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## "Inefficient Redistribution"


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# Inefficient Redistribution*

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Abstract

There are many well developed theories which explain why governments redistribute income. There are very few theories, however, which can explain why this redistribution so often takes an inefficient form. In this paper we develop a theory of why redistribution is made inefficiently. Inefficient redistribution makes staying in or entering a group relatively more attractive than efficient methods of redistribution would. The form of redistribution is therefore a tool to sustain political power in situations where: (1) the political influence of a group depends on its size, and (2) political institutions cannot credibly commit to future policy. We argue that the mechanism we propose may account for the choice of inefficient redistritive policies in agriculture, trade and the labor market.

**Keywords:** Democracy, Redistribution, Efficiency.

**JEL Classification:** D72, H21, J38.



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# 1 Introduction

Economists see inefficient redistribution everywhere. While many normative and positive theories explain why the government redistributes, we lack a satisfactory understanding of why this redistribution so often takes an inefficient form. A common example of inefficient redistribution is farmers receiving price supports or input subsidies, which distort relative prices and discourage the reallocation of productive resources to other sectors. Similarly, despite economists' conviction that free-trade is typically efficient, domestic industries are often protected via tariffs and quotas.[1] A particularly interesting and relatively neglected example in which the form of redistribution appears inefficient is labor market regulation. Firing costs and other restrictive labor practices, such as closed shop arrangements, are widespread in most countries but are thought to be highly inefficient. In all of these cases, standard arguments from price theory suggest that simple transfers to the beneficiaries of these redistributive policies would constitute an actual Pareto improvement. However, as Stigler (1971,1982) and Becker (1976) emphasized, such Pareto inefficiencies are hard to comprehend, and may be due to some fundamental, but as yet unmodeled, aspects of the political economy of redistribution.

In this paper, we present a theory of inefficient redistribution. Consider the example of price support for farmers. Imagine that farmers have sufficient political support to induce the government to redistribute income to them, and that this can take the form of a simple transfer of money to current farmers or a price subsidy. Economic theory suggests that the latter is relatively inefficient as it potentially avoids the reallocation of resources to sectors where they can be utilized more productively.[2] Our key observation is that the political equilibrium may nevertheless entail price subsidies because the form of redistribution affects farmers' decisions to remain in farming, and encourages new agents to enter, in a way that lump-sum transfers do not. Everything else equal, farmers would not want to encourage newcomers, as this will create competition for transfers and in the

[1] See Rodrik (1996) for a detailed discussion of trade policy where he explicitly notes the prevalence of inefficient redistribution as a major puzzle in need of an explanation, writing "saying that trade policy exists because it serves to transfer income to favored groups is a bit like saying Sir Edmund Hillary had to climb Mt. Everest because he wanted to get some fresh air. There was surely an easier way of accomplishing that objective!".

[2] Notice however that in a dynamic world, the expectation of future "lump-sum" transfers also makes farming a more attractive profession and may inefficiently keep resources there. Nevertheless, other types of redistribution keep more resources in farming, and are therefore more inefficient.

marketplace. However, if farmers' future political power and ability to extract further redistribution depends on their numbers, price subsidies may be preferred, even though they are less efficient and reduce per-capita transfers to existing farmers. Our story, therefore, builds on the political system's inability to commit to future redistribution to farmers and on a political economy setup where the size of a group matters for its political influence. In some sense, our analysis extends Becker's (1985, p. 338) insight that "a satisfactory analysis of the choice of method must consider whether the influence function itself depends on the methods used." In particular, to ensure future transfers, it is necessary for farmers to retain their political power, and they achieve this by choosing a relatively inefficient method of redistribution which discourages other farmers from changing sectors, and encourages new agents to enter farming. So, the method of redistribution is chosen to maintain their political influence. The same argument may apply to other instances of inefficient redistribution such as trade policy and labor market regulation as well, and suggests that these inefficient methods of redistribution may have also been chosen to preserve the consistuencies in favor of the redistributive policies.

As well as providing an explanation for the choice of inefficient methods of redistribution, our analysis also leads to a number of interesting comparative static results. First, we find that inefficient redistribution is more likely to arise when the political power of influential groups is contested, for example, when an industry and its voting power are declining. This result is consistent with the notion that declining industries receive the most distortionary transfers.[3] Second, when tax revenues are larger, the more likely is inefficient redistribution, which is also reasonable. Finally, and perhaps most importantly, we find that when factors of production are *less specific* to a sector, it is more likely that inefficient redistribution will arise. Existing theories suggest that specificity of factors should increase lobbying and rent-seeking behavior (e.g. Alt et al (1996), Coate and Morris (1998)). Although these theories do not explain why redistribution is made inefficiently, they would tend to suggest that redistribution, and hence inefficient redistribution, should be more prevalent when factors are more specific. Paradoxically, however, in many of the common examples of inefficient redistribution, there does not appear to be much specificity. For example, consumer goods industries, such as textiles, often receive most trade protection (e.g. Rodrik (1994), Ray (1991)). Our model suggests that because less specific factors are more mobile, redistribution needs to be more inefficient to prevent

[3]The empirical fact that it is the industries with comparative disadvantage which receive protection and subsidies has been noted by Baldwin (1985) and Rodrik (1994).

their relocation. It therefore provides an explanation for this paradoxical pattern in the political economy of redistribution.

An important ingredient of our analysis is that group size matters for political power. Although Olson (1965) has emphasized the free-rider problems affecting the political organization of large groups, it appears a realistic and innocuous assumption that in democracies, larger groups will command more power.[4] Cameron (1988), for example, writes "size represents an important resource in the struggle and conflict amongst groups...individuals may have more incentive to form groups if the potential membership is large and thus allows them to anticipate greater power and hence greater collective rewards." In the farming context scholars have continually stressed this point. For instance, Hansen (1991, p.7) argues, "the farm lobby [in the US] as a whole...suffered a marked setback in the sixties, seventies and eighties. As people migrated away from farms, the agricultural organizations represented fewer and fewer constituents...., and the responsiveness of the Agriculture Committee and the Congress declined." Kindleberger (1951) and Tracy (1989) suggest that the lower numbers of voters in farming groups in Britain compared to France and Germany explains why farmers obtained tariff protection in these countries in the 1880's, while in Britain they did not.

We are aware of only two previous arguments which may account for the prevalence of inefficient redistribution. Rodrik (1986) and Wilson (1991) argue that if the amount of redistribution is endogenous, then politicians might want to commit themselves to use inefficient methods in order to reduce total redistribution (see also Staiger and Tabellini (1987), Grossman and Helpman (1994), and Dixit, Grossman and Helpman (1997) for models with related results). Coate and Morris (1995), partially building on an argument by Tullock (1983), offer the most compelling argument for inefficient redistribution. In their model, politicians who care about a certain group exploit voters' uncertainty about which policies are efficient. In particular, while lump-sum redistribution to farmers would reveal that a politician cares about farmers at the expense of other groups, a price subsidy can be disguised as a Pigouvian subsidy aimed at correcting some market failure. There

[4]For example, the experience of cross-national trade union movements suggests that there are strong increasing returns to scale—compare the success of the large Scandinavian unions with the relative failure of the smaller US or British unions. Wittman (1995) argues that political entrepreneurs have an incentive to solve the collective action problem and there are many examples of this. To mention one, Bates (1997) shows that the national coffee growers association in Colombia was created in the 1920's as a result of political entrepreneurship, and this overcame the fact that the coffee growers were mostly smallholders facing considerable collective action problems. In undemocratic societies, however, the size of a group may be a liability rather than an asset because large groups provide potential tax revenues for the rulers. This may have been why farmers were heavily taxed in Soviet Russia and some African countries.

are two potential problems with Coate and Morris' interesting explanation, however. First, only inefficient policies which might in some state of the world be efficient can be used otherwise, the voters would see through it (see Austen-Smith (1991)). Second, it must be the case that neither the party in power nor a rival are able to tax farmers after giving the price subsidy and thereby reveal that they are redistributing truly for efficiency reasons, not because they care about the farmers.

Other related papers include Dixit and Londregan (1995) who construct a model in which the inability of politicians to commit to future transfers prevents efficient reallocation of agents. In particular, farmers who currently receive transfers, say because they are the swing voters, realize that they will lose these transfers, if they switched to manufacturing. Dixit and Londregan therefore explain why redistribution might lead to inefficiencies, but not why the form of redistribution is inefficient. In the same spirit, Alt et al. (1996) note that when policy is endogenous agents can take actions (e.g. specific investments) which induce future redistribution, thus preventing exit from a declining industry. Glazer (1989), Persson and Svensson (1989), Tabellini and Alesina (1990), Aghion and Bolton (1990), and Besley and Coate (1998) note that political incumbents may choose inefficient policies, such as large public sector deficits, in order to influence future choices of politicians or voters, but do not explain how inefficient redistribution may arise when more efficient methods are also available. Finally, Saint-Paul (1992) notes that insiders may oppose two-tier wage systems which would remove firing costs for newcomers, anticipating that this would reduce future political support for firing costs. He does not, however, pursue this idea to develop an explanation for inefficient redistribution.

The plan of the paper is as follows. We first outline a simple two-period model where inefficient redistribution occurs as a political equilibrium. In Section 3 we show that, contrary to the conventional wisdom, the extent of inefficient redistribution may increase when a sector requires less specific skills and investments. In Section 4 we discuss in detail a range of real world redistributive policies and argue that they use inefficient methods, at least in part, because of the reasons emphasized in our model.

# 2 The Basic Model

## 2.1 Fundamentals

Consider the following two-period economy (periods 0 and 1) with a single consumption good produced by one of two sectors, farming and manufacturing.[5] In the first period there are $1-\delta$ agents with a fraction $n_0$ being in farming and $1-n_0$ in manufacturing. These agents cannot change sector. All agents are risk neutral and discount the second period by a factor $\beta \in (0,1)$. In each period, a farmer produces an output of $B$ and a manufacturer produces output $A$, with $A > B$. We assume that farmers cannot be taxed (e.g. they can hide their output costlessly), while manufacturers can be taxed a maximum of $T$ (e.g. they can hide their output at a cost of $T$) where $T < A$. At the beginning of period 0, $\delta$ new agents arrive and choose which sector to enter. This decision is irreversible. There are no new agents in period 1. Let $\tau_0$ and $\tau_1$ denote the tax on manufacturers in periods 0 and 1 respectively, where $\tau_t \in [0,T]$, for $t = 0,1$. The tax revenue, if any, can be redistributed to farmers in two distinct forms. The first is a transfer to agents who are in farming at the beginning of the period, denoted by $\theta_t \geq 0$, for $t = 0,1$. The second is a general price subsidy which all farmers receive, denoted by $\mu_t \geq 0$.[6] The difference between $\mu_0$ and $\theta_0$ is that only those who were initially farmers at $t = 0$ receive $\theta_0$, whereas $\mu_0$ is also received by young agents who enter farming at time $t = 0$. $\theta_0$ therefore approximates an efficient transfer as it is conditioned on characteristics outside the agents control, while $\mu_0$, subsidizes farm output and encourages new agents to enter farming, and so, is an inefficient method of redistribution.[7]

It is clear that, ignoring political economy considerations, existing farmers prefer $\theta$-transfers to $\mu$-transfers, because they do not have to share the former with newly arriving farmers. Our key result in this section will be to demonstrate that political economy considerations may nonetheless encourage existing farmers to choose $\mu$-transfers. To discuss these issues, we now describe the political process explicitly. We assume that political decisions, specifically the values of $\tau, \theta$, and $\mu$, are determined by majority voting. Majority voting is a simple formulation which captures the idea that size matters for political

[5] These two sectors can be thought of as producing different goods which are perfect substitutes. The case of imperfect substitutes does not alter our results, but complicates the expressions.

[6] In the model output per-farmer is exogenous, so a per-capita subsidy to all farmers, new and old, is the same as a price subsidy. More generally, in a model with variable production there would also be a difference between price subsidies and per-capita subsidies to all farmers.

[7] $\mu_1$ will be redundant since only in period 0 is there a distinction between existing farmers and potential new farmers, so we ignore it in the rest of our analysis.

power. In particular, when at least half of the agents are in farming, the median voter is a farmer, and $\tau, \theta$, and $\mu$, are chosen to maximize farmers' utility (who all have identical preferences over policy). Other formulations, such as lobbying or various models of interest group competition, where size also matters for political power would yield similar results.

The timing of political and economic events is as follows. First, in period 0, the $1-\delta$ old agents vote over $\tau_0, \theta_0$, and $\mu_0$. Young agents are born, they observe the policy vector, and decide which sector to enter. Then production takes place and the policy is implemented. At the beginning of period 1, all agents, young and old, vote and determine $\tau_1$ and $\theta_1$. The model ends following production and implementation of the chosen policy. Also assume, for simplicity, that if $n_t = 1/2$, the median voter is a farmer. Defining $x$ as the fraction of new agents going into farming at time $t = 0$, the government budget constraints in the two periods can be written as:

$$(1-\delta)(1-n_0)\tau_0 = (1-\delta)n_0(\theta_0 + \mu_0) + \delta\mu_0 x \tag{1}$$

$$(1-n_1)\tau_1 = n_1\theta_1. \tag{2}$$

Note that young agents who go into manufacturing do not get taxed in period 0, and they may also not receive any transfers when they go into farming (that is, if $\mu_0 = 0$). Although the political process can discriminate between young and old farmers in period 0, this is not possible in period 1. Letting $\pi_0$ and $\pi_1$ be indicator functions which take the value 1 if the median voter is a farmer, we have

$$n_1 = (1-\delta)n_0 + \delta x, \tag{3}$$

and

$$\begin{aligned} \pi_t &= 0 \text{ if } n_t < 1/2, \\ \pi_t &= 1 \text{ if } n_t \geq 1/2 \text{ for } t = 0, 1. \end{aligned} \tag{4}$$

Let $V^f$ and $V^m$ be the expected utilities (at time 0) of old farmers and manufacturers. Let $W^f$ and $W^m$ be the expected utilities (at time 0) of new agents who choose farming and manufacturing. Then,

$$V^f(\theta_0, \mu_0, \theta_1) = B + \theta_0 + \mu_0 + \beta[B + \theta_1],$$

$$V^m(\tau_0, \tau_1) = A - \tau_0 + \beta[A - \tau_1],$$

and

$$W^m(\tau_1) = (1+\beta)A - \beta\tau_1 = V^m(\tau_0, \tau_1) - \tau_0.$$

$$W^f(\mu_0, \theta_1) = B + \mu_0 + \beta[B - \theta_1].$$

Newcomers make their occupational choices after observing $\mu_0$ which is relevant for their payoffs. So their strategy is conditioned on $\mu_0$, and we write the fraction of new agents who go into farming when farming transfer is $\mu$ as $x(\mu)$. Then the optimal sectoral choice of new agents in period 0 is:

$$\begin{aligned} x(\mu) &= 0 \qquad \text{if } W^m(\tau_1) > W^f(\mu, \theta_1) \\ x(\mu) &= 1 \qquad \text{if } W^m(\tau_1) < W^f(\mu, \theta_1) \\ x(\mu) &\in [0,1] \qquad \text{if } W^m(\tau_1) = W^f(\mu, \theta_1). \end{aligned} \tag{5}$$

$x(\mu)$ defines the best response function (correspondence) of newcomers for all possible levels of subsidies. Observe in particular that this function determines newcomers' best-response not only for the level of subsidy along the equilibrium path, $\mu_0$, but for all $\mu$. So helps us determine optimal behavior off-the-equilibrium path.

A pure strategy subgame perfect Nash equilibrium can then be defined as a tuple, $\{x(\mu), n_1, \tau_0, \theta_0, \mu_0, \tau_1, \theta_1\}$ such that equations (1), (2), (3) and (4) hold, the function $x(\mu)$ is defined by (5), $\{\tau_0, \theta_0, \mu_0\}$ maximizes $\pi_0 V^f + (1-\pi_0)V^m$, and $\{\tau_1, \theta_1\}$ maximizes $\pi_1 V^f + (1-\pi_1)V^m$.

The fact that $\tau_1$ and $\theta_1$ are decided at time 1 to maximize the utility of the agent who is the median voter in that period builds in the assumption that the political system cannot commit to future redistribution. This is a crucial ingredient in our explanation for inefficient redistribution because it provides the reason for farmers to wish to retain control in period 1. To simplify the discussion, we assume;

**Assumption 1** $(1+\beta)(A-B) > 2\beta T$,

which implies that the maximum tax rate is small relative to the productivity differential between the two sectors, and ensures that it is not worthwhile to go into farming only to receive future transfers.

Let us start with the case in which $n_0 < 1/2$. Then $\pi_0 = 0$ and the median voter in period 0 is a manufacturer, and chooses $\tau_0 = \theta_0 = \mu_0 = 0$. In this case, there exists a unique equilibrium in which all young agents go into manufacturing, $n_0$ remains at less

than 1/2, so $W^f(\mu_0 = 0, \theta_1 = 0) = (1+\beta)B < W^m(\tau_1 = 0) = (1+\beta)A$.[8] Therefore, we have:

**Proposition 1** *Suppose Assumption 1 holds and $n_0 < 1/2$, there exists a unique equilibrium with $n_1 = (1-\delta)n_0$, $\tau_0 = \tau_1 = \theta_0 = \theta_1 = \mu_0 = 0$, and $x(\mu_0 = 0) = 0$.*

Next, consider the case where $n_0 > \frac{1}{2(1-\delta)}$. Farmers are in power at time 0, and even if $x = 0$, they retain power. Therefore, they choose $\tau_0, \tau_1, \theta_0, \theta_1$, and $\mu_0$ to maximize $W^f$, which gives, $\tau_0 = \tau_1 = T$, $\mu_0 = 0$, $\theta_t = \frac{(1-n_t)T}{n_t}$, for $t = 0, 1$. To completely characterize an equilibrium, we only have to determine $x$ and $n_1$. In this case we have,

$$W^f = B + \beta\left[B + \frac{(1-n_1)T}{n_1}\right],$$

$$W^m = (1+\beta)A - \beta T.$$

Now Assumption 1 implies that $W^m > W^f$, and $x(\mu = 0) = 0$ (though in this case, $x(\mu)$ would be positive for $\mu$ sufficiently large).

**Proposition 2** *Suppose Assumption 1 holds and $n_0 > \frac{1}{2(1-\delta)}$, then there exists a unique equilibrium such that $\tau_0 = \tau_1 = T$, $\mu_0 = 0$, $\theta_0 = \frac{(1-n_0)T}{n_0}$, $x(\mu_0 = 0) = 0$, $n_1 = (1-\delta)n_0$ and $\theta_1 = \frac{(1-(1-\delta)n_0)T}{(1-\delta)n_0}$.*

The important point to note is that in both Propositions 1 and 2, the equilibrium maximizes output and *the form of redistribution is efficient*. Although there is redistribution, no production or occupational decisions are distorted. The reason for this efficient form of redistribution is that political power is not contested. When $n_0 < 1/2$, manufacturers have political power and this can never be transferred to farmers, while when $n_0 > \frac{1}{2(1-\delta)}$, farmers have political power and cannot lose it, even if all newcomers were to go into manufacturing. This highlights the important conclusion of our analysis that inefficient redistribution will arise in order to control political power.

Now consider the most important case for our analysis where $\frac{1}{2(1-\delta)} > n_0 > \frac{1}{2}$. Farmers have political power in period 0, but if all newcomers go into manufacturing, farmers lose

[8] There may have been other equilibria if $(1-\delta)n_0 + \delta > 1/2$. In this case, young agents would expect all other young to go into farming ($x = 1$), swinging political power to the farmers in period 1. Then, the median voter at time 1 would be a farmer and choose the maximum possible tax, $\tau_1 = T$, and so $\theta_1 = (1-n_1)T/n_1$. This would imply $W^m(\tau_1 = T) = A + \beta[A - T]$ and $W^f(\mu_0 = 0, \theta_1) = B + \beta[B + (1-n_1)T/n_1]$. Assumption 1, however, ensures that $W^f(\mu_0 = 0, \theta_1) < A + \beta[A - T]$ as long as $n_1 \geq 1/2$.

power. It is straightforward from the analysis in Proposition 2 that if $\mu_0 = 0$, newcomers will prefer to go into manufacturing, and farmers will lose their political power. The only way farmers can maintain political power, therefore, is to vote for $\mu_0 > 0$, i.e. for inefficient redistribution. As a result, in this case inefficient redistribution arises as a method of encouraging new agents to enter farming.

Let us consider the maximum transfer that farmers can make to newcomers. Since $\theta_t \geq 0$, the budget constraint (1) implies that the maximum transfer to newcomers is:

$$\mu^*(x) \equiv \frac{(1-\delta)(1-n_0)T}{(1-\delta)n_0 + \delta x}. \tag{6}$$

where $x$ is the fraction of new agents entering farming. The larger is this fraction, the smaller is the per-capita transfer. The government budget constraint then implies that $\mu_0(x) \leq \mu^*(x)$. We now write the expected utility of a new agent in the two sectors as functions of $\pi_1, \mu_0$ and $x$. First,

$$W^m(\pi_1) = (1+\beta)A - \pi_1 \beta T$$

since if $\pi_1 = 1$, that is if farmers hold political power at time 1, then $\tau_1 = T$. In contrast, if $\pi_1 = 0$, then $\tau_1 = 0$. Similarly,

$$W^f(\pi_1, x, \mu_0) = (1+\beta)B + \mu_0 + \pi_1 \beta T \left( \frac{(1-\delta)(1-n_0) + \delta(1-x)}{(1-\delta)n_0 + \delta x} \right).$$

This expression follows by imposing the second period government budget constraint, (2), and noting that if $\pi_1 = 1$, $\tau_1 = T$.

The first point to note is that when agents expect $\pi_1 = 0$, Assumption 1 implies $W^f(\pi_1 = 0, x, \mu_0) < W^m(\pi_1 = 0)$, so $x(\mu_0 = 0) = 0$. Therefore, there exists an equilibrium in which all new agents expect all others to go into manufacturing and so choose to go there, whatever the value of $\mu_0$, i.e. $x(\mu) = 0$ for all $\mu$.

The rest of the analysis will establish that there are two other kinds of equilibria with $x \in (0,1)$ and $x = 1$. First, define $\overline{\mu}(x)$ as the level of subsidy which makes newcomers indifferent between farming and manufacturing, that is $W^m(\pi_1 = 1) = W^f(\pi_1 = 1, x, \overline{\mu}(x))$. Then:

$$\overline{\mu}(x) \equiv (1+\beta)(A-B) - \beta T - \beta T \left( \frac{(1-\delta)(1-n_0) + \delta(1-x)}{(1-\delta)n_0 + \delta x} \right).$$

For feasibility, we require that the subsidy necessary to entice newcomers is less than the maximum subsidy that the farmers can afford, i.e. $\overline{\mu}(x) \leq \mu^*(x)$. $\mu^*(x)$, defined in (6), is strictly decreasing, while $\overline{\mu}(x)$ is increasing in $x$. Let us now define $x^*$ as the minimum

fraction of newcomers who need to enter farming to keep political power in farmers' hands, i.e. to ensure $n_1 = 1/2$. Therefore, for $\pi_1 = 1$ (i.e. to keep farmers in power) we require

$$x \geq x^* \equiv \frac{1/2 - (1-\delta)n_0}{\delta}.$$

Notice $x = x^*$ also implies that because the number of farmers in period 1 is equal to 1/2, per-capita transfers to farmers, $\theta_1$, are maximized. As a consequence, the subsidy necessary to induce newcomers to enter farming cannot be less than $\overline{\mu}(x^*)$. Hence, if $\overline{\mu}(x^*) > \mu^*(x^*)$, then there exists no equilibria with $W^f \geq W^m$, and the equilibrium with $x = 0$ is unique. Here, we assume.

**Condition 1** $(1+\beta)(A-B) < [2\beta + 2(1-n_0)(1-\delta)]T$.

which ensures that $\overline{\mu}(x^*) < \mu^*(x^*)$. This implies that the maximum transfer to newcomers entering farming, which takes place when $x = x^*$, is sufficiently large to attract them, so there is a region of the parameter space in our model where inefficient redistribution is possible.

Finally, we need to define another cutoff level, $\overline{x}$, as the maximal fraction of newcomers who can go into farming while still keeping farming attractive, i.e. while $W^f \geq W^m$. This implies that $\overline{x}$ is such that if $\overline{\mu}(\tilde{x}) = \mu^*(\tilde{x})$ for some $\tilde{x} \leq 1$, then $\overline{x} = \tilde{x}$, and otherwise, $\overline{x} = 1$. In words, if with maximal subsidies, farming and manufacturing are equally attractive to newcomers when a certain fraction of them enter farming, then $\overline{x}$ is equal to this fraction. Otherwise, it is equal to 1, so that even when all newcomers go into farming, there is enough tax revenue to subsidize farming to make it attractive to new comers.

Figures 1 and 2 graph the functions $\overline{\mu}(x)$ and $\mu^*(x)$ in the two cases where, $\overline{x} \leq 1$, (Figure 1) and $\overline{x} = 1$ (Figure 2). By Condition 1, at $x = x^*$, $\overline{\mu}(x^*) < \mu^*(x^*)$ and in Figure 1 there is an interior solution to the equation $\overline{\mu}(\tilde{x}) = \mu^*(\tilde{x})$. With this configuration, it is not possible to encourage more than a fraction $\tilde{x}$ to enter farming. In contrast, in Figure 2, we have $\overline{\mu}(1) < \mu^*(1)$, so it is possible to choose subsidies high enough to encourage all newcomers to enter farming.

We can now see that there exists a set of equilibria with $\tau_0 = \tau_1 = T$, $\pi_1 = 1$, $\mu_0 = \overline{\mu}(x')$ for $x' \in [x^*, \overline{x}]$. The strategy of newcomers which supports this equilibrium is: $x(\mu) = 0$ if $\mu < \overline{\mu}(x')$ and $x(\mu) = x'$ if $\mu = \overline{\mu}(x')$. That is when $\mu_0 = \overline{\mu}(x')$ and they expect a fraction $x'$ of others to go into farming, each newcomer is indifferent between the two occupations, so in equilibrium a fraction $x'$ indeed go into farming. In contrast, if the subsidy were less than $\overline{\mu}(x')$, then all newcomers would go into manufacturing. This

off-the-equilibrium path behavior therefore forces farmers to offer $\overline{\mu}(x')$. The levels of transfers in these equilibria are given by

$$\begin{aligned}\theta_1(x') &= \frac{[(1-\delta)(1-n_0)+\delta(1-x')]\,T}{(1-\delta)n_0+\delta x'} \\ \theta_0(x') &= \frac{(1-\delta)(1-n_0)T-\overline{\mu}(x')\,[(1-\delta)n_0+\delta x']}{(1-\delta)n_0}.\end{aligned}$$

Since $x' \geq x^*$, this pattern of occupational choice by the newcomers keeps political power in the hands of the farmers. Obviously, existing farmers prefer the equilibrium with $x' = x^*$, which is the one with the least amount of inefficient redistribution. However, given expectations about newcomers' strategy, they may have to make do with an equilibrium with $x' > x^*$. In particular, because each newcomer expects all others to go into manufacturing when the level of the subsidy is less than $\overline{\mu}(x')$, it is a best response for all of them to enter manufacturing, so farmers are obliged to pay $\overline{\mu}(x')$ in subsidies to maintain political power.

In the equilibria we have just described, newcomers are indifferent between manufacturing and farming, and enter farming in sufficient numbers to keep political power in the hands of the farmers. When more new agents go into farming, future per-capita transfers are lower, so a higher inefficient transfer, $\mu_0$, is required to entice these agents into farming. As a result, the utility of newcomers and manufacturers is the same in all equilibria, irrespective of the value of $x'$, but existing farmers have lower utility when $x'$ is higher. Therefore, the equilibrium with $x' = x^*$ weakly Pareto dominates those with $x' > x^*$.

Finally, when $\overline{x}$ defined above is equal to 1, there is an equilibrium with $W^f > W^m$, and $x' = 1$, that is all newcomers strictly prefer to enter farming and do so in equilibrium. The strategy of newcomers which supports this equilibrium is $x(\mu) = 0$ for all $\mu < \mu_0$ and $x(\mu_0) = 1$ where $\mu_0 \in [\overline{\mu}(1), \mu^*(1)]$. Notice that such an equilibrium cannot exist when $\overline{x} < 1$, because in this case there is no $\mu_0$ high enough to ensure $W^f \geq W^m$ with $x = 1$. In these equilibria, we have $\tau_0 = \tau_1 = T$, $\pi_1 = 1$, $x = 1$,

$$\begin{aligned}\theta_1(x &= 1) = \frac{(1-\delta)(1-n_0)T}{(1-\delta)n_0+\delta}, \\ \theta_0(x &= 1) = \frac{(1-\delta)(1-n_0)T-\mu_0\,[(1-\delta)n_0+\delta]}{(1-\delta)n_0}.\end{aligned}$$

and, $\mu_0 \in [\overline{\mu}(1), \mu^*(1)]$. Within this set of equilibria, those with higher $\mu_0$ give higher utility to newcomers and lower utility to existing farmers. Once again the reason for

multiplicity of equilibria is that if agents believe that for any $\mu < \widehat{\mu}$, all newcomers will go into manufacturing, farmers' hands are tied: they can only offer $\mu_0 = \widehat{\mu}$, and attract all newcomers to farming. In all these cases, multiple equilibria arise because of a fundamental feature of this type of models: relative returns to different sectors depend on taxes and transfers, which in turn depend on the occupational choices of newcomers. Despite the multiplicity of equilibria, however, the main result that inefficient redistribution is a possibility is clear. In fact, inefficient redistribution is a feature of all but one equilibrium in this case. The next proposition summarizes this result.

**Proposition 3** *Suppose Assumption 1 and Condition 1 hold, and* $\frac{1}{2(1-\delta)} > n_0 > 1/2$, *then there exist two types of equilibria.*

1. $\tau = 0$, $\mu_0 = 0$, $\pi_1 = 0$.

2. $\tau > 0$, $\mu_0 > 0$, $\pi_1 = 1$.

For a range of parameter values and equilibria, redistribution therefore takes an inefficient form. The underlying reason is that farmers are attempting to maintain political power and they realize that this can be achieved only by attracting new agents into farming in order to remain a large group. Inefficient redistribution achieves this because it rewards potential farmers, not only those who are already locked into farming. Expressed differently, because $\theta_0$ in our model is a lump-sum transfer, it does not distort the decision of marginal agents. Precisely for this reason, however, the political process may choose to redistribute via $\mu_0$ not $\theta_0$. That commitment to future redistribution is impossible is important: if all existing agents could jointly commit to $\tau_1$ and $\theta_1$ at time $t = 0$, then there would be no need to use inefficient redistribution, and all agents could be made better off. Such a Pareto improvement is not possible because of the constraints imposed by political economy considerations. In section 4, we discuss a number of examples where the concern of farmers and other groups to maintain political power seems to be a factor in the choice of inefficient methods of redistribution, so the forces highlighted by our analysis may be important in a variety of circumstances.

Some economists, for example Wittman (1989), have claimed that political competition will generally generate efficient, even output maximizing, policy. In our model, however, inefficient redistribution arises because of the political system's inability to commit to future redistribution. If such commitment were possible or if the political power

of farmers were not threatened, inefficient redistribution would not arise and Wittman's conjecture would be correct.

Also observe that future political power depends on the coordinated actions of newcomers, and it is this which causes the multiplicity of equilibria. The multiplicity is of some interest, however, as it highlights that the amount of inefficient redistribution can be quite large (above $\overline{\pi}(x^*)$, which is the minimum necessary to maintain power in farmers' hands). Unless newcomers receive large subsidies, and so come in large numbers, they may expect all others to go into manufacturing and decide to do the same. Since among the multiple equilibria with inefficient redistribution, farmers prefer those with lower $x$, i.e. those where fewer newcomers enter farming, they may have an incentive to also limit entry, for example, by methods such acreage controls. This highlights that existing farmers have non-monotonic preferences over entry: they want a sufficient number of newcomers to enter farming to maintain political power, but not too many to share the revenues with.

Finally, a number of results regarding when redistribution is more likely to be inefficient also follow from our analysis. First, for inefficient redistribution to arise we need Condition 1 to hold. This is more likely when $T$ and $\beta$ are high. When $T$ is high, tax revenues are large, so it is possible to pay enough to newcomers to attract them to farming. The result that larger tax revenues make inefficient redistribution more likely is intuitive. On the other hand, when $\beta$ is high, farmers are more forward looking and are therefore willing to sacrifice current transfers to maintain future political power. Perhaps, most interestingly, redistribution is more likely to be inefficient when the political power of an influential group is contested, i.e. when $\frac{1}{2(1-\delta)} > n_0 > \frac{1}{2}$. This is because the purpose of inefficient redistribution is maintain the influence of the group from declining. Many examples of inefficient redistribution are from declining industries, which is consistent this implication.

# 3 Specific Factors

In this section we develop a variant of the model of Section 2 in order to demonstrate that our framework may account for what appear to be somewhat paradoxical facts. In particular, the conventional literature suggests that the more skills and investments are specific to a given sector, the more agents have to lose from relocating in the economy, the greater the incentives for them to lobby for protection (see for example, Alt et al (1996)

and Becker 1985) and the recent formalization by Coate and Morris (1998)).[9] However, it is hard to see the importance of specific factors in many of the most pronounced cases of trade protection, such as textiles or farming, which are commonly viewed as sectors with limited specific investments by capital and labor.[10] Similarly, many cases of labor market policy involve protection for groups of workers with limited specific investment. We will now extend our model to show that contrary to conventional wisdom, our model predicts that sectors with less specific factors may create room for more inefficient redistribution.

Consider a modified version of the model above where there are no young agents ($\xi = 0$). However, in period 0 a fraction $\gamma$ of the farmers can switch to manufacturing at some cost $C$. A high level of $C$ corresponds to a situation in which switchers fail to employ their skills effectively in manufacturing, thus we think of it as a situation where farming uses highly *specific factors*. We continue to assume that those who are switching continue to produce $A$ in the other sector. To focus on the case where it is still socially efficient to reallocate agents into manufacturing we assume $(1+\beta)(A-B) > C$.

The timing of events is as follows. First, agents vote, and at this point a farmer does not know whether he will have the opportunity to switch. Next, farmers find out whether or not they have this opportunity and decide whether to switch (if they switch, they do not pay taxes until period 1). Finally, in period 1, there is voting again (but no switching) and the world ends. The difference between $\theta_0$ and $\mu_0$ now is that farmers who decide to switch in period 0 still obtain $\theta_0$, but since they do not produce, they do not receive the price subsidy $\mu_0$. Therefore, once again, $\theta_0$ is a non-distortionary transfer, whereas $\mu_0$ encourages agents to stay in the less efficient sector, and thus is an inefficient form of redistribution.

Let $W^f$ and $W^m$ denote the expected utilities of potential switchers, while as before $V^f$ and $V^m$ denote the utilities of immobile agents. Similar to before, we have

$$W^f = V^f = (1+\beta)B + \pi_0(\theta_0 + \mu_0) + \pi_1\beta\theta_1,$$

[9] This idea is commonplace in the literature on the political economy of trade policy. Alt et al. (1996, p.700) argue, "a crucial determinant of the incentives of an economic agent to seek trade protection (or, more broadly subsidies) for his or her economic activity is the degree to which the agent's assets are specific to this activity." Similarly, Baldwin (1989, p.124) claims, "one also expects vigorous efforts to secure protection in the face of significantly increased import competition by those industries [with] substantial...industry specific physical and human capital."

[10] The empirical literature on trade finds that industries that are labor intensive and low skill get more protection (see Rodrik (1994) for a succinct overview, and also Baldwin (1985) and Ray (1981, 1991)). Moreover, consumer goods industries receive more protection than industries which produce intermediate goods (Ray (1991)). It is precisely these industries (for example, textiles, apparel, furniture and fixtures, and miscellaneous industries such as toys and sporting goods) which are thought to have relatively unspecific factors of production.

$$W^m = (1+\beta)A - C + \pi_0\theta_0 - \pi_1\beta T.$$

We denote the fraction of farmers that switch by $1-x$. We concentrate on the part of the parameter space which is of most interest, namely where $n_0 \in (\frac{1}{2}, \frac{1}{2(1-\gamma)})$. We now make the analogous assumption to Assumption 1 which ensures that it is not worthwhile for a potential switcher to stay in farming just to get future redistribution.

**Condition 2** $2\beta T < (1+\beta)(A-B) - C$.

When this condition is satisfied, potential switchers would all go to manufacturing if $\mu_0 = 0$. Therefore, to maintain power farmers need to set $\mu_0 > 0$. In particular, using a similar argument to that above, for political power to remain with the farmers, we need $W^f \geq W^m$. Defining $\tilde{\mu}(x, C)$ as the minimum level of inefficient redistribution necessary for potential switchers to stay in farming, we require:

$$\mu_0 \geq \tilde{\mu}(x, C) \equiv (1+\beta)(A-B) - C - \beta T - \beta T\left(\frac{(1-n_0) + \gamma n_0(1-x)}{(1-\gamma)n_0 + \gamma n_0 x}\right).$$

This expression makes it clear that a higher level of specificity in farming, as captured by $C$, reduces the minimum required level of inefficient redistribution. For an equilibrium with inefficient redistribution to exist, there are two more requirements. First, the government budget constraint has to be satisfied. So we define, as in the previous section,

$$\mu^*(x) \equiv \frac{T(1-n_0)}{(1-\gamma)n_0 + \gamma n_0 x}$$

as the maximum level of the price subsidy as a function of $x$. Therefore, for potential switchers to remain in farming we require that $\tilde{\mu}(x, C) \leq \mu^*(x)$ and since $\tilde{\mu}(x, C)$ is increasing in $x$, at the very least we need $\tilde{\mu}(x^*, C) < \mu^*(x^*)$, where

$$x^* = \frac{1}{2\gamma n_0} - \frac{1-\gamma}{\gamma}$$

is the minimum fraction of potential switchers that need to stay in farming for political power to remain with farmers (i.e. to guarantee that $n_1 = 1/2$). To ensure that $\tilde{\mu}(x^*, C) < \mu^*(x^*)$, we assume the following.

**Condition 3** $(1+\beta)(A-B) - C < [2\beta + 1 - n_0]T$.

If this condition does not hold, there exists no equilibrium with farmers maintaining power, and no equilibrium with inefficient redistribution.

The next requirement is that $\gamma$ should be small enough for farmers to vote in period 0 for a policy that prevents potential switchers from changing sectors. In particular, we need $\gamma \leq \gamma^*$. To understand this condition note that since the policy is voted on by farmers and determined before they know their identity (i.e. whether or not they will have the opportunity to switch), then the 'ex ante' expected utility of a farmer is

$$(1-\gamma)W^f + \gamma \max\left\{W^f, W^m\right\}.$$

The policy is chosen to maximize this function. Potential switchers prefer not to have implemented a policy to keep farmers in political power (they would prefer to move to manufacturing and not be taxed). Thus, for a farmer to prefer the inefficient policy ex ante, there must be a high enough probability that he will be stuck in farming ($\gamma$ must be sufficiently low). Notice that the best expected payoff for a potential switcher is

$$\overline{W}^m = (1-\gamma)(1+\beta)B + \gamma\left[(1+\beta)A - C\right] + \frac{T(1-n_0)}{n_0}.$$

A switcher obtains this utility when the median voter is a manufacturer in period 1 so $\tau_1 = \theta_1 = 0$. On the other hand, if a farmer does not switch then the worst expected payoff he can get is $\underline{V}^f = (1+\beta)B + \mu^*(1) + \beta\theta_1 = (1+\beta)[B + \frac{T(1-n_0)}{n_0}]$, which applies when all potential switchers stay in farming ($x = 1$) so that per-capita transfers in period 1 are minimized. Therefore, for farmers to vote for $\mu_0 > 0$, we require $\underline{V}^f > \overline{W}^m$, a sufficient condition for which is,

$$\gamma < \gamma^* \equiv \frac{\beta T(1-n_0)}{n_0\left[(1+\beta)[A-B] - C\right]}$$

Note that Condition 3 implies that $\gamma^* < 1/2$ since $\frac{(1-n_0)}{n_0} < 1$.

The equilibrium set now looks like that of the previous section. One can draw graphs of the functions, $\mu^*(x)$ and $\tilde{\mu}(x, C)$ in the same way and either these intersect in the interior (at some $x \in [x^*, 1)$), or the solution is at $x = 1$. The interpretation of these different equilibria is identical; when more of the potential switchers are expected to stay in farming, per-capita transfers in period 1 are lower, so a higher level of inefficient subsidy, $\mu_0$, is required to make them indifferent between the two sectors.

**Proposition 4** *Suppose Conditions 2 and 3 hold and $\gamma \leq \gamma^*$. Then there exists a set of equilibria with inefficient redistribution with either, $x \in [x^*, 1)$ and $\mu_0 = \tilde{\mu}(x, C)$, or $x = 1$ and $\mu_0 \in [\tilde{\mu}(x, C), \frac{(1-n_0)T}{n_0}]$. Fix an equilibrium and consider a decline in C, then the minimum inefficient transfer $\tilde{\mu}(x, C)$ falls.*

For there to be inefficient redistribution, we need $C$ to be sufficiently large, since otherwise it is not possible to keep the potential switchers in farming (this is implicit in Condition 2). However, once $C$ is above this threshold, a higher $C$ reduces the amount of inefficient redistribution that is required. In terms of the graph, a higher $C$ shifts the function $\tilde{\mu}(x, C)$ vertically downwards. Intuitively, when $C$ is lower, the skills of potential switchers are less specific to farming, so they are more willing to move into manufacturing. This implies that farmers need to choose a more inefficient mix of redistributive policies to convince them to stay and thus maintain their political power. Therefore, contrary to conventional wisdom, our model, which derives inefficient redistribution from micro foundations, implies that a lower degree of specificity may increase the extent of inefficient redistribution.

# 4 Applications of the Model

## 4.1 Agricultural Policy

The first application we discuss is farming subsidies. Gisser (1993) argues, "most economists have by now abandoned the belief that the main purpose of regulation is to correct for failures in private markets. The U.S. farm commodities program is no exception since it is designed to transfer income from taxpayers, and sometimes from consumers to farmers". This quote reflects the consensus view - farm policy cannot be explained as correcting market failures. Although a number of authors have argued that the form that redistribution to farmers is relatively efficient (see Gardner, 1987 and Gisser, 1993), it is difficult to imagine that more efficient forms of transfers than price supports and quantity controls do not exist (for example, the Common Agricultural Policy in Europe is viewed as a highly inefficient program,[11] transferring resources to farmers, and direct subsidies to existing farmers would save considerable resources).

In fact, most studies analyzing agricultural subsidies take it for granted that lump-sum redistribution cannot be used. Our theory suggests that this is due to the desire to keep a critical mass of farmers in the industry. There is evidence supporting this notion. Wright (1995, p.14) echoes this view in noting that "making farming permanently more attractive to the young by means of price supports....is a goal that appears embodied explicitly or implicitly in the farm policies of most developed economies."

In the same vein, in the early 1960's the French government attempted to reduce farm

[11] A view widely accepted by all analysts, see for example Moyer and Josling (1990).

prices and promote the consolidation and modernization of small farms. This was opposed by the larger more powerful farmers who controlled the FNSEA (Fédération Nationale des Syndicats d'Exploitants Agricoles) since, as Franklin (1969, p.103) puts it "On the one hand, by supporting such price [subsidy] policies they [capitalist farmers] achieved an apparent common purpose with the large mass of the peasantry: on the other, any success such policies might register, by helping to maintain the peasantry rather than diminish them, would, at the same time, help to sustain the peasants' electoral importance, and by extension increase the pressure which the capitalist-led federations might bring to bear upon various governments." It therefore appears that farmers in France were aware that the form of transfers would influence their numbers and their future political power, and may have consequently preferred inefficient methods of redistribution.[12]

The situation was quite similar in Germany. The defeat by farming interests of the Mansholt plan in 1968 on identical grounds (see Averyt, 1977, p16-17) and in the US where the American Farm Bureau defeated the Brannan Plan in 1958 (see Hansen, 1991, p120 et seq and Christenson, 1959).

## 4.2 International Trade Policy

Most countries use tariffs and quotas to protect domestic industries. This is sometimes justified by infant industry protection arguments or similar externalities. Most economists, however, view tariffs and quotas as inefficient methods of transferring resources to special interest groups, in this case firms and workers in sectors which are subject to foreign competition. To apply our analysis to the case of international trade policy it might be useful to consider the two sectors, manufacturing and farming, as producing imperfect substitutes, and all consumers having the utility functions, $y_m^{\alpha} y_f^{1-\alpha}$, with $\alpha \in (0,1)$. The world relative price of farming output in terms of manufactures is $p$, so $pB$ replaces $B$. $\theta$ can still be interpreted as a lump-sum transfer, and $\mu$ can be interpreted as a tariff at the rate of $s = p\mu/B$, so it increases the return to farming to $pB(1+\mu)$.[13] Therefore, in this case transfers to a sector may take the form of trade protection, which distort relative prices and attract newcomers to this sector, though lump-sum and efficient transfers are

[12]These objectives are still central. For example following the McSharry reforms to the CAP in 1992 pressure by French farmers induced the government to pas the Loi de Modernisation de l'Agriculture in January 1995. Part of this law was to introduce the goal of getting 15,000 young farmers established per-year and in general lowering the costs of doing business as a farmer to encourage entry, see Coleman et al. (1997).

[13]Or the actual return is, $pB(1+\mu)/(p(1+\mu))^{1-\alpha} = Bp^{\alpha}(1+\mu)^{\alpha}$, since the prices of farming goods increases for farmers too.

available

We do not have direct evidence suggesting that the mechanism we propose was an important factor in the choice of inefficient trade policies. There is however some indirect evidence consistent with our approach. While a model with lobbying by small groups might seem more appropriate in considering trade policy, there is in fact much evidence in support of the notion that the number of voters benefiting from trade policy was an important determinant of the amount and form of this policy. Caves (1976) originally argued that the amount of votes an industry could mobilize increased trade protection. Tosini and Tower (1987) found that the proportion of textile and apparel workers in the total workforce of a congressional district or state was the most significant determinant of the pattern of voting on the 1985 Textile Bill. Baldwin (1985) presents other evidence of the importance of voting in the determination of US trade policy, and Harper and Aldrich (1991) provide similar evidence on legislation affecting the sugar industry.

## 4.3 Labor Market Policy

Most European labor markets are heavily regulated and characterized by institutions such as firing costs which make it prohibitively costly for continuing firms to layoff workers (Lazear, 1990). Although severance pay may be useful by providing insurance to laid-off workers that would otherwise remain uninsured, the majority of the costs incurred by firms are administrative, and do not benefit workers. Therefore, these policies appear highly inefficient. It is often argued that the main role of these costs is to increase insiders bargaining power and wages (e.g. Saint-Paul, 1996, Lindbeck and Snower, 1988). Within this same category are many pieces of legislation enhancing the ability of workers to unionize and engage in collective action to raise their wages (e.g. closed shop agreements). Most economists consider these to be designed to give workers market power, an inefficiency which they consider to be responsible for unemployment.[14] The same criticism as above can be raised, however. It would be much cheaper and efficient to make direct transfers to insiders, while also allowing the necessary worker and job reallocation. Therefore, the prevalence of firing costs and legislation which increases the ability of workers to combine and engage in collective action in Europe is quite puzzling from a theoretical perspective.[15]

[14]The basic model of unemployment in Layard et al. (1991) is one where unions trade-off higher wages against lower employment. The outcome is an equilibrium with unemployment.

[15]One could argue that these labor market interventions increase the incentives of workers to invest in human capital (for example, Acemoglu and Pischke (1998), Robinson (1997)). However, other labor

Our model provides a simple answer. Suppose $n_0$ of workers are in a high wage sector, for example manufacturing, and wages are determined by union-firm bargaining. There is a critical mass of workers $\overline{n}$, such that for all $n < \overline{n}$, the union loses its ability to push for higher wages. Suppose also that a fraction $\gamma$ of the workers in the sector are in loss-making firms. In the absence of firing costs, these firms will layoff their workers ($\gamma n_0$ of them), and many of these workers will find jobs in the other sectors, such as retailing and services, reducing union membership to $n_1 < \overline{n}$. The union and manufacturing workers will therefore campaign for firing costs in order to prevent their numbers from shrinking. Even though other methods of redistribution are more efficient, only firing costs and similar restrictive work-practices ensure that unions maintain their power in the future. Moreover, firing costs which reduce turnover stabilize the composition of the workforce and make it easier for unions to mobilize workers and more rational for workers to incur the costs of collective action. In terms of pro-union legislation, our argument is that unions support policies which sustain their future influence which rests on their ability to mount collective action.

There is a body of evidence which suggests the importance of this approach to understanding labor market institutions and regulations. Many authors have pointed out that the design of such institutions are important for their political sustainability. Esping-Andersen (1990) argues that, "the social rights, income security, equalization and eradication of poverty that a universalistic welfare state pursues are necessary preconditions for the strength and unity that collective power mobilization demands," (see also his 1985 book). In his view universalistic welfare states dynamically sustain the political coalitions that create them in a way that means-tested systems do not since the latter create divisions within workers. In a related argument Rothstein (1985, 1992) has shown that a central factor which explains the cross-country strength of trade union movements is whether or not they manage the national unemployment insurance scheme, as they do in Belgium and all of Scandinavia except Norway (the so called Ghent system). When they do, they are able to powerfully reinforce and sustain their bargaining power by determining the criteria under which unemployed people must accept jobs. This allows them to prevent the unemployed from undercutting their bargaining power.[16] These examples

market interventions can do this much more efficiently than administrative firing costs and closed shop arrangements.

[16]Pontusson (1992, p.28) argues that there are, "instances in which welfare reforms directly strengthened union organization. Most notably, the public unemployment insurance system introduced by the Swedish Social Democratic Party in 1934 subsidized union administered unemployment funds and thereby provided a direct incentive for wage earners to join unions."

suggest that the form of welfare state intervention may be directly inefficient and motivated by the desire to sustain the ability of workers to engage in collective action, or it may be inefficient indirectly because of the results of the collective action.

In her analysis of strikes over job losses, Golden (1997) has also stressed the importance maintaining union power. For example, (pp. 4-5) she argues, "even unions that appear radically to resist market forces accept that there are circumstances in which the enterprise must reduce the size of its labor force. But what no union can accept...is that the firm take advantage of such a situation to break the union itself. If too many shopfloor union representatives are included amongst those to be let go, or if so much of the union's membership is slotted for expulsion as to jeopardize the very future of the union as an organization...the union responds with industrial action. The aim of such action is to restore the union organization, not to prevent job loss. Strikes over workforce reductions... are rational, self-interested responses on the part of labor organizations to threats to trade unionism." Finally, Slichter (1941) noted, "if the union has no closed shop, restrictions on the employer's freedom to lay off may be a matters of self-preservation, because if union members are always the first to be dropped, the men will not remain in the organization."

These arguments therefore suggest that, as with agricultural and trade policies, some of the redistributive labor market policies are chosen to be inefficient to maintain their constituency, and hence enabling continuity in the political power of these policies' beneficiaries.



# 5 Conclusion

In this paper we have developed the idea that in political systems which lack the ability to make commitments to future policy, the dynamics of group power is crucial. Groups wish to take actions not just to raise their welfare today, but also to sustain their power so that they will be able to influence policy in their favor in the future. In order to do this they may need to take current actions which would not be optimal if there was no concern for the future. We have shown that favoring inefficient methods of redistribution may be precisely such an action in situations where the political influence of a group depends on its size (a natural assumption in democratic systems). This is because inefficient redistribution makes staying in, or joining a group, relatively more attractive to marginal agents than methods of efficient redistribution do. We argue that this explanation is consistent with a variety of evidence on the political economy of redistribution from agriculture, trade and

labor market policy.

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Figure 1

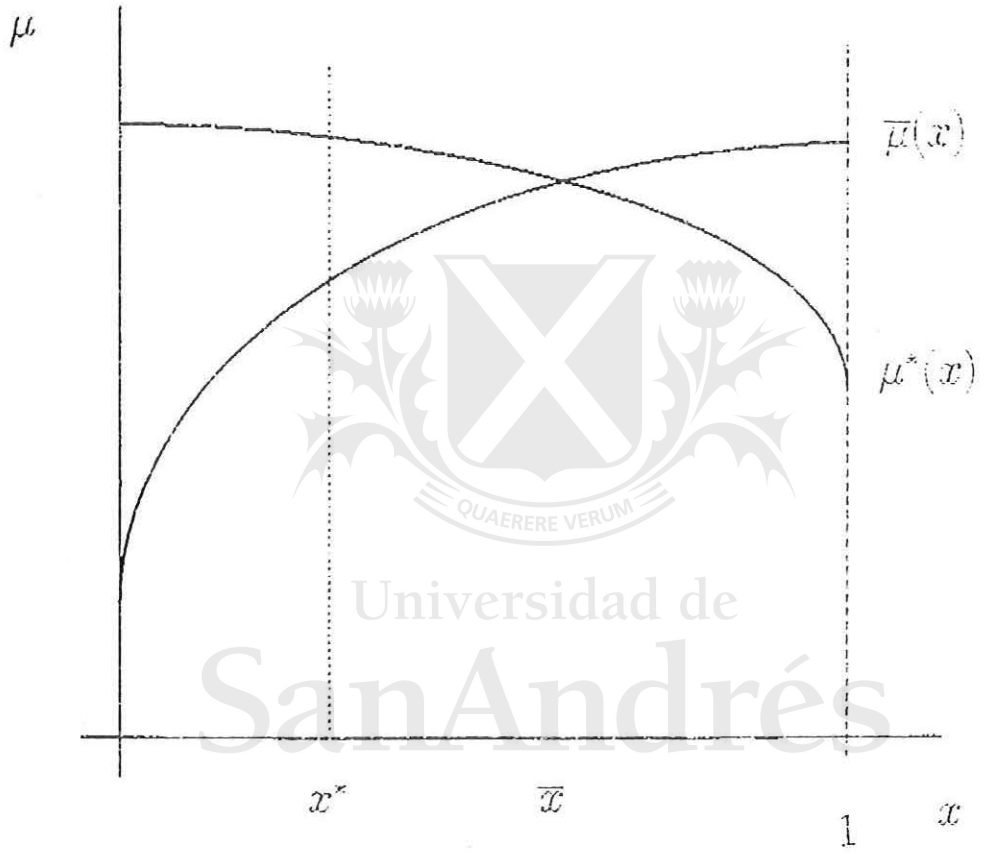

Figure 2