Robust Institutions: The Logic of Levy?

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Abstract. Levy (2002) argues that J. M. Buchanan's worst-case philosophy of constitutional political economy and J. W. Tukey's worst-case philosophy of mathematical statistics are analogous. Levy's analogy, however, is problematic. Institutions are only contingently robust. Worst-case political economy is simply best-case thinking in another guise.

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Introduction

David M. Levy (2002) translates "worst-case" thinking in political economy into the "*lingua franca* of robust statistics" (Levy 2002:131). Levy provides a helpful taxonomy for ranking political institutions (or more accurately, models of political institutions/sets of rules of the game) according to their "robustness" properties. The following picture (Levy 2002:133) represents the performance of two institutions (or models of sets of rules of the game) as a function of the posited state of the world (or theory of the state of the world).

When the state of the world (or supposition of the model) is γ, institution 1 generates a greater amount of the metric "good stuff" (Levy's terminology) than does 2. If γ holds, then 1 outperforms 2 (in terms of the desired metric). To illustrate Levy's point, let γ represent public-spirited socialist planners and 1 represent market socialism (see, e.g., Lange 1964 [1938], Lerner 1944). Planning (1) is superior to markets (2) when planner agent-type is public-spirited. Weaken the supposition of public-spiritedness (γ), however, thereby modeling planner agent-type as more akin to *homo economicus*, and voila: deadweight losses are pervasive (see, e.g., Levy 1990, Shleifer and Vishny 1992). Institution 2 outperforms institution 1 when γ does not hold: planners readily exploiting the fact that socialist planning transforms the entire economy into one gigantic monopoly.[1] Robust institutions (2) put a bound on the loss of "good stuff" resultant upon supposition γ's failure (134). Levy (2002:131) notes, "von Neumann's minimax loss approach to decision making is absolutely central to robust [worst-case] thinking."[2] Best-case thinking[3] (maximax) leads us to favor 1 over 2; the possible failure of γ simply does not impact on our choice.[4] Worst-case thinking (minimax), however, necessitates that we take the possible failure of γ rather more seriously.

Best-Case Thinking in Constitutional Political Economy?

Levy argues that J. M. Buchanan's worst-case philosophy of constitutional political econ-
omy and J. W. Tukey's worst-case philosophy of mathematical statistics are analogous:
"The use of heavy-tailed distributions as paradigm—without worrying overly much about
descriptive accuracy *as well as the "unrealistic" use of Leviathan models*—are defended
by the desire to avoid disaster" (Levy 2002:131, italics added).[5] It is precisely at this junc-
ture, however, that I suggest Levy's analogy is somewhat problematic. Levy's "robustness"
picture (Figure 1)—when drawn for ordinary least squares (OLS) and least absolute devi-
ations (LAD)—accurately captures a facet of statistical reality (Levy 2002:132). LAD (2)
categorically provides a more robust estimator than does OLS (1) when γ (the supposition
that the errors are independent normal) fails. Institutions (or rules of the game), however,
are not robust in the same technical sense as are econometric estimators. The inefficiency of
OLS relative to LAD when γ fails is a purely technical (or non-contingent) characteristic of
statistical reality. The relative superiority (or otherwise) of institution 2 (e.g., constitutional
constraints), unlike the efficiency of any given estimator, however, is wholly contingent.[6]

In terms of Figure 1, I suggest that Levy implicitly makes something akin to a maximax
(best-case) assumption when drawing institution 2. Levy readily limits the supposition
of γ (public-spiritedness) to one point for institution 1 (e.g., market socialism), whilst
making a tacit supposition that γ (or some very close approximation to γ) holds true at all
points when drawing institution 2 (e.g., constitutional constraints). Don Lavoie's pungent
remarks[7] regarding the incentive-compatibility of market socialist marginal cost pricing
rules are surely equally applicable to constitutional rules of the game.

Levy argues that constitutional rules provide 'insurance' against the potential 'worst-
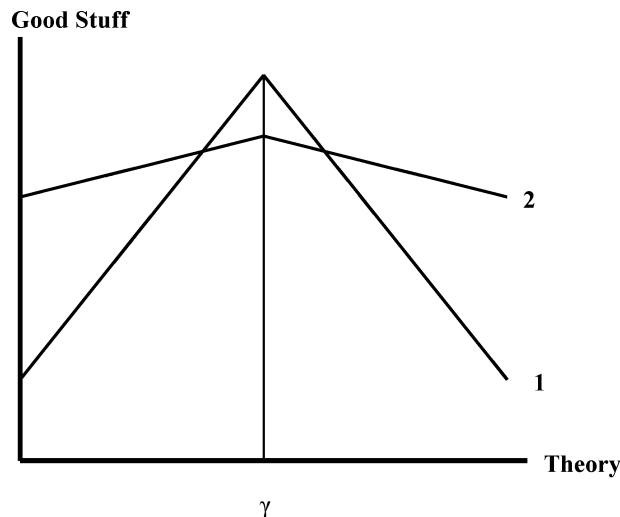case' disaster (loss of "good stuff") wrought when γ fails (Levy 2002:131).[8] Naturally,

Figure 1.

'constitutional insurance' has a price: the "good stuff" that is foregone when political agent-type is public-spirited (see, e.g., Brennan and Buchanan 2000 [1985]:62, Levy 2002:132). Levy apparently presupposes that constitutional rules are a type of non-contingently robust 'enforcement technology'.[9] The rules of the game are, as such, wholly binding: agent-type (γ or otherwise) is entirely irrelevant.[10] Surely, however, the "robustness" of any constitutional constraints is predicated on their enforcement.[11] I suggest that Levy draws institution 2 while making some γ type supposition regarding enforcement. It surely ill suits the constitutional political economist (of all people) to invoke a supposition of public-spiritedness (γ) regarding the agent who is ultimately charged with the task of enforcing the constitutional rules of the game. Does constitutional political economy have something akin to a benevolent-despot assumption (so despised by public choice theory) at its very heart? Without such an assumption, however, it is unclear why—in terms of Levy's 'insurance' metaphor—the 'insurance' will actually pay off when "worst-case" disaster threatens to rear its ugly head.[12]

Robust Institutions: Romance by the Backdoor?

James M. Buchanan characterizes public choice as the study of politics without romance, modeling political agents as no less self-interested than are the rest of us (see, e.g., Buchanan 1979:211). Gordon Tullock states "the view that the government can be bound by specific provisions [constitutional rules] is naïve. Something must enforce those rules, and what-ever enforces them is itself unbounded" (Tullock 1987:87). Is the constitutional political economist ultimately something of a best-case thinker? If some tacit supposition of γ (per-haps regarding enforcement) does underlie Levy's institution 2 as drawn, I suggest that constitutional political economy allows "romance" into the analysis at a higher level.

Intriguingly, John Stuart Mill argued in a somewhat similar vein to Tullock: "In politics as in mechanics, the power which is to keep the [constitutional] machinery going must be sought for outside the machinery" (Mill 1998 [1861]:182).[13]

Constitutional political economy has to date paid far too little attention to constitutional enforcement; too readily making the assumption that constitutional constraints are robust in exactly the same non-contingent sense as are statistical estimators. Surely this is a failing on the part of constitutional political economists: our only realistic choice is between contingently robust sets of rules of the game. Agent-type (the ultimate enforcer of the rules of the game) and constitutional constraints are complements rather than substitutes. Constitutional political economy, however, has traditionally (certainly at least prima facie) suggested otherwise (see, e.g., Buchanan 2001 [1981]:47).

Conclusion

Robust thinking (whether in statistics or political economy) requires one to be explicit regarding the potential 'worst-case' disaster that one seeks to avoid. Robust statistics worries that any given estimator may provide 'inefficient' or 'catastrophic' estimates when γ fails. The particular γ over which robust political economists lose sleep,

namely the 'public-spiritedness'—or otherwise—of political agents is far less clearly speci-fied than any posited 'non-normality' of the data. The clearer specification of γ may allow a more transparent insight into what (or who) puts the 'robustness' into robust institutions.

Notes

1. Stiglitz (1994:106–107) states, "we can ask, is the model robust? Do slight changes in the assumptions—particularly the assumptions about which we may have limited confidence—result in marked changes in the conclusions?" Frank H. Knight—in common with the modern public choice literature on socialist planning—had limited confidence in the assumption that socialist planners were public-spirited (see, e.g., Knight 1982 [1940]:170–171).

2. See, e.g., Brennan and Buchanan (2000 [1980]:xxiii, 220, 240).

3. Best-case thinking is roughly equivalent to the benevolent-despot model of politics. Brennan and Buchanan (2000 [1985]:55) state, "the benevolent despot model of politics and government has promoted and sustained monumental confusion in social science, and social philosophy more generally."

4. The "maximax" criteria ... would proceed on the most optimistic assumptions about how things would work out—Godwin, if you like that sort of thing" (Nozick 1974:5).

5. See, e.g., Brennan and Buchanan (2000 [1985]:35, 62–63).

6. Levy (personal correspondence) provides an interesting technical analogue to my 'contingency' point: "If the distribution of the random variable is bimodal then mean/OLS will be more robust than median/LAD. Nothing (as far as I know) is statistically robust everywhere. So the median is contingently more robust than the mean—the contingency is a symmetric and unimodal random variable." Levy (1989) explains why the use of the Athenian lot was sensible in the case of bimodality.

7. "Since rule following behavior cannot be legitimately inferred from the existence of a published rule, the analyst must apply choice theory to explain the self-motivated actions that people are likely to take when confronted with the rules under consideration. As soon as a rule is proposed as a substitute for directly self-motivated action, such issues as how to distinguish compliance from disobedience, how to provide sanctions for disobedience and rewards for compliance, and the extent to which the desired actions can be articulated in explicit rules must be examined" (Lavoie 1985:143). "It seems extremely difficult for anyone to adopt a socialist position and at the same time be familiar with and accept the analysis of public choice. Here I use *socialist* in the sense that this term was employed in the 1930's, when Lange, Lerner, and others convinced so many of their colleagues that socialism could *work*. No more than a smattering of sophistication in public choice (or in ordinary common sense, for that matter) is required to suggest the absurdity in that position" (Buchanan 1979:272).

8. Constitutional norms may "prove acceptable as embodying a minimax strategy aimed at securing protection against the worst-case outcomes that might emerge" (Brennan and Buchanan 2000 [1985]:xxiii).

9. *"We need not predict that each child will fall off the cliff to justify the installation of railings"* (Brennan and Buchanan 2000 [1980]:240, italics added). "We may illustrate by analogy." "It is costly to build a fence or to purchase a chain. It is possible to prove that the *no-fence, no-chain* solution is more efficient than either, *provided* that we model the behavior of our dog in such a way that respects the boundaries of our property" [γ] ... [Is the example] really very different from that procedure which argues that tax structure X is more "efficient" than tax structure Y provided that we model the behavior of government in such a way that it seeks only to further efficiency in revenue collection?" (Brennan and Buchanan 2000 [1980]:225, italics added). *Railings, fence*, and *chain*, however, categorically provide examples of a non-contingently robust 'enforcement technology'.

10. Constitutional political economy places emphasis on "setting up rules or constraints within which politicians must operate, rules that will make it a *relatively trivial matter as to the personal characteristics of those who happen to be selected as governors*" (Buchanan 2001 [1981]:47, italics added).

11. "There is ... one *crucial assumption* which clearly underlies the whole constitutional construction—that of *enforceability*" (Brennan and Buchanan 2000 [1980]:13, italics added).

12. "[The] good qualities [of the populace] supply the moving force which works the [constitutional] machinery" (Mill 1998 [1861]:207).

13. [P]olitical checks will no more act of themselves than a bridle will direct a horse without a rider. If the checking functionaries are as corrupt or as negligent as those whom they ought to check, and if the public, the mainspring of the whole checking machinery, are too ignorant, too passive, or too careless and inattentive to do their part, little benefit will be derived from the best administrative apparatus (Mill 1998 [1861]:194). Levy (1992) argues that the desire for approbation provides a surrogate for public-spirited motivation. Words matter for 'institutional robustness'.

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