An Economic Model of Representative Democracy: scoped review

Igor Rivin · 24 November 2026 · AI-assisted source audit

Finite counterexamples refute Proposition 7 as stated and the two-candidate efficiency conclusion of Proposition 12.

Reviewed edition: Quarterly Journal of Economics 112(1), 1997, pp. 85–114; published article.

This report publishes only reconciled findings with direct source and exact arithmetic checks. Other branches of the paper remain unaudited or unresolved. It makes no claim of priority or of an exhaustive search for corrections.

Checked findings

For Proposition 7 in the paper, physical p. 15, use three ideals `0,1/2,1`, absolute-distance losses and entry cost `1/10`. The two endpoints meet the printed conditions. The checker examines all 64 triple-candidate ballot profiles, including abstention, and tests weak dominance exactly as defined in footnote 3 on physical p. 5. The only undominated voting equilibrium has everyone voting for themselves. The median gains `1/6-1/10=1/15` by entering. No choice of a different admissible continuation can deter that deviation.

The stronger Proposition 12 counterexample uses six citizens and three nondefault policies, with identity-neutral utilities:

Citizens	I	J	K	Feasible policies when in office
1–3	1	0	2	I and default
4	0	1	2	J and default
5	0	10	1	J and default
6	0	10	1	K and default

The default yields −100 to everyone. Each citizen's unique feasible nondefault optimum is implemented if elected. Assumption 2 therefore holds: every feasible citizen-governed improvement is actually delivered by an available candidate.

Let citizens 1 and 5 run. The vote splits 3–3 between I and J. Citizen 6 is the K entrant: K strictly dominates I, but citizen 6 prefers the original I/J lottery, worth 5, to winning with K, worth 1. Entry costs make that loss larger. Duplicating I or J leaves the policy lottery unchanged and costs money. Each incumbent prefers staying to withdrawing for every $0 < \delta \leq 1/2$.

The checker constructs a complete continuation rule for all 63 nonempty candidate sets and verifies unilateral voting best replies, pure-ballot weak dominance and IIC in every set. With J and K present, citizens 1–4 vote for K and citizens 5–6 for J. Votes on duplicate policies go to a fixed designee. Hence the counterexample is a full political equilibrium, not merely an on-path payoff illustration. I is nevertheless selected with probability 1/2 and strictly Pareto dominated by K.

This exposes the missing incentive comparison in the source's physical pp. 28–29 proof. Increasing the chance that an efficient entrant wins can remove the entrant's chance of obtaining an even better policy from the other incumbent. A positive winning probability alone does not establish profitable entry. A favorable default is not responsible for this witness.

Evidence and limits

The panel used independent Sol 6.2 and Fable 5.2 assessments, followed by non-blind Astra 6.2 adjudication. The coordinator checked the reported witnesses against the source and replayed exact rational calculations. This is not proof-assistant verification or a full-paper certificate. General repair proposals remain candidates until separately checked.

5 assessments are recorded for this paper; 2 initial responses retain source-access flags. The focused response accounts for every supplied source. Recorded usage for these packets is USD 5.0279, within the collection's USD 100 ceiling. No additional inference was used to prepare this publication.

The neutral source inventory preserves the complete PDF and text/OCR index, including sections and bibliography. The dependency graph covers selected source-attributed inputs; unmarked or unconnected claims have not thereby been verified.

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Cite this report

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