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Evaluating South Africa's Post-Apartheid Democratic Prospects Through the Lens of Economic Development Theory

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EVALUATING SOUTH AFRICA'S POST-APARTHEID DEMOCRATIC PROSPECTS THROUGH THE LENS OF ECONOMIC DEVELOPMENT THEORY

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ABSTRACT

Political scientists have identified compelling correlations between economic development and democratic stability. In general, the wealthier and more developed a country, the greater its chances of maintaining a long-term, stable democracy. This Article evaluates whether South Africa's post-apartheid economic conditions are trending towards conditions that generally correlate to stable democracies. It compares South Africa's post-apartheid economic conditions to the empirical trends that development theorists have identified as correlative to democratic stability. This analysis is important because if South Africa's post-apartheid economic conditions do not exhibit positive trends, this may suggest that despite the just end of apartheid, conditions are becoming progressively more difficult for South Africa to maintain a democratic government. The Article finds that South Africa is exhibiting positive trends in relevant criteria such as levels of per capita income, education, urbanization, industrialization, and cumulative economic growth. The one exception is income inequality, which has remained constant and extremely high since the fall of apartheid. The Article reveals, however, that there have been various qualitative improvements in the nature of income inequality since the end of apartheid, which suggests that necessary quantitative improvements may be on the horizon. With that one notable caveat, the Article concludes that South Africa's democratic prospects appear bright when viewed through the lens of economic development.

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INTRODUCTION

Emerging democracies are notoriously fragile, especially in Africa. One commentator has estimated that in any given year since the decolonization of Africa, there have been at least twenty ongoing civil wars.[1] Each of these conflicts is complex in its own right, but there are recurring trends contributing to the instability of democracies in Africa. Ethnic division, vestiges of colonial exploitation, abusive government, and abject poverty seem to plague the continent.[2] South Africa's history under apartheid exhibits many of these unfortunate characteristics. South Africa does, however, stand apart from the trends in at least one important criterion: wealth.

South Africa is rich in natural resources. Unlike most other central and southern African countries, South Africa also has a well-developed infrastructure that was not destroyed during the transition to democracy.[3] South Africa has also maintained a capitalist-based economy and negotiated a reasonable continuity in property rights (unlike many African countries that transitioned to democracy during the height of the Cold War and were embroiled in extreme post-revolution redistribution plans).[4] These factors, combined with the lifting of international sanctions, resulted in an influx of foreign investment immediately following the demise of apartheid.[5] Thus, relative to other emerging democracies in Africa, South Africa's economic prospects were bright when it transitioned from apartheid.[6] Indeed, in 1994, the year of the country's first democratic election, South Africa was the

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[1] Larry Diamond, *Building a Democratic Africa*, HOOVER DIG., July 30, 1998, at 116, *available at* http://www.hoover.org/publications/digest/3532546.html.

[2] *Id*.

[3] *See* John Daniel, Jessica Lutchman & Sanusha Naidu, *Post-Apartheid South Africa's Corporate Expansion into Africa*, 31 REV. AFR. POL. ECON. 343 (2004).

[4] *Id*. at 343 (discussing South Africa's positive economic conditions following apartheid as compared to other cold-war era transitions to democracy). A classic counter-example to South Africa's positive economic conditions and policies is the unfortunate plight of Zimbabwe under President Robert Mugabe. *See* Edward A. Brett, *From Corporatism to Liberalization in Zimbabwe: Economic Policy Regimes and Political Crisis, 1980-97*, 26 INT'L POL. SCI. REV. 91 (2005) (explaining the nature, extent, and effects of Mugabe's property redistribution polices). For a helpful discussion of how South Africa's economic and redistribution policies immediately following apartheid helped to facilitate economic growth, see Leslie Boyd, Michael Spicer & Gavin Keeton, *Economic Scenarios for South Africa: A Business Perspective*, DAEDALUS, Winter 2001, at 71.

[5] Boyd et al., *supra* note 4, at 74-76.

[6] *See* Daniel et al., *supra* note 3, at 343. However, for a more pessimistic account of South Africa's economic conditions in 1994, see Boyd et al., *supra* note 3.

sixty-second wealthiest nation in the world, and one of the wealthiest nations in central and southern Africa.[7]

These positive economic conditions tell us a great deal about South Africa's chances of maintaining a stable democracy. Ever since S.M. Lipset identified a correlation between economic development and democratic stability, development theorists have sought to more precisely understand the relationship between democracy and development.[8] These theorists have identified some compelling aggregate trends. Adam Przeworski, for example, has concluded that "no democracy ever fell, regardless of everything else, in a country with a per capita income higher than . . . $6,055."[9] Other theorists have identified strong correlations between democratic stability and levels of education, urbanization, industrialization, economic growth, and income equality.[10]

This Article evaluates whether South Africa's post-apartheid economic conditions are trending towards conditions that generally correlate to stable democracies. The goal is to compare South Africa's post-apartheid economic conditions with the empirical trends that development theorists have identified as correlative to democratic stability. If South Africa's post-apartheid economic conditions do not exhibit positive trends, this may suggest that despite the just end of apartheid, conditions are becoming progressively more difficult for South Africa to maintain a democratic government.

I begin by reviewing relevant findings by development theorists and organizing those findings into a systematic approach that can be used to evaluate post-apartheid South Africa. I then present and analyze post-apartheid economic data pursuant to this approach. I conclude that South Africa has exhibited positive trends in almost all relevant background criteria except income inequality, which has remained relatively constant and extremely high since the fall of apartheid. However, a closer analysis of income inequality shows that

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[7] These comparisons are based on data from the Penn World Tables 6.2. Comparisons are based on Real GDP per capita (Constant Prices: Laspeyres, in 2000 U.S $ Constant Prices). *See* Alan Heston, Robert Summers, Bettina Aten, Penn World Tables 6.2, http://datacentre2.chass.utoronto.ca/pwt/ (last visited Dec. 17, 2009) (data report on file with author).

[8] Lipset first posited this correlation in Seymour Martin Lipset, *Some Social Requisites of Democracy: Economic Development and Political Legitimacy*, 53 AM. POL. SCI. REV. 69 (1959).

[9] Adam Przeworski & Fernando Limongi, *Modernization: Theories and Facts*, 49 WORLD POL. 155, 165 (1997).

[10] *See, e.g.*, CARLES BOIX, DEMOCRACY AND REDISTRIBUTION (2003); Seymour Martin Lipset, *The Social Requisites of Democracy Revisited: 1993 Presidential Address*, 59 AM. SOC. REV. 1 (1994).

although levels of inequality have not changed, the nature of inequality has changed dramatically.[11]

Inequality under apartheid was race-based, enforced by law, and funded by the elites' exploitation of immobile assets such as valuable minerals. Since the fall of apartheid, previously disenfranchised groups have obtained ownership of a large portion of the country's wealth. Additionally, South Africa's economy is trending away from its historic dependence on mining towards mobile assets that are more conducive to the development of a middle class. These changes suggest that there has been qualitative progress regarding inequality since the fall of apartheid. Thus, although the empirical findings of development theorists suggest that South Africa's high level of income inequality poses a serious threat to democratic stability, I conclude that South Africa's qualitative progress in this area suggests that quantitative improvements may be on the horizon. Nevertheless, from the standpoint of development theory, income inequality represents a real threat to prolonged democratic stability in South Africa. With that one caveat, however, South Africa's democratic prospects appear bright when viewed through the lens of development theory.

Part I of this Article outlines the study's basic methodology and assumptions. Part II provides a critical review of the statistical findings of development theorists and organizes those findings into a systematic model that can be used to evaluate South Africa's post-apartheid economic data. Part III presents and analyzes South Africa's economic data pursuant to that model. Part III also conducts a qualitative analysis of income inequality in post-apartheid South Africa and provides an overall assessment of South Africa's democratic prospects.

I. BASIC ASSUMPTIONS, QUALIFICATIONS, AND METHODOLOGY

Some preliminary qualifications and stated assumptions are necessary. First, the purpose of this Article is to place South Africa within the broader context of the aggregate trends and probabilities identified by development theorists. I do not claim that South Africa's democracy must satisfy the described background conditions in order to survive. Rather, I argue that its chances of survival based on economic factors can be roughly appraised by drawing upon the probabilities and trends identified in development theory. It is surely possible, notwithstanding prevailing aggregate trends, for South Africa to follow a deviant path to democratic stability. Costa Rica, for example, is well known for maintaining a longstanding democracy despite its rela-

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[11] *See infra* Part III.C. (discussing income inequality in South Africa).

tive poverty and lack of development.[12] This Article does not attempt to exclude all possible deviant paths. It tries only to identify what odds South Africa is facing given its post-apartheid economic circumstances.

Second, a significant debate in development theory is whether economic conditions cause transitions to democracy or whether they simply contribute to the stability of established democratic regimes that arise for a variety of other reasons.[13] This Article does not look at the degree to which economic conditions may have caused the downfall of apartheid.[14] The Article assumes the establishment of democracy and attempts to evaluate whether economic conditions following the establishment of democracy are becoming more or less conducive to democratic stability.[15]

Third, because my methodology includes a trend analysis of economic conditions in post-apartheid South Africa, an important issue is when to begin the analysis. South Africa held its first democratic election in 1994. However, this date is somewhat artificial when considering issues such as urbanization, education, and industrialization.[16] Prohibitions on black South Africans owning property and business interests as well as prohibitions on black South Africans ad-

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[12] *See* Mitchell A. Seligson & Edward N. Muller, *Democratic Stability and Economic Crisis: Costa Rica, 1978-1983*, 31 INT'L STUD. Q. 301 (1987). Incidentally, the analogy between Costa Rica and South Africa is weak. South Africa currently ranks among the twenty-five wealthiest countries in the world (GDP 2008 PPP). *See* World Bank, World Development Indicators Database http://siteresources.worldbank.org/DATASTATISTICS/Resources/GDP_PPP.pdf (last visited Dec. 5, 2009). Cost Rica is significantly poorer, ranking eighty-fourth. *Id*.

[13] *See infra* Parts II.B-C (discussing this debate in development theory).

[14] For a discussion of this sort, see Boyd et al*., supra* note 4.

[15] It should be noted that development theorists generally use minimalist definitions of democracy that do not require democracies to recognize universal franchise or a bare minimum of human rights protections. *See, e.g.*, S.M. LIPSET, POLITICAL MAN: THE SOCIAL BASES OF POLITICS 27-28 (Johns Hopkins 1981) (1960) (expressly adopting minimalist definitions of democracy developed by Joseph Schumpeter and Max Weber); ADAM PRZEWORSKI ET AL., DEMOCRACY AND DEVELOPMENT: POLITICAL INSTITUTIONS AND WELL-BEING IN THE WORLD, 1950-1990 5, 18-20 (2000). Thus, these studies often classify apartheid-South Africa as democratic because regular elections were held for white South Africans. *See, e g.*, PRZEWORSKI ET AL., *supra* at 73. The fact that apartheid era statistics were included in the data that Przeworski used to calculate world-wide aggregates for democracies does not materially affect the analysis in this Article because South Africa was only one datum point and because I am concerned with economic data after 1994, which falls outside any data set used by Przeworski.

[16] For a general discussion of the chronology of the transition to democracy and the gradual appeal of apartheid laws, see LEONARD THOMPSON, A HISTORY OF SOUTH AFRICA 221-65 (2001).

vancing beyond "semi-skilled occupational classes" were gradually eased beginning in the 1970s.[17] The infamous "pass laws," which regulated the location of residence, employment, and day-to-day mobility of black South Africans, were repealed in 1986.[18] Desegregation of public schools, on the other hand, did not occur until 1994,[19] and international sanctions were not lifted until the end of 1993.[20] However, because the full cumulative effect of these reforms and policies was not felt until 1994, and because a genuinely democratic government was not in place until that time, I generally begin my trends analyses in 1994.[21] Where earlier data is relevant, it is noted in the analysis.[22]

Finally, this Article does not purport to provide a complete and full picture of all economic and social problems relevant to the stability of South Africa's young democracy. The purpose (and value) of this project is to place South Africa's post-apartheid democracy within a larger context, namely the aggregate trends associated with democratic stability that have been identified in development theory. To do this, certain simplifications are necessary so that reasonable comparisons between South Africa and aggregate trends can be made. In this way I am able to asses South Africa's democratic prospects by comparing its economic conditions to the aggregate conditions that have been found to correlate with democratic stability. This necessarily results in an oversimplification of South Africa's background conditions. This Article knowingly ignores factors such as domestic political culture and global political and economic dynamics. However, in the few instances where I believe these simplifications particularly distort South Africa's economic condition, the most notable instance being income inequality, I have noted and explained my reasoning.

II. MODERNIZATION AND DEVELOPMENT THEORY

There is a significant body of literature exploring the relationship between economic development and democracy. This section pro-

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[17] ALAN HIRSCH, SEASON OF HOPE: ECONOMIC REFORM UNDER MANDELA AND MBEKI 17 (2005).

[18] *Id.* at 11.

[19] *See* Clive Harber, *Desegregation, Racial Conflict and Education for Democracy in the New South Africa: A Case Study of Institutional Change*, 44 INT'L REV. EDUC. 569, 571-73 (1998) (discussing legal measures taken to desegregate schools).

[20] G.A. Res. 48/1, U.N. Doc. A/RES/48/1 (Oct. 12, 1993); *see* Philip I. Levy, *Sanctions on South Africa: What Did They Do?*, 89 AM. ECON. REV. 415 (describing the timing of imposition and removal of international sanctions on South Africa during apartheid).

[21] In some instances, the beginning of my analysis is dictated by the availability of data. I appropriately note those instances.

[22] Additionally for purposes of critical evaluation, the attached Appendices include data from as far back as 1960 when it is available.

vides a brief summary of relevant theories and empirical findings and argues for a particular methodology – derived from these theories and findings – as a way of evaluating South Africa's post-apartheid democratic prospects.[23]

A. S.M. Lipset's Thesis, Methodology, and Conclusions

In his ground-breaking 1959 study, S.M. Lipset set out to empirically test the thesis that "the more well-to-do a nation, the greater the chances that it will sustain democracy."[24] Lipset employed a three-step methodology. First, he grouped nations into regions that he thought represented reasonably coherent "political culture areas."[25] He did this to avoid "complications introduced by the sharp variations in political practices in different parts of the earth."[26] Second, focusing on only three regions, he divided the countries within each region into two groups: (1) democratic and (2) less democratic.[27] Finally, he compiled data measuring wealth, industrialization, urbanization, and education for each nation and then calculated averages for the democratic and less-democratic groups.[28]

Significant for present purposes, Lipset thought that his methodology accounted for "deviant cases."[29] He recognized that in some cases "unique events may account for *either* the persistence or the failure of democracy in any particular society."[30] However, he asserted that his methodology of grouping nations and computing averages made "deviant cases fall into proper perspective."[31] According to Lipset, "[t]he statistical preponderance of evidence supporting the rela-

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[23] Julian Wucherpfennig & Franziska Deutsch, *Modernization and Democracy: Theories and Evidence Revised*, LIVING REVIEWS DEMOCRACY, Sept. 2009, at 1 (providing a roadmap of the current state of affairs in development theory).

[24] Lipset, *supra* note 8, at 75. His study was updated in 1962 and 1981 as a book titled POLITICAL MAN: THE SOCIAL BASES OF POLITICS, *supra* note 15, but the methodology and findings remained essentially the same. Wucherpfennig & Deutsch, *supra* note 23, at n.1.

[25] Lipset, *supra* note 8, at 73.

[26] *Id.*

[27] *Id.* at 73-74.

[28] To measure wealth, Lipset looked to per capita income, number of persons per motor vehicle, number of physicians per 1000 people, and number of radios, telephones, and newspapers per 1000 people. For industrialization, he used "percentage of males in agriculture" and "per capita energy consumed." For urbanization, he used the percentage of persons living in communities of various sizes. And, for education, he used literacy and educational enrollment at three levels of education. *Id.* at 76-77.

[29] *Id.* at 69-70.

[30] *Id.* at 72.

[31] *Id.* at 70.

tionship of a variable such as education to democracy indicates that the existence of deviant cases (such as Germany, which succumbed to dictatorship in spite of an advanced educational system) cannot be the sole basis for rejecting the hypothesis."[32] Thus, Lipset premised the strength of his conclusions partially on the aggregation of data across multiple variables. As addressed later in this Article, this has significant implications for applying Lipset's conclusions and methodology to a particular case study.[33]

Lipset found that in each of the economic categories he studied, the more democratic countries (on aggregate) scored significantly higher than the less democratic countries (on aggregate).[34] Based on these empirical findings, Lipset asserted that "it seems clear that the factors of industrialization, urbanization, wealth, and education, are so closely interrelated as to form one common factor. And the factors subsumed under economic development carry with it the political correlate of democracy."[35] Thus, Lipset's rather modest conclusion was that certain statistical correlations exist between economic development and democracy. He did not assert a direct, tractable casual relationship between economic development and democracy, nor did he claim that economic development is a prerequisite to democracy. He simply concluded that statistical correlations exist between the cluster of economic factors he identified and sustainable democracy.[36]

Lipset did, however, speculate as to why these correlations exist.[37] His primary explanation was that economic development lessens and mitigates potency of wealth inequality.[38] Drawing heavily on Marx, Lipset argued that wealthier countries have richer lower classes, "which means increased income, greater economic security, and higher education," which, in turn, "permit those in this status to de-

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[32] *Id.* at 70.

[33] *See infra* Part II.D.2.

[34] *Id*. at 75.

[35] *Id*. at 80.

[36] *See* Wucherpfennig & Deutsch, *supra* note 23, at 2.

[37] I refer to this aspect of Lipset's work as "speculation" because it does not appear to be supported by his data. He offers no empirical evidence, for example, regarding wealth distribution in democratic and non-democratic countries.

[38] LIPSET, *supra* note 15, at 45-53; Lipset, *supra* note 8, at 83-84. He also stressed the importance of education over other indices of development. He believed that it was "close to being a necessary condition" for democracy. *Id*. at 80. This conclusion seems to be based on his reliance on prevailing statistical research, and he does not offer a compelling or sophisticated theory as to why education correlates to democracy other than the colloquial notion that "[e]ducation presumably broadens man's outlook, enables him to understand the need for norms of tolerance, restrains him from adhering to extremist doctrines, and increases his capacity to make rational electoral choices." LIPSET, *supra* note 15, at 39.

velop longer time perspectives and more complex and gradualist views of politics."[39] Lipset believed economic development resulted in a larger middle-class and that a large middle-class operated as a stabilizing force for democracy.[40] Thus, Lipset concluded that "[a] society divided between a large impoverished mass and a small favored elite would result either in oligarchy . . . or in tyranny."[41] It is important to note that Lipset offered this theory as an explanation as to why economic development correlates to democracy. Implicit in his argument, therefore, is the assumption that overall economic development results in a large middle-class or at least a wealthier and better educated lower class. Lipset did not, however, provide any data or statistical analysis to support this explanation.

B. Relevant Contributions by Adam Przeworski, et al.

Although Lipset's work was met with a variety of criticisms,[42] Adam Przeworski's study published in 2000 represents the next major shift in development theory.[43] Przeworski attempted to disentangle two questions: (1) whether "[d]emocracies may be more likely to emerge as countries develop economically" (the "endogenous" theory) and (2) whether, "having been established for whatever reasons, democracies may be more likely to survive in developed countries" (the "exogenous" theory).[44] Relying solely on per capita income as a measure of economic development, Przeworski attempted to analyze "how the respective transition probabilities change with the level of development."[45]

Przeworski analyzed per capita income from 135 countries from 1950 to 1990 and concluded that "no democracy has ever been subverted, not during the period we studied nor ever before nor after, regardless of anything else, in a country with a per capita income

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[39] Lipset, *supra* note 8, at 83.

[40] *See* Wucherpfennig & Deutsch, *supra* note 23, at 1-2.

[41] Lipset, *supra* note 8, at 75.

[42] *See* PRZEWORSKI, ET AL., *supra* note 15, at 88-90 (discussing Lipset's most "influential critic," Guillermo O'Donnell); Wucherpfennig & Deutsch, *supra* note 23, at 1-4 (discussing criticisms of Lipset's approach).

[43] *See* Wucherpfennig & Deutsch, *supra* note 23, at 3-4 (discussing the significance of Przeworski's findings).

[44] PRZEWORSKI ET AL., *supra* note 15, at 88; *see also* Wucherpfennig & Deutsch, *supra* note 23, at 3-4.

[45] PRZEWORSKI ET AL., *supra* note 15, at 92. Przeworski looked at other indices besides per capita income, but his probability matrix relied solely on per capita income. *Id*. at 81 & n.2.

higher than that of Argentina in 1975: $6,055."[46] He further concluded that "the probability of a democracy dying declines monotonically with per capita income."[47] Thus, one of Przeworski's key contributions is the claim that once democracies reach a certain threshold of wealth, democracy is "impregnable."[48] Below that threshold, however, democracies are relatively vulnerable. Przeworski found that approximately 56% of democracies under the threshold failed.[49] Nevertheless, several of the democracies that survived below this threshold were particularly poor.[50] Przeworski therefore concluded that "though we already know that in affluent countries democracy is impregnable, wealth is not necessary for democracies to survive."[51]

In view of this conclusion, Przeworksi examined three additional development variables in an attempt to understand why democracies below the income threshold succeed or fail: education, economic growth, and income disparity.[52] Regarding education, Przeworski found that although the probability of a democracy failing decreases with higher education levels, wealth stabilizes democracies independent of education.[53] For example, Przeworski found that democracies with low education levels (between three to six years of education for the average member of the labor force) but high per capita income (between $4,001 and $8,000) are very stable (less than a 5% probability of failure).[54] However, the inverse also appears true from Przeworski's data: education can stabilize democracy independently of wealth.[55] Thus, Przeworski's data seem to corroborate Lipset's assertion that education is correlative to sustaining democracy.

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[46] *Id*. at 98. All of Przeworski's income data are "expressed in 1985 constant purchasing power parity (PPP) dollars, from Penn World Tables (PWT 5.6)." *Id*. at 81 n.2, 295.

[47] *Id*. at 99. He also concluded that the probability of a democracy dying is unrelated to its age. *Id*. at 101-103 ("[O]nce the level of development is taken into account, the hazard rates become independent of age, meaning that for a given level of development, democracies are about equally likely to die at any age.").

[48] *Id*. at 109 ("[I]n affluent countries democracy is impregnable.").

[49] *Id*. at 91, 98-101 (finding that thirty-nine of the sixty-nine democracies below the income threshold failed); *see also* Przeworski, *supra* note 9, at 165 (same).

[50] PRZEWORSKI ET AL., *supra* note 15, at 109.

[51] *Id*.

[52] *Id.* at 101-22. He also considered various other non-development related variables, such as presidentialism versus parliamentarianism, that are beyond the scope of this Article. *Id.* at 122-36.

[53] *Id.* at 101.

[54] *Id.* at 101-02.

[55] *Id.* at 102. Table 2.7 shows that if income is held constant, but education levels are adjusted, the probability of a democracy failing decreases. *Id*.

The most important variable for Przeworski, other than levels of per capita income, was economic growth.[56] He found that democratic regimes are more than three times likely to die while facing a decline in income than during periods of income growth.[57] Specifically, democracies fail at a rate of 0.74% if their income increases during any three or more consecutive years, but they fail at a rate of 7.7% if their income falls during any two consecutive years.[58] Przeworski also found that democracies are less likely to die during periods of rapid economic growth than periods of slow economic growth.[59]

C. Income Equality as a Condition of Democracy

Przeworski also conducted a rather curt analysis of income inequality and its correlation to the stability of democracies.[60] To measure income disparity, Przeworski used the Gini index and the distribution of income between the top and bottom quintiles of the respective populations.[61] He found that only one democracy failed while maintaining a Gini index below 35 (zero represents absolute equality and 100 represents complete inequality), while five democracies failed while maintaining a Gini index greater than 35.[62] Similarly, when the ratio between the top and bottom quintiles was less than nine, no democracy fell, but five democracies failed when the ratio was greater than nine.[63]

Przeworski also tested whether increasing or decreasing inequality has any effect on the stability of democratic regimes.[64] He found that democracies are "slightly less stable" when the share of the top quintile increases, or when the share of the bottom two quintiles decreases.[65] Przeworski further concluded that democracies are less stable when labor receives a lower share of value added in manufacturing.[66] Overall, Przeworski concluded that "democracies are less

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[56] *Id.* at 111-12.
[57] *Id.* at 109. I converted Przeworski's probabilities of 1 in 66 (economic growth) and 1 in 20 (economic decline) into a comparative ratio. *Id*.
[58] *Id.*
[59] *Id.* at 109-10. Przeworski defined rapid economic growth as growth faster than 5% per annum. *Id.* at 109.
[60] *Id.* at 117-22. This was in part because of his claim that reliable income inequality data was very difficult to obtain. *Id*. at 117, 120.
[61] *Id.* at 118-19.
[62] *Id.* at 118, 120.
[63] *Id.* at 120.
[64] *Id.*
[65] *Id*. at 119, 121. The probability went from 0.0088 to 0.0183 when the top quintile's share increased and from 0.0095 to 0.0211 when the bottom two quintiles' shares decreased. *Id*.
[66] *Id.* at 121-22.

stable in societies that are more unequal to begin with, in societies in which household income inequality increases, and in societies in which labor receives a lower share of value added in manufacturing."[67]

Przeworski's findings suggest that income equality is not a necessary condition for democracy but income *in*equality can contribute, albeit minimally, to the instability of a democracy. Przeworski's analysis recognized but minimized the role of income inequality for democratic stability.[68] Importantly, despite recognizing that income equality played some role in destabilizing democracies, Przeworski failed to offer a theory explaining this.

In 2001, Daron Acemoglu and James A. Robinson offered a theory of regime change that was based on income inequality.[69] Applying a game-theory model to political transitions, they concluded that "a highly unequal society is likely to fluctuate in and out of democracy."[70] They set up their model as follows. There are two groups of power in society: "the poor and the rich".[71] A state can be either democratic or non-democratic.[72] In a democracy, the poor set the tax rate because they represent the median voter.[73] In a non-democratic state, the rich set the tax rate.[74] In a non-democratic state, the poor can mount a revolution and the rich have to decide whether democracy, with its attendant tax increase, is an acceptable alternative to open rebellion by the poor.[75] In a democracy, the rich can "mount a coup," and the poor

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[67] *Id.* at 122.

[68] *Id.* at 117-22. One reason for this may be that Przeworski's work seems focused on disproving Lipset's contention that development can cause transition to democracy. His finding regarding income inequality and non-democratic regimes was that income inequality had a "negligible" effect on the stability of non-democratic regimes, which supports his theory that development does not cause democratic transitions. *Id.* at 120. This may explain why he did not dig any deeper on the issue. This does not mean, however, that income inequality does not do significant work in stabilizing or destabilizing democracies that fall below the income threshold. Przeworksi himself recognized that income inequality has a non-negligible effect on democracies. *Id.* Subsequent theorists have found strong correlations between the instability of democracies and income inequality. *See infra* notes 69-82 and accompanying text (discussing these theorists).

[69] Daron Acemoglu & James A. Robinson, *A Theory of Political Transitions*, 91 AM. ECON. REV. 938 (2001); *see* Wucherpfennig & Deutsch, *supra* note 23, at 4-5 (discussing Acemoglu and Robinson's contribution).

[70] Acemoglu & Robinson, *supra* note 69, at 939.

[71] *Id*. at 940 (setting out the full model).

[72] *Id*.

[73] *Id*.

[74] *Id*.

[75] Democracy is the relevant alternative (as opposed to simple redistribution of wealth by the rich) because it ensures that the rich will not revoke promises of redistribution or reverse their policies over time. *Id*. at 939.

have to decide whether tax relief for the rich is worth the savings of avoiding a coup.[76] In highly unequal democracies, the poor will impose heavy taxes on the rich, making it more likely that the rich will mount a coup.[77] This model, according to Acemoglu and Robinson, demonstrates that unequal democracies will be very unstable.[78]

Acemoglu and Robinson presented a "framework for analyzing" inequality and democracy, but they did not test their theory against economic data.[79] In 2003, Carles Boix and Susan C. Stokes tested a similar game-theory model against economic data.[80] Boix postulated that "a democratic outcome becomes possible when the inequality of conditions among individuals, and therefore the intensity of redistributive demands, falls to the point that an authoritarian strategy to block redistribution ceases to be attractive to the well-off."[81] Examining data from 1850-1990, they concluded that income equality is, in fact, both a significant cause of transitions to democracy and a significant cause of transitions from democracy to authoritarian rule.[82]

What is perhaps most significant (for present purposes) about Boix and Stokes' work is that it relied on indices of development other than per capita income.[83] They found that "per capita income . . . behaves mostly as a proxy for other more fundamental factors," and that inequality was the most important variable directly affecting democratic stability.[84] Furthermore, they found that certain factors

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[76] *Id*. at 940.
[77] *Id*. at 938, 940.
[78] *Id*. at 957.
[79] *Id*. at 938.
[80] Carles Boix & Susan C. Stokes, *Endogenous Democratization*, 55 WORLD POL. 517 (2003); *see* Wucherpfennig & Deutsch, *supra* note 23, at 4-5 (discussing Boix and Stokes' study). Boix and Stokes' theory was slightly different from Acemoglu and Robinson's theory. Boix modeled the game this way:

> As countries develop, incomes become more equally distributed. Income equality means that the redistributive scheme that would win democratic support (the one supported by the median voter) would deprive the rich of less income than the one the median voter would support if income distribution were highly unequal. Hence the rich find a democratic tax structure to be less expensive for them as their country gets wealthier, and they are more willing to countenance democratization.

Boix & Stokes, *supra* at 539-40.
[81] BOIX, *supra* note 10, at 19. Boix and Stokes' 2003 study actually applied a model developed by Boix in DEMOCRACY AND REDISTRIBUTION.
[82] Boix & Stokes, *supra* note 80, at 539-44.
[83] *Id*. at 534, 539-44.
[84] *Id*. at 543-44 ("Not higher income but income equality cause countries to democratize and to sustain democracy."). It should be noted that Boix did not discredit Przeworski's finding that income correlates to democratic stability. *Id*. at 544.

such as education, literacy, urbanization, and industrialization functioned as accurate indices of inequality.[85] Thus, unlike Przeworski, who relied almost exclusively on per capita income, Boix and Stokes analyzed other economic factors and concluded that "democracy is caused not by income per se but by other changes that accompany development, in particular, income equality."[86]

Another important contribution by Boix and Stokes was their analysis of the relationship between the mobility of capital and cleavages created by income inequality.[87] Their model stated that the more a society is dependent on immobile forms of capital (such as oil and other discrete natural resources) the higher the costs of redistribution for the rich, and consequently, the greater the resistance by the rich to democracy.[88] Conversely, the more a country's economy is based on mobile capital (such as those that appear in industrialized nations), the less expensive tax redistribution will be for the rich and the more open they will be to democracy.[89] Thus, Boix and Stokes found that a highly unequal society with an economy that is driven by immobile forms of capital is less likely to support a stable democracy.[90]

Boix and Stokes therefore provide statistical support and a more compelling explanation for Lipset's original speculation that "the factors of industrialization, urbanization, wealth, and education, are so closely interrelated as to form one common factor."[91] Their model evaluates these factors in a more sophisticated way: it incorporates them because they bear on income inequality and the mobility of capital, which, in turn, are indicative of the volatility of the class struggle (as originally speculated by Lipset).

D. Crafting an Approach Suited to Evaluating South Africa's Democratic Prospects

Having extracted the relevant statistical findings and theoretical models from the current literature, it is now necessary to outline

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Rather, he found that income inequality was the more fundamental indicium. *Id*. ("[P]er capita incomes rise in countries where incomes are becoming more equal.").

[85] *Id*. at 541-44.

[86] *Id*. at 540.

[87] BOIX, *supra* note 10, at 19-20; Boix & Stokes, *supra* note 80, at 534;

[88] BOIX, *supra* note 10, at 19-20.

[89] *Id*. Underlying this model is the assumption that immobile assets are easy to tax and therefore easy to target in redistribution plans. *Id*. at 19. Highly mobile capital, in contrast, is not as easy to target for redistribution. This means that the rich in societies dependent on immobile capital are more fearful of democracy, while the rich dependent on mobile capital are more willing to entertain democracy. *Id*.

[90] Boix & Stokes, *supra* note 80, at 544-45.

[91] Lipset, *supra* note 8, at 80.

an appropriate method for evaluating South Africa's economic background conditions. The task in this section is to craft an analysis that will evaluate South Africa's democratic prospects as accurately as possible based on post-apartheid economic data. Stated more crudely, how do we use the findings discussed above to approximate South Africa's chances of sustaining democracy? I believe that this question can best be answered by applying three models.

1. Step One: Przeworski's Income-Based Probability Calculations

First, I must determine South Africa's status vis-à-vis Przeworski's income threshold. This is perhaps the most reliable and least disputed indicator of democratic success and stability. No theorist appears to dispute Przeworski's claim that, regardless of all other variables, no democracy above the income threshold has ever failed.[92] If South Africa has breached this threshold, the sustainability of its democracy from an economic perspective would, presumably, be sound.

If South Africa has not crossed the income threshold (which it has not), I will then use Przeworski's probability calculations (which are based entirely on per capita income) to estimate South Africa's probability of democratic failure. This second aspect of Przeworski's work also remains sound. As noted above, critics such as Boix and Stokes have leveled two criticisms of Przeworski's work: (1) that development does in fact cause democracy to occur and (2) that per capita income is only a proxy for a variety of more fundamental factors of development that more directly affect a country's democratic prospects.[93] Despite these criticisms, they nevertheless accept that per capita income correlates with the stability of established democracies. Thus, Przeworski's probability calculations remain valuable tools in assessing whether economic conditions in a particular democracy are more or less conducive to democratic stability even though other more "fundamental" variables may be driving the correlation between income and democratic stability.

2. Step Two: Lipset's Background Conditions

Second, I will apply Lipset's "correlation" thesis to South Africa's transition from apartheid to democracy. As noted above, Lipset's work has been severely criticized, and a defense of using his approach is therefore necessary. Przeworski and others have criticized Lipset primarily for blending the "endogenous" and "exogenous" theories of democracy and development.[94] Przeworski agreed that a strong correlation between democracy and development exists, but he thought that

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[92] *See* Wucherpfennig & Deutsch, *supra* note 23, at 4-5.
[93] Boix & Stokes, *supra* note 80, at 539-44.
[94] *See* Wucherpfennig & Deutsch, *supra* note 23, at 3-4.

this was because, once established, democracies are "impregnable" in wealthy countries.[95] He disputed Lipset's claim that development will cause countries to transition from non-democratic to democratic regimes. Thus, Przeworski did not dispute that a correlation exists between democracy and development. He simply offered a more sophisticated explanation for this correlation.[96]

More importantly, Przeworski did not offer a compelling reason for why Lipset's cluster of economic indices was less appropriate for measuring development. In fact, he simply asserts in a footnote that he believes per capita income is the best indicator of development.[97] Based on the rest of Przeworski's findings, we can speculate that this is because per capita income bears a strong correlation to regime stability. It seems that Przeworski relied so heavily on per capita income because it displayed the most compelling correlations.

Nevertheless, as Boix and Stokes point out, there is reason to believe that per capita income is a good indicator of regime stability only because it is a proxy for more fundamental economic variables.[98] Although these underlying variables are less important at the extremes, where they likely trend in predictable correlation with per capita income, separate analysis of these indicia may be important for regimes that lie between economic extremes. A country that has an even chance of democratic success according to Przeworski's income-based probability calculations would surely be interested in an analysis of the more "fundamental factors" for which per capita income may be acting as a proxy.[99] It may be, for instance, that certain of these underlying factors are trending in different directions. Analysis of these underlying conditions could help to more precisely identify particular economic threats to democratic stability.

For these reasons, it is helpful to apply a modified version of Lipset's correlation thesis to South Africa. My methodology is as follows. I conduct a trend analysis regarding indices of urbanization, industrialization, education, and wealth (other than per capita income). I evaluate whether, since the fall of apartheid, South Africa is exhibiting positive trends in these development categories. The underlying intuition (adopted from Lipset) is that if South Africa is exhibiting negative trends in these categories, economic conditions may be get-

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[95] PRZEWORSKI ET AL., *supra* note 15, at 109.

[96] *Id.* at 101 ("Thus, Lipset was right in thinking that the richer the country, the more likely it is to sustain democracy.").

[97] *Id.* at 81 n.2.

[98] Boix & Stokes, *supra* note 80, at 543.

[99] *Id*.

ting progressively more difficult for maintaining a stable democracy.[100]

3. Step Three: Income Inequality

Third, in light of Boix's findings that income inequality is a significant factor for democratic stability, I will evaluate income inequality in South Africa from three perspectives. First, I will consider the level of inequality in South Africa as compared to the other democracies evaluated by Przeworski, specifically as it compares to the Gini index threshold of 35 used by Przeworski.[101] Second, I will evaluate trends in the level and nature of income inequality within South Africa since the fall of apartheid. Finally, I will evaluate trends regarding the mobility of capital as described by Boix.[102] This final step is important because South Africa's economy has historically been driven by highly immobile forms of capital (mining).[103] Thus, to the degree that South Africa's economy is diversifying and capital is shifting to more mobile forms, data regarding income disparities may be misleading in terms of the country's progress towards equality.

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[100] At least one caveat to this approach is necessary. Lipset was emphatic that the strength of his approached derived from aggregating data from various countries so that outliers would not disproportionately dominate tractable correlations. That is, he believed that country-to-country comparisons are not useful in drawing out general correlations between democracy and development because many incompatible eccentricities may exist between the two sample countries. *See* Lipset, *supra* note 8, at 69-72. By aggregating data from a variety of countries with roughly similar political traditions, Lipset believed that visible trends could be relied on as generally applicable correlations and not anomalies. *See id.* By comparing South Africa to itself, I am bypassing this methodological safeguard. It is possible that South Africa could follow an aberrational path. That is, it could sustain a democracy under economic conditions that do not track Lipset's correlation thesis. However, my goal here is not to prove that South Africa's economic conditions are a fail-safe indication of its democratic future. Rather, I take for granted Lipset's finding that there is a correlation between development and democracy and that, *generally speaking*, "the more well-to-do a nation, the greater the chances that it will sustain democracy." *Id*. at 75. Thus, the longevity of South Africa's post-apartheid democracy depends on whether it is trending towards sufficiently high levels of economic development.

[101] *See supra* notes 60-68 and accompanying text.

[102] *See supra* notes 87-91 and accompanying text.

[103] *See* MBendi, *Mining in South Africa—Overview*, http://www.mbendi.com/indy/ming/af/sa/p0005.htm (last visited Dec. 17, 2009) (describing the historic significance of mining for South Africa's economy).

III. EVALUATING SOUTH AFRICA'S POST-APARTHEID ECONOMIC DATA

In this section, I apply the above methodology to data collected regarding South Africa's economic background conditions. Sources for all data are noted appropriately. All of my own conversions are noted and presented in the attached appendices.

A. Applying Przeworski's Income-Based Probability Calculations

Przeworski found that "no democracy has ever been subverted, not during the period we studied nor ever before nor after, regardless of everything else, in a country with a per capita income higher than that of Argentina in 1975: $6,055."[104] More precisely, Przeworksi found that "up until 1990 thirty-one democracies had lived 742 years with incomes above that of Argentina in 1975, and not one had ever fallen."[105] Thus, Argentina's per capita income in 1975 represents a statistical threshold for democratic stability. That is, according to Przeworski, a democracy's chances for survival are ideal when its per capita income breaches $6,055, *regardless of any other economic variables.*[106] Przeworski's income threshold was "expressed in 1985 constant purchasing power parity (PPP) dollars, from the Penn World Tables (PWT 5.6)."[107] When this is expressed in terms of 2000 constant PPP dollars from the updated Penn World Tables (PWT 6.2), it is $10,364.[108]

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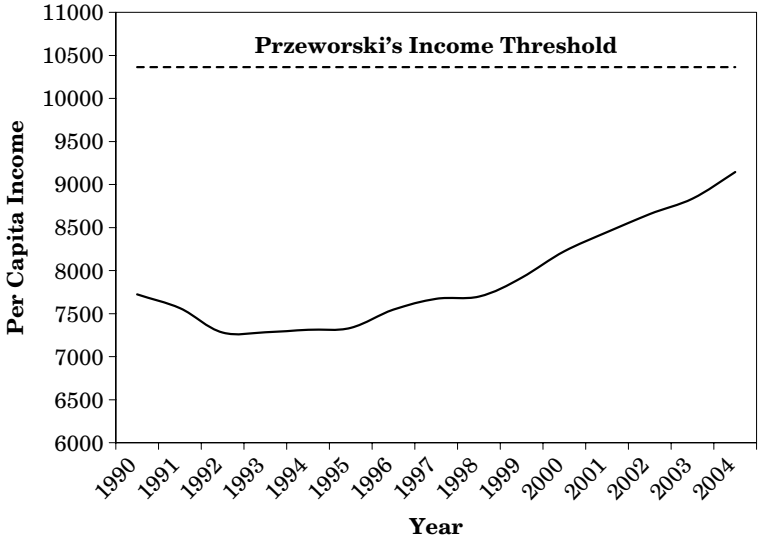
[104] PRZEWORSKI ET AL., *supra* note 15, at 98.
[105] *Id*.
[106] *See* Przeworski & Limongi, *supra* note 9, at 169 (describing this threshold as a "miracle" of certainty).
[107] PRZEWORSKI ET AL., *supra* note 15, at 81 n.2,.
[108] PWT 5.6 provides income data for South Africa only up until 1992. *See* App. 1.2. PWT 6.2 provides income data for South Africa from 1960 until 2004. However, PWT 6.2 expresses income in terms of 2000 constant PPP dollars. Thus, it was necessary to identify Argentina's income in 1975 in terms of 2000 constant PPP prices so that South Africa's post-apartheid income data could be compared to the threshold. As can be seen in App. 1.1., Argentina's income in 1975 in terms of 2000 constant PPP from PWT 6.2 was $10,364.

SOUTH AFRICA'S PER CAPITA INCOME (1990-2004)
CHART 1



At no point between 1960 and 2004 has South Africa breached Przeworski's income threshold.[109] In 1994, the year of South Africa's first election, its per capita income was well below the threshold at $7,311.[110] However, as Chart 1 illustrates, South Africa is closing in on Przeworski's income threshold. South Africa's per capita income rose steadily between 1994 and 2004, when it reached $9,145.[111] Since 2004, South Africa's per capita income has continued to rise, suggesting that, from an economic perspective, South Africa is trending towards that class of democracies that is "impregnable."[112]

Nevertheless, South Africa has yet to cross Przeworski's threshold. Although direct application of Przeworski's probability calculations is difficult because available data for South Africa after 1992 is based on a different price index than the one used by Przeworski,[113]

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[109] *See* App. 1.2.
[110] *Id*.
[111] *Id*.
[112] Data is not available for 2004 to 2008 from PWT 6.2; thus making a fair comparison to Przeworski's threshold difficult for those years. Nevertheless, the World Bank data, which are based on a different PPP index, shows that South Africa's per capita income increased from $8,197 to $9,343 between 2004 and 2008. *See* App. 1.2. This represents a 13% increase. If South Africa's income for 2004 from PWT 6.2 ($9,145) is projected forward at the same rate, South Africa's income for 2008 would be $10,334, which is just $30 lower than Przeworski's threshold.
[113] *See supra* note 108. Przeworski's income threshold does not create the same conversion problem because it is based exclusively on Argentina's per capita in-

a conservative estimate can be made about where post-apartheid South Africa lies in Przeworski's probability matrix.[114] First, in 1992, South Africa's per capita income, as indicated in the same data set relied upon by Przeworski, located South Africa within the category of countries that Przeworski estimates to have a 0.0278 probability of failure during the given year.[115] Second, income data from several more recent data sets show that South Africa's per capita income increased every year from 1992 to 2008.[116] Thus, a conservative estimate finds that South Africa remains (as of 2008) in the same probability category. That probability of democratic failure as estimated by Przeworski (0.0278) translates to an estimated life of thirty-six years.[117]

Regarding economic growth, Przeworski found strong statistical probabilities of democratic failure when per capital income decreased during two or more consecutive years.[118] South Africa exhibits positive trends regarding economic growth. Income dropped

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come in 1975. Przeworski's probability matrix, however, is based on aggregate per capita income ranges from various countries; making a direct conversion of his income ranges using PWT 6.3 impossible. *See* PRZEWORSKI ET AL., *supra* note 15, at 93 (Table 2.3).

[114] Another difficulty with directly applying Przeworski's probability calculations was brought to my attention by Boix and Stokes' article. Even though income data are adjusted based on appropriate price and exchange indices so that they can be compared accurately across time, the nature of world development suggests that Przeworski's threshold is increasing over time. *See* Boix & Stokes, *supra* note 80, at 545. That is, the price for "'buy'[ing] democracy," as Boix puts it, has increased. *Id*. Since Przeworski's study, which covered 1950-1990, it may be that the price of guaranteed democratic stability, i.e. the income threshold, has increased. However, because this increase would likely have been nominal for the intervening nine years, and because no updated threshold is available, I rely on Przeworski's probability calculations and evaluate South Africa's situation by applying them directly.

[115] App. 1.2 (the same data used by Przeworski) shows that South Africa had a per capita income of $3,073 in 1992 based on 1985 PPP dollars. According to Przeworski's probability matrix, countries with per capita income between $3,001 and $4,000 have a 0.0278 probability of failure. PRZEWORSKI ET AL., *supra* note 15, at 93 (Table 2.3).

[116] PWT 6.2 shows that South Africa's per capita income only increased after 1992 and the World Bank data show that per capita income continued to rise between 2004 and 2008. *See* App. 1.2. Thus, a very conservative estimate would be that as of 2008 South Africa remains at least in the $3,001-$4,000 range identified by Przeworski as having a 0.0278 probability of failure. PRZEWORSKI ET AL., *supra* note 15, at 93 (Table 2.3).

[117] PRZEWORSKI ET AL., *supra* note 15, at 98 (providing estimated-life calculations for corresponding probabilities).

[118] *Id*. at 109.

slightly in both 1998 and 1999, but, since 1994, there have been no other consecutive years of decreasing income.[119]

In sum, if we look exclusively at per capita income and economic growth as measured by Przeworski, South Africa's prospects for maintaining a stable democracy appear less than certain, but strong and trending in the right direction.

B. Post-Apartheid Trends Regarding Lipset's Background Conditions

As noted above, Litpset's general premise was that democracy would be more stable in countries that were becoming more developed. He found that more democratic countries were wealthier, more industrialized, more urbanized, and better educated than less -democratic countries. Since the fall of apartheid, South Africa has exhibited almost universally positive trends in these areas. This suggests that, at least as far as Lipset's background criteria are concerned, South Africa continues to move towards economic conditions that are favorable to democracy.

Industrialization. Lipset measured industrialization by reference to two indices: (1) the percentage of males in agriculture and (2) the "per capita commercially produced 'energy' being used in the country."[120] These indices, as well as other more contemporary measures, suggest that South Africa is relatively industrialized and trending positively in this area.

Although accurate employment data is not available any earlier than 2000, South Africa exhibits a strong and uninterrupted trend away from agriculture-based employment. The percentage of the population employed in agriculture has steadily decreased from 16% in 2000 to 9% in 2007.[121] This trend is buttressed by increased employment in other sectors. Employment in services rose from 59% to 65%.[122] Employment in industry rose more modestly from 24% to 26%.[123] Moreover, unemployment has fluctuated, but decreased overall from 27% to 23% for the same period,[124] suggesting that the positive trend away from agricultural employment is not being materially distorted by increased unemployment.

Energy consumption per capita presents a more puzzling trend. Between 1971 and 2006 consumption was at its highest in

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[119] *See* App. 1.2.

[120] LIPSET, *supra* note 15, at 34.

[121] *See* App. 2.1.

[122] *See* App. 2.2.

[123] *See* App. 2.1. Data for employment in manufacturing were not available.

[124] *See* App. 2.2.

1988.[125] From there, it steadily declined until 2002, when it reached its lowest point since 1980.[126] Since 2002, it has trended upwards but remains below the 1988 high.[127] Other indices also suggest that industry's significance in the economy is no longer growing. Industry's share of value added to the GDP, for example, has decreased from 35% in 1994 to 31% in 2008.[128]

This somewhat anomalous trend requires an explanation. One possibility is that it is indicative of the fact that South Africa underwent significant industrialization during apartheid.[129] Thus, industrialization in post-apartheid South Africa may be a bad indicium of development because South Africa's economy was already largely industrialized.[130] This trend may not be indicative of economic digression because, consistent with trends in other post-industrial economies, the economy has become increasingly dependent on the service sector.[131] Although industry's share of value added to the GDP has decreased slightly since apartheid, agriculture's contribution to the GDP has also continued to decline.[132] The service sector's contribution, on the other hand, has steadily increased from 55% of the GDP in 1970 to 66% in 2008.[133] Although industry's significance has been decreasing slightly, the country is certainly not slipping back into an agrarian economy, which is an important variable in South Africa be-

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[125] *See* App. 2.1.

[126] *Id*.

[127] *Id*.

[128] *See* App. 2.2.

[129] *See* Marie Huchzermeyer, *Informal Settlements: Production and Intervention in Twentieth-Century Brazil and South Africa*, LATIN AM. PERSP., Jan. 2002, at 83, 88.

[130] It is important to remember that Lipset was looking at the word during a very different era where many countries had yet to experience industrialization.

[131] *See generally* Thomas J. Kirn, *Growth and Change in the Service Sector of the U.S.: A Spatial Perspective*, 77 ANNALS ASS'N. AM. GEOGRAPHERS 353 (1987) (reviewing the reasons of increased role of service sector in "developed economies").

[132] *See* App. 2.2.

[133] *See* App. 2.3. Service sector statistics must be read with caution in South Africa because there is such a large segment of the population employed in unskilled, domestic service and other informal service industries. *See* Nicoli Nattrass & Jeremy Seekings, *Democracy and Distribution in Highly Unequal Economies: The Case of South Africa*, 39 J. MODERN AFR. STUD. 471, 476 (2001). Nevertheless, one would expect that the end of apartheid would correspond to a decrease in domestic service, which was made available very cheaply under apartheid because of laws regulating employment opportunities for black South Africans.

cause a high percentage of the population relies on an unskilled breadwinner for support.[134]

Thus, South Africa's post-apartheid economic development in this area seems modest, but positive. More people continue to move out of agricultural employment and into more modern, and presumably skilled, sectors of work.

Urbanization. Lipset evaluated urbanization by looking at the percentage of the population that resided in three different sized communities: (1) metropolitan areas; (2) cities over 100,000; and (3) cities over 20,000.[135] Data for South Africa regarding similar urbanization delineations are available from the World Bank, which divides communities between "rural," "urban," and "population in urban agglomerations of more than 1 million."[136] Within these categories, South Africa exhibits positive trends. Since 1970, the percentage of people living in cities of more than one million has grown monotonically from 23% to 33% in 2007.[137] The rural population has also decreased, although slightly more erratically, from 52% in 1970 to 39% in 2008.[138] The overall urban population has grown from 48% in 1970 to 61% in 2008.[139]

These data must be viewed with caution. Under apartheid, the pass laws kept blacks from living and working in cities. Blacks were permitted to live and work in urban areas only with express government permission and were required to leave their families in rural areas.[140] When these laws were finally lifted in 1986, the result was an influx of previously excluded people to urban areas.[141] Thus, this shift

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[134] Indeed, in 1993, 41% of all households were supported by a breadwinner who was in "semi-skilled or unskilled employment in the agricultural and domestic sectors." Nattrass & Seekings, *supra* note 133, at 475.

[135] LIPSET, *supra* note 15, at 34-38.

[136] The World Bank does not provide any more specificity regarding the definitions of "rural" and "urban." It states only that "'[u]rban population' is the mid-year population of areas defined as urban in each country as reported to the United Nations. It is measured here as the percentage of the total population." The World Bank, Population and Demographic Indicators, http://econ.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20451597~hlPK:1365919~isCURL:Y~menuPK:64133159~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html (last visited Dec. 17, 2009).

[137] *See* App. 3.

[138] *Id*.

[139] *Id*.

[140] *See* Valerie Moller, *Quality of Life in South Africa: Post-Apartheid Trends*, 43 SOC. INDICATORS RES. 27, 29 (1998) (discussing the pass laws).

[141] *Id*.

in demographics, which is clearly visible in the data,[142] was in some sense artificial. It was not necessarily the product of a growing and magnetic metropolitan culture, increased labor needs as a result of economic growth, or a shift from an agrarian to industrial economy. Indeed, the result of this influx has not been vibrant metropolitan communities, but large informal settlements surrounding most major cities, with hosts of attendant social, environmental, and economic problems.[143] "Urbanization," at least as reflected in this data, may be a misleading indicium of development in South Africa. Nevertheless, South Africa continues to become more urban, and because this coincides with overall economic growth, positive trends in the service and industry sectors, and a move away from agricultural employment, this represents a positive development trend.

Education. Lipset measured education by literacy rates and school enrollment.[144] South Africa exhibits positive trends in these categories. The literacy rate in South Africa has risen from 76% in 1980 to 88% in 2007.[145] Primary school enrollment represents an anomaly. It dropped from 90% in 1991 to 86% in 2007.[146] However, secondary school enrollment rose significantly from 62% in 1998 to 73% in 2007, and tertiary enrollment rose from 12% in 1991 to 15% in 2006.[147] With the exception of primary school enrollment, these statistics bode well. Indeed, South Africa's 88% literacy rate in 2007 is well above the aggregate rate of 62% for sub-Saharan Africa[148] and, incidentally, well above the aggregate literacy rate Lipset identified for democracies in Latin America.[149]

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[142] The increase in population in cities of one million or more best illustrates this phenomenon. *See* App. 3 (showing an increase from 25% in 1985 to 33% in 2007).

[143] *See generally* Huchzermeyer, *supra* note 129.

[144] LIPSET, *supra* note 15, at 35-41.

[145] *See* App. 4.

[146] *Id*.

[147] *Id*. . A significant factor not reflected in these statistics was the integration of public schools, which made better schools available to non-whites. *See* Servaas van der Berg, *Apartheid's Enduring Legacy: Inequalities in Education*, 16 J. AFR. ECONOMIES 849 (2007). Education inequality along racial lines persists, however. *Id*.

[148] *See* App. 4.

[149] LIPSET, *supra* note 15, at 37. This sort of cross-temporal comparison is understandably questionable. The digital information explosion and general trends in overall world development have resulted in literacy rates slowly rising in even the most impoverished places. Nevertheless, it does not follow that the education threshold for democratic stability rises in stride with this trend and therefore, this comparison seems helpful in evaluating South Africa's economic circumstances vis-à-vis other poor democracies that have had success in achieving stability.

Wealth. In addition to per capita income, Lipset looked at other indicia of wealth such as the number of persons per doctor and motor vehicle and the number of telephones, radios, and newspapers per 1,000 people.[150] South Africa has exhibited positive post-apartheid trends in these supplemental wealth indicia. The number of doctors per 1,000 people rose monotonically from 0.61 in 1992 to 0.77 in 2004.[151] The number of vehicles per 1,000 people rose from 139.24 in 1990 to 151.08 in 2006.[152] The percentage of households with televisions rose from 53.80% in 2001 to 59.20 % in 2004.[153] The number of mobile and fixed phone lines per 100 people went from 4.67 in 1975 to 97.87 in 2007.[154] Other more contemporary indicia of wealth, such as the number of personal computers per 100 people, also exhibit positive trends.[155] These variables corroborate the positive economic growth reflected in the per capita income data.[156]

In sum, even when we dig below per capita income as a measure of South Africa's post-apartheid economic development, South Africa exhibits generally positive trends regarding Lipset's background conditions for democratic stability. South Africa may not have reached prime economic conditions, but Lipset's background conditions seem to confirm that, since the fall of apartheid, it has trended steadily in that direction.

C. Income Inequality in South Africa

Notwithstanding the positive trends discussed above, income inequality represents an undeniably negative economic condition in South Africa. As one commentator has observed, "[a]mong the countries that have democratised as part of the 'Third Wave' . . . South Africa and Brazil hold the undesirable record of having the most une-

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[150] LIPSET, *supra* note 15, at 33-36.

[151] *See* App. 5.

[152] *Id*.

[153] *Id*. I did not include data regarding newspapers because I felt that the digital information revolution made changes in this area unreflective of any economic conditions within South Africa.

[154] *Id*.

[155] *Id*.

[156] Although I discuss income inequality in more detail in the next section, the above indicia are also relevant because they may reflect on the nature of South Africa's middle class. Because per capita income is calculated as an aggregate over the entire population, it does not capture income inequality. These indicia, which are based on per-person ratios, may capture some forms of wealth inequality. *See* Boix & Stokes, *supra* note 80, at 539-44 (discussing Boix's supplemental indicia of income inequality).

qual distribution of income."[157] South Africa's Gini index at the time of its democratization varies from study to study. Conservative estimates placed the Gini index at 59 in 1993.[158] Other estimates range from 62 to 68.[159] By all accounts, however, South Africa transitioned to democracy as an incredibly unequal society.

1. Applying Przeworski and Boix's Findings

Przeworski looked at two primary indicators of inequality: the Gini index and the ratio between the income of the top quintile and the income of the bottom quintile.[160] Data regarding post-apartheid income distributions is incredibly limited. The World Bank reports only three datum points for South Africa's Gini index and income distributions by quintile between 1993 and 2000. Nevertheless, looking at the limited data from the World Bank, inequality seems to be perched at a high, but stable figure. The table below shows the World Bank data.[161]

Year	Gini Index	Income Ratio
1993	59	22
1995	57	17
2000	58	20

With a Gini index of 58 in 2000, South Africa remained well above Przeworski's Gini index threshold of 35. This places South Africa in the bottom of that class of democracies that Przeworski calculated to have a 0.0132 probability of failing in a given year.[162] Similarly, South Africa's income ratio in 2000 was 20:1, which is well above Przeworski's 9:1 ratio.[163] This places South Africa in the class of democracies that Przeworski calculated to have a 0.0187 probability

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[157] Nattrass & Seekings, *supra* note 133, at 471. South Africa's income disparity is well-known. *See also* Moller, *supra* note 140, at 34 (quoting a 1994 finding that "South Africa has the worst distribution of income for any country for which national household data is available.").

[158] World Bank, World Development Indicators and Global Development Finance Database, http://databank.worldbank.org/ (select first database, click Next, select South Africa, click Next, select GINI Index, click Next, select 1993, click Next, click Formatted Report) (last visited Sept. 16, 2010).

[159] *See* Moller *supra* note 140, at 34 (listing a constant Gini index of 68 from 1975-1991).

[160] PRZEWORSKI ET AL., *supra* note 15, at 117-22.

[161] World Bank, World Development Indicators Database, http://databank.worldbank.org/ (follow instructions in fn 158, using the relevant variables) (last visited Sept. 29, 2010).

[162] PRZEWORSKI ET AL., *supra* note 15, at 118 tbl. 2.15.

[163] *Id*.

of failing in a given year.[164] However, what is striking about South Africa's data is that inequality has not trended significantly upward or downward since 1993. Although inequality dropped 5% in 1995 (Gini index), it rose slightly in 2000, resulting in only nominal aggregate changes (for the better) between 1993 and 2003.

In 2007, Jorge Aguero et al. evaluated various sources of available data other than those provided by the World Bank.[165] Commenting on this data, Aguero concluded that poverty and inequality likely increased between 1993 and 1998, but there was a partial reversal of these trends after 1998.[166] Another influential study by Berk Ozler considered non-World Bank data but also concluded that "[c]hanges in overall inequality were mostly negligible."[167] Ozler found that the Gini index remained nearly constant at 0.57 between 1995 and 2000.[168] Thus, inequality seems to have remained relatively constant since the fall of apartheid.

When one looks at the additional indicia suggested by Boix (education, "occupational diversification," and land used for agriculture),[169] more positive non-nominal changes are visible. As demonstrated above, post-apartheid trends in education have been generally positive. Regarding occupational diversification, Boix was concerned primarily with combined trends in urbanization and industrialization.[170] As demonstrated above, South Africa has moved away from agricultural employment towards increased service-based employment. The percentage of land used for agriculture increased from 80 to 82% between 1990 and 1994, but has been locked at 82% from 1994 to 2005, suggesting that this variable has stabilized.[171]

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[164] *Id*.

[165] Jorge Aguero et al., *Poverty and Inequality in the First Decade of South Africa's Democracy: What Can Be Learned from Panel Data?*, 16 J. AFR. ECONOMIES 782, 784-89 (2007). These data sets included a study conducted within the province of KwaZulu-Natal (KwaZulu-Natal Income Dynamics Study), the All Media and Products Survey, and the South African government's General Household and Labor Force Survey. *Id*.

[166] *Id*. at 807.

[167] Berk Ozler, *Not Separate Not Equal: Poverty and Inequality in Post-Apartheid South Africa*, 55 ECON. DEVELOPMENT & CULTURAL CHANGE 487, 491 (2007).

[168] *Id*. at 506-07. Ozler also considered the data sources used by Aguero et al. *Id*. at 515-17.

[169] Boix & Stokes, *supra* note 80, at 539-44.

[170] *Id*. at 542 tbl.2 n.d.

[171] *See* App. 2.3.

2. Toward A More Sophisticated Understanding of Income Inequality and Democratic Stability in South Africa

The common intuition following the fall of apartheid was that "the reduction of discriminatory measures . . . [would] have had an equalising impact on the income distribution."[172] However, as discussed above, the available data do not corroborate this intuition. Income distribution, at least between 1993 and 2000, seems to have remained relatively constant, with some positive trends in supplemental indicia such as education and urbanization.[173] How should this evidence be interpreted and what are its implications for South Africa's democratic stability? Two key facts shed some light on the surprising stagnation of inequality in post-apartheid South Africa.

First, as Nicoli Nattrass has argued, inequality in South Africa may not have changed quantitatively, but it has certainly changed qualitatively.[174] Aggregate inequality statistics hide the fact that the wealth of non-white South Africans has increased dramatically since the fall of apartheid.[175] The result is that "[i]nequality in South Africa has thus become increasingly a question of employment and occupation rather than racial discrimination; class is no longer coterminous with race."[176] Nattrass' findings are buttressed by data presented by Ozler regarding racial inequality. Ozler found that although inequality did not increase significantly on the aggregate, inequality rose dramatically amongst blacks.[177] This statistic captures the fact that the repeal of discriminatory laws allowed blacks, for the first time, to accumulate wealth. Equality among blacks existed under apartheid because blacks were systematically impoverished. The end of apartheid resulted in increased inequality among blacks but almost instant equality between white elites and a new class of black elites.[178]

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[172] Nattrass & Seekings, *supra* note 133, at 472.

[173] Some contend that inequality has widened significantly and systematically since the fall of apartheid. *See* Craig Schwabe, *Fact Sheet: Poverty in South Africa*, HUMAN SCI. RES. COUNCIL, available at http://www.sarpn.org.za/documents/d0000990/ (suggesting an increase from 0.68 in 1991 to 0.77 in 2001). However, the available data do not seem to support this conclusion. *See* Nattrass & Seekings, *supra* note 133, at 472 (discussing available data and concluding that levels of inequality have remained mostly constant).

[174] Nattrass & Seekings, *supra* note 133, at 473.

[175] *Id*. at 473 (attributing this to the "steady decline in wage and job discrimination, upward occupational mobility, and increased bargaining power through legal trade unions") (citations omitted).

[176] *Id*.

[177] Ozler, *supra* note 167, at 508.

[178] *See* Jo Beall et al., *Fragile Stability: State and Society in Democratic South Africa*, 31 J. S. AFR. STUDIES 681, 693-94 (2005) ("The face of 'big business' (formerly owned and run only by whites) has changed as a result of the creation of a

This change in the *nature* of wealth inequality is significant when evaluating the stability of South Africa's democracy. Boix, Lipset, and Acemoglu all model the effect of income inequality on democracy in terms of a class struggle between the poor and the rich. In South Africa, that struggle had an additional layer: race. Race-based legislation defined and maintained social strata. Thus, the necessary first step in dissipating the class struggle was to de-racialize wealth. Once income inequality is viewed from this layered perspective, I think there is reason to believe that South Africa is trending towards economic conditions that can develop and support a non-racial middle class.

First, and perhaps most importantly, recall Boix's point regarding the mobility of capital. Although not analogous in degree to oil-producing countries,[179] South Africa has historically relied on mining, a highly immobile form of capital, to drive its economy.[180] However, South Africa's dependence on mining has steadily decreased over the last several decades. According to the most recent data provided by the South African government, the two largest contributors to the GDP are manufacturing (18% of GDP) and the financial industry (21%).[181] Mining now comprises only 8% of the GDP.[182] Thus, the fall of apartheid did not involve the transfer of highly immobile assets from one group of elites to another. This is important because, according to Boix, the mobility of capital determines the stakes in the class struggle. Highly immobile capital increases the stakes for the rich, but mobile capital lowers those stakes and increases the chances of a democratic compromise between the poor and the rich.[183] Because of South Africa's increased dependence on *mobile* capital, the nature of the post-racial class struggle is more suited to democratic stability and the development of a non-racial middle class.

Second, economic conditions are favorable for the development of a middle class. As noted in detail above, all of Lipset's background conditions are exhibiting generally positive trends. Education rates

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black stratum of owners and managers. This has been one of the most visible markers of change over the past decade. It is now no longer possible to characterise big business as 'white', or to distinguish on racial lines between public positions of leading business figures or organisations.").

[179] *See* BOIX, *supra* note 10, at 19-20 (explaining that these countries illustrate why democracy is difficult when capital is immobile); Boix & Stokes, *supra* note 80, at 526-29 (same).

[180] *See* MBendi, *supra* note 103.

[181] STAT. S. AFR., GROSS DOMESTIC PRODUCT THIRD QUARTER 14 (2009), http://www.statssa.gov.za/publications/statsdownload.asp?PPN=P0441&SCH=4524 (last visited Dec. 17, 2009).

[182] *Id*.

[183] BOIX, *supra* note 10, at 19-20.

are up, the economy is growing, and urbanization and industrialization are exhibiting positive trends. All of these indicia suggest that the class struggle will shift to the development of a middle class that is not based on legally enforced racial categories.

Finally, the post-apartheid government's policies favor continued economic development. Unlike other Sub-Saharan African countries that underwent massive redistribution programs that entirely destabilized property rights and scared away foreign investment (Zimbabwe is the most notable example)[184] South Africa's redistribution efforts have been moderate and, most important, aimed at developing a middle class. In 1996, the African National Congress published Growth, Employment, and Redistribution (GEAR), which set out the parties' economic strategy.[185] The program sought to "create the desired growth by changing the economy to increase the amount of goods and services that are exported, particularly in the non-gold sector . . . [by creating] a good and stable domestic environment to encourage domestic and foreign investments in South Africa."[186] Regarding distribution, the government's strategy was to create jobs by securing foreign investment and investing in domestic infrastructure, particularly education.[187] The program was controversial because it was so conservative, but it nevertheless set the tone for economic development in post-apartheid South Africa.[188] A second government program that more clearly illustrates the priority of developing a strong middle class was called Black Economic Empowerment – a form of affirmative action targeted at the small-business sector.[189] Among other things, the policy gives companies distinct advantages when bidding for public works contracts if 51% or more of the company is owned by black South Africans.[190] These policies suggest that the government's strategies are aimed at building a strong non-racial middle class, which, depending on their success, may help to lessen inequality.[191]

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[184] *See generally* Brett, *supra* note 4.

[185] *See* Nattrass & Seekings, *supra* note 133, at 482-84 (discussing GEAR).

[186] African National Congress, Understanding GEAR, http://www.anc.org.za/show.php?include=docs/umrabulo/1997/umrabulo2p.html (last visited Dec. 17, 2009).

[187] *Id*.

[188] Beall et al., *supra* note 178, at 688-90 (discussing controversy of GEAR).

[189] Jeffrey Herbst, *Mbeki's South Africa*, FOREIGN AFF., Dec. 2005, at 100-103 (discussing BEE).

[190] *Id*.

[191] The BEE has been severely criticized as overrun with corruption. Critics allege that the program is a pretext for awarding government contracts to a few select companies based on patronage and, as a result of this corruption, BEE is serving only to create a small group of post-apartheid elites rather than promote

CONCLUSION

Empirical findings in development theory provide a valuable tool for assessing a country's prospects for democratic stability. With the exception of high levels of income inequality, South Africa has exhibited positive trends regarding almost all relevant indicia of economic development. Because South Africa has exhibited positive qualitative changes in income inequality, I believe that South Africa's overall prospects for sustaining a stable democracy, as measured solely by economic criteria, are relatively bright.

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the development of a strong black middle class. *See* Beall et al., *supra* note 178, at 693-94 (discussing these criticisms). Whether or not these criticisms are true, my point here is that the government has taken steps expressly designed to deal with the inequality. The real effect of these policies may be undermined by corruption and rule-of-law deficiencies, but the government is nevertheless taking steps towards empowering a middle class.

APPENDIX 1.1: PER CAPITA INCOME (ARGENTINA)

Year	**Argentina / Real GDP per capita (Constant Prices: Laspeyres) (I$ in 1985 Constant Prices) (PWT 5.6)***	**Real GDP per capita (Constant Princes: Laspeyres) (I$ in 2000 Constant Prices) (PWT 6.2)****
1960	4481	7859
1961	4790	8068
1962	4541	7968
1963	4298	7545
1964	4703	8031
1965	5011	8739
1966	4948	8569
1967	5012	8701
1968	5166	9005
1969	5505	9647
1970	5642	9740
1971	5823	9948
1972	5816	9946
1973	5929	10179
1974	6171	10591
1975	**6055**	**10364**
1976	5851	10107
1977	6128	10504
1978	5846	10093
1979	6305	10716
1980	6505	10807
1981	6070	10080
1982	5488	9493
1983	5610	9723
1984	5726	9829
1985	5324	8974
1986	5624	9533
1987	5720	9623
1988	5349	9228
1989	4908	8465
1990	4708	8231
1991	. .	9099
1992	. .	10054
1993	. .	10535
1994	. .	10968
1995	. .	10573
1996	. .	10911
1997	. .	11605
1998	. .	11933
1999	. .	11587
2000	. .	11332
2001	. .	10691
2002	. .	9561
2003	. .	10172
2004	. .	10945

* Data from Penn World Tables 5.6. Alan Heston, Robert Summers and Bettina Aten, Penn World Table, Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania (available at http://datacentre2.chass.utoronto.ca/pwt56/). This is the exact data relied upon by Przeworski.

**Data from Penn World Tables 6.2. Alan Heston, Robert Summers and Bettina Aten, Penn World Table Version 6.2, Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania, September 2006 (available at http://datacentre2.chass.utoronto.ca/pwt62/).

APPENDIX 1.2: PER CAPITA INCOME (SOUTH AFRICA)

Year	Real GDP per capita (Constant Prices: Laspeyres) (I$ in 1985 Constant Prices) (PWT 5.6)*	Real GDP per capita (Constant Prices: Laspeyres) (I$ in 2000 Constant Prices) (PWT 6.2)**	GDP per capita, PPP (constant 2005 international $) (WDI)***
1960	2185	4886	. .
1961	2211	5195	. .
1962	2294	5496	. .
1963	2423	5528	. .
1964	2547	5511	. .
1965	2627	5712	. .
1966	2690	5924	. .
1967	2798	5981	. .
1968	2867	6233	. .
1969	3015	6294	. .
1970	3264	6404	. .
1971	3360	6481	. .
1972	3280	6682	. .
1973	3418	6707	. .
1974	3638	6569	. .
1975	3579	6821	. .
1976	3535	6984	. .
1977	3332	7138	. .
1978	3345	7083	. .
1979	3351	7220	. .
1980	3496	7514	8597
1981	3679	7467	8841
1982	3590	7588	8589
1983	3366	7794	8217
1984	3502	7761	8415
1985	3322	7649	8100
1986	3293	7427	7896
1987	3299	7458	7863
1988	3360	7543	8000
1989	3340	7687	8011
1990	3250	7723	7824
1991	3190	7562	7587
1992	3073	7279	7271
1993	. .	7284	7207
1994	. .	7311	7283
1995	. .	7335	7349
1996	. .	7545	7497
1997	. .	7672	7521
1998	. .	7697	7384
1999	. .	7916	7378
2000	. .	8226	7497
2001	. .	8447	7562
2002	. .	8655	7765
2003	. .	8835	7910
2004	. .	9145	8197
2005	. .	. .	8504
2006	. .	. .	8862
2007	. .	. .	9224
2008	. .	. .	9343

* Data from Penn World Tables 5.6. Alan Heston, Robert Summers and Bettina Aten, Penn World Table, Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania (available at http://datacentre2.chass.utoronto.ca/pwt56/).

**Data from Penn World Tables 6.2. Alan Heston, Robert Summers and Bettina Aten, Penn World Table Version 6.2, Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania, September 2006 (available at http://datacentre2.chass.utoronto.ca/pwt62/).

*** Data from The World Bank: World Development Indicators: World Bank, International Comparison Program database.

APPENDIX 2.1: INDICES OF INDUSTRIALIZATION*

Year	Employees, agriculture, male (% of male employment)	Employment in agriculture (% of total employment)	Energy use (kg of oil equivalent per capita)	Employment in industry (% of total employment)
1960	. .	. .	. .	. .
1961	. .	. .	. .	. .
1962	. .	. .	. .	. .
1963	. .	. .	. .	. .
1964	. .	. .	. .	. .
1965	. .	. .	. .	. .
1966	. .	. .	. .	. .
1967	. .	. .	. .	. .
1968	. .	. .	. .	. .
1969	. .	. .	. .	. .
1970	. .	. .	. .	. .
1971	. .	. .	2005	. .
1972	. .	. .	1997	. .
1973	. .	. .	2074	. .
1974	. .	. .	2115	. .
1975	. .	. .	2184	. .
1976	. .	. .	2212	. .
1977	. .	. .	2195	. .
1978	. .	. .	2272	. .
1979	. .	. .	2298	. .
1980	. .	. .	2372	. .
1981	. .	. .	2551	. .
1982	. .	. .	2710	. .
1983	. .	. .	2685	. .
1984	. .	. .	2839	. .
1985	. .	. .	2771	. .
1986	. .	. .	2819	. .
1987	. .	. .	2835	. .
1988	. .	. .	2890	. .
1989	. .	. .	2702	. .
1990	. .	. .	2592	. .
1991	. .	. .	2655	. .
1992	. .	. .	2438	. .
1993	. .	. .	2541	. .
1994	. .	. .	2622	. .
1995	. .	. .	2696	. .
1996	. .	. .	2652	. .
1997	. .	. .	2626	. .
1998	. .	. .	2600	. .
1999	. .	. .	2544	. .
2000	15	16	2529	24
2001	13	11	2436	26
2002	14	13	2327	26
2003	13	11	2579	25
2004	10	9	2790	26
2005	9	8	2722	26
2006	9	9	2739	26
2007	11	9	. .	26
2008	. .	. .	. .	. .

* Data from The World Bank: World Development Indicators: International Labour Organization, Key Indicators of the Labour Market database; and International Energy Agency.

APPENDIX 2.2: INDICES OF INDUSTRIALIZATION (CONT.)*

Year	Employment in services (% of total employment)	Unemployment (% of total labor force)	Agriculture, value added (% of GDP)	Industry, value added (% of GDP)
1960	. .	. .	11	38
1961	. .	. .	12	38
1962	. .	. .	11	38
1963	. .	. .	11	38
1964	. .	. .	9	39
1965	. .	. .	9	40
1966	. .	. .	9	39
1967	. .	. .	10	38
1968	. .	. .	9	38
1969	. .	. .	8	38
1970	. .	. .	7	38
1971	. .	. .	8	37
1972	. .	. .	8	38
1973	. .	. .	7	40
1974	. .	. .	9	40
1975	. .	. .	8	41
1976	. .	. .	7	42
1977	. .	. .	7	41
1978	. .	. .	7	42
1979	. .	. .	6	46
1980	. .	. .	6	48
1981	. .	. .	6	46
1982	. .	. .	6	44
1983	. .	. .	4	45
1984	. .	. .	5	43
1985	. .	. .	5	44
1986	. .	. .	5	44
1987	. .	. .	6	42
1988	. .	. .	6	42
1989	. .	. .	5	41
1990	. .	. .	5	40
1991	. .	. .	5	38
1992	. .	. .	4	36
1993	. .	. .	4	36
1994	. .	20	5	35
1995	. .	17	4	35
1996	. .	21	4	33
1997	. .	23	4	33
1998	. .	25	4	32
1999	. .	25	4	31
2000	59	27	3	32
2001	63	29	4	32
2002	61	30	4	33
2003	64	31	4	32
2004	65	26	3	31
2005	67	27	3	31
2006	66	26	3	31
2007	65	23	3	31
2008	. .	. .	3	31

* Data from The World Bank: World Development Indicators: International Labour Organization, Key Indicators of the Labour Market database; and World Bank national accounts data, and OECD National Accounts data files.

APPENDIX 2.3: INDICES OF INDUSTRIALIZATION (CONT.)*

Year	Industry, value added (annual % growth)	Manufacturing, value added (% of GDP)	Services, etc., value added (% of GDP)	Agricultural land (% of land area)
1960	. .	20	51	. .
1961	5	21	50	84
1962	7	21	51	83
1963	8	21	51	82
1964	11	22	51	81
1965	6	23	51	80
1966	4	23	51	80
1967	3	22	52	80
1968	5	22	54	80
1969	6	22	53	79
1970	6	23	55	79
1971	3	22	56	79
1972	1	21	55	79
1973	4	22	53	79
1974	2	21	51	79
1975	1	23	51	78
1976	3	23	52	78
1977	–1	21	52	78
1978	3	21	51	78
1979	6	22	48	78
1980	5	22	45	78
1981	6	24	48	78
1982	–3	24	50	78
1983	–1	23	51	78
1984	5	23	52	78
1985	–2	22	51	78
1986	–2	22	51	78
1987	–1	22	53	78
1988	5	23	53	79
1989	2	23	54	79
1990	–1	24	55	80
1991	–3	23	57	80
1992	–2	22	60	81
1993	0	21	60	81
1994	2	21	60	82
1995	3	21	61	82
1996	2	20	62	82
1997	3	20	63	82
1998	–1	19	64	82
1999	0	19	65	82
2000	5	19	65	82
2001	2	19	64	82
2002	3	20	63	82
2003	1	19	65	82
2004	4	19	66	82
2005	5	18	67	82
2006	5	18	66	. .
2007	4	18	66	. .
2008	5	19	66	. .

* Data from The World Bank: World Development Indicators: World Bank national accounts data, OECD National Accounts data files; and Food and Agriculture Organization electronic files and website.

APPENDIX 3: INDICES OF URBANIZATION*

Year	Population in urban agglomerations of more than 1 million (% of total population)	Rural population (% of total population)	Urban population (% of total)	Rural population growth (annual %)
1960	23	53	47	1.64
1961	. .	53	47	2.91
1962	. .	53	47	2.57
1963	. .	53	47	2.32
1964	. .	53	47	2.14
1965	23	53	47	2.02
1966	. .	53	47	1.95
1967	. .	53	47	1.91
1968	. .	52	48	1.90
1969	. .	52	48	1.92
1970	23	52	48	1.94
1971	. .	52	48	2.19
1972	. .	52	48	2.18
1973	. .	52	48	2.15
1974	. .	52	48	2.12
1975	24	52	48	2.08
1976	. .	52	48	2.04
1977	. .	52	48	1.99
1978	. .	52	48	1.99
1979	. .	52	48	2.08
1980	24	52	48	2.21
1981	. .	51	49	2.04
1982	. .	51	49	2.12
1983	. .	51	49	2.17
1984	. .	51	49	2.20
1985	25	51	49	2.20
1986	. .	50	50	1.53
1987	. .	50	50	1.45
1988	. .	49	51	1.33
1989	. .	49	51	1.17
1990	25	48	52	0.96
1991	. .	48	53	1.01
1992	. .	47	53	1.03
1993	. .	47	54	1.04
1994	. .	46	54	1.06
1995	27	46	55	1.07
1996	. .	45	55	1.16
1997	. .	45	55	1.22
1998	. .	44	56	1.27
1999	. .	44	56	1.32
2000	28	43	57	1.37
2001	. .	43	57	0.71
2002	. .	42	58	–0.17
2003	. .	42	58	0.08
2004	. .	41	59	0.03
2005	30	41	59	0.00
2006	. .	40	60	–0.13
2007	33	40	60	–0.24
2008	. .	39	61	0.52

* Data from The World Bank: World Development Indicators: United Nations, World Urbanization Prospects, World Bank national accounts data; and World Bank Staff estimates based on United Nations, World Urbanization Prospects.

APPENDIX 4: INDICES OF EDUCATION*

Year	Literacy rate, adult total (% of people ages 15 and above)	School enrollment, primary (% net)	School enrollment, secondary (% net)	School enrollment, tertiary (% gross)	Literacy rate, aggregate for sub-Saharan Africa, adult total (% of people ages 15 and above)
1960	. .	. .	. .	. .	. .
1961	. .	. .	. .	. .	. .
1962	. .	. .	. .	. .	. .
1963	. .	. .	. .	. .	. .
1964	. .	. .	. .	. .	. .
1965	. .	. .	. .	. .	. .
1966	. .	. .	. .	. .	. .
1967	. .	. .	. .	. .	. .
1968	. .	. .	. .	. .	. .
1969	. .	. .	. .	. .	. .
1970	. .	. .	. .	. .	. .
1971	. .	. .	. .	. .	. .
1972	. .	. .	. .	. .	. .
1973	. .	. .	. .	. .	. .
1974	. .	. .	. .	. .	. .
1975	. .	. .	. .	. .	. .
1976	. .	. .	. .	. .	. .
1977	. .	. .	. .	. .	. .
1978	. .	. .	. .	. .	. .
1979	. .	. .	. .	. .	. .
1980	76	. .	. .	. .	. .
1981	. .	. .	. .	. .	. .
1982	. .	. .	. .	. .	. .
1983	. .	. .	. .	. .	. .
1984	. .	. .	. .	. .	. .
1985	. .	. .	. .	. .	. .
1986	. .	. .	. .	. .	. .
1987	. .	. .	. .	. .	. .
1988	. .	. .	. .	. .	. .
1989	. .	. .	. .	. .	. .
1990	. .	. .	. .	. .	54
1991	. .	90	. .	12	. .
1992	. .	. .	. .	. .	. .
1993	. .	. .	. .	. .	. .
1994	. .	. .	. .	. .	. .
1995	. .	. .	. .	. .	. .
1996	82	. .	. .	. .	. .
1997	. .	. .	. .	. .	. .
1998	. .	93	62	14	. .
1999	. .	94	62	14	. .
2000	. .	92	62	14	59
2001	. .	91	. .	14	. .
2002	. .	90	. .	15	. .
2003	. .	90	. .	15	. .
2004	. .	88	. .	16	. .
2005	. .	86	72	15	. .
2006	. .	85	74	15	. .
2007	88	86	73	. .	62
2008	. .	. .	. .	. .	. .

* Data from The World Bank: World Development Indicators: United Nations Educational, Scientific, and Cultural Organization (UNESCO) Institute for Statistics.

APPENDIX 5: INDICES OF WEALTH*

Year	Vehicles (per 1,000 people)	Physicians (per 1,000 people)	Households with television (%)	Mobile and fixed-line telephone subscribers (per 100 people)	Personal computers (per 100 people)
1960	. .	. .	. .	3.74	. .
1961	. .	. .	. .	. .	. .
1962	. .	. .	. .	. .	. .
1963	. .	. .	. .	. .	. .
1964	. .	. .	. .	. .	. .
1965	. .	0.49	. .	3.81	. .
1966	. .	. .	. .	. .	. .
1967	. .	. .	. .	. .	. .
1968	. .	. .	. .	. .	. .
1969	. .	. .	. .	. .	. .
1970	. .	. .	. .	4.15	. .
1971	. .	. .	. .	. .	. .
1972	. .	. .	. .	. .	. .
1973	. .	. .	. .	. .	. .
1974	. .	. .	. .	. .	. .
1975	. .	0.54	. .	4.67	. .
1976	. .	. .	. .	4.86	. .
1977	. .	. .	. .	5.08	. .
1978	. .	0.55	. .	5.30	. .
1979	. .	. .	. .	5.60	. .
1980	. .	. .	. .	5.92	. .
1981	. .	. .	. .	6.33	. .
1982	. .	. .	. .	6.68	. .
1983	. .	. .	. .	6.97	. .
1984	. .	. .	. .	7.06	. .
1985	. .	. .	. .	7.34	. .
1986	. .	. .	. .	7.88	. .
1987	. .	0.61	. .	8.10	. .
1988	. .	. .	. .	8.50	0.44
1989	. .	. .	. .	8.94	0.58
1990	139.24	. .	. .	9.43	0.71
1991	139.73	. .	. .	9.58	0.93
1992	139.22	0.62	. .	9.46	1.20
1993	136.26	. .	. .	9.70	1.49
1994	141.36	. .	. .	10.75	2.29
1995	139.31	. .	. .	11.60	2.81
1996	141.99	0.59	. .	13.03	3.57
1997	. .	. .	. .	15.84	4.40
1998	. .	. .	. .	20.08	5.49
1999	140.62	. .	. .	24.88	6.06
2000	132	. .	. .	30.23	6.59
2001	131	0.69	53.80	35.06	6.92
2002	144	. .	56.30	40.99	7.29
2003	. .	. .	57.90	47.34	7.67
2004	136	0.77	59.20	55.43	8.07
2005	143	. .	. .	82.51	8.46
2006	151.08	. .	. .	93.49	. .
2007	. .	. .	. .	97.87	. .
2008	. .	. .	. .	. .	. .

* Data from The World Bank: World Development Indicators: International Road Federation, World Road Statistics and data files; World Health Organization, OECD, supplemented by country data; and International Telecommunication Union, World Telecommunication Development Report and database, and World Bank estimates.