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THE THORNY QUEST FOR A RATIONAL CONSTITUTION

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The Thorny Quest for a Rational Constitution^{*†}

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Introduction

Most liberal democracies are governed by constitutional systems. The essence of a constitutional system is embedded in barring a simple parliamentary majority from violating some rights (e.g. the right of due process of law). In spite of the prevalence of this constraint on the power of parliamentary majorities to force their will on the constituency, it is not clear how to justify this constraint.

Opponents of constitutional constraints on the power of parliamentary majorities commonly invoke the so-called “counter majoritarian difficulty” (“the CMD”).¹ They justly contend that constitutions, like laws, are crafted

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¹The counter majoritarian difficulty has been the subject of endless scholarly debates. For a relatively early assessment of the difficulty see, for example, Jesse Choper, *Judicial Review and the National Political Process: A Functional Reconsideration of the Role of the Supreme Court* (1980).

by the representatives of the people, whether they operate as “regular” parliamentary assemblies or as “irregular” constitutional conventions. Oftentimes, as is the case in the American example, the Founding Fathers of constitutions are long dead, and some of their preferences might be deemed stale. The CMD queries the justification of letting the “dead hand” of past generations rule over the fresher, and presumably more updated, aspirations of current legislators. After all, if the people, through its representatives, preferred A to B in some time t_0 but then changed its mind and now, in t_1 , prefers B to A , why force it to stick to its former, obsolete, preference?

Some Earlier Attempts to Address the Counter Majoritarian Difficulty

Political thinkers often justify constitutional regimes by using deontological arguments. There is no doubt that these axiomatic methods are often forceful and convincing. For example, few people would deny the justification of constitutional constraints on the power of the majority to legislate genocidal norms. Even if we modify this extreme example and substitute it by milder legislative norms that deny equality, or deprive people of life, liberty or property without due process of law, it is easy to see why a constitution might be deontologically justified, i.e. to prevent majorities from infringing upon rights that we, as a liberal society, deem inalienable.

Side by side with these deontological explanations, some attempts have been made to justify constitutions on purely economic grounds. One of the best attempt was made by Robert Cooter, who explained that if we let society be governed by a simple majority rule the body politic might suffer a great deal of instability, because majority rules have an “empty core”.²

²See Robert Cooter, *The Strategic Constitution* (2002). “The core” is best understood as the set of stable equilibria, and hence the assertion that a majority rule has an “empty core” implies that it never equilibrates. To see why, assume that a pie has to be divided in a community consisting of three players, 1, 2, and 3, which is governed by a majority rule. Suppose that initially 1 and 2 agree to divide the pie equally between the two of them and leave nothing to player 3. This is not a stable equilibrium, because 3 can now offer either 1 or 2 a larger slice in exchange for getting something for herself and leaving the third player in the dark. But once this new division of resources is consummated the new victim can bribe one of the other two into a mutually beneficial arrangement and so on ad infinitum. We note that super majorities suffer in principle from the same affliction, provided that none of the players has the requisite number of “votes” to carry

Without detracting from the validity of these deontological or economic approaches, this paper attempts to justify the existence of constitutions, in spite of the CMD, on firmer grounds of rational choice. Our point of departure is James Buchanan and Gordon Tullock's seminal book *The Calculus of Consent*, which saw the light of day in 1962.

Building on the concept of a "veil of ignorance," which was first introduced by John Harsanyi in 1953³ and later made famous in the philosophy of John Rawls, especially in his celebrated *Theory of Justice* (1971), Buchanan and Tullock ("BT") contended that it would be rational for anyone situated behind a veil of ignorance to be governed by a constitutional regime. A "veil of ignorance" is a counter-factual situation where individuals are supposed to be ignorant of their actual roles in life. They are supposed to be unaware, for instance, whether they are destined to be rich or poor, white or black, male or female, young or old etc. Their ignorance of their actual situation frees their choices of opportunistic considerations, which are endemic among those who are better informed of their actual situation. Thus, their ignorance assists them to identify what they consider to be meritorious, without being swayed by selfish motivations.

BT thought that every rational individual situated behind a veil of ignorance would prefer a constitutional to a parliamentary regime for the following reasons. They assumed that "rights" are purely pecuniary, or at least proprietary, and individuals situated behind a veil of ignorance desire to get most of them for themselves. They argued that the agents' ignorance, behind that metaphoric veil, poses two risks, which the agents attempt to minimize.

The first risk is that whatever will be theirs in the actual situation, might be taken away from them by future legislation. The expected cost of that particular risk depends on the robustness of the constitution, which presumably puts limits on the availability of "taking." A "constitution," in BT's *Calculus*, is a voting rule which requires a super-majority of voters to sanction a taking law. Thus, the expected cost of this risk is declining with the percentage of legislators whose votes are deemed necessary by the constitution to legitimize a taking. For instance, this expected cost is minimized if the constitution sanctions a taking only by a unanimous vote of every single legislator. If we plot the percentage of legislators on the horizontal axis and

resolutions single-handedly; although admittedly it must be easier to unsettle coalitions under a simple majority rule.

³John Harsanyi, *Cardinal Utility in Welfare Economics and in the Theory of Risk Taking*, 61 J. Pol. Econ. 434 (1953).

the expected cost on the vertical axis, we obtain a negatively sloped function, which is minimized with 100% of the legislators. Figure 1 captures this intuition.

[Insert Figure 1 here]

The second risk facing individuals situated behind a veil of ignorance is that in the actual situation a law should allow them to expropriate other people's endowments. Obviously, they prefer that this particular law should not be blocked by an anti-taking clause in the constitution, and hence the expected cost of this risk is increasing with the number of voters required by the constitution to sanction the desired statute. This kind of expected cost can be plotted, as seen in Figure 2, as a positively sloped function, which is maximized at the 100% of voters point.

[Insert Figure 2 here]

BT explain that these two functions can be aggregated into a combined expected cost function, which is, as we recall, a function of the number of legislators required to sanction the transfers of endowments, **in either direction**. The point where this function is minimized thus emerges as the optimal point, as seen from behind a veil of ignorance. BT expressed their confidence that if the number of legislators is N , the combined function is minimized at some point $K > 0.5N$, and hence a rational solution to the CMD emerges. Figure 3 depicts BT's aggregate expected cost function.

[Insert Figure 3 here]

Moreover, BT implied, although not explicitly, that the optimal decision rule for any modification of the constitutional allocation of rights ought to be a rule of unanimity. This is because what is rational for one individual behind the veil of ignorance is good for every other individual, so at least behind that veil everyone should endorse the same endowment structure. BT's contribution was widely and justifiably applauded at its heyday, since it initiated a new way of thinking about political players as market agents. But today, fifty-odd years later, this kind of enthusiasm sort of faded away.

In our view, this lulling effect occurred because BT's implied promise of a major break-through failed to materialize.⁴

What went wrong with Buchanan and Tullock's Analysis? First and foremost, they failed to justify their conclusion that the combined expected cost function minimizes at some number $K > 0.5N$.⁵ The correctness of that assumption depends on the intuition that the first-type risk facing individuals situated behind a veil of ignorance, i.e. that their own endowments might be taken away from them is dominant; that is to say it eclipses the second-type risk, that they might not be permitted to appropriate the endowments originally allocated to other individuals. However, it is not impossible to assume that the agents' sense of greed relating to other people's property might exceed their sense of possessiveness relating to their own endowments ("the neighbors' lawn is greener").

On a more formal level, if the individuals' preference to risk is assumed to be linear, i.e. equal size additions to their wealth generate equal size additions to their utility, they should not care, while situated behind a veil of ignorance, how the pie is distributed or re-distributed in the actual world. This is so because everyone's expected piece of the pie is remains unaltered without regard to distributive policies. Obviously, this attitude to future events in the actual world is not consistent with any interest (or dis-interest) in founding a constitution.

One could justly claim that most individuals' attitude to risk is concave, rather than linear, i.e. equal additions to their wealth generate diminishing additions to their utility. However, if this happens to be the case then behind a veil of ignorance everyone ought to vie for an egalitarian distribution of the pie in the actual world of the type W/n , where W is the overall wealth and n is the number of individuals in the actual world. This aspiration too is not consistent with a preference for a constitutional regime.

⁴One prominent writer, after introducing some modifications to the parameters used by Buchanan and Tullock, concluded that in fact the optimal decision rule should be the simple majority rule. See Douglas Rae, *Decision Rules and Individual Values in Constitutional Choice* 63 Am. Pol. Sci. Rev. 40 (1969).

⁵James Buchanan, writing in 1975, admitted that the Calculus did not contain a proof for any particular decision rule, but reiterated his belief that in principle the rule of unanimity is optimal, because in some fashion it reflects what every single individual, blind to her actual situation in the post-constitutional stage, would prefer. See James Buchanan, *The Limits of Liberty, Between Anarchy and Leviathan*, in *Collected Works of James Buchanan*, Vol. 7, 55 et seq. (1999). The book was first published by the University of Chicago Press in 1975.

We think that BT’s main pitfall lies in their assumption that the purpose of constitutions is to reallocate a given level of overall wealth. This assumption implies that the game envisaged by individuals situated behind a veil of ignorance is a zero sum game — take a dollar from individual i and give it to individual $j \neq i$ instead. From an efficiency point of view this game is a wash.

But is it really? There are at least three cumulative reasons to think that it is in fact a **negative sum game**, i.e. in transfers between winners and losers winners win less than what losers lose. If this is so, individuals situated behind a veil of ignorance would rationally be averse to transfers’ and hence they would prefer to be ruled by an anti transfer constitutional document.

The first reason is derived from the psychological bias known as the “endowment effect.” The essence of this bias can be captured if we imagine that a widget is owned by individual i who is willing to sell it to individual j . Normally, sales of this type do not materialize because the minimum price demanded by i would far exceed the maximum price that j would be willing to offer.⁶ It follows that an arbitrary transfer of a widget from i to j causes more harm than good, and hence individuals situated behind a veil of ignorance would object to the transfer. Two of us elaborated this point in a previous paper⁷ and hence we shall not revisit it here. We wish, though, to note in passing that the endowment effect appears to apply not only to tangible “widgets” but also to “rights,” such as, for instance, the right to keep one’s job⁸ or the interest not to suffer a personal injury.⁹

The second reason is grounded on the way we understand the so-called “revealed preference hypothesis.” If I can use my budget to purchase a pound of apples or a pound of pears and buy the apples, it is a fairly good indication that I prefer apples to pears.¹⁰ Now if every individual in the actual state

⁶See Daniel Kahneman, Jack Knetsch, and Richard Thaler, *Anomalies: The Endowment Effect, Loss Aversion and the Status Quo Bias*, 5 J. of Econ. Perspectives 193 (1991).

⁷Uriel Procaccia and Uzi Segal, *Supermajoritarianism and the Endowment Effect*, 55 Theory and Decision 181 (2003).

⁸See Russell Korobkin, *The Endowment Effect and Legal Analysis*, 97 Northwestern U. L. Rev. 1227 (2003).

⁹See Edward McCaffrey, Daniel Kahneman and Matthew Spitzer, *Framing the Jury: Cognitive Perspectives on Pain and Suffering Awards*, 81 U. Va. L. Rev. 1341 (1995).

¹⁰This hypothesis was famously offered by Paul Samuelson in an early paper, *A Note on the Pure Theory of Consumer Behavior*, 5 *Economica* 61 (1938) and has since undergone numerous transformations and refinements. See, for instance, Hal Varian, *Revealed Preference and its Applications*, 122 *The Economic Journal* 332 (2012).

used her budget to obtain what tops her list of priorities, her disutility from being on the losing side of a transfer exceeds her utility of helping herself to someone else's top priority; Again, not knowing on which side of the transfer she might end up, it would be rational for her to oppose the transfer.

The third and last reason is the most compelling one. Unlike in BT's *Calculus*, the core of modern constitutions is not about proprietary rights, although some constitutions (depending on the jurisdiction), do include in their bill of rights, proprietary safeguards. The core dwells on human rights such as the two freedoms of religion, on freedom of speech, or on the right to be equally treated by the government and to enjoy due process of law. We presume, for instance, that if someone violates another person's right to worship according to her conscience or to vent her grievances in a lawful assembly, she derives some pleasure in doing so, because otherwise the violation would not have occurred; but it is equally clear that if her own basic rights were to be similarly violated she would have suffered the greater loss. Since behind a veil of ignorance she is not informed on which side of the fence she would be situated, her fear of being on the losing side would exceed her desire to harm others and hence she would prefer basic rights to be constitutionally protected.

Several of these insights were captured by more modern economists who modeled the predicament faced by voters with *a-symmetric* payoff matrices behind a veil of ignorance. The discussion in these models focused on the payoff matrices of players who wish to both protect their own endowments and to usurp the endowments of others, with varying degrees of information deficiencies behind the veil of ignorance. It was shown how these utilitarian lotteries ought to be solved differentially for each type of ignorance.¹¹

Building on these insights we shall first suggest a simplified formula to explain this kind of utilitarian lottery. We shall then proceed to discuss in more specific terms than in the existing literature the more realistic (and complex) case where the constituency is composed not just of one majority usurping the basic rights of a single minority, but rather what happens in our real world which features a rich landscape of diverse groups. We ask the question whether the multiplicity of minorities strengthens the case for judicial review from a utilitarian perspective. We identify the cases where it does as well as the cases where it doesn't. In quest of this issue we use, in

¹¹An excellent summary of this literature can be found in Dennis Mueller, *Public Choice III*, chapter 26 (2003).

turn, both traditional neo-classical tools and behavioral analysis.

1 Discussion

Suppose the constituency is divided between a majority and a single minority. The proportion of the minority is $p < \frac{1}{2}$. Society considers two possible policies:

- x : Let the minority enjoy a certain right.
- y : Don't let the minority enjoy this right.

Denote:

- α is the utility of a member of the majority if a right is granted.
- β is the utility of a member of the majority if a right is not granted.
- γ is the utility of a member of the minority if a right is granted.
- δ is the utility of a member of the minority if a right is not granted.

We assume that $\delta < \beta$ and $\gamma > \alpha$.

Policy x leads a person behind the veil of ignorance to the lottery

$$X_1 = (\gamma, p; \alpha, 1 - p)$$

Policy y leads a person behind the veil of ignorance to the lottery

$$Y_1 = (\delta, p; \beta, 1 - p)$$

Now every single expected utility maximizer behind a veil of ignorance would prefer to be governed by a majority rule, i.e. to oppose constitutional constraints if and only if

$$p\delta + (1 - p)\beta > p\gamma + (1 - p)\alpha \tag{1}$$

It ought to be noted that if we discard our assumption that voters are risk-neutral, then the ex-ante likelihood of a constitution is enhanced. Risk-averse agents might be prone to pay dearly to avoid the risk of finding themselves in the minority after all. In fact, the “difference principle” championed by John

Rawls and its main corollary, the maximin rule, rest heavily on assumptions of extreme risk aversion. The following discussion rests on the assumption of risk-neutrality, but we also remember that this is a concession that one could discard at will.

A number of interesting implications result from this simple inequality. First and foremost, the inequality may conceivably be violated, and hence rational constitutions *are feasible*, in spite of the CMD. The inequality is likelier to be violated if the minority is large enough, and if the difference in the absolute value of the utilities of members of the majority and members of the minority is substantial. The first of these observations, namely that the rational choice basis of constitutions depends, *inter alia*, on the size of the minority is rather disturbing.

To see this let us use a simple numerical example. Suppose that humankind is divided between two tribes, the Greens and the Purples, and the Greens outnumber the Purples by a ratio of ten to one. Suppose now that if we deny the Purples their basic rights a member of the majority (the Greens) gains a benefit of W “utiles” and, consistent with the intuition developed above, each Purple suffers a disutility measured at, say, $5W$ “utiles.” If everyone is aware, behind a veil of ignorance, that one has a ten-fold chance of being on the Green Team but only a five-fold burden if one turns out to be a Purple, everyone’s optimal strategy is to prefer a parliamentary regime without a constitution. If this reasoning holds water, it leads to the highly counter-intuitive (and morally embarrassing) conclusion that constitutional guarantees may be thrown out of the window if they hurt small minorities.

However, our assumption that there is only one minority is clearly false. Minorities abound and they cover a wide spectrum of types. If we suppose that constitutions protect the rights of all these minorities, a key question is whether members of any given minority would tend to coalesce with members of the other minorities such that the members of the resulting coalition are much more numerous. If this transpires, the case for constitutionalism becomes much more convincing. Of course, if the coalition is large enough to constitute a majority the argument becomes redundant, because rights would not be denied even under a simple majority rule. Indeed, there is some empirical evidence that minorities develop a sense of “empathy” to-

wards each other and hence coalitions do exist.¹² But since the existence of coalitions depends on culture and on the nature of the various minorities,¹³ we would like at this stage to assume zero empathy, or, in other words, that any member of a given minority's preferences towards the rights of members of other minorities to which she does not belong, are identical to the preferences of members of the majority. Let us start with the assumptions that there are just two equally sized minorities who display zero empathy towards each other. Both of these assumptions, that the number of minorities is 2 and that they are of equal size, are used for ease of notations and can in principle be relaxed without changing the outcome. We proceed to demonstrate that with these assumptions the same conditions for a rational choice of constitutions applicable to one minority (as stated above) apply to two minorities.

Each member of these two minorities is interested to promote her own rights α_i , $i = 1, 2$. The two minorities are statistically independent and therefore the probability of being a member of both is p^2 . The probability of being a member of both majorities is $(1-p)^2$ and the probability of belonging to a single minority is $2p(1-p)$. We assume that society can grant both minorities their rights or opt for a simple majority rule altogether, but not grant rights to just one minority. We also assume that utility is additive; for example, if society grants constitutional rights then the utility of a member of just one minority is $\alpha + \gamma$. Granting rights thus leads behind the veil of ignorance to the lottery

$$X_2 = (2\gamma, p^2; \alpha + \gamma, 2p(1-p); 2\alpha, (1-p)^2)$$

While denying rights leads to

$$Y_2 = (2\delta, p^2; \beta + \delta, 2p(1-p); 2\beta, (1-p)^2)$$

Hence a majority rule that denies all rights would be rationally preferred behind a veil of ignorance if, and only if,

$$2p^2\delta + 2p(1-p)(\beta + \delta) + 2(1-p)^2\beta >$$

¹²See, for instance, Ellen Riggle, Joy Whitman, Amber Olson, Sharon Scales Rostosky and Sue Strong, *The Positive Aspects of Being Lesbian or Gay Man*, *39 Professional Psychology: Research and Practice* 210 (2008).

¹³For example, religious fundamentalists, while keen on protecting their own way of life might show little tolerance for the rights, say, of the LGBT community, although the opposite is not necessarily true.

$$\begin{aligned}
& 2p^2\gamma + 2p(1-p)(\alpha + \gamma) + 2(1-p)^2\alpha \iff \\
& 2p[p\delta + (1-p)\delta] + 2(1-p)[p\beta + (1-p)\beta] > \\
& 2p[p\gamma + (1-p)\gamma] + 2(1-p)[p\alpha + (1-p)\alpha] \iff \\
& p\delta + (1-p)\beta > p\gamma + (1-p)\alpha
\end{aligned}$$

One recalls that this is exactly the same outcome in the presence of a sole minority (see eq. (1) above).

What follows thus far is that the case for constitutions seems less convincing if:

- They are not particularly risk averse in Rawlsian terms;
- Minorities lack empathy for each other's plight;
- The largest minority is small enough;
- The difference in the absolute value of the utility of members of the majority and of the minority is small enough.

All in all, these results may be somewhat disappointing for the proponents of judicial review, because they show that the very multiplicity of minorities which characterizes our society, if we do not consider other contributing factors (extreme a-symmetry in the felicific calculus, extreme risk aversion or the absence of a rather substantial single minority) do not assist their case: if no constitution is warranted for one minority it is also not a good idea for several minorities.

But this need not necessarily be the case. The preceding argument rested on a tacit assumption that all the relevant players are expected utility maximizers. But large and ever increasing evidence suggests otherwise and hence we would like to examine the impact of multiple minorities among non-expected-utility players.

We consider, for example, the rank dependent model developed by Quiggin,¹⁴ which seems to be the most popular alternative to expected utility theory. According to this model, the value of the lottery $(x_1, p_1; \dots; x_n, p_n)$ where the outcomes are ordered from worst to best is

$$u(x_1)f(p_1) + \sum_{i=2}^n u(x_i) \left[f\left(\sum_{j=1}^i p_j\right) - f\left(\sum_{j=1}^{i-1} p_j\right) \right]$$

¹⁴See John Quiggin, *A Theory of Anticipated Utility*, 3 J. of Economic Behavior and Organization 323 (1982).

Where u is a utility function and f is a probability transformation function. Using the above notation, we get that

$$Y_1 \succ X_1 \iff \delta f(p) + \beta[1 - f(p)] > \alpha f(1 - p) + \gamma[1 - f(1 - p)]$$

On the other hand,

$$\begin{aligned} Y_2 \succ X_2 \iff \\ 2\delta f(p^2) + (\delta + \beta)[f(2p - p^2) - f(p^2)] + 2\beta[1 - f(2p - p^2)] > \\ 2\alpha f((1 - p)^2) + (\alpha + \gamma)[f(1 - p^2) - f(((1 - p)^2))] + \\ 2\gamma[1 - f(1 - p^2)] \end{aligned}$$

This model makes it explicit that if we discard the expected utility assumption it is quite possible that if there is a single minority agents might prefer a parliamentary regime, but if there are two minorities, even with zero empathy between them, agents might prefer to be governed by a constitutional regime. For example, let $f(p) = \sqrt{p}$, and suppose that $p = 0.36$, $\alpha = 1$, $\beta = 3$, $\gamma = 3$, $\delta = 1$. We obtain that $Y_1 \succ X_1$, yet $X_2 \succ Y_2$. In other words, the claim that the analysis of one and two minorities leads to the same inequality does not extend to non-expected utility behavior.

The intuitive explanation of this transformation of preferences is that the probability that agents behind a veil of ignorance ascribe to being members of several minorities in the real world is (objectively) equal to the product of the probabilities of belong to each of these minorities. This is a very small number, and since agents tend to overestimate small probabilities, the risk of being members of several minorities is inflated in their minds to the extent that they might wish to "buy insurance" embodied in a constitutional regime. We realize that this over-estimation of small probabilities may be regarded in some sense as "irrational", but proponents of the counter majoritarian difficulty do not rest their case on the "rationality" of the will of the majority; they simply contend that deference must be given to the majority qua majority, be the defensible underpinnings of its preferences what it may.

Conclusion

The counter majoritarian difficulty does not seem particularly formidable after all, even if we ignore (and we don't) all deontological considerations.

Given the a-symmetry of the utility payoff matrix between members of the majority and members of the minority, the idea of a super majoritarian constitution is always feasible in principle, if we consider rational lotteries behind a veil of ignorance. The optimal outcome of such lotteries is further swayed in favor of imposing constraints on the power of parliamentary majorities if agents are presumed to be more risk averse, if the size of the minority is large, or if members of several minorities display a sense of empathy towards each other's plight. Finally, even if none of these conditions is satisfied, the idea of a restricting constitution still survives if agents are not expected utility maximizers, and hence tend to overestimate the (small) probability of being members of several minorities in the actual (i.e. non-original) state.

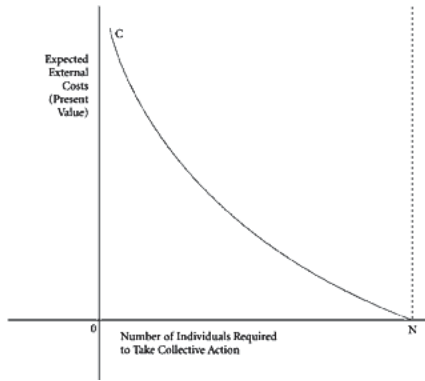


Figure 1

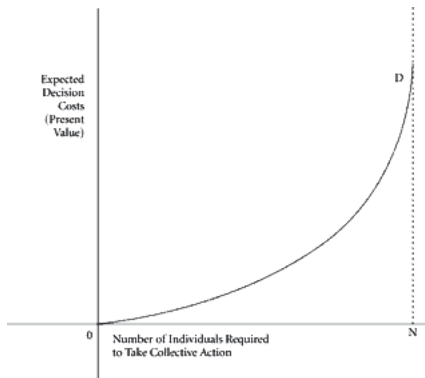


Figure 2

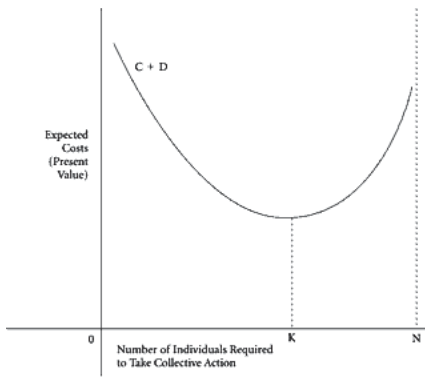


Figure 3