Chapter 6: Rising Income and Popular Revolution: Unlikely Paths to Universal Suffrage

1. Parliamentary Dominance without Democracy

The rise of parliament is only half of the story of the transition to parliamentary democracy. The eighteenth-century parliaments were not very representative in the modern sense. They were chose by elites nd would tend to directly represent only the interests of a small subset of the population--essentially those of the most wealthy (nobles, successful businessmen and farmers) and domint religious authorities (the Catholic or Ntional Church). In most cases, the groups represented in parliament had to select particular persons to serve in the parliament, and often these members of parliament (MPs) were selected by counting votes. In some of these cases, the privilege of voting for representatives was explicitly limited to the very wealthy, and in others it was implicitly so limited.

The point of departure for the present analysis is, consequently, one in which the privilege of voting for representatives is defined by wealth or income. The role of the king, which was, of course, not unimportant in 1800, is neglected in order to focus on the effects of industrialization on the method for selecting members of parliament. As is demonstrated below, the mechanism through which parliamentary supremacy and univeral suffrage emerged are nearly independent of one another.

2. Parliament's Disinterest in Suffrage Reform

Consider the following highly simplified model of parliamentary decisionmaking and the determination of voting rights. Suppose that citizens have preferences defined over private consumption, Xi, and a bundle of public services, Gi, that are uniformly available to all within the community, Ui = u(Xi, Gi). Suppose further that each citizen has an endowment of labor, Li, and capital, Ki, and that national income Y is produced via constant returns to scale using labor and capital under technology Z. This implies that national income can be represented as $Y = f(\Sigma Li, \Sigma Ki, Z)$ and that each citizen i's income can be represented as $Yi = wLi + rKi$, with $w = df/dL$, $r = df/dK$, and $Y = \Sigma Yi$.

Let C=c(G, Z) be the rate of transformation between private consumption good X and government service G. This implies that private consumption, X, can be characterized as $X = Y - c(G)$. Assume that government services are funded with a proportional tax on income just sufficient to fund the service level demanded, $tY = C(Gi)$. In this case, the citizen-voter will prefer the service level that maximizes:

$$U = u((1- C(G_i, Z)/Y) Y_i , G_i) \quad (1)$$

which requires service level Gi to be such that:

$$u_X (- C_G / Y) Y_i + u_G = 0 \quad (2)$$

The implicit function theorem implies that the typical citizen's demand for government services is determined by:

$$G^* = g(wLi + rKi, Y, Z) \quad (3)$$

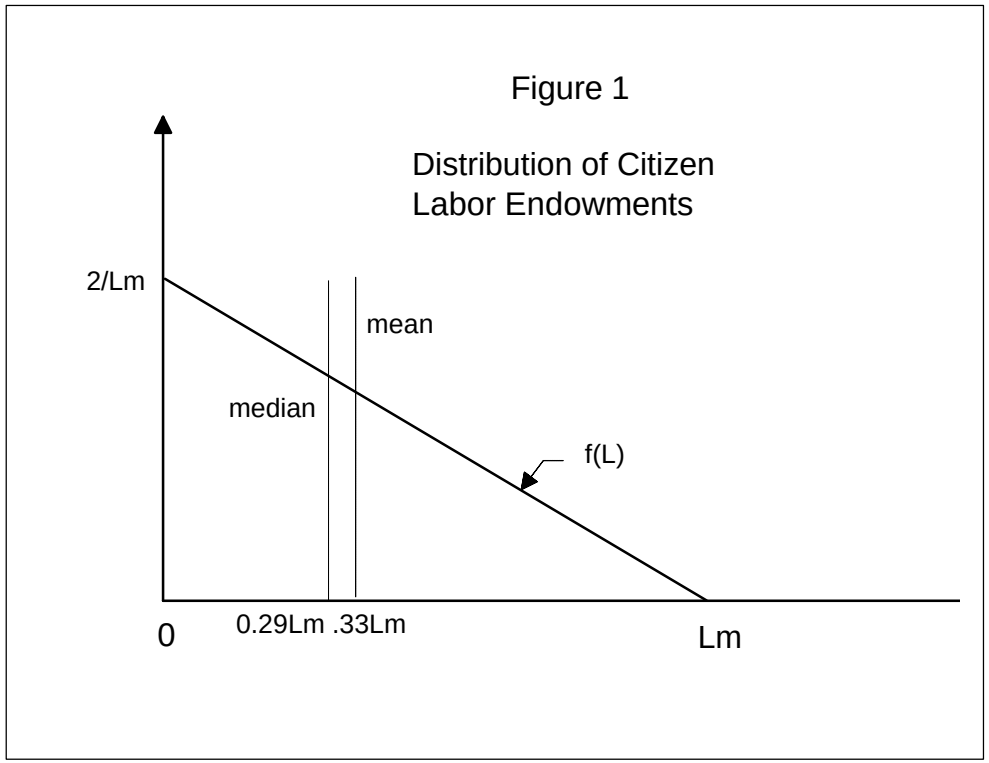
Each citizen demands services based on his or her endowment of labor and capital, the marginal product of those inputs and national income.

Because only the initial endowments of productive inputs vary by person in this model, it is the variation in the initial endowments that determines the distribution of citizen demands for government services. Suppose that the frequency distributions of labor and capital are approximately independent and skewed in a manner that can be approximated with triangular distributions, with labor endowments distributed between 0 and maximal labor endowment, L^M, where $l(0) = 2/L_M$ and $l(L_M) = 0$, and capital endowments distributed between 0 and maximal capital endowment K^M with $k(0) = 2/K_M$ and $k(K_M) = 0$.

Figure 1 depicts the assumed distribution of labor endowments and, thus, labor incomes. The triangular assumption is not crucial for the present analysis, but does assure that voter interests differ somewhat and median income is below average income, as tends to be the case in most observed income distributions. The distribution of income, Yi, can be written as $Yi \sim rLi + wKi$ within the domain of realized incomes.[47] It can be shown that the mean of the income distribution is $Y_A =$

[47] The sum of two linear monotonic decreasing functions is also linear and monotone decreasing.

$(rK_M + wL_M)/3$ and its median is $Y_v = (w L_M + r K_M)(2 - \sqrt{2})/2$.



In a polity where all citizens are eligible to vote and a median voter exists, two-candidate or two-party competition for office tends to converge to the policy preferences of the median voter. In the present model, the median voter is *the voter* with the median endowment of capital and labor. Note, however, that the median voter is not generally *the citizen* with median income, because the distribution of citizenship differs from the distribution of voters. For much of the history of parliamentary systems, eligibility to vote was determined by tax payments, and consequently, the median voter was generally a citizen with substantially more income than that of the median citizen. In modern democracies, suffrage eligibility is determined by citizenship and age, with the consequence that the median voter is older than the median citizen.

Suffrage restrictions can easily be incorporated into the model. Suppose that citizens are allowed to vote whenever their labor income tax payment is greater than T^L or their capital income tax is greater than T^K. Given the assumed distribution of productive resources, this implies that only citizens whose labor endowment satisfies $twL_i > T^L$ or whose capital endowment satisfies $trK_i > T^K$ are entitled to vote. (The tax rate is assumed to be determined by expenditures, with $t = c(G^*, Z)/Y$.)

Note that a tax-payment based suffrage system can be restated in terms of economic wealth and income. In endowment terms, only citizens with a labor endowment greater than L^E with $L^E = T^L/tw$ or with a capital endowment greater than K^E, with $K^E = T^K/tw$, are able to vote. Eligibility to vote in such systems is partly

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[48] The two triangular density distributions can be written as $F_L = (2/L_M - 2L/L_M^2)$ and $F_K = (2/K_M - 2K/K_M^2)$. Average income is denoted Y_A and can be characterized with:

$$Y_A = {}_0\int^{LM} wL(2/L_M - 2L/L_M^2)dL + {}_0\int^{KM} rK(2/K_M - 2K/K_M^2)\,dK$$

or

$$Y_A = (rK_M + wL_M)/3$$

Median income can be found at the labor capital combination that equates the cumulative income below the median with that above the median. Because of the assumed independence in factor endowments, one such combination is found at the medians of the labor and capital distributions. The median of the income distribution can be characterized as the voter with median holdings of labor, Lv, and capital, Kv, and median income as:

$${}_0\int^{Lv} wL(2/L_M - L/L_M^2)\,dL + {}_0\int^{Kv} rK(2/K_M - K/K_M^2)dK$$
$$= {}_{Lv}\int^{LM} wL(2/L_M - L/L_M^2)\,dL + {}_{Kv}\int^{KM} rK(2/K_M - K/K_M^2)\,dK$$

The medians of labor and capital distributions are $L_v = L_M(2 - \sqrt{2})/2$ and $Kv = K_M(2 - \sqrt{2})/2$, respectively, given the assumed triangular distributions. Median citizen income is, consequently, $Y_v = (w L_M + r K_M)(2 - \sqrt{2})/2$, where w and r again reflect the marginal product of labor and capital for the total employment of labor and capital.

Note that $(2 - \sqrt{2})/2 = 0.2929 < 1/3$; median income is less than average income. Triangular distributions are, of course, skewed distributions with different modes, means, and medians.

based on endowments, partly on productivity (insofar as productivity is reflected in wage rates and the return on capital), and partly on the general price level. For the present, assume that the economic determinant of wage rates and the rate of return on capital are stable. This would tend to be the case in economic steady states and for short-run analysis where it is normally assumed that a constant supply of capital and labor are employed using a particular production technology.

Under these conditions and a triangular distribution of the endowments, L_V and K_V, the median holding of capital and labor will satisfy:

$$_{TL/tw}\int^{Lv} w(2L/L_M - L^2/L_M^2)\, dL + {}_{TK/tw}\int^{Kv} r(2K/K_M - K^2/K_M^2)dK$$

$$= {}_{Lv}\int^{LM} w(2L/L_M - L^2/L_M^2)\, dL + {}_{Kv}\int^{KM} r(2K/K_M - K^2/K_M^2)\, dK \qquad (4)$$

in which case, the median voter's income is:

$$Y_v = (w (L_M - T^L/tw) + r (K_M - T^K/tw)) (2 - \sqrt{2})/2. \qquad (5)$$

and he or she will demand service level:

$$G^* = g(Yv, Y, Z) \qquad (6a)$$

or

$$G^* = \gamma(L_v, K_v, T^L, T^K, Y, Z) \qquad (6b)$$

Note that the *present suffrage rules partly determine government policies* by determining the identity of the median voter. This relationship allows the present median voter preferences over election law to be characterized with the indirect utility function:

$$U_v^* = u(1- C(\gamma(L_v, K_v, T^L, T^K, Y, Z), Z)/Y) Yv, \gamma(L_v, K_v, T^L, T^K, Y, Z)) \qquad (7)$$

Differentiating equation 7 with respect to T^L and T^K and applying the envelope theorem determines the first-order conditions for the median voter's optimal suffrage laws. These imply that the present suffrage qualifications T^L and T^K are *already optimized* for the present median voter.

$$Uv^*_{TL} = (u_C C_G - u_G) G_\gamma \gamma_{TL} = 0$$

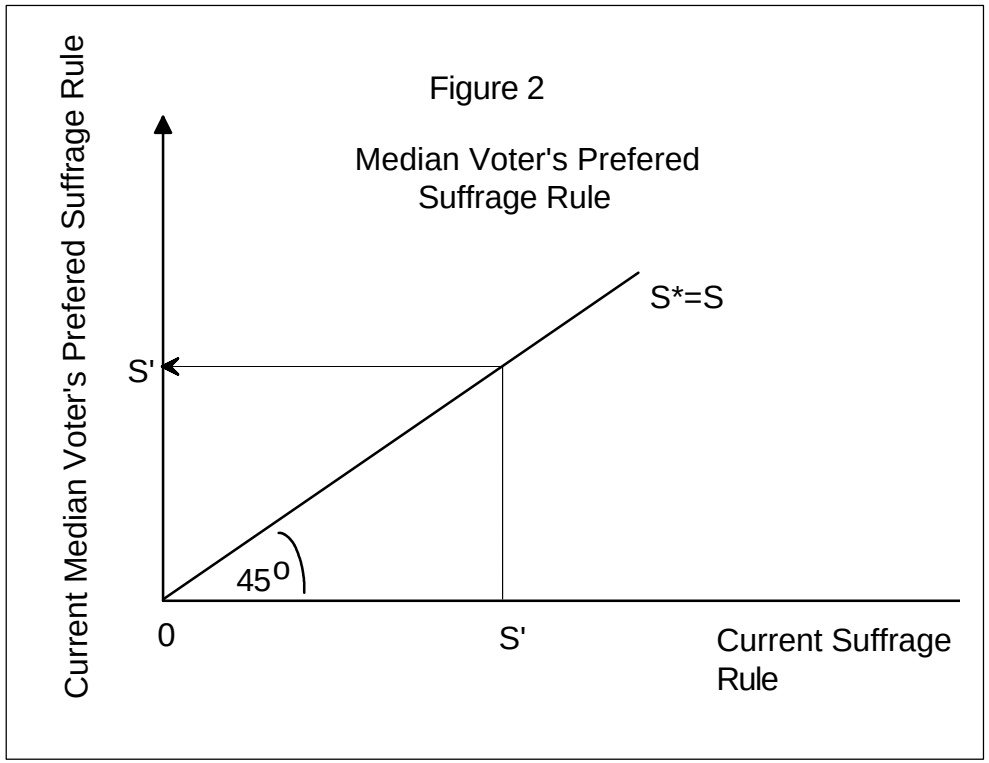
$$Uv^*_{TL} = (u_C C_G - u_G) G_\gamma \gamma_{TK} = 0$$

No other combination of wealth requirements for suffrage will generate a better service-tax combination for the pivotal voter, because G* maximizes the median voter's welfare under the present electoral laws (and the assumed tax constitution[49]). That is to say, the median voter at a given point in time will be completely satisfied with the preexisting suffrage constraints that made him the pivotal voter!

Consequently, in a stable economic and political environment, *there can be no effective electoral pressure for electoral reform*. The present median voter is content to be the median voter and has no interest in enacting laws that will worsen policyby creating a new median. The use of majority rule in elections and within parliament does not, by

[49] Brennan and Buchanan (1980) discuss the constitutional appeal of a tax constitution for leviathan. Tax constitutions are often informal arrangements in modern polities, although they were often formalized within medieval Europe. The most famous of these was the Magna Carta, which gave a council of barons veto power of the English king's tax policy. Similar institutional arrangements were present in Sweden, Denmark, Spain, and France. The stabilizing value of a uniform tax code under majority rule is discussed by Buchanan and Congleton (1998).

itself, generate a political impulse for universal suffrage.



3. Economic Growth and without Suffrage Reform

A restricted franchise of the sort modeled above and widely in place in nineteenth-century Europe tends to become less restrictive through time as economic growth takes place, because economic growth broadly increases income. Economic growth takes place as capital is accumulated, which tends to increase the marginal productivity and thereby the wage rates of labor, and through technological advances that improve the productivity of both labor and capital. As income rises throughout the income distribution, more and more citizens become qualified to vote, because more and more voters pay enough taxes to qualify for suffrage.

Stationary wealth-based rules for suffrage consequently imply that a somewhat larger electorate and somewhat new median voter tend to emerge in every election cycle during periods of economic growth and during periods of economic contraction.[50] That is to say, a stable set of income- and wealth-based rules for voter eligibility will not yield a stable electorate in a setting where income and wealth are changing.

The electoral effect of economic growth on suffrage under stable tax- or income-based suffrage rules, consequently, tends to make the present median voter somewhat worse off. After all, it is only by being the median voter that a particular citizen can realize his or her most preferred government service levels. A forward-looking median voter would be inclined to tighten gradually the eligibility rules for suffrage by increasing the wealth or income requirements for electoral qualification, so that he or she remains the median voter as economic growth takes place.

That is to say, if the present median voter had his or her way on suffrage reform, industrialization would tend to be associated with electoral rules that gradually become more demanding, rather than less demanding, through time.

In most political settings, however, the rules that determine voter qualifications are more difficult to change than ordinary policies are. Electoral rules are determined by constitutional and/or quasi-constitutional laws. Even in polities where qualifications for suffrage are not truly constitutional, it is clear to all that changes in the rules governing suffrage are major policy decisions. Debate on suffrage issues, consequently, tends to be extensive and normally runs through several terms of office. A single parliament normally cannot modify the prerequisites for suffrage in a single session of the legislature.

The stability of rules governing suffrage is partly a consequence of the somewhat lengthy process through which most constitutional laws and major policies come to be adopted. Essentially all proposed changes in electoral rules will be reviewed by subsequent parliaments that are beholden to new median voters. And, clearly the new median voter(s) will veto suffrage reforms designed to assure that the previous median voter retains elective control of parliament. In this manner, the lengthy formal and informal process of changing election laws, together with the immediate interests of successive median voters, tends to increase the stability of the qualifications for suffrage, even during periods when other policy interests of the median voter change through time.

[50] This purely economic route to suffrage expansion in periods of rapid growth can be as important as major reforms of suffrage laws. This method of obtaining suffrage was historically important in both the United Kingdom and Sweden, where suffrage rates approximately doubled, largely as a consequence of income increases rather than suffrage reform.

4. Changes in the Tax-Base Are Unlikely to Induce Suffrage Reform

Nonetheless, differences in individual circumstances, tastes, and ideology imply that many citizens tend to be dissatisfied with the present rules governing suffrage, including many who are entitled to vote. For example, voters with relatively large input endowments tend to prefer more restrictive rules and voters with relatively small endowments tend to prefer less restrictive rules. For these dissatisfied citizens, election law reform can generate a new median voter whose preferred policies are closer to their own. The question addressed in the remainder of this chapter is whether such demands for suffrage reform might indirectly affect election law through legal, although possibly nonelectoral, means.

The tax constitution implicit in the model used to this point allows the government to tax anyone that it wishes, although all taxpayers must be taxed at the same rate. Suppose instead that the tax institutions required only those with the privilege of suffrage to pay taxes. Such reasoning clearly played a role in the early European and American theories of representation, insofar as only substantial taxpayers were given the privilege of voting or were eligible for positions in parliament and those not represented were not directly taxed. Similar logic also applies to settings where territorial boundaries limit both tax base and electorate. If a group petitions to be included in a polity, it normally negotiates for representation or suffrage rights before agreeing to enter. In such cases, suffrage rules not only determine the identity of the median voter, but also the tax base available to the polity.

When the polity's tax base is affected by the degree of suffrage, the present median voter may have a fiscal interest in suffrage reform. The median voter's fiscal interest in expanding suffrage can be characterized by modifying equation 7 to take into account the effect of changes in suffrage on the tax base Y. Let Y be redefined as the size of the income tax base, which under the assumed tax constitution is a decreasing function of the wealth or income-tax qualifications for suffrage, $Y = y(T^L, T^K)$. It is clear that changes in suffrage laws will generate a new median voter who will have different demands for public services and also for suffrage laws, but in this case the new median voter *will not veto* the reforms that have made him or her the pivotal voter. The fiscal effects of the new median voter is accounted for by the implicit function describing G* and in the cost-sharing rule through effects on the ratio of median income to national income Yv/Y.

The present median voter's own income, Yv, is not affected by changes in suffrage although his future tax price for government services is affected. The present median voter's preferred suffrage eligibility rules now maximize:

$$U_v = u(1- C(G^*, Z)/y(T^L, T^K))Yv, G^*) \tag{8}$$

$$\text{with } G^* = \gamma(L_v, K_v, T^L, T^K, y(T^L, T^K), Z)$$

which requires:

$$Uv_{TL} = [u_X (- C_G / Y) Y_v + u_G]G^*_{TK} + u_x [Y_{TL}C(G^*)Yv /Y^2] = 0 \tag{9.1}$$

and

$$Uv_{TK} = [u_X (- C_G / Y) Y_v + u_G]G^*_{TK} + u_x [(Y_{TK} C(G^*)Yv/Y^2] = 0 \tag{9.2}$$

The first set of bracketed terms are the effects of increased suffrage restrictions on government services and the costs of those services; the second set of bracketed terms characterizes the effect of suffrage restrictions on the overall tax base.

In equilibrium, the income of the new median voter is the same as that of the present one, which allows the marginal effects of suffrage rules on G* to be neglected, because $u_X (- C_G / Y) Y_v + u_G = 0$. In that case, equations 9.1 and 9.2 imply that the median voter will expand suffrage up to the point where the tax base is maximized, which occurs at the point where $Y_{TL} = Y_{TK} = 0$. Essentially all taxpayers would be allowed to vote in this case, but not nontaxpayers. If the income of the new median voter is expected to differ from the present one, the first-order conditions imply that the present median voter will tradeoff marginal losses from changes in government services against marginal savings from an expanded tax base. It is also possible that no reform of suffrage laws will be adopted, because the marginal losses from new service and tax levels can be larger than the median voter's marginal tax savings from a somewhat broader tax base.

Only in cases where the anticipated tax savings more than offset marginal losses from "suboptimal" service and tax costs would suffrage be expanded. The new suffrage laws, however, are stable only in the case where the new median voter is opposed to further changes in suffrage.

The same analysis implies that this may not be the case. It is clearly possible that the new median voter, facing similar tradeoffs, will also be interested in expanding suffrage. In limiting cases, an initially small increase of suffrage might be gradually expanded to include all taxpayers as a series of suffrage expansions are adopted and ratified by successive median voters.

It is clear that economic growth would play a role in this process of suffrage reform, insofar as economic development increases the wealth and tax worthiness of relatively low income citizens. In this case, a significant increase in the taxable income or wealth of the unenfranchised can induce a gradual changes in election law if politically or legally it is more difficult to tax the unenfranchised than the enfranchised. That is to say, economic development can induce broad suffrage reform as a method of expanding the polity's tax base.

However, this conclusion depends on a somewhat unrealistic tax constitution in which only the enfranchised can be taxed. It is far more likely that non-voters will simply be taxed. To prevent parliament from taxing those not represented in it, would require either a formal tax constitution or sufficient ability to resist on the part of those lessor tax payers that it was easier to ignore them than to tax them. However, organizing a league of non-voting taxpayers is a difficult task.

5. Organizing Popular Movements

Given the absence of pressures for reform, those not represented in government may try to organize themselves an gain entry as another "well organized interest group," press for reform, or launch a revolution against the present constitution. However, eleimentary game theory suggests that this, too, is unlikely to be a path to democracy.

It is not necessarily more difficult to organize a large group than small group, because some organizational problems are easier to solve than others. For example, it is easier to solve a coordination problem than a team production problem or social dilemma. Coordination games have the property that once an equilibrium emerges, that equilibrium is in every potential participant's interest to adopt the group convention. Assurance games are similar to coordination games, in that there are multiple equilibria, but in assurance games some equilibria are better than others. If the initial condition one of the lower equilibria, it will require more oganization to shift from one equilibrium to the other than in coordination games. However, no long-standing organization is necessary because the equilibrium is stable once participants adopt the right strategies. To solve PD games, however, normally requires a standing organizataion because the desired outcomes are not game equililbria in the absense of constructed incentive systems.

Organizing a Protest

For example, if the organizer can provide a reward of R>1 in the "Protest Game" illustrated below the participants will find it to their private advantage to assemble at the designated time and place, and participate in public demonstrations. It is for this reason that organizers of protests often include speeches and other forms of entertainment and encouragement as inducements to shift from the comfortable (shirk, shirk) equilibrium to the more rewarding (protest, protest) equilibrium. For the illustration, it is assumed that protesting is either itself enjoyable an social activity or that large gatherings of protesters is sufficient to induce desired policy changes.

Of course, relatively few governments tolerate public protests, in part, because such groups may be sufficient to overwelm routine law enforcement, and therefore additional policing is necessary for "crowd control." Such efforts are costly, and may not discourage thuggery of various sorts, and may reduce the perceived effectiveness of the government's law enforcement abilities. Insofar as large-scale demonstrations may induce policy changes, they would also be opposed by groups that prosper from current policies. In such cases, penalities, P, will be imposed on protesters by government. In the case above, a "protestor" penalty a bit greater than 1 is sufficient to discourage the formation of protests and would cause an assembled group to disintegrate. Given P>1, each person finds themselves better off shirking than protesting regardless of choices made by others.

Table 4

The Assurance Game for Popular Demonstrations

	Team Member B: Protest	Team Member B: Shirk
Protest (A)	2, 2	0,0
Shirk (A)	0, 0	1,1
Exit (A)	1.1	1.1

Organizational Solution for Popular Demonstrations Opposed by Government

	Team Member B: Protest	Team Member B: Shirk
Protest (A)	2+R - P, 2+R-P	R-P, 0
Shirk (A)	0, R-P	1, 1
Esit (A)	1.1	1.1

The cell entries are utilities, the rank order of subjective payoffs for the team members (A, B). In the “natural case” it assumed that both team members shirk, e.g. conduct their ordinary private lives.

Such punishment schemes may be overcome by organizers of the group if they can increase the rewards of participation above those threatened by government, R>P. But, this is by no means an easy task, and, moreover, formeteur efforts can be discouraged by imposing higher penalties on such "conspirators." Together these strategies tend to make organizated effective protests fairly rare. Only when the private rewards of particiption are very large (e.g. R > P), would participation in new protests be a sensible.

In cases in which the government retains the loyalty of those charged with imposing punishments, punishments, can easily be increased to discourage the formation of organizations in many high stake settings as well. The death penalty for "treason" can be very effective deterrent.

Such threats, of course, need not be lead to large numbers of casualties in practice. To the extent that the promised punishments are credible, no protests take place, and no punishments are necessary. In such cases, domestic pressures for reform can easily be diffused by strong governments, and the lack of protests may cause many to believe that support for the government is stronger than it actually is.

Organizing a Revolt

On the other hand, effective governance also suggests that revolts or revolutions may be necessary for those outside government to influence policy. However, the problems to overcome in organizing a revolution are much greater than those involved in organizing public demonstrations of support or opposition to institutional reform.

In a multiperson setting the resultant contest combines team production and assurance problems and is more difficult to solve than are assurance games alone. In this case, the activities themselves may require, insofar as free riders may share in the fruits of protest or revolt without risking the penalities imposed by government. Armies have long been more effective than mobs, which is of course why village and national defense is normally an organized activity rather than an unorganized activity left to spontaneously formed defensie mobs. Even when no standing army is involved, the volunteers turnout in organized practice complete with a chain of command, as in the colonial "minutemen."

Thus, to defeat an effective standing government that is able to credibly punish even fairly large groups, will require a subtantial revolutionary organization rather than a mass protest. Essential elements of this organiztional game can be illustrated as follows. To simplify a bit, assume that there are just two possible outcomes, the status quo ante and the outcome of a successful revolt. The difference between a person's netbenifits in the pre and post revolutionary state can be called their "stake" in the revolution. In principle an individual's revolutonary stake can be positive or negative according to whether he or she expects to be better or worse off if the revolution suceeds. Suppose that the probability of successful revolt increases with the number of active participants and suppose that the organization behind the revolt has solved its internal incentive problems. For purposes of illustration I adopt the probability function: $F = (m/n)^g$, where m is the membership of the revolutionary organization, n is the number of persons in the community at large, and g represents the governments ability to resist revolutionary pressures. This may be affected by a variety of resource considerations including the size and discipline of the government's military and law enforcement system, as well as the internal norms of the present govenment. In the case, in which the government imposes expected penalty P on members of the revolt and the revolutionary organization provides reward R for membership an individual's decision to join can be illustrated in Table 5.

Table 5: The Revolt Game for Constitutional or Policy Reform

	Number of Revolters					
strategies	0	1	2	m	m*	All
Join Revolt	P, P	$(1/n)^g S + R - P$	$(m/n)^g S + R - P$	$(m/n)^g S + R - P$	0	S + R
Do Not Join	0	0	0	0	0	0
Exit	E	E	E	E	E	E

The cell entries are expected utilities, S is the net benefit of successful revolt, R is the reward of participating in the revolution, and P is the expected penalty associated with participation. E is the net benefit of moving to another community. In a community with a stable populstion E<0.

For individuals with positive stakes in the revolt, their will be a membership size beyond which participating in the revolt increases expected utility, m*. If the organization is smaller than m* this individual will not join. If m> m* is larger, than he or she will join the revolt.

Even in this simple representation, the decision to join or not is affected by a number of considerations. If all persons have the same S>0, then the game resembles the assurance game above, in the sense that if all would join the result would be better than the status quo. In such cases either the socity revolts or it doesn't, and an effective government can easily manipulate *P* and *g* to assure the absence of revolutionary organizations.

On the other hand, in settings in which the stakes vary within the community, with many person preferring the status quo to the expected outcome of expected revolt. The setting becomes more complex for the government. It may be very difficult ot dissuade those with very high stakes from joining such groups, although individuals with moderate interests in revolt may be discouraged from joining such groups as in the first case. The smallest group that a person will join is $m^* = (n)[(P-R)/S]^{1/g}$, which falls with states and organizational rewards, but increases with population and expected penalties. Of course both potential formeteurs and potential members, may simply leave the community if exit options are relatively more attractive than those at home, E>0. In such cases, exit options reduce revolutionary threats. On the other hand, a government will be plagued by small revolutionary groups whenever some formeteurs in the community have high stakes and unatractive exit options.

A successful revolt will require relataively high stakes (high S), relatively high rewards (R), or a relatively weak government (low g). Thus in some extreme cases, as noted by Weingast (2006) when S rises to high levels, and large groups may turn out in an active revolt. A government that is perceived to be weak or failing will also tend to confront stronger revolutionary movements, which is why small groups often attempt assassinations and disruptions of ordinary law in order.. On the other hand, if the organization itself is not able to generate enough resources to be self sustaining, as noted by Ferraro (xxxx), even small revolutionary groups may disintigrate.

An effective government, however, as argued by Tullock (1974, 1987) will impose relatively large P on revolutionary participants without inducing fear among non-participants (which tends to increase S and E) or indicating that the group is relatively large (and thus, possibly, worth joining). Laws against treason should be aggressively enforced, rewards for providing the ruler(s) with creditable evidence of conspiracies should be high, commissions rather than individuals should be given responsibility for as much as possible, and potential rivals should be exiled in a manner that reduces opportunities for acquiring support among elite.

Nonetheless, the personal advantages that many conspirators realize from participating in the conspiriacy itself and those associated with its possible success make such organizations difficult to eliminate completely. This tends to be true of small groups operating within government whose prospects for success are good. A dictator's own organizational problems imply that a particular autocrat's "term of office" is likely to be ended by an internal overthrow or coup d'état, as insiders silently shift their support among competing organizations on the basis of their anticipated success (Tullock 1987, p. 9). Palace coups, consequently, occur on a fairly regular basis (Biennen and van de Walle (1989).

In general, such organizations are not likely to generate popular revolts because a reasonably well-informed autocrat can more easily subvert a task that requires a large organization than a small one. Relatively large groups tend to be easier to detect and punish. Moreover, the private advantages of participating in a popular uprising tend to be very small relative to those obtained by members of a palace coup, although the aggregate benefits may be much larger. Together these imply that autocratic governmental institutions are more easily protected than is the tenure of a particular king or dictator.[51]

Moreover, it is clear that even a successful revolt is unlikely to succeed in establising a democratic reform. Formeteurs, as noted above, often retain control of their organizations, and formeteurs in most cases are indidivuals or small groups rather than broad groups. Thus, government of the new organization that replaces an existing government after a successful revolt will tend to be autocratic or oligarchic rather than democratic.[52]

[51] Preventing overthrow by the common people is, in general, quite easy if the ruler is only willing to repress vigorously and to offer large rewards for information about conspiracies against him. (Gordon Tullock, *Autocracy*, p.68.)

[52] It bears noting that George Washington was not a formetuer, but rather the agent of a council of colonial leaders, most of whom were elected representatives in colonial legislatures. Their role in the revolutionary group was, thus, unusual and reflected both representative interests (they had to remain in elected office to plan a significant role and thus realize relative high Rs in terms of ego-rents). Their institutional interests demanded continuation and empowerment of their colonial legislatures, which were long standing rather than revolutionary institutions.