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**“The Tinpot and the Totalitarian: A
Simple Economic Theory of
Dictatorship”**

Ronald Wintrobe

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**THE TINPOT AND THE TOTALITARIAN:
A SIMPLE ECONOMIC THEORY OF DICTATORSHIP**

by

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Previous versions of this paper have been given at the 1988 meetings of the Public Choice Society, at the University of Toronto, at the Institute des Sciences Politiques (Paris), and at Yale University. I am grateful to participants in those seminars, and especially to Peter Howitt, Pierre Salmon and Bob Young for helpful comments and suggestions.

I. INTRODUCTION

What should the attitude of citizens in democratic countries be towards dictatorships? What policies should their governments follow? The noted political scientist Jeane Kirkpatrick (1982) has advanced the provocative thesis (which also became for a time a cornerstone of United States foreign policy under Reagan) that there are really two kinds of dictatorships. The first type, commonly referred to as "totalitarian" dictatorship, is characterized by massive government intervention into the economic and social lives of the citizenry, motivated by Utopian goals of one kind or another, and exemplified by communist dictatorships, Nazi Germany, and possibly contemporary Iran. The second type is what Kirkpatrick calls "traditional autocracies" and which I call "tinpot" dictatorships, in which the ruling government does not disturb the traditional way of life of the people, and represses them only to the modest extent necessary to stay in office and collect the fruits of monopolizing political power (Mercedes Benzes, palaces, Swiss bank accounts, etc.). Examples of this latter type include the ex-rulers Samosa of Nicaragua and the Shah of Iran, presumably also Ferdinand Marcos, and General Noriega.

Kirkpatrick argued that U.S. foreign policy should be relatively tolerant towards the latter type of dictatorship, not because these regimes display very much that is appealing to lovers of freedom, but because: (a) while these leaders are dictators, they tend to be pro-Western and (b) their regimes are less repressive and less stable than totalitarian regimes, and the U.S., by taking a hostile attitude towards the repression of civil liberties in tinpot regimes, often abets their downfall only to see them succeeded by regimes of the totalitarian type. Hence, she argued, a "double standard" could be recommended to lovers of freedom in their attitude towards dictatorship and she fought for such a standard while American Ambassador to the United Nations.¹

Now, all policy conclusions depend on a model, and so it is reasonable to ask what the underlying model of dictatorship is in this case. I think it is fair to say that, in Kirkpatrick's

view, the essential tool or instrument of governments under either traditional or totalitarian dictatorship is *repression* or coercion of the citizenry. Consequently, the only difference between traditional and totalitarian dictatorships is the *level* of repression, i.e., the extent or intensity of political repression and the extent to which repression is carried out against the citizenry in different spheres of life, that is, the extent to which they interfere with the economic, social, and religious life of the citizenry. This way of looking at dictatorship is, I believe, common to much of political science.

Perhaps surprisingly, there has been very little attempt to ask the simple question: How much of the *behavior* of dictatorships can be explained with this type of model? For example, although all dictatorships are repressive, the *level* of repression does not appear to be constant under any particular regime, whether totalitarian or tinpot. In the USSR and in Eastern Europe, for example, from time to time there appear to be periods of permissiveness or "thaws" such as occurred in the Soviet Union under Khrushchev and currently under Gorbachev. In Latin America, there was a period of resurgence of authoritarianism in the 1970's, explanations for which now constitute a fairly large literature (see, e.g., Collier (1979)). In the 1980's, this trend appears to have been reversed. How can these changes in the level of repression be explained?

Secondly, one very common form of dictatorship in the modern world is the *military* dictatorship (with or without some civilian power sharing). If coercion or repression is the basic tool of dictatorial rule, one would expect military governments to have a comparative advantage here, so that military dictatorships would be among the most "successful" dictatorships, in the sense that they would be stable and long-lived. Instead, we find precisely the opposite. Military regimes tend to be relatively short, unstable, and (what could be more ignominious) typically hand power over to a civilian government after less than five years in power.² What explains the instability of military regimes, and why do military governments sometimes voluntarily cede power to civilians?

Thirdly, consider totalitarian regimes. The notion that totalitarian regimes rule solely on the basis of massive repression leaves a number of facts unexplained.

For example, although we have very little direct evidence about the popularity of these regimes in the form of opinion polls or electoral results, we do know that, *after* the end of World War II, a large proportion of the German population still supported Hitler.³ Moreover, it is well known to scholars of comparative economic systems that the economic record of communist regimes, at least as measured by economic growth rates over long periods of time, is remarkably good.⁴ In short, the puzzle is this: if totalitarian regimes rule by repression alone, why are they not more unpopular than they appear to be, and what makes them so dynamic? The traditional answer, of course, is that, in totalitarian societies, the people are brainwashed by the government. Repression is carried out not only against actions, but against thought. Kirkpatrick's definition of totalitarian government is "one prepared to use governments' coercive power to transform economic and social relations, beliefs, values and psychological predispositions."⁵ A "totalist ideology" is the first of Friedrich and Brzezinski's six characteristics of totalitarian government. Gordon Tullock develops an evolutionary argument to suggest that human beings are "readily indoctrinable"⁶ and will accept any regime which has been in office for some time, although he does not accord this factor much importance in explaining the survival of dictatorship.

The problem with ideology as an explanatory variable is that we do not understand it very well. Thus, Friedrich and Brzezinski, after giving ideology pride of place in their explanation of the workings of totalitarianism, also suggest that the population of these societies have a profound distrust of what they are told. But if the ideology is not believed, what function does it serve? Kirkpatrick, having laid even greater emphasis on the importance of ideological indoctrination in explaining the survival of totalitarian government, brings herself at last to the central question:

"But have they managed to reform human consciousness? Have they managed to educate Soviet citizens so that they would freely choose to behave according to the norms of Soviet culture *if the constraints of coercion were removed*? The answer of course is that we do not know."⁷

Since we do not know, and can probably never know the answer to this question, I suggest that it is probably not a very fruitful line of investigation.

In this paper, I take a different approach. I look at political life as a marketplace in which *political exchanges* take place. Repression is an important tool in the hands of the dictator, but just as a monopolist in the economic marketplace may try to impede (block, repress) entry by alternative sources of supply for the purpose of raising his profits on exchange, a political dictator does not repress for the sake of repression alone, but in order to raise his gains from exchange. Exchange in political markets — whether democratic or dictatorial — is hampered by the fact that there are no property rights in political markets which could enforce exchange. Consequently, some other institutional mechanism must be used to resolve the problem of cheating and I will suggest that investments in political loyalty play this role.

The starting point of this paper then, is that a dictator has two instruments — repression and loyalty — to accumulate power over the population. The next section elaborates on the use of these two instruments. The basic model of dictatorship is developed in Section III. The equilibrium levels of repression and loyalty are derived for a "tinpot" dictator — defined as a dictator who simply maintains the minimum amount of power necessary to stay in and enjoy the fruits of office. This model is then used to address two issues: the relationship between economic performance and political repression, and the instability of military dictatorships. Section IV extends the model to totalitarian regimes — defined as regimes which maximize power — and develops the connection between economic performance and political repression for that type of regime. Sections III and IV imply that, surprisingly, that an improvement in economic performance tends to lower the level of political repression in a tinpot regime, but *raises* it in a totalitarian regime. Finally, Section V

of the paper looks at policy implications. It derives the policies which democratic governments should pursue towards dictatorships, assuming that the objective is simply that of promoting more freedom in those countries (i.e., neglecting possible strategic considerations).

II. THE INSTRUMENTS OF POLITICAL POWER

The classic means for a dictator to accumulate and to maintain political power over the citizenry is that of political repression. Repression includes restrictions on the rights of citizens to criticize the government, restrictions on the freedom of the press, restrictions on the rights of opposition parties to campaign against the government, or, as is common under totalitarian dictatorship, the outright prohibition of groups, associations, or political parties opposed to the government. To be effective, these restrictions must be accompanied by monitoring of the population, and by sanctions for disobedience. The existence of a political police force and of extremely severe sanctions for expressing and especially for organizing opposition to the government such as imprisonment, internment in mental hospitals, torture and execution are the hallmark of dictatorships of all stripes.

Although political repression may be difficult to measure conceptually, a number of indices are available, among which perhaps the best known is the civil liberties index constructed by Raymond Gastil (1980) annually for a very large number of countries since 1973. Countries are ranked subjectively from 1 (most free) to 7 (least free) on the basis of such factors as the number of political prisoners, the degree of literacy and freedom of expression, freedom of the press, and so on. The rankings are reviewed by a distinguished panel of academics. A similar index is prepared by the magazine *The Economist* using a much wider scale (0 to 100).

Economists have not made much use of these data. The basic reason is undoubtedly the absence of a good theory of the determinants of political repression. On the other hand, it is an article of faith among many economists that at least some of the important determinants of political freedom are economic. For example, there is Friedman's well-known contention

that free markets and political freedom go together. Bilson (1982) attempted to test for the influence this and other economic variables on political freedom using the Gastil data. However, the results were not very definitive. For example, the level of government intervention turned out not to be a significant determinant of political repression in his analysis. Neither did the growth rate of GNP, the average level of government expenditure, the ratio of exports to GNP (an index of "openness" to foreign influences), or population size. The only important explanatory variable was the level of income per capita, which is negatively correlated with political repression. However, the hypothesis that all the coefficients are equal to zero was also rejected. This, and the likelihood that all the independent variables themselves are highly correlated suggests that the main obstacle to progress in this area is the lack of theory.

One approach, which has not been developed in the literature, begins with the recognition that governments, democratic or dictatorial, provide services to citizens including building roads, hospitals, schools, protection of property, and including policing and defense which protect the population as well as repressing it (even in dictatorships). To the extent that governments provide services to their citizens which those citizens want, it is useful to look at political life—even in dictatorships—as a market in which political exchanges are consummated. Under a dictatorship the market for political exchange is monopolized, to a greater or lesser degree, by the governing party. The degree of monopoly, and the size of the political market (i.e. the extent to which behavior in economic, social and other relationships is politicized) determine the character of a dictatorship. The extreme (in the sense of most complete) form of dictatorship is totalitarian dictatorship. Arendt (1951), Hayek (1944) and others envisage this regime along Orwellian lines. Although usually defined in terms of command rather than exchange (Arendt, 1951; Hayek, 1944), totalitarian regimes are easily defined in exchange terms as a society in which all exchanges are politicized, and all are undertaken with representatives of the state and with no competing organization.

In political exchange, the government provides goods and services to the citizenry in exchange for political support. One kind of political exchange is that described by Stigler (1971) and the subsequent literature on regulation and rent-seeking. In that literature, politicians supply interest groups with policies which amount to some form of favorable regulation—a subsidy, tariff, control over entry, favorable tax treatment and so on in exchange for political support. Interest group theory tends to show that small producers will usually be able to outbid large (consumer) groups because small groups are better able to control free-riding [Stigler (1971), Peltzman (1975), Becker (1983), Olson (1984)]. However, exchanges with large groups are not infrequent in political markets, as exemplified by deregulation or the unfavorable treatment of the auto industry, to cite only the most obvious examples. The evidence on the importance of ideology [Kau and Rubin (1982), Kalt and Zupan (1984)] also suggests that large groups are not necessarily neglected by the political process.

Whatever the groups favored in political exchange, there is a difficulty which is seldom faced in this literature: The exchanges are contractually unenforceable. Indeed, no formal contract is ever drawn up. Politicians make promises, especially at election time, and hope to obtain support in exchange for them. What prevents politicians from renegeing on the exchange? Of course, they often do renege. The accusation that a government has "broken its promises" is one of the most commonly heard charges in any election campaign. However, if politicians *always* broke their promises there would be little point in accusing them of doing so in any given instance. So the question remains: Why do politicians keep their promises as often as they do? And a similar problem exists on the demand side of the political marketplace. What motivates citizens and interest groups to deliver support?

Sporadic attempts have been made to deal with this problem [Landes and Posner (1975), Galeotti and Breton (1986)], but no general solution commands acceptance. On the other hand, the general problem of exchange in the absence of legal contractual enforcement has received wide attention in recent years. Important contributions include Telser (1980),

Klein and Leffler (1981), Shapiro (1983) and Shapiro and Stiglitz (1986). Perhaps the most comprehensive discussion is that of Shapiro (1983). Following Klein and Leffler (1981), he studies the problem of a firm marketing high-quality goods. Prior to purchase, consumers cannot distinguish high from low quality. What prevents the firm from producing low-quality goods and selling them as if they were high quality? Shapiro shows that there are three conditions required for it to be in the firm's interest not to cheat its customers: (a) the prospect of future sales; (b) that the firm has, in the past, established a reputation as a seller of high-quality goods; and (c) that the firm receive a price premium on high-quality goods, which both compensates the firm for its past investments in reputation and serves as a deterrent to cheating. If the present value of the premia received from future sales is large enough to overcome the one-time gains from cheating ("milking" its reputation) it will not be in the firm's interest to cheat. A similar result is obtained in the efficiency wage literature [e.g., Shapiro and Stiglitz (1984)], the central result of which is that firms will pay their employees a wage premium (i.e. wages in excess of marginal product) to prevent workers from shirking (cheating on their implicit contract).

Are these conditions fulfilled in political markets? No general answer to this question can be given here. However, political parties are long-lived institutions with reputations based on their past performance in office, and with a substantial stake in their reputation in the future [Galeotti and Breton (1986), Wintrobe (1987), Weingast (1988)]. And it seems obvious that rational politicians have the same incentive as rational sellers in economic markets to provide citizens with some reason to believe their promises. Similarly, rational politicians need to guard against "cheating" by citizens, i.e., they will search for mechanisms which guarantee that citizens or interest groups can be counted on to deliver support. In general, I suggest that the reciprocal problem of cheating is solved in political markets by investments in *political loyalty*. Two institutional mechanisms which engender loyalty are pork barrel projects, and political patronage.

To illustrate, suppose that a politician obtains a dam or bridge or other pork-barrel project for the citizens in his district. A proper cost-benefit analysis will reveal that the project is "wasteful". If the project is not wasteful, citizens have no reason to deliver support to that politician in exchange for the dam or bridge since the politician is making no sacrifice on their behalf, but simply doing what any technocrat would do. On the other hand, to the extent that the project is wasteful, i.e., a genuine pork-barrel project, citizens have some reason to believe that that politician or that political party is responsible for their getting the project, and will look after their interest in the future, provided they reciprocate with support. More precisely, the element of "waste" in the project is precisely the sign that the politician can claim credit for the project. A patronage job acts in exactly the same way. So pork-barrel projects and patronage jobs are the exact analog in political markets to price and wage premia in economic markets. The size of the premium is measured by the amount of waste in the project.

It immediately follows that the stock of loyalty capital of this type may be measured by the total value of rents distributed by the political party in office. The total costs of rent-seeking [Tullock (1967), Posner (1971)]—frequently measured in recent years—may be waste in the economic marketplace, but in the political marketplace these costs are useful investments which reduce the transactions costs of political exchange. In distributing political rents to a particular interest group or group of citizens, politicians are making a sacrifice (since the rents could have been distributed to another group). The group which receives the rents immediately have some reason to believe that that political party will look after its interest in the future. Since the rents can be withdrawn, politicians have reason to believe that the group which receives them will provide the politicians with loyal support. The rents act as a premium which compensates the interest group for its support or loyalty to the party, and serves as a deterrent to the shifting of loyalty. Consequently, pork-barrel projects and political patronage are investments which solve the problem of political cheating on both sides of the market.

Of course, there are many other such institutions, and many other ways in which politicians try to get citizens to believe in them, and to support them. Political markets are subtle and complex. The central point here is that rational politicians have an incentive to discover these, and to invest in them. We will call the total stock of such investments politicians' loyalty capital.

Political dictators have the same incentive to build loyal bases of support as democratic politicians. The exchanges between dictators and interest groups are no different than that with democratic politicians, as has been argued, for example, by Becker (1983). Dictators are also often interested in building popular support, and I will argue that this is a characteristic of stable or long-lived dictatorships. That both Hitler and Mussolini amassed considerable popular support is a well-known fact,⁸ and the basis for the claim by Lipset (1960) and others that the masses are a threat to democracy when politically active. In Section IV we will show how a number of features of totalitarian party structure in particular can be interpreted as institutions which facilitate political exchange. The next section simply assumes that a dictator can use both political exchange and repression to control the population, and explores the trade-off between these two instruments.

III. THE MODEL

A. Assumptions

To this point I have argued that a dictator can use two instruments to build and maintain political power over the population under his government. The first instrument involves *political repression*, i.e., removing the threat of opposition to his policies by outlawing it. The use of this instrument requires resources devoted to the production of repressive legislation, to publicizing these laws, to policing their obedience, and to punishing offenders. Alternatively, the dictator can bind parts of the population to him as loyal supporters through the creation and distribution of political rents. Rents cost resources and in addition generate a deadweight loss to the economy (of course, expenditures on repression are

also deadweight losses). The dictator who wishes to remain in office therefore faces a trade-off between these two alternatives. The interrelationships between them, however, are complex. The main complication is that while loyalty and repression both use up resources (and in that sense are alternative "inputs" into the creation and maintenance of political power), their levels are not independent of one another: The level of repression affects the supply of loyalty. In order to sort out the various relationships involved, I now construct a simple model of the equilibrium levels of repression and political loyalty.

Firstly, I assume that the relationship between the inputs of loyalty and repression and their output (power) can be represented as the production function

$$(1) \quad \pi = \pi(L,R)$$

The production function for power (Π) is assumed to be "well-behaved", i.e., $\pi_L, \pi_R > 0$, $\pi_{LR} > 0$, $\pi_{LL}, \pi_{RR} < 0$. These relationships imply diminishing returns in the production of power to the continued use of either instrument alone, and that there is some complementarity between repression and loyalty in the production of political power. Figure 1 depicts this production function in the form of a set of iso-powerlines, where, as is usual, higher iso-powerlines denote higher power.

(INSERT FIGURE 1 HERE)

Secondly, I assume that, since loyalty is a capital good, the amount of loyalty available to the dictator is fixed in the short run, but variable in the long run. On the other hand, the level of repression is variable in the short as well as in the long run.

Thirdly, I distinguish two kinds of dictators: totalitarians and tinpots. Totalitarian dictatorships maximize power over the population under their control. I believe this objective function is consistent with the characterization of totalitarianism in Arendt (1951), Hayek (1944) or Friedrich and Brzezinski (1965).⁹ The objective function of a tinpot dictator, on the other hand, is to minimize the resource cost of staying in office. In Figure 1, the tinpot dictator seeks no more power over the population than represented by the lowest

iso—powerline in the figure, π_{\min} . At any lower level of power, the tinpot will be deposed. Should the tinpot obtain more resources than required to attain $\pi = \pi_{\min}$ (resource constraints will be discussed shortly) he does not spend them on repression or loyalty, but on his own personal consumption or that of his family. Since the tinpot always remains on π_{\min} (as long as he stays in office), it immediately follows that there is an inverse relationship between the amounts of L and R demanded by the tinpot: An increase in R results in a fall in the level of L demanded.

Consider now the supply of loyalty to a tinpot dictator. I assume that while the tinpot may have a monopoly of formal political office, he does not monopolize political power in the country, but faces opposition in the sense of potential alternatives to his government. Citizens and interest groups may establish (possibly covert) ties with these potential opposition leaders. In other words, the dictator may have a monopoly of formal (legal) political power, but he has no monopoly on political loyalty. What happens to the supply of loyalty to the tinpot if the level of political repression is increased? There are two effects. First, the increase in repression acts like a "tax" on exchanges with opposition or potential opposition leaders. In other words, citizens or interest groups who speak out against the government, demonstrate against it, and so on, are essentially offering their support to someone willing to offer an alternative policy. An increase in repression—an increase in the probability of being discovered or in the size of the sanction imposed for "disloyal" activities—raises the "price" of disloyalty. As the price of exchanges with the opposition increases, the *relative* payoff to citizens and interest groups of exchanges with the dictator, or with his representatives, increases; for this reason we expect the supply of loyalty to the dictator to be positively related to the level of repression. However, there is an income effect that works in the opposite direction: An increase in repression increases the likelihood for any individual that he will himself be the victim of a sanction even if he or she is for the most part "loyal". This reduces the individual's wealth, and, so long as investments in political loyalty are a normal good, it reduces investments in political loyalty to the regime (as well as to the opposition). At low

levels of repression, this effect is small for the average individual. For example if, as in the early years of Nazi Germany, repression is directed mainly at obvious opponents of the regime, and at Jews, persons who fell into neither of these categories could reasonably assume that they would not be the victim of the regime's repressive policies. Consequently, so long as the level of repression is relatively low, it seems reasonable to assume that the first effect dominates the second, that is, that the supply of political loyalty is positively related to the level of repression, as depicted by the L^S curves in Figure 1.

The supply of loyalty to the dictator will also depend on other variables apart from the level of repression. In our framework, citizens and interest groups supply loyalty because they expect to receive some portion of the gains from political exchange in return. This return or rent to suppliers can be represented as a "price" received per unit of loyalty supplied (P_L^S). The distinction between the price received and the price paid will be discussed shortly. I assume the supply of loyalty is positively related to this price. In fig. 1, an increase in P_L^S from P_L^0 to P_L^* therefore results in a rightward shift of the supply curve, as depicted.

Finally, the supply of loyalty also depends on the economic performance of the regime (PE). For example, suppose that performance were better than expected. Then the value of a given fraction of the rents from political exchange will tend to rise, and the supply of loyalty will increase.

For these reasons, the supply of loyalty function can be written as:

$$(2) \quad L^S = L^S(R, P_L^S, PE).$$

$$\text{where } \frac{\partial L^S}{\partial R} > 0, \frac{\partial L^S}{\partial P_L^S} > 0, \frac{\partial L^S}{\partial PE} > 0.$$

The model can be completed by formally introducing the resource costs to the dictator of repression and loyalty. The costs per unit of repression, P_R , are the costs of obtaining manpower and capital equipment for the police, prisons, and the court system. It seems reasonable to assume that these per unit costs are not under the tinpot's control, although some

dictators may be able to "produce" repression more efficiently than others, as will be discussed shortly.

The cost to the dictator of creating and maintaining loyalty (P_L^D) include the costs of creating and distributing monopoly rents, of building dams, bridges, doing favors for the citizenry, and so on. The creation of loyalty is a rather subtle process, since it essentially involves the creation of a belief on the part of the citizenry that the dictator will look after their interests. The costs involved therefore include the costs of signalling and communicating in addition to the literal costs of such pork-barrel projects as dams and bridges. It follows that the price paid for a unit of loyalty capital by the dictator (P_L^D) differs from the price received by suppliers of loyalty (P_L^S) because the former includes all of the costs incurred by the dictator to create and maintain loyalty, while the latter includes only the portion actually received by suppliers of loyalty. Normally, the two prices will move together, but, for example, an increase in the efficiency of producing loyalty implies a lower P_L^D , but not necessarily a lower P_L^S . Apart from such exogenous changes, we shall assume that the ratio P_L^D/P_L^S is fixed. In what follows, the superscripts S or D will be dropped to simplify the notation whenever they are not required.

Finally, we assume that the price of loyalty is an increasing function of the amount of loyalty demanded. So the dictator's resource constraint can be represented by the concave "budget" line BB in Figure 1, or by the equation:

$$(3) \quad B = (P_R R + P_L(L))L \quad \text{where} \quad \frac{\partial P_L}{\partial L} > 0.$$

B does not represent the total budget of the government since it does not include resources spent for the dictator's personal consumption. Rather, B represents the resource costs to the dictator of staying in office. The dictator is not constrained by any particular level of B, since his powers enable him to at least some extent to increase the resources under his control through increased taxation, borrowing, or simple confiscation (though these may of course have deleterious effects on the economy and therefore on his future consumption prospects).

A simple way of representing the dictator's *total* budget is discussed shortly. For the moment, we simply note that resources spent on R or L to maintain his hold on power are thereby diverted from the tinpot's personal consumption. For this reason, the dictator will, in the long run at least, wish to minimize the resource costs of staying in office. Consequently, he will be sensitive to P_L/P_R , the relative per unit costs of R and L.

This long run equilibrium solution may be derived by re-writing equation (2) with P_L instead of L as the dependent variable:

$$(2') P_L = P_L(L, R, PE)$$

$$\text{in which case } \frac{\partial P_L}{\partial L} > 0, \frac{\partial P_L}{\partial R} > 0, \frac{\partial P_L}{\partial PE} < 0.$$

The tinpot's long run problem is to minimize the resource costs of staying in office, or (substituting (1) and (2') into (3))

$$(3) \quad \text{Min } V = P_R R + P_L(L, R, PE)L + \lambda[\Pi_{\min} - \Pi(L, R)]$$

with respect to the choice of R and L. (PE is assumed exogenous for the time being.)

This yields:

$$(4) \quad \frac{\partial V}{\partial L} = \frac{\partial P_L}{\partial L} L + P_L - \lambda \frac{\partial \Pi}{\partial L} = 0$$

$$(5) \quad \frac{\partial V}{\partial R} = \frac{\partial P_L}{\partial R} L + P_R - \lambda \frac{\partial \Pi}{\partial R} = 0$$

which may be combined to obtain the familiar-looking expression

$$(6) \quad \frac{\Pi_L}{\Pi_R} = \frac{P(1 + \epsilon_L^P)}{P_R + \epsilon_R^P P_L}$$

$$\text{where } \Pi_L = \frac{\partial \Pi}{\partial L}, \Pi_R = \frac{\partial \Pi}{\partial R}, \epsilon_L^P = \frac{P_L}{L} \frac{\partial P_L}{\partial L}$$

and $\epsilon_R^P \equiv \frac{P_L}{R} \frac{\partial P_L}{\partial R} < 0$. Equation (6) resembles the usual condition for cost-minimization,

except that the marginal cost of repression ($P_R + \epsilon_R^P P_L$) is less than its price because an increase in R allows the dictator to obtain loyalty at a reduced price ($\epsilon_R^P < 0$).

The equilibrium described by (6) is represented by point E in figure 1, and is unique, if the production function is well-behaved, the budget line concave, and the supply of loyalty upward-sloping, as depicted in the figure.

An interesting special case of this general model may be described if we further assume that the tinpot's *total* budget (i.e. including government resources diverted to his personal use, either for personal consumption, or perhaps deposited in Swiss bank accounts) arises solely from a proportional revenue-maximizing income tax. As in Brennan and Buchanan (1980), let t = tax rate, y_0 = initial (pre-tax) income. The tax reduces work effort and therefore income, by η (the elasticity of income with respect to the tax rate). Tax revenue is then $ty_0(1-\eta t)$. Assume also that the disposable income of the population (Y_D) is a good proxy for PE, the dictator's economic performance.¹⁰ Then the tinpot may be described as maximizing "profits", i.e. the difference between total revenue and the total costs of staying in office, as in

$$(7) \quad \text{Max } Z = ty_0(1-\eta t) - P_R R - P_L(R, L, Y_D)L + \lambda[\Pi_0 - \Pi(L, R)]$$

where

$$Y_D \equiv (1-t)Y_0(1-\eta t).$$

Maximizing (7) with respect to t , R and L yields the same first order conditions for R and L described in equations 4 and 5 (or 6), and it yields the further condition for t :

$$(8) \quad \frac{\partial Z}{\partial t} = Y_0(1-2\eta t) - \frac{\partial P_L}{\partial t} L = 0$$

$$\text{or } Y_0(1-2\eta t) = \frac{\partial P_L}{\partial t} L$$

$$\text{where } \frac{\partial P_L}{\partial t} \equiv \frac{\partial P_L}{\partial Y_D} \frac{\partial Y_D}{\partial t} > 0.$$

The left hand side is the marginal revenue from an increase in the tax rate, and the right hand side is the marginal cost, which arises because higher taxes reduce political support or loyalty, and must be compensated for by paying a higher price for loyalty to keep L from falling and reducing Π below Π_0 .

From (8), the optimum tax rate is

$$(9) \quad t^* = \frac{1}{2\eta} \left(1 - \frac{\partial P_L}{\partial t} \frac{L}{Y_0} \right)$$

This differs from Brennan and Buchanan's revenue-maximizing tax rate, which is simply $t^* = \frac{1}{2}\eta$. The "profit maximizing" tax rate described in (9) is lower than this, since $\frac{\partial P_L}{\partial t} > 0$. The present analysis is perhaps more general, since it incorporates the concern facing any dictator that raising tax rates increases opposition to his or her regime. No such problem arises for Brennan and Buchanan's Leviathan, who is assumed to have no difficulty in staying in office even at confiscatory tax rates.

B. Effects of Economic Performance on the Behavior of a Tinpot

To illustrate the workings of the model, suppose first that the economic performance of the regime improves, and that the regime is able to claim the credit for this. The analysis is straightforward, as a simple graphic proof shows. In Figure 2,

(INSERT FIGURE 2 ABOUT HERE)

E_0 depicts the initial equilibrium of the system, at which R , L , and P_L/P_R are given by R_0 , L_0 and $(P_L/P_R)_0$. The improvement in economic performance shifts the supply of loyalty to the right to S'_L . In the short run, there is now an excess supply of loyalty ($L_1 - L_0$). At L_1 , R_0 of repression is unnecessary to remain in power, and the dictator will relax R to R_1 , implying a new short run equilibrium at E_1 . In the long run, however, the excess supply of loyalty implies that the dictator can allow the price paid for it, P_L , to fall. This shifts S_L back partially to S''_L , and also shifts the budget line in the direction shown (to BB_1). Since (P_L/P_R) falls, the final long run equilibrium must be at a point to the right of E_0 , e.g., at E_2 in the figure on BB_2 implying an increase in L (to L_1) and a fall in R (to R_1). In other words, *under a tinpot dictatorship, an improvement in economic performance unambiguously results in an increase in loyalty and a fall in the level of political repression.*

Suppose, on the other hand, that there is a deterioration of economic performance. The supply of loyalty shifts to the left (to L'_S), as shown in Figure 3. At R_0 , the supply of loyalty has fallen to L_1 , and R_0 of repression and L_1 of loyalty are insufficient to keep the dictator in office ($\pi < \pi_{\min}$). The proper short-run response by the dictator is to increase R to at least R_1 , implying a new short-run equilibrium at E_1 . Thus the short-run response to changes in economic performance is asymmetric—a deterioration in performance calls for a sharp rise in repression, while an improvement results only in a slow relaxation of much smaller magnitude (compare $R_0 - R_1$ in Figure 3 to $R_0 - R_1$ in Figure 2). The asymmetry arises for two reasons: first, the increase in repression when performance declines is necessary for survival (in office), whereas only greed motivates a fall in R when performance improves. Secondly, the diminishing marginal rate of substitution between R and L implies that the absolute size of the increase in R required to stay in office when performance declines is larger than the decrease possible when performance improves. Because of this asymmetry, a cross-sectional regression between some index of economic performance (such as the growth rate of national income used in Bilson's (1982) study) and a repression index will not necessarily reveal the true relationship between these two variables.

(INSERT FIGURE 3)

Of course, dictators, especially tinpots, are not perfect and sometimes make mistakes. If they did not, they would never be deposed. The classic error for a tinpot dictator is to respond to worsening economic conditions by relaxing repression rather than increasing it. (For reasons that will become apparent later, I call this the error of a tinpot who confuses himself with a totalitarian.) For example, there is evidence that the Shah of Iran responded in this fashion to the unrest resulting in part from the considerable deterioration in economic conditions after 1976, and the result was his ouster.¹¹

In the long run, maintaining repression at R_1 is both expensive (since R_1, L_1 is not the cost-minimizing solution), and unnecessary (since at R_1 , the supply of loyalty will expand beyond L_0). Consequently, in the long run, the dictator can allow R to drift down, provided that P_L is increased to eliminate the excess demand for L which would arise again if R were to

fall back to R_0 . The rise in P_L shifts L^S partially back to $L^{S''}$, and twists the budget constraint in the direction shown in fig. 3, so that the new long-run equilibrium is at E_2 , implying (compared to the initial equilibrium) a fall in L and increase in R . In other words, a deterioration in the economic performance of a tinpot regime results in a fall in loyalty and an increase in political repression.

Note that if strong economic performance were to continue over a period of time, the level of repression would continue to fall, and ultimately it is possible that the tinpot would need to use very little repression to stay in office, and could even hold and win a reasonably free election. This scenario appears to describe recent events in South Korea.

C. Military Regimes

Military regimes appear to be a sub-species of the class of tinpot dictatorships. As mentioned in the introduction, there are two issues of particular interest concerning military regimes, namely: why are they so unstable? and why do they often voluntarily hand power over to civilian governments?

Military regimes can be analyzed with the help of fig. 4. The resource constraint depicted there for a military regime is steeper than that for a civilian tinpot, indicating a comparative advantage for the military at repression and a comparative disadvantage at accumulating political loyalty. The assumption that the military would have a comparative advantage at repression is easy to understand. After all, the central skill of the military is, in Lasswell's well known phrase "the management of violence". This is sufficient to establish the shape of the resource constraints in fig. 4. However, in addition, it has often been argued that the military are disadvantaged, compared with civilian regimes, at building a civilian political base. Thus, Stepan suggests that "a military government does not easily tolerate a normal level of dissension and debate needed to build or maintain coalitions with civilians".¹² Perlmutter and Bennett note that historically military regimes have shown "an inability to tolerate political participation"¹³, and suggests that the reason for this is that the mass

participation required to do this is thought to be closely related to political turbulence and the possibility of violence. Thus, although no quantitative evidence has, to my knowledge, been assembled on this issue, the general consensus among observers of these regimes seems to be, as summed up by Eric Nordlinger that "few (military regimes) have attempted to build mass parties and where they have been created they turned out to be ineffectual structures because genuine participation was not permitted".¹⁴

Assume, then, that the initial equilibrium for a military regime is at a point like E_M in fig. 4 (compared to E_C for a civilian regime), implying the use of more repression, R , and less political loyalty, L , compared to a typical civilian regime. What makes this military regime unstable? To answer this question, one has to probe into the motives behind the intervention of the military into political life. While these are undoubtedly many and complex, ranging from disgust at the behaviour of civilian politicians, fear of communist takeover, and the desire to restore order to political life, there is one motive which stands out for its simplicity and generality: the desire to increase the budget of the military. There is considerable evidence to support this point: Putnam (1967) classified 20 Latin American countries according to the extent of military intervention and found a positive correlation between this variable and defense spending as a percentage of Gross National Product. Schmitter (1971) classified Latin American countries into three groups according to the level of military intervention, and found that central government expenditures devoted to the military ranged from 9 to 14 and then 19 percent as the level of military intervention increased. Nordlinger (1970) found that the average proportion of Gross National Product allocated to defense expenditures was almost twice as high in countries with a pretorian officer corps than in those where the military accepted civilian control.

In other words, one straightforward way to explain military intervention in politics is to model the military as a budget maximizing bureau, and to note that intervention is a strategy available to the military for increasing their budgets in countries with weak political systems. As argued elsewhere (Breton and Wintrobe (1975, 1982)) budget maximization is too specific

a maximand to satisfactorily represent the objectives of most bureaus, mainly because of the existence of substantial opportunities for mobility among the different bureaus in most bureaucracies. However, this objection does not apply to the military, which tends to be a closed hierarchy. Since career opportunities for military personnel tend to be limited in bureaus outside the military hierarchy, budget maximization is often the most attractive strategy available to raise the salaries, prestige and power of military personnel. Consequently, the objectives of military dictators are not necessarily the same as that of tinpot regimes generally.

Suppose, then, that the military take power from a civilian regime. Initially, the equilibrium shifts from E_C to E_M in fig. 4. The military then proceed to do what military governments do best, namely, raise the salaries of military personnel. This has a peculiar consequence, which is that it raises the price of repression, P_R , i.e., it destroys the comparative advantage of the military in governing. (In fig. 4 the resource constraint of the military shifts in the direction shown by the arrow.) Consequently, having achieved its primary aim (increasing the military budget), the rational thing for the military government to do is to hand power over to a civilian regime, having received suitable guarantees of immunity from prosecution and from budget cuts by the new regime. Of course, a military government which seeks to remain in office not merely to raise the military budget will sense the danger to its capacity to govern of excessive salary increases to its personnel and may attempt to limit salary increases or to restrict them to certain subgroups in the military. This, however, tends to breed internal dissension, to destroy the internal cohesiveness of the military hierarchy, and possibly to breed a counter-coup. Counter-coups are quite common in military governments—according to Kennedy's (1974) study they were twice as likely in a military as in a civilian regime, and the vast majority involve the overthrow of one military government then its replacement by another.

Consequently, it is not difficult to explain both the instability of military regimes nor why the vast majority of military regimes tend to end via voluntary withdrawal of the military

from power. There is nothing peculiar about the fact that the military once in power, tend to reward their supporters; presumably all political regimes do this. Political parties who are backed by unions presumably reward unions when in power; political parties backed by business groups presumably to reward them when in power, and so on. What is peculiar about military governments is that in the process of rewarding their supporters, they tend to weaken, rather than strengthen, their own capacity to govern. While this point is obviously not a complete explanation of these regimes, it does explain both the instability of military regimes and why they typically end through a voluntary transfer of power to civilian regimes.

IV. TOTALITARIAN REGIMES

The differences between the totalitarian and a tinpot regime are reflected in their respective maximands. In a totalitarian regime I assume that the dictator or the Leader (Hitler, Stalin), or Great Helmsmen (Mao) maximizes the amount of power over the population under his or her control. I believe this definition is consistent with the descriptions of such regimes in Arendt (1951), Hayek (1948), and Freidrich and Brzezinski (1965). The classic historical examples are Nazi Germany and Stalin's Russia in the 1930's. For example, at the height of Hitler's power, the population of Germany was held not to be subject to any laws, but exclusively to the "will" of the Fuhrer as divined from his speeches and other remarks; subjection to laws would amount to circumscribing the power of the Leader.¹⁵ How useful the various concepts of totalitarian rule are, and how much they are applicable to other societies, especially post Stalinist Russia and other contemporary communist societies, is a hotly debated question.¹⁶ We present some evidence on this matter below. In any case, extreme cases are often useful analytically, and this definition of totalitarian regimes is useful in that it places them at the opposite extreme from tinpots. Most real world dictatorships undoubtedly lie somewhere in between.

From an economic point of view, the central question is the nature of the constraint on the totalitarian leader's maximization of power. Budget considerations may pose a constraint,

particularly at the point where revenue-maximizing taxes have been imposed on every available tax base. However, the Leader can always nationalize or confiscate resources directly. Deleterious economic effects such as deadweight losses (which constrain the behaviour of ruling interest groups in Becker's (1983) formulation) may cause problems, but do not necessarily reduce the power of the Leader. Supposing then, for the sake of argument, that we ignore budgetary and price constraints. Is there any other constraint on the totalitarian Leader's maximization of power?

From the Leader's point of view, the key consideration is the loyalty of the population. The Leader's problem is depicted in fig. 5. So long as the supply of loyalty curve is upward sloping, as it is between π_{\min} and π' in fig. 5, the dictator can increase his power over the population by increasing the level of repression. Consequently if the L_S curve is upward sloping throughout its range, the only possible equilibrium is a corner solution involving the perfect repression of the population, a goal to which Arendt often suggested that the Nazi regime was heading, namely "the permanent domination of each single individual in each and every sphere of life",¹⁷ and sometimes implied that it had attained. However, considerable evidence has been amassed subsequently that this goal was not achieved by the Nazi regime (see for example Broszat). In addition, theoretical considerations suggest that there is a conflict between perfect repression and the maximization of power over the population.

To see this, recall that an increase in repression (an increase in the price of disloyalty) induces opposing effects on the supply of loyalty to the regime. The substitution effect (the change in the amount of loyalty supplied as a result of a compensated increase in the relative price of disloyalty) always favors the regime. On the other hand, an increase in the probability of being discovered for having links to actual or potential opposition movements, or an increase in the sanction imposed for this offense reduces expected wealth, and this reduction in wealth has an income effect which leads an individual to reduce all investments in political loyalty, including those with the regime. At low levels of repression, it is reasonable to assume that the first effect dominates, as argued earlier. However, at high levels of repression

the income effect gets larger. In addition, as the level of repression increases, the number and the size of groups which are opposed to the regime become smaller, and at very high levels of repression, opposition to the regime tends to get wiped out. Consequently the substitution effect becomes vanishingly small when the level of repression becomes very large. Ultimately, then, the supply of loyalty to the regime must bend backwards as the level of repression increases sufficiently as depicted in fig. 5.

This point is reenforced if we note that the process of repression will usually be subject to error. The real opponents of the regime do not typically identify themselves as such, and actual or potential opposition to the regime will have to be inferred from certain behaviour and characteristics. At low levels of repression, the identification of opposition leaders is a relatively simple task. At higher levels of repression it becomes more and more complex. Consequently even perfectly loyal individuals will have to be more and more careful in establishing or maintaining network links: it may turn out that their investments will, *ex post*, turn out to have been made with the "wrong" people. This explains the great effort made, in the Stalinist purges of the communist party of the late 1930s, to wring fabricated "confessions" from the accused in the infamous Moscow trials. The more that doubts persisted within the party as to the real guilt of the accused, the more party members could reasonably be expected to withhold making any investments, even from perfectly loyal motives, for fear that they themselves would become the victims of the terror. Indeed, there is some evidence that the purges did go too far by the late 1930s.¹⁸ This explains both the subsequent "liquidation of the liquidators" and the ultimate relaxation of the terror at the end of 1938.

If the supply of loyalty becomes backward-bending, "optimality" for the totalitarian dictator is at a point like E_0 in fig. 5, where the backward-bending supply curve is tangent to the highest attainable isopower line.

Formally, the Leader chooses R and L to maximize power subject to the constraint posed by the supply of loyalty, i.e. his problem is

$$(10) \quad \max \Pi(L,R) + \lambda[L^S(R,PE)]$$

The solution is simply

$$(11) \quad \frac{\Pi_R}{\Pi_L} = \frac{\partial_L}{\partial_R}.$$

which shows that, if the supply of loyalty is the only constraint, the slope of the supply curve must be the same as that of the iso-powerline at the optimum point (E_0 in figure 5). Note that the dictator might still be able to increase his or her power by better than expected performance (PE), as will be discussed subsequently. But at E_0 the limits of *repression* as a means of increasing power over the population have been reached.

One implication of this model is that in a totalitarian regime, repression is carried to the point where at the margin, an increase in repression reduces the supply of loyalty. The opposite prediction holds for a tinpot. Consequently, one test of whether a dictatorship is totalitarian or tinpot concerns the marginal behaviour of the supply of loyalty in response to a change in the level of repression at the equilibrium point. Interestingly, some evidence on this question has recently been collected for the current Soviet regime. Using data from the Soviet Interview Project, Bahry and Silver (1987) computed a "KGB differential"—the relationship between the estimated competence of the KGB and the degree of support for various goals of the regime. That is, the subjects (2,793 Soviet emigres) were asked to rank the leaders of various Soviet institutions on different scales, including a scale for competence. They were also asked how much they supported various regime goals. Bahry and Silver found that while support for regime goals was positively related to the estimated competence and honesty of various institutional leaders, excluding the KGB, it was (significantly) negatively related to the estimated competence of the KGB. Thus, whatever the limitations of the procedure and the data,¹⁹ the results do indicate that at least so far as these respondents are concerned, the Soviet Union is still a totalitarian regime.

A totalitarian regime also differs from a tinpot in its response to exogenous shocks. Suppose, for example, that the performance of the regime were to improve, and that the Leader is able to claim credit for this. The improvement can be, as with tinpots, in any kind of

performance, including success in war or in solving some major political problem, but we focus here on economic performance, such as an improvement in the rate of economic growth, a reduction in inflation or unemployment, and so on. An improvement in any of these dimensions of performance shifts the supply of loyalty curve to the right as depicted in fig. 5. The new equilibrium is at E_1 . The power of the regime over the population increases unambiguously (since the supply of loyalty shifts to the right, the new L_s curve, L'_s must be tangent to a higher isopower line than is the old supply curve L_s). And, for the most obvious cases (e.g., a parallel shift of the supply curve, and homogeneous isopower lines) the level of repression tends to increase as well. The reason is simple: the increase in the supply of loyalty as a consequence of the increase in economic or other performance provides the Leader with an opportunity to amass more power. Since the Leader maximizes power (unlike a tinpot, who would simply squander the extra resources on personal consumption), he takes this opportunity.

In the Soviet Union and the satellite communist countries of Eastern Europe, economic performance for many years was surprisingly good. For the last 25 years or so, however, economic performance as measured by rates of growth, and by rates of growth of productivity, has steadily deteriorated.²⁰ The present model predicts that, in response to this deterioration, the levels of power, loyalty and repression will all diminish. I know of no direct evidence on the behaviour of these variables, but some indirect evidence which supports the proposition that repression is positively related to economic performance has been presented recently in a paper by Stephen White (1986). White argues that as economic performance in Eastern Europe has deteriorated, the parties have looked for other ways to secure "legitimacy", and he notes the following: (1) Increasing use of the electoral mechanism. Thus, multiple candidacies in communist "elections" were an isolated phenomena in the 1960s; they are characteristic of over half of the countries of Eastern Europe in the 1980s. (2) Political incorporation: the proportion of the population who are members of the party has increased steadily from 3 to 4 percent in the 1950s to 6 to 10 percent in the 1970s and 1980s. (3)

Associational incorporation, and (4) The instigation in successive countries of the practice of allowing letters to be written to the party, the state and the press.

From the point of view of the present model, all of these changes can be interpreted as reductions in the level of repression of the population. In the Soviet Union itself, the current wave of Glasnost may obviously be interpreted along the same lines, i.e., a fall in repression, in response to the deterioration in economic performance. This points out an alternative interpretation of current events in the Soviet Union which differs from the popular explanation that the Soviet Union is going through some fundamental change. In our interpretation, the positive correlation between the level of economic performance and the level of repression is precisely what is to be expected from a totalitarian regime, and not necessarily a sign that the regime is changing.

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Finally, and perhaps most importantly, the model implies that the *average* level of repression and the *average* level of loyalty are positively correlated in totalitarian regimes. In fig. 6, both repression and loyalty increase for movements along a given supply curve (except at the margin); This suggests that the level of loyalty to the regime in totalitarian regimes is high compared to tinpot regimes. Informal evidence that this was true for the Nazi regime is summarized and interpreted in Breton and Wintrobe (1986), and for the Soviet regime in Wintrobe (1988).

The interpretation of totalitarian regimes suggested by this model, then, is quite different from those that are common in the literature, including both proponents of the concept of totalitarianism, and their critics. It is also very different from the "command economy" construct widely used in the economic literature on socialist countries. From the present point of view, the repression characteristic of totalitarian societies also helps to build a core of loyal supporters whose relationship with the regime is one of exchange rather than coercion. The regime accommodates these offers of support through an institutional

mechanism which facilitates the accumulation of loyalty and enforces exchanges. This institution is the totalitarian party.

The Communist Party of the Soviet Union, for example, is organized on three principles. First, the Party controls the productive system. This is true in a formal sense (Article I of the Soviet constitution specifies that the Party is the "leading and directing force of Soviet society") and in the industrial sector at least in an informal sense: the Party permeates the productive system. Every factory of even modest size must contain a Party cell.

Consequently, the Party has much stronger control over the bureaucracy than the governing party in a democracy has over the civil service. The Party controls promotions, and access to a vast range of prerequisites, including housing, the closed system of hospitals, special shops and so on. (Matthews (1978) describes these privileges in detail). The Party uses these resources as prizes to encourage subordinates to compete with each other (possibly as a Lazear–Rosen (1981)–style "tournament") to loyally advance the goals of the Party. When the system functions efficiently, subordinates compete to loyally advance the goals of their superiors by showing initiative, dedication, enterprise and flexibility (rather than simply obeying orders, as discussed at much greater length in Wintrobe (1988)). In return, the Party ensures that the "implicit contract" that loyal performance will be rewarded is kept, i.e., that superiors within the government, ministry or Party hierarchies do not renege on implicit promises to subordinates. In this way, the Communist Party substitutes for enforceable property rights to solve the problem of mutual cheating which is characteristic of exchange when law–based property rights are absent.

One reason that the Party can fulfill this role is that the Party is a long–lived institution. So exchanges over time, e.g., across generations are possible. This explains one commonly noted feature of totalitarian regimes: their orientation towards economic growth. Otherwise, it is not obvious why such policies would be in the interest of the regime; the leaders could simply exercise their monopoly power by lavish living. Why should they sacrifice present consumption for the future when they will no longer be in office and their

sons and daughters are unlikely to succeed them? If membership at the top, for example, in the Politbureau, were transferable through sale the leaders of the Politbureau could collect its capitalized value and would have an incentive to preserve it.²² It is obvious why this route has not been taken. An alternative however, is provided if the communist party facilitates exchanges between the young and the old. In that case, differences in time preference will be eliminated through trade — the old (the leadership) pursuing growth orientated policies, and the young offering loyal performance in exchange. This explains the peculiar "futuristic" look of all totalitarian parties — the Thousand Year Reich, the early associations of Fascism with the artistic movement known as Futurism, and the enormous program of forced industrialization carried out by Stalin.

In addition to enforcing exchange, the totalitarian Party possesses a number of features which facilitate investments in loyalty to the Party. First, unlike a democracy, there is no "free rider" problem with political participation in the Soviet Union: political participation (one way of investing in loyalty) is demanded, monitored and rewarded (for details on these and other practises, see Hough and Fainsod (1979) or Schapiro (1971) for a historical treatment). Secondly, membership in the Party is an exclusive privilege. Exclusive membership makes expulsion possible and the threat of expulsion for disloyalty — whether on an individual or a mass basis — the party purge — is obviously a powerful incentive device. Third, the party is centrally organized. All "factions" and groups within the Party are officially prohibited in the Party's statutes; communication and decision-making are organized along strictly hierarchical lines (the principle of "democratic centralism"). To the extent that these three incentives are effective, loyalty is diverted towards the Party and its hierarchy, and not to other (proscribed) political groupings within it, or dissident groups outside of it. (From the Party's point of view, dissidence threatens exchanges in the same way that crime threatens property rights and efficiency in a capitalist economy.) Fourthly, the Party encourages and directs loyalty by maintaining and propandizing an exclusive ideology, which promotes its goals and which helps to establish and to codify its reputation. The ideology of Marxism-Leninism is mainly a

critique of capitalist societies and does not fundamentally guide (or hinder) the actual functioning of the Soviet system. Its main function is to promote loyalty to the Party. The ideology identifies heroes and villains, glorifies successes and minimizes the failures of the Party. It may succeed in this respect, irrespective of whether or not it is believed, if ideological propaganda builds the Party's reputation in the same way that firm's advertising promotes its reputation (and brand loyalty) in Klein and Leffler's (1981) analysis. That is, it is not the content of a ideology but is accumulated stock (the analogue of the magnitude of a firm's investments in quality-specific capital in Klein-Leffler's analysis) which contributes to its reputation and promotes loyalty. For example, why else would Pravda devote three quarters of its space for nine months to the publication of greetings to Stalin on the occasion of his seventieth birthday?²³ Presumably it is not the content ("Happy Birthday, Stalin!") but the repetition of the message that is the message. In any case, whatever function it serves, that repetitive quality which Nelson (1970) and Klein and Leffler saw as the key to the informative content of advertising in the West is even more characteristic of totalitarian propaganda.

Fifth, the Party controls the distribution of rents. One simple interpretation of the legendary "shortages" characteristic of Soviet type of systems, and which are otherwise rather difficult to explain (the difficulties have been discussed extensively by Kornai (1980)) is simply that the shortages create rents, and the rents are controlled by the Party. Consequently, they are an excellent device for building Party loyalty. In this interpretation, the shortages are a permanent feature of Soviet-type systems, and no economic reform can be expected to remove them. While inefficient economically, they reduce the transactions costs of political exchange.

This brief description (for more detail, see Wintrobe (1988)) suggests that in Soviet-type and, I suspect in other totalitarian societies, the "organizational technology" for operating an economic system on what might be called loyalty-based property rights is far more advanced than it is in other political systems.

V. POLICY IMPLICATIONS

Perhaps surprisingly, in view of its simplicity, the model developed here does yield rather strong implications with respect to the policies which should be followed by democratic countries vis à vis both tinpot and totalitarian dictatorships. I assume throughout that the only aim of Western governments is to promote freedom, i.e., that the countries of the West have no strategic or economic interests in these countries other than the promotion of freedom for their people. This is obviously an idealistic point of view, but it does represent the oft-stated aims of much of Western policy.

A. Policy Toward Tinpots

The major policy issue with respect to tinpot dictatorships is whether to extend economic aid to them or not, and if aid is given, whether this aid should be tied to improvements in the human rights record of such regimes. Fig. 6 displays the policy dilemma with respect to tinpots regimes. Consider first the policy of giving aid with no strings attached. Aid in this form does not change the relative costs of repression and loyalty to the dictator. It does imply that more resources (BB' rather than BB in fig. 6) could be spent on repression and loyalty while maintaining the dictator's personal consumption at its initial level. However, if, as depicted, the original budget constraint provides enough resources for the dictator to remain in office (it is at least tangent to π_{\min}), the dictator will simply spend the aid on personal consumption. If the tinpot could not remain in office without foreign assistance (BB lies everywhere below π_{\min}), the aid does have an effect which is to maintain the dictator in office as long as the aid is continued. The equilibrium levels of R and L at R^* and L^* respectively are, however, unchanged.

An alternative policy which is often advocated is to "tie" the aid to a constraint on violations of human rights by the tinpot. Assuming that this constraint can be made effective, i.e. that violations can be properly monitored, and that the constraint is binding, this implies that the tinpot will be constrained to impose a level of repression lower than R^* , e.g. one no

greater than R_0 in fig. 6. As fig. 6 clearly shows, the effect of the binding constraint is to destabilize the regime. In the short run, loyalty is fixed at L^* and with R_0 of repression and L^* of loyalty, the dictator has insufficient power to stay in office, no matter how high the level of external assistance.

Neither of these two policies, then, is effective in reducing repression. The first policy (aid with no strings attached) is ineffective because although it may maintain the tinpot in office, it creates no incentives for the tinpot to substitute loyalty for repression as a means of staying in office. The second policy (aid with a binding human rights constraint) is ineffective because it gives the tinpot no chance to do so but rather puts the tinpot in immediate danger of being deposed. (If the aim of the policy is to cause the tinpot's downfall, why extend aid at all?) Moreover, both policies may have other effects which are counterproductive. For example, if the aid is continued for a long time, the tinpot is freed from dependence on the loyalty of his or her supporters and may substitute for this a dependence on foreign aid, especially if he or she finds it easier to get the aid than to maintain loyalty. Alternatively, if the tinpot is deposed, the regime which replaces him or her may be even less palatable (Kirkpatrick's point).

There is, however, a third policy which has some chance of success. This is a policy of aid, combined with a long term human rights constraint, i.e., one that becomes successively more stringent over time. The aim is to force the tinpot to the new long-term equilibrium at E_1 . The long-run constraint ensures that the tinpot will in the future only be able to stay in office at a level of repression no greater than R_0 . The aid provides the tinpot with sufficient resources to "purchase" the extra loyalty required at no sacrifice to his personal consumption, and the long-term nature of the constraint implies that sufficient time is allowed for the dictator's investments to yield the required support. Consequently, this policy alone among those considered provides the correct incentives to the tinpot to reduce repression. Of course, there are a number of other policies which could be considered. These include the use of economic sanctions, giving aid to international agencies rather than to the tinpot, "earmarking"

the aid to specific investment projects, and so on. Their effects can easily be analyzed within the present framework.

B. Policy Towards Totalitarians

The question of economic aid is not usually a policy issue with respect to totalitarian governments. In any case, these regimes have had (possibly for the reasons suggested in our analysis of totalitarian dictatorships above) no difficulty in staying in office, and no totalitarian regime has ever collapsed due to internal opposition. The central issues for the democracies in dealing with these regimes have been: (1) Should democracies engage in economic relations (trade and investment) with them in the knowledge that these relationships are likely to improve their economic performance or should they pursue policies such as an arms race, or economic sanctions which have, among other possible effects, that of worsening the totalitarian regimes' economic performance? (2) Should the democracies push for human rights? Again, the point of view in addressing these questions taken here is a scientific one: given the assumptions of our model, which policies will reduce the optimal level of repression chosen by the totalitarian Leader?

Fig. 7 displays the policy dilemma of the democracies in dealing with totalitarian governments. E_0 is the initial equilibrium. If, as a result of trade or other favorable economic relationships with the democracies, the economic performance of the regime improves, and if the regime can take at least part of the credit for this improvement, the supply of loyalty to the regime L_s shifts to the right to L'_s . The most plausible result (see the discussion in Section IV) is a new equilibrium like E_1 in fig. 7 with the dictator obtaining more power and more loyalty and being more repressive. In this case the direct result of a trade or arms agreement is to worsen the political rights of the people, (even if it raises their standard of living) so these policies, by themselves, tend to be ineffective in increasing freedom. On the other hand, a human rights constraint (e.g., one binding at R_0) if imposed alone would simply reduce the power of the regime and therefore be unacceptable to the Leader. This can be seen in fig. 7:

the new optimum for the dictator with a binding human rights constraint of R_0 is at E_2 , a lower level of power than E_0 . Again, however, although neither policy is effectively used alone, they can be effective in combination. The principle is simple: a binding human rights constraint can be suggested to the regime, provided it is accompanied by the offer of a trade or arms or other agreements which will improve performance sufficiently to allow the dictator to increase loyalty to L_0 . At these levels of repression and loyalty (E_3 in fig. 7) the dictator has as much power as before. Repression, however, is successfully reduced (from R_3 to R_0). Consequently, a slightly better trade or arms agreement will *increase* the dictator's power, and therefore be acceptable to him or her, while still reducing the level of repression under the regime.

Of course, the cause of freedom will be even better served if the totalitarian regime can be toppled. To the extent that this is not possible, however, and the existence of these regimes has to be accepted by the democracies, the policy suggested here does tend to reduce the oppressiveness of these regimes.

V. CONCLUSION

In this paper, I have attempted to use basic tools of economic theory to construct a simple model of the behaviour of dictatorship. Two extreme cases were considered: a "tinpot" dictatorship, defined as one where the dictator wishes only to minimize the costs of remaining in power, so that he or she can continue to collect the fruits therefrom, and a "totalitarian" dictatorship, one in which the totalitarian Leader maximizes power over the population. Some novel predictions were derived: for example, an improvement in economic or other type of performance implies that a tinpot dictator will reduce the extent of his or her repression of the population; a totalitarian, on the other hand, tends to respond by increasing it. Some tentative evidence which supports this prediction for the totalitarian is presented. The model also explains why military dictatorships (a subspecies of tinpots) tend to be short-lived, and why they often voluntarily hand over power to a civilian regime. Finally, the model also explains a

number of features of totalitarian regimes, e.g. the persistence of shortages in Soviet type regimes, the preferences of their leadership for economic growth, and why they have, on the whole, been fairly successful in achieving that goal, and the structure of totalitarian party organization.

Perhaps surprisingly, the simple model presented here does yield rather strong policy implications with respect to how democratic regimes should deal with dictatorships, on the assumption that the democracies wish to maximize freedom in the world. In particular, an emphasis on the observance of human rights under either type of regime, provided it is imposed in the right way and accompanied by sufficient aid, trade or investment is shown to be not only a sensible but a necessary condition if economic relations with either type of regime are to increase, and not decrease, human freedom.

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FOOTNOTES

1. See especially the essay "Dictatorship and Double Standards, in Kirkpatrick (1982). Some attribute the origin of the basic distinction not to Kirkpatrick, but to Friedrich and Brzezinski (1965).
2. See Nordlinger (1977), p. 139; In M. Paldam's (1987) sample, the average life of a military dictatorship is less than 3 years.
3. See Larsen (1980), and Kater (n.d.), p. 105, for the results of various polls.
4. See Ofer (1987).
5. Kirkpatrick (1982), p. 101.
6. Tullock, p. 94.
7. Kirkpatrick (1982), p. 123.
8. See the studies in Larsen (1980).
9. See, especially Arendt, pp. 320 ff. and the discussion in Burrows (1968).
10. See the literature on the political business cycle, which relates political popularity to various macroeconomic indexes such as the growth in per capita real disposable income. See Hibbs (1987) for a recent survey of this literature.
11. See Arjornad (1986)
12. Stepan (1971), p. 263.
13. Perlmutter and Bennett (1980), p. 20.
14. Nordlinger (1977), p. 58
15. See Arendt (1951)
16. See for example Burrows (1968), and references therein.
17. Arendt, p. 325.
18. See Schapiro, (1971), pp. 435 ff.
19. The main problem is that the emigres are often atypical—for example, 85% of them are Jewish, and 30% read Samizdat (banned underground literature).

10. See Ofer (1987).
21. A complementary explanation of recent events is suggested in Wintrobe (1988).
22. This point is also made in Schap (1986).
23. Bialer, p.

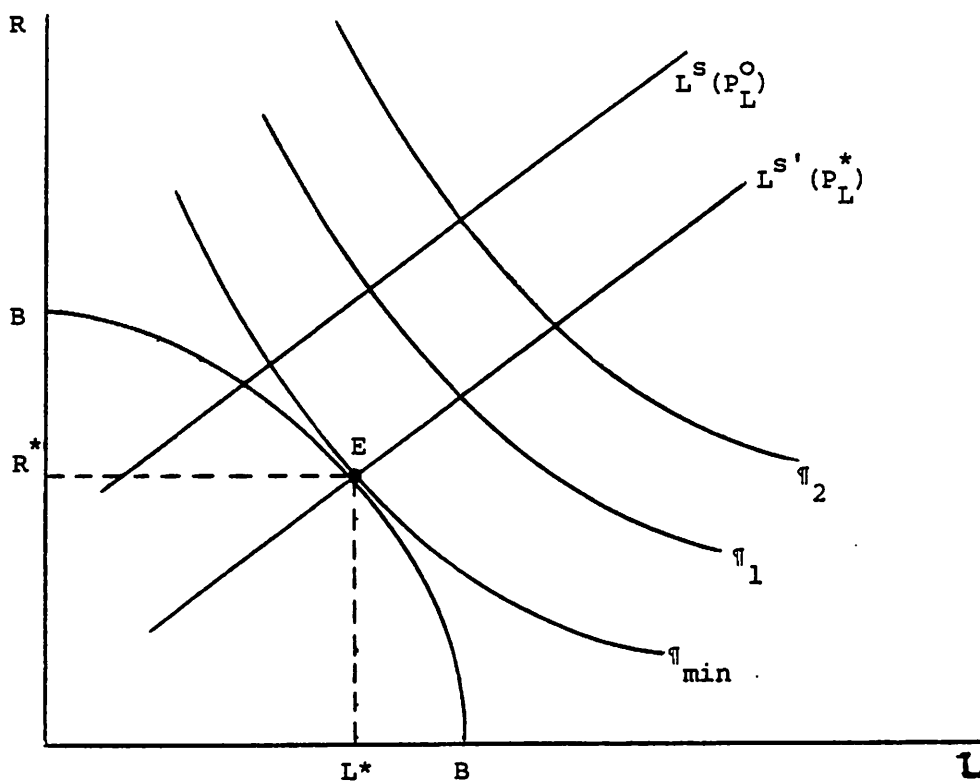


Fig. 1

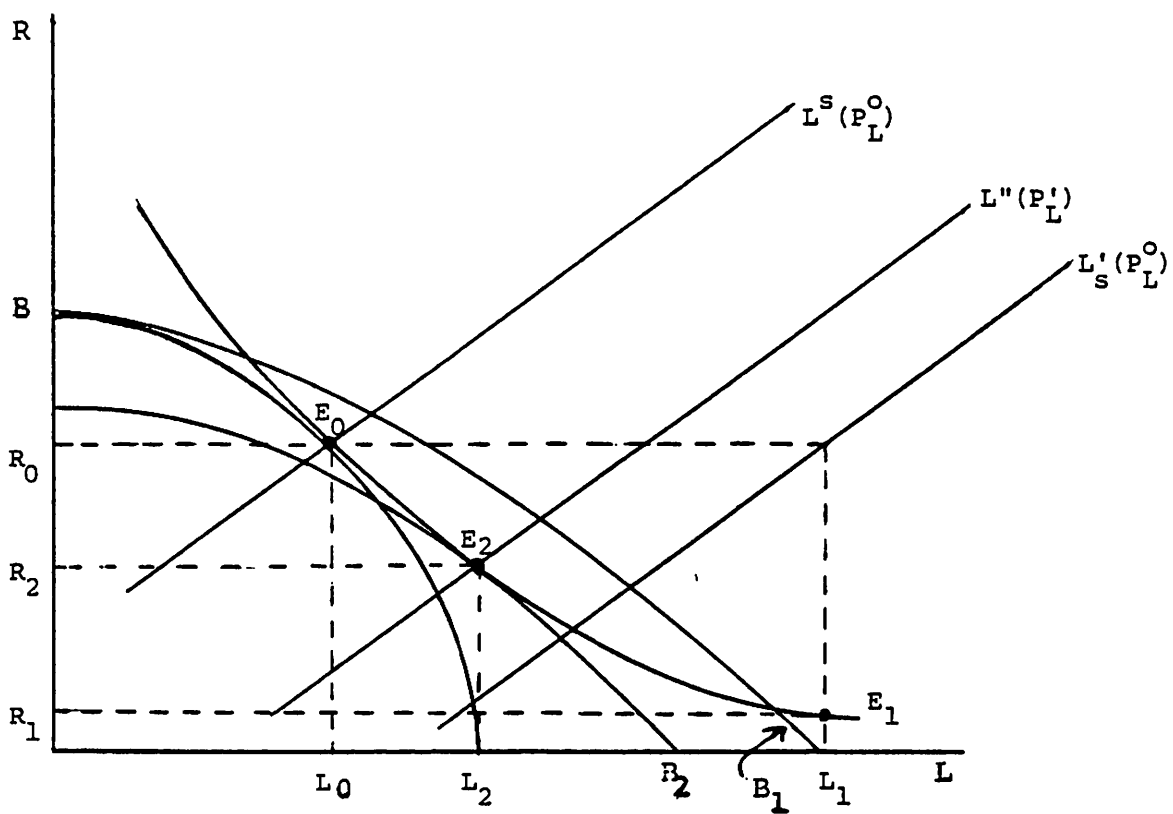


Fig. 2

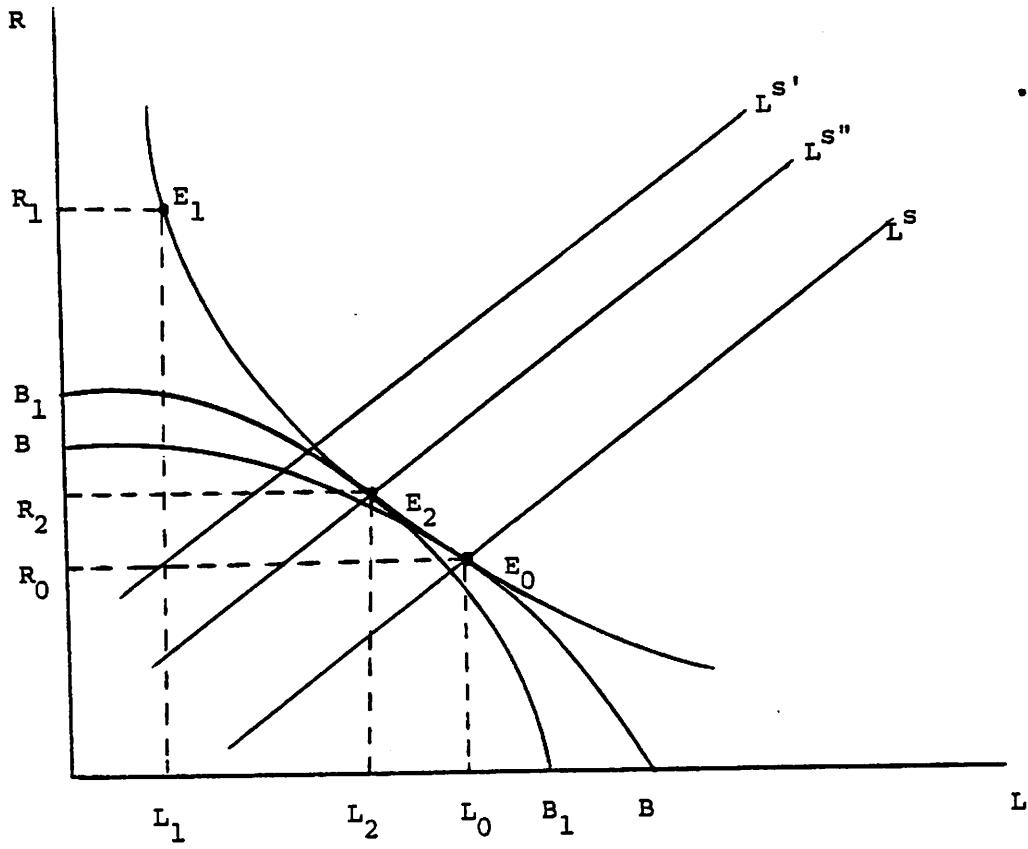


Fig. 3

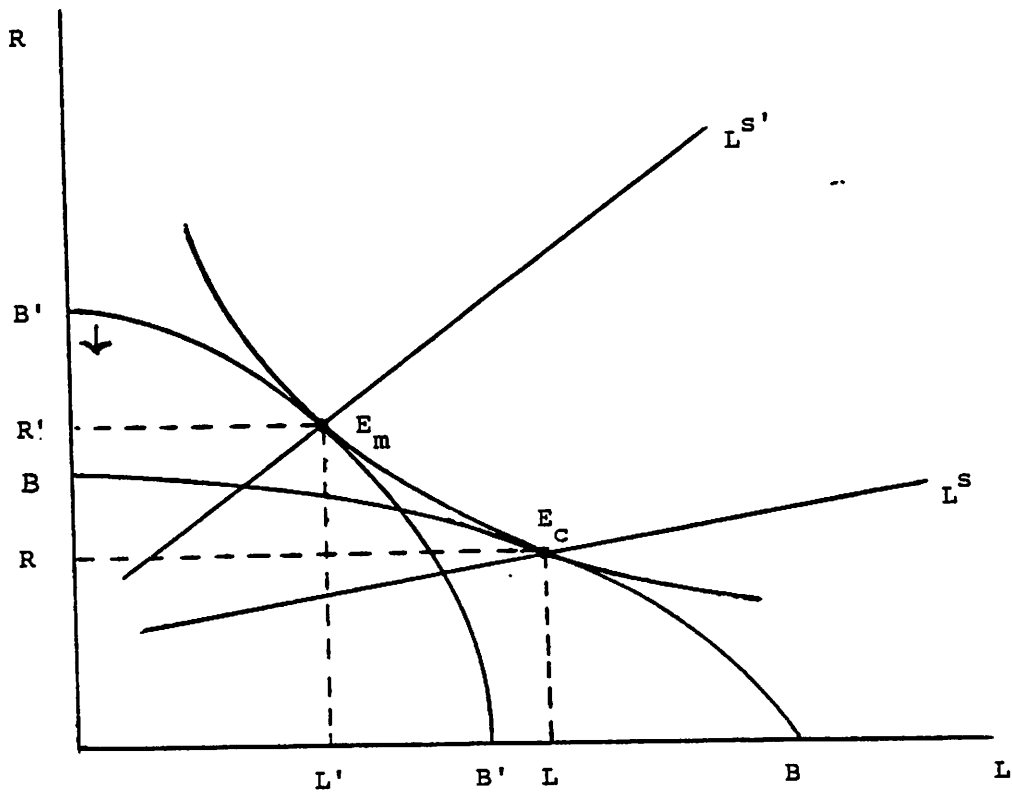


Fig. 4

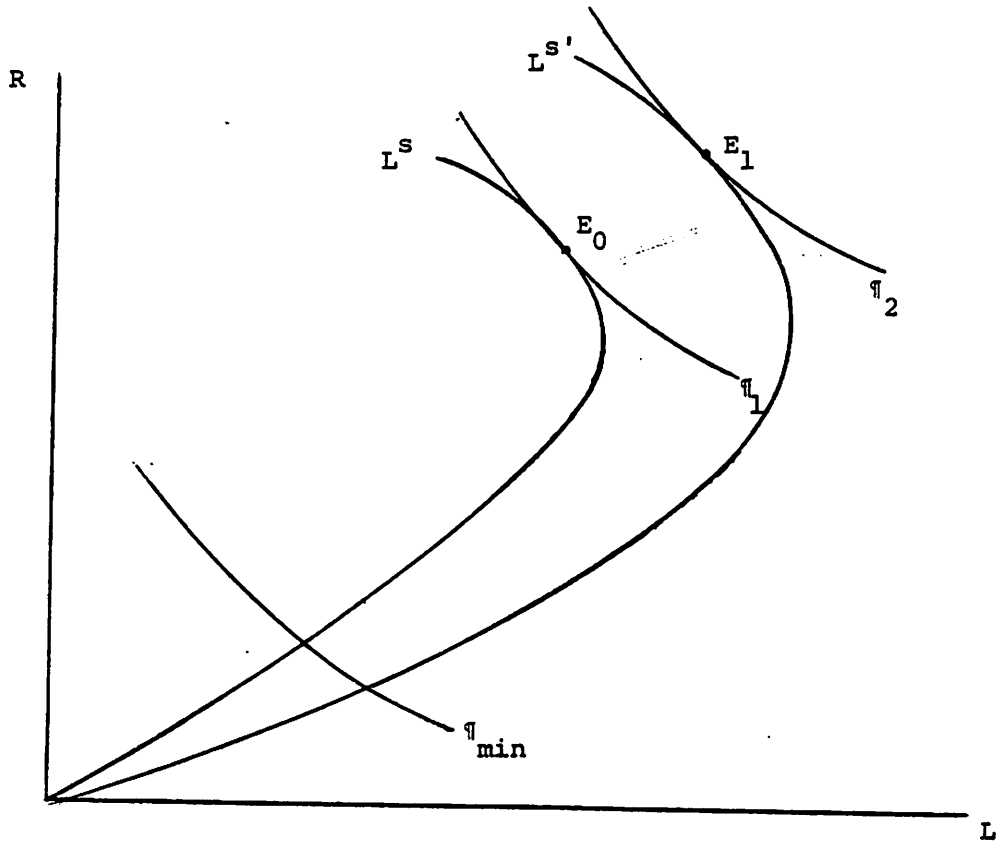


Fig. 5

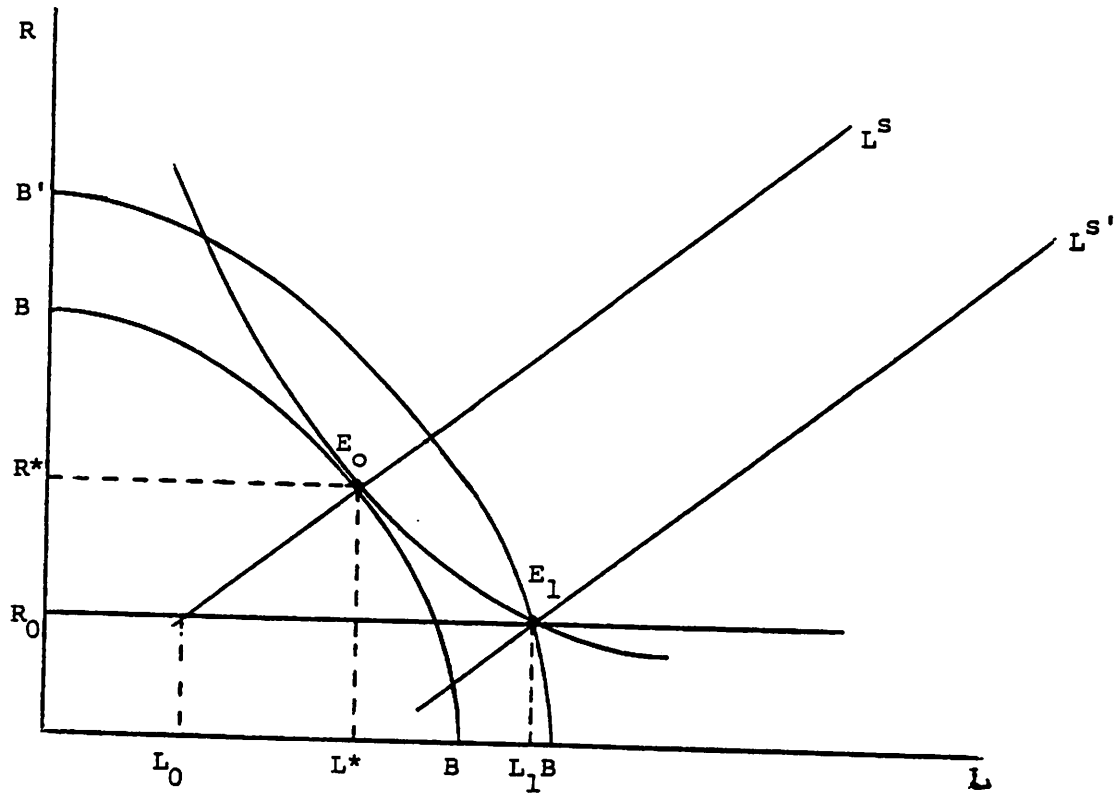


Fig. 6

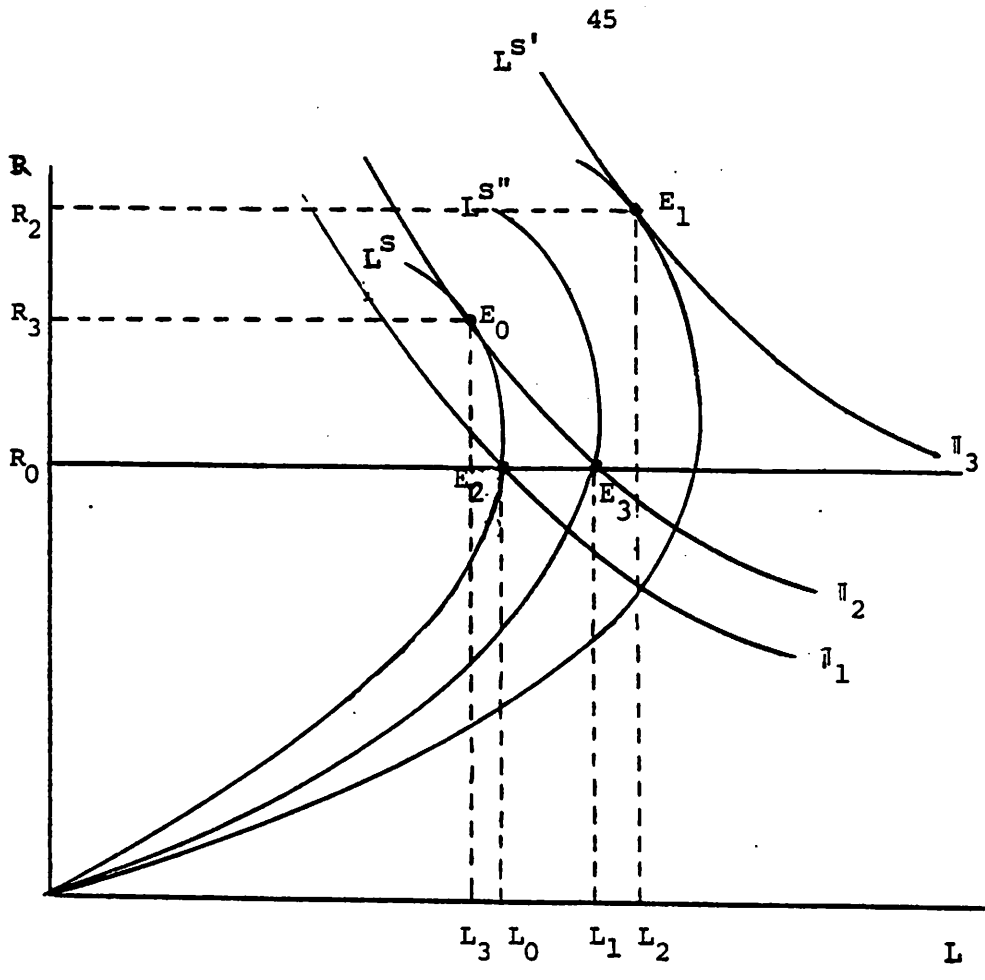


Fig. 7