The Self-interested Rationale for Franchise Expansion

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Abstract

A new rationale is presented for why an elite may wish to expand the franchise even in the absence of serious threats to the established order. Expanding the franchise can turn politicians away from particularistic politics based on ad-personam redistribution within the elite, and foster competition based on provision of public programs with diffuse benefits. Under some circumstances, this shift in mode of political competition more than compensates the elite for the dilution of their influence.

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1 Introduction

Democracies with universal voting rights are a relatively recent phenomenon. Prior to the First World War, most democratic countries did not allow women and young persons to vote, and some restricted the voting rights of minorities. These same countries now allow all citizens above the age of 18 to vote. This raises a series of questions: What forces caused the franchise expansion? Do the previously dominant groups necessarily lose out from the expansion? What are the consequences of this expansion for efficiency and for the composition of public spending? In this paper we offer a stylized model of franchise expansion which differs in some economically interesting ways from the existing models, and fits better some instances of franchise expansion that are hard to rationalize using existing economic models.

In the US, women gained suffrage only in 1920,[1] and the abolition of Jim Crow laws in the South dates as recently as the 1960s. Before the 20th century, the franchise is progressively expanded throughout the world, typically by lowering the wealth threshold required to vote, by lowering the voting age, abandoning religious restrictions ..... This progressive enlargement of the franchise is common to the historical development of most political systems. With each enlargement, the makeup of the electorate changes as "stakeholders" become "shareholders." Each enlargement induces political actors to adjust their positions to the new environment. Given the importance of the phenomenon of expansion, it is interesting to understand the incentives for the elite to expand the franchise and whether an enlargement of the franchise can be expected to increase efficiency.

Voluntary expansions of the franchise are puzzling for several reasons. First, much of the political game is about redistribution of resources, and extending the franchise implies that a given pie must be cut into more slices. From the point of view of the

[1] This is the date in which the 19th amendment was ratified and women gained the vote in all states and at the federal level. As will be discussed below, some states granted women the right to vote as early as 1873.

elite this seems to be a bad proposition. More broadly, enlarging the franchise dilutes the elite's power to influence policy. This is a drawback for the elite. So, whenever the process of enlargement is sanctioned by the enfranchised elite, something has to be explained.

The question of franchise expansion has been studied by historians, political scientists, and more recently economists. The literature has put forward some explanations for voluntary expansion. The leading explanation is one of expansion under threat: the disenfranchised group gains enlargement by effectively threatening the social order and hence the position of the enfranchised group (Acemoglu and Robinson (2000), Conley and Temini (2001)). This explanation may fit some historical instances in which the franchise was expanded to pre-empt social upheaval. In many cases, however, the expansion was implemented in the absence of any serious threat to the established order. This is the case of the expansion of the suffrage to women, to minors, and small expansions due to the lowering of the census barrier. In these cases, the elite did not object to the enlargement and in some cases did directly support it. Of course, sociological explanations have been proposed that can account for this apparently puzzling phenomenon. These explanations invoke a change in the acceptable norms of behavior of the elite, and are comprehensively reviewed by Acemoglu and Robinson (2000). While a change in moral norms can certainly account for this phenomenon, at least in the sense of proximate cause, it is interesting to see if we are able to account for this phenomenon purely on the basis of standard wealth-maximizing model of behavior. If we are able to credibly justify expansion of the franchise in such an "amoral" model, then we have a competing explanation. This can be evaluated vis-a'-vis the "moral" explanations to see how much they contribute as a "prime" cause and how much as a "proximate" cause. In this paper we address voluntary expansions, and offer a rationale for why the elite may welcome an expansion of the franchise.

Our explanation is based on the incentive for politicians to engage in redistributive politics within the elite. We posit that politicians who compete for election have a

limited amount of power to make electoral promises. They can use this power to promise ad-hominem benefits or, alternatively, use the power of government to provide programs with diffuse benefits. Politicians, who compete for specific subset of voters in the elite, find redistributive policies more expedient, all other things being equal, than policies whose diffuse benefits cannot be directed to swing voters. Thus, competition for votes induces politicians to rely excessively on instruments of tactical redistribution. This distortion induces an an inefficient over-reliance on redistributive policies. In this setup, voters (the elite) may wish to compel politicians to employ the power of office towards the provision of policies with diffuse benefits. One way to achieve this effect is to enlarge the franchise. Increasing the number of voters reduces the fraction of the electorate that can be wooed with ad-hominem promises. By comparison, policies with diffuse benefits become more attractive to politicians, who are induced to increase their offer. This effect pushes the political outcome in the direction preferred by the elite. A secondary effect, of course, is that when the franchise is expanded, the elite loses out in the allocation of redistributional policies, as more of them are trained towards the enfranchised population. We show that this second effect can under certain conditions, be dominated by the first one. Thus, the presence of new voters can have a positive externality on an elite due to a shift in the instruments of political competition.

There is some evidence that accords with this account. Under our rationale, a voluntary expansion of the franchise coincides with a shift in the mode of competition, from ad-personam redistribution towards policies with wide popular appeal. Such a shift has been documented by Cox (1987) for 19th century England, in which progressive expansions of the franchise coincided with a shift away from personal politics towards voting on broad programs proposed by national parties. Similarly, Lott and Kenny (1999) offer evidence that the introduction in the US of womens' suffrage in the early 1900's is correlated with a marked increase in government provision of programs with diffuse benefits. Finally, Kenny (2001) shows that the introduction of women's suffrage came earlier in states with a smaller percentage of women. This is consistent

with the notion that extending the franchise has a cost for the elite because the extension induces politicians to divert resources away from the elite towards the newly enfranchised group. When that group is too large, in our model the cost to the elite exceeds the benefits of expansion.

There are ulterior reasons to be interested in franchise expansion, beyond an interest in that phenomenon *per se*. Understanding the effects of expanding the franchise can shed light on a number of related questions such as voters participation, as well as questions of progressive democratization of a political system (this is the notion that a system is more democratic the wider the electorate). Our analysis attempts to contribute in this dimension.

2 Model

There are two candidates who have no preferences over policies. To start with we assume that candidates maximize the share of the vote.

There are two goods: money and a public good. There is a set of citizens C of measure 1. A generic citizen is denoted by c Each citizen is endowed with one unit of money. To begin with, assume that producing the public good takes all the resources in the economy.[2] Citizens have linear utility over money. A citizen's value for the public good is $G + u$, where G is a number common to all voters and u represent citizen c's idiosyncratic taste. The u's are distributed across the population according to a distribution H which is symmetric around zero. We assume that H is strictly increasing and has support $[\underline{u}, \overline{u}] \subset [-1, 1]$.

There are two kinds of citizens: the elite and the "oppressed". The elite citizens are in set E which is a subset of measure η of the set of citizens C. We compare the case in which only citizens in the elite have the right to vote with the case in which all citizens can vote.

[2] We will relax this assumption in Section **??**.

To begin the analysis, we assume that the distribution of preferences for the public good is the same within the elite as among the oppressed voters.

Candidates can either offer transfers or the public good. Denote by $\phi_i : C \to \Re$ the function that describes the offer of transfers to citizens by candidate i. If $\phi(c) < 0$, citizen c is offered a tax. This function must satisfy a resource constraint $\int_C \phi(c)dc = 0$.

The electoral game is sequential.[3] A simultaneous version of the game is analyzed in Section 6.

Stage 1 Candidate 1 moves first and chooses whether to offer transfers or the public good.

Stage 2 Candidate 2 moves second, observes the offer that candidate 1 makes to each voter and then chooses whether to offer money or the public good.

Stage 3 Each citizen observes the offer made by each candidate and citizens in the elite vote.

To begin with we assume that the policy offered by the candidate with a majority of the votes (of the enfranchised) gets implemented. We consider alternative ways to implement policy in Section 6.

3 The Simple Logic of Franchise Expansion: An Example

We now discuss a simple version of the model where the public good delivers the same utility G to all citizens (in the model, this corresponds to the case where the distribution H is degenerate). We show that there are values of G such that all citizens in the elite wish to expand the franchise.

The strategy of candidate 1 is easily established. Offering transfers gives candidate 1 no votes. Indeed, candidate 2 can obtain arbitrarily close to 100% of the votes by

[3]The sequential aspect of our game is related to the lobbying model of Groseclose and Snyder (1996).

offering ϵ more than his opponent to almost all voters and zero to the remaining voters. Thus, candidate 1 strictly prefers to offer the public good whenever the public good guarantees a positive vote share.

Now consider candidate 2's strategy. Offering the public good leads to a vote share of 50 percent since it leads to a tie with candidate 1. The alternative strategy, offering transfers, entails expropriating all citizens outside the elite plus a minority within the elite, and redistributing these resources to a subset of the elite. This strategy is profitable if more than 50 percent of the elite can be bought off, i.e., can be offered slightly more than G. Since the total amount to be redistributed equals 1, $\eta/2$ or more voters can be bought off if and only if $G < 2/\eta$.

In sum, if $G < 2/\eta$ the public good is not provided. Suppose also that $G > 1/\eta$, so that, in equilibrium, money is not sufficient to buy off all voters in the elite. In this case, a "lucky" majority of the elite receives utility of approximately G, and the remaining "unlucky" members of the elite receive zero. In these circumstances not only will the unlucky members of the elite prefer to receive the public good; even lucky members of the elite are arbitrarily close to preferring a political system in which the public good is provided. Indeed, any arbitrarily small loss of utility for the "lucky" members of the elite, which could derive from an arbitrarily small probability of switching places with an unlucky member or from some small amount of disutility from the presence of less fortunate members of society, would lead the lucky members to strictly prefer the public good to be provided.

Providing the public good is exactly what expanding the franchise achieves. If $G > 2$, it is a unique equilibrium for both candidates to provide the public good when all citizens vote (no candidate can deviate and obtain a vote share above 50 percent).

We have shown that, when $max\{1/\eta, 2\} < G < 2/\eta$, some members of the elite receive nothing unless the franchise is expanded, and so strictly prefer for politicians to compete under a universal franchise. The remaining members of the elite are indifferent between the two franchise scenarios, and so are not against expansion.

The reason why the elite can benefit from franchise expansion is that politicians do not behave efficiently from the point of view of the elite. When only the elite is enfranchised, politicians have an incentive to resort to redistributive policies even in circumstances in which the elite prefers other means of competition (the public good). As the franchise is expanded, the strategic value to politicians of redistributive policies declines–bringing the politicians' incentives more in line with the elite's.

4 Equilibrium of the Electoral Game.

In this section we analyze the game in which a fraction η of the electorate is enfranchised. A special case is $\eta = 1$, which corresponds to universal suffrage.

4.1 $G < 1/\eta$: The Public Good is Not Promised By Any Candidate

When $G < 1/\eta$, it is intuitive that politicians prefer offering transfers to offering the public good, since for the elite the total amount of money available to redistribute exceeds the aggregate benefits of the public good and furthermore transfers can be targeted if the politician finds it expedient. There is, however, a potential concern with multiplicity of equilibria. The multiplicity arises because when $G < 1/\eta$ our simple game gives the first mover (candidate 1) zero payoff independent of his strategy, and thus candidate 1 is indifferent among all his actions. In this section we present an equilibrium-selection argument that picks one equilibrium.

We show that all equilibria of a nearby "perturbed game" converge to the equilibrium of the original game in which all voters are treated equally. The perturbation consists of introducing a small probability for candidate 1 of receving a nonzero vote share.

We now introduce the perturbed game. For simplicity, in this section only we fix $\eta = 1$ (it is obvious how to extend the argument and the equilibrium to the case $\eta < 1$).

The perturbed game Candidate 1 makes offers from a budget of one dollar per voter; candidate 2 has a budget of B which can take values on $[1-\epsilon, 1+\epsilon]$.[4]

The important feature of this perturbed game is that candidate 2 might have a smaller budget than candidate 1. This feature can be interpreted as candidate 2's competence in raising money, or voters' different perception of transfers offered by the two candidates. Let us show that in any equilibrium of the perturbed game, candidate 1 offers a transfer of 1 to each voter. The idea behind this result is related to the analysis in Groseclose and Snyder (1996).

Theorem 1 *For any $\varepsilon > 0$ at the equilibrium of the perturbed game candidate 1 offers the same amount to all voters. As ε converges to zero, the amount promised to almost all voters by candidate 2 converges to that same amount.*

Proof: First, note that the only relevant event for candidate 1's choice of action is the one in which $B < 1$ (when candidate 2 has a budget $B \geq 1$ candidate 1's choice has no effect on his own vote share as candidate 2 gets 100%). In this event, if candidate 1 offers 1 to all voters he obtains a vote share equal to $1 - B$. We want to show that, if candidate 1 chooses any other strategy he obtains a lower vote share.

Suppose that candidate 1 offers transfers according to the strategy ϕ_1. Candidate 2's best response is to match the transfer offered by candidate 1 to as many voters as possible. The cheapest way to do this is to target those voters who have been promised less by candidate 1. Order the set of voters on $[0, 1]$ according to the inverse of the amount they receive from candidate 1 and let v denote a voter's index. Candidate 2's best response is to exhaust his budget by offering $\phi_1(v)$ (indifferent voters must vote for candidate 2 in any subgame perfect equilibrium) to voter v, where $v \in [0, x]$. The threshold x denotes the highest-indexed voter to receive positive transfers from

[4] In the proof we assume that B is known to candidate 1. However, the argument can be adapted to cover the case in which B is not observed by candidate 1.

candidate 2:

$$\int_0^x \phi_1(v) = B.$$

Candidate 2's best response yields him a vote share of x, so candidate 1 obtains $1-x$. Suppose, by contradiction, that candidate 1 offers a positive measure of voters an amount different from 1. Then, a positive fraction of voters must receive offers of more than 1 from candidate 1. These voters must belong to the interval $(x,1]$. Now observe that in equilibrium we must have $\phi_1(x) = \phi_1(1)$. Indeed, if $\phi_1(x) < \phi_1(1)$ candidate 1 could reduce uniformly the offers of some voters on $(x, 1]$ and increase the offer to voters on $[0, x]$, thereby forcing candidate 2 to exhaust his budget before reaching voter x and increasing his own vote share. Denote by $T \geq 1$ the amount received by all voters on $(x, 1]$. Since $\int_0^x \phi_1(v) = B$, both candidates spend B on voters in $[0, x]$. By candidate 1's budget constraint, we obtain that $1 - B = T(1 - x)$, or

$$(1 - x) = (1 - B)/T.$$

Thus, candidate 1's vote share equals $(1 - B)/T$ which is decreasing in T. Candidate 1's vote share is maximized by choosing $T = 1$. i.e., offering the same to all voters. ∎

4.2 $G > 1/\eta$: The Public Good is Promised By Some Candidate

In this section we consider those parameter values for which candidate 1 offers the public good. When $G > 1/\eta$ candidate 1 is guaranteed a positive vote share if he promises the public good. If he promises transfers he gets no votes. He will therefore offer the public good.

What is interesting from the viewpoint of public good provision, however, is the strategy of candidate 2. Candidate 2 ties if he promises the public good. If G is not too large, candidate 2 can do better by promising transfers to appropriately chosen voters.

Theorem 2 *There is a critical value $\overline{G}(\eta) > 2/\eta$ with the following property. If $1/\eta < G < \overline{G}(\eta)$, candidate 1 offers the public good, candidate 2 offers transfers and obtains a majority of the votes; in this case the public good is not provided and all voters receive utility smaller than or equal to their value for the public good. If $G \geq \overline{G}(\eta)$, both candidates offer the public good.*

Proof: As mentioned above, when $G > 1/\eta$, candidate 1 offers the public good. Candidate 2 obtains 1/2 of the voters if he offers the public good. If he offers transfers, he can obtain the vote of any voter to whom he offers a transfer of $G + u$. The cheapest votes to buy are those of voters with the lowest u. Thus, if he offers transfers, candidate 2 orders voters according to the distribution H and offers transfers of $G+u$ to all voters such that u is lower than some x. Candidate 2's share of the vote by offering transfers is $H(x)$, where x is identified by the budget constraint $\int_{\underline{u}}^{x}(G+u)dH(u) = 1/\eta$. Candidate 2 will offer transfers as long as G is such that $H(x) > 1/2$. When x equals zero, $H(x) = 1/2$ and candidate 2's best response switches from redistribution to public good. The threshold $\overline{G}(\eta)$ is the value of G at which $x = 0$. Formally, $\overline{G}(\eta)$ solves

$$\int_{\underline{u}}^{0}(\overline{G}(\eta) + u)dH(u) = 1/\eta. \tag{1}$$

Since H is symmetric around zero, $\overline{G}(\eta) > 2/\eta$. When $1/\eta < G < \overline{G}(\eta)$ candidate 1 offers the public good, candidate 2's best response is to offer transfers, and candidate 2's platform gets implemented.

When $G > \overline{G}(\eta)$, candidate 2 obtains 1/2 of the votes by offering the public good and less than 1/2 by offering transfers. Thus, he will offer the public good and the public good is implemented with probability one in equilibrium. ∎

5 Voting on Expanding the Franchise

We assume that the expansion of the franchise is put to a referendum There are alternative ways to model the political process. A referendum has the virtue of being

particularly simple. In this section we assume that the only alternative is to expand the franchise completely or not at all.

This vote takes place in period one. In period two there is an election which unfolds as in Section 4. If the outcome of the referendum is positive, then the election takes place with all the citizens voting. If the outcome of the referendum is negative, then only people in the elite vote.

The key force that leads to an expansion of the franchise is apparent from our analysis in Theorem 2. When $1/\eta < G < \overline{G}(\eta)$, the public good is not provided, a fraction of the members of the elite receives no transfers, and the remaining members of the elite receive transfers equal to their value for the public good. This means that, if the members of the elite could reform the political process so as to induce provision of the public good, they would all be weakly better off, with some voters being strictly better off. Expansion of the franchise is exactly what it takes to lead candidates to offer the public good more often.

In order to get rid of tie breaking assumptions in the voting, we assume that, at the time of the referendum, each member of the elite observes his value of u with some noise, namely, they are not completely sure about their future preferences for the public good. This noise can be arbitrarily small. Such an assumption makes sense when thinking about voting on an issue which will affect policies throughout several future elections.

Theorem 3 *If* $G < \max\left\{1/\eta, \overline{G}(1)\right\}$*, the referendum fails and the franchise is not expanded. If* $\max\left\{1/\eta, \overline{G}(1)\right\} < G < \overline{G}(\eta)$ *then members of the elite unanimously vote to expand the franchise. If* $G > \overline{G}(\eta)$*, all voters are indifferent as to the expansion of the franchise.*

Proof: Note first that $\overline{G}(1) < \overline{G}(\eta)$ for any $\eta < 1$.

Suppose that $G < 1/\eta$. If the franchise is not expanded, from our discussion in Section 4.1, we know that the equilibrium involves neither candidate offering the public good. From Theorem 1, we can look at the equilibrium of the redistributive game in

which all voters get the same amount. Thus, if the franchise is not expanded, each voter expects to receive $1/\eta$. Suppose now that the franchise is expanded. There are three cases: (i) If $G > \overline{G}(1)$, the public good is provided in equilibrium, and each citizen receives $G + u$. In this case, since $G < 1/\eta$, a majority of the voters receives utility lower than $1/\eta$. Thus, a majority of the members of the elite is worse off if the franchise is expanded and votes against expansion in the referendum. (ii) If $1 < G < \overline{G}(1)$, by Theorem 2 all voters receive transfers lower than or equal to their value for the public good. Since $G < 1/\eta$, a majority of the members of the elite is better off with a small franchise. (iii) If $G < 1$, neither candidate offers the public good, and by the same logic as in Theorem 1, we can look at the equilibrium of the redistributive game in which all voters get the same amount. Thus, all voters get 1. This implies that all members of the elite are worse off in the case of expansion and they unanimously reject the referendum.

Suppose now that $1/\eta < G < \overline{G}(1)$. In this case, the outcome of the game if the franchise is expanded is very similar to the outcome if the franchise is not expanded: the first candidate offers the public, the second offers transfers, and transfers are implemented. The crucial distinction between the two scenarios is that, if the franchise is expanded, the fraction of voters who receive transfers is smaller since there are more voters, and the amount of money is the same. Thus, there is a fraction of voters (those with low u) who receive transfers and receives the same utility in the two scenarios. There is a fraction of voters (those with intermediate u) who receive transfers of $G+u$ if the franchise is not expanded, but receive no transfers if the franchise is not expanded. Finally, there is a fraction of voters (those with high u) who receive no transfers in either scenario. If citizens could observe their u perfectly, then there would be a set of members of the elite who is indifferent about the outcome of the referendum and a set of voters who is strictly better off if the referendum fails. Under our assumption that voters observe u with some noise, all voters are worse off if the franchise is expanded.

Thus, we have shown that in all cases in which $G < \max\left\{1/\eta, \overline{G}(1)\right\}$, the referen-

dum fails.

Suppose now that $\max\left\{1/\eta, \overline{G}(1)\right\} < G < \overline{G}(\eta)$. If the franchise fails the public good is not provided whereas if the franchise is expanded, the public good is provided. By Theorem 2, when the franchise is not expanded, in equilibrium all voters receive a utility smaller than or equal than their value of the public good, and those who do not receive transfers receive a strictly smaller utility. Since voter observe u with some noise at the time of the referendum, there is a chance that they will not receive transfers if the franchise is not expanded. Therefore, they are all better off if the public good is provided and they unanimously support the referendum.

If $G > \overline{G}(\eta)$ the outcome of the election is the same regardless of the outcome of the referendum. Thus voters are indifferent about the outcome of the referendum. ∎

There are several interesting features of this result.

The first feature is that there are circumstances in which the elite strictly prefers to maintain a small franchise. If $G < 1/\eta$, the equilibrium involves no public good provision, and this is an efficient outcome from the point of view of the elite. Thus, members of the elite will oppose an expansion of the franchise. Such an expansion would lead to inferior outcomes from the point of view of the elite. since an expansion would lead to an undesired public good provision, or a redistribution of resources to citizens outside the elite. Note that this shows that the existence of the public good is essential for the franchise to be voluntarily expanded. If there were only one mode of political competition, namely redistributive politics, the franchise would not be expanded voluntarily.

An interesting extension of Theorem 3 is to consider circumstances in which the referendum can specify partial expansions of the franchise and also criteria for belonging to the new elite. Historically there are several cases where franchise expansion has been only partial. For instance, in England, male suffrage was expanded in three major reforms that took place over fifty years in the 19th century, starting with the reform of 1832. Also, in most countries, female suffrage came after universal male suffrage. A

possible explanation for this gradual expansion is the following. Suppose that the value of the public good today is large enough that voters would like to expand the franchise. However, in the future, the value of the public good may drop. In this case, the voters may prefer to expand the franchise just enough to guarantee provision of the public good today. This limits the set of people who will fight over transfers tomorrow if the value of the public good is indeed small. This possibility also leads to the potential for voters to worry about subsequent expansions of the franchise.

6 Extensions

6.1 Candidate Objectives and Policy Implementation

In our analysis of Section 4 we have assumed that candidates maximize the vote share. However, our analysis can accommodate more general objectives for candidates. In the game presented in Section 2, it is easy to see that the equilibrium is the same as long as candidates maximize any strictly increasing function of their vote share. Furthermore, the same result holds if candidates maximize the probability of winning (winner-take-all system) as long as, when two strategies lead to the same probability of winning, candidates choose the strategy that leads to the higher vote share.

The model we have presented also assumes that the candidate with the larger vote share gets to implement his announced policy. However, in reality, and especially in proportional systems, minority parties may have an influence on policy, and the final outcome might depend in a complicated way on the outcome of some post-election bargaining game. We now discuss an alternative way to model post-election policy compromise. Consider a more general model where the policy proposed by candidate i is implemented with probability $\pi_i(s_i)$, where s_i is the vote share obtained by candidate i. Assume that $\pi_i(s_i)$ is increasing and that $\pi(1/2) = 1/2$. The function π may be thought of as a reduced form of a post-electoral bargaining game between the two parties.

The equilibrium policy proposals in the electoral game remain those obtained in Theorem 2. The reason is the following: voters' incentives remain the same because each voter wants to increase the vote share of the candidate who proposes a preferred policy. Thus, voters' behavior following a pair of proposals by the two candidates is unchanged relative to the analysis of Theorem 4. This implies that candidates' incentives remain unchanged as well. Of course, the implemented policies are now different. In particular, when $1/\eta < G < \overline{G}(\eta)$, there is now a positive probability that the public good offered by candidate 1 gets implemented. Furthermore, since candidate 1's vote share in equilibrium is increasing in the value of G (for this range of Gs), the probability that candidate 1's platform gets implemented is increasing in the value of G as well.

This implies that the description of the outcome of the referendum on the expansion of the franchise in result in Theorem 3 must be amended. However, the only difference is that now there is a possibility that voters will want to expand the franchise even when $G < \overline{G}(1)$ since expanding the franchise will increase the probability of provision of the public good. The specific parameters will depend on the form of the function π.

6.2 Simultaneous Game

Assume now that candidates move simultaneously. Assume also that that there is only one type of public good ($u = 0$). Everything else is the same as in Section 2.

Lizzeri and Persico (2001) solved the equilibrium of the model for the case where the entire population can vote ($\eta = 1$). They showed that For $G < 1$ the public good is not provided. For $G > 2$ the public good is provided for sure. For $1 < G < 2$, there is no equilibrium in pure strategies. However, there is an equilibrium in mixed strategies where the public good is provided with probability $G - 1$. Furthermore, in the equilibrium, if candidates offer transfers, all voters receive the same amount ($1) in expectation.

We now discuss the case where $\eta < 1$. From the viewpoint of the candidates, this

game is strategically equivalent to a game where all voters are endowed with \$1 and where the public good has monetary value ηG (renormalize the unit of account). Thus, the probability that the public good is provided is $\eta G - 1$ for $1 \leq \eta G \leq 2$, and when transfers are offered, all members of the elite receive $1/\eta$ in expected value. Thus, the voter's expected utility in this game is

$$[\eta G - 1] \cdot G + [1 - (\eta G - 1)] \cdot \frac{1}{\eta}.$$

Whenever this expression is increasing in the size of the franchise η, all voters in E will be unanimous in their preference for expanding the franchise. The derivative with respect to η reads

$$G^2 - \frac{2}{\eta^2}.$$

When this expression is greater than zero, that is, when $\eta G > \sqrt{2}$, all voters would vote for expanding the franchise (when $\eta G > 2$ then voters are indifferent). In contrast, when $\eta G < \sqrt{2}$ the members of E do not gain from expanding the franchise.

Thus, the qualitative features of our analysis in the sequential game are preserved in the case where candidate move simultaneously.

7 Conclusions

We have presented a model in which, under some circumstances, the elite unanimously wishes to expand the franchise. In the model: (a) the pool of voters (enfranchised and not) is identical; (b) voters compete for scarce resources; (c) the disenfranchised citizens uniformly benefit (get richer) from the expansion (d) members of the elite unanimously prefer to expand the franchise (because they too get richer); (e) there is no threat of punishment in the model.

The fact that voters compete for scarce resources introduces a cost for the elite of expanding the franchise that is proportional to the scope of the expansion. In our model, voluntary expansions of the franchise are less likely when the size of the elite

is small relative to the size of the newly enfranchised population. The fact that the cost of expansion is smaller when the newly enfranchised are few is consistent with Kenny (2001), who documents that women gained the right to vote earlier in those states where they constituted a smaller fraction of the population.More generally, we could view this aspect of the result as suggestive of the fact that democratization via non-violent means (referendum, or constitutional reform) is particularly difficult when the country is governed by a small oligarchy. In these cases, revolutions are more likely to be successful at achieving an expansion of the franchise. In contrast, if the size of the elite is already quite large, then peaceful expansions are much more likely.

In our model, the presence of competition for resources between the elite and the disenfranchised has a surprising effect. We now argue that the presence of competition is exactly what makes it worthwhile for the elite to expand the franchise. To this end, consider as a thought experiment a model in which politicians cannot expropriate the disenfranchised and transfer their resources to the elite. In such a model the strategic value of redistribution need not, as is the case in our model, diminish as the franchise is expanded; franchise expansion just "scales up" the game of electoral competition that was previously focused on the elite. Thus, enlarging the franchise need not result in a changed mode of political competition, and the incentives for the elite to expand the franchise would be absent.

The thought experiment reveals that competition with the disenfranchised is precisely what creates the incentive for the elite to expand the franchise. This observation should be surprising, especially when contrasted with the implications of a model of pure redistribution. In a model where there is no public good, the fact that the elite competes with the disenfranchised and expropriates them is reason for the elite to resist expansion.

8 References

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