

Democratization as a cost-saving device

Luis Angeles*

November 17, 2008

Abstract

We propose a theoretical analysis of democratization processes in which an elite extends the franchise to the poor when threatened with a revolution. The poor could govern without changing the political system by maintaining a continuous revolutionary threat on the elite. Revolutionary threats, however, are costly to the poor and democracy is a superior system in which political agreement is reached through costless voting. This provides a rationale for democratic transitions that has not been discussed in the literature.

1 Introduction

The theoretical analysis of democratization processes has made major advances over the last decade; most notably with the highly influential work of Daron Acemoglu and James A. Robinson¹. Our paper contributes to this literature by presenting a model of democratization closest in spirit to Acemoglu and Robinson (2006) but where revolutionary threats are costly for the poor and the cost of a revolution is not random. We argue that the changes make the model more realistic and, more important, reveal a rationale for democratization that

*Department of Economics, University of Glasgow. Adam Smith Building, Glasgow G12 8RT, UK. Email: l.angeles@lss.gla.ac.uk. I thank seminar participants at the University of Manchester for helpful comments. All remaining errors are of course mine.

¹Seminal papers are Acemoglu and Robinson (2000, 2001) and their book-length treatment of the subject in Acemoglu and Robinson (2006). In this paper, our main point of reference will be Acemoglu and Robinson (2006) and assertions about these authors' theory should be understood as referring to this work. Most of what we say, however, would also apply to the models in Acemoglu and Robinson (2000, 2001). The related literature is extensive; on the particular topic of democratization processes we can mention Lizzeri and Persico (2004), Jack and Lagunoff (2006a, 2006b), Fleck and Hansen (2006), Cervellati et al. (2008), Acemoglu and Robinson (2008) and Acemoglu (2008).

has not been discussed in the literature. In our model countries democratize to reduce the costs of reaching agreements over public policy.

Acemoglu and Robinson study democratization processes in a game-theoretic framework where two groups of agents, the elite and the poor, strategically interact in order to decide the public policies of the country. Two features are most salient in Acemoglu and Robinson's theory of democratization: (i) the role of revolutionary threats, and (ii) the importance of commitment problems over future public policies. In a nutshell, revolutionary threats force the elite to implement changes in the initial order of society and the impossibility to commit to future public policies implies that the only change that will convince the poor of not carrying a revolution is democratization.

In order to produce the above result, Acemoglu and Robinson resort to two rather particular assumptions. First, they assume that threatening with a revolution (without actually carrying one) entails no costs. Second, carrying a revolution is costly to the poor but this cost is assumed to fluctuate randomly from period to period. Let us describe how these two assumptions are used in Acemoglu and Robinson's framework before discussing their plausibility.

The poor can threaten with a revolution in any period but that does not mean that their threat will be credible. A revolution entails important costs for the poor, so their revolutionary threat will be credible only if the gains from carrying a revolution outstrip the costs. The elite will make concessions to the poor only if the revolutionary threat is credible; that is, only if the cost of a revolution is relatively low.

Imagine that the cost of a revolution is constant and relatively low. In that case there would be no need for democracy in the model of Acemoglu and Robinson. On every period the poor would threaten with carrying a revolution if their preferred policy is not implemented, their threat would be credible and the elite would yield to their demands. The elite could commit to follow the poor's preferred policy in all future periods and the commitment would be credible.

Consider now that the cost of a revolution varies randomly over time and, as a consequence, the threat of a revolution is credible only in some periods. In that case, a commitment from the elite to follow the poor's optimal policy would not be credible: as soon as the threat of revolution subsides the elite

would retract their promise. As a consequence, a commitment to follow the poor's optimal policy in the future would not be enough to pacify the poor in the periods where a revolutionary threat *is* credible. In such periods the only option left to the elite in order to avoid a revolution would be to democratize. A democracy is assumed to shift political power from the elite to the median voter permanently. Since the median voter belongs to the poor, a democracy would ensure that the poor's preferred policy is adopted in all subsequent periods.

The mechanism just exposed is certainly ingenious, but are the premises on which it is based credible? Let us start with the assumption that revolutionary threats are costless to the poor. In order to threaten with a revolution the poor must organize marches, enforce strikes, block roads and resort to a whole range of actions destined to show their power. None of these activities come cheap; besides the direct costs they entail, the poor suffer from an absence of labor income while performing them. The costs of a revolutionary threat are smaller than those of a revolution but we believe that they are not negligible and can play a significant role in justifying a democratic transition.

The second assumption highlighted above is the randomness of the cost of carrying a revolution. Acemoglu and Robinson justify this assumption by pointing out that the cost of a revolution depends on the organizational level of the poor (or what they call the poor's "de facto power") and that this last one fluctuates over time. Thus, the poor may be well organized today and pose a credible revolutionary threat but they may become disorganized tomorrow and their cost of carrying a revolution would be so high that threatening with one would not be credible.

We regard this hypothesis as unconvincing and lacking historical support. It is certainly true that the organizational level of the poor evolved throughout history; middle-age peasants were probably less likely to challenge the country's elite than their urbanite nineteen-century descendants. But that is not the same as saying that the poor's organizational level fluctuates up and down randomly over time. To a first approximation, Europe since the mid-nineteen century could be characterized by a progressively increasing level of organization of the working classes through the development of left wing parties and labor unions².

²For instance, the average vote to European left-wing parties increased persistently from 4.7% in the early 1880s to 33% in the 1940s and stayed at that level until the 1980s (Bartolini 2000, table 2.2).

It is probably fair to say that it was these groups' *solid position* in the political landscape rather than any hypothetical fluctuations in their future power which convinced the elites of the need to extend the franchise. Short-term fluctuations should not obscure the overall picture of an increasingly organized European working class since, say, the Communist Manifesto.

This may be true even in the developing world, where early victories by populist movements have often been followed by backlashes from the elite and the military. The poor's parties and movements usually remained alive through these periods only to re-emerge, often stronger, once the conditions allowed. Society was moving towards increasingly organized working classes, despite some fluctuations around the trend.

An example of this pattern is provided by Argentina. The first fully democratic elections in Argentina took place in 1916, four years after the promulgation of the Saenz Peña Law which established universal, secret and compulsory suffrage for all male citizens over the age of eighteen (Gallo 1986). The election of 1916 saw the victory of the Radical Civic Union, an opposition party whose support came mainly from outside the elite and was responsible for much of the social protest that led to the extension of the franchise. The Radical party dominated elections until 1930, when a military coup gave power back to the elite. Did this imply a loss of the electoral rights obtained and a disorganization of the lower classes? Hardly so; the Saenz Peña Law was not repelled and elections were held in 1931 and 1937 with participation rates *higher* than previously³. The Radical party did not recover the presidency due to fraud or proscription but "remained the largest of Argentina's political movements" (Rock 1991, p.16) and as such influenced political outcomes. The shift in the balance of power away from the elite and towards the rest of society was not a temporary phenomenon; it was a permanent change that was to lead to the dominance of Argentine politics by Juan Domingo Peron starting in 1946.

Acemoglu and Robinson (2006, p. 136-142) discuss three historical episodes which they use to illustrate how the temporary nature of the poor's de facto power implies that the elite's promises suffer from time inconsistency. These episodes are the English Peasants' Revolt of 1381, the Comuneros Rebellion

³The elections of 1916, 1922 and 1928 had participation rates of 8.8, 8.8 and 12.9 percent respectively. Those of 1931 and 1937 had participation rates of 11.1 and 14.2 percent respectively (Vanhanen 2000).

of 1781 and the Russian Revolution of 1905. None of these episodes is actually related to the democratization processes of England, Colombia or Russia; which took place one to several centuries afterwards. Moreover, we would argue that in none of them did the elite actually implement any policy concession even in the short term, so talk of time inconsistency - where promises are kept during some time before being set aside - seems misplaced. In our view, these three episodes (but most particularly the first two) actually refer to cases where the poor did not hold "de facto power", or at any rate not enough of it, and nevertheless decided to confront the elite. The elite was caught by surprise and made some bogus promises in order to gain time and organize itself, but the promises were never intended to be put in practice. The three episodes were won by the elite, they are not good examples of how the poor can impose their policies during a certain period.

Besides the two assumptions discussed above, Acemoglu and Robinson's theory is also questionable for some of its results. As the authors admit, democracy arises precisely because the poor's de facto power is only temporary. A society where the poor have a permanent hold on de facto power would not become democratic in their framework, something that we cannot help but find disturbing.

Another surprising aspect of these authors' theory is that it requires the poor to be unusually foresighted: they realize the transitory nature of their de facto power and this precisely at the moment when they are most powerful. This may be too much to ask from the poor and does not seem to be supported by much historical evidence.

The model we develop in this paper makes use of the attractive elements of Acemoglu and Robinson's theory of democratization while eliminating the more questionable hypotheses discussed above. Revolutionary threats play a central role in our model and the elite is unable to commit to future policies. Revolutionary threats, however, are costly for the poor and we do not assume that the poor's organizational capabilities or de facto power fluctuates over time. The resulting model is, we believe, more transparent and offers an alternative interpretation of the reasons that led, and keep leading, societies towards democracy.

2 Our model of democratization

We use a modelling framework most closely related to Acemoglu and Robinson (2006) in order to make comparisons between our mechanism and theirs as clear as possible. An important difference is that in our model the poor start by deciding whether they want to threaten with a revolution (and incur the cost that this supposes) or not. This step is not present in Acemoglu and Robinson: since revolutionary threats have no cost in their model the poor will always pose a threat (which can then be credible or not).

We consider an infinite-period economy populated by a continuum of people of measure 1. Two groups exist in this society: the poor, who constitute a proportion λ of total population, and the elite, who constitute the remaining $1-\lambda$. Within each of these groups all members are identical and we abstract from collective action problems. The poor are more numerous ($\lambda > 1/2$), implying that in a democratic regime the median voter would be a poor person.

The poor receive each period a per capita income of y^p , and the corresponding amount for each member of the elite is $y^r > y^p$. The average income of the economy, $\bar{y} = \lambda y^p + (1-\lambda)y^r$, will be normalized to 1. It follows that all monetary quantities to be used in this model, including the costs of threats and revolution that we introduce below, will be expressed in relative terms with respect to the average income of the society. Notice that this normalization also implies that $y^r > 1 > y^p$.

There is one public policy in this economy: a flat tax rate on income whose proceedings are distributed equally among all members of society. There are no costs associated with the collection and redistribution of this tax. The after-tax income of the poor and the elite will be, respectively, $\tilde{y}^p = (1-\tau)y^p + \tau$ and $\tilde{y}^r = (1-\tau)y^r + \tau$ where τ is the tax rate and a tilde denotes after-tax incomes. After-tax incomes are simply a weighted average between pre-tax incomes and the average income of society (which equals 1); the weights being determined by the tax rate. It follows that $\tilde{y}^p > y^p$ and $\tilde{y}^r < y^r$.

Determining the optimal tax rate for the poor and the elite is straightforward: the poor would like a tax rate equal to 1 (in which case after-tax incomes would equal 1 for everybody) and the elite would like a tax rate equal to 0. Notice that we are restricting the tax rate to lie in the interval $(0, 1)$. Clearly,

less extreme solutions would be obtained by incorporating tax collection costs but the mechanics of the model would remain unchanged⁴.

The tax rate to be implemented in practice will depend on the political system in place. We consider two potential political systems: non democracy and democracy. With a democracy all agents vote to chose the tax rate and the median voter theorem applies. Since the median voter belongs to the poor, a democracy leads to the poor's preferred tax rate. Under a non democracy the elite holds all political power and is free to set any tax rate. In principle this would translate into a tax rate equal to zero, but the elite has the possibility of setting a different rate. This is important since the model will allow the elite to offer such concessions to the poor when a revolutionary threat exists.

The economy starts as a non democracy. The sequence of events in the first period, and in all subsequent periods that start as a non democracy, is given in Figure 1. The poor move first and have two choices: to remain calm and accept the status quo ("no threat") or to threaten the elite with a revolution unless democracy is put in place. If the poor chose not to threaten, the elite sets the tax rate to 0 and the game repeats itself next period.

To threat with a revolution the poor must organize marches, strikes and blockades. All these actions will cause each poor agent a per capita cost of ϕ . For simplicity, the elite does not suffer any cost from a revolutionary threat. A revolution would involve violence, major interruptions in production and the destruction of parts of the capital stock. A revolution will cause a per capita cost of μ to all agents in the economy⁵. We will assume that $\mu = \rho\phi$ with $\rho > 1$, i.e. a revolution is several times more costly than a threat of revolution. As discussed before, in the framework of Acemoglu and Robinson we would have $\phi = 0$ and μ would be a random variable.

If the poor decide to threaten with a revolution the elite has two options. First, the elite can yield to the demands of the poor and accept to democratize right away. In this case the political system would remain a democracy for all subsequent periods. The second possibility is for the elite to refuse democracy but offer a policy concession instead. In this case the political system would

⁴Acemoglu and Robinson (2006) assume increasing and convex costs of collection.

⁵Results would be unchanged if we assumed that a revolution causes different costs to the elite and the poor.

remain a non democracy but the elite sets the tax rate at some level in the interval $(0, 1)$. This case includes the possibility that the elite does not make any concession at all; which would correspond to an offer of setting the tax rate to 0. It also includes, at the other extreme, the offer of setting the tax rate to 1 and therefore mimicking the after-tax incomes under democracy.

If the elite denies democracy but offers to set the tax rate equal to $\tau \in (0, 1)$ the poor have two options. One possibility is to accept the offer of the elite, in which case the proposed taxing and redistribution will take place and the game repeats itself the next period. Alternatively, the poor can refuse and carry on with a revolution. In this case the poor and the elite will suffer the cost of a revolution and a democracy will be established as a result. As was the case with the peaceful transition, a democracy becomes permanent once established. Figure 1 shows the four possible outcomes of the game, which are labelled as: (1) Non Democracy, (2) Democracy, (3) Non Democracy with policy concessions, and (4) Revolution, followed by Democracy.

We will characterize the pure strategy Markov perfect equilibria of this game in which strategies depend only on the actions taken during the current period. If the result of the first period is non democracy (with or without a policy concession) then the game would be repeated and, in a Markov perfect equilibrium, the same result would be obtained in all subsequent periods (there is neither randomness nor time-varying values in the model). If the result of the first period is democracy, with or without a revolution, all subsequent periods will be devoid of any strategic interaction and the poor's preferred tax rate will be in place. It follows that there are also four outcomes in the infinite-period version of the game: if the first period ends in outcomes 1 or 3 then all future periods will end up the same way; if the first period ends in outcomes 2 or 4 democracy will prevail in all future periods.

As in the framework of Acemoglu and Robinson, the elite cannot credibly commit to future policy concessions. This is immediate in our model since, in the absence of democracy, the elite will choose their preferred tax rate each time there is no revolutionary threat. The option of a policy concession from the elite is thus understood to apply to the present period only. We may assume that the elite explicitly offers a temporary change in the tax rate or, alternatively, that it promises a permanent change but the poor understand that the promise will be broken in the absence of future threats.

The intertemporal utility of agent i will be given by $V^i = \sum_{t=0}^{\infty} \beta^t \tilde{y}_t^i$ where $i = p, r$ and $\beta < 1$ is a discount factor. The payoffs for a member of the poor and a member of the elite in each of the game's four possible outcomes are given below.

1. If the poor do not threaten with a revolution, tax rates would remain at zero in all periods; thus:

$$V^p(ND) = \frac{y^p}{1 - \beta}$$

$$V^r(ND) = \frac{y^r}{1 - \beta}$$

2. If the poor threaten with a revolution and the elite accepts to democratize, after tax incomes would be equal to 1 for both agents and the poor would pay a one-time cost of revolutionary threat:

$$V^p(D) = \frac{1}{1 - \beta} - \phi$$

$$V^r(D) = \frac{1}{1 - \beta}$$

3. In the case of a non democracy with policy concessions payoffs would be given by:

$$V^p(PC) = \frac{1}{1 - \beta} [(1 - \tau) y^p + \tau - \phi]$$

$$V^r(PC) = \frac{1}{1 - \beta} [(1 - \tau) y^r + \tau]$$

It is noteworthy that in this case the poor will suffer the cost of threatening with a revolution on every period. Indeed, by choosing not to revolt the poor ensure the continuity of a non democratic regime that will set positive tax rates only if the revolutionary threat is kept alive.

4. The final possibility is to have a revolution followed by democracy. Payoffs would be the same as in the case of a peaceful democratic transition minus the per capita cost of a revolution that affects both the poor and the elite:

$$V^p(RD) = \frac{1}{1-\beta} - \phi - \mu$$

$$V^r(RD) = \frac{1}{1-\beta} - \mu$$

The payoffs just derived reveal an unambiguous ranking of outcomes for the rich. Indeed:

$$V^r(ND) > V^r(PC) > V^r(D) > V^r(RD)$$

We cannot rank the payoffs of the poor in a similar way but we can establish two inequalities. The first one is evident: $V^p(D) > V^p(RD)$; which simply states that it is better to achieve democracy without the cost of a revolution. The second inequality is more revealing and is at the center of our model: $V^p(D) > V^p(PC)$. This result is worthy of notice because a regime of policy concession could set a tax rate equal to 1, the tax rate that would prevail in a democracy. Even in this most favorable case, however, the poor would be better off in a democracy because they would not bear the cost of keeping a constant revolutionary threat on the elite. In other words, democracy's superiority is assured by its ability to save on the costs of reaching a political agreement. In the regime of policy concessions agreement is reached through a costly demonstration of force from the part of the poor. In democracy agreement is reached by costless voting.

With these payoffs in hand, we set up to solve the model by backward induction. The last possible stage of the game requires the poor to accept or reject the elite's offer of a policy concession. The poor will accept if $V^p(PC) \geq V^p(RD)$ or, substituting with the expressions derived above, if:

$$\frac{1}{1-\beta} [(1-\tau)y^p + \tau - \phi] \geq \frac{1}{1-\beta} - \phi - \mu$$

Solving this inequality for τ (and using $\mu = \rho\phi$) yields:

$$\tau \geq 1 + \frac{1}{1-y^p} (\beta\phi - (1-\beta)\rho\phi) \equiv \tau^* \quad (1)$$

In other words, the poor will accept the elite's proposal if it is generous enough; which will be the case if the tax rate they offer is above - or at least

equal - to the threshold value τ^* .

The threshold value τ^* can lie outside of the interval $(0, 1)$ depending on the values of the cost parameters ρ and ϕ and the discount rate β . Equation (1) reveals that τ^* will be larger than 1 if $\rho < \frac{\beta}{1-\beta}$, between 0 and 1 if $\frac{\beta}{1-\beta} \leq \rho \leq \rho^*(\phi)$ and less than 0 if $\rho > \rho^*(\phi)$ where $\rho^*(\phi) = \frac{\beta}{1-\beta} + \frac{1}{1-\beta} \frac{1-y^p}{\phi}$.

Turning to the previous stage of the game, the elite must decide whether to offer a policy concession or to democratize when faced with a revolutionary threat. If the elite can offer a policy concession that the poor will accept, that is if $\tau^* \leq 1$, they will do so. The reason is that a policy concession is the best possible outcome for the elite facing a revolutionary threat ($V^r(PC) > V^r(D) > V^r(RD)$). If $\tau^* \in (0, 1)$ the elite will offer $\tau = \tau^*$, the lowest possible tax rate that will deter a revolution. If $\tau^* < 0$ the elite will offer no concession, i.e. $\tau = 0$, knowing that this will be taken. If $\tau^* > 1$, finally, there is no tax rate that will stop the poor from revolting. In this case the elite will accept to democratize immediately to avoid the cost of a revolution.

In the first stage of the game, finally, the poor will decide whether to threaten with a revolution or not taking into account the elite's response as described above. It is apparent that if $\tau^* < 0$ the poor will choose not to threaten since a threat will produce a cost and no reward.

If $\tau^* \in (0, 1)$ the poor can get a policy concession by threatening. They will decide to threaten if $V^p(PC) > V^p(ND)$, which is equivalent to

$$\frac{1}{1-\beta} [(1-\tau^*)y^p + \tau^* - \phi] > \frac{y^p}{1-\beta}$$

Replacing τ^* for the expression derived above and solving for ϕ we obtain the following condition:

$$\phi < \frac{1-y^p}{(1-\beta)(1+\rho)} \equiv \phi^l(\rho)$$

If, finally, $\tau^* > 1$ the poor know that threatening with a revolution will lead the elite to democratize straight away. Threatening will be a beneficial strategy as long as $V^p(D) > V^p(ND)$, that is, as long as

$$\frac{1}{1-\beta} - \phi > \frac{y^p}{1-\beta}$$

or, solving for ϕ :

$$\phi < \frac{1 - y^p}{1 - \beta} \equiv \phi^h$$

The above derived conditions complete the analysis of the model, all possible equilibria are summarized in the following proposition.

Proposition 1 *There are five Markov perfect equilibria in the infinite period model under consideration.*

1. *If $\rho > \rho^*(\phi)$, implying $\tau^* < 0$, the poor will never threat with a revolution and the country will remain a non democracy.*
2. *If $\frac{\beta}{1-\beta} < \rho < \rho^*(\phi)$, implying $0 < \tau^* < 1$, and $\phi > \phi^l(\rho)$ the poor will never threat with a revolution and the country will remain a non democracy.*
3. *If $\frac{\beta}{1-\beta} < \rho < \rho^*(\phi)$, implying $0 < \tau^* < 1$, and $\phi < \phi^l(\rho)$ the poor will threat with a revolution on every period and every period they will obtain a policy concession which sets the tax rate to τ^* . The poor will accept this policy concession every period.*
4. *If $\rho < \frac{\beta}{1-\beta}$, implying $\tau^* > 1$, and $\phi > \phi^h$ the poor will never threat with a revolution and the country will remain a non democracy.*
5. *If $\rho < \frac{\beta}{1-\beta}$, implying $\tau^* > 1$, and $\phi < \phi^h$ the poor will threat with a revolution and the elite will accept to democratize the political system.*

The equilibria are thus determined by the value of the two cost parameters in the model, ϕ and ρ . We illustrate the above result in figure 2, which divides the cost parameters space in the different regions defined by proposition 1⁶. Regions closer to the origin correspond to cases where the costs of threat and revolution are low and they result in democracy or in policy concessions. If both ϕ and ρ move over time towards zero the result will necessarily be democracy. Regions far from the origin correspond to cases with high costs of threats and revolution and they result in non democracy.

⁶We use the following results to draw figure 2: $\lim_{\phi \rightarrow \infty} \rho^*(\phi) = \frac{\beta}{1-\beta}$, $\lim_{\phi \rightarrow 0} \rho^*(\phi) = \infty$, $\lim_{\rho \rightarrow 0} \phi^l(\rho) = \phi^h$, $\lim_{\rho \rightarrow \infty} \phi^l(\rho) = 0$ and $\forall \phi : \rho^l(\phi) < \rho^*(\phi)$ where $\rho^l(\phi)$ is the inverse function of $\phi^l(\rho)$. We also note that $\phi^l(\rho)$ intersects the line $\rho = \frac{\beta}{1-\beta}$ at the value $\phi = 1 - y^p$.

If we interpret the costs of threats and revolution as Acemoglu and Robinson do, that is as reflecting the organizational level of the poor, the result is intuitive: as the poor become more and more organized the political system will necessarily become a democracy. A non democratic system with policy concessions will typically be an intermediate step between non democracy and democracy⁷.

Once the cost of carrying a revolution is low enough, policy concessions will not stop a revolution and the elite is forced to democratize. The rationale for this, however, is very different from the one offered by Acemoglu and Robinson. According to these authors, policy concessions are not enough because they will be removed in the future. And they will be removed in the future because the poor's de facto power fluctuates randomly over time. In our model the poor's de facto power does not fluctuate and the poor can be sure that policy concessions will be maintained in all future periods. The need for democracy arises from the fact that such non democratic regime with policy concessions is costly to maintain; a continuous threat of revolution is necessary to ensure the elite's compliance. Democracy is thus a superior outcome since political agreement is reached by costless voting.

Other results from our model are similar to those obtained by Acemoglu and Robinson. Higher income inequality, for instance, leads to a larger range of the parameter space being characterized by democracy or policy concessions⁸. Another result in common with Acemoglu and Robinson is that no revolutions take place in equilibrium. We regard this as a realistic feature of these models: revolutions have been rare events throughout history and the instances where democracy has been obtained after revolutionary threats, but before a full revolution hit the streets, are much more numerous. More often than not, the elite recognizes that resistance to the poor's demands would be futile and act in consequence.

⁷Non Democracy with policy concessions will always be an intermediate step between Non Democracy and Democracy if ϕ is below $1 - y^p$. This is not a demanding condition: the per capita cost of threatening with a revolution, ϕ , is likely to be less than $1 - y^p$, the difference between average income and the per capita income of the poor. In other words, we would expect most countries to be placed well on the left in Figure 2.

⁸To see this, notice that - since average income is normalized to 1 - income inequality can be measure by the distance between average income and the poor's income, $1 - y^p$. In figure 2 an increase in $1 - y^p$ would shift ϕ^h , $\phi^l(\rho)$ and $\rho^*(\phi)$ to the right, leading to larger areas where democracy or non democracy with policy concessions would be the outcome.

3 Conclusion

The work of Acemoglu and Robinson discussed in this paper has clearly advanced our understanding of democratization processes. Their emphasis on the role of revolutionary threats is, we believe, historically relevant⁹. Elites agreed to extend the franchise knowing that this would hurt their future interests only because the remaining alternative would have been even more damaging.

Acemoglu and Robinson also advance an economic justification for democracy. Their thesis is that people demand democracy not because they enjoy it or feel that open political competition is more just than monarchical or oligarchic regimes but because it solves a commitment problem over future public policies. In their framework, the poor would be glad to overlook democracy if they could get their preferred public policies all the time. Because the poor's de facto power fluctuates over time, the only way they can obtain this is by forcing the elite to democratize in the period when their de facto power is high.

This paper offers an alternative economic justification for democracy: democracy is a cost-saving device. We start by making the assumption that the poor's de facto power does not fluctuate over time; so they could impose their preferred policies period after period by demonstrating their force. This, however, would be a costly way to reach political consensus, with force being the poor's only available argument. Democracy saves on these costs by substituting strikes and marches for votes, thus delivering the same public policy outcomes through a smoother process.

⁹Przeworski (2008) offers a much-welcomed analysis of the historical evidence.

References

- Acemoglu, D. and Robinson, J. A. 2000, Why did the West extend the franchise? Democracy, Inequality and Growth in Historical Perspective, *Quarterly Journal of Economics* 115, 1167-1199
- Acemoglu, D. and Robinson, J. A. 2001, A theory of political transitions, *American Economic Review* 91, 938-963.
- Acemoglu, D. and Robinson, J. A. 2006, *Economic origins of dictatorship and democracy*, Cambridge University Press.
- Acemoglu, D. and Robinson, J. A. 2008, Persistence of power, elites and institutions, *American Economic Review* 98 (1), 267-293.
- Acemoglu, D. 2008, Oligarchic versus democratic societies, *Journal of the European Economic Association* 6, 1-44.
- Bartolini, S. 2000, *The political mobilization of the European left, 1860-1980: the class cleavage*, Cambridge: Cambridge University Press.
- Cervellati, M., Fortunato, P. and Sunde, U. 2008, Hobbes to Rousseau: Inequality, institutions and development, *Economic Journal* 118, 1354-1384.
- Fleck, R. K. and Hanssen, F. A. 2006, The origins of democracy: A model with application to ancient Greece, *Journal of Law and Economics* 49 (1), 115-146.
- Gallo, E. 1986, Argentina: society and politics, 1880-1916, in: Bethell, L. (ed.), *The Cambridge History of Latin America Volume V*, Cambridge University Press.
- Jack, W. and Lagunoff, R. 2006a, Dynamic Enfranchisement, *Journal of Public Economics* 90 (4-5), 551-572.
- Jack, W. and Lagunoff, R. 2006b, Social conflict and gradual political succession: An illustrative model, *Scandinavian Journal of Economics* 108 (4), 703-725.
- Lizzeri, A. and Persico, N. 2004, Why did the elites extend the suffrage? Democracy and the scope of government, with an application to Britain's "age of reform", *Quarterly Journal of Economics* 119 (2), 707-765.
- Przeworski, A. 2008, *Conquered or granted? A history of suffrage extensions*, mimeo.
- Rock, D. 1991, Argentina, 1930-46, in: Bethell, L. (ed.), *The Cambridge History of Latin America Volume VIII*, Cambridge University Press.
- Vanhanen, T. 2000, A new dataset for measuring democracy, 1810-1998, *Journal of Peace Research* 37 (2), p. 251-265.

Figure 1
The game

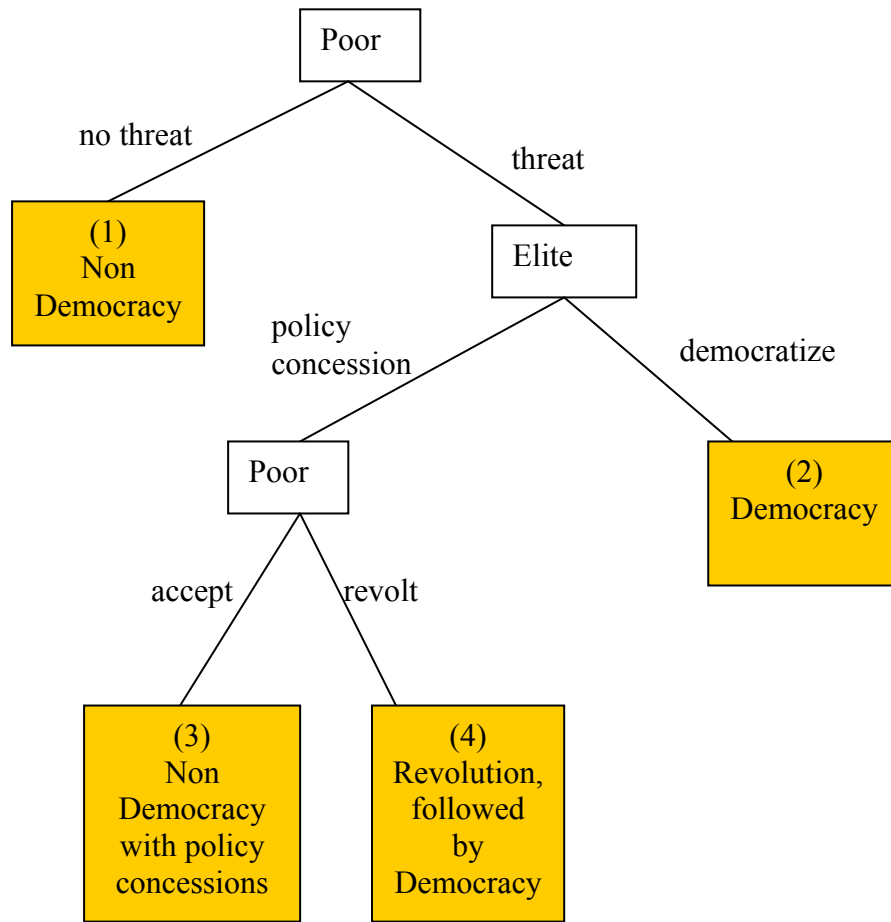
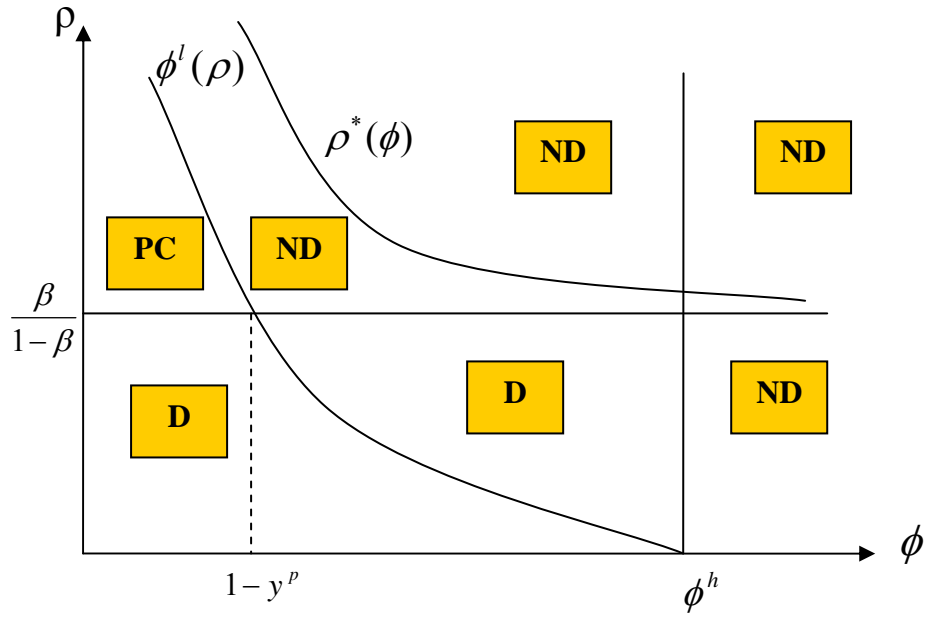


Figure 2
Equilibria in the cost parameters space



ND: Non Democracy
 PC: Non Democracy with Policy Concessions
 D: Democracy