Measuring Institutions: Indicators of Political and Economic Institutions in Namibia: 1884 - 2008

B.P. Zaaruka and J.W. Fedderke

Working Paper 236

August 2011
Measuring Institutions: Indicators of Political and Economic Institutions in Namibia: 1884-2008

B.P. Zaaruka* and J.W. Fedderke†

August 23, 2011

Abstract

This paper presents a database on institutional measures for Namibia for the period 1884 to 2008. Using the techniques of principal components and factor analysis in aggregating these indicators, the study does two things. First, it illustrates a methodology for constructing de jure and de facto institutional measures by means of using pieces of legislation and quantitative data, respectively. Secondly, these indicators are used to assess the nature of political and economic institutional transformation from the colonial legacy to the modern outcome using Namibia as a natural experiment. The new indicators while covering a long time period (1884-2008), correlate fairly well with some of the widely used institutional indices produced by the Freedom House and the Heritage foundation.

Keywords Namibia Institutional Indicators Political Freedom Property Rights Judicial Independence Political Instability

1 Introduction

This paper evaluates the nature of institutions that characterise Namibia in the form of property rights, judiciary systems and political freedom for the period 1884 to 2008. This is done through the construction of de jure and de facto indicators of property rights, political rights and civil liberties and judicial independence, using legislation as an indication of the rules of the game (see North, 1990). The indices chosen represent the political and economic institutions considered important for economic growth. The lengthy time period is chosen following the suggestion by Kaufman et al. (2003) that the likelihood of observing significant changes in institutional variables substantially increases with the length of time under consideration.

Crucial to the study, the period under review also allows the examination of the hypothesis of the persistence of inherited institutions. According to Acemoglu et al. (2001), in areas where Europeans showed strong settlement patterns, they created institutions characterised by strong protection of property rights and efficient enforcement of contracts. They argue that these institutions, created by colonisers, have persisted over time and they continue to influence economic performance after independence. Namibia like many other developing countries, finds itself at the heart of these debates. Amongst the German colonies in Africa, Namibia and Tanzania were the only colonies with sizeable German populations, which underscore the presence of European settlement in these countries. According to Acemoglu et al. (2001), European settlers demanded and received social, political and institutional structures similar to those that existed in their home country.

An empirical verification of this hypothesis is problematic for several reasons. Firstly, long-run measures of institutions do not exist to permit rigorous tests of the hypothesis. Virtually

*PhD Candidate, School of Economics, University of Witwatersrand, Email:berniez09@yahoo.com
†Penn State University, School of Business, University of Witwatersrand and Economic Research Southern Africa.
all the evidence of the effect of institutions on economic performance is derived within a short-
term framework\(^1\) of analysis, thereby limiting the ability to test the long-run effect. Secondly, new
difficulties have arisen from the development of measures for institutions based on the judgments of
“experts”\(^2\). According to Glaeser et al. (2004), the standard indicators tend to measure outcomes,
rather than the formal constraints\(^3\) as defined in theory. This has led to measures of institutions
used in the growth literature being volatile, uncorrelated with constitutional constraints, and closely
correlated with short-run government policies and election outcomes.

The systematic divergence in growth per capita over a long period among many developing
countries and the possibility of country heterogeneity\(^4\) underlines the crucial importance of utilising
longer time series for explaining growth trajectory differences. An alternative approach is to consider
constructing longer dated indicators of a de jure and de facto nature to allow for testing the impact
of institutions on economic growth over time.

Using the technique of principal components and factor analysis in aggregating the composite
indicator, guided by the conceptual framework as developed by Fedderke et al. (2001), the study
constructs institutional measures for Namibia. This study contribute to the growing institutions-
growth empirical literature by providing alternative indices of political freedoms, property rights,
judicial independence and political instability for Namibia for the period 1884-2008.

In the next section, the relevant literature is reviewed. Section three presents the methodol-
ogy employed for the construction of the present indices. Section four applies the methodology of
constructing the indicators to Namibia, while in Section five presents the comparisons of indicators
with other existing indicators on Namibia as well as with similar data sets on Tanzania\(^4\) and South
Africa.\(^5\) Section six presents the summary of the findings and the conclusion.

The paper traces the genesis and the developmental transformation of the institutional framework
in Namibia from 1884 to 2008, using various legislations promulgated during the period under review.
The legal foundations of most of the institutional indicators are traceable in many laws, in the form
of acts, ordinances, proclamations and administer general (AG) proclamations, because legislative
authority over South West Africa/Namibia vested in various different offices and bodies at different
points in the country’s history.

Namibia has been subjected to colonialism for a period of over a century, and in line with the
foundations of New Institutional Economics\(^6\), the colonial legacies are traceable in most institutional
indicators, even after 18 years of independence.

Namibia’s colonial record starts first with German Empire’s protectorate in 1884 which ended
with defeat of Germany in the First World War in 1915. The 30 years of German colonial rule
termination, initiated yet another new phase of colonial history with more profound and longer term
effects under the South Africa, lasting for 75 years. Namibia gained her independence from South
Africa in 1990, with a government committed to multiparty democracy. The period from 1990 to
2008 is marked with peaceful and declared free and fair elections.

---

\(^1\) Generally, the coverage is the late 1960s and 1970s, which typically overlaps with the post-independence period
of many developing countries.

\(^2\) Rules of the game as postulated by North (1990).

\(^3\) According to Durlauf et al. (2001), the approach of entering institutional quality measures in regression analyses
imposes a strong homogeneity assumption: all countries are assumed to have an identical aggregate production function.
See also the studies by Dawson (2007) and Minier (2007) that have addressed the parameter heterogeneity
and institutions.

\(^4\) Zaaruka et al. (2011), provides the datasets on Tanzania

\(^5\) Fedderke et al. (2001), provides the datasets on South Africa.

\(^6\) See the work of North (1990); Acemoglu et al. (2001; 2002; 2003) and La Porta et al. (1998; 1999).


2 Literature Review

2.1 Theoretical Literature Review

The recent debate has witnessed a shifting away from purely looking at traditional (proximate) determinants of economic growth to deeper fundamental (ultimate) determinants of growth.\(^7\) Three strands of competing literature have emerged in the study of fundamental determinants of long-run economic growth. A first strand of literature argues that geography is the dominant factor in determining a sustained level of economic growth in the long run. According to the geography hypothesis, countries that are located in zones that are disadvantaged by the climate, quality of soil, or the prevalence of diseases, were originally and remained poorer than those favoured by geography. Cited papers in this literature include Myrdal (1968), Diamond (1997) Gallup, Sachs and Mellinger (1999), Sachs (2001, 2003), and Olsson and Hibbs (2005).

A second strand of literature emphasises participation in international trade as a growth-inducing factor leading to unconditional convergences of income between poor and rich countries. This is attributed to the work of Sachs and Warner (1995) and Frankel and Romer (1999).

A third strand of literature puts emphasis on the role of institutional changes as a critical determinant of long-run economic growth. Acknowledgment of the importance of institutions for economic development has been posited in the growth literature since the writing of Adam Smith, and more recently by Douglass North and Robert Thomas, who observed that factors such as capital accumulation or innovation “are not causes of growth: they are growth” (North & Thomas, 1973, p.2; North 1987, 1990). The theory has its roots in the work of Ronald Coase (1937, 1960), which connected neo-classical theory, transactions costs and institutions. Coase (1960) argued that zero transactions-cost conditions lead to a market solution that maximises income irrespective of the institutional arrangement. North (1987) argued, however, that transaction costs are pervasive and, as such, institutions matter.

A useful framework for thinking about what institutions are and how they can best be measured is provided by North (1990). According to North (1990: 3) institutions are “human devised constraints that structure human interactions composed of formal (law and regulations) and informal (sanctions and customs) rules and they are devised by human beings to create order and reduce uncertainty in exchange”. Three fundamental elements can be deduced from North’s definition. Firstly, institutions consist of formal constraints devised by human beings to shape human interaction, such as the statute of laws, common laws and regulations. Secondly, the informal rules or unwritten rules (represented through culture, traditions, and norms of behaviour) are transmitted within the society and imposed by society itself. Thirdly, enforcement mechanisms play a crucial role in ensuring that institutions are effective in order to create order and reduce uncertainty.

Hall and Jones (1999)\(^8\) revived the modelling of institutions as deeper determinants, with the recent institutions-versus-geography debate being accredited to the work of Acemoglu et al. (2001, 2002 & 2005). The institutional hypothesis explains the long-run differences in economic development across countries by lasting differences in the quality of endogenously generated institutions. Acemoglu et al. (2002, 2005) argue that Europeans adopted very different colonisation policies in different colonies, resulting in diverse institutions today. In places where they could not settle due to high mortality rates, they tended to set up extractive institutions\(^9\) to oppress the native population and facilitate the extraction of resources in the short run. In places where they faced low mortality rates, the colonisers set up favourable institutions for their own future benefits. These institutions persisted over time and tend to explain much of the differences in economic development across

---

\(^7\)The proximate determinants are conventionally held to refer to capital accumulation, labour and technology, while ultimate determinants are institutions, legal and political systems, socio-cultural factors, demography and geography.

\(^8\)Earlier empirical studies linking institutions and economic performance include the work of Kormendi and Meguire (1985), Scully (1988), Barro (1996), and Engerman and Sokoloff (1997), among others.

\(^9\)These institutions did not introduce protection for private property, nor did they provide check and balances against the government.
The broad aim of this review is to look closely at the measurement of institutions. The main motivation for this interest is that despite the emphasised importance of institutions, measuring of institutions remains a critical question.

2.2 Review of Empirical Literature

2.2.1 Institutional Measures

The way that empirical institutional measures are categorised is important for interpreting their effects. The institutional framework, as provided for in the definition by North (1990), comprises both formal and informal constraints. From this widely cited definition, good institutions are viewed as establishing an incentive structure that reduces uncertainty and promotes efficiency, hence contributing to improved economic performance.10

(i) Property Rights Indicators

In the literature, property rights are often argued to have the greatest impact on economic growth.11 However, the quantification and operationalisation of property rights has proved to be challenging. Nevertheless, this has not stopped researchers from creating indices to measure property rights. The most frequently used indicator of property rights is provided in the compilations of the Economic Freedom Index by the Frazer Institute. According to Gwartney et al. (1996), an index of economic freedom should measure the extent to which legally acquired property is protected and individuals are engaged in voluntary transactions. This indicator was based initially on objective quantifiable variables in most of its components, in the form of macroeconomic indicators, while omitting key elements of law and regulations affecting economic freedom.

However, this has been corrected in Gwartney and Lawson (1997) and subsequent publication of the data sets for 1997-2000; additional components on legal and regulatory elements have been added to the data sets. Since 2000, the Fraser Institute has been looking at 38 components which are divided into five major components to rate the countries12 on a scale of zero to ten on an annual basis. A score of ten means a country is the most free, and a score of zero means a country is the least free. Ratings are available for some countries since 1970 (at five-year intervals).

Another database that provided an indicator of property rights protection is the Heritage Foundation (see Johnson et al., 1995). The degree to which property rights are guaranteed is scored between one (very high) and five (nonexistent). Unlike the Fraser Institute, the property rights index is reported as a separate score and it is available annually since 1996.

A longer time run of property rights is provided by Fedderke et al (2001) for South Africa dating back as far as 1950 and spanning up to 1997, while recently Gwenhamo et al. (2008) provided a similar index for Zimbabwe, Zaaruka et al. (2011) for Tanzania, Fedderke et al. (2010) for Malawi and Lourenço Jr et al. (2010) for Zambia. This is based on the legal statutes that govern immovable property.13 For the purpose of this study, the key point to note is that, all of the proxies used in constructing property rights are broadly defined,14 while the focus of this study is specifically on the right to own immovable property and the qualities of these rights.

(ii) Political Rights and Civil Liberties Indicators

10 See North (1991) for a general discussion.
12 By 2006, Namibia was rated 71 out of 141 countries with a score of 6.8.
13 The concept of property rights is based on the Honore’s definition of ‘full liberal ownership’ as adopted by Waldron (1988).
14 Except for work by Fedderke et al. (2001) and Gwenhamo et al. (2008).
While the property rights indicators experience some deficiencies, recent developments in political economy have quantified political institutions. Despite the availability of several empirical measures of political institutions, there is however no universal agreement among scholars on the ways of empirically measuring political freedom or political democracy. Among the indices are quantitative measures of political rights and civil liberties produced by Freedom House on an annual basis since 1972, for almost 165 countries. The political rights measure looks at a number of issues that allows for degree of political competition and permits people to choose their leaders freely. The civil liberties measure on the other hand considers measures of the rule of law and judiciary independence. Each right is scaled from 1 (free) to 7 (not free).

Another data set is the Polity IV database popularised by the work of Gurr (1975) and Jaggers and Gurr (1995). The main variables captured are institutionalised democracy, which signals the existence of institutions or procedures through which citizens can express their political preferences meaningfully, and the institutionalised autocracy index, which signals an autocratic state in which competitive political participation is suppressed or prohibited. These data are available for few independent states for the period 1800-2007.15 Most countries are included in the sample upon attainment of independence status.

The Database of Political Institutions (DPI) compiled by the Development Research Group of the World Bank is among the latest developments on political indicators. Beck et al. (2001) present the database and demonstrate its use. The database covers around 177 countries for the period 1975-200616 and it contains a variety of variables mainly measuring aspects of the political system and electoral rules. The major categories are the chief executive variable, looking at years in office, the chief executive’s party affiliation; electoral rules looking at the type of the voting system and whether or not elections are affected by fraud. Others are measures of the political party fractionalisation index, indices of checks and balances and federalism.

(iii) Judicial Independence Indicators

This is the least-considered indicator compared to the previously discussed indicators. This is partly due to the difficulties of measuring and defining the concept. A couple of researchers have published several criteria or variables the judiciary must meet, based on specific laws or procedures, to constitute judicial independence (La Porta et al. 2004; Feld and Voigt, 2003), while others focus mainly on the concept of the rule of law (Kaufmann et al. 2009) and courts’ dispute-resolution mechanisms (Djankov et al., 2003). The literature or measurements that focus on the number aspects of judicial institutions mostly agree that a truly independent judiciary has three main characteristics. First, there is clear separation of the judicial system from other branches of government. Second, the judicial system is impartial; i.e. the judicial decisions are not influenced by the judge’s personal interest in the outcome of the case. This also includes the idea that judges are not selected primarily because of their views, but on merit. Lastly, judicial decisions, once rendered, are respected.

The work of La Porta et al. (2004) covered the power and reach of the judicial system for 71 countries in a single database in 2004. The measure of judicial independence is based on two factors: (i) whether judges of the highest courts have life tenure, and (2) whether judicial decisions are a source of law.

Closest to the current work is Feld and Voigt (2003), which provided a de jure and de facto judiciary independence index that covered the 77 countries for the year 2000. The de jure indicator comprises twelve variables, including life tenure and appointment by professionals. The de facto indicator is composed of eight factors; including the average length of actual judicial services and how often laws relating to courts have been changed. These indicators are available cross-sectional only.

The work of Djankov et al. (2003), on the other hand, focuses on measures of dispute resolution in courts. The study provided the legal origin and legal formalism index for 109 countries for the year

\[15\] Namibia data cover the period from 1990 to 2007.

\[16\] Namibia data are available for period from 1991 to 2006.
The legal formalism index is made up of seven broad aspects, including the use of professional judges as opposed to lay judges and self-representation, and the need to make written as opposed to oral arguments at various stages of the process.

The rule-of-law dimension which constituted one of the components of the governance indicators compiled by the World Bank (Kaufman, Kraay, & Mastruzzi, 2005, 2009, and Kaufman, Kraay, & Zoido-Lobatón, 1999) is a perceptions-based indicator. This captures the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police and the courts, as well as the likelihood of crime and violence. This variable is available annually for 2002 to 2008, although data exist for 1996, 1998 and 2000.

It is clear from the above discussion that most of the available indicators either represent a snapshot at a point in time or are cross-sectional in nature, thus limiting their usefulness in single-country time-series empirical work.

(iv) Political Instability Indicators

Many different variables have been employed to reflect the concept of political instability in literature. While there have been several attempts to construct a single indicator, there is no universal agreement among scholars given the dimensionality embodied in the concept of political instability. Therefore, a number of data sets exist which provide many indicators that can be used as possible proxies of political instability. This includes among others the Banks (1971) Cross-Polity-Time-series, which includes variables measuring civil protest (general strikes, riots and anti-governmental demonstrations), politically motivated aggression (guerrilla warfare, assassinations and purges) and political regime instability (coups d’état and revolutions). The data coverage for Namibia starts from 1980.

The other source of political instability proxy data are major rating services such the International Country Risk Guide (ICRG henceforth), which covers political risk evaluations. The commonly used indicators are government instability, internal conflicts, external conflict, military in politics, religious tensions and ethnic tension. The indicators are available on an annual basis starting from 1984.

The Database of Political Institutions by Beck et al. (2001) also offers indicators that can be used as political instability proxies. These include indicators such as polarisation and tenure of the chief executive. The database covers around 177 countries for the period 1975-2006.

2.3 A Framework for the Evaluation of Measurement of Institutions

Recent debates question the manner in which institutions are defined and measured. According to Glaeser et al. (2004), the frequently used measures of institutions do not abide by the definition of institutions as postulated by North (1990). Glaeser et al. (2004) argued that most of these indices do not capture the formal constraints. Instead, these variables tend to measure outcomes. As such they do not meet the criterion of permanency that North refers to.

Similarly the work of Arndt and Oman (2006), criticise the World Governance Indicators as developed by Kaufmann et al. (2003. Their arguments are that the World Governance indicators lack comparability over time. Kurtz and Shrank (2007) additionally express their concerns with regard to subjectivity in the construction of the World Governance Indicators. Their argument is that these indicators are perception-based measures of governance and highly correlated with each other.

As a way forward, the work of Voigt (2007: 23) makes a proposal on how to measure institutions empirically. According to Voigt (2007: 23), the measures of institutions should be precise, objective and take into account de jure as well as de facto elements. By doing so, the definition of North (2006) is embraced. The current study aligns itself with this argument and attempts to limit the common

\footnote{Glaeser et al. (2004) cite the International Country Risk Guide (ICRG), The World Governance indicators and Polity IV data sets.}
outlined problems by constructing measures that are de jure in nature based on formal legislation. These allow for the assessment of the rules of the game, rather than outcome. To minimise the influences of the authors’ biases, multivariate techniques are used to compile the overall index.\textsuperscript{18} Separate de facto indicators are constructed using observable statistical data.

## 3 Methodology

The study employs techniques and methods that minimise problems as outlined in section 2.3 of this paper. Fedderke et al. (2001) argue that in order to avoid outcome-based measures and to develop measures in line with North’s definition, detailed analysis of formal legislation ought to be used. This involves annual ratings of the status of rights based exclusively on formal legislation in constructing the de jure position in the evolution of property rights, political and civil liberties, and the judicial system. The application is to Namibia during the period 1884-2008.

### 3.1 Technique and the Method

The construction of indices is much like mathematical or computational models. According to Nardo et al. (2005), the robustness of any index depends as much on the craftsmanship of the modeller as to universally accepted scientific rules for encoding. The construction of indices, generally involves four steps, i.e. development of a theoretical framework; scaling and rating; weighting and aggregation; and verification (McGranahan et al., 1972), which is also applied in this paper.

#### 3.1.1 Development of a clear theoretical framework

The first step in constructing the composite indicators is the development of a clear theoretical framework which provides the basis for the selection and combination of each sub-component into a meaningful composite measure. The following institutional indicators based on the accepted definitions are constructed for the period 1886-2008.

(i) **Property Rights Indicators**

Demsetz (1967) defines property rights as the liberty or permission to enjoy benefits of wealth while assuming the costs which the benefits entail. Our indicator is constructed with particular reference to immovable property. This covers all legislation passed that affects the issue of immovable property, with special reference to land rights in Namibia.

The ideal set of property rights will comprise of the following seven incidents, based on Honore’s definition of “full liberal ownership” as adopted by Waldron (1988) and used by Gwenhamo et al. (2008).

1. Right to possess: The owner at his own discretion is allowed to possess and dispose of his property.

2. Right to use: An owner is allowed to use his/her property at his/her own discretion, without contradicting the law.

3. Right to manage: An owner is allowed to manage his/her property at his/her own discretion without interference – in case of leaseholds.

4. Right to capital: The right to use property in financial transactions, including as collateral. Also includes the freedom to use of property for sublet and rent to earn capital.

5. Right to security: Ownership is protected from expropriations and interference by others.

\textsuperscript{18}See the discussion in the next section on the techniques employed.
6. Incident of transmissibility: An owner can transfer the rights to a specific person. This includes the right to sell, or give away, or mortgage, or buy or inherit.

7. Liability to execution: An owner could be held liable for liabilities emanating from his property which injuriously affect others.

The understanding is that any interference with any of these bundles of rights may restrain the freedom that can be enjoyed from the property.

(ii) Political Freedom

This measure is composed of indicators of political rights and civil liberties based on theoretical dimensions of a contemporary liberal democracy advanced by Gurr and Jaggers (1995). The political rights indicators are based on the degree to which individuals in a state have control over those who govern. The civil liberties indicator measures the rights of the individual, including freedom of expression, assembly, association and religion. The following key features are evaluated in accordance with the written laws:

1. Voting Rights / Franchise: This refers to universal suffrage where the right to vote is not restricted by race, gender, belief, wealth or social status.
2. Freedom of Association: The right of individuals who share similar interests to come together and form organisations that represent their interests and views.
3. Freedom of Assembly: These uphold the right to peaceful assembly and limit the use of force by authorities in controlling the assemblies.
4. Freedom of Expression: The right to freedom of expression upholds the rights of all to express their views and opinions freely. This also includes media freedom.
5. Extension of Arbitrary Executive Power: This deals with constitutional provisions that limit and exclude the use of discriminatory discretionary powers vested in the executive in the applications of laws.
6. Freedom of Movement: The right of movement and the right to reside in an area of choice within the territorial boundaries of the relevant polity.
7. Independence of the judiciary and Legislature: This relates separation of power between the executive, judicial and legislative branches of government.
8. Academic Freedom: The right to freely teach or learn without unreasonable interference from authority. This also encompasses the right to access any institution of education irrespective of race, gender, belief, wealth or social status.
9. Government Secrecy/ indemnity: Deals with the applications of laws that act to conceal information to the public.
10. Due process of law: Is based on the principle that the government must respect all of the legal rights that are owed to a person according to law. This calls for protection of individual persons from the state.
12. Others: is a residual category that captures all rights and freedom relating to political freedom that cannot be classified under any of the specific dimensions. One key right relates to labour repression which was quite important during the colonial period of Namibia, and other African countries in general.
(iii) **Judicial Independence**\(^{19}\)

The judicial independence index reflects the independence enjoyed by legal enforcement institutions, here proxied by the judges, in passing their judgement (Feld et al., 2003). It is important to recognize the differences between the independence of the judiciary and political freedom as measured in this study. The Political freedom index has to do with whether or not political and civil rights are guaranteed, while judicial independence is about ensuring that citizens of that country are treated fairly and political and civil rights are protected. The judiciary plays an oversight role to ensure liberal democracy. To achieve the oversight role, the judicial independence relies on the principle that judges must decide cases fairly and impartially, relying only on the facts and the law.

The conceptual framework for assessing judicial independence captures the dynamics that encourage or impede judicial independence. This framework consists of two parts. The *first part* focuses on the influence of the legal foundations as provided for in the legislation over the judicial system. This forms the *de jure* measure of the judicial system. Based on Feld et al., (2003), these are summarised by five broad categories assessed to highlight the status of the de jure judicial independence.

1. Establishment of courts according to law (constitutional separations of power from arms of government in law).
2. Appointment procedures, including compensation
3. Impartiality: Judicial decisions are not influenced by the judge’s personal interest in the outcome of the case. Judges selections are based primarily on merits and not on their political views or affiliations.
4. Access to Courts and Courts record: The people rely on courts to protect their access to justice and to protect their legal rights; public access to court information.
5. Judicial Accountability: Ability to do what is right, for instance, the ability of high courts to reverse erroneous lower court decisions on appeal. Enforcement of ethical standards and administrative rules between judges and their peers.

The *second part* examines the factual implementation of various unwritten constraints that influence and control the judiciary. This indicates the de facto indicator focusing on actual country experience. The approach is guided by the work of Feld et al., 2003, whose eight variables are summarised and accessed in these five broad categories for indication of the *de facto* judicial independence status.

1. Number of judges removed from office (includes reassigned duties such as ambassadorship, etc.)
2. Number of times the court’s decision is over-ridden by other branches (Contempt of Court)
3. Annual number of corrupt judicial officials who either are arrested or whose cases are dismissed or reprimanded. This reflects judicial corruption (bribery) which tends to undermine the impartiality of the judicial process within the court system.
4. Number of harassed judicial personnel; this includes issues of verbal and physical attacks directed towards judges due to rulings that are unpopular with some cliques.
5. Incidence of side-stepping the judiciary

\(^{19}\) For the purpose of this study judicial independence and the independence of the judiciary is used interchangeably to mean the same concept.
Political instability:

This constitutes socio-political unrest and disturbance; the choice of the sub-components is guided by the work of Fedderke et al. (2001).

1. The number of politically motivated arrests per year
2. The number of political parties and publication banned per year
3. The number of declarations and renewals of states of emergencies per year
4. Incidents of war-related armed attacks on the general public per year
5. Township strikes and riots

3.1.2 Scaling and Rating of Indices

According to Booysen (2002), scaling of indices entails the ordering of subcomponents/variables in some meaningful way. This entails the transformation of variables into ordinal scales. Accordingly, the scaling entails the reading of enacted legislation to translation into numbers. Relying on the scaling categories in Fedderke et al. (2001) as reference point, the conventional linear scaling transformation method is applied. The composite indices are scaled from 0-100, with 100 representing an ideal state or type of rights being guaranteed under the respective composite index. In terms of the sub-components, the raw points are awarded using scales, which together aggregate to a hundred score. This process entails some inter-subjective judgements.

(i) Property Rights Indicators

It is argued that property is a general term for the rules that govern people’s access to and control of things like land, natural resources, the factors of production and also inventions and other intellectual products. These systems of rules are assumed to exist in any society to avoid conflict and ensure cooperation, production and exchange. The common property arrangements are common property and private property and thus form the core of this study. Guided by the normative ideal criteria, the rating instrument is based on a list of seven incidences of rights as discussed in section 3.1.1.

The initial weights are derived from the work of Gwenhamo et al. (2008). The right to possess are scaled from 0-20, the right to use, right to capital, right to security and right to transmit are scaled from 0-15. The right to manage and liability to execution are scaled from 0-10 (see table 1). Based on the weights, the following rating criteria are developed within the paper to guide the readers on the outcome of the rating the pieces of legislation.

Scores are awarded to various sub-components using varying scales. A lower score indicates an enactment of legislation that curtails the liberty or permission to enjoy the property, while the opposite is true for a higher score. Summing across all incidences gives a total score of 100, representing an ideal set of property rights being guaranteed under the respective tenure index.

(ii) Political Freedom

20 This is relevant for the construction of the de facto indicators due to the use of qualitative data.
21 This requires points of reference relative to which indicators can be scaled (Drewnoski, 1972). A minimum and a maximum value are usually identified for each of the variables.
22 The sub-component weights are adopted from the work of Gwenhamo et al. (2008), to maintain comparability in the datasets and these reflect the intersubjective judgements due to the independent verification by experts.
23 Factor analysis technique was used in obtaining the component weights contribution into the single composite indicator.
The rating instrument is based on the twelve key features covering both notions of political rights and civil liberties. Based on the work of Gwenhamo et al. (2008), eight of the sub-components were scaled from 0-10, yielding a total of 80 raw points. This category includes voting rights, freedom of association, freedom of assembly, freedom of expression, the extent of arbitrary executive power, government secrecy or indemnity, due process of law and freedom of movement.24

The other four categories were scaled from 0-5, and these include academic freedom, religious freedom, independence of the judiciary and the legislature25 and a residual category. The following scaling matrix (see table 2), is compiled to guide the outcome of the rating instrument.

Raw points are awarded to the various sub-components based on scales, whereby an increase in the score indicates a move toward contemporary liberal democracy, and a decrease in the score indicates a move away from the ideal.

(iii) Judicial Independence (de jure)

The rating instrument is based on five factors that serve as guiding principles in ensuring the formal (de jure) independence of the judiciary (see table 3). Due to the importance of both the high and lower courts in the countries under review, the five indicators were evaluated at both levels, thereby leading to ten sub-components. In this paper, these sub-components enjoy equal weighting of 10 point scale. Summing across all sub-components26 gives a total score of 100, representing an ideal state of judicial independence.

(iv) Judicial Independence (de facto)

This index relates to the de facto measure of the independence of the judiciary. The idea is to capture the quantitative information as reported through the variety of materials ranging from newspapers to political magazines as well as governmental and non-governmental reports.27 Information on some sub-components is seldom available due to non-reporting of certain activities particularly the sub-component judicial corruption. In order to standardise the sub-components, five scales are compiled in table 4.

(v) Political Instability

Some episodes of instability have effects that are disproportionate to their fatalities. In order to standardise the variables, five scales for recording annual magnitudes for each variable are discussed in table 5.

3.1.3 Weighting and Aggregation of Index Components

The study relies on multivariate techniques by applying principal component analysis and factor analysis, which present an empirical and relatively more objective option for weight selection (Ram, 1982; Slottjie, 1991). Principal component analysis is applied to the de facto indicators while the factor analysis is used in obtaining the components weights contribution into the single composite indicator for all de jure indicators. The two concepts are related but not identical.

In the principal components analysis, the components are weighted with the proportion of variance in the original set of variables explained by the first principal component of that particular

24 The freedom of movement is increased to a 10 point scale due to the importance of the right for Namibia due to colonial history.
25 It should be noted that in the paper of Gwenhamo et al. (2008), this sub-component was initially given a 10-point scale. The different treatment in this paper is to limit its influence on the specific indicator, to avoid a web of association with the judicial independence indicator.
26 The importance of certain components over others in the overall composite index was determined through the use of factor analysis to minimize the author’s biases.
27 The index is based on verifiable facts and not on subjective evaluations.
component. According to Ram (1982), the technique has the advantage of determining the set of weights that explains the largest variation in the original component.

Factor analysis assigns the largest weights to the indicators that have the largest variation, independently of prior views on their economic importance. These properties are particularly desirable in order to minimise the inherent subjectivity in the construction of indicators. In this way, the authors’ biases are kept to a minimum.

3.1.4 Checking of Robustness and Validity of the Composite Indices
Composite indices also need to be validated. The common used measure of validity is the use of statistical correlation with other such measures\textsuperscript{28}. The study relies on the Spearman’s rank correlation coefficient, which is appropriate for ordinal measures.

3.2 Data Sources
The data used to construct the de jure institutional measures relies mainly on primary sources. Detailed pieces of legislation with regard to land, political rights and civil liberties were obtained from the Colonial Gazette and Statutes of Namibia. This was mainly obtained from the National Libraries and National Archives and cover mainly the period of colonial authority. For the post-independence period, pieces of legislations are obtainable from the Namibia Parliamentary database.

The construction of de facto indicators, i.e. political instability and independence of judiciary, relied on archival materials ranging from newspapers to political magazines. The other sources of such information include human rights groups and NGO reports in Namibia.

3.3 Anticipated Caveats
The study recognises a number of caveats that are inherent in long-period studies such as this one, particularly when it involves the development of composite indicators and data gathering.

- **Coherence and continuity**: The period under review is characterised by major changes such as changes in colonial powers, World War I and II and a protracted period of a suppressive apartheid era in Namibia. The manner how rights are conceived and defined has changed considerably over the period under review.

- **Reliability**: This underscores the issues of conformity in the interpretation of historical meaning of different rights. Of particular concern to Namibia is the dichotomy in the application and interpretation of rights that was very markedly different for different racial structures\textsuperscript{29}.

4 The Nature of the Institutional Framework in Namibia 1884-2008\textsuperscript{30}
This section presents the interpretation of property rights, political freedoms and political instability indices for Namibia for the period 1884 to 2008.

4.1 Property Rights in Namibia
The nature of property rights in Namibia has evolved over a number of years and is presently an outcome of the land tenure system implemented during both the German and South African colonial

\textsuperscript{28}See Arat (1991) and Fedderke et al (2001), among others.
\textsuperscript{29}See Fedderke et al. (2001) on the exposition of this issue, and Namibia being a colony and latter incorporated as a fifth province into South Africa was subjected to some extent to the laws and interest of the former South Africa regime.
\textsuperscript{30}The data workings and dataset is available from authors on request.
times, and as inherited and partly modified after independence in 1990. Namibia is largely a pastoral country; only relatively small areas in the north are suitable for crops. The pre-colonial period was characterized by traditional pastoral systems and individual property rights on land were almost non-existent. The pastoralists and their livestock ranged widely over the semi-arid rangelands in response to the varying availability of water and grazing. In the pastoral system, most chiefdoms or political institutions were loosely based on the number of their stock and their ability to defeat neighbouring tribes to gain water and grazing rather than to assign land to individual or families within their own tribes (Werner, 1998). The Ovambo kingdoms in the northern part of Namibia, however, partly enjoyed centralized decision and resource allocation powers.

The concept of non-freehold tenure sometimes referred to as customary land rights, applied to black owned communal and resettlement land. Many conflicting views exist on the existence of land ownership during the pre-colonial period and in Africa in general. Based on the discussion in James et al. (1973), this study assumes the existence of property rights of occupancy in the pre-colonial period as part of African traditional culture exercised in the unwritten customary laws. Due to a lack of unwritten laws, customary land ownership was and it is still regarded as an inferior form of ownership in many parts of Africa (Peter, 1997). For instance the lack of written title deeds and customary laws in Africa marginalized the majority of the blacks during the colonial regime, with the passing of formal laws, due to difficulties in proving individual ownership.

On the other hand the colonial period between 1884 and 1990 was characterized by measures of ensuring secure property rights under the freehold tenure system, mainly granted to whites and transnational corporations to the detriment of blacks or non-whites of Namibia. A number of restrictions of rights to immovable property in Namibia were instituted along racial lines and legalised under a variety of laws. This created dualism in land ownership as expressed in the four main systems of land tenure, freeholds (private), state land, non-freehold (customary land) and leaseholds systems. The post-independence land rights ownership in Namibia reflects the colonial tenure system.

4.1.1 Outcomes of Rating

Due to differences in the nature of tenure systems in Namibia, the rights held were not of the same character. As such the liberty or permit to enjoy benefits, were different across the tenure systems. Therefore, the development of a single property rights indicator would not be reflective of the limitations to property rights enjoyed by different holders. The paper therefore first introduces two property rights indices reflecting the freehold and non-freehold tenure systems, respectively.

Then, a composite based on these two tenure systems is constructed taking into account the methodological difficulties involved in creating a single index in such environment. The work of Federerke et al. (2001) and Gwenhamo et al. (2008), suggests an approach to this problem, by creating a single property right indicator based on the proportions of land available to the different tenure systems, and/or the population distribution between racial groupings.

To maintain comparability between the indices developed in this study with the above-mentioned studies, three composite indices of property rights were constructed. The first was based on proportions of land available to the two tenure systems; the second was the population distribution between different racial groupings. The final was based on applying factor analysis techniques to sub-components under two tenure systems to obtain weight contribution of each component. The resulting scores by sub-components were aggregated into a single property rights indicator by weighting each sub-component according to its relative contribution. Figure 4 presents the property rights indices resulting from the three weighting methods. Figures 1 and Figure 2 present the sub-components of freehold tenure system and non-freehold tenure system respectively.

The discussion below presents the two tenure system indices before reporting the composite indicator results for Namibia.

31 It should be noted that the northern part of Namibia were not part of the Police Zone, an area where most of the land laws in Namibia were applicable during the colonial administration.
4.1.2 Freehold versus Non-freehold tenure system in Namibia

The differences in the qualities of rights in freehold against non-freehold tenure system are introduced with the application of formal laws in 1891 (see figure 3). The passing of these formal laws guaranteed protection of individual property for the European settlers to the detriment of the local black Africans. Furthermore, legal instruments were enacted to provide colonial authorities with properties that in turn were allotted and registered under ownership of the few whites. This includes Land Acquisition of Real Estate’s Imperial Ordinance of 1 September 1895, which declared all land as crown land vested in the German Empire.

The period between 1904 and 1915, marked the beginning of the significant persistent divergence in security of rights in the freehold as compared to non-freehold tenure system. At least two reasons can explain this observed trend: the type of ownership under the two tenure systems and the massive land expropriations that took place during this period. First, the written legislation such as the Land Rights Ordinance of the Emperor in 1902 and Land Rights Ordinance of the Governor of 1910 conferred legal ownership only to white settlers through land titles (deeds) registration, while blacks were served with verbal occupational rights.

Second, the passing of the Sequestration of Natives Movable and Fixed Property Imperial Order of 1905 (December 26), which was applied between 1905 to 1908 fuelled land expropriations owned by the black Africans in the greater part of Namibia which later became to be known as the Police Zone. The legislation made provisions for full expropriation of all land under the occupation of all blacks who took part in the uprising in Namibia. According, under German law for the period between 1907 and 1915, black Africans in the southern and central parts of Namibia were prohibited from owning land and large stock.

The divergences in the security of rights in freehold and non-freehold tenure system continued throughout the entire period of South African occupation from 1920 until 1990. This was mainly due to the fact that the new legislation passed during the period strengthened all types of ownership rights under the freehold tenure system. The marginal improvements observed in the non-freehold tenure system were merely in the form of occupational rights which were minimally restored for the landless blacks' class which was a product of the German administration.

The initial period of the South African occupation between 1920 and 1924, marked a disproportional improvement in both tenure systems. The freehold tenure system index was strengthened with the introduction of legislation such as the South African Land Settlement Act of 1912 as amended in 1917 and in 1920. Among other things, the Land Settlement Proclamation no.14 of 1920, made provision for the establishment of a Land Board in order to strengthen and manage allocations of farms under the free hold tenure system. This was followed by the establishment of a Land Bank in 1921, which provided farmers under the freehold tenure system with capital to invest in their operations. This led to further consolidation in the structure of land ownership in the freehold tenure.

The 1920s also saw a slight improvement in the non-freehold tenure index due to the Crown Land Disposal Proclamation 13 of 1920, which made provision for the proclamation of native reserve for the use of land-less black Africans. The South African regime only conferred occupational rights on the black Africans in the designated black reserve or communal land. The rights enjoyed under this system were very limited as compared to the freehold tenure system. This was observed through regulation such as the Native Reserve regulation of 1924 which imposed a limitation on the number of livestock to be owned and grazing fees on all stock grazed in the reserve or communal land.

Between 1926 and 1948, the legal framework concentrated on the improvements and security of rights under the free hold tenure system with minimal or no focus on non-freehold tenure system. Among others things, the period between 1926 and 1936, witness the consolidation of laws that enhances the financial assistance in land settlement under the freehold tenure system and further

---

32 The uprising culminated in genocide between 1904 and 1908 in Namibia.
33 The use of land as collateral to obtain financial assistance under the freehold tenure system is regarded is form of de jure right. i.e. right to capital.
protection of title rights thereby improving the security of property rights under this system. Of particular importance is the Land Settlement Consolidation and Amendment Proclamation no.310 of 1927, which made provision for the establishment of the Land Board with a view of acquiring more land for allotments to overseas applicants on behalf of the government. The Farmer’s Special Relief Proclamation no.18 of 1934 provided for advances of livestock to certain farmers affected by drought to enable them to continue or resume farming.

The period between 1940 and 1948 saw further improvements in the rights to occupy and own land under freehold with enactment of the Land Settlement Act of 1940 and Land Settlement Proclamation no.310 of 1948. These two pieces of legislation made provisions for the granting of temporary grazing licenses to more settlers and conversion of temporary grazing licences into full ownership of the land, respectively. By the end of this period, almost all crown land in Namibia had been allocated, and property rights were firmly secured under the freehold tenure system.

Given that the majority of black Africans were confined to the newly created reserves or communal land during the early 1920s, the quality of rights in non-freehold tenure remained largely unchanged during the entire period of the South African colonial regime. The marginal improvements noticeable in 1936, 1939 and 1956 are merely increases in the coverage of occupational rights additional land added to native reserve through the Development Trust Act 18 of 1936; Native Trust Proclamation no.23 of 1939 and Native Reserve Ordinance no.4 of 1956. The year 1968, witnesses the introduction of the homeland policy in Namibia through the adoption of the Development of Self Government for Native Nations Act no. 54 of 1968.34 The Act made provision of segregation based on racial and ethnic groupings and a large number of blacks were to be relocated from their ancestral land to newly formed homelands. This marked a second land expropriation in the history of Namibia, although less severe than that of 1905 to 1908. No major legislation was issued between 1970 and 1990.

The adoption of the Republic Constitution in 1990, which guarantees protection of all rights including property rights, improved the status of both tenure systems. The year 2002 marked a change in the two tenure system as measures of addressing persistent divergences between them were initiated. Fundamental change in the formal structure of rights in the non-freehold tenure system came in 2002, twelve years after independence with the passing of the Communal Land Reform Act no. 5 of 2002. For the first time in the history of Namibia recognizable ownership under customary land rights is documented and acknowledged and extended for the natural life of the holder.35 On the other hand, the right to own and security under freehold tenure were threatened in 2002 with the buying of land for resettlement purposes from foreign absentee landlords under the Agricultural (Commercial Land Reform) Act no. 13 of 2002.

4.1.3 Interpretations of the Property Rights in Namibia

The review is based on the composite property index derived using factor analysis due to its objectivity (see figure 4). The trend in the quality of property rights index in Namibia emerges from a very low protection based on informal written rules, governing the interaction between blacks and whites. Securing of property rights was ensured through the customary law under which Chiefs traded with the white settlers. The period 1890-1900, signifies the notable change in the property rights index, as white settlers intensified land acquisition through implementation of formal laws in favour of white settlers.

Deterioration in the status of property rights occurred between the periods 1904 to 1908, the period 1915-1918, and the period 1968-1990 (see figure 4). Although Namibia remained under repressive occupation until 1990, the process of land expropriations from the blacks was virtually concluded during the period between 1904 to 1908 under the following laws: Expropriation of Lands

\footnote{34} This based on the recommendation of the Odendaal Commission which was published in 1964.

\footnote{35} It should be noted that the security of tenure for communal land owners applies only to residential and arable land for individual households. The land rights to communal grazing areas remain under the state.
and Arbitration Clauses Proclamation of 1902; Land Expropriation Ordinance of the Emperor of 1903; The Expropriation of land of dissonant tribes, Imperial Ordinance of 1905 and Crown Land Disposal Ordinance of the Imperial Chancellor of 1907. All these legislations made provisions for full expropriations of all land under the occupation of all black Africans who took part in the uprising which led to genocide in Namibia.

The decline of the composite property index in 1915-1918 was due to the outbreak of World War I of 1914, which caused a structural break in property rights as landlords mainly from the freehold tenure system were forced to renounce their title rights in favour of the new South African landlords.

The period 1920-1960 saw an improvement in the status of property rights index, more pronounced for the freehold tenure system and to a lesser extent in the non-freehold system. The sections on the two tenureship systems already discussed the reason behind the nature of this institutional framework. It should be noted, however, that black Africans under the South African administration were allocated limited occupational rights on smaller sizes of land. This, however, was an improvement compared to the situation of non-occupational rights that prevailed in southern and central part of Namibia after the genocide between 1908 and 1920.

Between 1968 and 1990, the property rights index deteriorated, mainly due to the introduction of the homeland policy through the adoption of the Development of Self Government for Native Nations Act no. 54 of 1968. The Act made provision of segregation based on racial and ethnic groupings.

The realisation of independence in Namibia in 1990 brought hope to many Namibians with regard to restoration of land ownership rights. Notable improvements are realised in 1996 and 2002 with the introduction of the land resettlement programme and communal land reform, respectively.

In summary, the legal land instruments passed during the Namibian colonial period from 1884-1990, served two purposes i.e. provision of properties and protection of already earned or acquired properties by the white settlers. The process of land expropriations from black Namibians was completed in the first stage of the colonial period under the German regime and has persisted until today. The South Africans upheld the institutional framework by enclosing the black Africans into smaller sizes of pieces of land known as the reserve or homelands. Finally, the Namibian democratic government is making progress in addressing land ownership rights, with special reference to non-freehold tenure system.

4.2 Political Freedom in Namibia

In large parts of Africa and especially among the pastoralist societies of central and southern Namibia, the pre-colonial political systems were highly decentralized with law-making, social control and allocation of resources carried out by local entities such as lineage groupings and homestead communities. According to Legesse (2000: 1973), this type of system normally guaranteed consensual decision-making arrangements due to its ability to curb the concentration of power in an institution or a person. Likewise, in northern Namibia as in other parts of Africa, centralization and concentration of power in the hands of the traditional leaders also existed.

The advent of colonial authority in Namibia in 1884 introduced a highly organised form of government that exerted foreign colonial authority over black Africans. The German colonial period is marked by forcible restructuring of political and social relations by means of legalised dispossessing of property and the creation of a coercive labour system through the introduction of pass laws and curfews.

The South African administration retained the repressive general framework of the German forced labour system with minor modifications. Upon confirmation of the mandate, the South African regime introduced a more rigorous system of control which lasted until the late 1980s. The major

36 The land expropriations in Namibia during colonial administration mainly affected the black Africans who were residing in the former Police Zone. In terms of arable land proportion, the Police Zone represents over 80% of total arable land in Namibia.
focus was on the control of movement of all blacks in the territory and the control of blacks in urban areas. With the introduction of the apartheid regime in South Africa in 1948, racial segregation intensified whereby fundamental political and civil rights of the black Africans were curtailed and minority rule by whites was maintained until 1990 when Namibia gained its independence.

From 1884-2008, Namibia went through various complex phases of political regimes, and it is thus impossible to assume a unified political system. Important synthetic observations can nevertheless be made from the observed data.

4.2.1 Outcome of Rating

The three dimensions of contemporary democracy as measured by the Freedom House indices are evaluated as a single index in the study. Unlike other indices in this arena, this index is based on formal rules and as such does not establish the de facto realization of the freedoms. The sub-components weights were adopted from the work of Gwennamo et al (2008) and the outcome of the sub-components ratings are depicted in figure 5.

The discussion below presents the composite political freedom index as shown in figure 6. The aggregation into a single composite was accomplished by the use of factor analysis technique. During the period under review, the white settlers had better protected rights, while black Africans did not. The new constructed political freedom index captures the notion that good political institutions are those that permit some degree of equality of opportunity in society, including such things as equality before the law.

4.2.2 Interpretations of Political Freedom in Namibia

Namibia during the period under review experiences a steady decline in the quality of political freedoms from 1896 with the proclamation of the Criminal Jurisdiction over the Natives Ordinance of the Imperial Chancellor. This decline is witnessed throughout until 1980, when slight improvements in terms of formal structure of the law were experienced. The marked improvement in 1989 is a result of the first democratic general election held on 11 November. Major overall improvements were witnessed in 1990 with the adoption of the Namibian Constitution of 1990 which provides for multiparty democracy and a bill of rights.

The year 1899, witnessed the establishment of the first self-government for the white settlers and henceforth set the legal basis that impinged on fundamental political and civil rights of black Africans for the next century. The deterioration in the institutional framework reflected the notions of sovereignty derived from the European system of states and repression of black Africans.

The first severe deterioration in the quality of political and civil rights is observed between 1902 and 1915 (see figure 6). This was manifested through the legislation of the Emigration of the Natives Ordinance of 1902 and Pass Law Ordinance of 1907, which restricted the movements of blacks in Namibia. The Pass Law Ordinance of 1907, among others stipulated that all black Africans above the age of seven should be registered and carry a valid pass all times. The same period witnessed repressive labour system stifling personal freedom of the blacks with the adoption of the Contracts of Service Ordinance of the Governor of 1907. The ordinance calls for employment of every black Africans male whose age is above seven years. Other constraints on individual freedom were perpetuated through laws such as the Prohibition of Mixed Marriages Act of 1905, which served to prohibit sexual relations across the statutorily defined racial boundaries.

The period 1916 to 1919 marks a slight improvement in the formal rights, largely on the revision of the Masters and Servants Ordinance in 1916. The revision raised the age limit for compulsory labour of blacks from 7 years to 14 years. The punishment under this law was centralised. The practise of “fatherly correction” (whereby white employers had the right to beat their servants) and flogging was outlawed.

The improvements in formal rights for the majority of the black Africans were transitory as more stringent laws for the control of movements, assembly and expression were enacted. This
included the Suppression of Vagrancy and Idleness Proclamation no.25 of 1920 and the Pass Law Proclamation no. 11 of 1922. These were reinforced by the Natives (Urban Areas) Regulation no. 34 of 1924 and the Natives (rural) Regulation of 1924. Universal suffrage was denied through the provision in the first South West Africa Constitution Act no.42 of 1925. The Act made provision for the establishment of an all-white Legislative Assembly and Executive Committee elected by the white electoral community.

In terms of the formal structure of the law, the situation remained largely unchanged from 1925-1948, despite the introduction of some few new laws and amendments to existing legislations. This is followed by deteriorations in formal rights observed between 1949 and 1980. The period is underscored by a passing of discriminative laws that extended and specified more fully the arbitrary power of the executive. First, the year 1949 witnessed a de facto incorporation of Namibia into South Africa, through the amendment of the South West Affairs Constitution Act no.23 of 1949. The whites of Namibia were given direct representation in the South African Parliament. Then a stream of laws were enacted in the South African Parliament and made de facto applicable to Namibia. These were Riotous Assemblies and Suppression of Communism Act no.15 of 1954 and Riotous Assemblies Act no.17 of 1956. Pressure from the United Nations prevented a full application of these laws.

This led to worsening in formal rights again in 1966 and the subsequent year with the passing of the Namibian Suppressions of Communism Act of 1966 and the Terrorism Act of 1967. These pieces of legislation authorised detention without charge for an indefinite period and provided for the death penalty for persons convicted of terrorism. More repressive actions were witnessed during the 1970s throughout Namibia as more new laws were enforced. Included in this volume of laws are the Proclamation R17 of 1972, The Internal Security Act of 1976, Proclamation AG9 of November 1977, Proclamation AG26 of April of 1978 and Proclamation AG50 of 1978. In all these legislations, a general ban is placed on all meetings, applied curfews at night and provisions for the detention and deportation of persons considered a threat to the SA authority.

The amendment to the South West Africa Constitution Act no. 95 of 1977 saw the abolishment of Namibian representation in the South African Parliament in 1977. A slight change in the legislation occurred in 1980 with the passing of the Representative Authorities Proclamation AG8 of 1980 which made provision for second tier governmental authorities based on the ethnic division of Namibia. A few amendments and repeal to laws were made with a view of improving the extension of arbitrary power of the executive. These include the Abolition of Racial Discrimination Act no.10 of 1980 and Abolition of Racial Discrimination Act no.21 of 1981. These pieces of legislation mainly removed the restrictions on the use of public amenities based on race and thereby partially easing restrictions on personal liberties. All other repressive legislations, however, remained intact.

The marked improvement in formal political freedom in 1989 was a result of the first democratic general election held on 11 November in that year. The major overall improvements are witnessed in 1990 with the adoption of the Namibian Constitution of 1990 which provides for multiparty democracy and a bill of rights (see figure 6). Furthermore, the Racial Discrimination Prohibition Act no.26 of 1991, makes all acts of racial discrimination a criminal offense and punishable by law. The first amendment to the Republic Constitution in 1998 which made provision for the first President of Namibia to hold office for three terms showed some degree of extension of arbitrary executive power. There has been, however, no major attack on the quality of rights, in terms of the formal structure of political and civil freedoms in Namibia since Independence in 1990.

4.3 Judicial Independence

Prior to the establishment of colonial rule in Namibia, as in many parts of Africa, there was no central machinery for the administration of justice. Hence the practice of settling disputes was not uniform.

\footnote{For the purpose of this study the judicial independence and the independence of judiciary is used interchangeably to mean the same concept.}
The German colonial period, saw a formalisation of judicial institutions that was characterized by a dichotomy. The court system was developed along racial lines and thus provided for a different structure of administration of justice between whites and black Africans. In the case of whites clear separation of powers between the executive and the judiciary existed, while in the case of black Africans the division was non-existing. The local administrative authorities under District Officers exercised civil and criminal jurisdiction over the blacks. The South African colonial authority saw some degree of separation of the judiciary from the executive power by law.

4.3.1 Outcomes of Rating

It should be noted that for the purpose of the de jure indicators, the study relied on formal structural guarantees of independence of the judiciary as specified in the law, without ascertaining the degree of judicial independence de facto. It is irrelevant to this indicator whether or not interference took place or not. Due to colonial history in Namibia, the construction of realistic measures of independence of the judiciary should encompass both consideration of the Higher and Lower courts, as the majority of the black African had access only to Lower Courts. The resulting index is based on initial equal weighting of the sub-components, while aggregation into a single composite was accomplished by the use of factor analysis.

Figure 7 plots the sub-components of the de jure judicial independence index. The figure shows how each of the 10 categories adds to the overall index. Figure 8 present the composite de jure judicial index and it is discussed next.

4.3.2 Interpretations of the Judicial Independence Index (de jure)

One of the main characteristics of the traditional communities’ judicial institutions was collective responsibility either in the centralised or the decentralised system. As such, the separation of powers and checks and balance were virtually non-existing.

The first attempt in the separation of powers was introduced in 1886 with the adoption of German law (see figure 8). This made provision for the creation of courts handling cases which involved whites only. The local administrative authorities under District Officers exercised civil, criminal and contentious jurisdiction over the blacks and this was outlined in the Criminal Jurisdiction over the Natives’ Ordinance of the Imperial Chancellor of 1896.

A slight improvement was noticeable in 1919 with the passing of the Administration of Justice Proclamation no.21 of 1919. The proclamation provided for the establishment of High and Lower courts in Namibia and the application of Roman Dutch law. The Appellate Division Act no.12 of 1920, however, placed the appeals of High Court of Namibia under the jurisdiction of the Appellate Division of the Supreme Court of South Africa. Although the, SWA Constitution Act no.42 of 1925 underscored a clear separation between the executive, legislative and judicial authorities. The judicial matters, however, remained one of the reserved issues under the direct jurisdiction of the Union of South Africa.

The period between 1920 until the late 1940s witnessed a rather stable formal structural protection of the independence of the judiciary (see figure 8). Judges enjoyed security of tenure and of salary and courtrooms were generally open to the public throughout the period under the South African regime.

Deteriorations in the independence of the judicial framework were witnessed as from 1955-1984 as the National Party government directly sought to undermine the independence of the judiciary. One such an early attempt was the application of the Appellate Division Quorum Act of 1955, which made provision for the President to appoint additional judges to higher courts to sit in cases

---

38 This is captured in the de facto measure of the Independence of the Judiciary discussed in the next section under 4.5 of this paper. The idea is to separate the two to allow for close scrutiny of the measures as they portray two different realities in general.
concerning the validity of an Act of Parliament. These created a bench where judges would be more likely to approve, or at least tacitly accept, apartheid laws.

Further declines are witnessed in 1959, when the Namibian High Court was merged into that of South Africa with the application of the Supreme Court Act no. 59 of 1959. According to the Act, the Namibian High Court became part of the provisional division of the Supreme Court of South Africa. This subjected Namibia to all application of apartheid laws which among others things affected appointment and tenure system of judicial personnel. Blacks were denied membership to bodies such as the Pretoria Bar whose members were heavy utilised by the National Party government in the appointment of judges as from the 1950s.

A huge improvement in formal judicial independence institutional framework was realised with the adoption of Namibian Constitution in 1990 which created the judiciary as one of the main organs of the state. Article 78, (1) (2) and (3) of the Republic of Namibia Constitution of 1990 provide for the establishment of the judiciary and its independence, consisting of the Supreme Court, a High and Lower Courts.

In 1991, the Attorneys Amendment Act no. 17 of 1991 and the Admission of Advocates Amendment Act no. 19 of 1991 were amended to allow Namibian who obtained legal qualification from universities than South African’s Universities to practice law in Namibia. More improvements were witnessed in 1992 with the establishment of the Labour Court which belonged to the Superior Courts of Namibia with the adoption of the Labour Act no.6 of 1992 (see figure 8). The Act also established the District Labour court which is the hierarchy of the lower courts. The composition of judges and acting judges were to be determined by the Judge President thereby limiting any interference from the other arms of government directly.

A further improvement was observed in 1995 with the adoption of the Legal Practitioners Act, 1995 (Act 15 of 1995) which made provision for the merging of the advocates and attorneys profession. This reduced legal cost and improved access to legal representation without being referred from the attorney to obtain services of an advocate who is an expert in a specific field of law. The formal structure of judicial independence in Namibia has been amplified to join the ranks of countries which have explicit declaration of judicial independence in their constitution. This is important in countries which had elevated the Constitution to be the supreme law of the land.

4.4 Judicial Independence (de facto)

4.4.1 Conceptual Framework

The conceptual framework for assessing judicial independence is capturing the dynamics that encourage or impede factual judicial independence. The judiciary plays an oversight role to ensure liberal democracy. To achieve the oversight role, the judicial independence relies on the principle that judges must decide cases fairly and impartially, relying only on the facts and the law.

To assess de facto judicial independence, five sub-components have been used. Each of the five sub-components were standardised to takes on values between 0-4, where a greater value in this instance indicates a constraint on the degree of Judicial Independence. The index is constructed by applying the method of principle component analysis on the sub-components.

4.4.2 Interpretations of the Judicial Independence (de facto) Index

The period between 1950 and 1985, shows a little movements in the index as the judiciary was highly intertwined with the executive and legislative (see figure 9). Under colonial rule the judiciary largely acted as an instrument of the administration rather than protecting the people and overseeing the exercise of executive power. There are no reported cases of judgements invalidating repressive

---

39 Due to the limited reliable data on sub-components of this index, the period of coverage is from 1950 to 2008.
legislation, thereby rendering the judicial to be seen as independent. There were no contempt of
court cases and judicial harassment as the two organs represented the same ideology.

The period from 1985, witnessed a change in the working between the two branches of the state.
The executive sought to undermine the working of the judicial system by side-stepping the courts
particularly when judges started opposing the applications of apartheid laws in some court cases.
This included the formation of para-militia groups.\footnote{This refers to formation of the koevoet or
crow bar by the governing regime in Namibia in 1980s. It should be noted that the formation of this
group is not only due to the above illustrated event, but also is due others factors which are beyond this study.}

Since 1990, the judges in Namibia have enjoyed a relative independence in passing the decision.
Cases of contempt of court are very rare and judicial bribery is not prevalent which has become
evident in many developing countries upon attainment of independence.

A slight movement is noticeable in 2004, when attacks on an unpopular ruling by a High Court
in the case of treason were attacked by some members of the ruling political party. In the case of
Namibia it appears that the de jure nature of Judicial Independence as formally guaranteed in the
Namibian Constitutions is factually enjoyed.

4.5 Political Instability

4.5.1 Conceptual Framework

The measure of political instability developed in this study captures various dimensions of social
unrest and disturbances. According to Alesina and Perrotti (1996), one may argue that when insta-
bility reaches high levels, social unrest disrupts market activities and increases economic uncertainty.
During the pre-independence period, the Namibian political economy was underscored by social un-
rest as opposed to executive instability. This study, therefore adopts the social unrest approach in
measuring political instability.

The choice of sub-components is based on the work of Fedderke et al (2001) to maintain compat-
ibility. In addition, township riots and strikes were added as sub-components given the multitude
occurrences of these events in Namibia. The index was constructed by applying the method of
principal components\footnote{This technique is chosen to overcome the uncertainty surrounding the appropriate weighting of the components as expressed in the work of Fedderke et al (2001) and Gwenhamo et al (2008).} to the following sub-components:

1. The number of politically motivated arrests per year\footnote{While the figures for politically motivated arrest are not published officially, the South African Institute of Race Relations Survey devoted a section on Namibia and provides estimates particularly during the 1970s and the 1980s.}
2. The number of political parties and publication banned per year
3. The number of declarations and renewals of states of emergencies per year
4. Incidents of war-related armed attacks on the general public per year
5. Township strikes and riots

4.5.2 Interpretations of Political Instability Index

High episodes of political and social instability occurred as early as 1904 to 1908, an uprising that
led to the genocide of the OvaHerero and Nama people in Namibia (see figure 10). The next peak
is witnessed in 1915 as Namibia was subject to war-related armed attacks due to World War I. The
declared state of emergencies in 1915 lasted until 1918.

The 1922 and 1925 instability was attributable to rebellions amongst the Bondelswart ethnic
group of Warmbad and the Rehoboth unrest respectively. The 1940 and 1950s witness the formation
of a number of African nationalist parties opposing the minority white rule economic and political domination through petitions to the United Nations. The mid-1960s signifies the commencement of serious hostilities in the country led by South West Africa People Organisation (SWAPO) independence struggle. This intensified during the period 1970s until 1 April 1989, when the United Nations Resolution 435 was implemented in Namibia. The year 1999 witnessed further political unrest due to attempted secessionist attacks in the Caprivi region on August 2, by Caprivi Liberation Army (CLA). A state of emergency was declared in the region, and the government arrested alleged CLA supporters.

5 Comparative Analysis

In this section, two types of comparative analyses are undertaken. First, we compare the newly constructed indicators for Namibia with other measures widely used in the literature. The second comparison focuses on the evolution of three countries\(^43\) formal institutional frameworks. The analysis seeks to disclose how historical associations among these countries have changed over time. A comparison is made between Tanzania\(^44\) and Namibia. This is motivated by the fact that these countries shared a close alignment of the initial legal frameworks under the German regime. Due to their institutional frameworks historical ties, direct comparison between Namibia and South Africa\(^45\) is made.

5.1 Comparison of new indices

5.1.1 Namibia Formal Institutional Framework

Table 6 shows the non-parametric Spearman correlation coefficients for the new series of formal institutional indices and the widely used indicators of political freedoms and property rights in Namibia. The sign of the spearman correlation coefficient \(r\) indicates the direction between variables. The value of the coefficient varies between -1 and +1; with \(r = 1\) indicating a perfect positive correlation, \(r = -1\) indicating a perfect negative correlation and \(r = 0\) indicating no correlation between the variables concerned. As the values moves towards 0, the relationship between the variables is weaker.

The property rights index is compared to the Heritage Foundation and the Fraser Institute indices of property rights. There is a correlation between the constructed property rights index (Nam-Prop) and the Heritage Foundation property index (Prop-HR) with a coefficient of -0.58 and statistically significant at the 5% level. The negative sign between these indices is due to inverted scale. The Fraser Institute index (Prop-FR) is poorly correlated with a coefficient of 0.18 and statistically insignificant. This might demonstrate the assessment of alternative rights measures based on de jure factors as argued by Glaeser et al (2004).

The political freedom index is compared to the Freedom House indices of political freedom and civil liberties, which runs from 1989 -2008. The newly constructed Political Freedom index (Nam-Polfree) is poorly correlated with the Freedom House political freedom (Polfree-FH) with at a coefficient of 0.37 and statistically insignificant, while a statistically significant correlation is detected between the Political Freedom index and the Freedom House civil liberties (Civil-FH). The negative sign between these indices is due to inverted scale.

When comparing the new indices, there is a low and insignificant correlation of 0.18 between Property rights index and the Political Freedom index. The correlation between property rights index and political instability (Nam-Inst) is -0.43 and statistically significant. The judicial independence (Nam-JI de jure) maintains a weak correlation with the political freedom and political instability

\(^{43}\)This includes Namibia, Tanzania, and South Africa and the datasets was constructed along the same dimension.

\(^{44}\)The Tanzania data is obtained from the work of Zaaruka et al. (2011).

\(^{45}\)The South African data is derived from the work of Pedderke et al. (2001).
with correlation coefficients of 0.34 and -0.39 respectively. This confirms the differences in the forms of rights.

5.2 Evolution of formal institutional framework

5.2.1 Namibia and Tanzania

Figures 11; 12 and 13 depict the status of property rights; political freedom and judicial independence de jure indices for Namibia and Tanzania respectively.

(i) Property Rights Index

The status of property rights in Tanzania fared comparatively better than in Namibia from the early 1900s to the early 1960s. There are two possible explanations for this. The first relates to the type of economic activities that were undertaken in these countries. The second relates to German responses to wars that took place in the 1900s.

A majority of the Tanzanian population practiced crop cultivation and proof of ownership for blacks could be shown through effective occupation. Namibia, in particular the central and southern part which experienced a great deal of western influence, was occupied by pastoral and semi-pastoral communities for whom proof of ownership was difficult. Secondly, after the period of the internal wars, the German colonial power issued various pieces of legislation to expropriate land in Namibia, thereby causing an irreversible deterioration in the status of property rights in Namibia.

Tanzania ratings started deteriorating in the mid-1960s under the new socialist government, as individual ownership was virtually extinguished. The only improvements came after 1984 and 1999 with the introduction of the new laws which addressed the issues surrounding bills of right and customary land rights respectively.

(ii) Political Freedom Indices

With regard to political freedoms, the two countries seem to be more at par. However the extreme harsh laws, i.e. the pass law and the contract law of 1907 in Namibia, compromise Namibian freedoms severely. Generally, under the period of colonialism, political freedoms were equally stifled in the two countries. The improvement in Tanzania in 1961 was quite short lived as the situation reversed, with the declaration of the one-party state under the post-colonial government.

In Namibia, the deteriorating trend could be ascribed to the application of the apartheid doctrine in the late 1940s. However, since independence in 1990, political freedoms are legally better respected than in Tanzania.

(iii) Judicial Independence de jure Indices

The judicial independence framework statuses of the two countries appear to be at parity both under the German colonisation period and the respective British and South Africa regime for Tanzania and Namibia.

Since the 1960s, with Tanzania gaining independence, a divergence is noticeable, but is not carried out in full. This is due partly to the notion of supremacy of the party over the arms of government. Namibia experienced strong improvements in 1990 with the adoption of the Constitution, which enshrined the independence of the judiciary.

5.2.2 Namibia and South Africa

Figures 14 and 15 show the status of property rights and political freedom indices for Namibia and South Africa. The status of property rights between the two countries shows some good degree of association from the mid-1940s till mid-1970s due to application of apartheid legislation.
The situation improved significantly in South Africa in the early 1980s onwards with the repeal of black discriminatory laws. Noticeable improvements in the case of Namibia are only seen after independence in 1990. It should be noted however, that the Namibian government has been slow in addressing issues related to property rights i.e. land issues in Namibia, hence the bigger divergence in the status of property rights between the two countries.

The political freedoms however remained at par during the period under review. Namibia for first time showed a slightly better measure in the mid-1960s and this could be party explained by the interference of the United Nations in running of the mandate of South Africa over Namibia. There were some delays in the application of repressive laws to Namibia, while the period from 1977, shows the abolition of Namibian seats in the South African parliament. The period 1980-1989 gave the Namibian Legislative Council powers to make its own laws on all matters. Some repressive laws were repealed in preparation for the country transition to democratic rule.

6 Conclusion

The key argument of this paper is that measures of institutions are time truncated in the existing literature. This renders it difficult to explain the persistence of differences in income levels across countries. The paper argues that longer dated series of institutional measures are vital, and therefore presents the formal measures on Namibia. The measuring of institutions using written rules are in line with accepted definition of formal institutions being postulated in the literature. The new indicators while covering a long time period (1884-2008), correlate fairly well with some of the widely used institutional indices produced by the Freedom House and the Heritage foundation.

The cross-country comparisons between Namibia and Tanzania reveal a comparable pattern in political freedoms and judicial independence both under the German colonial administration and subsequently, under the British colonial administration over Tanzania and the South African colonial administration over Namibia. The property rights patterns however, remain divergent between the two countries under the German colonial rule. The comparison between the Namibia and its former coloniser i.e. South Africa shows a similar close pattern in terms of political freedom and property rights for most of the period. The early-1980s, witness huge improvements in property rights in South Africa, while Namibia improved slowly over time.

Another feature of the study, covering this longer period underscores the notion of persistence in institutions. The paper argued that despite changes in colonial regimes, the broader framework of institutions remained partly the same. This is reflected in the institutional framework such contract labour system and pass laws which were applicable during the German era and upheld by the next regime. In Namibia, the expropriation of land during German colonial administration led to creation of smaller size land units known as reserve for the African blacks. The smaller sizes of unproductive land could partly explain the problem of income inequality in Namibia today.

References


26


[48] International Monetary Fund (2003). Growth and Institutions, in World Economic Outlook, Growth and Institutions, Chapter 3, IMF, Washington D.C.


28


29
# Tables

## Table 1: Property Rights index: Scaling matrix

<table>
<thead>
<tr>
<th>Rating based on the following assessment</th>
<th>Individual Sub-Components where: scale falls into the following ranges</th>
<th>Overall Index-scale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-10</td>
<td>0-15</td>
</tr>
<tr>
<td>Full protection by law; all seven incidence of rights are protected.</td>
<td>10</td>
<td>14-15</td>
</tr>
<tr>
<td>Property protection by law; incidence of rights are protected.</td>
<td>8-9</td>
<td>11-13</td>
</tr>
<tr>
<td>Property protection by law; very few incidence of rights are not guaranteed</td>
<td>6-7</td>
<td>8-10</td>
</tr>
<tr>
<td>Partial protection of property rights by law; few incidence of rights are guaranteed, weak property expropriations</td>
<td>4-5</td>
<td>5-7</td>
</tr>
<tr>
<td>Minimal protection by law; Property expropriations are possible, unwritten customary laws, verbal treaties</td>
<td>2-3</td>
<td>2-4</td>
</tr>
<tr>
<td>All rights are curtailed; Properties are subject to full expropriation</td>
<td>0-1</td>
<td>0-1</td>
</tr>
</tbody>
</table>

Source: authors’ breakdown

## Table 2: Political Freedom index: Scaling matrix

<table>
<thead>
<tr>
<th>Rating based on the following assessment</th>
<th>Individual Sub-Components where: scale falls into the following ranges</th>
<th>Overall Index-scale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-5</td>
<td>0-10</td>
</tr>
<tr>
<td>Fully developed liberal democracy with recognitions of all rights</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Entrenched procedural justice and freedom of association and assembly</td>
<td>4</td>
<td>8-9</td>
</tr>
<tr>
<td>Considerable scope for procedural justice; reasonable scope for political and social associations</td>
<td>3</td>
<td>6-7</td>
</tr>
<tr>
<td>Degree of arbitrariness in governmental action is more constrained</td>
<td>2</td>
<td>4-5</td>
</tr>
<tr>
<td>High degree of arbitrariness in state action; exclusive franchise arrangements and discriminative laws</td>
<td>1</td>
<td>2-3</td>
</tr>
<tr>
<td>Indicative of de jure totalitarian state</td>
<td>0</td>
<td>0-1</td>
</tr>
</tbody>
</table>

Source: authors’ breakdown

## Table 3: Judicial Independence (de jure) index: Scaling matrix

<table>
<thead>
<tr>
<th>Rating based on the following assessment</th>
<th>Individual Sub-Components Scale</th>
<th>Overall Index-scale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-10</td>
<td>88-100</td>
</tr>
<tr>
<td>A full Constitutional seal off the judicial from the influence of other branches. Fully structural protection of judicial personnel by the Constitution with regard to tenure and remuneration.</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Constitutional separation of powers; Professional appointments of some judicial officers.</td>
<td>8-9</td>
<td>75-87</td>
</tr>
<tr>
<td>Separation between arms of government and fewer restrictions on the judiciary contained in laws or Constitutions.</td>
<td>6-7</td>
<td>51-74</td>
</tr>
<tr>
<td>Some degree of separation with some procedural and substantial restrictions on the judiciary embedded within the laws / Constitutions.</td>
<td>4-5</td>
<td>38-50</td>
</tr>
<tr>
<td>Limited separations between arms of government; No clear appointment procedures.</td>
<td>2-3</td>
<td>13-37</td>
</tr>
<tr>
<td>Lack of separations between arms of government; no proper function courts; lack of judicial professionals</td>
<td>0-1</td>
<td>0-12</td>
</tr>
</tbody>
</table>

Source: authors’ breakdown
Table 4: Judicial Independence (de facto) index: Scaling matrix

<table>
<thead>
<tr>
<th>Subcomponents</th>
<th>Scaling Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual number of judges reassigned</td>
<td>0 = None ; 1 = 1 case ; 2 = 2 Cases ; 3 = 3 cases ; 4 = more than 3 cases</td>
</tr>
<tr>
<td>Annual number of contempt of Court cases</td>
<td>0 = None ; 1 = 1 – 2 cases ; 2 = 3 to 4 cases ; 3 = 5 to 6 cases 4 = more than 6 cases</td>
</tr>
<tr>
<td>Annual number of corrupt judicial officials cases (Arrested or dismissed or reprimanded)</td>
<td>0 = None ; 1 = 1 – 2 cases ; 2 = 3 to 4 cases ; 3 = 5 to 6 cases 4 = more than 6 cases</td>
</tr>
<tr>
<td>Number of unfair verbal / physical attacks on Judicial officials</td>
<td>0 = None ; 1 = 1 case ; 2 = 2 Cases ; 3 = 3 cases ; 4 = more than 3 cases</td>
</tr>
<tr>
<td>Number of Incidence of side-stepping the judiciary (use of other informal courts)</td>
<td>0 = None ; 1 = 1 – 2 times ; 2 = 3 to 4 times ; 3 = 5 to 6 times 4 = more than 6 times</td>
</tr>
</tbody>
</table>

Source: authors’ breakdown

Table 5: Political Instability index: Scaling matrix

<table>
<thead>
<tr>
<th>Subcomponents</th>
<th>Scaling Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual number of political fatalities including genocides</td>
<td>0 = less than 100 fatalities ; 1 = 100 – 1000 fatalities ; 2 = 1000 to 5000 fatalities ; 3 = 5 000 to 10 000 fatalities ; 4 = more than 10 000 fatalities</td>
</tr>
<tr>
<td>Annual number of politically motivated arrest</td>
<td>0 = less than 10 arrest; 1 = 10 – 25 arrest ; 2 = 25 to 50 arrest ; 3 = 50 to 100 arrest ; 4 = more than 100 arrest</td>
</tr>
<tr>
<td>Township strikes and riots (number of demonstrators involved)</td>
<td>0 = less than 100 demonstrators; 1 = 100 – 500 demonstrators ; 2 = 500 to 1000 demonstrators; 3 = 1000 to 5000 demonstrators; 4 = more than 5 000 demonstrators;</td>
</tr>
<tr>
<td>Number of political parties and publications banned per year</td>
<td>0 = None ; 1 = 1 – 2 parties or publications ; 2 = 3 to 4 parties or publications ; 3 = 5 to 6 parties or publications ; 4 = more than 6 parties or publications</td>
</tr>
<tr>
<td>Number of declarations and renewals of state of emergencies per year</td>
<td>0 = None ; 1 = 1 – 2 times ; 2 = 3 to 4 times ; 3 = 5 to 6 times ; 4 = more than 6 times</td>
</tr>
</tbody>
</table>

Source: authors’ breakdown
Table 6 Spearman Correlation Coefficients for Namibia

<table>
<thead>
<tr>
<th></th>
<th>The New Constructed Indices</th>
<th>Freedom House indicators</th>
<th>Heritage Foundation Index</th>
<th>Fraser Institute index</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NAM-Prop</td>
<td>NAM-Polfree</td>
<td>NAM-JI de jure</td>
<td>NAM-Inst</td>
</tr>
<tr>
<td>NAM-Prop</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAM-Polfree</td>
<td>0.1810*</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NAM-JI de jure</td>
<td>0.7313**</td>
<td>0.3486**</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>NAM-Inst</td>
<td>-0.4382**</td>
<td>-0.3954**</td>
<td>-0.3610**</td>
<td>1.0000</td>
</tr>
<tr>
<td>Polfree-FH</td>
<td>-0.3255</td>
<td>0.3678</td>
<td>-0.5652**</td>
<td>-0.0044</td>
</tr>
<tr>
<td>Civil (FH)</td>
<td>-0.6201**</td>
<td>0.4770*</td>
<td>-0.5926**</td>
<td>-0.1393</td>
</tr>
<tr>
<td>Prop -HR</td>
<td>-0.5839*</td>
<td>-0.4558</td>
<td>0.0000</td>
<td>0.0000</td>
</tr>
<tr>
<td>Prop-FR</td>
<td>0.1782</td>
<td>-0.4858*</td>
<td>0.6748**</td>
<td>0.3303</td>
</tr>
</tbody>
</table>

Notes: * denotes significance at 5 %; ** denotes significance at 1 % level.
Figures

Figure 1: Sub-components of Property Rights Index (Freehold Tenure): 1884-2008

Figure 2: Sub-components of Property Rights Index (Non-Freehold Tenure): 1884-2008
Figure 3: Freehold versus Non-freehold tenure system Property Rights Index: 1884-2008

Figure 4: Composite Property Rights Index: 1884-2008
Figure 5: Sub-Components of Political Freedom Index: 1884-2008

Figure 6: Political Freedom Index for Namibia: 1884-2008
Figure 7: Sub-Components of Judicial Independence De jure Index: 1884-2008

Figure 8: Judicial Independence (de jure) Index for Namibia: 1884-2008
Figure 11: Comparison of Property Rights: Namibia versus Tanzania

Figure 12: Comparison of Political Freedom: Namibia versus Tanzania
Figure 13: Judicial Independence de jure: Namibia versus Tanzania

Figure 14: Comparison of Property Rights: Namibia versus South Africa
Figure 15: Comparison of Political Freedom: Namibia versus South Africa