



# **Measuring Institutions: The Zimbabwe Case**

Farayi Gwenhamo<sup>1</sup>, Johannes Fedderke<sup>2</sup> and Raphael de Kadt<sup>3</sup>

**Working Paper Number 112**

---

<sup>1</sup> School of Economics, University of Cape Town

<sup>2</sup> School of Economics and Economic Research Southern Africa, University of Cape Town

<sup>3</sup> Department of Politics, University of Kwa-Zulu-Natal

# Measuring Institutions: The Zimbabwean Case

Farayi Gwenhamo\*, Johannes Fedderke† and Raphael de Kadt‡

December 17, 2008

## Abstract

The current, persistent growth problem in Zimbabwe is often attributed to poor economic and political institutional frameworks characterised by insecure property rights and an unreliable rule of law. An empirical test of this hypothesis presents some methodological difficulties. Although political scientists have been constructing measures of social and political dimensions of societies for some time, such measures are not available over sufficiently long time runs to inspire confidence in their usefulness in being able to address the long-run and dynamic questions that arise when linking economic performance and institutions. The aim of the paper is to assemble a new set of political and economic institutional indicators for Zimbabwe covering the period 1946 to 2005. While the new indices span for a significantly long time period, they are highly correlated with existing, widely used institutional indices produced by the Freedom House, the Heritage Foundation and the Fraiser Institute. The new data set will contribute towards understanding the institutional dimension of Zimbabwe's persistent economic decline.

## 1 Introduction

Since the late 1990s, the Zimbabwean economy has been grappling with a state of rapid and continuous socio-economic deterioration. *Per capita* annual Gross Domestic Product (GDP) has been declining continuously at an annual average rate of 6.2% since 1999 (see table 1). Although the country experienced episodes of negative growth between 1964 and 1995, none of the recessions were as persistent as the current recession that started in 1999 (see figure 1). Accompanying the poor growth rate is a continuously worsening hyper-inflationary environment. The inflation rate hiked from 65% in 1999 to 240% in 2005. Domestic and foreign investment also fell rapidly. For instance, the net foreign direct investment (FDI) declined from its historically high level of US\$444 million in 1998 to an annual average of below US\$150 million in the subsequent years. In addition, the gross fixed capital formation (GFCF) fell from an annual average rate of 20% in the 1990s to 15% in 2005.

**[Insert table 1 about here]**

A variety of factors ranging from unfavourable climatic conditions<sup>1</sup> to policy-related macroeconomic imbalances<sup>2</sup> have been offered to account for Zimbabwe's persistent growth problem. However, there is a view that the weak economic and political institutional framework characterised by insecure

---

\*School of Economics, University of Cape Town

†School of Economics and Economic Research Southern Africa, University of Cape Town

‡Department of Politics, University of KwaZulu-Natal

§We would like to thank the participants at the 2008 Ronald Coase Philippines Conference on Institutional Analysis and the 2008 ERSMA Macroeconomic Workshop on Institutions and Growth for their valuable comments. The usual disclaimer applies.

<sup>1</sup>The droughts in 1983, 1986, 1992, 1995 and 2001 to 2002 resulted in a contraction of the agricultural sector with negative implications for the overall economic performance.

<sup>2</sup>Since independence, the government's expansionary fiscal policy has resulted in a destabilising government deficit, excessive foreign debt and inflationary pressures.

property rights and an unreliable rule of law is at the centre of the persistent growth problem.<sup>3</sup> This view accords well with the New Institutional Economics (NIE) literature which argues that strong economic and political institutions are fundamental ingredients for good economic performance.

**[Insert Figure 1 about here]**

Institutions are defined along a wide continuum but North's (1990) view of institutions has become widely accepted. North (1990) defines institutions as rules of the game or humanly devised formal and informal constraints shaping human interaction in political and economic activities. In contrast to the traditional growth theories which focused on capital accumulation and technological innovation as the major determinants of economic growth, the NIE emphasise the importance of property rights protection, contract enforcement and the rule of law.<sup>4</sup>

In light of the above, an understanding of the determinants of long-term economic outcomes in Zimbabwe is important. While investigating the role of macroeconomic and geographical factors is not a major challenge, testing the hypothesis of the long-term link between economic outcomes and institutions does present methodological difficulties. The difficulties arise because there is no universally agreed way of measuring institutions. Furthermore, most existing empirical indices measuring institutions have limited time coverage, thus limiting their usefulness in country-specific studies.

The purpose of this paper is therefore to evaluate the nature of both political and economic institutions in Zimbabwe for the period 1946 to 2006. This will be achieved by constructing indicators of formal or *de jure* property rights and political freedoms. In addition, we also build a *de facto* political instability index covering the period 1950 to 2006. The resulting database enables the testing of several hypotheses on the long-term link between institutions and economic outcomes.

The lengthy time period is chosen following the suggestion by Kaufman and Mastruzzi (2003) that the likelihood of observing significant changes over time in institutional variables increases substantially with the length of time under consideration. We will also undertake a comparative analysis of the institutional structures in Zimbabwe and South Africa. This will be done using the data set for Zimbabwe constructed in this paper and the data set for South Africa constructed in Fedderke *et al.* (2001).

The rest of the paper is organised as follows. Section two outlines the theoretical framework. This is followed by the literature review on the measurement of institutions and the link between economic performance and institutions in section three. Section four details the empirical methodology for constructing the *de jure* property rights and political freedom indices. In sections five and six, the empirical methodology is applied to the construction of *de jure* political freedom and property rights indices for Zimbabwe respectively. Section seven presents the construction of a *de facto* political instability index. Section eight presents a comparative analysis and section nine concludes the paper.

## 2 Theoretical Framework

North (1990) offers a useful framework for considering both the measurement of institutions and the impact of institutions on economic outcomes. North views the institutional framework as comprising both formal and informal constraints governing economics and politics. There exists a continuum with unwritten taboos, customs and traditions at the one end of the continuum and constitutions and formal laws governing economics and politics at the other end. In the absence of formal rules, a dense social network leads to the development of customs, laws, trust and normative rules that constitute an informal institutional framework.

The relationship between the formal rules and informal constraints is very complex and not clearly understood (North, 2005). As such, the combined effects of formal and informal institutions on economic outcomes are also not very clear. North however remarked that the way in which the

---

<sup>3</sup>See, for example, the arguments in Richardson (2005a, 2005b) and Bates (2006).

<sup>4</sup>North and Thomas (1973), North (1990), Acemoglu, Johnson and Robinson (2001, 2004).

economic and political interactions take place depends not only on the formal rules and informal constraints defining the incentive structure but also on the effectiveness of the enforcement of the rules. Therefore, institutions are weak when sub-optimal rules are enacted and/or when optimal rules are poorly enforced.

On the link between institutions and economic outcomes, the NIE emphasise the need to start with democratic political institutions and other checks and balances on the government as a mechanism for securing property rights.<sup>5</sup> Once such institutions are in place, investment in human and physical capital and therefore economic growth are expected to follow. The Hayek-Friedman hypothesis refers to this transmission mechanism in which political institutions have positive externalities in fostering economic freedoms, thereby increasing the propensity to undertake economic activity.<sup>6</sup> The NIE however, does not suggest indivisibility between political and economic institutions. Divisibility is regarded possible when autocratic regimes such as the People's Republic of China choose to maintain relatively high degrees of economic freedom such as the security of private property rights. However, under democratic political institutions, the probability that economic freedoms will be well defined is higher since rational voters have self interested motives to support politicians who support economic freedoms. By contrast, autocratic regimes lack such self-regulating mechanisms and will adopt economic freedoms only by choice.

An alternative hypothesis linking institutions and economic outcomes is that advanced by Lipset (1959). Lipset's central proposition is that minimum threshold levels of economic development and human capital are required in order to sustain democratic political institutions. The postulated link is thus from economic development to political institutional development. This perspective in which causality stems from economic development provides little theoretical insights on the possible impact of institutions on economic growth.

However, the two alternative views outlined above both emphasise the need to secure property rights to support investment in human and physical capital and they both see such security as a public policy choice. Fedderke (1997) and Wu and Davis (1999) also supported the dominance of property rights over other institutional factors in explaining different patterns of economic development across countries and over time. It is argued that the role of property rights in lowering the uncertainty associated with interaction between economic agents increases both the volume and growth of exchange between economic agents, hence improving economic growth.

## 3 Empirical Literature Review

### 3.1 Measures of Political and Economic Institutions

The political science and political economics literature offers several attempts to quantify both economic and political institutions. This section surveys literature on indicators of property rights and political freedoms.

Although there are several empirical measures of political freedoms, there is no universal agreement among scholars regarding the ways of empirically measuring political freedom or political democracy. Existing indicators of political freedoms can be subdivided into objective and subjective measures. Attempts to use objective measures include the use of voter turn out statistics (Leaner, 1958; Vanhanen, 2000); the composition of the legislative and executive branches of government (Cutright, 1963; Vanhanen, 1990, 2000); or the franchise in a political system (Cutright and Wiley, 1969). Bollen (1980) and Bollen and Paxton (2000) argued that these are invalid indicators of political freedoms, since they are influenced by many factors that are only marginally related to political rights and political liberties.

The subjective indicators rely on expert judges who rate countries' standing on various aspects of

---

<sup>5</sup> See, for example, North and Thomas (1973), North (1990) and Acemoglu, Johnson and Robinson (2004).

<sup>6</sup> See Fedderke (1997).

political freedoms such as fairness of elections, the freedom of the media, or the liberties of political groups. These subjective measures dominate the practical and scholarly usage because there are generally viewed as better measures of institutional frameworks when compared to the objective indicators (Bollen and Paxton, 2000). Here, we review some of the key opinion-based indicators of political freedoms.

To begin, we consider the Freedom House scales of political rights and civil liberties. The political rights measure, scaled from 1 to 7 (where, 1= free and 7 = not free), is a measure of the degree of political competition and the right of citizens to choose their leaders. The civil liberties index, similarly scaled, is a measure of the rule of law and independence of the judiciary. Although the Freedom House indices have a wide country coverage, their time span is limited starting from 1972 onwards.

Bank's (1971) Cross-Polity Time-Series includes categorically scaled variables measuring the freedom of group opposition, competitiveness of nomination process of the chief executive and the legislature and the effectiveness of the elected legislative body in undertaking its duties. Bollen (1980, 1990) computed measures of political democracy based on two core concepts, political liberties and popular sovereignty. Each of these concepts is operationalised using a combination of subjective and objective data. The political democracy data is available on five-year intervals starting in 1960. Bollen's work cautions against the use of democracy indicators that confound democracy with political stability as these are two related but separate concepts that should be treated differently.

Jagers and Gurr (1995) assembled a political dataset called the Polity III, now updated to Polity IV. The most commonly used measure in the dataset measures is the variable called "constraints on the executive". The variable considers the extent of institutionalised constraints on the decision-making power of the executive. It is measured on a 1 to 7 scale with higher scores representing good institutions. Another important measure of political institutions in the Polity IV data set is the democracy measure. The democracy measure captures three main elements. These include the presence of institutions and procedures through which citizens can express effective preference about alternative policies and leaders, the existence of institutional constraints on the exercise of power by the executive and the guarantee of civil liberties to all citizens in their daily lives and in acts of political participation. The polity IV data set covers all independent states starting in 1800 with annual updates.

Fedderke *et al* (2001) constructed an index of political freedoms for South Africa that is based on a global interpretation of the status of both political rights and civil liberties. In building up the index, their methodology made extensive use of the formal legal framework governing political freedoms. The major advantage of the indicator is that it stretches from 1935 to 1997, a time period long enough to allow the use of the index in addressing long-run issues that arise when studying the link between political institutions and economic growth. Furthermore, the use of actual laws in the statute books as the rating information yields indicators that do not confound *de jure* institutions with *de facto* outcomes. The major limitation though is that the index is only available for South Africa, and therefore cannot be used for cross-country comparative studies.

More recently, Kaufman *et al* (2003, 2005) produced several indicators of governance for the World Bank. The governance concept here is much broader in dimension than the indicators above. The six clusters of governance covered are voice and accountability, political stability, government effectiveness, regulatory quality, rule of law and control of corruption. Each of the six clusters of governance is obtained by combining a number of opinion based sub-component indicators drawn from a variety of sources. The methodology of construction uses an unobserved components model which expresses the observed data in each cluster as a linear function of an unobserved component of governance plus a disturbance term capturing perception errors. This model yields estimates for each of the six governance measures.

Although the Kaufman *et al* (2003) indicators have the advantage of drawing from a wide range of information, some of the assumptions of the underlying model are limiting. The model assumes that the distribution of governance is normal with a non-shifting zero mean and a unit standard

deviation. This assumption implies that the world average value of institutions does not change over time. A further limitation is that the indicators span for a very short time period, starting in 1996, thus limiting their usefulness in single country time-series studies.

Not much work has been done to quantify property rights. Single time point measures are constructed by the Fraser Institute in the compilation of the index for Economic Freedoms in the World (EFW) by Gwartney, Lawson and Block (1975-1996) and Gwartney and Lawson (1997-2006). The Heritage Foundation produces annual scores of property rights protection as part of their index of economic freedom (Johnson and Sheehy, 1996-2006). This index is available on an annual basis starting from 1996. Fedderke *et al* (2001) also evaluated the formal structure of property rights in South Africa for the period 1950 to 1997 by considering the legal and constitutional framework governing protection of immovable property.

Deficiencies of indicators of property rights is coupled with increasing scepticism on the use of the Freedom House indices as proxies of contract enforceability, security of property rights and rule of law. In response, some academic researchers such as Mauro (1995) and Knack and Keefer (1995) are increasingly turning to subjective ratings marketed to international investors by firms specialising in political risk evaluation.

The major ratings services include the Business International (BI henceforth), the International Country Risk Guide (ICRG henceforth) and the Business Environmental Risk Intelligent (BERI henceforth). Using the ICRG institutional data, Knack and Keefer (1995) constructed an index to capture security of private property and enforceability of contracts. The index loads on five ICRG indicators of expropriation risk, repudiation of contracts by government, rule of law, quality of bureaucracy and corruption in government.

There are some drawbacks associated with the institutional indices outlined above. Most of the indices are not available for a comprehensive width of geographical coverage, for a range of countries over different levels of development and cultural space, and over sufficiently long time runs to inspire confidence in their usefulness in being able to address the long-run and dynamic questions that arise when linking economic performance and institutions. The short time coverage of most existing measures of institutions has resulted in the Freedom House indices dominating empirical work linking institutions and economic outcomes. The two Freedom House measures of political rights and civil liberties have the most comprehensive coverage across countries and over time when compared to most existing indicators.

Kormendi and Meguire (1985) used the Freedom House civil liberties index as a proxy for economic rights such as freedom from expropriation. The same index was used by Scully (1988) to measure what he called the ‘institutional framework’ comprising the degree of political, civil and economic liberties of nations. Grier and Tullock (1989) employed the same index again as a proxy for the ‘political infrastructure’, a measure of the extent of civil liberties of nations. More recently, Isham, Kaufman and Pritchett (1997) used the Freedom House civil liberties indicator to measure the ‘quality of governance’.<sup>7</sup> This feature renders the possibility of distinguishing the independent impacts of different institutional dimensions on economic performance, particularly in the context of a web of association between social and political indicators pointed to by Fedderke and Kligaard (1996, 1998).

Again, due to the limited time coverage of empirical indicators, most econometrics-based studies that link institutional frameworks of nations and economic outcomes tend to rely on cross-country or panel data that may lead to biased results due to heterogeneity across countries. In order to resolve these methodological issues, there is need to build comprehensive country-level data sets of institutional indicators that span lengthy time periods.

---

<sup>7</sup>Other studies that have also used the Freedom House indexes to proxy for various aspects of the institutional environment include, Barro (1996), Helliwell (1994), Sachs and Warner (1995) and Savvides (1995).

## 3.2 Impact of Institutions on Economic Performance

Empirical studies linking institutions and economic performance vary depending on the choice of institutional indices used. In the early work, linking political institutions and economic growth, Grier and Tullock (1989) used the Freedom House civil liberties indicator. They constructed a dichotomous variable from the civil liberties measure in which the countries in the two most repressive categories were distinguished from all others. The new dichotomous variable was described as proxy for the “political infrastructure” of nations. They found that political repression is associated with a significant reduction in annual growth rates in Latin American and African samples, but that repression has no effect in the Asian sample.

A later set of studies investigating the relationship between regime type and economic growth interpreted the Freedom House political freedoms and civil liberties indexes as measures of democracy. Barro (1996) and Helliwell (1994) found that these indicators are positively related to growth only if variables such as educational attainment and investment rates are omitted as explanatory variables. They concluded that any beneficial impacts of democracy on growth may operate through factor and human capital accumulation. Helliwell (1994) and Barro (1996) support Lipset’s (1959) hypothesis that the positive relation between income levels and democracy is most attributable to the former’s impact on the latter rather than vice versa.

Using the Freedom House indices, Isham, Kaufman and Pritchett (1997) analysed the impact of the civil liberties and political freedoms on the performance of World Bank-financed projects in various developing countries for the period 1974 to 1993. They found that the rates of return are higher in nations with greater civil liberties, as measured by the Freedom House civil liberties indicator. However, pure political rights, as measured by the Freedom House political rights index, have no effect on the rates of return to the World Bank projects.

Other studies linking political institutions and economic outcomes make use of composite institutional measures. Mauro (1995) aggregated BI’s indices of judiciary efficiency, red tape and corruption into a composite index which he called bureaucratic efficiency. The BI indices are integers between 0 and 10 with higher values of the indices representing goods institutions. The study found a positive and significant relationship between the bureaucratic efficiency index and the average *per capita* GDP growth rate over the period 1960 to 1985 for a sample of 123 countries. The findings imply that an improvement in institutions is associated with higher levels of *per capita* GDP growth rate.

While the above studies consider the role of political institutions only, theory emphasises the importance of property rights. Kormendi and Meguire (1985) presented some of the earliest efforts to empirically link property rights and economic growth. They used the Freedom House civil liberties as a proxy for property rights. They acknowledged that the civil liberties index is not intended to measure economic rights, but argued that the two were likely to be correlated. Their results suggested that property rights indirectly influences economic growth in a positive manner through investment.

Knack and Keefer (1995) investigated the impact of property rights and contract enforcement on economic growth and factor accumulation. To measure property rights and contract enforcement, the study aggregated the ICRG indices of expropriation risk, repudiation of contracts by government, rule of law, quality of bureaucracy and corruption in the government. The composite index of property rights and contract enforcement was significant in investment regression but insignificant in the growth regression. The finding confirms an indirect effect of property rights and contract enforcement on growth through investment.

Acemoglu *et al* (2001) addressed the problem of endogeneity that arises in studies linking property rights and economic outcomes. Endogeneity arises when there are feedback effects from economic performance to institutions. Empirical results will be biased if endogeneity is not taken into account. Acemoglu *et al* (2001) then used mortality rates of colonial settlers as an instrument of property rights. They argued that while settler mortality rates had an important impact on the quality of past institutions that were built in countries colonised by the main European powers, the mortality rate was not endogenous to economic performance. The study found that property rights have a

positive effect on output in the former European colonies.

Rodrik *et al* (2002) examined the extent to which geography, integration and institutions could explain the variation in cross-national incomes world-wide. Following Acemoglu *et al* (2001), they used settler mortality rates as an instrument of property rights. They concluded that property rights play a dominant role in explaining economic performance when compared to geography and integration.

Acemoglu and Johnson (2005) established the relative importance of “contracting institutions” versus “property rights institutions” for economic growth. Contracting institutions are defined as those institutions supporting private contracts. They defined property rights institutions as those constraining government and elite expropriation of private property. Property rights were proxied by three indicators, Polity IV’s constraint on the executive measure, Political Risk Services’ assessment of protection against government’s expropriation and the Heritage foundation’s assessment of private property protection. The results suggest that while the property rights institutions have first order effects on long-run economic growth, investment and financial development, contracting institutions only matter for financial intermediation.

To sum up the literature review, we note that several measures of institutions have been produced and employed in empirical work linking institutions and economic outcomes. While there is no consensus on the most appropriate way to measure institutions, perception based indices appear to dominate empirical work.

## 4 Empirical Methodology

The literature survey has shown various attempts to quantify the structure and quality of various dimensions of institutions. This paper follows closely the methodology in Fedderke *et al* (2001) in constructing institutional indicators for Zimbabwe. The rationale for adopting this methodology is twofold. Firstly, by using formal legislation instead of political and economic outcomes for evaluating the status of rights, the methodology safeguards against the problem pointed out by Glaeser *et al* (2004) of generating outcome based indicators that do not measure institutions as per the North (1990) view of institutions as constraints. Secondly, the resulting new data set is comparable to the data set of South Africa in Fedderke *et al.* (2001).

In assessing the institutional environment, annual ratings of the status of rights is based exclusively on formal legislation. We note at the outset that such an exercise presents some methodological and conceptual difficulties.<sup>8</sup> Here we present the more prominent ones:

1. The indexes summarise a large amount of information across a range of distinct dimensions. Inevitably, any concrete state at any given point in time realises fully defined rights in these distinct dimensions to differing degrees. Hence, the composite aggregate index will inevitably hide the important changes that take place within these dimensions.
2. The rating process may be affected by the prevalence of “judge-specific method effects” (Bollen and Paxton, 2000). These are perceptual biases of the judge making the subjective rating. Judge-specific methods effects may enter the rating at any of the three levels of the rating process, namely, 1) the collection of the rating information 2) the evaluation of the information, and 3) the transformation of the evaluation into an actual value. The effect of such biases is to reduce the precision of the indicators.

The methodology employed for this study attempts to limit the subjectivity problem as far as possible by adopting the following rigorous steps as suggested by Bollen and Paxton (2000) and Fedderke *et al* (2001):

---

<sup>8</sup>See Bollen (1990, 1992) for a detailed discussion of difficulties that emerge in the case of the construction of political (and property) rights indexes.

1. First, the construction of the political freedoms and property rights indexes will proceed by defining the relevant set of criteria to be used in evaluating the rights. The relevant set of criteria is informed by an appropriate theoretical conceptualisation of the rights or freedom of concern.
2. Guided by the ideal structure of the rights, sub-component variables of the index are identified.
3. Rating scales for the sub-components are set using a participatory approach which involves experts (political scientists, political economists, property lawyers and social scientists) assigning weights to the different sub-components. The guiding principle is to assign heavier weights to sub-components that are more fundamental to the rights being evaluated.
4. Rating information is collected from various secondary sources. In this case, rating is based explicitly on enacted legislation.
5. Once the sub-components and ratings scales have been determined and the rating information collected,<sup>9</sup> rating of sub-components is done. This is done using the delphi technique which involves a team of experts assigning scores to each of the sub-components on an annual basis. Ratings for any given year are done relative to the previous year's score. The sub-components are then aggregated into a composite additive score for each year. This is an advance over the Fedderke *et al* (2001) methodology in which separate components are only implicitly evaluated in building up the overall index with no explicit scores being provided for the sub-components. The advantage of this rating procedure is that it reduces the aggregation bias and also enables an analysis of individual sub-components.
6. The last step involves a presentation of the indexes to an independent panel of leading social scientists, political economists and lawyers who are well versed with issues in Zimbabwe. Adjustments to the measures are undertaken on the basis of the feedback. This is done in order to limit the perceptual biases that might arise from the delphi sessions. In this study, the newly constructed indices were presented to various panels of experts at several local and regional conferences and one international conference.

In the next two sections, we discuss the construction and interpretation of the political freedom and property rights indices for Zimbabwe for the period 1945 to 2005.

## 5 Political rights and civil liberties in Zimbabwe: 1946-2005

### 5.1 Identification of an ideal state of political freedoms

We note at the outset that the notion of political freedoms or democracy is much debated. This study makes no attempt to provide an exhaustive review of the debates. We adopt the three theoretical dimensions of a contemporary liberal democracy advanced by Jagers and Gurr (1995). The first dimension is institutionalised political competition accomplished through establishment of regular and meaningful competition among individuals and groups, an inclusive degree of political participation in the selection of leaders and policies. The second dimension is the existence of institutionalised constraints on the exercise of executive power. The final dimension is the guarantee of civil liberties to all citizens in their daily lives and in acts of political participation.

The three theoretical dimensions are operationalised by setting the following normative ideal criteria. This constitutes a nation state with a legal and constitutional structure that embodies the following features:

---

<sup>9</sup>The database of laws used in the Delphi technique sessions is available from authors upon request.

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 the 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 very precisely defined and limited constraint with respect to matters of ‘national security’.
7. A bill of rights or some equivalent, constitutionally robust, mechanism to effectively protect the rights of individuals.
8. A division of power between the executive, judicial and legislative branches of government.

The above normative ideal criteria can also be equated to a “Rechtsstaat” in which fundamental justice exists and government authority is legitimately exercised only in accordance with written, publicly disclosed laws.

## 5.2 Scaling and rating of sub-components

Guided by the normative ideal criteria, the rating instrument is based on a check list of 12 sub-components covering the two broad areas of political rights and civil liberties. Raw points are awarded to 8 of the sub-components using a 10 point scale. These include voting rights, freedom of association, freedom of assembly, freedom of expression, the extent of arbitrary executive power, independence of the judiciary and the legislature, government secrecy or indemnity and the due process of law. A score of 0 represents the enactment of legislation that completely limits the rights of interest, while a score of 10 shows the enactment of legislation that promotes or extends rights. These 8 categories yield a total of 80 raw points.

The remaining 4 categories are awarded raw points on a 0-5 scale. These include freedom of movement, academic freedom, religious freedom and a residual category that captures all discriminatory law that cannot be classified under any of the specific dimensions. These categories yield a total of 20 raw points. Summing across all categories gives 100 points as the highest number of points that can be awarded to the political rights and civil liberties indicator. The implied relative weighting reflects the importance of certain dimensions over others in the overall composite index. The rating information is obtained from various secondary sources.<sup>10</sup> The final political freedom index is an addition across all the sub-components.

A score between 0 and 12 would be indicative of a *de jure* “totalitarian” state of the type exemplified by Nazi Germany and the Soviet Union during the Stalin years. A score between 13 and 37 would indicate a state with political and civil rights structure in which a very high degree of arbitrariness in state action is enabled by legislation as well as having highly discriminatory or “exclusive” franchise arrangements. For a score between 38 and 50, the degree of arbitrariness in governmental action is more constrained.

<sup>10</sup> Palley (1966), Saller (2004), The Human Rights Bulletin (various issues) by Zimbabwe Lawyers for Human Rights, an index to legislation in Zimbabwe from Kubatana.net, the International Labour Organisation online Natlex.

A score between 51 and 74 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 liberty as well as restrictive franchise arrangements. A score between 75 and 87 would indicate a political system with entrenched procedural justice and freedom of association and assembly, subject to relatively few constraints. This leaves the 88 to 100 range for fully developed liberal democracy with recognition of third generation rights.

### 5.3 Outcomes of the rating

Some caveats need to be issued at the outset. First, for the purposes of this measure, no attempt is made 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, it is irrelevant to this indicator whether or not any of the statutes were actually applied.

Second, unlike the Freedom House indexes, formally specified political rights and formally specified civil liberties are not separated. As such, the measure is based on the global interpretation of the state of the political rights and civil liberties in each year under consideration.

Third, in covering a long period as we have done, issues of commensurability may arise. This is due to the fact that over the period 1945 to 2006, Zimbabwe went through various complex phases of legal regimes making it impossible to assume a unified political system. During the period under review, at least six distinct constitutional dispensations may be identified:

1. The first constitutional dispensation covers 1945 to 1960 during which the 1923 constitution was in place. This resulted in Britain granting internal self government to the white population in Rhodesia.<sup>11</sup> This saw the inauguration of a unicameral legislative assembly elected by a non-racial franchise effectively limited to whites by way of high income and property requirements.
2. The second constitutional dispensation occurred from 1961 to 1964 with the adoption of a new constitution in 1961. It is during this phase that Britain’s reserved powers over local legislation were completely relinquished and replaced by a bill of rights in the new constitution.
3. The third constitutional dispensation occurred from 1965 when a new constitution was promulgated after UDI. This stretches to 1968.
4. The fourth constitutional dispensation was a period of bicameralism and a voters’ roll defined on an explicitly racial basis extending from 1969 to 1978.
5. The fifth constitutional dispensation was that of the 1979 constitution produced as a result of internal settlement agreement between the Smith government and the conservative Black Nationalist Parties.
6. The final constitutional dispensation is the current constitution adopted in 1980 as a result of the Lancaster House Peace Agreement.

Figure 2 plots the sub-components of the political freedom index. The graph is cumulative showing how each of the 12 sub-components contributes to the overall index. The aggregate index is sketched out in figure 3.<sup>12</sup>

**[Insert figure 2 about here]**

---

<sup>11</sup> Zimbabwe’s name prior to independence.

<sup>12</sup>The rating information is available upon request from the authors.

## 5.4 Interpretations of the Political Freedom Index

It is evident from figure 3 that the country experienced a decline in the quality of political freedoms from its base year in 1946 up to 1960. This is expected since the mid 1940s to late 1950s experienced a steady stream of legislation that impinged on fundamental political and civil rights of the native Africans. Such an institutional framework reflected the desire of the European elite to prevent both political and economic competition from the Africans (Blacks). Specifically, the electoral franchise was severely limited to the Europeans (whites) through the provisions of the Electoral Act of 1951 specifying high income and property requirements, which in reality were out of reach of the Black majority. Freedoms of association, assembly, expression, movement and the due process of law were severely restricted during this time through the enactment of legislation such as the Native (Urban Areas) Accommodation and Registration Act of 1951, the Municipal Act of 1953, the Public Order Act of 1955 and the Native Registration and Identification Act of 1957. This legislation was used by the government to stifle political dissent and to limit personal freedoms.

**[Insert Figure 3 about here]**

There is a sharp dwindling of formal rights between 1959 and 1960. This follows enactment of “security laws” which severely violated fundamental rights. Examples of such legislation include the Preventive Detention (Temporary) Provisions Act (1959), Public Order Amendment Act (1959), the Unlawful Organizations Act (1959), the Vagrancy Act (1960), Emergency Powers Act (1960) and the Law and Order (Maintenance) Act (1960). These Acts gave the government wide discretionary powers to arrest and detain without trial and to restrict assembling for political reasons. Further constraints on the freedoms of movement, association and assembly during this two-year period are found in the provisions of the Industrial Conciliation Act of 1959.

In the early 1960s, the ruling United Federal Party (UFP) recognised that political and economic exclusion of Africans was not consistent with its goal of industrialisation. The institutional framework kept African average incomes at persistently low levels, which in turn led to very low internal demand. Low demand was in turn detrimental to the realisation of a sustainable internally-driven industrialisation process. This internal inconsistency led to the liberal reforms of 1961 aimed at political and economical advancement of the Africans.

The abrupt improvement of the political freedoms in 1961 was due to the legislative reforms in the 1961 constitution which sought to increase enfranchisement of Africans and introduce minimum representation for Blacks in the House of Assembly. The constitution introduced the first ever entrenched bill of rights, while 1961 also saw the repulsion of the most discriminatory laws such as the Immorality and Indecency Suppression Act. However, the attempted institutional transformation was abortive because in 1962, the UFP lost power to the conservative Rhodesian Front (RF) which had the backing of white workers, agrarian and petty bourgeoisie.

The future of African political and economic advancement became bleak when the conservative RF came into power. The immediate effect was an increase in acts of insurgency by Black Nationalist movements. As the government came to grips with the state of increasing political dissent, formal rights started declining from their seemingly “better” state in 1961 through the enactment of repressive legislation. This phenomenon continued throughout the 1960s. After the RF government, led by Smith, unilaterally declared independence from the colonial power in 1965, another constitution was promulgated. This gave the government wide discretionary power to declare states of emergency, to arrest and detain opponents without trial and to censor publications. Compared to the ideal state, this represented a serious violation of fundamental rights. The situation continued to worsen as the liberation war intensified and government became determined to restore socio-political stability.

The inception of independence in 1980 marked the beginning of an era in which there was a new dispensation in the structure of formal political rights. The distinct improvement in 1980 followed the enactment of the Employment Act which repealed a number of discriminatory laws such as the African Juveniles Employment Act, the African Labour regulations Act, the Foreign Migratory Labour Act as well as the Masters and Servants Act. The Public Service Commission Act of the

same year removed racial restrictions to entry into the public service. The major improvement was also an outcome of the entrenched bill of rights and provisions for the immediate enfranchisement of all African adults contained in the 1980 Lancaster House Constitution. Further but steady improvements were realised as more discriminatory laws were repealed in the years that followed.

The situation however started deteriorating again in 1985 as a result of the continuous enactment of legislation allowing for arbitrary state action at the expense of the individual rights. The key acts contributing to this trend between 1985 and 1992 were the Presidential Powers (Temporary Measures) Act of 1986, the Constitutional Amendment No 7, No 9 and No 10. The Constitutional Amendment Act of 1993 which provided for the imposition of a death penalty resulted in yet another sharp fall in the level of rights. The subsequent acute worsening in the formal rights in 2002 was a result of the enactment of the Public Order and Security Act, the Access to Information and Protection of Privacy Act, Labour Relations Amendment Act and the Presidential Powers (Temporary Measure) Election Act Modification Notice. Together, these acts greatly limited the electoral franchise and the freedom of expression and association.

## 6 Property Rights in Zimbabwe

The property rights index constructed relates to immovable property, with particular focus on land. The rationale for focusing on immovable property is that the Zimbabwean economy is primarily an agro-mining economy implying that immovable property such as land plays a huge role in facilitating economic transactions. The methodology again follows an initial identification of an ideal set of rights. Zimbabwe's realisation of this ideal set of rights is then examined with reference to the most important pieces of legislation affecting these rights over this period. The resulting index corresponds to the procedural rules constraining state and elite's expropriation and not outcomes of whether there is actual expropriation.

### 6.1 Identification of an ideal state of property rights

Although there are variations in both philosophical and legal spheres of what constitutes property rights, we follow the lead of Waldron (1988) who used Honore's definition of "full liberal ownership". Honore (1961) sets out eleven "standard incidents" or common features of ownership which comprise:

- The right to the possess.
- The right to use.
- The right to manage.
- The right to the income.
- The right to the capital value.
- The right to security against expropriation.
- The power to transmit.
- The lack of any term on the possession of these rights.
- A duty to refrain from harmful use.
- Certain judgments against the owner may be executed on the object.
- Incident of residuary.

Waldron (1988) noted that Honore’s list of standard incidents only provides common features of ownership. In his work, Waldron (1988) argued that the prohibition on harmful use is better regarded as a general background constraint on action than specific rules of private property and thus should be ruled out. Furthermore, for the purposes of this study, some dimensions are eliminated. The right to income is incorporated into the right to use the property as the owner sees. Absence of term and incident of residuary shall be excluded on the basis that it does not significantly affect the transaction costs of carrying out economic activity. Thus the “ideal” set of property rights will constitute the following seven incidents:

- Right to possess.
- Right to use.
- Right to manage.
- Right to capital.
- Right to security.
- Incident of transmissibility.
- Liability to execution.

## 6.2 Scaling and Rating of sub-components

The scale for property rights is also defined to range from 0 to 100. The full existence of all seven of the above incidents in the above definition are used as the “ideal” set of property rights and would be equivalent to 100 points. Any variation from this would thus correspond to a less than perfect score. The complete exclusion of these rights or incidents would thus result in a score of zero for a society.

Raw points are awarded to the various sub-components using varying scales. The right to possess which we consider as the most critical dimension of ownership has a scale ranging from 0-20. A score of zero is an indication of the enactment of legislation that curtails ownership rights while the opposite is true for a score of 20. The right to use, right to capital, right to security and the right to transmit are scaled from 0 to 15, where a score of 15 is an indication of the enactment of legislation that extends the right of interest whereas the opposite holds for a score of 0. The remaining two incidents are scaled from 0-10. Summing across all incidents gives a total score of 100 points, which coincide with the ideal set of property rights. The implied relative weights again show the relative importance of the certain sub-categories in the composite indicator.

## 6.3 Outcomes of Rating

Because of the colonial history in Zimbabwe, the construction of a realistic property rights index presents further methodological difficulties. The difficulties arise because restrictions on rights to immovable property, especially land, were executed along racial lines during the colonial era (up to 1980). During this period, rights over land held by Africans (Blacks) were not of the same character as the rights enjoyed by the Europeans (whites) and international capital in respect of the land which they were able to purchase (Palley, 1966).

The post-independence land ownership rights derive a lot from this colonial legacy of dualism in land ownership. Land ownership rights are expressed in the four main systems of land tenure, namely freehold (private), state land, communal and leasehold (resettlement) systems. The freehold (private) tenure system is prevalent in the commercial farming sector that is predominantly owned by white commercial farmers and transnational companies. The other forms of tenure (communal and resettlements), which are non-freehold primarily apply to black owned land. With such a dualistic

tenure, a single property rights indicator would not reflect the limitations or extensions to property rights experienced by different sectors.

The Fedderke *et al* (2001) study on South Africa faced a similar constraint. The study resolved this limitation by producing a single index which is implicitly weighted by the availability of land to the relevant racial groups and by the population distribution between different racial groupings. To overcome such a constraint, we evaluate the security of rights in the freehold and non-freehold tenures separately. The resulting two *de jure* property rights indices are then combined into a composite index using two different weighting systems.

The index denoted by PRFH captures the structure of formal property rights in the freehold land tenure and PRNFH captures the status of formal property rights in the non-freehold tenure systems. Figure 4 plots the sub-components of the PRNFH while the aggregate PRNFH index is shown in figure 5. The sub-components of the index of property rights in the freehold tenure system (PRFH) are depicted in figure 6 while the resulting aggregate index is shown in figure 7.

[Insert Figure 4 about here]

[Insert Figure 5 about here]

[Insert Figure 6 about here]

[Insert Figure 7 about here]

The two indexes are weighted into a composite property rights index first using the proportions of land available to the different tenure systems, and then using population distribution between different racial groupings. Figure 8 presents the property rights indices resulting from the two weighting methods.

[Insert Figure 8 about here]

## 6.4 Interpretations of the property rights index

Changes in the institutional framework prior to independence mainly reflect changes to laws regulating the non-freehold tenure systems. The colonial period was characterised by an entrenched and stable institutional framework for the freehold-tenure systems in which ownership was dominated by the whites and transnational capital. In the post-independence era, especially after 1990, there was however increased turbulence in the formal laws regulating privately held land regardless of the origin or race of owners.

The composite index Propert1 based on the proportions of land available to the different tenures places almost equal weights to the two separate indices and therefore fails to capture the unequal access to land and resources by different sectors of the economy. In contrast, the index Propert2, which employs racial proportions, attempts to factor in the racial misalignments in the institutional framework for land ownership.

For purposes of tracking the overall structure of formal property rights, we choose Propert2, which we denote *propert* in the rest of the study. Our choice of this composite property rights index is based on the Acemoglu *et al* (2004) argument that good economic institutions are those that provide security of property rights and relatively equal access to economic resources to a broad cross-section of the society and not a minority. Propert2 scores take into account the accessibility to land and resources by different sectors of the economy.

Now we turn to the interpretation of the property rights index. The physical and qualitative division of land between Blacks and whites was legalised initially through the Land Apportionment Acts of 1930 and 1941. The provisions of this act allowed the government to partition the land into European areas, African areas (Tribal Trust Lands), an unreserved area and national land. The tenure systems as well as scale and quality of land were lopsided in favour of the whites and foreign firms.

The deterioration of the status of property rights in 1951 resulted from the enactment of the Land Husbandry Act. The act made special provisions allowing the government to remove Africans from the Tribal Trust Lands if the need arose. It also prescribed stringent measures to force African

farmers to de-stock their cattle and modify land tenure practices. In terms of individuals' property rights, this constitutes a serious restriction on the right to security from government expropriation and the ability of an individual to use the property.

The improvement to the formal rights in 1961 is a result of the adoption of the 1961 constitution which gave the legislature power to amend the Land Apportionment Act and to make provisions for opening up land to Blacks. In the same year, the Land Apportionment was amended to create a category of land open to all races. In 1969, the Land Tenure Act was passed to repeal the Land Apportionment Act, which was the pillar of unequal access to immovable property by different races. Although more land was set aside for black ownership, this was done within a framework that sought to further formalise dualism of land ownership.

Independence in 1980 saw the inception of the Lancaster House Constitution. It provided for the constitutional protection of all private property. The constitution also prescribed that the acquisition of private property by the government should be on a "willing buyer, willing seller" basis and that compensation for the acquired land should be at market price, promptly paid in the currency of the land owner's choice. One perspective of these ingrained provisions of the Lancaster House Constitution was that they served to protect existing rights and interests in land belonging mainly to white commercial farmers and some transnational companies. In contrast, another perspective is that these provisions imposed constraints on the government's ability to enhance access of the poor and other marginalised groups to land and land resources.

Beginning in 1985 up to the mid 1990s, the government made several changes to the legal framework directed towards addressing the historically unbalanced access to immovable property. Such changes were contained in the Constitution of Zimbabwe Amendment (No 5) of 1985 and (No 11) of 1990, the Mines and Mineral Act of 1987 and Land Acquisition Act of 1985, re-enacted in 1992 with some amendments. These changes were implemented within the framework of fair compensation and thus posed no serious threat to private property.

1994 marks the beginning of an era in which formal property rights started deteriorating. This is because of the constitutional amendments removing the constitutional protection of compensation for land. The biggest blow came in 2000, when the government amended the constitution for the sixteenth time removing government's obligation to pay compensation to the owners of land acquired for land reform process shifting the onus to Britain, the former colonial power. Further deteriorations came in the subsequent years as government introduced further amendments to legislation that were aimed at limiting the jurisdiction of the courts over the land issue.

## 7 Political Instability in Zimbabwe: 1950-2005

### 7.1 Conceptual Framework

The notion of instability adopted in this study captures the idea of socio-political unrests and disturbances. The reasoning being that when instability reaches high levels, socio-political instability disrupts market activities which in turn affects productivity and therefore returns to investment (Alesina and Perroti, 1996). Moreover, political instability may result in bad economic policy formulation either because (a) governments choose not to improve the efficiency of policy-making, since they anticipate an imminent loss of power,<sup>13</sup> or (b) because the unstable political systems results in weak governments that are unable to change and improve policy formulation. However, Olson (1982) argues that very high levels of political instability may be desirable, since it destroys the hold on the state exercised by powerful interest groups who are more concerned with the imposition and maintenance of redistributive policies than with sound growth enhancing economic policy.

The index is constructed on the basis of official and unofficial sources, which are placed in a weighted composite index of instability in accordance with alternative weights. The choice of the

---

<sup>13</sup> See Olson (1993).

sub-components to include in the index is informed by past literature as well as availability of information. The political instability series contains the following sub-components:

1. The number of declarations and renewals of states of emergencies per year.
2. The number of publications banned per year.
3. The number of politically motivated arrests per year.
4. Number of reported cases of politically-related property damages per year.
5. Incidences of war-related armed attacks on the general public per year.

## 7.2 Description of Variables and Data Sources

Information on the number of declarations and renewal of states of emergency and the number of publications banned per annum is obtained from Ramussen and Rubert (1990, 2001). Renewals of states of emergency are also considered against the background of continuous states of emergency between 1965 and 1990. Information on the number of politically motivated arrests was obtained mainly from archival material ranging from newspapers to political magazines.<sup>14</sup> The Catholic Commission for Justice and Peace report on the Matabeleland political unrests in the 1980s, and provided useful information on the disappearances and detentions that occurred during this time. Although it is acknowledged that accuracy of the information is questionable, the figures at least give a picture of when political violence was at its peak. Property damages that are considered here are those associated with political violence. The source of such information is the Zimbabwe Human rights NGO forum political violence reports and the Catholic Commission for Justice and Peace reports. The number of armed attacks data is obtained from the Alesina *et al* (1996).

## 7.3 Interpretations of the political Instability Index

There is no *a priori* standard for weighting the above sub-components into a composite political instability index. Given this uncertainty surrounding the appropriate weighting, we use different weightings. Figure 9, 10 and 11 present the results of the different weightings. Our expectation is that weighting 1 in figure 9, which places more weight on war related political violence closely depicts the variation of the level of social and political unrests over time in Zimbabwe. According to figure 9, peaks in political and social instability occurred in 1960, 1965, the period 1975 to 1979, the mid-1980s, and the period 2000 to 2003.

[Insert Figure 9 about here]

[Insert Figure 10 about here]

[Insert Figure 11 about here]

Although the formation of a number of African nationalist political parties opposed to the European economic and political domination started in the 1950s, the real warfare only began in 1960 intensifying in the mid-1970s up to the time of independence in 1980.

In the late 1990s particularly 1999, two major factors contributing to increased political instability can be identified. Firstly, the argumentation of civil society opposed to government policy through the formation of the National Constitutional Assembly (NCA), a coalition of non-governmental organisations, academics and university students. The NCA successfully campaigned for the rejection of a government-led constitutional change in the 1999 Constitutional referendum. The government's loss in the referendum and desire to win in the 2000 Parliamentary elections led to a violent crack-down on the civil society coalition and the newly formed opposition political party, the Movement for Democratic Change (MDC). Secondly, violent and unconstitutional farm invasions also contributed towards high levels of socio-political unrests.

---

<sup>14</sup>Research assistants from the University of Zimbabwe Political Science department gathered all the archival data used in this study.

## 8 Comparative Analysis

To check the efficacy of the new series of institutional indices constructed in this paper, we compute correlations between our indices and other widely used existing empirical indices of political freedoms and property rights. Table 2 presents the non-parametric spearman correlation coefficients.

[Insert Table 2 about here]

We compare our political freedoms indicator (PolFree) to the Freedom House (FH) indices of political freedom and civil liberties and the Vanhanen (2000) democratisation index. The new index PolFree runs from 1946 to 2005. The Freedom House indices are perception based and available for the period 1972 to 2005. The Vanhanen (2000) democratisation index is an objective-based measure which combines several variables such as voter turn out and the percentage of parliamentary seats taken by smaller political parties. For Zimbabwe, the Vanhanen democratisation index covers the period 1980 to 2005. The PolFree index correlates highly with the Freedom House political freedom index and the Vanhanen democratisation index with correlation coefficients of -0.76 and 0.89 respectively (see table 2). However, correlation between PolFree and the Freedom House civil liberties index is very low and insignificant.

The property rights index is compared to the Fraser Institute (FI) and the Heritage foundation (HF) indices of property rights. Our property rights index (Propert) has a 0.74 correlation with the Fraser Institute property rights index and a 0.82 correlation with the Heritage Foundation property rights.

While, a perfect measurement precision is not possible from our procedure, the high correlations between our indicators and other existing indicators raises our confidence on the efficacy of the new set of institutional indices.

We now turn to the relationship between political freedom and property rights. There is a low and insignificant correlation of 0.27 between the indices PolFree and Propert. This confirms the divisibility of the two forms of rights. With regards to the relationship between political instability and the rights indexes, it is shown that political instability bonds well with property rights with a significant correlation of -0.72. However, political instability stands in no relationship with political freedoms with a low and insignificant correlation of 0.08.

We now turn to the comparison of the formal institutional frameworks in South Africa and Zimbabwe. Historically, the two countries' legal frameworks were closely linked implying a close tie in their formal institutional structures (Sprack, 1974). In his analysis of the relationship between legal frameworks in South Africa and Rhodesia,<sup>15</sup> Sprack (1974) refers to Rhodesia as "*South Africa's sixth province*" just to demonstrate how well connected the legal frameworks were. Given these close historical links, our analysis here seeks to unveil how this association has changed over time.

Figures 12 and 13 compare the status of political freedoms and property rights in Zimbabwe and South Africa respectively. Data on the South African indicators is obtained from Fedderke *et al.* (2001). While the status of political freedoms was at par in the mid-1940s, the situation deteriorated more rapidly in South Africa than in Zimbabwe. With the attainment of independence in Zimbabwe in 1980, the Lancaster House constitution was adopted and most of the discriminatory laws were repealed. This created an even wider gap between the two countries. The situation remained unchanged until 1990 when Apartheid was abolished and South Africa became a democratic nation. Ever since the 1990s, "fundamental justice" and rule of law have been advanced in South Africa and made available to all races. However, Zimbabwe's case has been deteriorating mainly due to the continued use of legislation as tool to suppress political dissent as well as personal freedoms.

[Insert Figure 12 about here]

[Insert Figure 13 about here]

Figure 13 compares the property rights indices in Zimbabwe and South Africa. It is clear that although Zimbabwe's ratings are better compared to South Africa up to the mid-1980s, the situation changed after the mid-1980s. Whilst *de jure* property rights in South Africa continued to improve

---

<sup>15</sup>Zimbabwe's name prior to independence in 1980.

since 1976, those in Zimbabwe remained stagnant only improving marginally in some years until 1985, when the ratings in South Africa began to surpass those in Zimbabwe.

## 9 Conclusion

The major purpose of the paper was to assemble new institutional indicators for Zimbabwe that can be used in country-specific time-series work linking institutions and economic outcomes. This has been achieved by the construction of the following indices:

- A *de jure* political freedom index for the period 1946 to 2005.
- A *de jure* property rights index for the period 1946 to 2005.
- A *de facto* political instability index for the period 1950 to 2005.

Although the paper closely follows the Fedderke *et al.* (2001) methodology, some methodological improvements were attained by scoring sub-components of the indexes individually. This has the advantage of reducing aggregation biases as well as allowing the analysis of individual sub-components. Comparison of the series raises some concrete questions.

Four main issues arise from the new set of institutional indices. The first issue is the relationship between political freedoms and property rights. A low correlation was found between the two indices implying a high degree of divisibility between the two forms of rights. The independency of the two would imply that even autocratic regimes may accompany sound property rights.

The second issue is the relationship between political instability and the rights indexes. It was found that political instability bonds well with property rights but has no significant relationship with political freedoms. Third, the new indicators correlate fairly well with some existing commonly used institutional indices thus raising our confidence on the validity of our own measures. However, unlike the Freedom House indexes of political freedoms and the Fraser Institute property rights index, our indexes are available for a relatively longer time period allowing confidence in their use to address long-run issues.

Fourth, the study also provides a comparative analysis of the structure of formal rights between South Africa and Zimbabwe. There seems to surface the conclusion that while the two countries might have had close historical ties, both have travelled different paths with regards to developments in their political and property rights institutions.

## References

- [1] Acemoglu, D., and Johnson, S. (2005). Unbundling Institutions. *Journal of Political Economy*, 113, 949-995.
- [2] Acemoglu, D., Johnson, S., and Robinson, A. (2001). The Colonial Origins of Comparative Advantage: An Empirical Investigation. *American Economic Review*, 91, 1369-1401
- [3] Acemoglu, D., Johnson, S., and Robinson, A. (2004). Institutions as the Fundamental Cause of Long-Run Growth. NBER Working Paper No. 10481. National Bureau of Economic Research, USA.
- [4] Alesina, A., and Perroti, R. (1996). Income Distribution, Political Instability and Investment (1996). *European Economic Review*, 40, 1203-1228
- [5] Alesina, A., Ozler, S., Roubini, N., and Swagel, P. (1996). Political Instability and Economic Growth. *Journal of Economic Growth*, 2, 189-211.

- [6] Banks, A.S. (1971) *Cross Polity Time- Series Data*. Cambridge MA: MIT Press.
- [7] Barro, R. J. (1996). Democracy and Growth. *Journal of Economic Growth*, 1, 1-27.
- [8] Bates, R. (2006). The Destruction of Property Rights and Resulting Wildlife Catastrophe in Zimbabwe. American Enterprise Institute for Public Policy Research.
- [9] Bollen, K., and Paxton, P. (2000). ‘Subjective Measures of Liberal Democracy’. *Comparative Political Studies*, 40, 58-86.
- [10] Bollen, K.A. (1980). Issues in Comparative Measurement of Political Democracy. *American Sociological Review*, 45,438-457.
- [11] Bollen, K.A. (1990). Political Democracy: Conceptual and Measurement Traps. *Studies in Comparative International Development*, 25, 7-50.
- [12] 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 Claude, R.P. (Eds), *Human Rights and Statistics*, 188-215. Philadelphia: University of Pennsylvania Press.
- [13] Cutright, P. (1963). National Political Development: Measures and Analysis. *American Sociological Review*, 28, 253-264.
- [14] Cutright, P., and Willey, A.J. (1969). Modernization and Political Representation: 1927-1966. *Studies in Comparative International Development*, 5, 23-44.
- [15] Fedderke, J.W. (1997). Political and Social Dimensions of Economic growth. *Theoria*, 89, 1-42.
- [16] Fedderke, J.W., and Klitgaard, R.E. (1996). Economic Growth and Social Indicators: An Explanatory Analysis. City University: Department of Economics and Applied Econometrics Research Unit Discussion Paper No 45.
- [17] Fedderke, J.W., and Klitgaard, R.E. (1998). Economic Growth and Social Indicators. *Economic Development and Cultural Change*, 46, 455-490.
- [18] Fedderke, J.W., R. de Kadt, and J. Luiz (2001). Indicators of Political Liberty, Property Rights and Political Instability in South Africa. *International Review of Law and Economics*, 21, 103-134.
- [19] Gastil, R. D. (1978). *Freedom in the World: Political Rights and Civil Liberties 1978*. New York: Freedom House.
- [20] Glaeser, E., La Porta, R., Lopez-De-Silanes, F., and Shleifer, A. (2004). Do Institutions Cause Growth. *Journal of Economic Growth*, 9, 271-303
- [21] Grier, K.B., and Tullock, G. (1989) “An Empirical Analysis of Cross-National Economic Growth, 1951-1980.” *Journal of Monetary Economics* 24, 259-76.
- [22] Gupta, D.K. (1990). *The economics of political violence*. Praeger, New York.
- [23] Gwartney, J., and Lawson, R. (1997-2006). *Economic Freedom of the World: 1997-2006 Reports*. Vancouver: Fraser Institute.
- [24] Gwartney, J., Lawson, R., and Block, J. (1975-1996). *Economic Freedom of the World: 1975-1996 Reports*. Vancouver: Fraser Institute.
- [25] Helliwell, J.F. (1994). Empirical Linkages between Democracy and Economic Growth. *Journal of Political Science*, 24, 225–48.

- [26] Honore, A. (1961). "Ownership" in Guest, A.G. (Eds), *Oxford Essays in Jurisprudence: First Series*, Oxford: Clarendon Press; <http://www.kubatana.net/html/archive/legisl>.
- [27] International Labour Organisation online Law Database retrieved from [http://www.ilo.org/dyn/natlex\\_browse](http://www.ilo.org/dyn/natlex_browse).
- [28] Isham, J, Kaufmann, D., and Pritchett, P. (1997). Civil Liberties, Democracy, and the Performance of Government Projects. *The World Bank Economic Review* 11, 219–42
- [29] Jagger, K and Gurr, T.R. (1995) Tracking Democracy's Third Wave with the Polity III data, *Journal of Peace Research*, 32,469-482.
- [30] Johnson, B. T., and Sheehy, T. (1995-2006). The Index of Economic Freedom, The Heritage Foundation.
- [31] Kaufmann, D., Kraay, A., and Mastruzzi, M. (2005). *Measuring Governance using Cross Country Perception Data*. World Bank: Washington, DC.
- [32] Kaufmann, D., Kraay, A., and Mastruzzi, M. (2003). *Governance Matters III: Updated Governance Indicators for 1996-2002*. World Bank: Washington, DC.
- [33] Knack, S., and Keefer, P. (1995). Polarization, Property Rights and Links between Inequality and Growth. IRIS Center, Working Paper No. 153.
- [34] Kormendi, R.C., and Maguire, G. M. (1985). Macroeconomic Determinants of Growth: Cross-Country Evidence. *Journal of Monetary Economics*, 16,141–63.
- [35] Leaner, D. (1958). *The passing of Tradition Society*. Glencoe. Free Press
- [36] Lipset, S.M. (1959). Some Social Requisites of Democracy. *American Political Science Review*, 53, 69-105
- [37] Mauro, P. (1995). Corruption and Growth. *Quarterly Journal of Economics*, 110, 681-712
- [38] North, D. (1990). *Institutions, Institutional Change, and Economic Performance*. Cambridge University Press. New York.
- [39] North, D. (1994). Economic Performance through Time. *American Economic Review*, 84, 359-368
- [40] North, D., and R.P. Thomas (1973). *The Rise of the Western World: A New Economic History*. Cambridge University Press.
- [41] North, D., and Thomas, R. P. (1973). *The Rise of the Western World: A New Economic History*. Cambridge University Press, New, New York.
- [42] North, D.C. (2005). *Understanding the Process of Economic Change*. Princeton University Press.
- [43] Olson, M. (1982). *The Rise and Decline of Nations: The Political Economy of Growth, Stagflation, and Social Rigidities*. New Haven, CT. Yale University Press.
- [44] Olson, M. (1993). 'Dictatorship, Democracy and Development'. *The American Political Science Review*, 87, 567-576.
- [45] Palley, C. (1966). *The Constitutional History and Law of Southern Rhodesia 1888-1965: With Special Reference to Imperial Control*, Clarendon Press: Oxford

- [46] Ramussen, R.K., and Rubert, C.S. (1990) *Historical Dictionary of Zimbabwe*. Second Edition. The Scarecrow Press. London
- [47] Ramussen, R.K., and Rubert, C.S. (2001) *Historical Dictionary of Zimbabwe*. Third Edition. The Scarecrow Press. London
- [48] Richardson, C. (2005a). The loss of Property Rights and the Collapse of Zimbabwe. *Cato Journal*, 42, 541- 563
- [49] Richardson, C. (2005b). How the Loss of Property Rights Caused Zimbabwe’s Collapse. *Cato Institute Economic Development Bulletin* No 4.
- [50] Richardson, C.J. (2006). ‘Learning from failure: Property Rights, Land Reforms, and the Hidden Architecture of Capitalism’. American Enterprise Institute for Public Policy Research Paper.
- [51] Rodrik,D.,Subramanian, A and Trebbi. (2002). ‘Institutions Rule: The Primacy of Institutions over Geography and Integration in Economic Development’. NBER Working Paper 9305. National Bureau of Economic Research, USA.
- [52] Sachs, J D., and Warner, M. A. (1995). Economic Reform and the Process of Global Integration. *Brookings Papers on Economic Activity* 1:1–95.
- [53] Saller, K. (2004). The Judiciary Institution in Zimbabwe. Siber Ink in association with the Faculty of Law, University of Cape Town.
- [54] Savvides, A. (1995). Economic Growth in Africa. *World Development*, 23, 449–58.
- [55] Scully, G.W. (1988). The Institutional Framework and Economic Development. *Journal of Political Economy*, 96, 652-662
- [56] Sprack, J. (1974) *Rhodesia: South Africa’s Sixth Province: An Analysis of the Links between South Africa and Rhodesia*. London: International Defence and Aid Fund.
- [57] Vanhanen (2000). A New Data Set for Measuring Democracy: 1810-1998. *Journal of Peace Research*, 37, 251-265.
- [58] Vanhanen, T. (1990). *The Process of Democratization: A Comparative Study of 147 States, 1980–8*. New York: Crane Russak
- [59] Waldron, J. (1988). *The Right to Private Property*, Oxford: Clarendon Press
- [60] Wu, W., and Davis, O.A. (1999). The Two Freedoms, Economic Growth and Development: An Empirical Study. *Public Choice*, 100, 39-64.
- [61] Zimbabwe Lawyers for Human Rights (2001-2006). “The Human Rights Bulletin: Political Violence Reports Political Violence Reports”. Zimbabwe Human Rights (NGO) Forum.

## Tables

**Table 1: Macroeconomic Indicators for Zimbabwe**

Year	Per Capita Annual GDP Growth %	Inflation rate %	FDI inflows in US\$	GFCF % of GDP
1964-1970	3.88	2.5	----	12.46
1970-1979	0.71	7.0	18.47	16.98
1980-1989	1.38	12.09	-4.88	16.18
1990	3.82	15.00	-12.22	18.21
1991	2.65	31.00	2.79	20.58
1992	-11.30	28.00	19.00	22.36
1993	-1.28	22.00	38.00	23.59
1994	6.93	21.00	41.00	21.37
1995	-1.77	10.00	117.70	24.58
1996	8.43	26.00	80.90	18.04
1997	1.05	16.00	135.10	18.05
1998	1.43	37.00	444.30	17.06
1999	-4.79	65.00	59.00	13.25
2000	-8.87	56.00	23.20	11.79
2001	-3.54	122.00	3.80	11.00
2002	-5.08	151.00	25.90	9.01
2003	-10.97	263.00	30.00	12.58
2004	-4.42	350.00	60.00	15.42
2005	-5.98	240.00	102.80	15.00

Source: World Bank Indicators

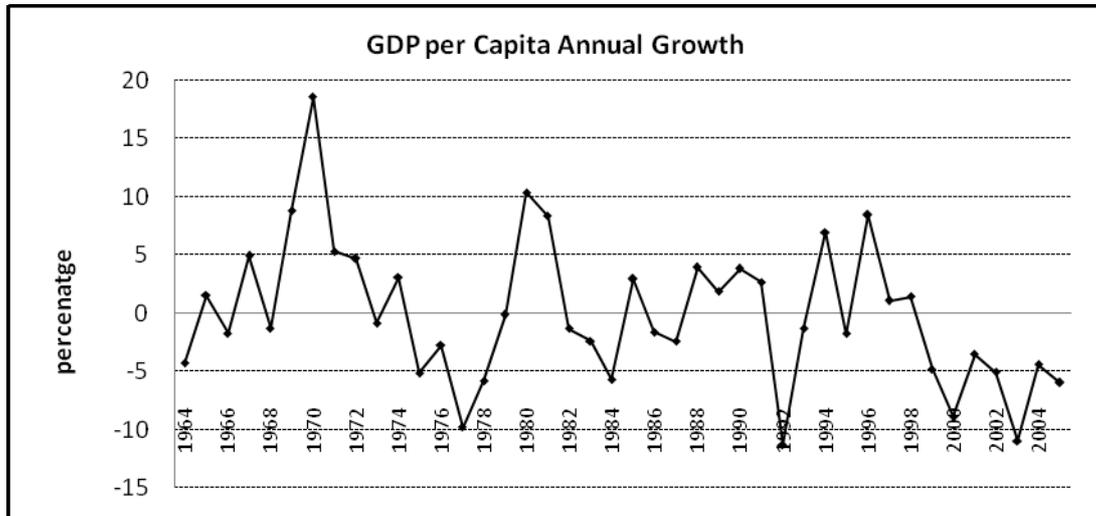
**Table 2: Spearman Correlation Coefficients**

	PolFree	Political Freedom (FH)	Civil Liberties (FH)	Propert	Propert (FI)	Political Instability
PolFree	1.000					
Political Freedom (FH)	0.7612*	1.000				
Civil Liberties (FH)	0.2866	0.2190	1.000			
Vanhanen Democratisation Index	0.8232*					
Propert	0.2761	-0.1898	0.4600*	1.000		
Propert (FI)	0.0275	-0.0946	-0.4808*	0.7427**	1.000	
Propert (HF)				0.8212*		
Political Instability	0.0879	0.0075	0.4234*	0.7184**	0.5731**	1.000

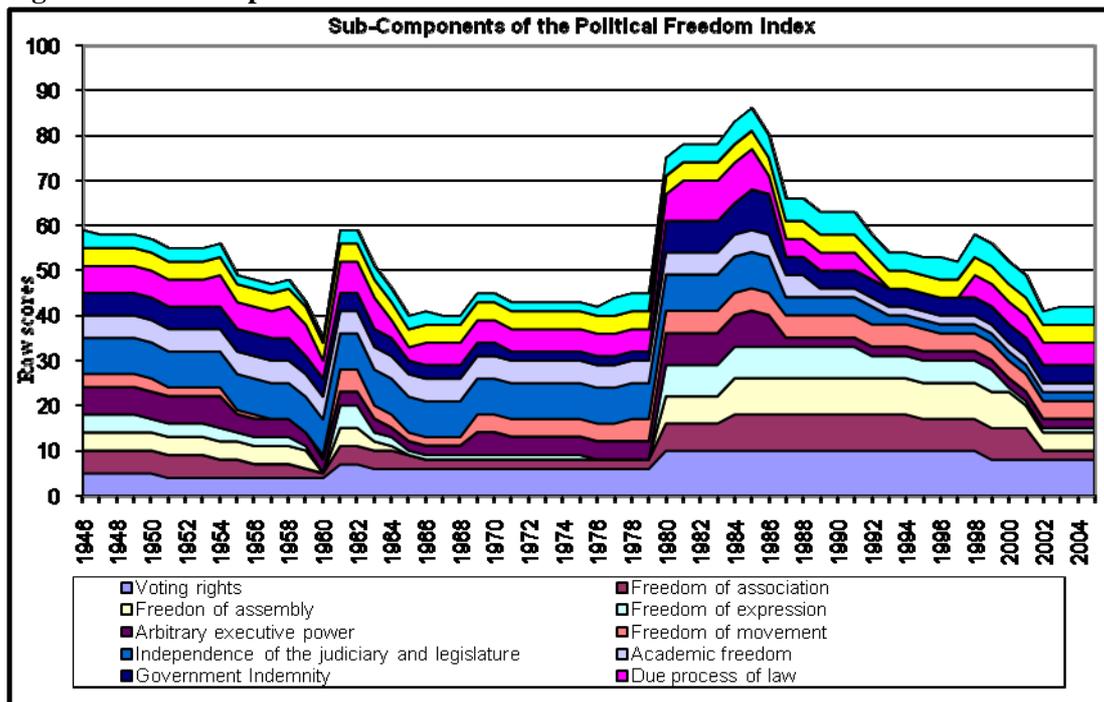
Notes: \* denotes significance at 5%, \*\* denotes significance at 1% level.

# Figures

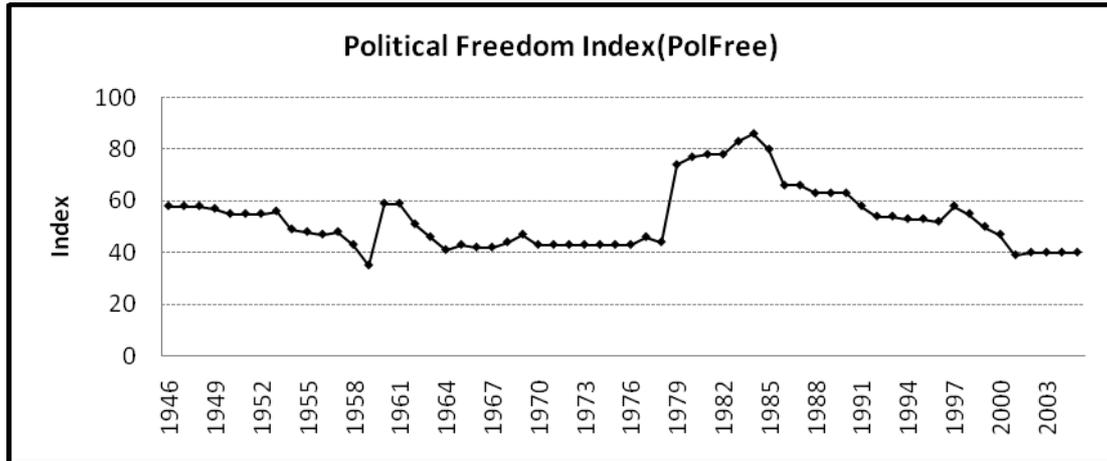
**Figure 1: Per Capita GDP Annual Growth Rate in Zimbabwe: 1964-2005**



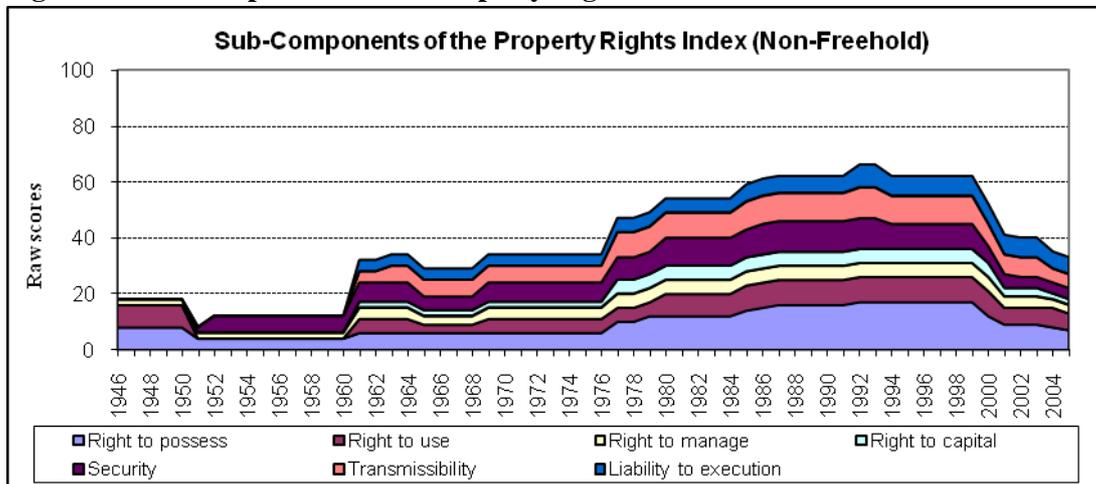
**Figure 2: Sub-Components of the Political Freedom Index**



**Figure 3: The Political Freedom Index: 1946 to 2005**



**Figure 4: Sub-Components of the Property Rights Index in the Non-Freehold Tenure**



**Figure 5: The Property Rights Index in the Non-Freehold Tenure (PRNFH)**

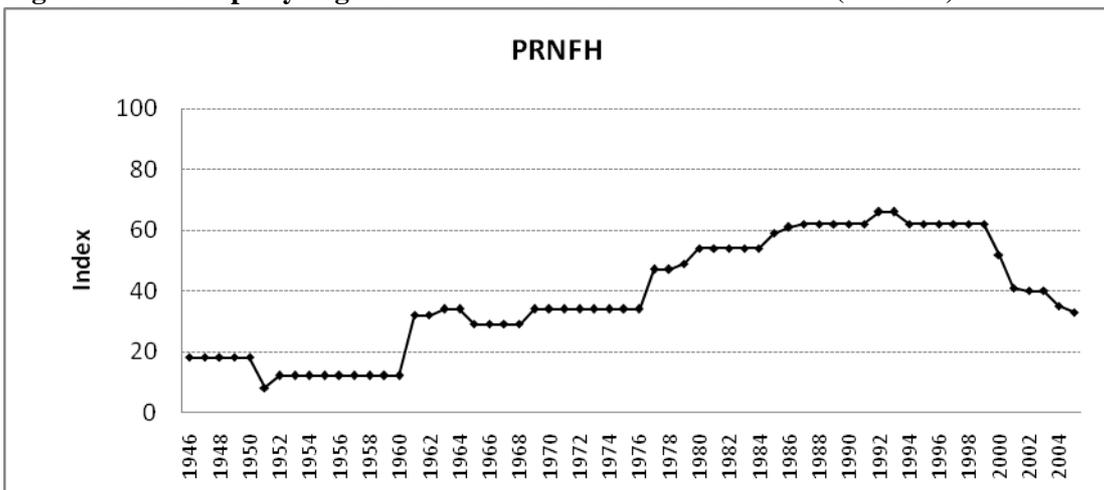


Figure 6: Sub-Components of the Property Rights Index in the Freehold Tenure

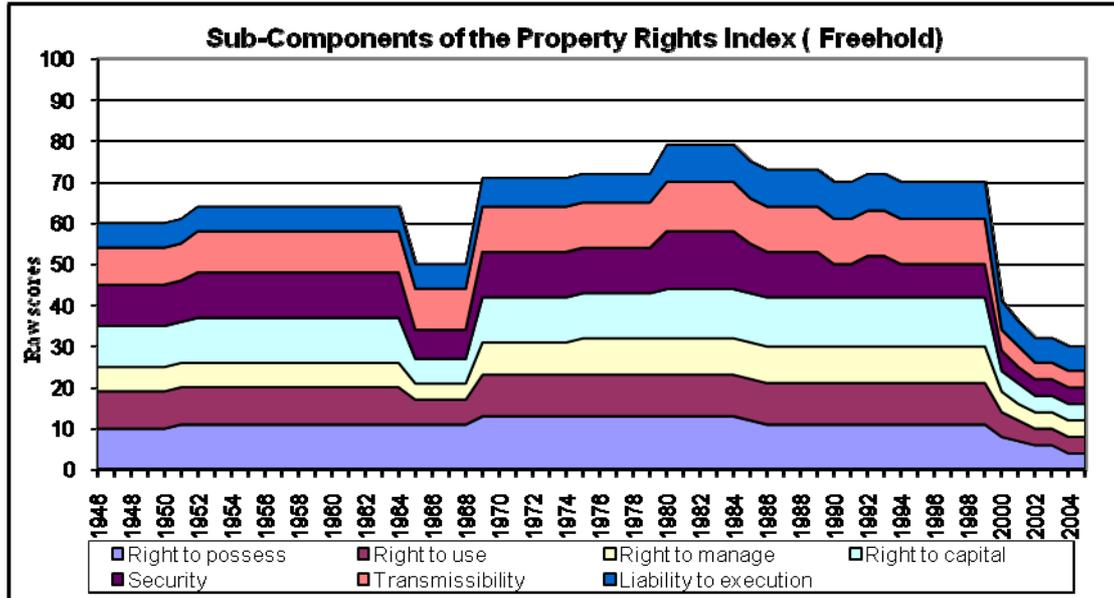


Figure 7: The Property Rights Index in the Freehold Tenure

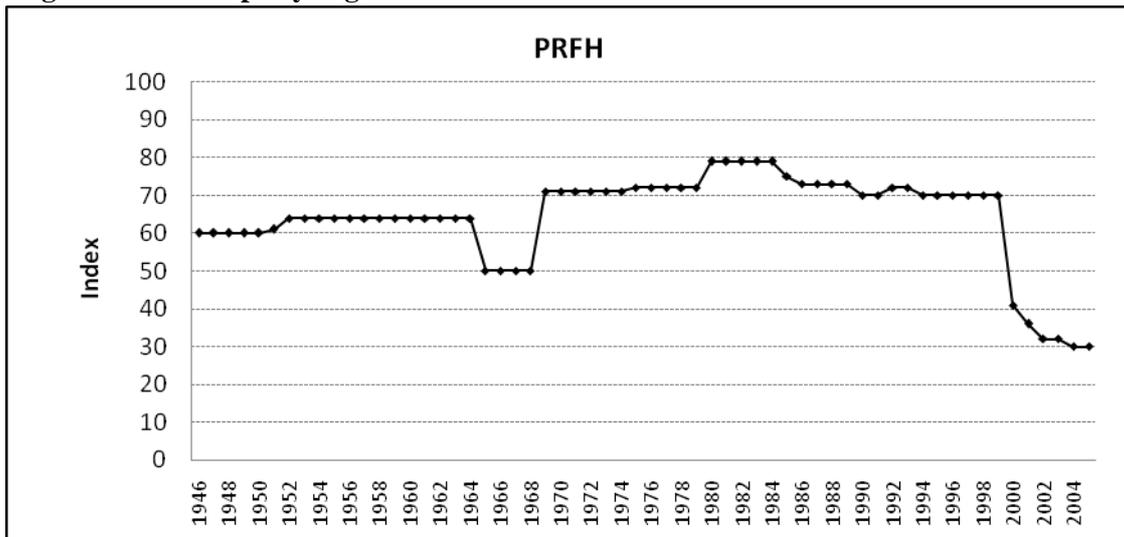
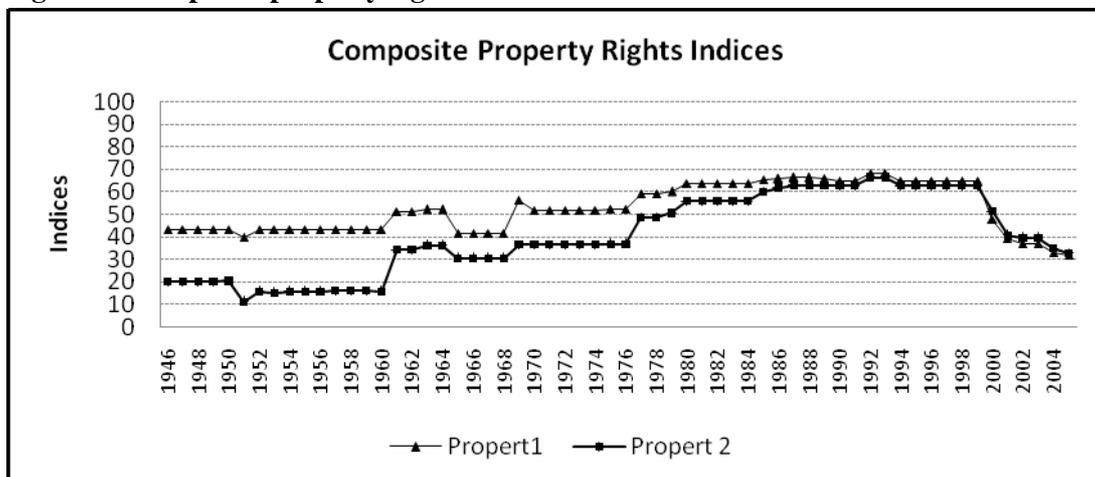
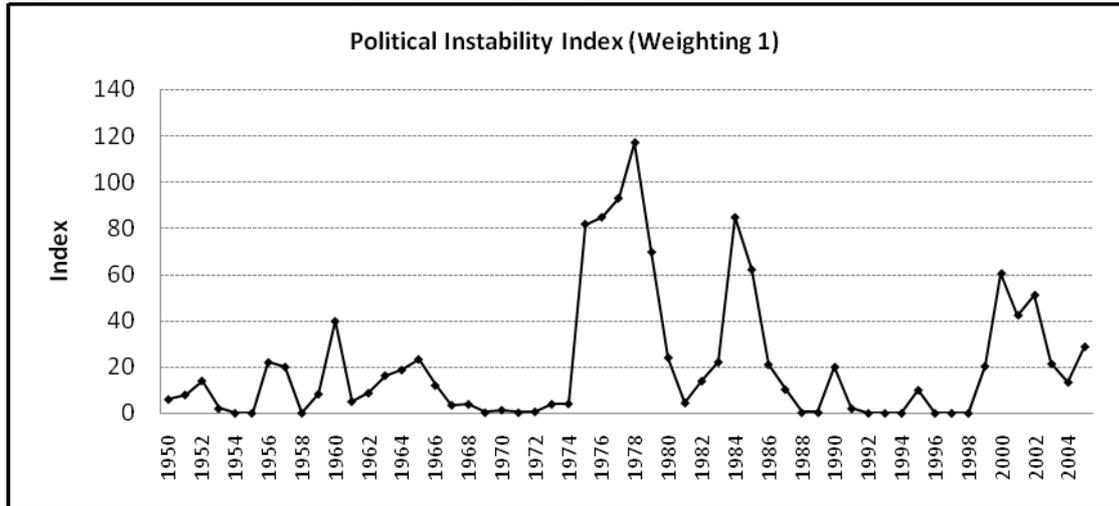


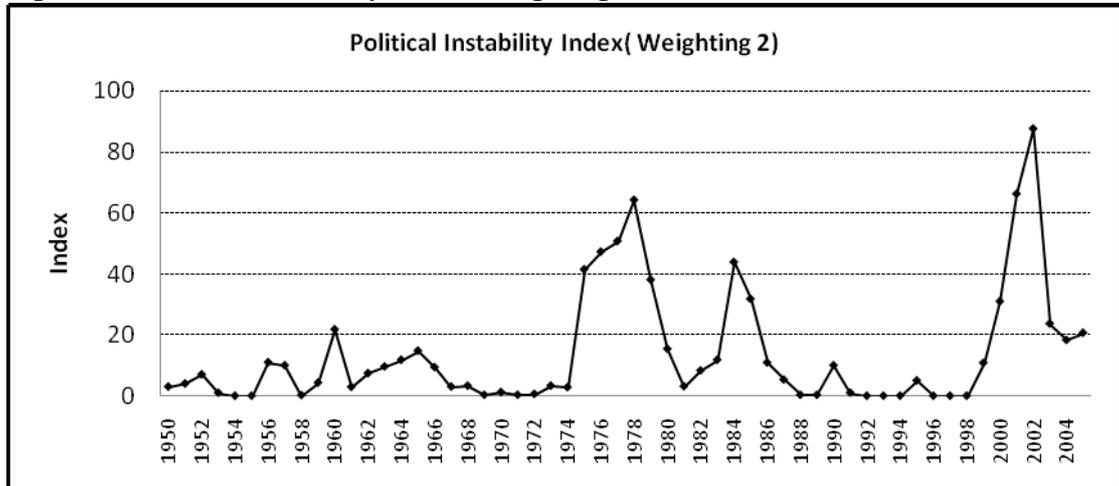
Figure 8: Composite property rights indices: 1946-2005



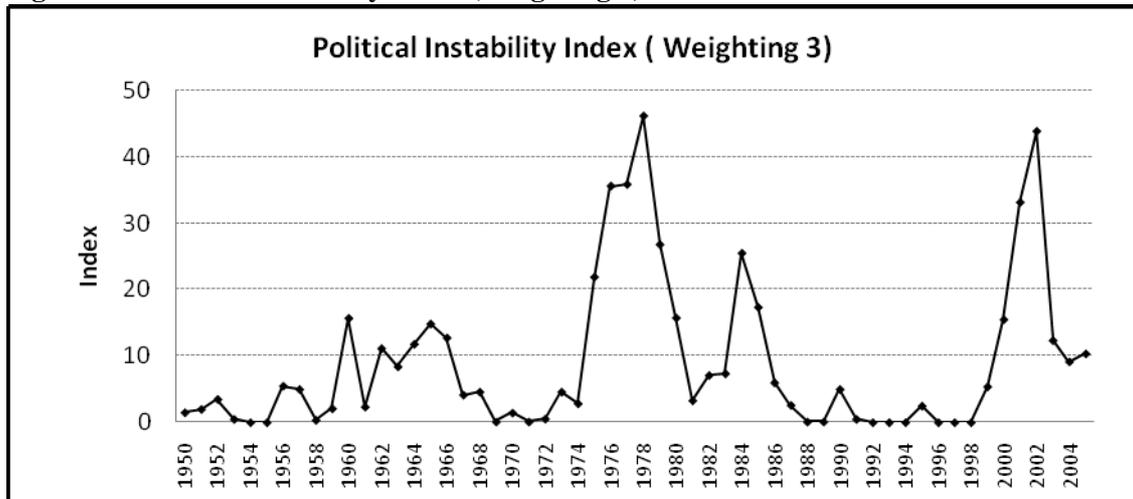
**Figure 9: Political Instability Index (Weighting 1): 1950-2005**



**Figure 10: Political Instability Index (Weighting 2): 1950-2005**



**Figure 11: Political Instability Index (Weighting 3): 1950-2005**



**Figure 12: Political Freedoms: Zimbabwe Compared to South Africa**



**Figure 13: Property Rights: Zimbabwe Compared to South Africa**

