# AGRICULTURAL COMPETITIVENESS: MARKET FORCES AND POLICY CHOICE

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*The Political Economy and
Institutional Determinants of Public Policy in Agriculture*

## THE NEW THEORY OF ENDOGENOUS GOVERNMENT POLICY

An extensive literature has evolved in the past decade applying the economic
theory of politics to agricultural policy. The 'new political economy', or en-
dogenous theory of economic policy, recognizes that policy makers are rational
and maximizing agents who respond to incentives and constraints just like
others within the economy. Citizens delegate the formulation of economic
policy to politicians who, in turn, select a policy that maximizes their objec-
tives, subject to their political constraints. The latter are greatly affected by
incentive constraints embedded in existing institutions.[1] An important incen-
tive constraint, reflecting the conflict of interest between citizens and poli-
ticians, is where the policy maker's objective does not coincide with collective
(citizens') interests.

Traditional farm policy analysis is based on the assumption that there is an
*autonomous government maximizing social income*, seeking to correct for
market failures. Any deviation from economic welfare prescriptions reflects
the 'politics of economics'. 'Revealed preference' models represent a depar-
ture from this approach whereby policy is depicted as a problem of constrained
choice (Rausser and Freebairn, 1974). Reaction functions relating policy to
parameters of the economic structure are estimated with coefficients reflecting
both government objectives and the influence of the structural parameters of
the economy (Makin, 1976). Observed policy levels 'reveal' the weights on
the policy preference (or 'governing criterion') function, given the structure of
the economy. A major limitation of these models is that the underlying politi-
cal process that determines the preference weights is not specified.

Several models have been advanced that specify the explicit behaviour of
participants in the political market. The most popular approach is the 'clearing
house' view of government, where politicians respond passively to pressure
group activities (Bhagwati, 1989; Becker, 1983). Olson (1965, 1990) focuses
on factors affecting the ability of a group to organize for collective action to
explain why industrial countries subsidize farmers while developing countries
tax them. Overcoming organization costs and 'free-riding' is critical for a
group to be successful and depends on group size and costs of communication.
Many economists have extended Olson's analysis. Becker, for example, em-

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phasizes pressure group activities and assumes that politicians are passive and voters are rationally ignorant. The literature in agricultural economics is laden with these Olson/Becker models (for example, Gardner, 1987; Lindert, 1992; Miller, 1991).[2]

An alternative approach is the politician–voter model, which emphasizes the role of entrepreneurial politicians (Downs, 1957). The structure and underlying assumptions contrast with the 'self-willed' or 'clearing house' models of government in explaining price policy bias in agriculture (de Gorter and Tsur, 1991; Swinnen and de Gorter, 1993).[3] The interaction of active politicians (who *supply* policy interventions) with support-supplying citizens (who *demand* policy interventions) in a political market is purported to explain policy outcomes. Political support reflects the intensity of citizen's preferences and depends on how the policies affect their economic welfare. Competition between politicians ensures an equilibrium (Mueller, 1989).[4]

To evaluate alternative theories, we adopt the following taxonomy relating to public policies that reflect the polity's economic role: distributive policies (such as price supports), allocative policies (such as public research expenditures) and protective policies (such as securing property rights). Each category affects the level and distribution of income in society, with distributive policies reducing aggregate social income while allocative policies increase it. Protective policies provide the underlying rules of the game and enforce those rules (North, 1990). This paper first evaluates the insights gained by the new political economy literature on distributive and allocative policies. Then we discuss how political and civil institutions affect decisions and incentive structures of agents in both the public and private sector and the impact on distributive and allocative policies.

## EXPLAINING PATTERNS OF DISTRIBUTIVE POLICIES IN AGRICULTURE

One of several stylized facts about the patterns of agricultural protectionism is that protection to farmers increases with per capita income, with poor countries often taxing farmers (Anderson and Hayami, 1986; Lindert, 1992). This correlation has been called the 'income elasticity of demand for farm assistance' by society.

Another stylized fact is that export sectors receive less protection than import sectors. Krueger *et al.* (1988) find direct protection to agriculture to be negative for exportables (typically non-food or cash crops) but positive (with exceptions) for importables (often food staples). Total protection averaged –7 per cent for importables and –35 to –40 per cent for exportables. Agricultural sectors worldwide with more inelastic demand and fewer farm numbers are also known to obtain more protection. Meanwhile, protection to manufacturing has declined and governments inevitably employ inefficient policy instruments.

Both the pressure group and politician–voter models have some success in explaining these patterns. The pressure group model explains the correlation between the level of economic development and protection as due to a de-

crease in organization costs for collective action. Two factors play a key role: first, as a country grows richer there are fewer farmers, which reduces 'free-rider' problems; second, an improvement in infrastructure and communication facilities makes it easier to organize rural interests (Olson, 1990). Furthermore, higher protection to inelastic demand and import sectors is explained by the lower deadweight costs of the transfer (Becker, 1983). The politician–voter model obtains several of the Olson/Becker results without assuming lobbying or costs of organizing pressure groups. For example, an increase in deadweight costs reduces the equilibrium farm subsidy and smaller groups receive a larger per capita subsidy or pay a larger per capita tax.[5] The first result arrives through the same mechanism as in Becker: deadweight costs reduce per capita benefits and increase per capita costs. The downward impact of farm numbers on protection is due to organization costs in the Olson model, to deadweight costs in Becker and to distributional effects in the Downsian model. The increase in political support due to the (economic) distributional effect more than offsets the reduction in political support due to the (relative) decrease in the number of voters in agriculture (de Gorter and Tsur, 1991; Swinnen and de Gorter, 1993).

Some collective action theory predictions are inconsistent with empirical observations. While imports typically receive more support than exports, the exportable sectors in developing countries usually consist of large, cost-efficient farms (including plantations), far fewer in number relative to the many small-sized farms (including peasant holdings) that typically comprise the importable sector. Furthermore, Olson (1965) devotes a section in his pathbreaking book to reasons why his pressure group model *cannot* explain the passage of farm legislation that heaped huge subsidies on such a large part of the population (farmers represented 25 per cent of the US population in the 1930s).[6] Similarly, important 'waves' of agricultural protection in Belgium were uncorrelated with either farm numbers or improvements in rural infrastructure or communication facilities. Moreover, entrepreneurial politicians played a key role in overcoming organization costs, using existing cultural, social and religious institutions. Farm organizations reduced transaction costs for politicians in obtaining votes and farmers were well organized long before massive subsidization started (Swinnen, 1992).

The politician–voter model explains additional observed patterns of government interventions without pressure group activities. The politically optimal subsidy changes with changes in factors that increase the deadweight costs of the policy (for example, demand and supply elasticities, and the export share) and, therefore, reduce the benefits and increase the costs of the transfer. In addition, declining shares of food in consumer expenditures, and increasing capital intensity in production, reduce per capita costs for consumers and increase per capita benefits for producers from protective tariffs, yielding higher politically optimal tariffs (Swinnen, 1994; Anderson, 1994).

A pivotal result of the politician–voter model is that governments reduce pre-policy income gaps between sectors. Governments subsidize farmers in an attempt to compensate for what T.W. Schultz calls the 'farm problem' in industrial countries and tax farmers in developing countries to overcome their 'food problem' (de Gorter and Tsur, 1991). Farmers in industrial countries are

being compensated for the costs of intersectoral resource adjustments corresponding to the rapid shift in comparative advantage from agriculture to industry as the economy grows. The problem is particularly acute because of a low income elasticity of demand for food and large productivity gains in farming. Excess supply in the face of a price-inelastic demand schedule results in the 'farm problem' of persistent rural–urban income disparities. Overwhelming evidence exists that governments respond by subsidizing farmers.

Tracy (1989) describes how West European governments have implemented measures to protect farmers' incomes in response to 'agricultural crises' since 1880. Similarly, in the United States, Bullock (1992) shows how US transfers to agriculture are countercyclical: farmers receive more government support when they face harder times. The ratio of farm to non-farm incomes was 100 per cent higher in 1925 than in 1941 (Alston and Hatton, 1991), resulting in the watershed legislation of the Agricultural Adjustment Act in 1933. Countries which subsidize farmers have high productivity rates and wages in the manufacturing sector, while the opposite is the case in an economy that is less industrialized (Honma and Hayami, 1986). We argue that this is because the gap between manufacturing and agricultural productivity increases in the process of industrialization as the urban population gets larger and richer (witness the sharp shifts in agricultural policy by the newly industrialising countries in recent decades). The differential treatment between the export and import sectors may partially be explained by export sectors having a comparative advantage and hence higher endowment incomes relative to the import-competing food crop sectors. Hence the latter sectors are taxed less and are in some cases even subsidized. This occurs even though farmers in the export sector are typically fewer in number, larger in size and thus more able to organize as a pressure group. Finally, the polarization between the United Kingdom and Germany on matters relating to EC cereal support prices can also be partially explained by the relative rural–urban endowment incomes between the two countries (de Gorter and Tsur, 1991). In general, the relative income result explains empirical phenomena of redistribution to lower-income groups (see Baldwin, 1989, for a survey). Both Mueller (1989) and Baldwin argue that such transfers can only be explained, respectively, by 'altruistic' or 'social concerns' motives of government. However, protection to declining sectors is fully consistent with self-interested behaviour of politicians and voters (Swinnen and de Gorter, 1993).

What conclusions can be drawn? Pressure group activities are widespread and therefore cannot be ignored. Furthermore, studies of the factors affecting voters' decisions find that the influence of pressure groups is indirect but campaign funds do matter. Campaign contributions buy favours and influence in gaining access to politicians, rather than affecting policy outcomes directly (Jacobson, 1980). Models of interest group contributions to politicians focus on the evaluation of a politician's probability of winning re-election, and the ensuing net benefits accruing to the interest group as a result of legislative decisions taken by the politician in their favour (see, for example, de Gorter, 1983; Abler, 1991). The probability of re-election is dependent on both the campaign contributions and the voting decisions by congressmen on policy positions taken. Interest groups act strategically by contributing more resources

to politicians who are in close electoral races, to incumbents, to politicians who tend to favour their interests, or to politicians with seniority and powerful committee positions in Congress.

However, several facts about farm policy can be explained without relying on collective action. Furthermore, a number of empirical observations are inconsistent with pressure group model predictions. The importance of collective action and lobbying in explaining agricultural policy making may have been overemphasized to the neglect of analysis of the distributional effects of structural changes in the economy and the role of entrepreneurial politicians. A comprehensive model should include both elements of politician–voter and pressure group activities,[7] and should focus on changes in distributional impacts. Policy prescriptions to limit pressure group activities may not have the intended effect if politician–voter interaction is a fundamental force determining policy outcomes.

## EXPLAINING ALLOCATIVE POLICIES IN AGRICULTURE

Allocative policies, such as public research expenditures, have long been emphasized by agricultural economists, even in relation to attempts to ensure that commodity policy compensates farmers for technology's contribution to the 'farm problem' (the 'technological treadmill'). Rausser (1992b) and Bardhan (1990) argue that the political economy literature generally has emphasized the 'predatory' aspects of political economy to the neglect of 'productive' policies. In reality, governments have made important contributions to improving allocative efficiency and reducing transaction costs. Recently, formal models of the 'new political economy' genre have emphasized the joint determination of allocative and distributive policies in agriculture (Rausser and de Gorter, 1989; de Gorter *et al.*, 1992). Because both types of policy affect the level and distribution of income between sectors, the same political forces for distributive policies should be operational in explaining allocative policies as well.

The stylized facts about 'public goods' in agriculture emphasize their high productivity and apparently severe underinvestment in provision in both industrial and developing country agriculture (Ruttan, 1982). Farmers can gain relatively less (or even lose) from cost-reducing public good inputs under conditions of inelastic demand, elastic supply and a high marginal effect of the public good in reducing production costs (de Gorter and Zilberman, 1990). Swinnen *et al.* (1993), using a model of political support-maximizing governments choosing distributive and allocative policies jointly, find that subsidies to farmers increase if the latter gain relatively less from public research (and vice versa if farmers gain relatively more). The implication for policy analysis is that, if support-maximizing politicians are prevented from using commodity policy (with no concomitant change in the policy formation process), then public research expenditures will be reduced. Distributive policies allow for more growth-promoting policies, provided the interaction effects of allocative policies on the deadweight costs of distributive policies are not overwhelming (see de Gorter *et al.*, 1992, for conditions under which this may occur).

Why is it then that significant underinvestment in public goods still prevails in both industrial and developing countries? The effects of allocative policies on income distribution is critical. Developing countries have elastic demand and inelastic supply in agriculture while industrial countries have the reverse. Farmers in developing countries are therefore expected to gain relatively more from publicly funded research than their urban counterparts, while the opposite occurs in industrial countries. Given that commodity policy taxes farmers in developing countries and subsidizes farmers in industrial countries, underinvestment in public research is expected.

Similar normative results are emerging from studies integrating endogenous policy with the theory of endogenous growth. Endogenous growth theory has emphasized the role of knowledge spillovers (Helpman, 1992). In analysing the consequences of alternative policies on growth, this literature typically views the cross-country differences in economic policy as exogenous and set without concern of the polity to achieve desired results. Several recent papers have set out to rectify this limitation.[8] The primary insight from this research is that income inequality has a harmful impact on growth. A more unequal distribution of income generates a higher demand for distributive policies, resulting in the taxation of capital and a reduction in investment (Alesina and Rodrik, 1993; Persson and Tabellini, 1992). Alesina and Perotti (1992) argue that this mechanism works indirectly through sociopolitical instability: income inequality fuels social discontent and political instability. In turn, sociopolitical instability increases the uncertainty faced by entrepreneurs and so reduces investment. As a consequence, income inequality injures capital accumulation and growth. Empirically, this outcome holds especially under democratic regimes: while a significant negative correlation exists between inequality in 1960 land distribution (an indicator for *wealth* distribution) and economic growth over the subsequent two decades and a half for all countries, a negative correlation between growth and *income* inequality holds only for democracies.

Several limitations are evident in this literature. First, growth has no effect on the distribution of income. In reality, current economic policy affects growth in future years, which in turn affects income distribution. Second, this literature focuses exclusively on the outcome (growth) and not on the specific policy instruments. Third, only the distributive policy is endogenous (which is not the case in the distributive–allocative farm policy literature where allocative policies are endogenous as well). Endogenous growth arrives through exogenously imposed (productive) government services. The income distribution effects of allocative policies affect the distributive policies, but not vice versa in these models. Nevertheless, the normative implications for the role of distributive policies are identical to those identified by de Gorter *et al.* (1992). Alesina and Perotti (1992) argue that distributive policies aimed at reducing inequality may increase economic growth: 'fiscal transfers may be beneficial if the fiscal burden of the transfers is compensated by the gain in social harmony'.

## INSTITUTIONS, PUBLIC POLICIES
## AND ECONOMIC PERFORMANCE

The new theory of endogenous policy determines an equilibrium policy as the optimal choice for the government, given its objectives and constraints. The latter are to an important degree determined by the legal, regulatory and institutional (LRI) framework, of which the property rights system is a fundamental element (Rausser, 1992a, 1992b). The LRI framework is a hierarchy of *political* rules (defining the polity's decision structure and the characteristics of agenda control), *economic* rules (defining property rights) and *contracts* (containing the provisions of exchange agreement in exchange) (North, 1990).[9] Property rights and hence individual contracts are specified and enforced by political decision making. The structure of rights (and the character of their enforcement) defines the incentive structure and opportunities for the players, in either economic or political exchanges. To achieve growth, the structure should provide incentives for efficient resource allocation (that is, a set of property rights that makes the private return on innovation, investment in human capital, and so on approach the social rate).

A key question is, which LRI framework yields optimal public policy and economic performance?[10] Most neoclassical economists agree that political institutions have to ensure a strong government to enforce property rights and competition yet restrict the government's potential for implementing policies that may curtail economic growth (North, 1990; Rausser, 1992a; Weingast, 1992; Williamson, 1991). Ideal political rules ensure that countries do not get caught in inefficient institutional 'equilibrium traps' (Weingast). Instead, such rules provide incentives for public policy legislation that maximizes aggregate income with gainers compensating losers. North claims that the informational and institutional conditions required for this outcome are very restrictive: 'the institutional structure most favourable to approximating such conditions is a modern democratic society with universal suffrage. Vote trading, log rolling, and the incentive of an incumbent's opponents to bring his or her *deficiencies* before constituents and hence reduce agency problems all contribute to the *better*' (p. 109, italics in original). However, the requirements for information and equal access to the decision-making process are not remotely achieved in most democracies. Recent empirical studies find, indeed, that indicators of political and civil rights are positively related to economic growth (for example, Scully, 1988). These observations empirically support the argument that liberal political rules are a requirement for sustained economic growth.

However, these findings are also consistent with an alternative hypothesis: that richer countries can afford more liberal political and civil rights systems. In general, political rules lead to economic rules. But the structure of economic interests will also influence the political structure. In equilibrium, a given structure of property rights (and their enforcement) will be consistent with a particular set of political rules. The process of growth is inherently destabilizing to this equilibrium. Technological change, the spread of more efficient markets and changes in information costs or relative prices in general lead to conflicts with the fundamental ownership structure of property rights. A change in relative prices that improves the bargaining power of a group of constituents

can lead to alteration of the rules. However, no or negative growth can be equally, or even more, destabilizing in a competitive political market-place.

Clearly, differentiation between these two causal hypotheses has far-reaching implications for development assistance and national strategies for economic growth. If the direction of causality is from economic growth to institutions, programmes that attempt to produce growth through changed policies and institutions are flawed. However, if economic growth is produced by changes in political, civil and economic institutions, then initiatives addressing these fundamental features of societal organization can be successful (McMillan *et al.*, 1993). Economists have taken both sides on this point. Barro (1993), for example, argues that 'pushing democracy is no key to prosperity'. Rausser (1992a), on the other hand, has argued that sound public policies cannot be sustained unless basic political and civil freedoms exist.[11] This debate is not new. In the 1940s and 1950s, there was the pervasive view that late industrializing countries required strong, authoritarian governments to mobilize the resources needed for growth. By the early 1970s, there was increasing scepticism about the merits of central planning. A view emerged that success in development could be more readily achieved in an environment characterized by a liberal economic and political order (Ruttan, 1991).

The empirical evidence underlying Rausser's (1992a) conclusions, among others, is based on the McMillan *et al.* study. In that, the bi-causality problem is dealt with by decomposing annual data on growth rates into 'permanent' and 'transitory' components. They conclude that the economic benefits of a reform in rights are systematic and significant, and that economic benefits, in the form of increased growth, occur with a lag after the initiation of reforms in political rights or in civil rights.[12] On the other hand, a series of studies in the 1950s and 1960s indicated that low-income countries with authoritarian political systems experienced more rapid rates of economic growth than countries which were more democratic. Also, in the present developed market economies, the emergence of capitalism preceded the emergence of democracy. However, at higher levels of per capita income, the positive relationship between authoritarian political organization and the rate of economic growth tended to disappear (Huntington and Dominiquez, 1973). Ruttan (1991) doubts whether these results are still valid now, as many of the authoritarian regimes have since gone through periods of political instability. He concludes that perhaps the strongest inference is that a poor country that fails to establish a reasonable degree of political stability imposes a severe burden on the forces conducive to economic growth. This conclusion is consistent with studies linking stability to growth (Alesina and Perotti, 1992).

The latter argument suggests that the focus on political rules ('authoritarianism versus democracy') may be too simplistic to explain the differences in performance. A crucial issue is the credible commitment of government with respect to property rights and enforcement of commercial rules (similar to that of discretion versus rules in the macroeconomics literature). Possibly, it is not so much political freedoms as such that do (not) provide this credibility, but additional characteristics of political organization (Bardhan, 1990). Weingast (1992) argues that a 'market-preserving federalism' is better than any other constitutional form in incorporating a credible commitment structure of the

state *vis-à-vis* its polity, and is therefore the optimal governance structure for a country. He discusses how the emergence of such a governance structure in England, in the eighteenth century, and in the United States, in the nineteenth, is the main reason why those countries have been relatively successful compared to other countries with different governance structures. Weingast claims that one of the main reasons why China has been so successful over the past decade is that it has the same decentralized and credible governance structure. Other studies reach similar conclusions: that a concentration of political resources represents a constraint on economic development (North, 1990; Holt and Turner, 1966).

Finally, recent empirical models have not specified the public policy variable that links economic and political parameters directly to economic performance (nor have the endogenous growth models). Some exceptions are studies that focus on the influence of political decision-making structures on patterns of agricultural policies. Beghin and Kherallah (1994) conclude that pluralistic systems are associated with higher agricultural protection levels, although in a non-linear fashion. Access to pluralism appears to be important, although further democratization does not induce more distortions. Results of Swinnen *et al.* (1993) are consistent with Alesina and Rodrik's hypotheses that the autonomy of authoritarian regimes makes their behaviour less predictable on the basis of structural economic variables and more dependent on the government's preferences. The impact of the European Community's decision-making structure on the common agricultural policy (CAP) has been identified. Runge and von Witzke (1987), for example, argue that the institutional framework of the EC's decision making, such as the unanimity rule and financial solidarity among member countries, is a key determinant of the CAP and that institutional reform is a prerequisite for CAP reform.

## CONCLUSIONS

The understanding of the determinants of public policy in agriculture has improved in the past decade. Our view is that collective action has been overemphasized in explaining patterns of distributive policies in agriculture relative to the role of active, entrepreneurial politicians, relative incomes and the changing distributional impacts of policies. Recent contributions in both the agricultural economics and the endogenous growth literatures focus on the joint determination of allocative and distributive policies. Apart from explaining patterns of allocative policies in agriculture, this literature emphasizes that distributive policies allow governments to increase growth-promoting policies by reducing income inequality and political instability. Many questions remain concerning the nature of optimal political institutions required for promoting efficient public policies and accelerated economic growth. A crucial issue for sustained economic growth is the existence of institutions that credibly protect commercial rules and property rights.

Much research remains to be done, especially on policy combinations and the choices of policy instrument. Recent studies linking basic indicators of economy and polity to economic performance need to integrate the intermedi-

ate policy steps in order to show the true causal influences that determine outcomes. While general equilibrium models have become standard, most political economy models in the agricultural economics literature remain static, in contrast with that on the politics of macroeconomic policies. Credibility constraints and their institutional implications should be the focus of future agricultural policy analysis. Most political economy models are deterministic. Institutions affect policies but the same forces and motives that make policies endogenous are also bound to affect institutions. If our analysis has both institutions and policies as fully endogenous, what role is left for political leadership and economic policy advice? Future developments in the field of public policies and institutions will need to address this question.

## NOTES

[1]North (1990) defines institutions as humanly devised constraints (formal and informal) that structure political, economic and social interaction. Institutions arise in a world of uncertainty, costly information and transactions costs. One can distinguish between North's 'rules of the game' and 'behaviour patterns'. Within neoclassical institutional economics, studies that focus on institutions as 'rules of behaviour' reject the rational behaviour assumption, while the definition of institutions as 'rules of the game' derives from the analysis and focus on transaction costs (Eggertson, 1990).

[2]Alston and Carter (1991) survey the 'self-willed' and 'clearing house' government approach to agricultural policy.

[3]Examples of support-maximizing government models are Hillman (1982) and Peltzman (1976). However, de Gorter and Tsur (1991) show that government transfers are zero under Hillman's and Peltzman's formulations, unless Olson-type pressure group factors play a role. The development economics literature recognizes the potential role of entrepreneurial politicians by referring to the 'developmental state' where the 'state' takes a leadership role, despite lobbying efforts by the 'civil society' or by interest groups (Bardhan, 1990).

[4]We will ignore other models of the polity such as self-interested bureaucracies and altruistic politicians.

[5]These two results are equivalent to propositions 2 and 3 in Becker (1983). Furthermore, Swinnen and de Gorter (1993) show that competition among politicians favours 'efficient' methods and that a group that is more sensitive to changes in utility due to the transfer will be more able to reduce its tax or raise its subsidy. The first result is identical to Becker's proposition 4; the latter is the dual to Becker's proposition 1 on the efficiency of lobbying.

[6]To circumvent organization costs and the 'free-rider' problems of large groups, Olson (1965) appeals to his 'social by-product' theory to explain US farm policy: farmers got together for social reasons and political activity was a by-product that generated pressure activities and hence government action on their behalf. Farmers became politically powerful through their lobbying strength as a 'by-product' of its non-political functions.

[7]Examples of combined approaches are Rausser and de Gorter (1989) and Magee *et al.* (1989).

[8]North (1990) is also critical of this approach: 'Recent neoclassical models of growth built around increasing returns and physical and human capital accumulation crucially depend on the existence of an implicit incentive structure that drives the model ... to account for the diverse experience of economies ... without making the incentive structure derived from institutions an essential ingredient appears to me to be a sterile exercise' (p. 133).

[9]Stability requires that rules higher in the hierarchy be more costly to alter than rules lower in the hierarchy. Social norms and cultural values play a crucial role and are the most difficult to alter.

[10]North (1990) and Williamson (1991) argue that, as the main issue in economics is *change* and *adaptation*, the economic objective should be 'adaptive efficiency', which often may be inconsistent with 'allocative efficiency'.

[11]Evidently, this discussion ignores the possibility that political and civil freedoms are goals in themselves.

[12]Levine and Renelt (1992) claim that the cross-country relationship between long-run average growth rates and almost every particular macroeconomic indicator is fragile in several empirical models, except for one robust correlation between GDP and investment. They also conclude that the relationship between institutional freedoms and economic growth is fragile. The latter conclusion is contested by McMillan (1993) using an alternative method to deal with multicollinearity and principal components than the extreme bounds approach.

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