

Why did (not) the East Extend the Franchise? Democracy, Intra-Elite Conflict and Risk Sharing

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Abstract

The process of enfranchisement is studied in a model of intra-elite conflict over the sharing of social surplus. The relative bargaining power of each elite, function of the surplus each elite is able to appropriate if the bargaining breaks down, is uncertain ex-ante. Accordingly, two competing elites can decide to enfranchise a weak but numerically large non-elite group in order to insure against future imbalances in relative bargaining power. The enfranchisement decision requires the non-elite group to be relatively weak and imperfectly informed about intra-elite bargaining power. Our results are robust to public good provision following enfranchisement when there is preference heterogeneity over the location of the public good across the different elites. A comparative analysis of the Indian Democracy is provided.

1 Introduction

The idea that maintaining balance of power between competing elites is at the origin of the process of the democratization is common among political scientists. For example Moore (1964, pp. 435-437) notes that a fundamental precondition for a process of democratization in England or in India was “...*the weakening of the landed aristocracy [...by contrast...] a commercial and industrial class which is too weak and dependent to take the power and rule in its own right and which therefore throws itself into the arms of the landed aristocracy and the royal bureaucracy...*” led to the fascism in some countries like Germany or Japan.

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More recently, Bardhan (1984, p.77) along similar lines emphasizes the capacity of the democracy to manage the conflict among equally powerful elites in the decision of sharing the social surplus: *“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”*.¹

Enfranchising the non-elites and involving them in the decision mechanism is a natural way to give part of the elite the possibility of finding partners for a coalition and, thus, of increasing their relative bargaining power vis a vis other part of the elite. In France for example, Luis Napoleon restored the male universal suffrage to balance the power between landed and urban elites.²

However, some questions naturally arise, it is not clear why the non-elite needs to be enfranchised for this purpose, i.e. why aren't they limited to providing external support? and, perhaps more importantly, why does the alliance with the non-elite not lead to an hegemony of one elite, threatening rather than stabilizing the democratic institutions?

In this paper we will give a possible answer to these questions using a model of between classes bargaining over a social surplus. The relative bargaining power of each elite is endogenously determined as a function of the surplus each elite is able to appropriate if the bargaining breaks down. We assume that the relative bargaining power is uncertain ex-ante, when the two elites decide whether or not to extend franchise to weak but numerically large non-elite. Once the enfranchisement decision has been made, nature then determines the relative bargaining power of two elites. We assume that either of the two elites are ex-post informed about each others' bargaining power while the non-elite observe imperfect signal. All enfranchised agents vote over surplus sharing proposals, but the outcome of the vote is not necessarily implemented since we allow for ex-post renegotiation and bargaining.

We show that the franchise extension is an effective device for the two elites to insure against relative shifts in bargaining power. In particular it ensures that, at the ex-post renegotiation stage, the enfranchised non-elite ally with the weaker of the two elites in order to counterbalance the power of the stronger of the two elites. A critical assumption for this to work is that enfranchisement gives to the non-elite an even negligibly small amount of bargaining power, which is

¹See also Anderson (1972).

²Luis Napoleon also suggested the Prussian Government to implement the same strategy, (Bardhan 1984).

higher relative to the weaker of the two elites, and therefore enfranchisement gives an incentives to collude with the weaker elite in any bargaining game with the stronger elite. Moreover, at the voting stage of the game, the non-elite must be imperfectly informed about intra-elite bargaining power. Otherwise, the non-elite would use their voting power to extract too much surplus and, therefore, ex-ante they will not be enfranchised.

Furthermore, our results are robust to the introduction of public good provision conditional on enfranchisement. Specifically, we show that enfranchisement will lead to surplus sharing rather than public good provision when the degree of preference heterogeneity across the two elites over the location of the public good is high and therefore, surplus appropriation by the elites- allowed, even with full enfranchisement, by the possibility of renegotiation- can crowd-out the more efficient public good provision.

Our results on enfranchisement are linked only to the conflict resolution and surplus sharing among the elites. Unlike existing literature (discussed below), we abstract from any issue related to class complementarity between sections of the elites and non elites in the production process, and we allow for free renegotiation after the enfranchisement decision is taken. In this respect, we demonstrate how ex-post renegotiation limits the level of redistribution or public good provision demanded by the median voter under full enfranchisement. Therefore, we emphasize that the improvement of the conditions of the lower classes do not necessarily follow the process of democratization and, in the last section, we present the Indian democracy as an example of democratization with little redistribution and little supply of public goods.

We argue that our model can explain many features of the Indian democracy in a comparative analysis with other countries, where the dismissal of the English colonial rule was followed by a not-so-successful attempt of instituting democratic institutions. Unlike Pakistan, the Indian elites are particularly fragmented and often conflicting; and unlike Nigeria, the ethnic divisions are not so strong to prevent the non elites from acting together. Therefore, our model suggests that at the core of Indian democracy there is a delicate equilibrium between elites fragmentation, which prevents the hegemony of one elite over the other, and the lack, to some extent, of geographically-based ethnic conflicts, which in African regions prevented the formation of a unified working class.

The paper is organized as follows: In section 2 we present the relate literature. The main model and its equilibria are analyzed in section 3. In section 4 we extend the model to consider the possibility of supplying public goods. Finally section 5 is devoted to a comparative analysis of the Indian democracy.

2 Related literature

While to the best of our knowledge, both the model and the results we obtain in this paper are new, in what follows we relate what we do to the existing literature.

In Acemoglu and Robinson (1998), the decision of extending the franchise abstracts away from intra-elite conflict. Enfranchisement is an irreversible commitment to redistribute from the elites to the non elites, under threat of revolution. Moreover, the nature of enfranchisement as commitment rules naturally out the possibility of renegotiation.³ In our paper, the enfranchisement does not imply long term commitment to redistribute to the non-elite, but only a negligibly small shift in bargaining power to the non-elites. This opens the door to the possibility of renegotiating the voting outcome with full enfranchisement and therefore, lowers the capacity of the enfranchised class of appropriating surplus. Our outcomes seem more in line with the observation that in the years following franchise extension in England in the nineteenth century there is no sign of an increase in the transfers to lower classes (see Lizzeri and Persico (2004) for this evidence), and with the evidence, presented in the last section, that in India there is no sign of reduction in the index of wealth concentration after the full franchise extension in 1949.

Lizzeri and Persico (LP henceforth) study the decision of enfranchising the non elites in a framework of internal conflict within elite. They show that it is necessary to enlarge the number of enfranchised individuals in order to discourage politicians from supplying transfer to buy voters (the *pork-barrel politics*) and to induce them instead to provide public goods. However, LP do not consider the possibility of renegotiating the voting outcome in the regime of restricted franchise and this assumption impacts on the incentives to enfranchise.⁴ In our paper, bargaining power between classes is independent of the voting outcome. Therefore a section of the elite can always renegotiate the electoral results if it happens to have the power to appropriate a large share of the surplus, whether or not the franchise is extended. LP model focuses on an environment where

³Acemoglu and Robinson (2001) partially relax this assumption, making that the decision of enfranchisement reversible but costly.

⁴In order to illustrate this point we can use the initial example in LP. Let 1 be the social surplus to be allocated to a one-unit population and $G > 4$ the value of a public good that can be produced with the social surplus. A political party can win the election by redistributing when it needs to acquire only $x \leq 0.25$ votes. This implies that the enfranchised, say e , are less than 0.5. On the other hand a party can win by supplying the public good when $e > 0.5$. This result, however, relies on the assumption that the part of the elite who do not receive any transfer, $e - x$, will accept this outcome, without being able to renegotiate. If a form of renegotiation is allowed, the promise of the winning party to redistribute the entire surplus to its voters is not credible. Therefore, the provision of the public good can be a winning strategy even without the franchise extension.

some degree of democracy is already accepted, and the elites are already committed to accept the electoral verdict, like the Britain "Age of Reform". Our aim is to provide an explanation where the creation of democratic institutions starts from an initially non institutionalized environment.⁵

An important element common in the existing literature: in the above mentioned LP model, in Llavador and Oxoby (2004) and Galor and Moav (2003) is the increasing complementarity between working class and capital owners in a process of economic development, where the complementarity between human capital and physical capital increases with the accumulation of the latter. Therefore in a process of industrialization, the increasing interest of capital owners for the human capital generated an incentive for the rich capitalistic elites to enfranchise the poor non elite in order to support the same policies or to prefer the Pareto-improving supply of public good to pork barrel politics. The obvious (and explicit) conclusion of these papers is that enfranchisement is inherently linked to western capitalistic development.⁶ In our paper, we do not need any technological complementarity among classes to achieve the full enfranchisement, which allows us to consider the democratization process as independent from the modern capitalistic development. This is important if we consider that India in 1946 was largely a pre-capitalistic and rural society⁷.

3 Transfers and enfranchisement

3.1 A model

Our model has three time periods, $t = 0, 1, 2$. There are three classes of homogeneous agents: W, K, L . There is a surplus of Y which has to be shared between the three classes. Individuals in each class consume the surplus at $t = 2$. Preferences over consumption are represented by the utility function $u : \mathfrak{R}_+ \rightarrow \mathfrak{R}$ where $u'(\cdot) > 0 > u''(\cdot)$ which implies that individuals are strictly risk averse. The total number of individuals has a mass of 1, with the mass of W larger than $\frac{1}{2}$. For simplicity we assume that the size of K and L are equal.

⁵In the last section, we will see that the Indian extension of franchise, decided just after its Independence in 1946, can be considered more a one-shot decision rather than a gradual process.

⁶Among traditional political scientists there has been a long debate on this issue: the modernization theory of Lipset (1959) claims the presence of a causality relationship from industrial development to democracy, and have been widely criticised by other important following contributions like Diamond (1992) among others.

⁷Other models of franchise extension emphasize the idea of enfranchisement as a commitment device and include Conley and Temini (2001), Bertocchi (2003), Fleck and Hanssen (2002).

From a different perspective Ticchi and Vidigni (2003) show how elites enfranchise citizen in case of war to increase their incentives to fight.

Each class (or coalition of classes) bargain over how to share the surplus Y , the bargaining power of a class (or coalition of classes) is determined by the utility each class (or coalition of classes) obtains if bargaining breaks down; we can imagine that in this case the class (or coalition of classes) appropriate part of the surplus using the force, while some surplus gets destroyed. Following the literature we call this utility *the disagreement payoffs*.

Let θ be a random variable generating the relative strength of the classes K and L , determined by the nature at the beginning of $t = 1$ as follows:

$$\theta = \begin{cases} K & \text{prob. } \frac{1}{2} \\ L & \text{prob. } \frac{1}{2} \end{cases}.$$

Let $i \neq j \neq k$ the indexes for different classes and $\Gamma = \{\{i\}, \{j\}, \{k\}, \{i, j\}, \{i, k\}, \{j, k\}\}$ the set of all possible coalitions (except the grand coalition). We measure strength of a group $\gamma \in \Gamma$ by the disagreement function $d_{\gamma, \gamma'}(\theta)$, for each $\gamma' \in \Gamma \setminus \gamma$. We make the following assumptions on the disagreement function $d_{\gamma, \gamma'}(\theta)$, $\gamma' \in \Gamma \setminus \gamma$. Let i and j represent the two elites and $\theta = i \neq j$, we assume:

1. $d_{i,j}(i) > d_{j,i}(i)$ and $d_{i,j}(i) + d_{j,i}(i) < Y$;
2. $d_{\{j,W\},i}(i) > d_{i,\{j,W\}}(i)$ and $d_{\{j,W\},i}(i) + d_{i,\{j,W\}}(i) < Y$
3. Without enfranchisement, for all θ , $d_{W,\gamma'}(\theta) = 0$, with $\gamma' \in \Gamma \setminus \{W\}$; while with enfranchisement, $d_{W,i}(i) = d_{W,\{i,j\}}(i) = 0$, $d_{W,j}(i) = d_W$, d_W positive but close to 0;

Assumption 1 formalizes the idea that either K or L is always the dominant class, are ex-ante symmetric and their (relative) strength is determined by the state of nature θ . In this sense, K, L are sections of the elite. For Assumption 2 the coalition of the weakest elite with W has always has greater strength than the prevailing elite on its own. Finally Assumption 3 states that irrespective of the state of nature, W has the weakest bargaining power. Nevertheless, once enfranchised, W 's bargaining power increases marginally and it is larger relative to the weakest class belonging to the elite.⁸ We can justify this assumption in at least two ways: first, after enfranchisement, W 's willingness to fight increases as members of W obtain a psychological payoff from their identity as voters; second, after enfranchisement, W 's ability to fight increases as members of W organizes a party for the election. This assumption is crucial since W can now accept to form a coalition with one of the two elites and prefer a coalition with the weakest elites rather than with the stronger.

The sequence of events is as follows:

⁸For simplicity purposes we kept unchanged the bargaining power of W with the strongest elites, therefore the bargaining power of W increase only with respect to the weakest elite.

- *Ex-ante enfranchisement*: At $t = 0$, the set of voters is determined. We assume that only the classes K, L are enfranchised as voters and are represented by their respective political parties. However, by unanimous consent, both classes K, L can also decide whether or not to enfranchise W .
- *Interim majority voting*: At the beginning of $t = 1$, nature chooses θ . Both K and L observe θ but W receives a noisy signal s about θ so that conditional on $\theta = i$,

$$s = \begin{cases} i & \text{with prob. } q \\ j, j \neq i & \text{with prob. } 1 - q \end{cases} \quad (1)$$

such that $\frac{1}{2} \leq q < 1$. Conditional on nature's choice and signal s_k , each enfranchised class proposes a sharing rule $\tau = (\tau_K, \tau_L, \tau_W)$ of the surplus Y . The set of voters then vote between sharing rules and the sharing rule with highest number of votes wins⁹.

- *Ex-post renegotiation*:
 - Step1 *coup*: At $t = 2$, θ is fully revealed to all classes. If the winning proposal from the voting stage is accepted, the game ends and all classes consume their share of the surplus Y according to victorious sharing rule. If after observing the sharing rule chosen in the preceding period, class $i = \theta$ objects, the winning proposal from the voting stage is rejected and the bargaining subgame begins.
 - Step 2 *bargaining sub game*:. If the deviating coalition consists of a single class i , bargaining proceeds as follows. First, the two other classes j, k decide whether or not to form a coalition. If no coalition is formed i bargains with the two classes separately where each sequence of pairwise bargains has equal probability. If j, k decide to form a coalition, then i bargains first with the coalition $\{j, k\}$ and then, j and k bargain over the share of the surplus appropriated in the preceding round of bargaining. At this stage, the game ends and each class consumes its share of the surplus Y .

This completes the specification of the rules of the game. At the ex-post renegotiation stage, at each step, bargaining outcomes are determined, sequentially, by Nash bargaining. Further, we also require that at the ex-post renegotiation stage, for a deviating coalition to form, all its members must strictly gain by deviating from the status quo¹⁰. Given the bargaining outcomes

⁹If there is more than one sharing rule with the highest number of votes, then each sharing rule in set of sharing rules with the highest number of votes is selected with equal probability.

¹⁰One way to justify this requirement would be to assume that each class in a deviating coalition must bear a negligibly small cost.

at the ex-post renegotiation stage, we solve for the extensive-form game of enfranchisement and voting by backward induction.

Bargaining sub game

We begin our formal analysis by deriving the bargaining outcomes of ex-post renegotiation. In what follows, we summarize the bargaining outcomes of ex-post renegotiation by a "grabbing function" $c(\gamma, \theta)$ that takes into account any coalition formation at the ex-post renegotiation stage. that summarize the bargaining outcomes of ex-post renegotiation. Let $c(\{W\}, \theta)$ denote the grab function for W without enfranchisement and $c'(\{W\}, \theta)$ denote the grab function for W with enfranchisement.¹¹

Lemma 1 *Under assumptions (1)-(3), the grab function $c(\gamma, \theta)$ has the following properties:*

1. *The grab function is symmetric in K and L i.e. $c(\{K\}, L) = c(\{L\}, K) = c_1$, (or equivalently, $c(\{K\}, K) = c(\{L\}, L) = Y - c_1$) where $Y - c_1 > c_1$;*
2. *A coalition of classes has always greater bargaining power than any one class on its own $c(\{j, W\}, i) = c_2 > \frac{Y}{2}$;*
3. *For $\theta = i$ and $i \neq j$, $c(\{W\}, \theta) < c_0 = c'(\{W\}, \theta)$ where c_0 is small positive number arbitrarily close to zero and $c_0 < c_1$.*

Proof. See the appendix. ■

Given Assumptions 1-3, in the equilibrium path of the bargaining subgame the rejection of the sharing rule will be followed by the formation of the coalition $\{j, W\}$ (when $\theta = i \neq j$) that will be able to grab some surplus, say c_2 , to i , then W will grab part of it, say c_0 , and the lasting $c_2 - c_0$ will be appropriated by the weakest elite j .

Using the grabbing function $c(\gamma, \theta)$ we will next determine the possible equilibria of the game and, given assumptions 1-3, we will show that if individuals are enough risk averse the enfranchisement is the only possible subgame perfect equilibrium.

3.2 Equilibria

The subgame at $t = 1$ without enfranchisement

¹¹It is useful to note the index j of function $d_{i,j}(i)$, indicating the opposing coalition or groups, is redundant (then it has been dropped) in the grabbing function $c(\cdot, \theta)$ since this function measure the bargaining power on the equilibrium path of play.

Let us consider the case when $\theta = K$. We demonstrate that along any equilibrium path of play, the winning proposal is $\tau_K = Y - c_1$, $\tau_L = c_1$, $\tau_W = 0$ and no coalition of classes will reject the proposal. Under our assumptions, it is evident that on their own, neither K nor L can do better by rejecting the winning proposal. Can L do better by building a coalition with W ? Note that coalition $\{L, W\}$ can grab c_2 and therefore, on the face of it, L has an incentive to build a coalition with W and reject the winning proposal. What about W 's incentive to join a deviating coalition with L ? Whatever be W 's signal, as $c(W, \theta) = 0$, for $\theta = K, L$, note that following any deviation, L will appropriate c_2 and leave nothing for W . But, then, W will have no incentive to deviate with L . Finally, note that any proposal with $\tau_L > c_1$ will be rejected by K as K can grab $Y - c_1$ on her own and further, any proposal with $\tau_L < c_1$ will be rejected by L as L can grab $Y - c_1$ on her own. A symmetric argument establishes that when $\theta = L$, along any equilibrium path of play, the winning proposal is $\tau_K = c_1$, $\tau_L = Y - c_1$, $\tau_W = 0$ and moreover, no coalition of classes will reject the proposal. Therefore we have the following result:

Lemma 2 *Without enfranchisement, if $\theta = K$, the sharing rule $\tau_K = Y - c_1$, $\tau_L = c_1$, $\tau_W = 0$ is the equilibrium outcome while if $\theta = L$, the sharing rule $\tau_K = c_1$, $\tau_L = Y - c_1$, $\tau_W = 0$ is the equilibrium outcome.*

The subgame at $t = 1$ when W is enfranchised

W observes a noisy signal q . Consider, first, the situation where we require that no coalition of classes has an incentive to reject W 's proposal. In this case, we claim that the best-response offer by W is $\tau_K = \tau_L = Y - c_2$, $\tau_W = 2c_2 - Y$ and moreover, no coalition of classes has an incentive to reject W 's proposal. The argument proceeds as follows. Under the constraints that no coalition of classes has an incentive to reject W 's proposal, W 's proposal must satisfy the following (in)equalities:

$$\begin{aligned}\tau_i &= \frac{(Y - \varepsilon_i)}{2} \text{ with } i = K, L \\ \tau_W &= \varepsilon_L + \varepsilon_K\end{aligned}$$

where ε_i , $i = K, L$ is such that

$$\begin{aligned}Y - c_1 &\geq \frac{Y - \varepsilon_i}{2} \geq Y - c_2 \\ \varepsilon_L + \varepsilon_K &\geq c_0,\end{aligned}$$

As $c_2 > \frac{Y}{2} > c_1$ and c_0 is close to 0, the above inequalities are mutually consistent. Since $\frac{Y - \varepsilon_K}{2} \geq Y - c_2$, class K will never deviate alone. Moreover, W will never form a deviating coalition with the elites as following any deviation W will obtain maximum $c_0 < \tau_W$. While W

will accept to form coalition only with the weakest elite, say L , if K rejects the proposal, and grab $c_0 > 0$ in the bilateral post-coalition bargain against L . On the other hand W will never accept any counter proposal of forming a coalition with K since W will get 0 in this case. Finally L will never form a deviating coalition with K as following any deviation L will only obtain $c_1 \leq \frac{Y - \varepsilon_L}{2}$. In equilibrium, ε_i , $i = K, L$, will satisfy $\frac{Y - \varepsilon_i}{2} = Y - c_2$ or equivalently, $\varepsilon_i = 2c_2 - Y$. Therefore, in equilibrium, $\tau_K = \tau_L = Y - c_2$, $\tau_W = 2c_2 - Y$.

Next, consider the situation when W 's is rejected with positive probability by some deviating coalition. Note that W will never make an offer that is rejected by both L and K with probability one. Suppose that, $s = K$ and that W "bets" on $\theta = K$ and makes an offer that is not rejected by K on her own. It follows that c_2 is the maximum it is possible to extract from K as otherwise K can reject W 's proposal and obtain $Y - c_2$, by fighting against the coalition W and L . Moreover, c_1 is the minimum amount W will offer to L as otherwise, L will have an incentive to form a deviating coalition with K . It follows that W 's proposal will be $\tau_K = Y - c_2$, $\tau_L = c_1$ and $\tau_W = c_2 - c_1$ and moreover, with probability q no coalition of classes will reject this proposal. On the other hand, with probability $1 - q$, $\theta = L$. In this case, L will reject W 's proposal. Note that after W 's offer is rejected, L -coalized with W - will anticipate that K will reject any offer less than $c_2 - c_0$. and therefore, propose the outcome $\tau_K = c_2 - c_0$, $\tau_L = Y - c_2$, $\tau_W = c_0$.

Call $\tau_K = \tau_L = Y - c_2$, $\tau_W = 2c_2 - Y$ "Fair Sharing" and $\tau_K = Y - c_2$, $\tau_L = c_1$, $\tau_W = c_2 - c_1$ "Bet on the winner". In equilibrium, W prefer fair sharing if and only if:

$$u(2c_2 - Y) > qu(c_2 - c_1) + (1 - q)u(c_0). \quad (2)$$

for c_1 and c_2 close to 0. From $\frac{Y}{2} < c_2 < Y$ it follows that $u(2c_2 - Y) < u(c_2 - c_1)$ and W prefer bet on the winner, when W 'signal is sufficiently precise, i.e. q sufficiently close to one. However, since

$$\frac{1}{2}u(Y - c_2) + \frac{1}{2}u(c_1) < \frac{1}{2}u(Y - c_1) + \frac{1}{2}u(c_1),$$

ex-ante the elites will not enfranchise W . Accordingly we state the following:

Proposition 3 *There exists $\bar{q} < 1$, such that when $q \geq \bar{q}$, W is never enfranchised.*

Proof. It follows directly from condition (2) with $\bar{q} : u(2c_2 - Y) = \bar{q}u(c_2 - c_1) + (1 - \bar{q})u(c_0)$. ■

The decision of enfranchising W

When W has precise information about the realization of θ , it is not possible for elite j to ensure against the outcome $\theta = i$ because W will always prefer to favor i . We will see next that only when the information on θ is not perfect, the enfranchisement decision exists in equilibrium. Now, consider the case where W has little information on θ and, for simplicity, assume $q = \frac{1}{2}$, i.e.

W is completely uniformed over θ . Condition

$$u(2c_2 - Y) > \frac{1}{2}u(c_2) + \frac{1}{2}u(c_0) \quad (3)$$

ensures that fair sharing offer: $\tau_K = \tau_L = Y - c_2$, $\tau_W = 2c_2 - Y$ will be made at the equilibrium under full enfranchisement. As a result, ex-ante the elites K and L will always extend the franchise if

$$u(Y - c_2) > \frac{1}{2}u(Y - c_1) + \frac{1}{2}u(c_1) \quad (4)$$

It is important to notice that, since

$$Y - c_1 > Y - c_2 > c_1$$

and

$$c_2 > 2c_2 - Y > c_0,$$

using conditions (3) and (4), when $u''(\cdot) = 0$ (with risk-neutral preferences) there will never be enfranchisement and by continuity, if the degree of concavity of $u(\cdot)$ is small, again there will be no enfranchisement. Indeed, if we consider the CRRA class of utility function, $u(x) = \frac{x^{1-\gamma}}{1-\gamma}$, $\gamma \neq 1$, by computation, it is easily verified that there exists $\bar{\gamma}$, $0 < \bar{\gamma} < 1$, such that whenever $\gamma > \bar{\gamma}$, $\gamma \neq 1$, there is enfranchisement in equilibrium. The following proposition summarizes the above discussion:

Proposition 4 *When individuals are sufficiently risk averse K and L will always enfranchise W*

4 Public goods versus transfers and enfranchisement

In this section, we study enfranchisement in a model where agents have option of invest Y in a public good, instead of redistributing it. Moreover, we will assume that different classes have heterogeneous preferences over the public good location therefore, if the public good is provided, classes either vote or bargain over its location.

4.1 Public goods bargaining and enfranchisement

We assume, for simplicity, that the entire Y must be invested in order to obtain the public good. The location of the public good is indexed by points in R_+^2 in figure 1. Each individual classes K , L and W has it maximum utility from the public good when this is located in the points $K = (0; 0)$; $L = (\bar{l}; 0)$, and $W = (\frac{\bar{l}}{2}; \frac{\bar{l}}{\sqrt{2}})$ respectively, with $\bar{l} < G$. Where we assumed for simplicity

that the three classes have the same distance \bar{l} among each other (i.e. the triangle (K, L, W) is equilateral).¹²

If the public good is located in a point $l \in R_+^2$, the preferences of the three classes are described by the utility functions

$$\begin{aligned} u_K(G) &= u(G - |l|) \\ u_L(G) &= u(G - |l_L - l|) \\ u_W(G) &= u(G - |l_w - l|). \end{aligned}$$

We assume that the production technology for the public good is such that the entire surplus Y must be either invested in building the good or shared and consumed. Accordingly each class propose at time 0 either a sharing rule (τ_K, τ_L, τ_W) or the public good with location l^* . The rest of the game is the same as before and the public good is supplied only when the proposal is accepted at majority by the enfranchised class and the stronger elite did not object the democratic rule. If the stronger elite objects to the location of the public good, then the public good is not provided and the classes obtain their disagreement utility exactly like in the previous sections. It follows that using the grab functions $c(\gamma, \theta)$ we can derive a grabbing function over the location the public good, $l(\gamma, \theta)$, that summarize the outcomes of ex-post renegotiation, where for $\theta = i$ and $i \neq j$

1. *The grab function is symmetric in K and L i.e. $l(\{K\}, L) = l(\{L\}, K) = l_1$ where l_1 is close to zero;*
2. *Without enfranchisement, $l(\{W\}, i) = l(\{W\}, j) = 0$ while with enfranchisement $l(\{W\}, \theta) = l_0$, where l_0 is small positive number arbitrarily close to zero and $l_0 < l_1$;*
3. *$l(\{j, W\}, i) = l_2 > \frac{\bar{l}}{2}$*

Let us define $\lambda < \frac{1}{2}$ the size of each elite and assume, for expositional simplicity,

$$\frac{Y - c_1}{\lambda} > G,$$

so that the good is never supplied without enfranchising W and

$$\frac{2c_2 - Y}{1 - \lambda} < G - |l_L|,$$

¹²As far as W is equidistant from K and L , i.e. the triangle is isosceles, the solution will not change qualitatively. If W is closer to one of the two elites there may be a systematic bias of W , who will prefer the bet on winner to the fair sharing. In this case the enfranchisement will not take place ex-ante.

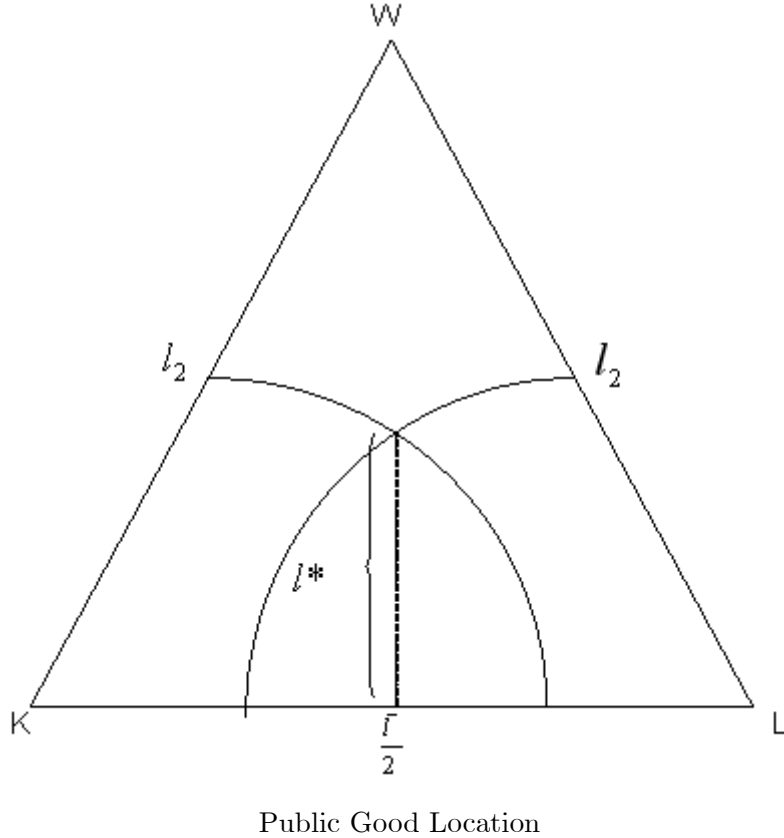
hence the non elite will always prefer the public good to the transfer.

Given these two conditions the public good is supplied in equilibrium only if the strongest elites does not object W proposal to locate the good at distance l^* and not prefer to grab the surplus, i.e. $G - l^* > \frac{Y - c_2}{\lambda}$.¹³ From figure 1 we can see that $l^* = \frac{\bar{l}}{2}$ is the point of maximum elites' expected utility from the public good, in order W 's proposal not to be rejected there must exists a \bar{l} such that

$$G - \frac{\bar{l}}{2} > \frac{Y - c_2}{\lambda}, \quad (5)$$

when (5) is not satisfied W will always propose the sharing rule $\tau_K = \tau_L = Y - c_2$, $\tau_W = 2c_2 - Y$ to avoid the coup, and obtain $2c_2 - Y$ instead of c_0 . Therefore from (5) we can state

Proposition 5 *If the distance between the elites is sufficiently large, i.e. $\bar{l} > 2(G - \frac{Y - c_2}{\lambda})$ the enfranchisement will not produce the public good supply.*



¹³We are assuming that W prefer the fair sharing rather than bet on the winner. It can be shown as before that this is true if individuals are sufficiently risk averse and W 's information on θ is sufficiently noisy.

5 A comparative analysis of Indian Democracy

In this section, we provide some descriptive and anecdotal evidence showing that our model is able to capture the distinctive features of Indian democracy, and we compare India with other countries, whose institutions did not achieve the same level of stability.

India is the world's biggest and one of its more stable democracies. In more than 50 years since the first election there have been 15 general elections and over 300 state contests. Both at state level and at the centre, governments have always been elected by people with a reasonably high level of alternance among political parties.¹⁴ It is perhaps needless to add that India enjoy 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. This assembly can be considered as balanced representation the elites (Sarkar 2001).¹⁵ In this sense, the the Democratization in India is closer to a one shot decision than to a dynamic process.

A non redistributive democracy

The success of Indian democracy came in spite the low income, widespread poverty and illiteracy and immense ethnic diversity. However, always consistent with our model, the Indian democracy did very little to increase the living standard of the majority 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 rise 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) p. 211)

Weiner's observations are supported by Figure 2, depicting the index of wealth concentration and relative poverty in India from 1946- the date of the constituent assembly, which allowed for universal suffrage- to the early 1990s.¹⁶ We can observe that income inequality and relative poverty

¹⁴ Although the congress has traditionally been the dominating force, in 1977 it is thrown out. In 1980 it is voted back, in 1989 Indians opted again for a change and in 1991 the congress goes to power again.

¹⁵ The constituent body were elected through indirect elections, chosen by provincial legislatures that had been elected in early 1946, by a pool of 10 percent of the entire population.

¹⁶ Gini index and last income quintile: Deininger and Squire, High quality Dataset. GDP per capita growth: Penn Table.

hardly present any downward trend, in spite of often positive growth rates.¹⁷ No redistribution clearly took place: the Gini Index of wealth concentration, changed from 35 in 1951 to 32 in 1991;¹⁸ 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.¹⁹

Furthermore, in figure 2 we can observe very little evidence of education provision; there is very low level of education characterizing the Indian population in 1960, 11 years after the first election, and only a marginal decrease until 1990. The share of individuals above 25 years that completed the first level passed from 6.3% in 1960 to only 8.5% in 1990, while the ones without any schooling changed from 75% in 1960 to 60% in the 1990.²⁰ Moreover there is a widespread consensus that level of health care is persistently neglected in many part of India. Always in this respect, Sen (1995) notes:

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" the "tasks ahead" that Jawaharlal Nehru identified in his famous speech on the eve of independence, on August 14th 1947. 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.

We can therefore argue that there is little evidence of public good supply after the enfranchisement.

Distribution of power between the elites

At the onset of the constituent assembly the stronger dominant classes were constituted by large landowners and the industrial urban class often in conflict within each other. The uncertainty on their respective effective power is amplified by social, religious and as well as regional divisions. The caste system was an institutional way to organize this fragmentation, but at the same time,

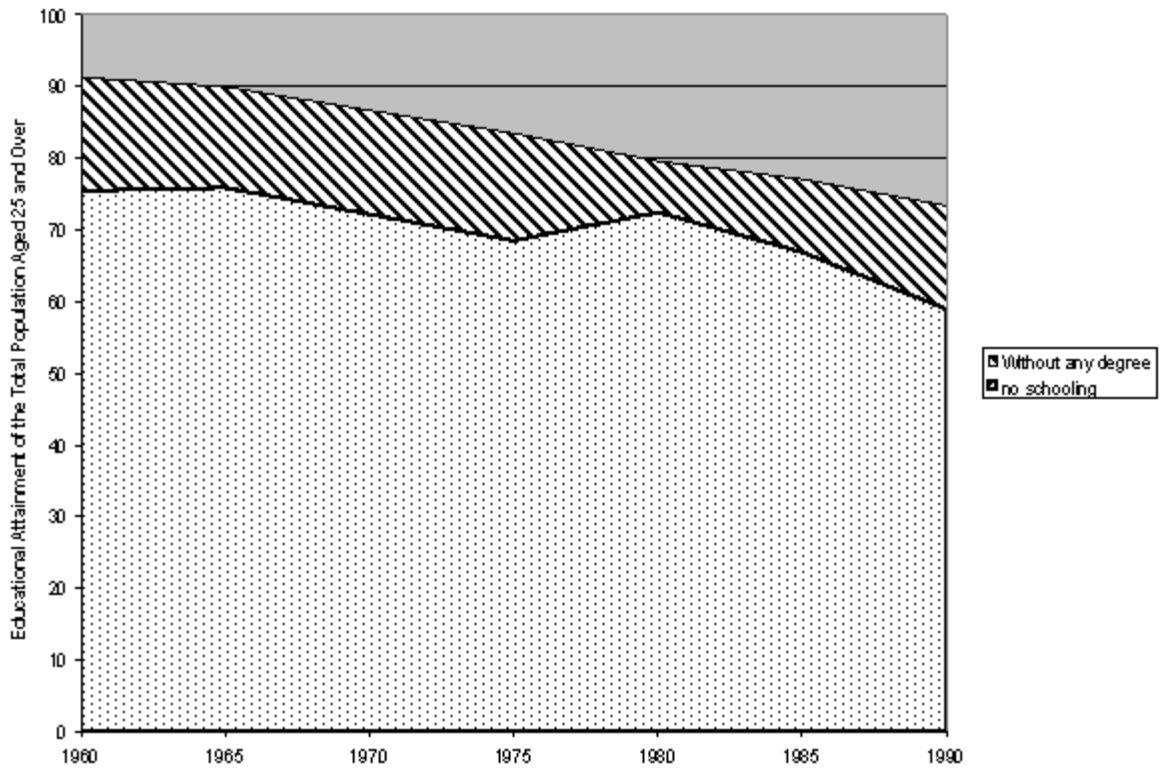
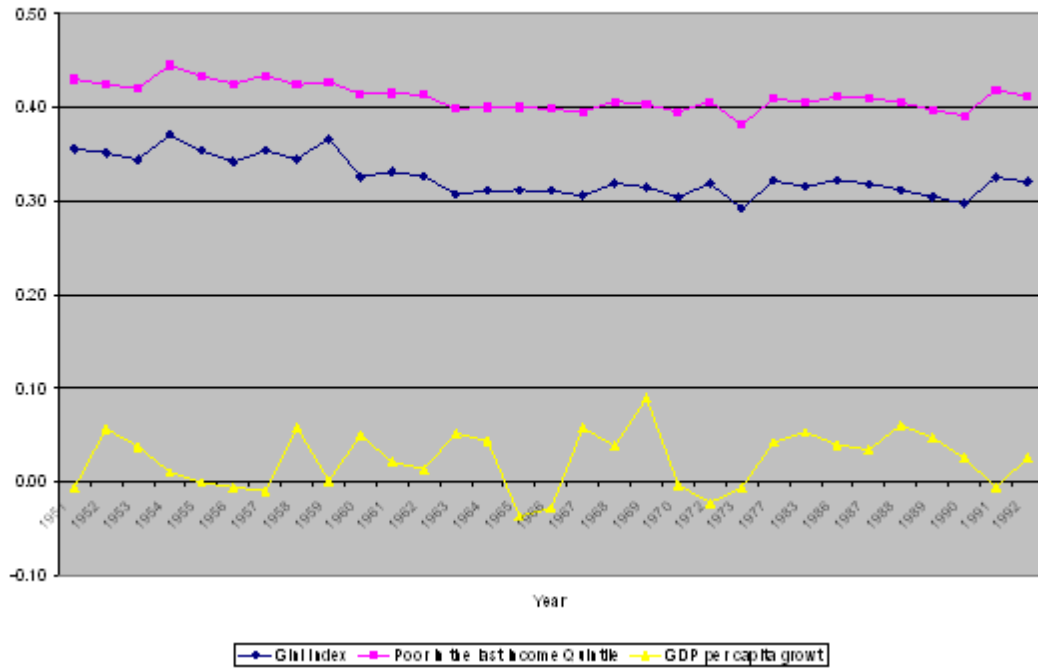
¹⁷Recently, in the early 2000s, we started to observe a decline in the poverty rate, but this is due to "trickle down" growth, rather than to wealth redistribution.

¹⁸Deininger and Squire, High quality Dataset.

¹⁹Brass 1990.

²⁰Barro and Lee Dataset.

Inequality and poverty in India



it perpetrated these divisions. These divisions were already present in the Mogul's era but they were exacerbated by the English rulers, that thoroughly implemented the divide and rule, trying to prevent the formation of any coalition that could represent a threat (Moore 1966).

In this respect India deeply differ from in the Imperial China and tzarist Russia, both characterized by a strong central power. Even more remarkable is the comparison between India with Pakistan, either for their geographic proximity and for the common past as English colonies. In contrast with India, Pakistan is characterized by an overwhelming Sunny Muslim majority, which favorised the formation of a strong and unified elite.²¹ Although the creation of Pakistani democracy was conteporaneus to the indian democracy, until now it has been destabilized by four major military coups (1958, 1969, 1977, 1999).

Composition of the non elites

The fragmentation of low classes in India mirrors the ones of the elites, and also in this respect Indian society is different from China and Russia, where the lower classes had less marked divisions, and for this reason resulted stronger in their revolutionary power. A proof of this political weakness is represented by the general weakness of the communist parties in India. They have never been strong at a central level, and, when they gained some representativity at local level, like in the West Bengal, they have always supported moderate policies of redistribution rather than dramatic change in the economic system (Moore 1966). Therefore, we can argue that Indian lower classes would never be able to have an high level of bargaining power (*i.e.co* sufficiently small).

In spite of their sociopolitical differences the degree of ethnic conflict in India has always been less serious than in African countries, and it is conceivable that the non elites can potentially ally together against the elites, irrespectively of their ethnic origin. The fact that the Congress party and the coalition of parties in power at the central government during the different legislatures are not organized on an ethnic basis (Horowitz 1985) supports this claim. This is a fundamental precondition for our model, where we assumed that the non elites W acts together. If part of W belong to the same groups that the stronger elite, say i , it may have an incentive to ally with i because of the ethnic identity, rather than oppose it and allying with the rest of W .²²

The lower level of inter-ethnic conflict in Indian society is perhaps due to the geographic

²¹Until 1961, 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 1961, the Bengali minority, with the help of India, obtained their independence with the formation of Bangladesh.

²²Or, more materialistically, the power of commitment represented by the social linkages allows the stronger elite to credibly promise some surplus to every member of their same ethnic group, dividing in that way W .

dispersion of Indian ethnic groups. On the contrary, when different ethnic groups are concentrated in the different region of the country, it is much more likely that the non elites will not ally horizontally within each other, but prefer to ally vertically with the elites of the same group. The ethnical characterization of the Southern African parties provides a support to this argument. In Nigeria, for example, after independence three essentially ethnic parties 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 Ibo of Eastern Nigeria. In this political panorama it is hard to imagine a unified non elites that, first, does not bet on the winner after the enfranchisement and, second, turns compact against the prevailing elites if this mounts a coup.

In this respect, the two following episodes describing an attempt of coup in India and a successful coup in Nigeria seems to support our results. In India, Indira Gandhi used the promise of alleviating poverty to burst her popularity and concentrate the power in her person. This culminated when Indira Gandhi had the then president Faqr ud dub Ali Ahmed, declare a national emergency, which was clearly unconstitutional since this proclamation was not discussed by council ministers (Rudolph and Rudolph (2001)). After this act Gandhi lost her enormous popular support and in the need of confirm her legitimacy she called and lost elections in 1977.²³ In terms of our model Indira Gandhi sought the alliance of the non elites to disenfranchise the other parties by promising more distribution, but this commitment was not credible and the non elites preferred the alliances with the other party. As already Kohli (2001) notes: "The fact that she was voted out of power following the emergency only confirm the efficacy of indian democracy"

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. Far from rejecting this outcome and turning compact against the NPC, the lower classes split along the ethnic and geographic lines, which lead the country to a long civil war that lasted until 1970 (Ake 1985).

²³The Janata party won the elections.

6 Appendix

We prove lemma 1. The proof proceeds as follows. We begin by establishing some properties of the Nash bargaining solution. For any two classes, i, j bargaining over a surplus of size m , with disagreement points $d_{i,j}, d_{j,i}$ (for simplicity we henceforth omit the second subscript) with $d_i + d_j < m$, the Nash bargaining outcome is the solution to the following maximization problem:

$$\begin{aligned} & \max_{c_i, c_j} (u(c_i) - d_i) (u(c_j) - d_j) \\ & c_i + c_j \leq m, c_i \geq 0, c_j \geq 0. \end{aligned}$$

Notice that at any optimum $c_i + c_j = m$. As long as $\lim_{c \rightarrow 0} u'(c) = \infty$, any solution to the above maximization problem must also be interior. By computation, it follows that the first order conditions is:

$$\frac{u'(c_i)}{(u(c_i) - d_i)} = \frac{u'(c_j)}{(u(c_j) - d_j)}$$

As $u'(\cdot) > 0, u''(\cdot) < 0$, it follows that if $d_i > d_j$, $c_i > c_j$ and therefore, as $c_i + c_j = m$, $c_i > \frac{m}{2} > c_j$. Let $c_i(d_i, d_j, m), c_j(d_i, d_j, m)$ denote the solutions to the Nash bargaining problem. Then, again using the FOC, as $d_i \rightarrow m$ and $d_j \rightarrow 0$, it follows that $\lim_{d_j \rightarrow 0} c_i(d_i, d_j, m) = m$ and $\lim_{d_j \rightarrow 0} c_j(d_i, d_j, m) = 0$. Further, by substituting the solutions of the Nash bargaining solution in $(u(c_i) - d_i) (u(c_j) - d_j)$ we can also write down the value function of the coalition $\{i, j\}$ as a function of m , $V_{\{i,j\}}(m)$. Note that by standard results in duality, $V_{\{i,j\}}(m)$ is an increasing, concave function of m and as $\lim_{c \rightarrow 0} u'(c) = \infty$, $\lim_{m \rightarrow 0} V'_{\{i,j\}}(m) = \infty$. Suppose now the coalition $\{i, j\}$ is bargaining with a class k over a surplus of size Y , with disagreement points $d_k, d_{\{i,j\}}, d_k + d_{\{i,j\}} < Y$. Then, the Nash bargaining outcome is the solution to the following maximization problem:

$$\begin{aligned} & \max_{c_k, c_{\{i,j\}}} (u(c_k) - d_k) (V_{\{i,j\}}(c_{\{i,j\}}) - d_{\{i,j\}}) \\ & c_k + c_{\{i,j\}} \leq Y, c_k \geq 0, c_{\{i,j\}} \geq 0. \end{aligned}$$

But, then, as before, if $d_k < d_{\{i,j\}}$, $c_k < c_{\{i,j\}}$ and $c_{\{i,j\}} > \frac{Y}{2} > c_k$. Using these results and the assumptions made on the disagreement functions $d_{\gamma, \gamma'}(\theta)$, it immediately follows that $c(\{K\}, L) = c(\{L\}, K) = c_1$, (or equivalently, $c(\{K\}, K) = c(\{L\}, L) = Y - c_1$) where c_1 is close to zero and $Y - c_1 > c_1$ and for $\theta = i$ and $i \neq j$, without enfranchisement, $c(\{W\}, i) = c(\{W\}, j) = 0$ while $c(\{W, j\}, i) = c_2 > \frac{Y}{2}$. Moreover with enfranchisement, for $\theta = i$ when W bargains with $j \neq i$, W obtains a share of the surplus $c_0 > 0$ while if W bargains with i , W 's share of the surplus is 0 and therefore, conditional on $\theta = i$, if i objects to the winning proposal from the voting round, W will form a coalition with $j \neq i$ and bargain with i . Therefore, with enfranchisement, $c(\{W\}, \theta) = c_0$.

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