Indicators of Political Liberty, Property Rights and Political Instability in South Africa: 1935-97

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This paper presents a number of new indicators of political institutions in South Africa, over the 1935-1997 period. The indicators presented include indicators of political freedom, political instability, immovable and intellectual property rights, and the efficiency of institutions through which rights claims can be enforced in South Africa. We present the methodology employed to construct each of the indexes, and explore the patterns of association that are present between the indicators.

1 Introduction

This paper is concerned with a characterization of the nature of political institutions and conditions in South African from the 1930's to the 1990's. It does so by means of a number of indexes for Political Freedom, Political Instability, the degree of political fractionation, Property Rights, and the quality of the institutions customarily used in order to enforce either political of property rights.

The paper forms part of a wider study on the determinants of long run South African economic performance. The recent literature surrounding economic growth has emphasized potential determinants of economic growth beyond those we might conceive of as more narrowly "economic".

The possibility of an interaction of political and social institutions with economic growth as an additional source of heterogeneity across countries raises the important issue of what the precise nature of the link between political and social institutions and growth is. The debate has raised a number of distinct possibilities.[1] Modernization theory postulates a link from economic development to democratisation, such that "good things go together". However, since the postulated causality runs from economic to political development, and since the link is viewed as existing between the levels of economic and political development, modernization theory in its initial format has little to say concerning the impact of political and social institutions on economic growth.[2] An extension to modernization theory is thus an investigation of the possibility of a link from political and social institutions to economic growth. One possibility might be that political freedoms might have positive externalities in reinforcing economic freedoms, strengthening both the demand for and the defensibility of the latter.[3] An alternative

[1] See Fedderke (1997) for a more extensive discussion.

[2] The seminal contribution is Lipset (1959). For further supporting evidence see Bilson (1982), Bollen (1979), Bollen and Jackman (1985), Burkhart and Lewis-Beck (1994), Cutright (1963), Helliwell (1992), Inglehart (1995), Theil (1979). Bilson (1982) indicates the possibility of a non-linearity. Sirowny and Inkeles (1990), and even more comprehensively Diamond (1992), provide reviews of the empirical evidence. Both Diamond (1992) and Burkhart and Lewis-Beck (1994) reject the possibility of political institutions influencing the level of economic development on the basis of empirical evidence.

[3] This might be termed the Hayek-Friedman perspective. Empirical evidence in support is provided by Grier and Tullock (1989) and Kormendi and Meguire (1985). The latter find political institutions impact on growth not only directly, but also indirectly via the investment rate.

proposition might be that externalities are not positive but negative, since democracy at low levels of development is subject to populist pressure for redistributive policies, with negative consequences for savings rates, relative price distortions and uncertainty.[4]

The link between political and social institutions with economic growth need not be restricted to the impact of the state of institutions. Political instability has been generally viewed as lowering economic growth by raising uncertainty, and by reducing the quality of economic policy formulation.[5] However, where political instability disrupts rent-seeking activities it may have a positive impact on growth,[6] and some authors have suggested the presence of simultaneity between growth and stability by pointing to the possibility that growth may disrupt traditional social forms.[7] Some studies go further in identifying income inequality as a specific cause of the growth inhibiting political instability or redistributional policies noted in the preceding discussion.[8]

Attention has also been devoted to a deeper theoretical understanding of how and why political institutions may come to exert an impact on economic growth. One suggestion has been that the credibility of political dispensations is critical if political institutions are to avoid time-inconsistency problems, and that credibility is vital to maintaining private sector and foreign investor confidence (the argument is analogous to those surrounding the

[4]See the discussion in Landes (1990). Barro (1994) provides empirical evidence in support of a negative impact of democracy on growth, as does Marsh (1979) with qualification, and Weede (1983).

[5]Alesina and Perotti (1993), Barro (1991), Londregan and Poole (1990), Knack and Keefer (1995), Venieris and Gupta (1986) all report empirical findings confirming both a direct and indirect (via the investment or saving rate) impact of political instability on growth. See Olson (1993) on the link between political stability and the quality of economic policy formulation. On the link between instability and excessive foreign debt burdens and capital flight see Alesina and Tabellini (1989) and Ozler and Tabellini (1991).

[6]Olson (1982), who argues that (severe) political instability may disrupt the hold of rent-seeking interest groups on the state, and thereby raise economic growth.

[7]See Olson (1963). Londregan and Poole (1990) confirm the presence of simultaneity between economic growth and political instability, but find economic growth lowering instability.

[8]See Alesina and Perotti (1993) and Persson and Tabellini (1994). Clarke (1995) finds not only indirect effects of income inequality on economic growth (such as the investment channel noted above), but a direct negative effect of inequality on growth, for both democratic and autocratic regimes. However, some studies find no systematic relationship at all (see Papanek and Kyn 1986).

credibility of stabilization policy).[9]

Perhaps most importantly of all, property rights are frequently advanced as the institutions of greatest significance to economic growth, lowering uncertainty and transactions costs associated with economic activity.[10] An analogous but broader conception is that of social capital, viewed as consisting of a range of formal and informal cultural practices which increase the probability of cooperative solutions to problems of collective action, and which is again viewed as lowering transactions costs and uncertainty, and hence as beneficial to economic growth.[11]

The economic literature has thus gone some way toward incorporating a number of distinct links between social and political institutions and economic growth - and a nexus of institutional determinants of growth surrounding political liberties, civil rights, and property rights has emerged.

Yet a feature of the empirical literature on the link between institutions and growth is that a number of distinct studies employ a common set of indicators for the institutional environment at issue. Thus Scully employs the Freedom House political rights and civil liberties as proxies for property rights; Barro employs the same index in order to explore the link between democratization and economic growth. Indeed, the Freedom House index dominates the empirical discussion, perhaps because of the dearth of indexes on political contexts.

Particularly in the context of a "web of association" between social and political indicators pointed to by Fedderke and Klitgaard (1996, 1998), this renders the possibility of differentiating between the independent impact of these institutional dimensions on growth impossible.

Moreover, a brief examination of the Freedom House Political Rights and Civil Liberties indexes for South Africa reveals a further important feature with methodological implications for econometric investigations employing the rights indexes. Figure 1 illustrates both indexes for South Africa. The Freedom House indexes are confined to a scale of 1 (good) to 7 (bad). As a consequence even for a country such as South Africa, which experienced strong, sometimes countervailing movements in rights over the sample period

[9] See Borner, Brunetti and Weder (1995), who see credibility as of far greater significance than the level or stability of political rights.

[10] See Knack and Keefer (1995), North and Thomas (1970, 1973), North (1981, 1990), Scully (1988, 1992).

[11] See Coleman (1988, 1990), Putnam (1995) and Fukuyama (1995a, 1995b), Fedderke, De Kadt and Luiz (1999).

for which the Freedom House data is available (1973-97), both indexes prove to show relatively infrequent change, until the liberalization of the early 1990's. Secondly, South Africa belongs to the class of countries for which the two rights dimensions manifest a very high correlation, +0.71 in the case of South Africa.[12] Lastly, the time span for which the index is available is relatively short, covering the 1973-97 period only. As such detailed time series explorations of the link between growth and the rights indexes are severely circumscribed.

This paper addresses some of these limitations of rights indexes thus far available. First, it presents a time series for the level of political freedoms in South Africa, though such freedoms are properly conceived of as a composite of political rights and civil liberties. The reason for this conflation is elaborated below, but essentially the argument is that the strong correlation between the indexes reported above occurs since rights structures are indivisible.

Second, the paper also presents a time series for property rights in South Africa. This index was constructed on the basis of a similar methodology to that employed for the rights index, entailing a consideration of the quality of the law governing property in South Africa. As the methodology of the paper explains, considerable pains were taken to ensure that the political rights and property rights indexes remained independent. As a consequence, we are in a position to examine the question of whether property rights and political rights for South Africa have been independent, or whether systematic forms of association exist between them.

The property rights index splits property rights into the law governing immovable property, and those governing intellectual property rights. Two considerations govern this decision. First, intellectual property rights were given little consideration in South African law prior to the 1960's, chiefly since little pressure was exerted to develop intellectual property law. This corresponds with international trends toward proper definition of intellectual property rights much later than property rights in immovable property. The second consideration is that intellectual property rights have perhaps a more immediate proxy in the form of patent registrations, obviating the need for a subjective index such as that constructed for immovable property. The argument is that patent registration is the most direct means of securing intellectual property rights, and will be used only if property rights are

[12] We report correlations between the two indexes for 86 countries in Appendix 1.

properly defined and enforceable.

The paper further introduces a number of potential indicators of the efficiency of the institutions designed to enforce political freedoms and property rights; the judiciary. The measures are designed to proxy for the efficiency of magistrates' courts in South Africa with respect to: a) civil cases and b) criminal cases. The central point that concerns us here is to include in our study some measure of the ease with which property or any other rights can be enforced. Formally well-defined rights which cannot be enforced by whatever means, provide little by way of ensuring the certainty of being able to appropriate the proceeds and fruits of one's economic activity which is generally held to provide the prime motivation for the clear definition of property rights. Since the courts system is the prime means of ensuring enforceability of property rights, a measure of the "efficiency" of the courts system was held to be the best available proxy for the enforceability of property and other rights.

Lastly, the paper extends the question of whether, and to what extent property rights and political rights are related to further political indicators. We focus on two such indicators: an index of political fractionation (measured as the probability that two randomly chosen members of parliament would belong to the same political party);[13] an index of political instability (measured as the weighted average of a range of indicators of activity under South Africa's security legislation).

2 An Outline of the Methodology Employed for the Construction of the Present Indexes

Our construction of rights indexes is not the first such attempt undertaken. A number of prior studies have provided indexes of rights and freedoms, though the majority of such studies have been for countries other than South Africa.[14] Yet the construction of these, as indeed most empirical time series is not without methodological difficulty. A detailed discussion of the difficulties that emerge in the case of the construction of political liberties (and property)

[13] We are of course aware of the limitations of such an index in the South African racially defined context. We deal with this question in due course below.

[14] Some examples are provided by Lerner (1958), Lipset (1959), Coleman (1960), Cutright (1963), Banks and Textor (1963), Banks (1971), Dahl (1971), Gastil (1978), Hewitt (1977), and Muller (1988).

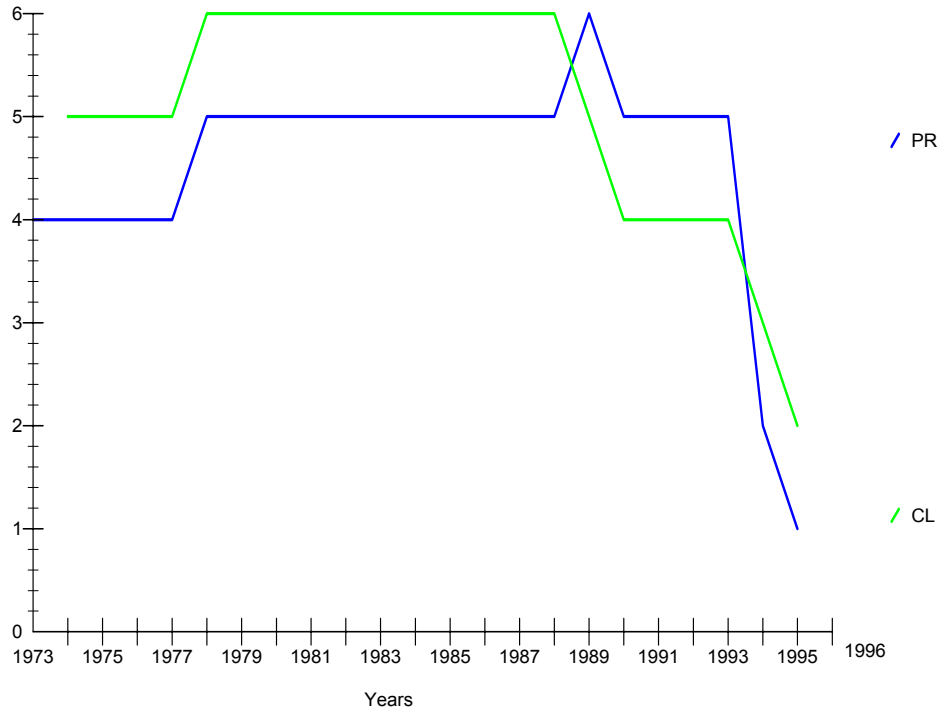

Figure 1: Freedom House Political Rights and Civil Liberties Indexes

rights indexes may be found in Bollen (1990, 1992). We outline some of the more salient as:

1. Such indexes summarize a large amount of information across a range of distinct dimensions. Thus, for instance, the political liberties' index constructed below loads on the following: the nature and inclusiveness of the franchise; freedom of expression, political association, and assembly; freedom of choice; checks and balances on the discretionary power of all branches of government; freedom of movement and residence; freedom of the press; and the adequacy of means for enforcing personal rights.

2. Inevitably any concrete state at any given point in time realizes fully defined rights in these distinct dimensions to differing degrees. Hence a composite aggregate index will inevitably hide important changes that take place within these dimensions.

3. The aggregation of the differing dimensions here as well as for indexes such as the Freedom House indexes proceeds by judgement on the basis of expert opinion. This inevitably introduces an element of subjective judgement into the index.

4. Given the attempt to construct two separate rights and freedoms indexes, the danger is that the construction of the two series is not fully independent.

The methodology employed for the present study attempts to limit as far as possible the impact of such problems by adopting a rigorous set of principles in setting up the methodology of construction.

First, the construction of the two indexes proceeded by defining the relevant set of criteria to be used in evaluating the rights context of South Africa in the property rights and political freedoms dimensions, a priori, before any empirical research followed. All subsequent evaluation proceeded in terms of these criteria.

Second, the construction of the two indexes was conducted by two independent researchers, and without any conferral, in order to avoid the destruction of the orthogonality of the two indexes.

Third, the indexes were presented to an independent (in the sense that they were unconnected to the study) panel of leading South African social

scientists and South African property lawyers. Their assessment of the series was requested, and any suggested amendments or modifications were actively incorporated into the constructed series.

The time series here presented are the outcome of this process.

3 A Time Series of the Level of Political and Civil Freedoms in South Africa from 1934 to 1997

Our purpose is the construction of a time series of political liberties for South Africa. The intention is to provide a longer time series than that available from the Freedom House measures, for instance, in order to enable the use of the series in formal time series estimation.

We note at the outset our recognition that the definition, specification and measurement of political liberties is inherently problematic. This is for reasons that are at once both conceptual and methodological. Conceptually, not only are categories such as "political rights", "political freedoms" and "civil liberties" all arguably "essentially contested" concepts (Connolly 1983; Gallie 1955-6); they are also linked in a web-like association with other concepts. Thus "democracy", "justice" and even "capitalism" and "socialism" have come to be identified with, or defined in terms of often diverse accounts or descriptions of "political freedom". Thus any attempt analytically to separate political freedom from other related concepts is necessarily in some measure arbitrary, stipulative and thus controversial. While we are aware of the controversial nature of such categories, there are reasons to believe that a "common" or "consensual" basis can be claimed for our use of this category. Banks points out that the degree of congruence between Gastil's (the Freedom House measure) and Humana's civil rights measures in both 1983 and 1986 is very high, as is the congruence between the political rights measures (Banks 1992: 365-373). The normative criteria that inform Humana's 1986 study were specifically modified to reflect the types of freedom articulated in the Universal Declaration of Human Rights.

We have defined political freedoms in a manner that distinguishes them from a number of related concepts. Thus we have delimited the scope of political freedom so that the term does not directly measure democracy, property rights or political instability.

The time-series data presented below are intended to serve as the basis for an analysis of the relationship between the formal structure of politi-

cal and civil freedoms in South and the growth performance of the South African economy. It constitutes part of a larger study, some parts of which have already been completed, that is concerned to explore the institutional dimensions of economic growth in South Africa.

This series attempts to measure the level of political and civil freedoms in South Africa from 1934 to 1997. For the purposes of this series, formally specified political freedoms and formally specified civil liberties are not separated. The measurement is based on a "global" interpretation of the state of political and civil liberties in each year under consideration. The scale is defined to range from 0 to 200, where 200 represents a system of liberal democracy or "Rechtstaat" that, in terms of the formal structure of political and civil liberties, constitutes an "ideal type". A score of 200 would reflect a system in which there is, for each individual, the most extensive system of personal liberties compatible with a like system for all the other members of the society.

To score between 175 and 200, a nation-state would have a legal and constitutional structure that embodied the following features:

1. An electoral system with a universal adult franchise in which there is no exclusion from participation on the grounds of race, colour, creed or sex and in which free and fair elections take place on a regular and precisely determined basis.

2. Constitutionally guaranteed freedoms of expression, political association and assembly.

3. Constitutionally guaranteed freedom of religion and freedom of choice with respect to "personal" matters such as vocation and sexual orientation.

4. Constitutional provisions to check and exclude arbitrariness and discrimination in the application of laws.

5. Legally entrenched freedom of movement and the right to reside in an area of choice within the territorial boundaries of the relevant polity.

6. A free press constrained only by the laws of libel and defamation and a very precisely defined and limited constraint with respect to matters of 'national security'.

7. A Bill of Rights or some equivalent, constitutionally robust, mechanism whereby the rights of individuals can be effectively protected.

8. A division of powers between the executive, judicial and legislative branches of government.

Such a score accords closely with a structure of political and civil freedoms that would score high on each of the 40 variables specified in Humana's 1983, and somewhat modified in his 1986, data (see Banks 1992:367-369). It would also conform closely with the normative requirements of the Universal Declaration of Human Rights.

A score between 0 and 25 would be indicative of a de jure "totalitarian" state of the type exemplified by Nazi Germany and the Soviet Union during the Stalin years. (Though it should be noted that the formal provisions of the Soviet Constitution were misleading.) A score between 26 and 75 would indicate a state with a political and civil rights structure in which a very high degree of arbitrariness in state action was enabled by legislation as well as having highly discriminatory or "exclusive" franchise arrangements. A state that fell in this range would tend not to respect habeas corpus. For a score between 76 and 100 the degree of arbitrariness in governmental action is more constrained.

A score between 101 and 149 would indicate considerable scope for "procedural justice" such as "due process" and reasonable scope for the exercise of choice in matters of political and social association, though such a system might contain some formal discriminatory provisions and constraints on personal liberties as well as restrictive franchise arrangements. A score between 150and 175 would indicate a political system with entrenched procedural justice, and freedom of association and assembly, subject to relatively few constraints. This leaves the range from 176-200 for fully developed liberal democracy, with recognition of third generation rights.

In addition, for the purposes of this measure, the "structure of expectations" has not been taken into account. Thus there has been no attempt to establish the degree of "fit" between the "formal" specification of rights and freedoms within legislation and the likelihood that such legislation would be acted upon.

Thus, this measure is not to be understood as a measure of repression. That is, it is irrelevant to this index whether or not any of the statutes or proclamations were actually applied or enacted. Such enactment would be

captured in a measure of political repression. This decision to construct a "self-standing" series is consistent with Bollen's caution that, in measuring levels of democracy, measures of stability should be excluded (Bollen, 1980:374). At the same time it is necessary to point out that the distinction between promulgation and enactment in the case of South Africa during the period under review is sometimes difficult to make since the acts of promulgation and enactment were in many cases effectively the same.

3.1 The Construction of the Index for South Africa

The index for South Africa was constructed by generating a score for each year for the period under review. This was done through an evaluation of the implications for the structure of civil and political liberties of all relevant legislation enacted during the year under consideration. The term "legislation" here refers to Acts of Parliament, amendments and emendations to already existing statutes as well as proclamations and parliamentary approved directives issued under the aegis of enabling legislation. The numerical weighting accorded each year was established in the following manner. First, the year under review was assessed against the normative "ideal type" constructs referred to above. Second, it was evaluated to establish whether it marked a worsening, or an improvement, by comparison with the preceding (and where applicable succeeding) year.

Given the nature of the South African state, however, the index could not always rely purely on formal pieces of legislation. Actions by the state often took place outside the juridico-legal framework, and came to influence the rights environment within which citizens could define their identities and actions.

3.2 The Interpretation of the Index for South Africa

A number of caveats need to be issued at the outset.

The first is that, in covering as long a period as we have, some problems of commensurability arise. This is especially the case with regard to changes in the form of constitution. During the period under review, arguably at least five distinct constitutional dispensations may be identified:

1. The first obtains from 1935 through to 1979 with the augmentation of Executive power in the latter year.

2. The second obtains from 1979 through to 1984 in which year the "It should be noted that the fractionation indexes is interpolated between election years. This generates ongoing change in a series that strictly speaking was constant between election years. The reasoning behind the data transformation is that the underlying social changes that generate the electoral change are likely to be continuous rather than discrete."Tricameral" constitution was established.

3. The third is the period of "tricameralism" which stretches from 1984 to 1993.

4. The fourth is the period of the Interim Constitution that lasts from 1993 to 1996.

5. The fifth is that of the present 1996 Constitution which issued from the Constitutional Assembly and was finally ratified by the Constitutional Court.[15]

Two further points need to be made about these constitutional changes. The first is that the constitutional dispensation is originally one characterized by parliamentary sovereignty but in which power effectively shifts, increasingly, from the legislature to the executive. The second is that after 1993 a substantially different set of constitutional principles is in force. These new principles mark a decisive departure from previous dispensations in at least two key respects. The first is that the Constitution is the supreme law of the republic, which, through the agency of the Constitutional Court, constrains the scope of parliamentary legislation. The second is that the electoral system shifts from a single-member, modified Westminster system to one embodying the principle of proportional representation. For the purposes of this index, the role of the Constitutional Court becomes crucial in that its decisions have at least the force that parliamentary statute or State Presidential proclamation had under previous dispensations.

A second caveat is that the reliability of scores for the early period (1935-1947) is arguably less sound than that for later years. There are two reasons for this. The first is the problem of historical interpretation and changing frameworks of meaning. The second is that the provision of a rights index in the period after 1947 was considerably aided by the information contained

[15]Relevant aspects of some of these constitutional changes are identified in the appended index.

in the publications of the South African Institute of Race Relations, and the Annual Survey of South African Law produced by the University of the Witwatersrand Law Faculty. Prior to 1947 no such record is readily available, and the only available sources were general historical and parliamentary records, pamphlets etc. As such, the provision of a consistent source of information on a year-to-year basis was not available. As such, the subjective content of the index may well be higher over the 1935-47 time period.

Moreover, South Africa presents special difficulties with regard to the separation of "political rights", "political liberties" and "civil liberties".[16] These difficulties turn on the extent to which, following Bollen's distinction (Bollen 1992), restrictions on political rights and political liberties are inextricably interwoven with restrictions on civil liberties and personal freedoms.[17] This interconnection reflects the extent to which South African society developed as a system of racial estates in which the National Part political elite was concerned not merely to hold onto political power but to recast the entire social structure along racial lines.

Lastly, the measurement of political rights and political and civil liberties in South Africa is, for most of its history, rendered especially difficult with respect to the society as a whole. This is because of the peculiarly "dichotomic" structure of the society whereby the structure of such rights and liberties was very markedly different for different racial groups. Specifically, in terms of the structure of the polity, whites enjoyed a vastly better range of rights and freedoms - including, from 1931, unqualified universal suffrage. Thus the formal structure of the system was, until the creation of the Interim Constitution, informed by strongly antinomical principles of organisation.

[16]Bollen, in adverting to the distinction between political rights and political liberties, notes that: "Political Rights exist to the extent that the national government is accountable to the general population and each individual is entitled to participate in the government directly or through representatives. Political liberties exist to the extent that the people of a country have the freedom to express any political opinions in any media and the freedom to form or to participate in any group". Bollen1986:568) Bollen furthermore, classifies Dahl's 1971 (Dahl:1971:3) eight requirements for democracy under the rubrics of "political rights" and "political liberties" as follows:

(a) Political rights: right to vote; eligibility for public office; right of leaders to compete for votes; free and fair elections; institutions for making governmental policies depend on voters' and other expressions of preferences;

(b) Political liberties: freedom to form and join institutions; freedom of expression; alternative sources of information. (see Bollen 1980:11).

[17]See Bollen (1992:189-90).

South Africa during the period under review experienced a steady decline in the quality of political and civil liberties from its base in 1934 through to 1969. The situation remained, in terms of the formal structure of the law, largely unchanged from 1969 through to 1982 even though new legislation was introduced and existing legislation modified during this period. The period from 1983 to 1989 marks a steady improvement in the formal structure of political and civil rights.[18] There was then a dramatic improvement in 1990, the substance of which was expressed in State President F.W. de Klerk's address to Parliament on 2 February.

In 1945 the Bantu Urban Areas Consolidation Act was enacted. This had implications for the freedom of movement of Africans that extended beyond the implications of the 1936 Bantu Trust and Land Act. It established a labyrinthine and intricate administrative structure to facilitate the regulation of the lives of African (black) people within the urban areas.

The constraints on individual freedoms entailed by the above mentioned Acts of 1936 and 1945 were further compounded by the impact of the Prohibition of Mixed Marriages Act of 1949 and the Immorality Amendment Act of 1950, both of which served to prohibit sexual relations across the statutorily defined racial boundaries. The freedom of movement, choice of domicile and of association and assembly were constrained further by respectively the Group Areas Act and the Suppression of Communism Act of 1950.

The 1951 legislation that made corporal punishment obligatory for certain offences can be interpreted as constituting an attack on the discretionary freedom and independence of the judiciary and magistracy.

The 1950's saw a steady stream of legislation that extended and specified more fully the arbitrary power of the state, thereby further eroding the freedoms of association and assembly with respect to both civil and political action. Included in this legislation were the Public Safety Act of 1953, the Riotous Assemblies and Suppression of Communism Act of 1954, the 1956 Riotous Assemblies Act and the Separate Representation of Voters Act also of 1956. Thus 1956 may be seen as a year in which the rights situation deteriorated badly. This deterioration continued through 1957 with the passing of Section 16 of the Immorality Act.

[18] Of course, we recognise that considerable political turmoil, and violations of human rights marked the period. We refer the reader to the discussion above regarding the separation of formal rights and their observance. Moreover, we capture the violation of human rights (in the form of detention without trial, for instance, in the instability index to be discussed below).

The formal structure of rights worsened decisively again in 1960 with legislative provision for the increase of penalties for certain offenses under the Riotous Assemblies Act and the passing of the Publications and Entertainments Act, the Control of the Exhibition of Films In African Areas legislation, and the passing of the Unlawful Organisations Act, No.34. Habeas Corpus was further compromised through the enactment of Regulations 19 and 20 of the Regulations for the Administration of the Transkeian Territories. This particular piece of legislation authorized indefinite detention without trial.

As with the 1950's, the 1960's saw a steady consolidation of the legislative basis for arbitrary state action at the expense of individual rights. Included in this body of laws were the General Law Amendment Act and the General Law Further Amendment Acts of 1962. The statutory expressions of the progressive constraints on political and civil liberties throughout the 1960's are itemized in the data series below. The combined effect of this legislation was to further limit the freedoms of association, assembly, publication and speech as well as to further restrict the right to legal due process.

The situation, which had worsened steadily throughout the twenty-two years of National Party rule from 1948 through to 1970, remained substantially unchanged through the 1970's and through the first part of the 1980's. The 1970's are arguably more significant for the repressive action on the part of the government than they are for any greatly significant new legislation. It is only in the mid-1980's, beginning with formal, though only partial and complexly structured and circumscribed extension of the franchise implicit in the "tricameral" legislature, that matters at a formal level begin to improve somewhat.

It should be stressed that, in terms of the formal structure of political and civil rights, the 1980's are a contradictory decade. Some of the legislation involved little more than a "refinement" or re-definition of some of the earlier legislation. This was especially the case with the legislation for the period 1980 - 1982 itemized below. 1985 saw the repeal of the Prohibition of Mixed Marriages Act of 1949 and of Section 16 of the Immorality Act of 1957. The Group Areas Act, however, remained in force.

Although 1986 is marked by the State of Emergency introduced in June by President P.W.Botha, it also sees legislation passed that permitted the voluntary desegregation of restaurants. The White Paper on Urbanization, which effectively marks the end of "influx control", and thus implies a formally larger measure of freedom of movement, was also introduced. Thus the 1980's, on balance, provide evidence of a partial and "controlled" (even

if partly unintentionally so) extension of political rights and a formal, partial, easing of restrictions on personal liberties.

This process culminated in President F.W. de Klerk's address to the House of Assembly on 2 February, 1989 which - through the unbanning of political organizations that it entailed - marked a decisive extension of the freedoms of assembly, speech and association. In effect, this announcement articulated the intention to finally and comprehensively reverse the legislative programme that had been enacted in the period 1948 to 1982.

The full reversal of this legislation was completed by 1994, in which year South Africa's first properly democratic elections - characterized by universal suffrage and procedures that were formally fair and free - took place. Indeed, the period 1989 to 1998 marks not only the "undoing" of the statutory order that had been established during the first three and a half decades of National Party rule, but also a decisive improvement upon the situation that obtained from 1934 to 1948. In terms of the formal structure of political and civil freedoms, South Africa thus joined the ranks of those countries which, judged against the normative model that underlies this study, have the best systems.

Figure 2 reports the constructed political freedoms index.

4 Property Rights in South Africa : 1950-1997

This is a first attempt at the quantification of the formal existence of property rights regarding immovable property in South Africa over the period 1950 to 1997. The methodology followed an initial identification of an ideal set of rights. South Africa's realization of this ideal set of rights was then examined in the light of the most important pieces of legislation affecting these rights over this period. In this sense therefore the property rights index is again premised on the identification of the structure of formal rights in South Africa, as opposed to the practical realization of those rights. A score summarizing the extent of the existence of these rights is estimated for each year in this period.

To our knowledge this is also the first attempt at a formal index of property rights anywhere in the world. The only exceptions are the single time point measures provided by Freedom House (1996) in the compilation of an Economic Freedom index, and the index of economic freedoms in the world provided by Gwartney, Lawson and Block (1996, also:1998).

Our index differs in a number of respects. First, in contrast to both

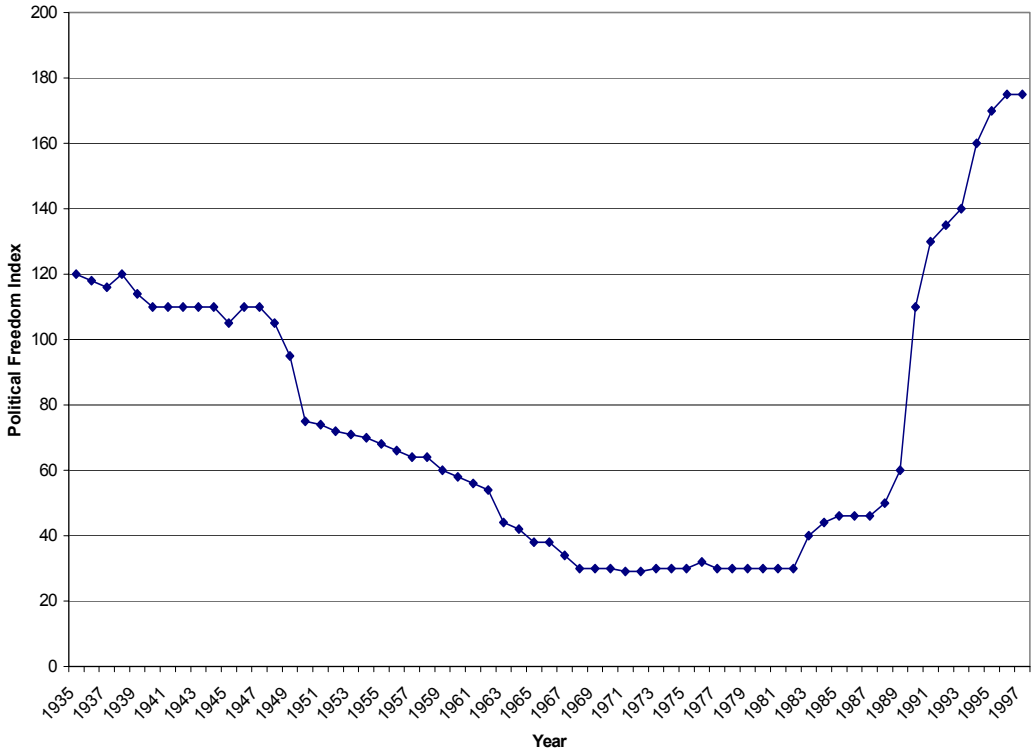

Figure 2: Composite Political and Civil Freedoms Rights Index

alternative measures, the index here provided covers a far more extended time run (from 1950-97). By contrast the Freedom House measure provides just a single time point (1995), while the Gwartney, Lawson & Block study provides measures only for 1975, 1980, 1985, 1990, and a composite score for 1993-5.

Second, the Gwartney, Lawson & Block study measures economic freedom primarily in the form of macroeconomic indicators (such as money supply growth rates, taxes on international trade, etc.). As such the series is no longer an indicator of the "pure" legal framework within which economic activity is regulated (the indicator does contain series for the "legal framework", but also money supply growth rates - which are surely distinct entities). Moreover, the focus is by no means on the full legal framework covering property rights.

Third, the Freedom House Economic Freedom indicator is also more broadly defined than our index, in the sense that it includes not only the freedom to own property, but also the freedom to earn a living, to operate a business, to invest one's earnings, to trade internationally, from unreasonable government interference, and to participate in the market economy. While our index may cover some or all of these aspects, our focus is intended to be narrowly and specifically on the right to own immovable property, and the quality of these rights.

Lastly, while the Freedom House index is in terms of a scale from 1 to 3, we offer a more differentiated scale.

4.1 A Definition of Property Rights

There has been much debate in both the philosophical and legal spheres over what comprises property rights. However there is a particular conception of property rights that has become the standard[19] in terms of its philosophical and legal treatment. This view can be encapsulated by considering A. M. Honore's definition of "full liberal ownership":

> Ownership comprises the right to possess, the right to use, the right to manage, the right to the income of the thing, the right to the capital, the right to security, the rights or incidents of transmissibility and absence of term, the prohibition of harmful

[19] See Carter (1991) pp.4-5; Lewis, (1984) pp. 242.

> use, liability to execution, and the incident of residuarity: this makes eleven incidents.[20]

While this definition is a useful starting point, it is proposed that, for the purposes of this study, it be amended. Firstly, it has been argued that out of these eleven incidents, the prohibition of harmful use is not a basic component of ownership. Rather it is a recognition of the fact that individuals' rights exist in a social framework and that their ability to behave in any way they like must be tempered by the recognition of the implications of their actions on other people. Thus this incident is an obligation resulting from their being a member of a society and is not a basic right or incident of ownership per se. It shall thus be excluded for the purposes of this study.

Secondly, the following incidents shall also be excluded: the right to the income of the thing, absence of term and the incident of residuarity. The right to the income of the thing is for all intents and purposes of this study equivalent to the right to use the property as the owner sees fit. Thus the considerations of any restrictions on this right (to use) will be sufficient. Furthermore, the incident of absence of term (i.e. that ownership is 'unlimited in point of duration') is not valid in South Africa given the existence of the institution of fidecommissa, liability to execution and expropriation.[21] In any event it is not a vital incident in that it does not affect the transaction costs of carrying out economic activity in any important way. Finally, while the incident of residuarity is a vital (if not the defining) characteristic of ownership, it has no relevance to this study. In any event this incident has not been affected by legislation in South Africa over this period.

It is thus proposed that the following definition of a property right be used in this study :

> Ownership comprises the right to possess, the right to use, the right to manage, the right to the capital, the right to security, the incident of transmissibility and liability to execution.

This makes seven incidents.

[20] Carter, (1991) pp. 4-5.
[21] See Lewis, (1984) p. 253.

4.2 A Property Rights Scale

It is proposed that the full existence of all seven of these incidents included in this definition be used as the 'ideal' set of property rights and would be equivalent to a 'perfect' score of 100. Any variation from this would thus correspond to a less than perfect score.

Furthermore it is proposed that these incidents be weighted equally. Thus a limitation of any one of these incidents would result in an equal decrease in the overall score proportional to the extent that that incident was limited by the piece of legislation.

The complete exclusion of all of these rights or incidents would thus result in a zero score for a society.

4.3 The area of application of this study - immovable property only

It has been decided that the exclusive focus of this index should be the limitations of property rights to immovable property in South Africa. This is mainly because of the general importance of immovable property to the economic growth process in South Africa - given its historical reliance on mining and agriculture. Furthermore, the policy of apartheid's implementation largely depended on the restriction of property rights to immovable property on racial grounds. Thus these rights were severely affected over this period. Finally, property rights to movable property were not affected to any comparable extent whatsoever over this same period.

The other category of property rights also not considered in this index is that of intellectual property. The justification for this is we have separate and direct and independent proxies for intellectual property rights.

4.4 Rights to Immovable Property in South Africa

There have been important restrictions of rights to immovable property in South Africa in the period 1950-1997. These restrictions were implemented along racial lines and formed an important building block in the apartheid edifice and was extremely important in creating the skewed income distribution which the South African economy currently exhibits.

However there is a difference between the formal appearance of these restrictions and their actual discriminatory impact. Formally, since 1950, all

population groups' property rights were similarly affected. Given this 'separate but equal' approach to the formal treatment of property rights, it has been decided to create a single index of formal property rights to immovable property and then weight it according to two factors - firstly, the availability of land to the relevant racial groupings; and secondly the population distribution between the racial groupings. In this way some indication of the actual importance of these restrictions will become clear from the apparent 'equal' treatment by the legislature.

Another area of law of particular importance to South Africa is the question of mineral rights. Case law dating back to 1891 emphasizes that ownership of the land and ownership of the mineral rights will normally go together.[22] However while ownership of the land would normally include ownership of the mineral rights, these can be separated. In the case of a mineral rich country such as South Africa, this distinction is of vital importance. More importantly for the purposes of this study, it has been held by the courts that the rights of the mineral rights holder are preferential to those of the land owner when it comes to the question of land use. Thus mineral rights owners are allowed rights of access, to mine and all ancillary activities. This placed a severe restriction on the rights of the landowners.

4.5 Pre 1950

The source of some of the most important limitations on property rights for all racial groups can be found in legislation passed prior to 1950. The following Acts were instrumental in this regard :

1. The Black Land Act, no. 27, 1913;
2. The Development Trust and Land Act, no. 41, 1936;
3. The Black (Urban Areas) Consolidation Act, no. 25, 1945;
4. Coloured Persons Settlement Areas Act, no. 7, 1946;
5. The Asiatic Land Tenure Act, no. 28, 1946.

In all of these acts there is a common, segregationist, thread - the identification of areas of land which may only be owned and occupied by individuals of a particular racial group.

[22] See Lewis (1984) pp. 244-248.

4.6 The Group Areas Act No.41, 1950

Prior to 1950 however, there were only small isolated pockets of restricted areas. A major extension of this philosophy came about with the Group Areas Act, no. 41 of 1950. According to this Act, all land was to be allocated to population groups. This had the effect of forcing all population groups into their relevant restricted areas - something that had not previously been the case. In fact existing land ownership by 'disqualified' people in non-restricted areas had been allowed. It had just not been allowed to increase[23] - the only avenue for the acquisition of property was to the areas proclaimed by the 1913 and 1936 Land Acts. In terms of urban areas, the local authorities were normally the owners of the majority of land made available for the occupation of racial categories other than whites, and while they allowed the lease of this land to blacks, they almost never sold to the lessees. However individuals were allowed to acquire and own land in these areas.

The Group Areas Act ensured that while the same essential restrictions applied as before, they now applied to everybody. Everybody was restricted in the same way - they could only buy property in the areas allocated to them; they could only sell their property to either the state or to members of the population group which was allowed to reside in any particular area; they could only reside in those areas allocated to them, they could only lease or rent their property to members of the relevant population group.

In terms of individuals' property rights this constitutes a serious restriction on the ability of a person to possess, use and manage the property. Furthermore it reduced the right of the individual to security, the capital and the income of the immovable property. These acts thus violated almost all of the incidents of property rights included in the above definition to some extent, and a score of 40 has been chosen to represent this.

The most important distinction between this apparent formal equality in restrictiveness and the actual impact of this legislation is that the size of the relevant areas available to different population groups differed immensely. White South Africans had access to most of the land while Black, Coloureds and Asian South Africans were forced to live in very restricted townships or rural areas, and this distinction clearly had to be reflected in the rights series.

We present the property rights series in Figure 3.

[23]There were exceptions obviously. Mining operations were not affected by this act and provision was made for domestic servants, amongst others, to reside in white areas.

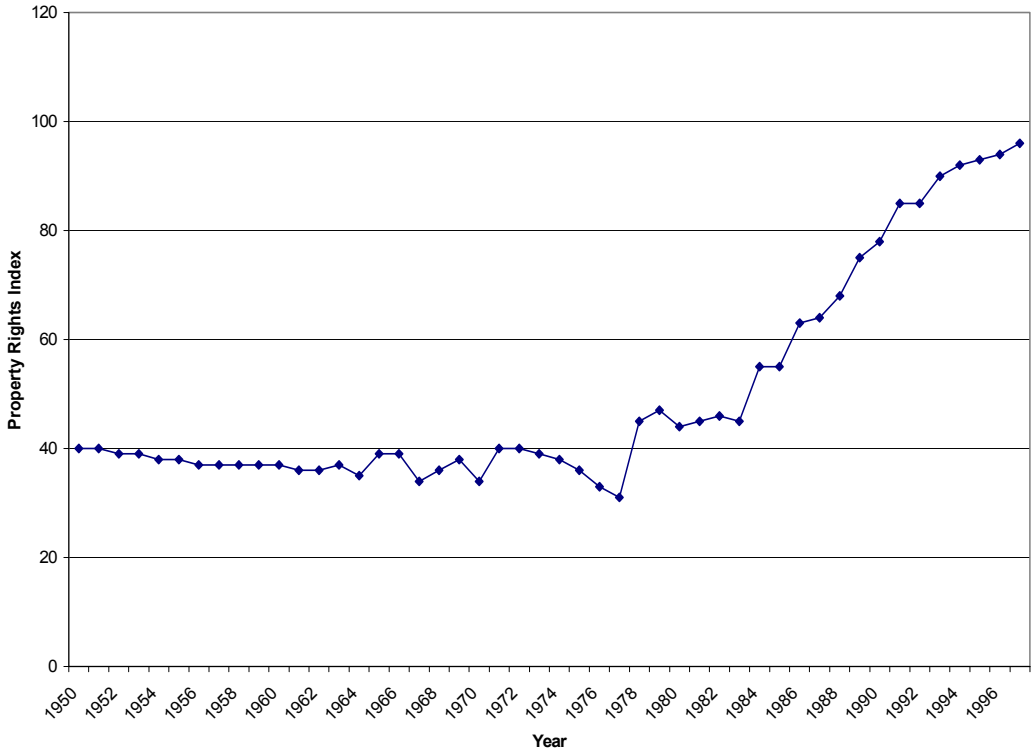

Figure 3: Immovable Property Rights Index

4.7 Intellectual property rights

We introduce a separate index for intellectual property rights. Two considerations govern this decision. First, intellectual property rights were given little consideration in South African law prior to the 1960's (see Lewis 1984), chiefly since little pressure was exerted to develop intellectual property law. This corresponds with international trends toward proper definition of intellectual property rights much later than property rights in immovable property. The second consideration is that intellectual property rights have perhaps a more immediate proxy in the form of patent registrations, obviating the need for a subjective index such as that constructed for immovable property. The argument is that patent registration[24] is the most direct means of securing intellectual property rights, and will be used only if property rights are properly defined and enforceable. Figure 4 illustrates.

Of course, the absolute number of patent applications may be potentially misleading, since it does not control for the absolute level of economic activity. We therefore present two alternative indicators of intellectual property rights. The first controls for the level of economic activity, in the form of the ratio of patent applications to GDP. The second for the size of the population, in the form of the ratio of patent applications to the population size. Figure 5 illustrates both series.

What is apparent from a comparison of Figures 4 and 5, is that while the absolute number of patent applications would imply a steady improvement in intellectual property rights, the two ratios suggest a number of distinct time windows into which the implied intellectual property rights would fall:

- 1917 - 1945: over which intellectual property rights were either constant or declining.
- 1945 - 1970: over which intellectual property rights were steadily improving, or remained constant.
- 1970 - 1996: over which intellectual property rights were steadily decreasing.

We realise that these indexes cannot be considered as anything but fairly remote proxies for intellectual property rights. Indeed, a more immediate

[24] An alternative conception of intellectual property rights uses not the absolute number of patent applications as the indicator, but either the per capita patent applications, or the patent applications per unit of GDP as the indicator.

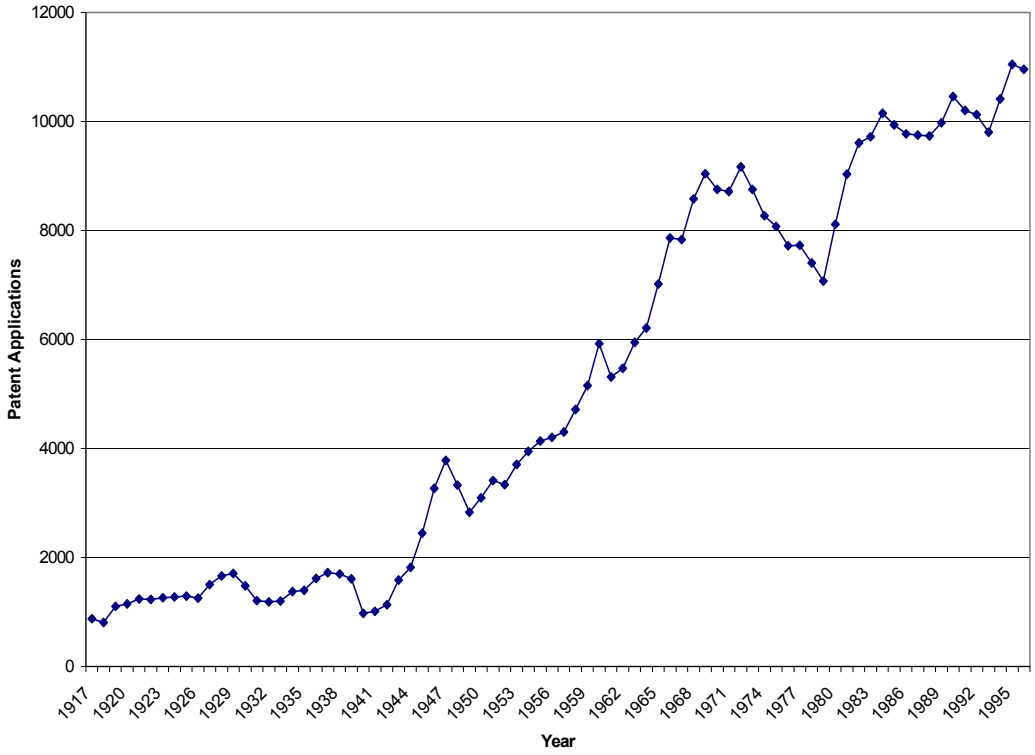

Figure 4: Intellectual Property Rights Proxy

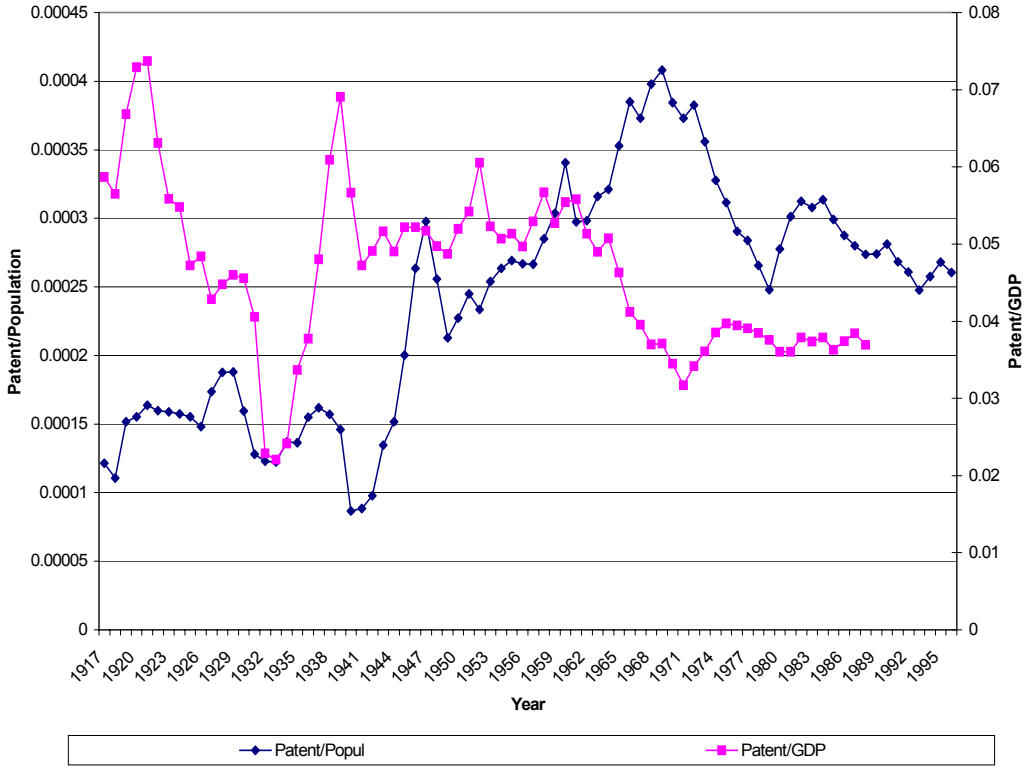

Figure 5: Alternative Intellectual Property Rights Proxies

interpretation might be that the indexes would be more appropriately understood as indicators of the level of technology transferral. However, even if the latter argument is well founded, the probability of technology transferral should be correlated with the degree of protection that owners of technology blue-prints perceive to attach to their discoveries. Technology transfer, in short, is more probable under conditions of well-protected property rights, than otherwise.

5 Enforceability of Rights

Given that the formal codification of rights and freedoms is of little significance under conditions where those rights cannot be enforced, we add a number of indicators of the quality of the judicial system in South Africa. These indicators are of relevance both to the political freedoms and the property rights indexes.

Given that the magistrates' courts in South Africa are the first line of recourse for judicially mediated legal disputes, we suggest that the efficiency of magistrates courts are the most important indicators of judicial efficiency. The first two measures are based on the number of magistrates' bench hours spent per criminal or civil case during the course of a calendar year. While a high score on the index may be taken to indicate that the courts deliberate with great care on the decisions that are reached, it also implies that the costs of litigation are likely to be high, thus raising the barriers to proper enforcement of property rights. It is in the latter sense that we employ the index. Figure 6 illustrates the two measures of what we term the "efficiency" of the magistrate court system in South Africa.

We present two alternative indicators of judicial activity. The first is the number of magistrates court criminal and civil cases per unit of population, and the second the number of magistrates court criminal and civil cases per unit of GDP. These are presented in Figures 7 and 8 respectively.

The three sets of indicators show similar patterns. All show a marked rise in the number of criminal and civil cases per bench hour, per population unit and real GDP unit over the 1945-60 time frame. All remain in a narrow, constant band over the remaining time period, to 1996.

If the indicators are plausible proxies for institutional efficiency, therefore, there is a suggestion of improving efficiency in the post war era, while the post-1960 period has seen little alteration in the efficiency of rights enforce-

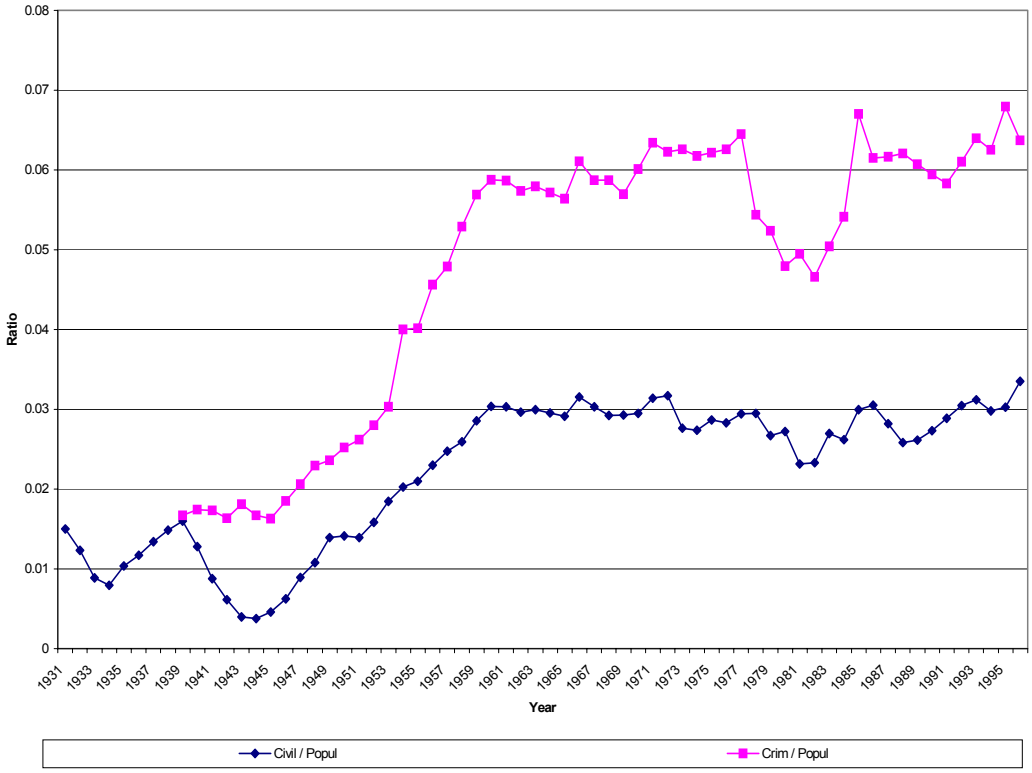

Figure 6: Enforceability Index Based on Criminal and Civil Cases

ment mechanisms.

6 An Index of Political Instability

While the South African state has been subject to relatively unique time paths in both property rights and politico-civil rights, it has also been (perhaps precisely because of its rights structure) subject to ongoing, systematic challenges to its legitimacy, with the consequence of recurrent phases of instability.

In order to control these sources of political instability, the South African state over time introduced increasingly repressive legislation. These have already been detailed in connection with the rights indexes outlined above.

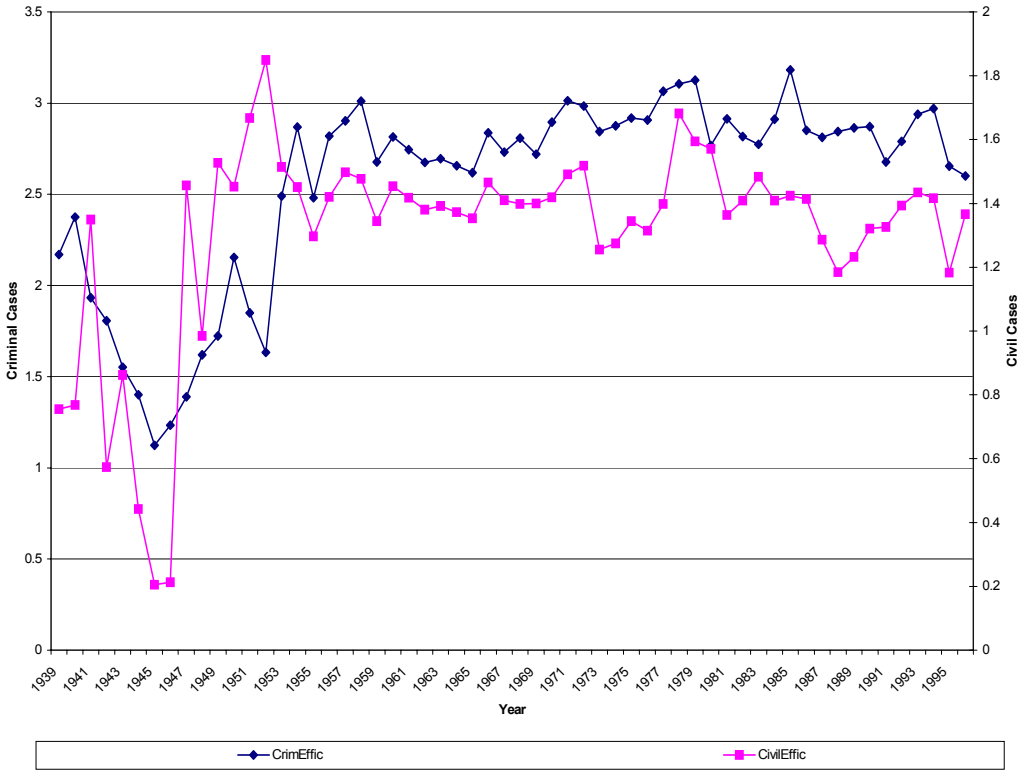

Figure 7: Magistrates' Criminal/Civil Cases Per Population Unit

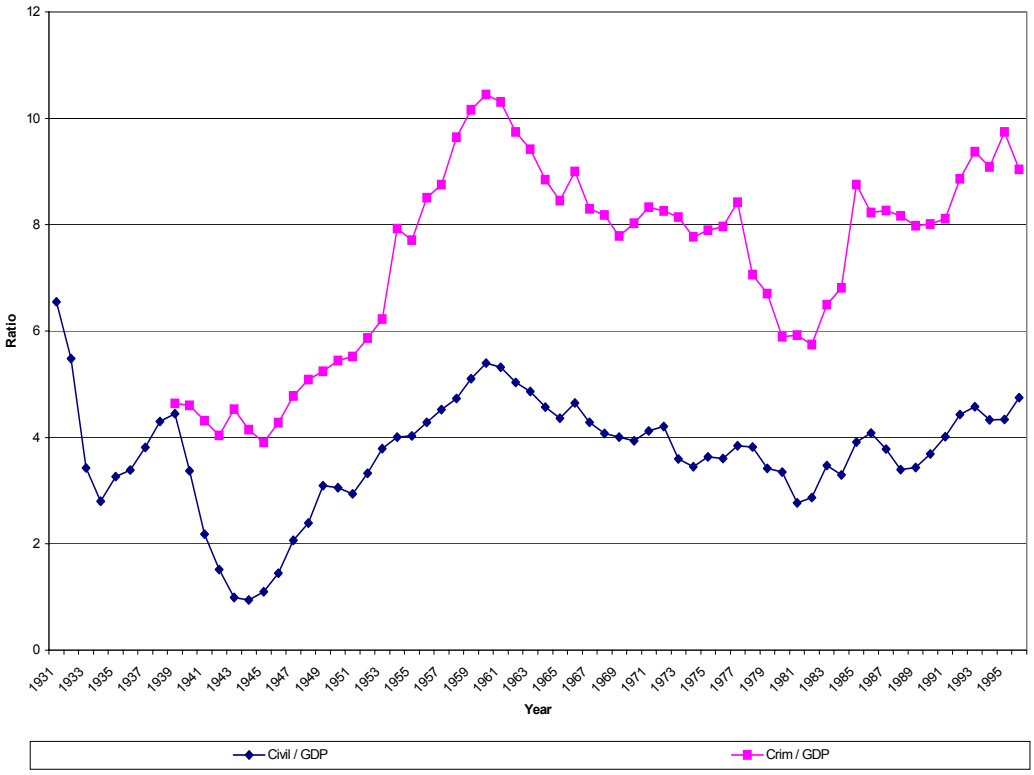

Figure 8: Magistrates' Criminal/Civil Cases per Real GDP Unit

The useful corollary is that periods of instability are directly observable in terms of the number of prosecutions undertaken in terms of the legislation designed in order to act as vehicles of repression. It is this observation that informs the identification of the majority of the components of the instability index.

An important modulation on this methodology is necessary during the course of the 1980's, in which repression of dissent increasingly took the form of extra-judicial intervention (such as detention, political assassination, disappearances, etc.). Fortunately the South African Institute of Race Relations maintained a careful monitoring exercise, particularly of detention without trial, and we made extensive use of this resource.

The political instability index thus also serves to separate the formal de jure political and civil rights from their de facto realization. The latter index is constructed on the basis of official and unofficial sources, which we place in a weighted composite index of instability in accordance with alternative weightings. The series contain the following components:

1. The number of prosecutions under the Defence Acts,[25] and Emergency regulations.[26]

2. The number of prosecutions for "faction fighting".[27]

3. The number of people proscribed and/or banned under the Suppression of Communism Act 1951.[28]

4. The number of people placed in detention.[29]

5. The number of political fatalities.[30]

[25] This is most relevant to the 1935-50 period.

[26] This is most relevant to the Second World War period.

[27] Published annually by the CSS, for the pre-1950 period.

[28] These figures were published annually by the Minister of Justice.

[29] While figures for detentions are either not published officially or the official figures are unreliable, the South African Institute of Race Relations Survey provides estimates of detentions particularly during the 1980's, during which time official statistics are particularly poor.

[30] While figures for detentions are either not published officially or the official figures are unreliable, the South African Institute of Race Relations Survey provides estimates of detentions particularly during the 1980's, during which time official statistics are particularly poor. This component is particularly relevant to circumstances prevailing in the Kwa-Zulu-Natal area.

6. The number of organizations officially banned.

7. The number of actions against "riots".

8. Declarations of official states of emergency.

9. The number of publications subjected to censorship.

Given the uncertainty surrounding the appropriate weighting of the components of the repression series, we presented a number of different weightings to a panel of South African experts drawn from a range of disciplines.[31] We present the three weightings considered in Figures 9, 10, and 11.

Their consensus is the index given by Figure 11. The implication is that the peaks of repressive activity in South Africa occur during the 1964, 1976 and mid-1980 periods of strong oppositional activity against the Apartheid system.

7 An Index of Political Fractionation

We construct an additional series to capture the nature of the political system for South Africa. We construct a political fractionation index that measures the probability that two randomly chosen parliamentarians from the South African legislature belong to different parties. The measure is constructed as:

$$F = 1 - \sum_{i=1}^{n} \left(\frac{n_i}{N}\right)\left(\frac{n_i - 1}{N - 1}\right) \tag{1}$$

where n_i denotes the number of members of the legislature who belong to the $i'th$ party, N denotes the number of members of the legislature. F then computes the probability that two randomly selected members of parliament will belong to separate parties. The Parliamentary Research Office kindly provided data.

Figure 12 reports the Political Fractionation Index. Needless to say we recognize that the South African legislature was a distorted representation of political interests in South Africa over the 1910-94 period. Nevertheless, what is noticeable is that political fractionation even in the limited franchise

[31] We chose leading authorities in political science, sociology, law, economic history, and history.

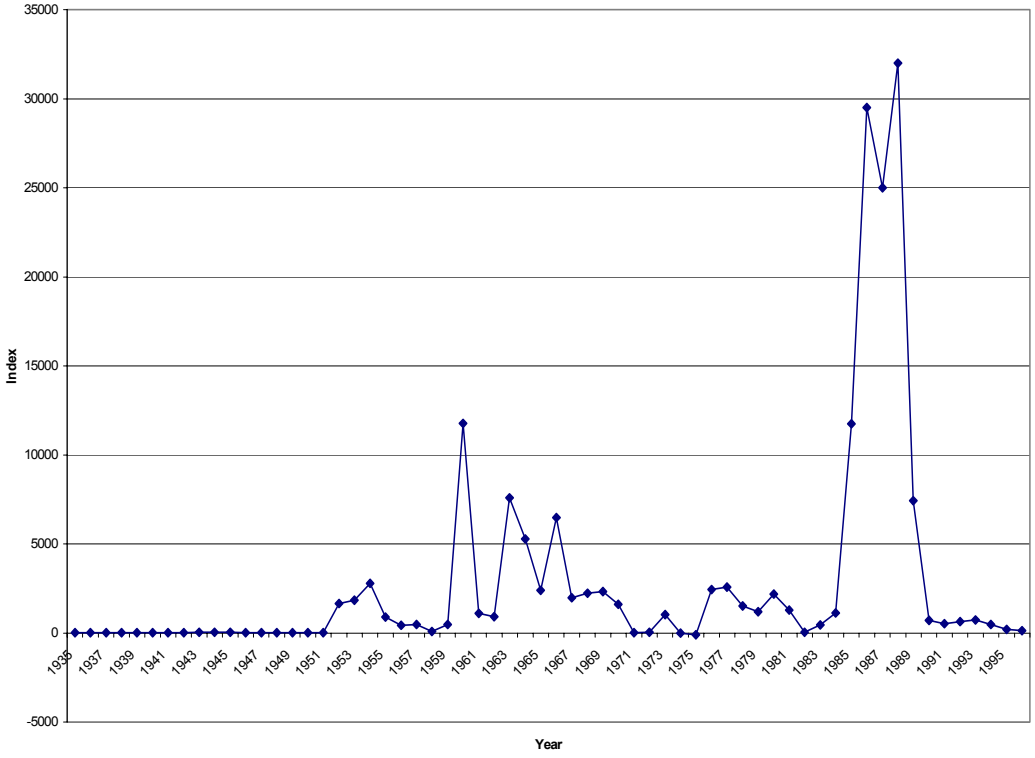

Figure 9: Political Instability Index - Weighting 1

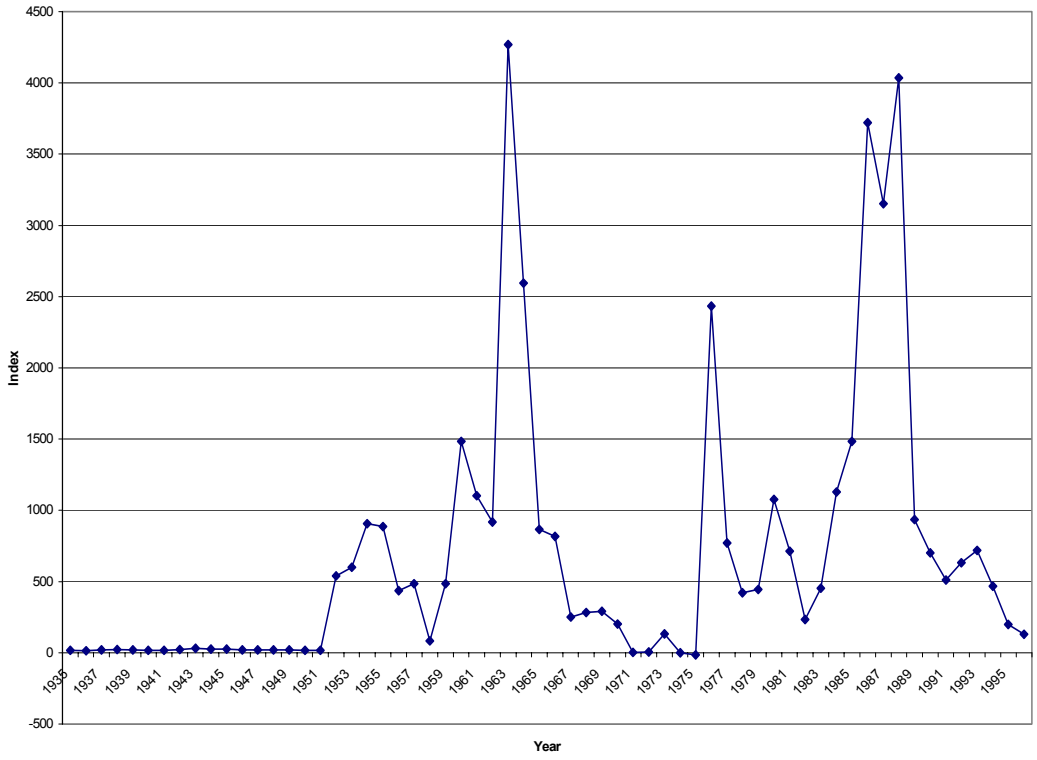

Figure 10: Political Instability Index - Weighting 2

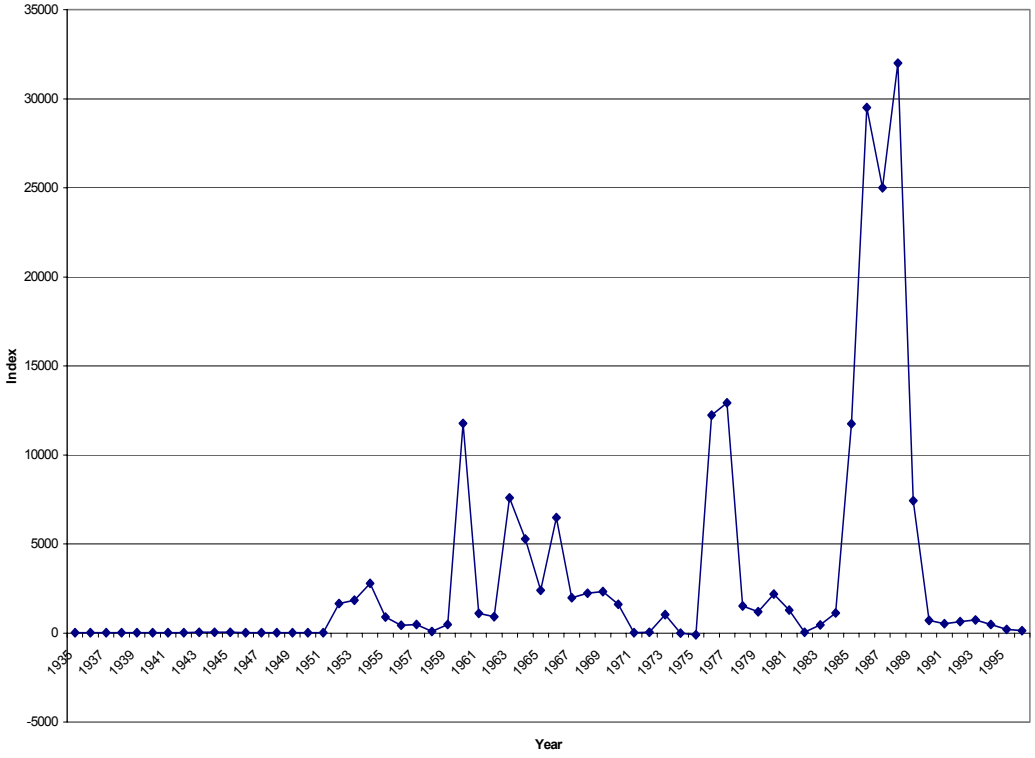

Figure 11: Political Instability Index - Weighting 3

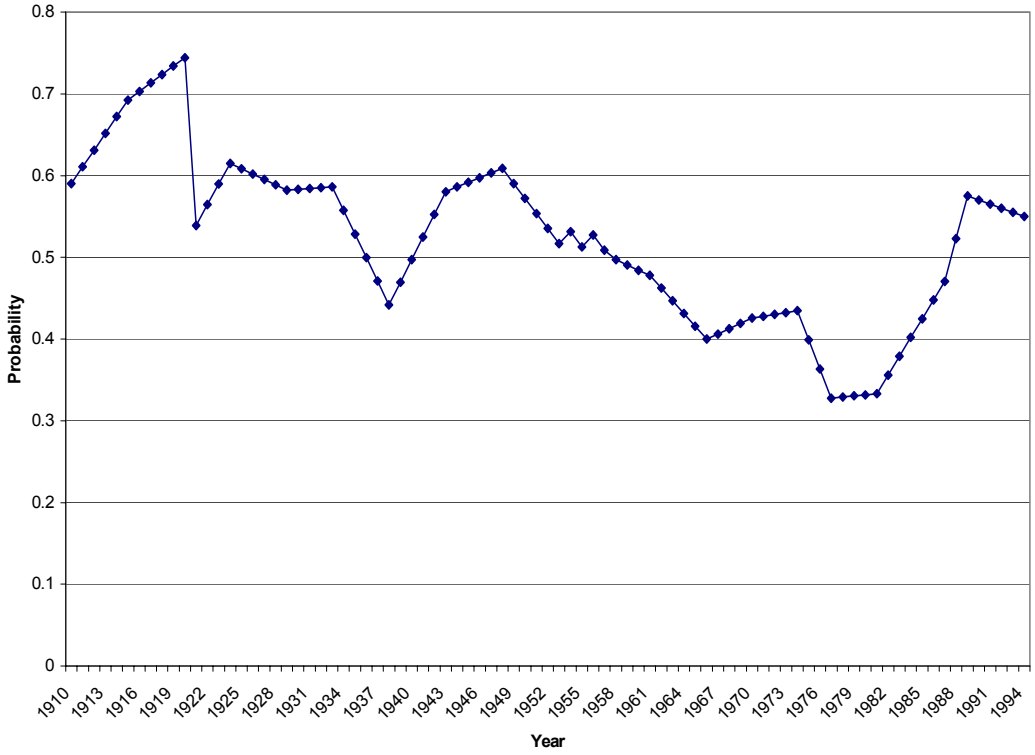

Figure 12: Political Fractionation Index

legislature declined over the course of the twentieth century since the formation of the Union, until approximately the same time point at which the political liberties index in South Africa begins its improvement. The coincidence is perhaps suggestive of the feasibility of maintaining political liberty under a legislature that is not sufficiently differentiated.

8 Comparison of the Series

While we recognize that the South African legislature was a distorted representation of political interests in South Africa over the 1910-94 period, comparison of the three indexes for property rights, political & civil freedoms, and the political fractionation index is suggestive. Figure 13 illustrates. In

particular the implications are that:

1. While the decline in political and civil liberties was more severe than that in the property rights index over the 1945-80 period, both series follow a similar pattern, particularly in the rise in the rights index in the post-1980's series. We emphasize that the two series were constructed entirely independently of one another.

2. Perhaps more surprisingly, the pattern generated by the political fractionation index is again broadly similar to that of the two rights indexes.[32]

3. The similarity between the three series is borne out by the correlation matrix, reported in Table 1. The correlations between the political rights index (PolFree), the political fractionation index (PolFrac), and the property rights index (Propert) are all not only high (0.77, 0.83) but statistically significant at less than the 1% level. The correlation between property rights and political fractionation is somewhat lower (0.48), but remains statistically significant.

The correlation between the political rights and the political fractionation measures suggests that even under the partial system of representation in South Africa, repressive political developments emerged only where political diversity was successfully suppressed.

For the purposes of comparison, the Freedom House rights measures are included in the correlation matrix (though the number of observations for these measures is far smaller than for our newly constructed indexes). First, the Freedom House Political Rights index (PolRigt(FH)), appears to be poorly correlated with all other variables introduced for this study. Indeed, the only exception is the statistically significant association with the Freedom House civil liberties index (CivLib(FH)). By contrast the CivLib(FH) variable correlates strongly with our new measure of political rights, PolFree, (0.90, statistically significant at less than the 1% level), and emulates the high correlation of the new rights measure with the PolFrac and Propert variables (0.69, 0.72, both significant at the 1% level). The implication is

[32]It should be noted that the fractionation indexes is interpolated between election years. This generates ongoing change in a series that strictly speaking was constant between election years. The reasoning behind the data transformation is that the underlying social changes that generate the electoral change are likely to be continuous rather than discrete.

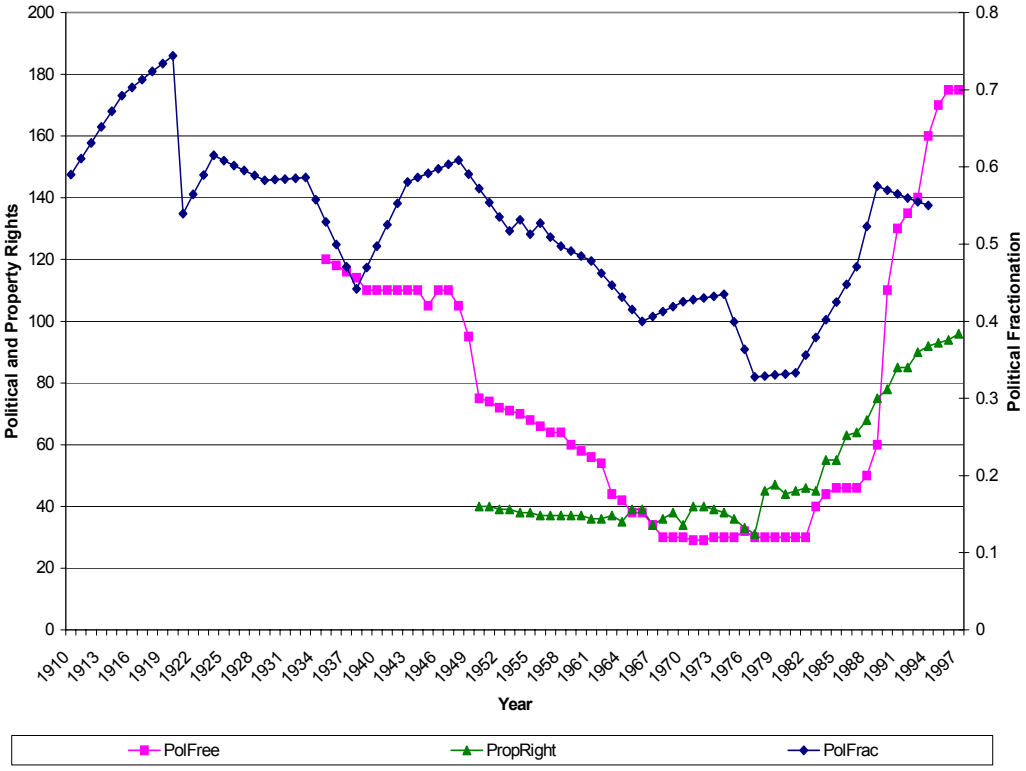

Figure 13: Freedoms, Rights and Fractionation Indexes

	PolFrac	PolFree	PolRigt (FH)	CivLib (FH)	Instabil	Propert	CivCas	CrmCas
PolFrac	1							
PolFree	0.77** (0.00)	1						
PolRigt (FH)	−0.02 (0.92)	0.51 (0.23)	1					
CivLib (FH)	0.69** (0.00)	0.90** (0.00)	0.71* (0.02)	1				
Instabil	−0.03 (0.85)	−0.20 (0.28)	−0.18 (0.66)	−0.37 (0.13)	1			
Propert	0.48** (0.00)	0.83** (0.00)	0.28 (0.94)	0.72** (0.00)	0.10 (0.22)	1		
CivCas	−0.37* (0.01)	−0.24 (0.49)	−0.25 (0.86)	−0.40 (0.32)	−0.28* (0.03)	−0.31 (0.16)	1	
CrmCas	−0.30 (0.06)	−0.27 (0.41)	−0.16 (0.37)	−0.35 (0.52)	0.11 (0.60)	−0.03 (0.40)	0.36* (0.04)	1
Patent	−0.63** (0.00)	−0.33** (0.00)	0.20 (0.72)	0.48 (0.12)	0.21 (0.08)	0.65** (0.00)	−0.30 (0.12)	0.24* (0.02)

Table 1: Correlation Coefficients. Figures in parentheses denote probability levels. * denotes significance at the 5, and ** at the 1 percent level.

thus that our new political freedom measure is substantially similar to that of the Freedom House civil liberties measure - though it has the immediate advantage of being available for a much longer time-span than is the Freedom House data (1935-97).

We note this result with some degree of satisfaction. The reason stems from Bollen's (1992) assessment of alternative rights measures, which explicitly assesses the Freedom House indexes for adequacy. The assessment he provides is that the Freedom House political Rights variable focuses on political liberties narrowly conceived, while the civil liberties indicator has far broader conception, with a more inclusive definition of rights. In this sense therefore, we suggest that our freedom index has successfully captured the broad definition of the rights structure of South Africa that we set out to achieve. Moreover, the Freedom House political rights variable is assessed by Bollen (1992:204) as being contaminated, by virtue of containing elements of what we here treat as the separate dimension of political fractionation, as well as foreign control and literacy. In this sense our new freedom index appears to have identified the relatively purer series.

We also note with satisfaction that the political instability index included in the study (Instabil) is indeed orthogonal to all of the rights measures

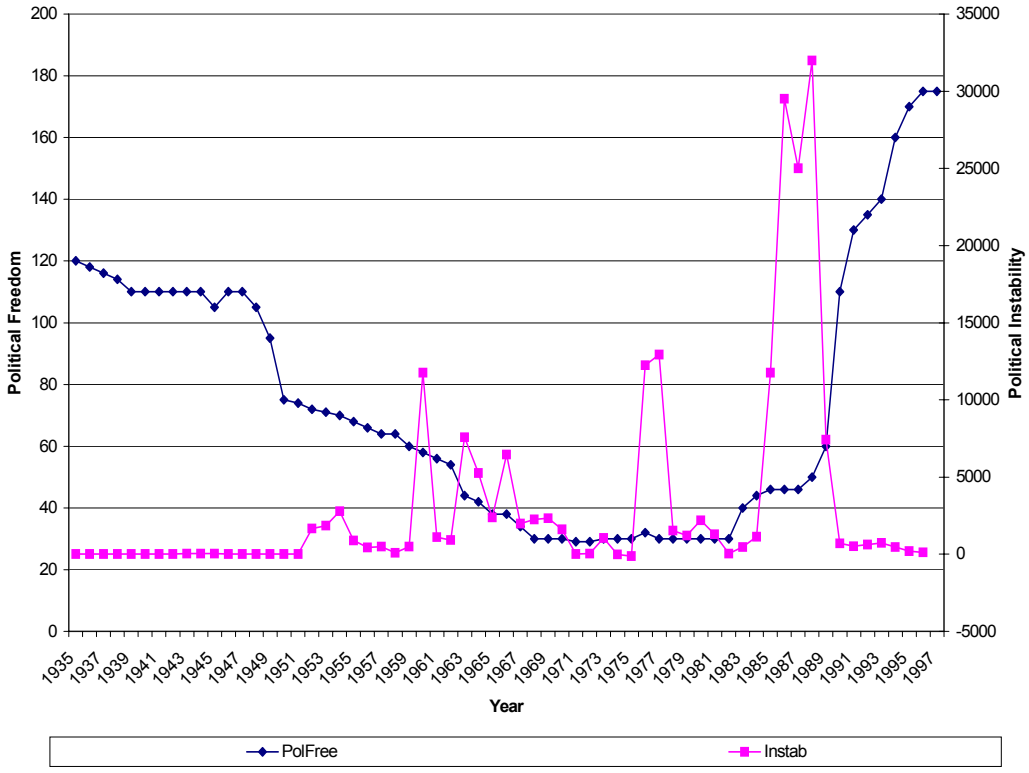

Figure 14: Political Freedom and Political Instability

deployed - the PolFree variable, the Freedom House Measures, as well as the Propert variable - as well as the political fractionation measure, and the efficiency of the judiciary measures. This is evident from Figure 14.

The property rights index, Propert shows a relatively high correlation with the proxy suggested for intellectual property rights, Patent, (0.65, statistically significant at the 1% level). Interestingly, however, both political liberties and political fractionation show a significant negative correlation with patent registrations.

The two proxies for the efficiency of property rights enforcement show little correlation with any other variables (though they are correlated amongst themselves).

9 Conclusions

This paper has assembled a number of new data series for future analysis. In particular, we have obtained:

- An index of political freedom over the 1935-97 period.
- An index of immovable property rights over the 1950-97 period.
- A number of alternative measures of intellectual property rights
- An index of the efficiency of the institutions responsible for the enforcement of rights over the 1939-97 period.
- An index of political instability over the 1935-97 period.
- An index of political fractionation over the 1910-94 period.

The focus of the present paper has been to identify the methodology employed in the construction of each of the indexes, and to establish a first comparison between the individual series.

In the latter regard we note that while the political freedom and the property rights indexes are strongly correlated, both are unambiguously orthogonal to the index of political instability. This conforms to the accepted standards of rights index construction, in particular those enumerated by Bollen in his many contributions on the subject. In this sense, therefore, we have some confidence in the quality of the series here advanced.

Not all of the series here presented deserve equal confidence, of course. We have noted in our discussions the limitations that attach to all subjective measures of rights, though we also suggested that such limitations have been minimized as far as possible by our methodology.

However, the intellectual property rights measures here advanced are subject to ambiguity not because the proxies used are subjective indexes, but because they represent indirect measures of the true variable of interest. Similarly, the measures of institutional efficiency proposed are subject to alternative interpretations, and as such may generate ambiguous results when employed for estimation.

Nevertheless, we take comfort from the fact that the panel of independent experts consulted on the data series, have given broad approval for the final

series here presented, in the light of the proposed adjustments to the initial series presented.

Comparison of the series here constructed also raises some suggestive substantive questions. First, the correlations reported in Table 1 suggest a number of associations notable either for their statistical significance and strength, or the absence thereof. The question we raise in this regard is as to the significance of such presence or absence, and what the likely theoretical explanations of such associations might be. Since the present study has provided a number of indexes, allowing for a differentiation between various conceptually distinct aspects of South Africa's rights structure, a particular concern here is the question of what the relationship (if any) between various aspects of agents' rights might be. Are rights ultimately indivisible, such that improved property rights are only feasible under improved political rights, and vice versa, or are the two types of rights independent, such that autocracy may accompany sound rights in property? Is it really the case that political instability stands in no relation to the quality of political freedoms, and if so, what does drive political agitation? We also note that the provision of the time series in this study provide the means of a considerably more detailed time series investigation of the propositions that have emerged around modernization theory.

Such questions and others are beyond the scope of the current expositional study, and must remain for a subsequent study. We hope that the series be employed in subsequent estimation and further empirical research.

10 Appendix 1: Freedom House political rights and civil liberties correlations

Note: By - we denote cases for which no variation occurs in the rights indexes over the full sample period (1973-1996). While the absence of variation precludes the computation of a correlation coefficient, this does not imply the absence of an association. For virtually all cases (the exception is Honduras - where the problem arises due to a constant civil liberties ranking of 3 on the index through the in-sample period), this occurs for countries with the highest possible Freedom House rights ranking.

C0ountry	r	Country	r	Country	r
Algeria	+0.71	Haiti	+0.71	Nigeria	+0.78
Angola	+0.71	Honduras	-	Norway	-
Argentina		Iceland	-	Pakistan	+0.28
Australia	-	India	+0.46	Panama	+0.77
Austria	-	Indonesia	+0.44	Paraguay	+0.80
Bangladesh	+0.60	Iran	-0.02	Peru	+0.77
Belgium	-	Ireland	-	Philippines	+0.73
Bolivia	+0.87	Israel	-0.48	Portugal	+0.82
Brazil	+0.64	Italy	-0.09	Rwanda	-0.16
Cameroon	-0.15	Jamaica	+0.39	Senegal	+0.41
Canada	-	Japan	-0.04	Sierra Leone	+0.75
Chile	+0.97	Jordan	+0.97	Singapore	+0.40
China	+0.94	Kenya	+0.62	South Africa	+0.71
Colombia	+0.56	Korea	+0.94	Spain	+0.89
Costa Rica	-	Libya	+0.59	Sri Lanka	+0.94
Cote d'Ivoire	+0.02	Luxembourg	-	Sudan	+0.90
Cyprus	+0.91	Madagascar	+0.56	Sweden	-
Denmark	-	Malawi	+0.70	Switzerland	-
Dominican Republic	-0.41	Malaysia	+0.21	Thailand	+0.49
Ecuador	+0.80	Mali	+0.90	Trinidad & Tobago	+0.62
Egypt	+0.25	Malta	+0.83	Tunisia	+0.16
El Salvador	+0.40	Mauritius	+0.04	Turkey	+0.76
Ethiopia	+0.57	Mexico	-0.23	Uganda	+0.80
Finland	+0.91	Morocco	+0.45	UK	-
France	-	Mozambique	+0.56	USA	-
Ghana	+0.83	Netherlands	-	Uruguay	+0.96
Greece	+0.78	New Zealand	-	Venezuela	+0.53
Guatemala	+0.71	Nicaragua	+0.66	Zaire	+0.05
				Zambia	+0.79
				Zimbabwe	+0.17

Table 2:

References

Alesina, A., and Perotti, R., 1993, Income Distribution, Political Instability, and Investment, *NBER Working Paper No.4486.*

Alesina, A, and Tabellini, G., 1989, External Debt, Capital flight and Political Risk, *Journal of International Economics*, 27, 199-220.

Annual Survey of South African Law (all editions from 1947 - 1946)

Banks, A.S., 1971, *Cross-Polity Time Series Data*, Cambridge MA: MIT Press.

Banks, D.L., 1992, New Patterns of Oppression: An Updated Analysis of Human Rights in T.B.Jabine and R.P.Claude (eds.), *Human Rights and Statistics*, University of Pennsylvania Press, Philadelphia, 364-91.

Banks A.S., and Textor, R.B., 1963, *A Cross-Polity Survey*, Cambridge MA: MIT Press.

Barro, R.J., 1991, Economic Growth in a Cross Section of Countries, *Quarterly Journal of Economics*, 106: 407-43.

Barro, R.J., 1994, Democracy and Growth, *NBER Working Paper No. 4909.*

Bilson, J.F.O., 1982, Civil Liberty - an econometric investigation, *Kyklos*, 35, 94-114.

Bollen, K.A., 1979, Political Democracy and the Timing of Development, *American Sociological Review*, 44, 572-87.

Bollen, K.A., 1990, Political Democracy: Conceptual and Measurement Traps, *Studies in Comparative International Development*, Spring, Vol. 25, 7-50.

Bollen, K.A., 1992, Political Rights and Political Liberties in Nations: An Evaluation of Human Rights Measures, 1950 to 1984, in T.B.Jabine and R.P.Claude (eds.), *Human Rights and Statistics*, University of Pennsylvania Press, Philadelphia, 1992, 188-215.

Bollen, K.A., and Jackman, R.W., 1985, Political Democracy and the Size Distribution of Income, *American Sociological Review*, 50, 438-57.

Borner, S., Brunetti, A., and Weder, B., 1995, *Political Credibility and Economic Development*, New York: St. Martin's Press.

Blum, P. (1950) *Union Native Policy as Reflected in Government Legislation and Publications , 1910 - 1948. A Bibliography.* University of Cape Town School of Librarianship, Cape Town.

Burkhart, R.S., and Lewis-Beck, M.S., 1994, Comparative Democracy: The Economic Development Thesis *American Political Science Review*, 88(4), 903-910.

Carter, A. (1991) *The Philosophical Foundations of Property Rights*, Harvester Wheatsheaf, New York.

Clarke, G.R.G., 1995, More evidence on income distribution and growth, *Journal of Development Economics*, 47: 403-27.

Coleman, J.S., 1960, Conclusion: The political systems of the developing areas, in G.A.Almond and J.S.Coleman (eds), *The Politics of Developing Areas*, Princeton: Uiversity Press.

Coleman, J.S., 1988, Social Capital in the Creation of Human Capital, *American Journal of Sociology*, 94(Supplement), S95-S120.

Coleman, J.S., 1990, *Foundations of Social Theory*, Cambridge Mass.: The Belknap Press of Harvard University Press.

Connolly, W.E., 1983, *Terms of Political Discourse*, 2'nd edition, Princeton: University Press.

Cutright, P., 1963, National political development: measures and analysis, *American Sociological Review*, 28, 253-64.

Dahl, R.A., 1971, *Polyarchy: participation and opposition*, New Haven: Yale University Press.

Diamond, L., 1992, Economic Development and Democracy Reconsidered, *American Behavioural Scientist*, 35(4/5); 450-99.

Dugard, John (1978) *Human Rights and the South African Legal Order*, Princeton University Press, Princeton, N.J.

Fedderke, J.W., 1997, Political and Social Dimensions of Economic Growth, *Theoria*, 89, 1-42.

Fedderke, J.W., De Kadt, R.H.J., and Luiz, J.M., 1999, Economic Growth and Social Capital: A Critical Reflection, *Theory and Society*, forthcoming.

Fedderke, J.W., and Klitgaard, R.E., 1996, Economic Growth and Social Indicators: An Exploratory Analysis, *City University: Department of Economics and Applied Econometrics Research Unit Discussion paper No. 45.*

Fedderke, J.W., and Klitgaard, R.E., 1998, Economic Growth and Social Indicators, *Economic Development and Cultural Change*, 46(3), 455-90.

Freedom House, various editions, *World Survey of Political Rights and Civil Liberties.*

Freedom House, 1996, *World Survey of Economic Freedom 1995-96*, edited by R.E.Messick, New Brunswick: Transaction Publishers.

Fukuyama, F., 1995a, The Primacy of Culture, *Journal of Democracy*, 6(1), 7-14.

Fukuyama, F., 1995b, *Trust: The Social Virtues and the Creation of Prosperity*, London: Hamish Hamilton.

Gallie, W.B. 1955-6, Essentially Contested Concepts, *Proceedings of the Aristotelian Society*, Vol. 56.

Gastil, R.D., 1978, *Freedom in the World: Political Rights and Civil Liberties 1978*, New York: Freedom House.

Grier, K.B., and Tullock, G., 1989, An Empirical Analysis of Cross-National Economic Growth, 1951-80, *Journal of Monetary Economics*, 24, 259-76.

Gwartney, J.D., Lawson, R., and Block, W., 1996, *Economic Freedom of the World: 1975-95*, The Fraser Institute.

Helliwell, J.F., 1992, Empirical Linkages between Democracy and Economic Growth, *NBER Working Paper No. 4066.*

Hewitt, C., 1977, The effect of political democracy and social democracy on equality in industrial societies: a cross national comparison, *American Sociological Review*, 42, 450-64.

Inglehart, R., 1998, *Modernization and Postmodernization: Cultural, Economic and Political Change in 43 Societies*, forthcoming.

Knack, S., and Keefer, P., 1995, Institutions and Economic Performance: Cross-Country Tests Using Alternative Institutional Measures, *Economics and Politics*, 7(3), 207-27.

Kormendi, R.C., and Meguire, P.G., 1985, Macroeconomic Determinants of Growth: Cross-Country Evidence, *Journal of Monetary Economics*, 16, 141-63.

Landes, D.S., 1990, Why Are We So Rich and They So Poor?, *American Economic Review*, 80(2), May, 1-13.

Lerner, D., 1958, *The passing of traditional society*, Glencoe: Free Press.

Lewis, C. (1984) 'The Modern Concept of Ownership of Land',

Lipset, S.M, 1959, Some social requisites of democracy, *American Political Science Review*, 53, 69-105.

Londregan, J.B., and Poole, .T., 1990, Poverty, the Coup Trap, and the Seizure of Executive Power, *World Politics*, 42, 151-83.

Marsh, R.M., 1979, Does Democracy Hinder Economic Development in the Latecomer Developing nations? *Comparative Social Research*, 2, 215-48.

Mathews, A.S., 1971, *Law, Order And Liberty in South Africa*, Juta and Co., Johannesburg and Cape Town.

Mathews, A.S., 1978, *The Darker Reaches of Government: Access to information about public administration in three societies*, Juta and Co., Johannesburg and Cape Town, 1978.

Muller, E.N., 1988, Democracy, Economic Development, and Income Inequality, *American Sociological Review*, 53, 50-68.

North, D.C, 1981, *Structure and Change in Economic History*, New York: Norton.

North, D.C., 1990, *Institutions, Institutional Change and Economic Performance*, Cambridge: University Press.

North, D.C., and Thomas, R.P., 1970, *An Economic Theory of the Growth of the Western World*, The Economic History Review, 23(1), 1-17.

North, D.C., and Thomas, R.P., 1973, *The Rise of the Western World*, Cambridge: University Press.

Olson, M., 1963, Rapid Growth as a Destabilizing Force, *Journal of Economic History*, 23, 529-52.

Olson, M., 1982, *The Rise and Decline of Nations*, New Haven and London: Yale University Press.

Olson, M., 1987, Economic Nationalism and Economic Progress, *The World Economy*, 10(3), 241-64.

Olson, M., 1988, The Productivity Slowdown, The Oil Shocks, and the Real Cycle, *Journal of Economic Perspectives*, 2(4), 43-69.

Olson, M., 1993, Dictatorship, Democracy, and Development, *American Political Science Review*, 87(3), 567-76.

Olson, M., 1996, Big Bills Left on the Sidewalk: Why Some Nations are Rich, and Others Poor, *Journal of Economic Perspectives*, 10(2), 3-24.

Ozler, S., and Tabellini, G., 1991, External Debt and Political Instability, *NBER Working Paper No. 3772.*

Papanek, G.F., and Kyn, O., 1986, The Effect on Income Distribution of Development, the Growth Rate and Economic Development, *Journal of Development Economics*, 23, 55-65.

Persson, T., and Tabellini, G., 1994, Is Inequality Harmful for Growth? *American Economic Review*, 84(3), 600-21.

Putnam, R.D., 1995, Bowling Alone: America's Declining Social Capital, *Journal of Democracy*, 6(1), 65-78.

Rose-Innes, Rt. Hon. Sir James., 1931, Speech, City Hall, Cape Town 28 January 1931, in *Native Disabilities in South Africa, Non Racial Franchise Association and Joint Council of Europeans and Bantu*, Capetown.

Sirowny, L., and Inkeles, A., 1990, The Effects of Democracy on Economic Growth and Inequality: A Review, *Studies in Comparative International Development*, 25(1), 126-57.

Scully, G.W., 1988, The Institutional Framework and Economic Development, *Journal of Political Economy*, 96(3), 652-62.

Scully, G.W., 1992, *Constitutional Environments and Economic Growth*, Princeton: University Press.

Theil, H., 1979, The Positive Correlation of Affluence and Freedom, *Economics Letters*, 2, 295-7.

Venieris, Y.P, and Gupta, D.K., 1986, Income Distribution and Sociopolitical Instability as Determinants of Savings: A Cross-sectional Model, *Journal of Political Economy*, 94(4), 873-83.

Weede, E., 1983, The Impact of Democracy on Economic Growth: Some Evidence from Cross-National Analysis, *Kyklos*, 36, 21-39.