The Transition to Democracy : Collective Action and Intra-elite Confict

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The Transition to Democracy: Collective Action and Intra-elite Conflict[*]

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Abstract

This paper studies how intra-elite conflict results in transition to democracy, characterized as both franchise extension to, and lowering the individual cost of collective political action for, an initially disorganized non-elite. Two risk averse elites compete for the appropriation of a unit of social surplus with initial uncertainty about their future relative bargaining power. Both elements of a democracy are necessary to ensure that the two elites credibly commit to a mutually fairer share of the surplus and we derive sufficient conditions for democracy to emerge in equilibrium. Our formal analysis accounts for stylized facts that emerge from an analysis of Indian and West European democracies.

Keywords: Democracy, elites' conflict, collective action, coalition formation, party formation, bargaining, risk-sharing, Indian democracy.

JEL Classification: D74, O12, H11.

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1   Introduction

When does intra-elite conflict result in democracy? Several strands of research emphasize the importance of intra-elite bargaining in the transition to democracy. Moore (1964) argues that a fundamental precondition for stable democracy is a balance of power between landed upper class and urban bourgeoisie, while totalitarian regimes arise whenever one class dominates the others. Bardhan (1984) studies the capacity of the democracy to manage the conflict between elites. Olson (1993) notes: "We can deduce (...) that autocracy is prevented and democracy permitted by the accidents of history that leave a balance of power or stalemate- a dispersion of force or resources that makes it impossible for any leader or group to overpower all of the others". And Collier (1999) underlines the central role of political or economic elites' bargaining in almost all processes of transition to democracy.[1]

This paper studies the conditions under which democracy is the outcome of intra-elite conflict. Two risk averse elites compete for the appropriation of a unit of social surplus with initial uncertainty about their future relative bargaining power. In order to credibly commit to insure each other against future imbalances in relative bargaining power, the two elites surrender some of their decision power to the numerically large but weak non-elites. We characterize the ex-ante choice of democracy as both franchise extension to, and lowering the cost of collective political action for, an initially disorganized (i.e. unable to act collectively) non-elite. We show that *both* these features are necessary for the two elites to credibly commit to insure each other against future uncertain imbalances in relative bargaining power and we derive sufficient conditions for democracy to prevail in equilibrium.

Our analysis proceeds by backward induction, and it begins at the point where all uncertainty about relative bargaining power between the two elites has been resolved. We show that in a democracy, if the voting outcome is renegotiated, the organized (i.e. able to engage in a collective action) non-elite and the weaker elite will only ever form a coalition with each other to bargain with the stronger elite. Any gain in bargaining power by allying with the stronger elite is temporary as eventually either of these two classes will have to

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[1]Section 4 is devoted to a detailed analysis of the empirical evidence.

bargain with the stronger elite on their own.

Next, we determine surplus division at the voting stage. If there is no franchise extension to the non-elite, the resulting surplus division will exclude the non-elite, while ensuring that the weaker elite obtains enough surplus to avoid a coalition formation with the non-elite. Therefore, in this case, the non-elite will have no incentive to get even partially organized in the first instance. With franchise extension, the median voter will belong to the non-elite and the resulting surplus will be pinned down, via backward induction, by surplus division resulting from coalition formation at the renegotiation stage. Therefore, both franchise extension to, and lowering the cost of collective political action for, the non-elite are necessary elements in any ex-post credible insurance commitment between the two elites.

Before uncertainty is resolved,[2] anticipating a coalition with the weaker elite, we show that there are two equilibrium outcomes in the collective action problem faced by non-elite individuals: one where no non-elite individual engages in collective political activity ("individualist" equilibrium) and the other where every non-elite individual engages in collective political activity ("collectivist" equilibrium).[3] Thus, non-elite individuals face strategic uncertainty. We adapt an equilibrium selection argument (stochastic stability, Young (1993)) that picks the equilibrium that is more likely to prevail in the presence of strategic uncertainty[4] and we show that lowering the cost of collective activity ensures that the collectivist equilibrium emerges.

Finally, when the bargaining power of a fully organized non-elite is small relative to the degree of risk aversion of the two elites, both elites unanimously choose democracy.

Bardhan (1984) provides a useful description of how the threat of coalition formation between the elite and the non-elite works in practice in a democracy:

> "Populist rhetoric has been a useful weapon in clipping the wings of an over-greedy bargaining partner [...] profuse tears of commiseration with the masses [...] have drowned a rival's extravagant claims. If the industrialists at any time overstep in their bargaining, sure enough there will be an uproar in the Par-

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[2] We justify the timing of collective activity in section 2.3 below.

[3] In our set-up, consistent with Olson (1965), selective incentives resolve the free-riding problem involved in collective action.

[4] In the language of Harsanyi and Selten (1988), the selected equilibrium is risk-dominant.

liament about the 'anti-people conspiracy of the monopoly capitalists'; similar invectives against the 'kulaks' or, somewhat less frequently, against the 'parasitic intelligentsia' will also be aired on appropriate occasions. The competitive politic of democracy thus serves the purpose of keeping rival partners in the coalition on the defensive" (P. Bardhan 1984 pp. 77).

Two examples, drawn from the histories of Indian and French democracy, are a useful illustration of the coalition dynamics underlined in our model. In India, Indira Gandhi's attempt to mount a coup (by imposing "Emergency") in 1975 culminated with the lost of the enormous popular support she had hitherto enjoyed and indeed, she called and lost elections in 1977. Even though she promised more redistribution to the non elite, this commitment was not credible and an alliance consisting of the non-elite with anti-Congress parties opposed her.[5] In France, universal male suffrage was introduced in 1848. When a social reform agenda was passed thanks to the alliance between the working class and Republicans, a conservative government disenfranchised 2.8 million of men in 1850. However, in 1851 the Republicans and the working class supported the coup led by Louis Napoleon Bonaparte, who restored the universal suffrage, initially only formally and from 1868, under the pressure of Republicans and working classes more substantially (Collier 1999, pp. 42-43 and Elwitt pp. 41) also by abolishing the previously imposed ban on organized political activity.

A possible objection to our argument is that stable democracy is not a necessary outcome of intra-elite conflict in heterogenous societies as in many African countries. In an extension to the main model, we consider scenarios where, due to linguistic or ethnic differences, there are vertical links between one elite and a section of the non-elite. With such vertical links, we show that a vertical bias in coalition formation between elites and sections of the non-elite could indeed prevent democratization.

The model emphasizes how democracy is characterized by both full enfranchisement and legalization of political activity and that both these elements are necessary. Indeed all constitutions of the countries commonly considered democratic explicitly recognize freedom of collective organization as well as the universal right to vote (in the last section we provide a sample of the relevant articles concerning freedom of organization). And in fact, in the

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[5] The Janata Party won the 1977 elections.

modern democracies, the mass parties supporting the non elites started to form immediately after the extension of the franchise.[6] Furthermore, political scientists have documented that in many dictatorship individuals have the right to vote (and often massively participate in elections) without having real freedom of association,[7] and that criteria used to define democracies must include not just the right to vote but also the existence of effectively competing collective political organizations.[8]

We emphasize the effect of the institutions, specifically freedom of organization, in shaping individual incentives to act collectively. There is a similar concept, the political opportunity structure, developed in the sociology literature (see e.g. Tilly (1978), McAdam (1982), Tarrow (1998)). This concept is based on the idea that the state with its institution determined the opportunity of the collective action. Tarrow (1998), p. 20, argues that

> "contentious Politics emerges when ordinary citizens, (...), responds to opportunity that lowers the cost of collective action, reveal potential allies, show where elites and authorities are most vulnerable and trigger social networks and collective identities into action around common themes.".

There is a related political economy literature which has raised fundamental issues regarding the transition to democracy. Seminal papers in this literature include Acemoglu and Robinson (2000, 2001), Conley and Temini (2001), Fleck and Hanssen (2002), Justman and Gradstein (1999) and – like in our paper, in a framework with intra-elite conflict– Lizzeri and Persico (2004), Llavador and Oxoby (2005). All above mentioned papers view the transition to democracy as consisting of franchise extension. Our paper differs from this literature as it emphasizes both franchise extension and lowering the cost of collective political activity as necessary elements in the transition to democracy, so that, in equilibrium, voting outcomes are not renegotiated.[9]

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[6]See, for example, Epstein (1967).

[7]Przeworski et Al. (2000) classifies dictatorship with the elections as "mobilizing dictatorship". In their database, containing observation in the period 1950-90, there are 147 mobilizing over a total of 274 different dictatorships.

[8]See Hermert (1978) for a systematic outline of the differences between competitive and non-competitive elections. Along similar line, but even more restrictive is Dahl (1989), who provides a series of requirement a real democracy must fulfill.

[9]Some other models analyzing issues related to democratization include Bertocchi (2003), Galor and Moav (2006), Lagunoff and Jack (2005), Ticchi and Vidigni (2003) among others.

The paper is organized as follows. In section 2, we present the main model. Section 3 analyzes some extensions of the model. Section 4 is devoted to the discussion, using our model and its results, of comparative historical and institutional evidence relating to India and the pattern of democratization in some Western European countries. Section 5 offers some final remarks. Some of the more technical material is contained in the appendix.

2   The model

We study a model with three classes of homogeneous agents, E_1, E_2, W, where E_i, $i = 1, 2$, denotes the two elites and W represents the numerically large non-elite. There are three time periods, $t = 0, 1, 2$. The measure of disposable social surplus is normalized to one.

The two elites E_1 and E_2 are assumed to be initially organized: each individual in E_1 and E_2 can credibly commit to act collectively. In contrast, the non-elite W is initially completely disorganized: no individual in W can commit to act collectively. In order to act collectively, each individual has to join an organization (a party) and we assume that party membership has a privately borne participation utility cost c for each individual.[10] Only individuals who act collectively are able to appropriate a portion of the disposable surplus. The portion of surplus appropriated by the organized individuals in a class is invested to provide a collective good that only those individuals consume.[11]

At $t = 0$, the two elites, by unanimous consent, choose whether or not democratize. Democracy has two elements:

a) Enfranchisement of each individual in W, so that she has right to vote at $t = 1$;

b) Legalizing collective political activity for individuals in W which lowers the privately borne cost of party membership from $\bar{c}$ to some level $\underline{c}$ where $\bar{c} > \underline{c} > 0$.

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[10] We assume that c is a sunk cost. We can think of it as an initial cost to get in touch and establish a communication channel with the other members. For a discussion of the timing party formation see section 2.3 below.

[11] Note that in this model, we do not make a distinction between joining the party and acting collectively in support of the party, as we assume that only party members can act collectively. This allows to simplify the exposition since it implies that all individuals who act collectively obtain the same payoff. A more realistic model discriminating between party members and non-party members who choose to act collectively would not change qualitative features of our results.

Once the decision of whether or not to extend democracy has been made, each individual in W decides whether or not to join the party.

The relative power of E_1 and E_2 is uncertain at $t = 0$ and is determined at $t = 1$ by θ, a random variable, where

$$\theta = \begin{cases} 1 & \text{prob. } q \\ 2 & \text{prob. } 1-q \end{cases}.$$

The interpretation is that when $\theta = i$, elite E_i can appropriate the entire unit of disposable surplus in any bilateral bargain with E_j.[12] The variable q can be interpreted as an index of power between the two elites, so that when $q = \frac{1}{2}$, the two elites are symmetric and neither is dominant. For expositional simplicity, we initially solve the model under the case $q = \frac{1}{2}$, then in section 3.2, we study the consequences of relaxing this assumption.

At $t = 1$, the relative bargaining strength of the two elites becomes common knowledge. The pool of voters, by majority voting, decide a surplus allocation for each of the three classes.

At $t = 2$, either one of the two elites on their own or any other coalition of classes may reject the voting outcome and renegotiate the surplus allocation determined by majority voting at $t = 1$. Consumption takes place at the end of $t = 2$.

Preferences over consumption of the collective good are represented by the smooth utility function $u : \Re_+ \rightarrow \Re$ where $u'(.) > 0 > u''(.)$ i.e. agents are strictly risk averse and payoff are normalized so that $u(0) = 0$. The payoff of a organization member in W from consuming $x \geq 0$ is $u(x) - c$.

The total number of individuals has a mass of $1 + 2\lambda$, with the mass of W equal to 1 and the mass of each elite equal to λ with $2\lambda < 1$ so that with enfranchisement, the median voter belongs to W.

We solve the model by backward induction.

2.1 Renegotiation and coalition formation at $t = 2$

Let W^π denote a situation where there is a fraction π of individuals in W who join the party so that π is a measure of the level of organization in W, with higher values of π denoting

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[12]One can think at this as a shock increasing the value of the production factor owned by one elite, for example an increase of oil price, and this wealth can be used to buy guns or to hire an army.

a higher level of organization. When $\pi = 0$ individuals in W are completely disorganized, act individually and therefore, neither E_1 nor E_2 can form a coalition with W.

At $t = 2$, in the renegotiation phase that ensures after the outcome of majority voting is rejected, the timing of events is as follows:

1. If a single class has objected, the two classes who did not objected decide whether or not to form a coalition. If no coalition is formed, the objecting class bargains first with one and then with the other, and each class has an equal probability of being the first.

2. If two classes form a coalition to reject the winning proposal, first, the coalition bargains with the excluded class and then, bargain with each other over the surplus appropriated in the preceding round of bargaining.

For each $\pi > 0$, let Γ denote the set of all admissible coalitions excluding the grand coalition.[13] For each $\gamma \in \Gamma$, let $\Gamma(\gamma)$ denote the set of admissible coalitions which excludes any class already contained in γ.[14] We assume that in any process of bargaining between two classes or between a class and a coalition of classes, the outcome is determined by a grabbing function $g(\gamma, \gamma', \theta)$ measuring the share of the available surplus γ is able to extract in a bilateral bargain with $\gamma' \in \Gamma(\gamma)$ given θ. For $\gamma \in \Gamma$, $\gamma' \in \Gamma(\gamma)$, the interpretation is that in any bilateral bargain, bargaining power is equivalent to the amount of the available surplus that γ can grab relative to γ'. Clearly, $g(\gamma, \gamma', \theta) = 1 - g(\gamma', \gamma, \theta)$. Consistent with the assumption that conditional on $\theta = i$, E_i is the stronger elite, we assume that $g(E_i, E_j, i) = 1$ and for simplicity we assume that the stronger elite is able to extract the entire surplus even from a fully organized non elite, $g(E_i, W^1, i) = 1$.[15]

In the main text, we treat the grabbing function as a primitive; however, in the appendix, we endogenize this grabbing function via a process of recursive Nash bargaining where the power of a class or coalition of classes is reflected in the way disagreement points are specified.

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[13] More formally: $\Gamma = \{\{W^\pi\}, \{E_1\}, \{E_2\}, \{W^\pi, E_1\}, \{W^\pi, E_2\}, \{E_1, E_2\}\}$

[14] Formally, for any two classes $i, j \in \gamma$, $\Gamma(\gamma) = \{\gamma' \in \Gamma : i \notin \gamma' \text{ or } j \notin \gamma'\}$.

[15] This assumption simplify the exposition, but it is not necessary to our argument as long as both $g(E_i, E_j, i)$ and $g(W^1, E_i, i)$ are sufficiently small.

Let $f(\pi)$ denote the final surplus (in terms of collective good) W is able to appropriate after forming a coalition with E_j against E_i and then bargaining with E_j on its own, where

$$f(\pi) = g\left(\{W^\pi, E_j\}, E_i, i\right) g(W^\pi, E_j, i)$$

In what follows we will assume that the more organized W is, the higher is its bargaining power against the weaker elite and the bargaining power of the coalition between weaker elite and non elite– both $g\left(\{W^\pi, E_j\}, E_i, i\right)$ and $g(W^\pi, E_j, i)$ are increasing in π; hence $f(\pi)$ is also increasing in π. As $\pi \to 0$, W^π bargaining power goes to zero as well and in the limit, $\lim_{\pi \to 0} g(W^\pi, E_j, i) = \lim_{\pi \to 0} f(\pi) = 0$.

Note that no individual (whether or not a party member) in W^π will obtain any share of the available surplus if it joins a coalition with the stronger elite. For this reason, anticipating a coalition with the stronger elite, for each individual in W it is a dominant strategy not to join the party (and pay a participation cost $c > 0$).

On the other hand, if $\pi > 0$, each party member in W^π will have an incentive to form a coalition with E_j and E_j will have an incentive to form a coalition with W^π. It follows that when $\pi > 0$, the payoff to E_i is $1 - g\left(\{W^\pi, E_j\}, E_i, i\right)$, the payoff to E_j is $g(\pi) = g\left(\{W^\pi, E_j\}, E_i, i\right) g(E_j, W^\pi, i)$ and the payoff each individual in W is $f(\pi) = g\left(\{W^\pi, E_j\}, E_i, i\right) g(W^\pi, E_j, i)$.

As the degree of organization only affect payoffs at the renegotiation stage, at time 2, the payoff to each individual in W belonging to the party of size π is $u(f(\pi)) - c$ while the payoff from not joining the organization is 0. As $u(0) = 0$ and $u(.)$ is continuous and $\lim_{\pi \to 0} f(\pi) = 0$, $\lim_{\pi \to 0} u(f(\pi)) = 0$. Moreover, as $u'(.) > 0$, and $f(\pi)$ is continuous and increasing in π, $u(f(\pi))$ is also continuous and increasing in π.

Therefore, condition

$$u(f(1)) < \bar{c} \tag{1}$$

implies that when forming new organizations is illegal, it is a dominant action for each

individual in W not to join the organization.[16] On the other hand,

$$u(f(1)) > \underline{c} \qquad (2)$$

is a necessary condition for the party formation in W. In what follows we assume that the inequalities (1) and (2) always hold.

2.2 Equilibrium enfranchisement

In this section, we study (i) surplus division at $t = 1$, the voting stage and (ii) the ex-ante decision of individuals in W to form a party at $t = 0$ and (iii) the ex-ante decision of the two elites to extend democracy at $t = 0$.

Voting at $t = 1$

Fix $\theta = i$. Let $\tau = \left(\tau_{E_i}, \tau_{E_j}, \tau_{W^\pi} \right)$ denote a surplus sharing rule where τ_{E_i} (respectively, τ_{E_j}) is the portion of the surplus appropriated by E_i (respectively, E_j) and τ_{W^π} is the is the portion of the surplus appropriated by W^π. If there is no democracy, $\pi = 0$ and the only possible surplus division is $\tau_{E_i} = 1$, $\tau_{E_j} = \tau_{W^0} = 0$ as any other division will be rejected by the strongest elite. With democracy, the median voter is in W and the winning sharing rule is $\tau_{E_i} = 1 - g(\pi) - f(\pi)$, $\tau_{E_j} = g(\pi)$ and $\tau_{W^\pi} = f(\pi)$: by backward induction, if $\tau_W > f(\pi)$, either of the two elites will object and following such an objection, W^π will form a coalition with E_j and obtain $f(\pi)$.

Note that if the two elites legalize $W's$ party but do not extend franchise, there will be no party formation in equilibrium. Assume on the contrary that $\pi > 0$. Then, the equilibrium surplus sharing would be $\tau_{E_i} = 1 - g(\pi)$, $\tau_{E_j} = g(\pi)$ and $\tau_{W^\pi} = 0$ as surplus division will exclude the non-elite while ensuring that the weaker elite will extract $g(\pi)$ by threatening to form a coalition with W^π at the renegotiation stage but ex-ante no individual in W^π would ever join the party since $\tau_{W^\pi} = 0$.

Moreover if the two elites extend franchise, but do not lower the cost of joining the party, so that $c = \bar{c}$, given assumption (1) $\pi = 0$ and the surplus allocation would be $\tau_{E_i} = 1$, $\tau_{E_j} = \tau_{W^0} = 0$: enfranchising individuals in W, on its own has no real effect

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[16]The robustness of our results when this assumption is relaxed is discussed in more detail in section 2.3 below.

since any decision who attribute an allocation different than the one in oligarchy would be rejected by the stronger elite and renegotiated. *Therefore, both lowering the cost of political activity and enfranchisement are necessary to achieve a surplus sharing different than the one in oligarchy.*

Party formation at $t = 0$

In a democracy, collective political organization is legal and any member of W can join the organization at cost $\underline{c}$, hence given assumption (2), if individuals in W anticipate a coalition with the weaker elite then there is a threshold $\hat{\pi} > 0$ with $u(f(\hat{\pi})) = \underline{c}$, such that (a) if an individual in W believes that a fraction $\pi > \hat{\pi}$ will join the party, it is dominant for him to join as well, (b) if he believes that there is fraction $\pi < \hat{\pi}$ joining the party, then it is a dominant action for him not to join as well. It follows that party formation is characterized by a threshold and there are two symmetric equilibria[17] in the collective action game being played by individuals in W: one where no individual in W joins the organization (let us call it "individualist" equilibrium) and another where every individual in W will join the organization (we call it "collectivist" equilibrium).

Which of these two equilibria prevail? We develop an equilibrium selection argument that selects the prevailing equilibrium as a function of $\underline{c}$, the cost collective political activity with enfranchisement. Specifically, we show that without enfranchisement, the "individualist" equilibrium is selected while with enfranchisement, the "collectivist" equilibrium is selected.

Lemma 1 *In the party formation game played by individuals in W, the collectivist equilibrium is selected if and only if $\hat{\pi} < \frac{1}{2}$.*

Proof. See appendix. ∎

The key premise underlying the equilibrium selection argument used here (Harsanyi and Selten (1988) and Young (1993)) is that individuals in W face strategic uncertainty as there are multiple equilibria in the party formation game. Each individual assesses the likelihood of other individuals choosing actions according to either equilibrium under the assumption that other individuals make a mistake with some small probability and, given

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[17]We ignore the asymmetric equilibrium where $\hat{\pi}$ fraction of individuals in W join the party and $1 - \hat{\pi}$ fraction do not as it is never stable and has a empty basin of attraction.

these beliefs, choose their own actions optimally. The selected equilibrium is the one which is more likely to prevail in the presence of such strategic uncertainty. In the language of Harsanyi and Selten (1988), the selected equilibrium has the larger basin of attraction and is risk-dominant.

Note that as $u(f(\pi))$ is continuous and increasing in π, $\hat{\pi}$ is an increasing function of $\underline{c}$ and therefore, the condition that $\hat{\pi} < \frac{1}{2}$ can be equivalently stated as a condition that $\underline{c}$ is low enough. The following proposition summarizes the above discussion:

Proposition 2 . *If the cost of joining a organization in democracy, $\underline{c}$, is sufficiently low, all individuals in W will join the organization anticipating coalition formation with the weaker of the two elites at the renegotiation stage and a share $f(\pi)$ at the voting stage.*

Democracy at $t = 0$

Next, we study the choice of democracy at $t = 0$. To simplify notation, let $f(1) \equiv f$ and $g(1) \equiv g$. As the two elites are identical ex-ante, both of them will agree to a democracy if and only if the inequality holds:

$$\frac{1}{2}u(1) + \frac{1}{2}u(0) \le \frac{1}{2}u(1 - g - f) + \frac{1}{2}u(g) .\tag{3}$$

We can therefore state

Proposition 3 *A necessary condition for E_1 and E_2 to democratize is that both elites are risk-averse. When both elites are risk-averse and f is small enough (relative to the degree of risk-aversion of $u(.)$), the transition to democracy is Pareto efficient. .*
Proof. *See appendix.* ∎

Consider the case where individuals are risk neutral. In this case, as there are no gains from risk-sharing and $f > 0$, the expected utility of either elite at $t = 0$ (before their relative bargaining power is revealed) in oligarchy is higher than the expected utility in democracy. However, when elites are risk averse, there is a net gain in having a smoother consumption pattern across the two states, therefore, when f is not too large relative to degree of risk-aversion, the expected utility in Democracy could well be strictly higher than the expected utility in Oligarchy.

2.3 Discussion

1. *Cost of collective action:*

In the preceding analysis, we assumed that $u(f) < \overline{c}$ so that there was no organization formation in W without democracy. This is a simplifying assumption. When $u(f) > \overline{c}$, an implication the equilibrium selection argument presented here is that as long as $\overline{c}$ is high enough to ensure that $\pi(\overline{c})$, the solution to the equation $u(f(\pi)) = \overline{c}$, is strictly greater than $\frac{1}{2}$, our results continue to hold.

2. *The timing of party formation:*

What is the role of the timing of party formation in obtaining our democratization result? We have assumed that individuals in W form a party at $t = 0$ before the elites know their own relative bargaining power. We argue that no other timing makes sense and given the choice of when to form a party, party formation will take place at $t = 0$. Suppose party formation takes place after elites know their relative bargaining strength. Then, the stronger elite will always have an incentive to increase c in order to prevent party formation and thus coalition formation between the weaker elite and individuals in W. In our model, the cost c of party membership is a sunk cost and party members pay it only once at the time the party is formed. What in effect, we are assuming, is that the stronger elite will find too costly to break-up an existing party already formed at $t = 0$: if this isn't the case, the party in W will be broken up and democratization will reversed. Therefore, given the choice of when to form a party, party formation will take place at $t = 0$.

3. *Repeated interaction and renegotiation:*

Is our democratization result robust to repeated interaction between competing elites? On the face of it, folk theorem type arguments suggest that repeated interaction between competing elites in Oligarchy, should lead to efficient risk sharing between elites. However, there are at least two reasons why a folk theorem type argument may not apply here. First, the discount factor may be bounded away from 1 because, for instance, the gap between successive rounds of play (in our model, in Oligarchy, a round of play would have an ex-ante stage and ex-post stage of coalition formation and bargaining) is large. Second, the strategy profiles that support risk-sharing between elites may not be renegotiation-proof. Indeed, in our paper, there is a single efficient risk-sharing allocation between the two elites namely that at each value of θ, each elite appropriates half the social surplus in each round of play. Notice that for a strategy profile to be renegotiation proof, it would have

to result in the efficient allocation after any history of play. However, any strategy profile that supports efficient risk-sharing along the equilibrium path of play must involve some payoff loss for the stronger elite in the continuation game that follows on from the history where the stronger elite reneges on efficient risk-sharing, a contradiction.

3 Elite conflict without democracy

In this section, in contrast to the preceding analysis, we examine two different scenarios where intra-elite conflict doesn't necessarily lead to democratization: vertical biases in coalition formation and dominant elites.

3.1 Ethnic conflict

As already argued in the introduction, intra-elite conflict doesn't necessarily lead to stable democracy, especially when decolonization generates states that are populated by different social groups characterized by strong vertical links (like ethnic and linguistic links). In what follows, we show that with vertical bias, the conditions for democracy to emerge in equilibrium, derived in the preceding two sections, need to be qualified.

We model ethnic groups and ethnic conflict as follows. Assume that W is partitioned into subgroups W_1 and W_2 , such that each individual in W_i is that gets a negative utility $-b_i$, where $b_i > 0$, whenever it forms a coalition with elite E_j; otherwise, (for example, if it doesn't form a coalition, or if it forms a coalition with elite E_i, $j \neq i$), $b_i = 0$. We assumed that individuals have incentive to act collectively when anticipating a coalition with the weaker elite, $u(f) > \underline{c}$. However, if $u(f) < \underline{c}. + b_i$, for all $c \in \{\underline{c}, \bar{c}\}$, clearly no individual in W_i will form a coalition with E_j, and, assuming that the size of group W_i is greater than half, then for $\theta = i$, the fraction of individuals who act collectively is less than $\frac{1}{2}$ and therefore, there will be no organization formation in W, no ex-post coalition formation and consequently, no ex-ante democracy.

3.2 Dominant elites

Moore (1964) observes that the presence of a dominant elite results in dictatorship, not democracy. One way to model a dominant elite in our setting is to let the ex-ante probability that $\theta = 1$ be $q \geq \frac{1}{2}$. In other words, the two elites are not ex-ante symmetric in the sense

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that there is a bias in the probability with which one of the two elites become dominant. In such a situation, even when we maintain the assumptions under which Proposition 2 is valid, as long as q close enough to 1, there will be no unanimous agreement to extend democracy. The relevant inequality that needs to be satisfied for the dominant elite to agree to democracy is

$$qu(1) + (1-q)u(0) \leq qu(1-g-f) + (1-q)u(g) \tag{4}$$

and as $f > 0$, when $q = 1$, the direction of inequality (4) will be reversed and by continuity, this reversal will persist when q is close to 1. Of course, at the other extreme, when q is close to $\frac{1}{2}$, by continuity if (3) holds as a strict inequality so will (4). Moreover, as the LHS of (4) is increasing in q and the RHS of (3) is monotone in q, there is a $\bar{q} > \frac{1}{2}$ and $\bar{q} < 1$, such that when $q \leq \bar{q}$, (3) holds while when $q > \bar{q}$, the direction of the inequality is reversed.

4 Some empirical patterns

In this section we provide and discuss empirical evidence that supports the formal analysis developed here. To this end, it is useful to state four patterns that emerge from our formal analysis:

1. In the absence of ethnic bias, intra-elite conflict between equally powerful elites is a precondition for the transition to democracy;

2. Democracy lowers the cost of, and promotes, political activity;

3. The bargaining power of a fully organized non-elite can be small i.e. the non-elite median voter van be weak;

4. The transition to democracy doesn't rely on interest alignment between sections of the elites and non elites following on from modern capitalistic development.

Only point 4 needs more explanation. An important literature links the transition to democracy with modern industrial development as in Lizzeri and Persico (2004), Llavador and Oxoby (2005) and Galor and Moav (2006). In these papers, the transition to democracy is driven by class complementarity or interest alignment between sections of the elite

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and non-elite, which follows the modern capitalistic development. In contrast, in our paper, neither technological change nor a different mix of production factors are needed to generate the coalition among classes leading democracy. Therefore in our model, economic development in itself is neither a sufficient nor a necessary element for the emergence of democracy.[18]

4.1   Pattern 1: Intra-elite conflict and coalitions

Collier (1999) classifies three different patterns which historically led to democratization: i) middle sector mobilization, ii) electoral support mobilization and iii) joint project. In ii), democratization is the outcome of bargaining between political elites and he considers the following cases: Switzerland 1848, Chile 1847/41 , Britain 1867 and 1884, Norway 1898, Italy 1912, Uruguay 1918. In i) the democratization is an outcome of the conflict between political elite and economically rising middle-class (what we can consider as economical elites). This is the case of: Denmark 1849, Greece 1864, France 1848 and 1875, Argentina 1912, Portugal 1911 and 1918, Spain 1868, 1890 and 1931. In iii), where the working class played an active role alongside one of the two elites, Collier includes, Denmark 1915, Finland 1906 and 1919, Sweden 1907 and 1918, Netherlands 1917, Belgium 1918, Germany 1918, Britain 1918.

In what follows we analyze, in detail, some of these cases and also the establishment of democracy to India, a case that has received surprisingly little attention from the literature.

European Countries

There is some agreement among historians and political scientists that the elites in Britain had conflicting interests. Olson (1993) traces the origin of such fragmentation in the English civil war in the 17th century and writes. *"There were no lasting winners in the English civil wars. The different tendencies in British Protestantism and the economic and social forces with which they were linked were more or less evenly matched"*. The political environment after the Glorious Revolution led to the competition between rural aristocracy

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[18]This is not to say that development and democracy are completely unrelated. In our model democracy and development can be linked by the fact that economic development can be associated with the rise of strong industrial elite able to compete with traditional rural landowning. aristocracy.

and industrial capital (Olson 1993), which paved the way for franchise extension in the mid-Nineteenth century. Moore (1966) claims instead that this division was the result of the British capitalistic evolution, where part of the landed upper class and the gentry who transformed themselves into capitalists generated a different and equally strong elite, the upper bourgeoisie.[19]

The British parliament prior to 1832 was dominated either directly or indirectly by the big landlords. The 1832 Reform act established the right to vote based uniformly on property and income. It extended franchise to 14% of male population, roughly the entire middle class (Smellie 1949 and Collier 1999). The 1832 act gave the de jure power to a section of the economic elite who were unrepresented under existing electoral arrangements. We may argue that it avoided the alliance between bourgeoisie and working class that 44 years before leaded in France to the revolution. Accordingly, the landscape after the reform of 1832 was the one described by our model with two conflicting elites, who –represented in the parliament by the Conservatives and the Liberals– agreed to extend, with the largely bipartisan reform of 1867, franchise to a large part of the working class, a task that was completed by the reform in 1888 when about 60% of male adult were enfranchised.

The turmoil of the French revolution and the restoration of monarchy following the Vienna Congress resulted, in France, in a social environment dominated by two elites with conflicting interests. One elite, supporting the Republican party, mainly consisted of industrialists and professionals, and the other elite, mainly consisting of landowners, supported the monarchist party, while the working class was weak and still not organized (Elwitt (1975) pp. 5 and Luebbert (1991) pp. 37). In this context an episode can illustrate the bargaining relationship emphasized in the model: universal male suffrage was introduced in France 1848. When a social reform agenda was passed thanks to the alliance between the working class and republicans, a conservative government disenfranchised 2.8 million of men in 1850. However, in 1851 the Republicans and the working class supported the coup led by Louis Napoleon Bonaparte, who restored the universal suffrage, initially only formally and from 1868, under the pressure of Republicans and working classes more substantially by establishing the freedom of organization previously banned (Collier 1999, pp. 42-43 and Elwitt pp. 41).

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[19]The political struggles related to the Corn Laws are often presented as the most evident sign of the division among industrialist and rural elites.

Unlike France and Britain, Italy, Germany and Japan did not pass through historical episodes that weakened the traditional aristocracy and created conditions leading to intra-elite competition. In fact, the landed aristocracy was strengthened by their involvement in reunification process both in Germany and in Italy and by prestigious external military victories in Japan. Therefore, in all these three countries, the landed aristocracy was still dominant in the second half on nineteenth century. The oligarchic structure in Italy, Germany and Japan was mainly achieved through an incorporation of a weak bourgeoisie in an authoritarian state, and the landed aristocracy was still hegemonic in this alliance "...a commercial and industrial class which is too weak and dependent to take the power and rule in its own right [...] throws itself into the arms of the landed aristocracy and the royal bureaucracy". (Moore (1964), pp. 435-437).

In Germany, Bismarck's so called *revolution from above* (Moore 1962, pp. 433) was a strategy to preserve the conservative absolutist order, in his own words to *"overthrow parliaments with parliamentary means"*. Popular participation in the Germany government was strongly mitigated by institutional restrictions and the voting system was controlled by the Junker landlords. Similarly, mainly rural oligarchies governed in Italy and Japan until the establishment of their respective fascist governments between the 1920s and the 1930s, and after short-lived weak democracies (the Weimar Republic, the Taishō democracy in Japan, and Giolitti's governments in Italy). All main political figures: Bismarck in Germany, Cavour in Italy and the statesmen of the Meiji era embodied the interests of the landed aristocracy, and were deep conservative loyalists themselves. Even during the subsequent dictatorships, the landed aristocracy often maintained a strong position.[20]

India

India is the world's biggest and one of its more stable democracies. In the more than 50 years since the first election, there have been 15 general elections and over 300 state elections. Both at the state level and at the centre, governments have always been elected by people with a reasonably high level of rotation among political organizations.[21] As

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[20] In Italy for example, fascist leaders used to declare that fascism was "ruralizing Italy" and Mussolini promoted an strongly autarchic economic policy "la battaglia del grano" (the battle of wheat) throughout his rule.

[21] Although the Congress has traditionally been the dominating force, in 1977 it is thrown out. In 1980 it was voted back and in 1989 elections it was voted out again. In 1991, the Congress came back to power again.

it has been extensively documented, India enjoys a free media, freedom of assembly and association.

The decision to extend the franchise was voted unanimously by the constituent assembly, which also declared India an Independent state. The constituent assembly was elected via a process of indirect elections, organized in provincial legislatures elected in early 1946, using the 1935 act of franchise, mainly based on landowning. The electors constituted about 10 percent of the entire population (Sarkar 2001). Therefore, the constituent assembly can be considered to be representative of the elites and franchise extension in India was a one-shot decision rather than a dynamic process.

At the onset of the constituent assembly, the elites were constituted by large landowners and the industrial urban class often in conflict within each other. These divisions were already present in the Mogul's era but they were further exacerbated by the English rulers, who implemented the policy of "divide and rule", trying to prevent the formation of any coalition that could represent a threat . British rulers favoured and rested mainly on the support of Indian rural upper classes: native princes and large landlords.[22] In contrast, British colonialism did not favour Indian commercial and industrial elites, to prevent competition with their English counterparts who, for long time, sought protection, subsidy, and opportunities for monopolistic exploitation of the Indian market (Moore 1966, pp 371). This bias toward rural elites alienated the commercial and professional class generated a clear split between rural and urban elites in India. Accordingly, the British strategy resulted in the fact that the urban elite did not form a coalition with the powerful landed aristocracy, in a fashion which generated the dictatorial drift in Japan, Italy and Germany. The conflict between urban intellectual elites and rural big and medium farmers is a common element present in the history of Indian Democracy.

In this respect India differed from Pakistan. Geographically, Pakistan consists of regions which- during British colonialism- were characterized by mainly rural economy, dominated by Muslim Punjabi landlords.[23] The Punjabi elites, consisting mainly of the landed aristocracy (e.g. Kohli, 2001, pp. 5) were the core of the Muslim League who decided the

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[22]In the most important court there was a British resident advisor.

[23]Until 1971, the presence of a Bengali-muslim population in Pakistan generated a conflict with the west Pakistani majority, but their political power has always been small (Rashiduzzaman 1982). In 1971, the Bengali minority, with the help of India, obtained their independence with the formation of Bangladesh.

constitutional design of the country, and obtained partition from the rest of India. Although the creation of Pakistani democracy was contemporaneous with Indian democracy, it has never been stable with four major military coups (1958, 1969, 1977, 1999).

The following episode is a useful illustration of the coalition dynamics underlined in our model. Indira Gandhi's attempt to mount a coup (by imposing "Emergency") in 1975 culminated with the lost of the enormous popular support she had hitherto enjoyed and indeed, she called and lost elections in 1977. Even though she promised more redistribution to the non elite, this commitment was not credible and an alliance consisting of the non-elite with anti-Congress parties opposed her.[24]

The degree of ethnic conflict in India has always been less serious than for example in African countries. The fact that the Congress organization and the coalition of organizations in power at the central government during the different legislatures are not organized on an ethnic basis supports this claim (Horowitz 1985). Indeed, we showed that if part of non elites say W_i, have ethnic linkages with part of the elites E_i, and for these reasons W_i has some non monetary disutility b_i in allying with E_j, $j \neq i$, democracy will not emerge in equilibrium when b_i is large. The lower level of inter-ethnic conflict in Indian society is perhaps due to the geographic dispersion of Indian ethnic groups, which made them economically complementary and lower the level of b. And perhaps due to sanskritisation and castes institutions, which to a certain extend reflect horizontal divisions rather than vertical ethnic-type division. On the contrary, when different ethnic groups are concentrated in different regions of the country, it is more likely that non-elites will not ally horizontally with each other, but prefer to ally vertically with the elites of the same ethnic group.

In Nigeria after independence three essentially ethnic organizations had emerged: the Northern People's Congress (NPC) drawing its support from the Hausa and Fulani tribes of the North, the Action Group (AG), drawing its support from the Yoruba tribes of Western Nigeria, and the National Council of Nigeria and the Cameroons (NCNC) relying on the support of the Igbo of Eastern Nigeria. This clear regional divide was inherited from the British colonial period, where the South East, the South West and the North administrations were in practice ruled as fully independent units.[25] Interestingly, community

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[24]Kohli (2001) notes: "The fact that she was voted out of power following the emergency only confirm the efficacy of Indian democracy".

[25]The nationalistic party that after the independence forced the creation of a single state.

identities were so strong in shaping economic participation and social differentiation that a clear divide between classes did not emerge (Forrest pp. 24, 1993). Furthermore, we note that these three macro-regions are still today economically autonomous entities, predominantly agrarian in terms of employed labor force (more than 70 percent). The two rainy southern regions is where, historically, the production of staple tree and root crops is concentrated while the drier north is where the production of grains is concentrated (Olaloku et al. 1979).

The vertical ethnical division resulted, in Nigeria, in a series unstable democratic regimes. The first elections held in Nigeria in 1959 saw the victory of the NPC, which after one year declared the state of emergency in the western region whose local government, leaded by the AG, was proscribed and its leader arrested. The non elites, did not reject this outcome and instead of turning compact against the elites who disenfranchised them, they split along the ethnic and geographic lines, which lead the country to a long civil war that lasted until 1970 (Ake 1985).

4.2   Pattern 2: The cost and organization of political activity

It is quite incontroversial that democracy does not prevent and, on the contrary, encourages collective political activity. The constitutions of all main democracies dedicate one important article to the freedom of association or (/and) organization formation. In what follows we provide a sample consisting of the oldest and largest democracies.

- Canada: constitution act article 2 point d, guarantees freedom of association.

- France: article 4 (Title I) states "Political organizations and groups shall contribute to the exercise of suffrage. They shall be formed and carry on their activities freely (...)".

- Germany, article 9 (freedom of association) states "All Germans have the right to form associations and societies".

- Japan, article 21, (...) Freedom of assembly and association as well as speech, press and all other forms of expression are guaranteed (...).

- India, article 19 point c , "freedom to form associations or unions";

- Italy, article 18 (freedom of association) "Citizens have the right freely and without authorization to form associations for those aims not forbidden by criminal law."

- Turkey, article 33, "Everyone has the right to form associations, or become a member of an association, or withdraw from membership without prior permission.".

- US: 1st amendment, "(...) the right of the people peaceably to assemble (...)".

On the other side, Dahl (1989, p. 241) for the period 1981-85 classifies 85 countries (out of 168) as completely non democratic and notice that 70 among them have a total control of non-state collective organizations.

European Countries

In Great Britain, after the 1867 Reform Act, parties began to organize themselves as mass organizations and create institutions needed to compete at a national level (Acemoglu and Robinson, 2006, p. 179). Several small socialist groups had formed around this time with the intention of linking the movement to political policies. Among these were the Independent Labour Party, the intellectual and largely middle-class Fabian Society, the Social Democratic Federation and the Scottish Labour Party, this leads in 1900 to the formation of the Labour Representation Committee a centralized parties representing the working class. Furthermore, mass mobilization was achieved also through the creation of the national Union of Conservative Associations in 1867, and the National Liberal Federation in 1877, with the aim of coordinating and organizing local associations constituted mainly by workmen's classes (Beattie 1970, pp. 138-144).[26]

In France, the elections in 1848 under manhood universal suffrage, prompted the formation of the first mass organization, Republican Solidarity. This organization established branches in sixty-two of Frances's eighty-six departments and rapidly acquired about thirty-thousand members in 353 branches and it was formed by bourgeois, petty bourgeois and working class (Aminzade .1993, pp. 29-32).[27] Interestingly, Luis Napoleon during the initial

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[26] Taken literally, our model explains the formation of a single party for the non elites, but this is only the result of simplifying assumptions. In principle, non-elite can organize themselves in different bodies and also by joining preexisting parties, this would not change the nature of our results to the extent that the resulting organizations successfully coordinate to mobilize the non-elites in case of disenfranchisement threats.

[27] For example in the city of Toulouse the most outspoken republican militants were: 55% belonging to the working class, 21% bourgeois and 21% petty bourgeois.

repressive years of his regime declared Republican Solidarity illegal, but he never restricted suffrage. Republican Solidarity then almost disappeared, but it was revived with success in 1868, when Napoleon restored the formal democracy by removing the ban to any form of collective political activity.

India

The mass mobilization in India is a more complicated phenomenon than in the western European countries since it is inherently linked with the nationalistic and anticolonial movement. The Congress party, founded at the end of the nineteenth century became a mass organization after the first World War, in large part due to Gandhi. It is also interesting to notice that the Lahore demand for independence in 1929 was accompanied by a sharpening of the notion of democracy. The Nehru Report of 1928 suggested adult franchise and from the Faizpur session of 1936 onwards the Congress made a Constituent assembly elected by universal suffrage one of its central demands (Sarkar 2001, p. 29).

4.3 Pattern 3: The weak median voter

European Countries

A necessary condition for the democratization is that the ability of the working class to extract surplus is limited and that the organized working class on its own is weak (and becomes powerful only if allied with one elite). This is clearly consistent with Przeworski (1997) who notes:

> "Here it may be worth noting that democratic system was solidified in Belgium, Sweden, France and Great Britain only after organized workers were badly defeated in mass strikes and adopted a docile posture as a result.," (Przeworski (1997, p. 133)

In the UK, the enfranchised classes represented in the parliament by the Conservatives and the Liberals agreed to extend, with the reform of 1867, franchise to a large part of the working class, a task that was completed by the reform in 1888 when about 60% of male adult were enfranchised. In general this second wave of enfranchisement does not seem to be due to the strength of the working class. On the contrary, there is some agreement that the working class in England was too weak to represent a serious threat as Lizzeri and

Persico (2004) argue. The democratic demand from the lower class was represented by the Chartist movement, whose revolutionary power had its peak in the demonstration of 1848 that was brutally crushed. Therefore, one can argue that the Chartist movement did not necessarily entail a real chance of revolution in Britain (Wende 1999, pp. 147).

Similarly in France during the Paris' commune, where the urban working class– without the alliance of the Republicans– seized the power and governed Paris for few months was crushed by the troops of the Third Republic, which supports the claim, also put forward by Elwitt (1975) and Luebbert (1991), on the weakness of the working class as an autonomous force in France.

What about the ex-post capacity (the political power) of surplus extraction of the median voter in the European countries in the period immediately after the democratization? Democracy spreads in most of the Western Europe in the period 1830-1920. Aidt, Dutta and Loukoianova (2006) analyze 12 European countries in this period and find that enfranchisement generated low increases in welfare expenditure and a shift of the government expenditure from justice and police to infrastructure provision. The low increase in welfare expenditure seems consistent with claim that the de facto power of the working class remained low after enfranchisement.

India

Indian democracy has done very little to increase the living standard of the majority of Indian citizens. As Weiner notes:

> "The incorporation into the political system of backward caste elites and members of scheduled castes has apparently done little to reduce the enormous social and economic disparities that persist in India's hierarchical and inegalitarian social order. That raises the fundamental question: if there are now so many OBC and scheduled castes bureaucrats and politicians, why is not reflected in state policies to promote the well being of their communities? (...) Why has the increase in political power for members of the lower castes done so little to raise these communities?" *(Weiner (2001) pp 211).*

Weiner's observations are supported by Figure 4, depicting the index of wealth concentration and relative poverty in India from 1946- the date of the constituent assembly, which

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allowed for universal suffrage- to the early 1990s.[28] We can observe that income inequality and relative poverty has no downward tend– little or no redistribution has taken place.[29] Altogether, the funds allocated for the three main antipoverty programs constituted only the 4% of the total allocation in the plan where this project took place.[30]

Furthermore, we can observe very little evidence of extensive education provision; the share of individuals above 25 years that completed the first level is very low, 6.3% in 1960, 11 years after the first election. And it does not appear to be much higher in 1990, 8.5%, after 41 years of democracy.[31] Moreover there is a widespread consensus that level of health care is persistently neglected in many part of India. For example, Sen (1995) states:

> "If we were to look back at what has happened in India in the first four decades of planned development, two general failures appear particularly glaring. First, in contrast with what was promised by the political leadership which took India to independence, very little has been achieved in "the ending of poverty and ignorance and disease and inequality of opportunity" [...]. Four decades of allegedly "interventionist" planning did little to make the country literate, provide a wide-based health service, achieve comprehensive land reforms, or end the rampant social inequalities that blight the material prospects of the underprivileged."

INSERT FIGURE 1 HERE

The policy after independence mainly favoured agrarian, industrial and professional urban elites. The agrarian reform was not redistributive; there was a transfer of ownership from absentee landlords to enterprising rich farmers, who benefited also from policy of price support, subsidized inputs and institutional credits (Bardhan pp. 46 1988).[32] Substantial help was also addressed to industrialists, mainly from a few top Western Indian business families, with strong protectionist policies of import substitution, trade restriction, and

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[28] Gini index and last income quintile: Deininger and Squire, High quality Dataset. GDP per capita growth: Penn Table.

[29] Deininger and Squire, High quality Dataset.

[30] Brass 1990.

[31] Barro and Lee Dataset.

[32] By 1975 the big farmers (more than 4 hec) constituting 19 percent of the rural population accounted for 60 percent of cultivated area.

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large public provision of capital goods, intermediate goods, infrastructural facilities for private firms often at artificially low prices (Bardhan pp. 41-47). Also the professionals and high level bureaucrats were favoured by the government policy. In a country were the illiteracy is so widespread, this class benefited from educational expenditure. In India, total expenditure on education has been generally lower than comparable developing countries and a disproportionate share of the education budget has gone into higher education and to provide grants-in-aid to private schools with very little left for primary education (Weiner 1999, pp. 214). This policy favoured the educated urban classes by helping their children for secondary education and maintaining their monopoly as human capital owners (Bardhan, 1988 pp. 52).

There is a high level of fragmentation of lower castes. The caste system was an institutional way to organize this fragmentation, but at the same time, it perpetrated these divisions. A proof of this political weakness is represented by the general weakness of the Communist organizations in India. They have never been strong at a central level, and, when they gained power at the state level, as in West Bengal, they have always supported moderate policies of redistribution rather than dramatic change in the economic system. Therefore, we can argue that Indian lower classes would never be able to have an high level of bargaining power on its own (*i.e.* f is sufficiently small).

4.4   Pattern 4: Growth and democracy

Is democracy linked to industrial development? The evidence on this issue is moot. There is a relatively old debate on the so-called "modernization theory" that democratization naturally follows the development process. This was initially fuelled by an article of Lipset (1959) subsequently criticized by Luebbert (1991) and O' Donnel (1973) among others. O' Donnel , in particular, argues that the collapse of democracy in Latin-America in the 1960s and 1970s undermined the confidence in the modernization-promoted democracy. The Indian experience (at least till the late 1980's) provides an example of a reasonably stable democracy in an stagnating economy (in figure 1 we show the Indian GDP growth rate until 1990). Furthermore, if is true that in some western countries like Britain, Sweden and France, the process of industrialization was closely associated with a process of democratization, it is also true that in some other countries like Germany, Italy and Japan equally impressive episodes of industrialization led to totalitarian regimes. Consistently with this

observation, recent empirical evidence casts serious doubt on the causality from economic development to democratization (Przeworski et. al. (2000), Acemoglu, Johnson, Robinson, Yared (2005), and Persson and Tabellini (2006)).[33]

5   Final Remarks

The following quote is a good way of summarizing our main result:

> "*In a country where the elements in the dominant coalition are diverse, and each sufficiently strong to exert pressures and pulls in different directions, political democracy may have slightly better chance, than in other developing countries,(...). This is based not so much on the strength of the liberal value system in its political culture as on the procedural usefulness of democracy as an impersonal (at least arbitrary) rule of negotiation, demand articulation and bargaining within coalition, and as a device by which one partner may keep the other partners at the bargaining table within some moderate bounds*" Bardhan (1984, p.77).

In particular, our model clarifies how democracy can be seen as a negotiation device by which competing elites ensure a mutually fair share of the surplus by handing formal power to a weak non-elite median voter.

Possible directions for future research include investigating, more generally, voting models with an endogenously weak median voter, understanding the provision of and funding of public goods with a weak median voter and studying the link between secessionist movements and democratic institutions.

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6   Appendix

6.1   Proof of lemma 1

We use the idea of a stochastically stable equilibrium developed by Young (1993) (see also Charness and Jackson (2007)). Let g be an arbitrary finite normal form game with a set of N players, an action set A^i for each player and a payoff function $u^i : \times_{i=1}^{i=N} A^i \to \Re$. Suppose each player believes that whenever any other player chooses to play a specific

action, with probability ε, $0 < \varepsilon < 1$, she ends up choosing some other action in A^i. Let $g(\varepsilon)$ denote the perturbed game. A state in $g(\varepsilon)$ is a profile of actions. For each state, let each player pick a best response to that state in $g(\varepsilon)$. Associated with each best-response is a function α from the set of states to itself. When ε is small enough, let the set of $\alpha's$ that remain best responses for all smaller ε be denoted by $A(g)$. Any $\alpha \in A(g)$, together with ε defines a Markov process over the set of states that is both irreducible and aperiodic and therefore has a unique steady-state distribution. A stochastically stable state is one which has positive probability under the limit of the steady state distribution of the preceding Markov process as ε goes to zero for any selection $\alpha \in A(g)$. If a state is both a Nash equilibrium of g and a stochastically stable, then it is said to be a stochastically stable equilibrium of g.

As matters stand, we can't apply, in a straightforward way, the definition of a stochastically stable equilibrium to select between the two equilibria in the coordination game played by non-party members in W. The reason for this is that there is a continuum of individuals, of unit measure, in W while the definition of stochastic stability presupposes a game with a finite number of players. Instead, we take a sequence of finite subsets of players in W (equivalently, a finite grid contained in the unit interval) whose limit is W (equivalently, whose limit is the unit interval). Let $\tilde{N}_j$, $j \geq 1$, be a sequence of finite grids contained in the unit interval so that $\lim_{j \to \infty} \tilde{N}_j = [0, 1]$. Let $N_j = \#\tilde{N}_j$. We call a sequence of finite grids admissible if (i) there is a threshold $\bar{N}_j$ for each j such that $\lim_{j \to \infty} \frac{\bar{N}_j}{N_j} = \hat{\pi}$, (ii) the payoff to a party member is $u(f) - c$ if the number party members is greater than or equal to $\bar{N}_j$ and is $-c$ otherwise, (iii) the payoff to a non-party member is zero. For an equilibrium to be stochastically stable in the coordination game played by individuals in W, it must be the limit of the sequence of stochastically stable equilibria of all admissible sequences of finite grids converging to the unit interval.

Fix j and consider $\tilde{N}_j$. For $\tilde{\varepsilon}$ small enough, if at least $\bar{N}_j$ individuals join the party, then the best response of each non-party member must be to choose join the party as well. Similarly, if at most $\bar{N} - 1$ join the party, then the best response of each non-party member must be to join the party. Let $\#N_j^p$ be the number of party members. In states where $\#N_j^p = \bar{N}_j - 1$, choosing either of the two options, join the party or not join the party, are possible best responses for an individual. It follows that that best responses differ only in states where $\#N_j^p = \bar{N}_j - 1$. Now, consider the associated Markov process for small

$\tilde{\varepsilon}$. There are two recurrent communication classes[34], one where all individuals choose to join the party (labelled a_1) and one in which all individuals choose not to join the party (labelled a_2). By Theorem 4 in Young (1993), only states in a recurrent communication class with least resistance will have positive probability weight in the limit of the steady state distribution of the Markov process as $\tilde{\varepsilon}$ goes to zero. Consider the state a_2. Then, (i) there is a best response selection such that given $N_j - \bar{N}_j + 2$ errors, the best response of each individual is to be in a_1 and (ii) there is a best response selection such that given $N_j - \bar{N}_j + 1$ errors, the best response of each individual is to be in a_1. Therefore, the minimum resistance of leaving the state a_2, depending on the selection made, is either $N - \bar{N} + 1$ or $N - \bar{N} + 2$. It follows that the minimum resistance of a tree oriented from the state a_2 to the state a_1, depending on the best response selection made, is either $N_j - \bar{N}_j + 1$ or $N_j - \bar{N}_j + 2$. Next, consider the state a_1. Then, (i) there is a best response selection such that given $\bar{N}_j - 1$ errors, the best response of each individual is to be in a_2 and (ii) there is a best response selection such that given $\bar{N}_j - 2$ errors, the best response of each individual is to be in a_2. Therefore, the minimum resistance of leaving the state a_1, depending on the best response selection is either $\bar{N}_j - 1$ or $\bar{N}_j - 2$. It follows that the minimum resistance of a tree oriented from the state a_1 to the state a_2, depending on the best response selection made, is also either $\bar{N}_j - 1$ or $\bar{N}_j - 2$. The state a_1 is the unique stochastically stable equilibrium if and only if both $N_j - \bar{N}_j + 1 < \bar{N}_j - 1$ and $N_j - \bar{N}_j + 2 < \bar{N}_j - 2$ or equivalently, both $\bar{N}_j > \frac{N_j + 2}{2}$ and $\bar{N}_j > \frac{N_j + 4}{2}$. As $\frac{N_j + 2}{2} > \frac{N_j + 4}{2}$, if $\bar{N}_j - 2 > \frac{N_j}{2}$, the state a_1 is the unique stochastically stable equilibrium. Rewriting these inequalities, it follows that state a_1 is the unique stochastically stable equilibrium if and only if $\frac{\bar{N}_j - 2}{N_j} > \frac{1}{2}$. As $j \to \infty$, for any admissible sequence of finite grids, $\frac{\bar{N}_j - 2}{N_j} \to \hat{\pi}$ and therefore, when $\hat{\pi} > \frac{1}{2}$, the unique stochastically stable equilibrium is one where all non-party members do not join the party or equivalently, when $\hat{\pi} < \frac{1}{2}$, the unique stochastically stable equilibrium is one where all non-party members join the party.

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[34]For the definition of the terms "recurrent communication classes", "resistance" and "minimum stochastic potential" in this proof, see Young (1993).

6.2   Proof of Proposition 3

Inequality (3) is equivalent to

$$\int_{1-g-f}^{1} u'(x)dx \leq \int_{0}^{g} u'(x)dx. \tag{5}$$

When both elites are risk-neutral i.e. $u''(.) = 0$, by computation, it follows that as $1 - (1 - g - f) = g + f > g$, the direction of the inequality (3) is always reversed. Therefore, risk-aversion is a necessary condition for equilibrium enfranchisement. However, when $u''(.) < 0$, as $1 - (1 - g) = g$ and $0 < g$,

$$\int_{0}^{g} u'(x)dx > \int_{1-g}^{1} u'(x)dx$$

and therefore, as long as f is small enough, (3) will hold.

6.3   Endogenising the grabbing function

We show how the grabbing function can be endogenously derived as the outcomes of a process of sequential bilateral Nash bargains, where first, a coalition of two classes bargains with a class and second, given the surplus appropriated at the proceeding stage, each class in the coalition bargains with each other.

For each pair of coalitions γ, γ', $\gamma' \in \Gamma(\gamma)$, we model the raw force of a coalition by its disagreement function $d_{\gamma,\gamma'}(\theta)$. Measuring the surplus γ is able to appropriate in the event of civil war against γ'. Moreover, for each $\gamma \in \Gamma$ and $\gamma' \in \Gamma(\gamma)$, there is a continuous function $c : [0,1] \rightarrow [0,1]$ with $d_{\gamma',\gamma}(\theta) = c(d_{\gamma,\gamma'}(\theta))$ such that whenever $0 < d_{\gamma,\gamma'}(\theta) < 1$, $d_{\gamma,\gamma'}(\theta) + c(d_{\gamma,\gamma'}(\theta)) < 1$ but $\lim_{d_{\gamma,\gamma'}(\theta)\rightarrow 1} c(d_{\gamma,\gamma'}(\theta)) = 0$ and $\lim_{d_{\gamma,\gamma'}(\theta)\rightarrow 0} c(d_{\gamma,\gamma'}(\theta)) = 1$ so that there is surplus destruction after the civil war but the surplus destruction is minimal when one coalition or class completely overwhelms the other. Finally, we assume that both $d_{\{W^\pi, E_j\},\{E_i\}}(i)$ and $d_{\{W^\pi\},\{E_i\}}(\theta)$ are continuous and increasing in π with $\lim_{\pi\rightarrow 0} d_{\{W^\pi\},\{E_j\}}(i) = 0$ and $\lim_{\pi\rightarrow 0} d_{\{W^\pi, E_j\},\{E_i\}}(i) = d_{\{E_j\},\{E_i\}}(i)$.

Our analysis of sequential Nash bargaining proceeds by backward induction. First, when both γ, γ' each consists of a single class (labelled as k, l), and the available social surplus

is $s > 0$, the Nash bargaining outcome is the solution to the maximization problem:

$$\max_{c_k, c_l}(u(g_k s) - u(d_{\{k\},\{l\}} s)) \left(u(g_l s) - u(d_{\{l\},\{k\}} s)\right)$$

At an interior solution, the first-order conditions characterizing the solution to this maximization problem is:

$$\frac{u'(g_k s)}{(u(g_k s) - u(d_{\{k\},\{l\}} s))} = \frac{u'((1 - g_k)s)}{\left(u((1 - g_k)s) - u(d_{\{l\},\{k\}} s)\right)}$$

Note that when $d_{\{k\},\{l\}}$ increases the LHS of the proceeding equality increases and therefore, as $u''(.) < 0$, g_k must increase to maintain equality. Therefore, g_k, viewed as function of $d_{\{k\},\{l\}}$ and $d_{\{l\},\{k\}}$, is continuous in both arguments, increasing in $d_{\{k\},\{l\}}$ but decreasing in $d_{\{l\},\{k\}}$. Moreover, if $d_{\{k\},\{l\}} > d_{\{l\},\{k\}}$, $g_k > g_l$. As $d_{\{k\},\{l\}} \to 0$, by assumption, $\lim_{d_{l,k}(\theta) \to 0} c(d_{l,k}(\theta)) = 1$ and therefore, in the limit, $g_k \to 0$ and $g_l \to 1$.

Next, we define the "utility function" of a coalition of classes $\{k, l\}$ as the value function $V_{\{k,l\}}(s)$ derived from the solution to the Nash Bargaining maximization problem between k, l for a fixed s. Note that by standard results in duality, $V_{\{k,l\}}(s)$ is an increasing, concave function of s. When the coalition $\{k, l\}$ bargains with the class $\{m\}$, then the Nash bargaining outcome is the solution to the following maximization problem:

$$\max_{c_i}(u(g_m) - u(d_{\{m\},\{k,l\}}))) \left(V_{\{k,l\}}\left(g_{\{k,l\}}\right) - V_\gamma(d_{\{k,l\},\{m\}}))\right)$$

At an interior solution, the FOC is:

$$\frac{u'(g_m)}{(u(g_m) - u(d_{\{m\},\{k,l\}})))} = \frac{V'_{\{k,l\}}(1 - g_m)}{\left(V_{\{k,l\}}(1 - g_m) - V_\gamma(d_{\{k,l\},\{m\}}))\right)}$$

Using arguments identical to those used before, g_m, viewed as function of $d_{\{m\},\{k,l\}}$ and $d_{\{k,l\},\{m\}}$, is continuous in both arguments, increasing in $d_{\{m\},\{k,l\}}$ but decreasing in $d_{\{k,l\},\{m\}}$ and if $d_{\{m\},\{k,l\}} > d_{\{k,l\},\{m\}}$, $g_m > \frac{1}{2}$ and whenever $d_{\{k,l\},\{m\}} \to 0$, $g_{\{k,l\}} \to 0$ and $g_m \to 1$.

By an appropriate change of notation, define

$$g(\{k\}, \{l\}, \theta) = g_k(d_{\{k\},\{l\}}(\theta), d_{\{l\},\{k\}}(\theta))$$

and

$$g(\{m\}, \{k, l\}, \theta) = g_m(d_{\{m\},\{k,l\}}(\theta), d_{\{k,l\},\{m\}}(\theta)).$$

It follows that under the assumptions made $d_{\gamma,\gamma'}(\theta)$ so far, we have that (i) $g(\gamma, \gamma', \theta) = 1 - g(\gamma', \gamma, \theta)$, (ii) $g(E_j, E_i, i) < g(E_i, E_j, i)$, (iii) $\lim_{\pi \to 0} g(W^\pi, E_i, \theta) = 0$ and $\lim_{\pi \to 0} g(\{W^\pi, E_j\}, E_i, i) = g(E_j, E_i, i)$, (iv) both $g(\{W^\pi, E_i\}, E_j, \theta)$ and $g(W^\pi, E_i, \theta)$ are increasing in π and finally, (v) $f(\pi)$ is continuous in π.

Therefore, all the properties of the $g(\gamma, \gamma', \theta)$ used in the text can be derived by a process of sequential Nash bargaining.∎
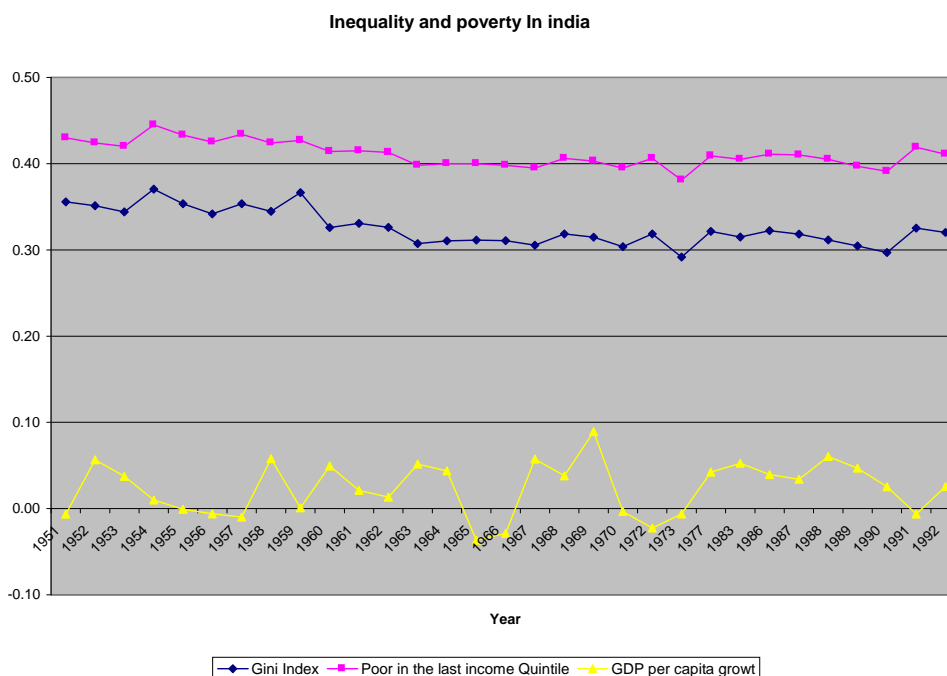
Inequality and poverty In india

Figure 1