationship between the sizes of the payments and the individual rates of purchase. If substitution effects are extended to purchase-related transfers, so that all members of (1) fully reckon that any excess outlay generated by the higher price will be returned as a transfer, then the whole attempt to "correct" behavior via the imposition of the unit tax will fail from the outset.

In order to ensure that the levy of the tax modifies behavior, as well as for more general political reasons, the revenues from the tax would likely be returned to persons on some broad-based sharing scheme, even if the transfers could be limited to members of a single class, such as members of (1). But, once any such departure from the idealized scheme is introduced, however, distributional interests of persons are introduced that might be directionally counter to any efficiency-inducing "exchange" through political process.

Even such partial political intervention as represented by the return of revenues generally to members of (1) would seem, however, to be highly improbable. Persons in (3), those who are totally unaffected by the external diseconomy, would almost necessarily be included in the political choice process, directly or indirectly, and they will have interests that are exclusively distributional. Suppose that the political economist proposes the levy of an efficiency-inducing unit

<sup>3</sup>Through our simplifying assumption about the absence of producers' rents, the incidence of the tax falls exclusively on buyers.

## MARKET AND POLITICAL FAILURE

tax on the industry's output, with revenues returned to buyers of the product, with the differentiation as required, along with some supplemental payments to cover the losses measured by the welfare triangles. In other words, assume that the "exchange" between members of (1) and (2) meets all of the requirements for agreement, so that the political implementation of this "exchange" promises to generate the idealized efficiency solution. But persons in (3) may not acquiesce in the observed payment of cash transfers to members of (1). Persons in (3) will insist on sharing in the funds made available from the apparently newly discovered revenue source. To the extent that members of (3) are brought into the revenue-sharing group, members of (1) will oppose the whole scheme, again on strictly distributional grounds. No longer would they be fully income-compensated for the change in price of the good consequent on the change in industry output. And members of (2), those who suffer the external diseconomy, can scarcely be expected to "bribe" all members of (3) sufficiently to ensure the viability of the efficiency-inducing rate of tax. Politically, the efficiency-inducing tax seems a nonstarter.

We can extend the analysis and try to make some very general predictions about politicization of the externality in the example. We retain the three-set classification of persons, and we now introduce the assumption that the political choice process works as if it were a simple majority voting rule. For purposes of simplicity in exposition, assume initially that the three sets are of equal size, and that a person holds membership in only one set. We can array the policy options or alternatives as follows:

1.  $T_0$  — Leave the competitive result alone; levy zero rate of tax.
2.  $T_e$  — Impose efficiency-inducing rate of tax; distribute revenues equally among all members of politically dominant coalition.
3.  $T_m$  — Impose revenue-maximizing rate of tax; distribute revenues equally among all members of politically dominant coalition.
4.  $T_p$  — Impose prohibitive rate of tax.

We can now examine the ordinal ranking of these alternatives by the members of the three sets. There are two possible arrays, depending on the relationship of  $T_e$  and  $T_m$ . In the first array below, I assume that the efficiency-inducing rate of tax falls below the revenue-maximizing rate of tax; in the second array, this relationship is reversed. The rankings are as follows:

Set (1) Buyers	Set (2) Sufferers	Set (3) Unaffected
	(I: $T_e < T_m$ )	
$T_o$	$T_p$	$T_m$
$T_e$	$T_m$	$T_e$
$T_m$	$T_e$	$T_o, T_p$
$T_p$	$T_o$	
	(II: $T_e > T_m$ )	
$T_o$	$T_p$	$T_m$
$T_m$	$T_e$	$T_e$
$T_e$	$T_m$	$T_o, T_p$
$T_p$	$T_o$	

It is evident from examination of these arrays that, under the assumption that the sets are equi-sized,  $T_m$  is the stable majority choice. The preferences are single-peaked. There is a two-group majority coalition favoring  $T_m$  over either of the other alternatives.

This result is relatively insensitive to changes in the distribution of revenues from the tax that is levied and to the amount of pass-through wastage in the fiscal process. The ranking for members of (3) will remain as indicated if there is any positive net transfer to them. And note that members of this set are the median preference holders; the interests of those persons in sets (1) and (2) are strictly opposed in either of the two rankings. Members of (1), the buyers, will have the ordinal rankings indicated if there is any drainage of revenues from their hands, and, in addition, if they do not secure the required supplementary payments over the simple return of all revenues. Sufferers (2) will always prefer the prohibitive tax, except in those cases where they might, as major sharers in revenues, prefer the revenue-maximizing tax.

The  $T_m$  result is also relatively insensitive to changes in the relative sizes of the three groups. So long as neither (1) nor (2) is sufficiently large, on its own, to enforce a majority choice, the members of (3) are in control, even if their size is small. If either (1) or (2) is sufficiently large to impose a majority choice, then  $T_o$  or  $T_p$  will emerge. Note that, in no case will  $T_e$  emerge from the operation of the voting rule. The efficiency-inducing rate of tax is dominated by one of the other three alternatives, under any and all variations in the relative sizes of the three sets.

If the efficiency-inducing rate of tax falls below the revenue-maximizing rate (I in the arrays above), then politicization of the externality will generate an allocative result that involves final industry output below that which is Pareto efficient. Whereas the uncor-

rected market result involves industry overproduction, the politicized result involves underproduction relative to the standard efficiency norm. If the efficiency-inducing rate of tax lies above the revenue-maximizing rate (II in the arrays above), politicization will involve industry output that remains above that which the efficiency criterion would indicate to be ideal but below the output in the uncorrected market. In this case, politicization is at least directionally corrective.

The failure of politicization to correct for the externality seems clear in the single example examined in detail here. But does the divergence between the predicted political solutions and those that might satisfy the efficiency criterion depend on the "institutional structure of externality"?<sup>4</sup> The existence of *any* surplus, whether producers' or consumers', that results from the market generation of an activity that exerts large-number externalities, negative or positive, will ensure that distributional aspects enter directly in any political control process. Participants in the political decision process seek to maximize their own utilities, given the instruments available to them. They may only be secondarily interested in their shares in the efficiency gains that idealized market correction might promise.<sup>5</sup> Models other than the single one analyzed in some detail above might, of course, be introduced to demonstrate the generality of the results.

But the overall conclusion remains the negative one that politicization of market failures will be highly unlikely to secure the objective of moving the economy toward satisfaction of the idealized efficiency norm so long as the political process itself embodies the expressions of differential interests by citizens.

#### IV. Can the Potential Efficiency Gains Be Captured?

As the discussion has indicated, there will remain unexploited efficiency gains in the operation of the market and/or the political process. In both cases, we can imagine or dream of idealized allocative changes that could prove advantageous to all parties in the economy or polity. And, as the simple analytics of the Pareto classification shows, there must exist means of moving from what is to an optimal solution in such a way that no person is harmed by the change. But the accomplishment of any such change may require a

<sup>4</sup>In an early paper entitled "The Institutional Structure of Externality" (1973), I examined several models in terms of the sources of market failure in each case. I did not, however, follow up and examine the same models for possible implications under political control.

<sup>5</sup>For a general recognition of this point, see Flowers and Danzon (1984).

complex and sophisticated structure of highly personalized tax and subsidy schedules, compensations, side payments, and transition rules that are beyond the capacity of either market or political structures as we know them. It may not be institutionally feasible to capture more than some fraction of the efficiency losses that market and political failures seem to impose upon us.

The very existence of such gains should ensure, however, that there will remain a role for the political economist who might be able to advance proposals that will embody mutuality of gain.<sup>6</sup> If he reckons on the predicted operating properties of both ordinary markets and ordinary politics, the political economist will presumably be led to consider reform at the level of basic institutional-constitutional rules, where the distributional aspects can be mitigated if not totally eliminated from consideration. Why should anyone, as a potential participant in political process, be interested in abstract efficiency? As the analysis has suggested, the participant will, in particular cases, place primary emphasis on distributive shares. If, however, general rules are considered, rules that are to be applied to a large number of separate cases of potential political control, the participant does have an interest in an efficient structure. Since he cannot know how, distributionally, he will be affected on any one from the whole set of issues that may emerge for political decision, the individual will be led from consideration of his own interest to promote efficiency in the predicted working properties of the inclusive institutional structure.<sup>7</sup>

If the inclusively defined set of institutional constraints is treated as exogenous, and hence not subject to change, there is a sense in which any observed allocation is efficient. To the extent that participants maximize their utilities, given the constraints within which they act, there remain no efficiency gains to be exploited. Reference to potential efficiency gains must, therefore, imply a belief that some constraints are subject to change.<sup>8</sup>

## V. The Efficiency Norm and Distributive Standards

To this point, the discussion has been exclusively contained within an acceptance of the efficiency norm as the basis for evaluating insti-

<sup>6</sup>In a very early paper, I defined the role for the political economist to be that of seeking out possible proposals for change that would command consent. See my "Positive Economics, Welfare Economics, and Political Economy" (1959).

<sup>7</sup>The logical foundations of this bridge between efficiency and individual self-interest were presented in Buchanan and Tullock (1962).

<sup>8</sup>For further discussion, see my "Rights, Efficiency, and Exchange: The Irrelevance of Transactions Cost" (1984/1985).

tutional performance. The epistemological claims of the theoretical welfare economists have been presupposed, even though these claims appear to me to be open to serious challenge at a more sophisticated level of philosophical inquiry. For most neoclassical economists trained in the post-welfare economics era, there is nothing unusual or unacceptable in using the efficiency norm for evaluating the performance of the market process. These same economists might, however, question the use of the same norm to evaluate politics. Why should politics be expected to generate efficiency in resource use? As noted, however, unless the same scalar is employed, how can relative "failure" or "success" be judged at all?

Some distributional norm or standard is perhaps the most likely alternative to efficiency. By comparison here, however, there seems to be little or no agreement in a precise definition of a distributive ideal. If such an ideal could be defined, then the operation of the market might be compared with that of political process. Once again, both processes would surely be judged to fail to achieve the norm.

In application to the achievement of any distributive norm, however, care must be taken to define the distributive potential of the two separate institutions. The market operates, and in so doing, it generates a particular distribution of the surplus that emerges from social cooperation in the usage of the premarket resource endowments held under legally defined ownership of separate persons. The market cannot, and does not, act directly on the distribution of the endowments of persons. By contrast and comparison, politics may make little or no distinction between the distribution of the surplus emergent from social cooperation and the distribution of initial endowments among persons. There is no constraint on the operation of ordinary politics that is at all akin to that imposed by the legal structure on the operation of the market. When, therefore, the market is compared unfavorably with politics from the criterion of some distributive ideal, the relatively open-ended potential for political redistribution is seldom noted.

Even when such comparisons are made properly, however, the discussion is often concentrated on the prospects of idealized attainment of the distributive ideal rather than on any realistic analysis of the distributional changes that might be implemented in the workings of democratic politics. As is the case with efficiency, persons are not likely to express interests in abstract distributional ideals for the society in general when they participate in political decisions. They are likely, instead, to seek to further their own well-defined interests. Whether or not political process will, indeed, be able to "improve" on market-determined distributive results remains an open issue that

social scientists have been surprisingly reluctant to analyze seriously.<sup>9</sup> Until and unless politics, as it works, and not as it might ideally be imagined to work, can be demonstrated to generate better distributive results than the market, “better” in terms of some reasonable acceptable standard, advisers should be reluctant to encourage distributional politics.

This paper does not deliver the assessment of analytical developments in the context of the experience of the quarter century, the assessment that was my assigned subject. The analysis has been aimed at raising more questions than it attempts to answer, and the paper’s message is perhaps best interpreted as a sketch for a research program that seems hardly to have been commenced. By inference, the argument might be taken as a criticism of the naiveté of both the market-failure welfare economists and the market-works-politics-fails stance of many modern public-choice and new neo-classical economists. By comparison with idealized standards, both markets and politics fail. Recognition of this simple point is a mark of “scientific” progress. Such recognition directs attention to comparative institutional analysis and to the structure of the set of constraints within which either market or political behavior takes place. The domain of “constitutional economics” beckons; let us get on with it.

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<sup>9</sup>For a preliminary attempt to analyze transfer or redistributive political process in positive terms, see Brennan and Buchanan (1985, chap. 8). Further work on this topic is in planning stages. For a related argument that concludes that the market process may be the only distributional system that avoids conflict, see Usher (1981).

## MARKET AND POLITICAL FAILURE

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