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White, democratic, technocratic: the political charge behind official statistics in South Africa

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ABSTRACT

Central to governance, comparison and evaluation—and evolving at the intersection of economic ideas, interests and institutions—official statistics are far from neutral artifacts in both the global north and south. This article investigates the case of South Africa. Building on primary sources and interviews, I distinguish between three periods in the history of the country's official economic statistics. This history—and the nation's statistical self-presentation—have been shaped by the legacy of apartheid, the construction of the new democratic state, the influence of international standards setters, and heated political struggles in a nation divided along racial and class lines. Although the South African case is unique in many ways, it offers valuable insights into the evolution of official statistics outside of the global north more broadly.

KEYWORDS

Official statistics; South Africa; institutions; norms

Introduction

Official statistics are central to policymaking and governance, necessary for comparison and evaluation (Camargo, 2009; Hartwig, 2006). They are also sources of power. 'Official statistics are simplifications that try to capture those parts of reality that interest the ruler (the main source of demand for official statistics) in order for them to understand, influence and alter that reality' (Krätke & Byiers, 2014, p. 14). Citizens also hold politicians to account using numbers such as the Gross Domestic Product (GDP) and the unemployment rate. As the introduction to this special issue argues, the science of economic measurement is a deeply political enterprise, with the choice to measure an economic or social phenomenon in a specific way often including or excluding groups of citizens.

The literature on quantification has grown rapidly since the 2008 financial crisis, with criticism from both academia and civil society focusing especially on GDP as

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a measure of national wealth (Fioramonti, 2013; Gadrey & Jany-Catrice, 2012; Porter, 1995). Disciplines including economics, sociology and political science have also delved into the process of quantification itself (Desrosières, 1998; Mügge, 2016). Focusing mostly on western countries, scholars have studied the interests of politicians seeking to embellish their achievements (Moon & Richardson, 1985), the influence of international organizations and standards (Clegg, 2010; Wallmana & Evinger, 2008), and the role of path dependency, linking specific statistical measures to policy commitments (Baxandall, 2004).

This article seeks to further this literature by examining the balance between institutional path dependency and change in the evolution of official statistics in South Africa. Like several of the other contributions to this special issue, it investigates the drivers behind the institutional choices that characterize contemporary macroeconomic statistics in South Africa. I show, in particular, how the history of apartheid, the imperatives of national development, and the racial divide have cast long shadows on the statistical enterprise (Maloney & Caicedo, 2012). This apartheid history demonstrates how, in an extreme form, statistics can be embedded in and function as handmaidens of stark societal inequalities, naturalizing them by presentation distorted statistical representations as unproblematic mirrors of economic reality.

The advent of multiracial democracy introduced challenges of its own, rooted in by simmering social and racial tensions as well as an economy to restructure and re-integrate into the global economy (Carmody, 2002; Cling, 1999; Taylor, 2003). Taken together, these episodes illustrate one of the arguments highlighted in the introduction to this special issue, namely that statistics can be summoned to both oppressive and emancipatory goals. The South African case features both as maybe few other countries do.

South Africa's recent history, although highly context-specific, reveals the relationship between domestic politics and global standards (see van Heijster and DeRock in this special issue) and the role of institutions in the evolution of official statistics. Even when governments turn to statistics to portray themselves in a flattering light (see Aragão and Linsi in this special issue), they do so embedded in political and economic institutions. As Krätke and Byiers argue, 'a better understanding of the factors that drive and constrain the production and usage of official statistics at the national level—particularly the objectives of the state—is needed' (2014, p. 18).

So how and why are South African economy and society measured the way they are? I distinguish between three distinct periods in the history of official South African statistics. In the first period—that of apartheid—economic statistics focused on the needs of the white population, while institutional and statistical norms established during apartheid continued to inform subsequent developments. In the second period, the statistical enterprise was tied to the needs of multiracial democracy; all existing and future statistics to represent the entire population were debated in a context of increasing openness to the international economy and organizations. In the third period, growing tensions within the African National Congress (ANC) government and the country's economic and social needs prompted the national statistical body to affirm its institutional role in a process of acquiring legitimacy and independence. The story revolves around the evolution of the main organization responsible for official statistics: the Central Statistical Service (CSS), rechristened Statistics South Africa (StatsSA) in 1998. The legacy of apartheid, the construction of the new democratic state, the influence of



international standards, and the heated political struggles of a divided nation structure this story.

The following sections outline key aspects for consideration, drawn from both the literature and my analytical framework of path dependence versus the adoption of international standards. I then detail how official statistics evolved over the three historical periods outlined above. The article builds on 25 interviews conducted in South Africa in 2018 with present and past statisticians, labor and business representatives, researchers, politicians and consultants, as well as on primary documents detailing statistical debates and developments in the country. The interviews focused on both considerations of statistical method and the evolution of economic measurement (Appendix 1 (online) presents a detailed list of interviewees and topics).

Quantification: Ideas, interests and institutions

Official statistics and national statistical systems are crucial for public administration and policymaking (Heine & Oltmanns, 2016; Taylor, 2016). According to the United Nations' fundamental principles of official statistics, established in 1994, 'official statistics provide an indispensable element in the information system of a democratic society'. Official statistics are central to governance (Camargo, 2009; Hartwig, 2006). They can integrate societies and strengthen the social contract, but they can also become instruments of exclusion.

Official statistics emerged in the late nineteenth century from the need to gauge population welfare (Desrosières, 1998; Garraty, 1979). If statistics were previously mostly descriptive, they were at this time beginning to mirror national policies, serving as both tools of governance and evaluation for the modern nation-state and bureaucracies that sought to advance rational decision-making (Camargo, 2009). The ability of statistics to facilitate international comparison was an early concern. Albert Thomas (1921, pp. 271-272), the first director of the International Labor Office, declared following the First World War that 'the reconstruction that has come with peace, the new situations which have arisen, the relations between the various peoples, have one and all increased the necessity for knowledge'. Standardized practices in statistics came to be seen as indispensable.

The question of how official statistics are constructed is not only of historical or theoretical concern. Following processes of social validation, economic indicators shape the choices of policymakers and the perceptions of citizens and private actors. But if numbers allow simplification and the communication of complex social phenomena, they also result from 'power relationships that are inevitably involved in the quantification of social life' (Clegg, 2010, p. 474). Statistics have established an important engineering perspective to the realm of economics, shaping policy interventions in consequences, in a normative approach (Speich, 2011).

Data producers and users have interests that can conflict at the aggregate level (Heine & Oltmanns, 2016). Politicians may use statistics to embellish their achievements, and the opposition to criticize the government—both shaping the construction and use of definitions (Moon & Richardson, 1985). Mügge (2016) has shown how indicators can be studied as powerful institutionalized ideas. Samuel (2013), one of the few authors studying macroeconomic statistics in non-western countries, has focused on the obscure parts of the process of quantification at the heart of social, political and institutional struggle. For example, the scientific narrative in Burkina Faso is tied to its positive image for international donors and its visible compliance to international standards. In France, the economy of conventions has sought to study the process of quantification (Desrosières, 2011) by studying the implicit choices made by actors who produce, interpret and reform statistics, revealing their methodologies, the tensions around measures and definitions, and the external relationships of statistics organizations (Camargo, 2009). As conventions, statistics—to the extent that actors accept and use them—help to construct a common language. The utility of official statistics stems from their reliability, not as faithful representations of reality but as conventions that can structure debate and action.

Statistics are thus dynamic and shaped by a multiplicity of ideological, institutional, and behavioral factors. The current article builds on these different approaches by exploring the history of official statistics in South Africa through the lens of historical institutionalism (Hall & Taylor, 1996). Therefore, to refine the research question, I investigate how institutions and their interactions affect the measurement of official statistics over time. The concept of institution is dynamic. Institutions are the result of arbitration between different representations of the world. They produce rules while maintaining a circular causality with individuals (Faverau, 1999; Prévost, 2010). 'Institutions are formal or informal rules, conventions or practices, together with the organizational manifestations these patterns of group behavior sometimes take on' (Parsons, 2007, p. 70).

Between agency and structure, institutions result from strategic interactions between agents. These interactions lead to a particular dynamic equilibrium. Strategies are not only rational: behaviors are bounded by their own worldview, as individuals are embedded in a 'world of institutions' (Hall & Taylor, p. 939; Parsons, 2007). Agents are themselves attached to past legacies. The history told concerns mainly the structure, but won't let apart the agency as it is also an important part of it. In this theoretical perspective, the distribution of power associated with the development and operation of institutions and the diffusion of ideas are important.

So how the organization between political, economic, statistical institutions evolved over time? Path dependency is a central mechanism to understand institutional development in a historical perspective. It will be detailed in the following section, especially in respect to its relevancy to the South African context.

Path dependency and the diffusion of international norms

Path dependency has been explained in many different contexts and periods of time. Those works have emphasized the impact of 'states capacities', of 'policy legacies', of 'societal forces' (Hall & Taylor, 1996, p. 941). In this historical institutional framework, institutions show some persistent features. But this continuity is punctuated by critical junctures, placing institutional arrangements on different paths (Capoccia & Kelemen, 2007; Collier & Collier, 1991). The sequencing of the history of official statistics is done in this objective: how the different periods in time differs or not from each other and why? Where are the branching points in history and how to explain the path chosen?



Domestic roots

Institutional path dependence can be fueled by several factors. Increasing returns and positive feedbacks result when more people make the same choice; selfreinforcement creates complementary institutions that encourage specific choices to be sustained, which are locked in when these choices become dominant (Page, 2006). Internal consistency—the gap between individual and collective decisions and culture (North, 1990; Pierson, 2004) are further possible explanations of institutional path dependence. Given the difficulties in quantifying these links, many researchers focus on the dynamics of institutions and their interactions (Fadiran & Sarr, 2016). The postulate in the context of South Africa is that an important critical juncture occurred with the shift from apartheid to democracy. And the path taken for statistical institutions after this critical juncture results from specific interactions with policy legacies and international norms. For this, I must understand what came before, during, and after this postulated critical juncture.

How to identify this critical juncture and its consequences? A critical juncture is a period of change, occurring in different ways depending on the context, and producing different legacies (Collier & Collier, 1991). Old institutions collapse and new ones emerge (Peinert, 2018). Different paths, different decisions are possible during this critical juncture, but one particular option is adopted, and it becomes more and more difficult to return to the initial point as we advance in time (Mahoney, 2001). Critical juncture and path dependence are thus strongly related. The literature also adds on the sequencing. Capoccia and Kelemen (2007) define critical junctures as relatively short periods of time compared to the duration of the path-dependent process resulting from it. During this short period of time, agents face a broader range of options compared to before or after the juncture. A historical snapshot is thus not sufficient, path dependence needs a narrative extending over time (Parsons, 2007). 'What is being highlighted is the significance of interaction effects, and the dependence of those interaction effects upon the synchronized timing of the events or processes at hand' (Pierson, 2004, p 55).

Acemoglu et al. (2001) have argued that differences in colonial experience are linked to exogenous differences in institutions which in places persist to this day. In the wake of decolonization, many African leaders—except in countries where independence was won through armed struggle—built their legitimacy on existing institutions, reproducing the structures of the colonial state (Young, 2004). Africa's newly independent democracies pursued data collection in different sectors with new needs and priorities, often using standards installed during colonial rule. The system of national accounts, for example, informed policymaking and was used for evaluation by international organizations. Although structural adjustment hampered the development of statistical capacity in the 1980s (Bonnecase, 2015; Jerven, 2013a), this began to change again in the mid-1990s with the Addis Ababa Plan of Statistical Development in Africa to achieve self-sufficiency in producing statistics. The pace of change in law, policy, technology, infrastructure and governance has since increased (UNECA, 2016), with forums, organizations and partnerships growing across the continent.²

The past is present in South Africa's society and economy (Kenney, 2010). Current inequalities can largely be traced to the legacy of apartheid and its racial categorizations and exclusions. For example, today's exceptionally high level of rural unemployment is rooted in previous restrictions on mobility in the homelands (Kingdon & Knight, 2004). Economic inequality, poverty, unemployment and growth have remained existential challenges since the end of apartheid, with one in two South Africans classified as poor (StatsSA, 2017). In examining the legacy of apartheid and the critical juncture of the coming of multiracial democracy in 1994, I focus on the institutional evolution of a single central actor: the Central Statistical Service (CSS), rechristened Statistics South Africa (StatsSA) in 1998 (Appendix 2 (online) presents a timeline of its evolution).

Diffusion of international norms

The diffusion of international norms through statistical standards gathered pace after World War II, both in the global north and south (Hartwig, 2006; Ward, 2004). 'All political players of the global community that emerged after the war – the two superpowers as well as the new postcolonial states and the Europeans, who had to reconstruct both their domestic and their colonial economies – strongly embraced quantitative macroeconomic knowledge' (Speich, 2011, p. 27). In the context of aid and conditionality, developing countries had to collect specific statistics to meet the needs of international organizations. As the United Nations' Millennium Development Goals popularized the use of indicators to measure economic and social development (Williams & Smith, 2000) and donors insisted on measurable results and 'good governance', getting official statistics in order became a priority. The good governance agenda—which encompasses the tenets of New Public Management—requires quantified data. International organizations develop 'best practices' supported by 'good institutions' (Baron, 2006).

International organizations such as the International Monetary Fund (IMF) and the World Bank have different approaches to statistical governance, the former being more coercive (see DeRock's contribution to this special issue). In the diffusion of statistical norms, the World Bank has established partnerships with statistical offices in high-income countries and provides consultancy services in developing countries. This diffusion leads countries to privilege certain norms; particularly in Africa, the IMF supports capacity development in producing statistics for national accounts, prices and merchandise trade (Ibid). The establishment and legitimacy of international standards depends on their adoption and implementation by national governments as well as use by private market actors (Mosley, 2003). The idea that statistics can provide signals for private actors is not new as Kelman (1987, p. 293) has shown for the United States: 'in the House debates over the 1880 census, Representative Cox, as a member of the Select Committee on the Census, argued that the business information in the census would allay industrial anxiety and give hope and buoyancy to trade'.

As in many other fields of technocratic policy, *de facto* international norms have diffused through transnational expert networks. Professionalization is a crucial factor in the dissemination of international norms, with both the legitimacy and authority of international organizations deriving from their expertise (Seabrooke & Nilsson, 2015). Indeed, expertise is coupled with moral authority: 'claims of expert and moral authority are two central components of international organizations authority' (Clegg, 2010, p. 477). But although their moral authority rests on their alleged impartiality, international organizations through their norms solve as well

as define problems. Their authority is moreover linked to the power of numbers and scientific presentation through international standards. As showed by Broome et al. (2018) on the indirect power of global benchmarking, international organizations shape standards 'best practices' by playing the role of teacher of norms and of evaluator of norm compliance, of performance. The diffusion of transnational knowledge practices shape state action everywhere, and is 'underpinned by an appeal to the authority of rational-scientific expertise housed within international organizations' (Ibid, p. 533). Focusing on the Worldwide Governance Indicators, Van Den Meerssche (2018, p. 192) explained the role of the World Bank in the 'depolitization of governance', through objectification and normalization. At the same time, they universalize a specific norm of statehood.

Critics have portrayed the developing world as dominated by international norms promoted by the IMF and affluent nations, which abuse their dominant positions to diffuse neoliberalism, especially when recipient states lack capacity and expertise (Drezner, 2001; Harmes, 1998). But international standards are not applied in completely harmonized ways as there remain differences in calculation, classification, scope, elements to include and exclude, and so on (Linsi & Mügge, 2019). The process of adopting international standards in domestic settings is far from straight-forward. For example, the international classification of diseases results from compromises between national preferences and international norms (Bowker & Star, 1997). To appropriate the norm also means to interpret it, resulting in hybrid practices. The evolution of official statistics is neither dominated by international norms nor path dependence; we need to consider the interplay between agency and structure, between behaviors and institutions, and between bottom-up and top-down processes.

Statistical apartheid (1948–1993)

The national statistical office of South Africa was established in 1914. The Representation of Natives Act, which laid the foundations for apartheid, entered into force in 1936 and was followed by the creation of ethnic homelands (Bantustans) for black Africans a decade later. South Africa under apartheid consisted of Namibia, four independent countries, and six dependent homelands (some language groupings refused to accept 'independence' and remained rural homelands within white South Africa). All sub-levels—with their own budgets, governments and administration—depended on the central government for fiscal transfers (Van de Heever & Adams, 2015).

In 1948, racial policy was given an affirmative dimension by the Nationalist government, which to suggest measures for development needed to grasp the economic and social conditions in African areas. 'The Tomlinson Report attempted to build a bridge between the ideological rhetoric of apartheid and the need for positive action to deal with economic conditions in the reserves' (Butler et al., 1977, pp. 159-160). The statistical enterprise was fragmented between institutions focused on different racial groups inhabiting different geographic areas. The most important institution was the Central Statistical Service, which focused mainly on whites (less than 5 million people) and economic statistics. At the time, the CSS reported to the Department of Home Affairs. The Human Sciences Research Council was more focused on black Africans, in the homelands and in South Africa, and on demographic statistics. The Development Bank of Southern Africa was dedicated to the financing of black economic development and worked in the homelands, while academics researched demography in the four independent Bantustans. The Bureau of Market Research, with its income and expenditure surveys, was also active in the homelands. Finally, homeland statistical offices had censuses as their principal mission (Lehohla, 2002; Seekings, 2001).

Although some official statistics during apartheid included colored and Indian groups, black Africans—comprising more than 70 percent per cent of the population—were ignored (May et al., 2000). CSS statistics were mainly producer-driven and interaction with users was absent; if black Africans were included, it was for the purpose of control and segregation (Krätke & Byiers, 2014). There was also an absence of comprehensive social indicators to assist policymaking (Møller, 1997). The apartheid state was focused on economic statistics in line with the macroeconomic focus of their users in the white-controlled economy, government departments and academia (Belkindas & Ngwenya, 2016). Given the limitations and politicization of statistics, their users in academia were few in number (Seekings, 2001). Anti-apartheid agencies within the country and abroad treated CSS outputs as propaganda, and largely ignored them' (Orkin et al., 1998, p. 4). The methodology of the census used by the CSS reflected the tenets of apartheid.

They were used to overflying the areas, which of course caused massive resentment among black political leaders, because they said 'you counted us like cattle on the ground'. (Interview with Mark Orkin)

For whites, the most important official statistics were economic, mirroring the interests of the urban business class. These interests were also reflected in the composition and management of the national statistical office. The priority was fostering international trade and the state reported its numbers to further its interests (Orkin, 2000). Economic statistics and the national accounts produced by the CSS were sophisticated and comprehensive, and followed international practices; the consumer price index was already well developed. Alongside the South African Reserve Bank, half of the department of national accounts was dedicated to measuring GDP (Orkin, 2000). Measurements of GDP and the consumer price index reflected domestic norms. Broadly speaking, the application of GDP to African economies is problematic given the size of informal economies on the continent (Jerven, 2013a). In South Africa, this division of the labor market into formal and informal was reflected in education and the practice of reserving certain jobs for whites (Mariotti, 2012). Economic interests in the mining sector further informed this structure, which was supported by the social engineering of apartheid (Plagerson & Stuart, 2018). Overall, considerable resources were invested in the collection of data on whites (Seekings, 2001).

The CSS played a central role in shaping statistics, as outlined in the Statistics Act of 1976. But CSS statistics existed in the racially organized system, especially as the CSS reported to the Department of Home Affairs responsible for implementing the Population Registration Act of 1950 and registering people according to their racial group (nowadays, Home Affairs are in charge of immigration and identity). Towards the end of apartheid, the CSS began to back positions that diverged from that of the central government. To mollify the victims of racial discrimination, the government decided to abandon the racial classification in the collection of data



for the 1991 census and to repeal the Population Registration Act. But the CSS, and especially its director with the support of the Statistics Director for Bophuthatswana⁵ and some of the country's leading scholars, decided to collect data on race, which was deemed necessary for demographic rather than political purposes (Khalfani & Zuberi, 2001).

Apartheid thus led to a unique structural set-up that conditioned the agency of its actors. As the main producer of official statistics, the CSS was directly linked to the central government and contributed to racialized social engineering. While complying with some international statistical norms in line with the interests of specific actors, these norms were adapted to support the structure of apartheid.

The transition to democracy (1994–1999)

Between old and new norms

From 1994, the need to design, implement, monitor and evaluate the Reconstruction and Development Program⁶ led to statistical reforms (Kiregyera, 2015). The need to identify acceptable measures of the economy and society was supported by a socio-political and business consensus that respected the pact between elites, which had previously led the government to preserve some pillars of the apartheid economy. The Congress of South African Trade Unions (COSATU) had played a key role in the fight against apartheid, the accession of the ANC, and the construction of the new democracy (Webster, 2017).⁷ The postapartheid labor movement has often been more vocal than the opposition parties (Gordon et al., 2013); the business sector maintained close but tense relations with government. While the South African economy, both during and after apartheid, was dominated by a group of conglomerates (Carmody, 2002), the elite economic bargain began to fray in the 1990s. Hirsch and Levy (2018) trace this to the agenda of economic reform influenced by established companies wishing to expand overseas,8 ongoing contestation over the distribution of rents between business and labor, and the program of black economic empowerment favoring political allies and fueling uncertainty. The relation between political elites, businesses and unions was crucial; their competing ideologies led to tensions over indicators, with unions fighting for more government intervention and the business sector, for less (Hirsch & Levy, 2018; Interviews with Alan Hirsch and Ravi Naidoo).

At this critical juncture following the 1994 elections, the CSS was no longer part of the Department of Home Affairs and became a national department in its own right. Nevertheless, it was still 'inside the structure of a bigger organization' (Interview with Joe de Beer). In the years immediately before and after 1994, the CSS had to straddle the old and new models (Orkin et al., 1998). With the reunification of South Africa, the independent states and homelands were reincorporated in what used to be white South Africa. With the new organization of governmental departments and provincial governments—and the emergence of new actors including trade unions, lobbies and non-governmental organizations—a new hierarchy of users appeared for the CSS, urgently demanding up-to-date statistics with new definitions and criteria of relevance. If the rule was to not criticize statistical conventions during apartheid, in this period users vocally criticized measures considered a threat to the new democracy (Belkindas & Ngwenya, 2016, p. 94).

The reputation of the CSS as an institution of the apartheid era undermined its legitimacy in the eyes of the new government. In early 1995, the minister responsible for the Reconstruction and Development Program, Jay Naidoo, commissioned the Australian Bureau of Statistics and the United Nations Population Fund to report on preparations for the 1996 census, the findings of which were critical of the CSS (Interviews with Mark Orkin, Joe de Beer, Charles Meth). The transition inside the statistical system began in 1995 with change at the head of the CSS, followed by the nomination of an Interim Statistics Council in 1996 and the rechristening of the CSS as StatsSA. The legitimacy of the central statistical institution, however, was not self-evident to the private market, which again revealed the continuation of previous patterns. For example, the measurement of GDP was inherited from the statistical system preceding the democratic transition and endorsed by the 1993 System of National Accounts. The arrangement was that StatsSA was responsible for the production measure (the official estimate of GDP) while the measure for expenditure remained the responsibility of the South African Reserve Bank, which was 'broadly seen by local and international users as having official status' (StatsSA, 2008, p. 3). Trust towards the Reserve Bank was high as well (Interview with Peter Perkins). This period witnessed the growing openness of data, especially given the changes within CSS/StatsSA. One consequence of apartheid was the absence of comprehensive data on which policies could be grounded, for instance to fight unemployment or poverty (May et al., 2000). With the development of more comprehensive and complete datasets, the academic users of statistics have been progressively able to pursue research on a diversity of economic and social issues (Seekings, 2001).

There are again continuities from the previous period, but with adaptations to establish a new consensus in the democratic context. One of the most consequential was the retention of the old racial categories—Black/African, Colored, Indian/Asian, and White—now used to inform policies of black empowerment and statistics on labor and poverty. The post-apartheid government accepted the racial divide as a social reality and marker of historical disadvantage (Maré, 2014). In the new democratic context, the system of racial classification was used by the government to repair the wrongs of apartheid, and by society to express identity (Seekings, 2008).

Re-engaging the international economy

The involvement of international organizations was requested by the CSS/StatsSA during this period as engagement with the international economy necessitated comparable numbers, it bolstered the credibility of the statistical organization in the eyes of new political actors, and there was a need to compensate for the gaps in apartheid statistics and the shortage of skills within StatsSA.

The young democracy had to rebuild its government over the whole of South African territory. When the country instituted non-racial rule in 1994, it embraced unconventional forms of economic restructuring. Indeed, the new democracy with its low external debt enjoyed some freedom to pursue heterodox development strategies (Carmody, 2002), as witnessed in its Reconstruction and Development Program. It was the ANC's main policy platform, focused on Keynesian redistribution (Adelzadeh, 1996). But the ANC government's strategy of 'growth through

redistribution' faded over time, becoming a two-pronged strategy with redistribution on one side and growth on the other (Hirsch, 2005). Two years later, the government shifted towards the more orthodox Growth, Employment and Redistribution Program, encouraged not only by the country's major conglomerates but by the state itself. 'Relations with the World Bank and the IMF would be conducted in such a way as to protect the integrity of domestic policy formulation and promote the interests of the South African population and the economy' (Hirsch, 2005, p. 3). The strategy of trade liberalization was proactive in order to both attract foreign investment and to gain some autonomy in policy-making (Carmody, 2002; Hamilton & Viegi, 2014).

The involvement of international consultants was particularly important at the time as statistics were deemed more credible when they adhered to international standards. International consultants also sought to transfer skills to StatsSA and to address the void in official statistics inherited from apartheid (Interviews; May et al., 2000; StatsSA, 2003). This demand came from the statistical office but also directly from the ministry: 'Jay (Naidoo) basically said to the Swedes and Australians, among your many offices of help, we want statistics' (Interview with Mark Orkin,). The Interim Statistics Council worked closely with StatsSA and with a Swedish adviser towards what would become the Statistical Act of 1999, establishing StatsSA as the autonomous official institution producing statistics in the country.

The act was drafted in the 1990s, with a lot of foreign support [...] One or two of the consultants coming from Stats Sweden basically wrote the Act. It was a big process of getting examples from others countries, and to see what works, what doesn't work, to have an Act for ourselves. (Interview with Joe de Beer)

The UN Statistical Office paid several visits to StatsSA in order to implement the 1993 System of National Accounts. Consultants from Sweden, Australia, the Netherlands, Canada, Norway and elsewhere—whose visits were funded by aid programs that sought to improve the public sector and infrastructure (Interview with Mark Orkin; Seekings, 2008)—advised in matters such as organizational development, training, household surveys methodology, price-index methodology, national accounts, business registers and census planning (IMF, 2001). The involvement of Swedish consultants in the design of social statistics and Australian and Canadian consultants in economic statistics and matters of governance led to two important reports for StatsSA in the late 1990s and early 2000s.

We were very largely ignorant of the international trends and how a local office should be structured. What must the priorities be? (Interview with Mark Orkin)

With limited resources, the question to prioritize developmental and social statistics or market-driven economic statistics was central. For the statistical institution, 'the voice of the daily business press, local and international, is more immediate than that of the illiterate rural grandmother' (Orkin, 2000, p. 20). Several statistics were thus redesigned: for example, the needs-oriented annual household survey became a market-oriented labor force survey.

This period witnessed the demise of agreements about statistical organization and measurement from the apartheid era and recognition of the need for new indicators to represent new realities. South Africa's openness to the international economy, the need for new statistics to serve multiracial democracy, the lack of



expertise inherited from the methodologies of apartheid and the need for credibility all created an environment favorable to the voluntary application of international standards and the turn to consultants. Decisions about statistics and institutional structure were thus linked as competing interests sought to measure South Africa's economy and society.

Technocrats in search of normalization (1999-present)

The first director of StatsSA, the Statistician General, was Pali Lehohla. He was also the first black director of the statistical institution. Following the Statistical Act of 1999, this period was one of StatsSA's maturation as an independent institution.

When the Finance Standing Committee inquired about coordination between StatsSA and the government's departments in 2002, Pali Lehohla emphasized the neutrality of statistics stemming from the use of international conventions to ensure that conflict between StatsSA and the departments would be resolved in a neutral manner. 'StatsSA has a statutory mandate and is kept in line by the well informed media, academia and international standards and definitions' (Finance Standing Committee, 2002). The depoliticization of statistics was a crucial strategy for StatsSA to be seen as an independent institution and to justify the credibility of its measures.

This period witnessed concurrent processes of depoliticizing statistics, striving for objectivity, and mobilizing statistics for political purposes. StatsSA was seeking to become an autonomous force producing statistics on the African continent and was a key participant in the process of professionalization. Since the early 2000s, it had stood out as one of the leaders of the development of statistics—and thus the diffusion of international standards—in Africa, first within the Southern African Development Community and the African Union. 'South Africa's credibility in the international statistical arena was confirmed by StatsSA winning the right to host the conference of the International Statistical Institute in 2009' (StatsSA, 2003, p. 24).

The strategy allowed statistics produced by StatsSA to be used as scientific evidence in negotiations between different actors. During a tense period between the government and the mining sector,⁹ the Chamber of Mines began to exclusively use official statistics to orient the discussion and to avoid haggling over numbers:

There is such a trust deficit between us and the government at the moment that we virtually decided to use only official data. And, so, whatever we talk about, there is no debate about where you get the data, it is about your interpretation of the data, which helps a lot. (Interview with Henk Langenhoven)

Bolstering users' trust in statistics was not always easy. In the face of extremely high unemployment and political criticism (Alenda-Demoutiez & Mügge, 2020), the World Bank was asked to review South Africa's statistical approach and to furnish recommendations (interview with Peter Buwembo). In its 2003 annual report, StatsSA again pointed to the role of consultants from Australia and Canada in enhancing statistical quality and credibility (StatsSA, 2003). In 2003, StatsSA made a mistake calculating the consumer price index. André Roux and John Stopford from Investec¹⁰ identified the flaw in the rental component of the index, which had not been updated properly for 15 months. Coverage in the financial and

business press pushed StatsSA to review the index; the error, it turned out, had significant consequences. In 2000, the government had sought to target inflation through macroeconomic policy. The downward revision of inflation showed to the South African Reserve Bank that interest rates were too high over the period, and this statistically upward-bias led to higher wages than warranted and a loss of output (Aron & Muellbauer, 2005). To regain the public's trust, StatsSA asked for an international review of the consumer price index and explained the mistake and the correction in the media. There were no comments from the state authority, except a call from the Governor of the South African Reserve Bank to a Johannesburg radio station to defend StatsSA. But StatsSA also made its political point behind the scenes. Supported by several officials, informal discussions and exchanges took place until the Cabinet itself supported StatsSA's position (Interview with Peter Kelly).

The use of international standards by StatsSA reflected broader trends in the world of development where political problems were rendered into technical ones through the provision of expertise by development agencies (Ferguson, 1994). For example, the fiction of civil society organizations being neutral and external to politics now structures much development aid, giving rise to new political issues, favoring certain avenues towards development, and bestowing more or less legitimacy to different actors as partners (Lavigne Delville, 2015). By bringing knowledge and expertise, international standards support the supposed objectivity and credibility of official statistics and methods, and thus the institutions producing them. As in the case of the South African mining sector, the political debate is no longer about quantification itself but about the use of statistics to inform policies against unemployment and poverty. There is thus a certain depoliticization of quantification which supports the autonomy and image of expertise of StatsSA as well as a politicization of the use of statistics. The search for normalization seeks to avoid criticism regarding methods and to enable debate using a common standard. In the face of political and administrative challenges, this representation of neutrality became crucial for StatsSA.

All this culminated in a conflict in 2013 between Morten Jerven, author of Poor numbers: How we are misled by African development statistics and what to do about it, and Pali Lehohla, who prevented Jerven from speaking, as invited, at the United Nations Economic Commission for Africa. But both men spoke to the media. Lehohla asserted that Jerven's book and discourse would highjack the African statistical development program. Jerven answered that 'Pali Lehohla and his counterparts are doing well in the current system. Any change to the status quo in the political economy of statistics in Africa is considered a threat' (Jerven, 2013b). The political dimension thus remains in the defense of normalization, of the efforts of the past decade, of African statisticians and the reputation of African statistics—statistics that inform relations with donors and international market players, evaluating countries' performance and conditioning investment and aid.

In this period, we witness new trends towards normalization and the application of international standards as well as StatsSA's search for credibility. The depoliticizing technocratic impulse in the search for objective and neutral statistics grows more important. This apparent neutrality promoted another goal in the South African context, related to the example of the Chamber of Mines: to debate not on how the numbers have been calculated, but on their interpretation, on the need for

policy, Indeed, Pali Lehohla during his 17 years as Statistician General discussed policies in newspapers columns and at conferences. This strategy of normalization—of the depoliticization of statistics through the building of expertise—reflects a duality behind measurement activities: an 'anti-political' work is necessary to protect measurement activities from interrogations; but, by revealing objects and phenomena, measurement can have political effects (Barry, 2002). It was also identified by Prewitt (1987) in US statistical history: statistical description can bring social conditions to public attention, which has indeed been an important dynamic within post-apartheid South African statistics. Besides, statistics introduce practices that objectify politics, classify populations, and include and exclude individuals. In this period, South Africa's autonomy, growing tensions within the ANC government, and the country's economic and social difficulties lead StatsSA to affirm its role as an independent South African—and African—institution.

Concluding remarks

Two questions were important to ask to understand the path followed by statistical institutions in South Africa: where are the branching points in history and how to explain the path chosen? The institutional history of official statistics in South Africa has been sequenced in three different periods, emerging from the qualitative study. I postulated in particular that the democratic period, the shift from apartheid to an opposite inclusive political and economic system, has constituted a critical juncture. Table 1 summarizes the different arguments of the three periods, to be able to draw conclusions.

Concerning the first question, I indeed argue that the democratic period, from 1994 to 1999, has been a critical juncture. Before this critical juncture, statistical institutions were clearly related to the racialized political and economic institutions. Agency was very limited, as the choices offered to the different actors in this system. The democratic period is not only a transitional period: the creation of a new democracy has consequences for all institutions, not only statistical ones. Political institutions change to democratic ones, economic institutions should now serve everybody, support the openness to international economy, and social institutions also evolve. For statistical institutions as the others, new users appear, with different values, different interests. The feasible choices, policy directions, are indeed much higher compared to the previous period, but also the following one. This period is relatively short, compared to the long racial history of South Africa, but also with the duration of the path-dependent process it actually instigated. In the last sequence, the normalization period, the range of options decrease. The relationship between the different institutions continues to evolve, but now in defined directions, even if their stability is questionable (considering inequalities, political instabilities, social tensions, etc.). The choices made during the critical juncture constraints the future choices, especially on the respect with international norms and the need for StatsSA to affirm its role as an independent organization, but also mark a strong opposition with the previous period, with a need to remodel all institutions.

The second question is precisely about these choices, between past legacies and adaptation of international norms. If the power relations were clear during the apartheid, they are also questioned during the critical juncture, as the pact between

Table 1. Key institutional development in South Africa	can statistics.
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Sequences	Statistical apartheid	Democratic period	Normalization period
Structure	■ Apartheid ■ Racial and geographical fragmentation ■ No autonomy	■ Rebuilding the state ■ Old and new domestic norms ■ Increasing openness to international norms	 Stabilization of democracy Social, economic and political tensions Independence of StatsSA
Agency	 CSS leads the path of official statistics Focus on specific economic statistics Use of international norms to respect interests of key sectors Bias in choice of statistics and methodologies to the detriment of black Africans 	■ New and varied users with competing interests ■ Perpetuation and adaptation of apartheid norms ■ Balance inside StatsSA between the need for new statistics and building legitimacy ■ Voluntary involvement of foreign consultants	 Affirming the role and credibility of StatsSA Objectification of statistics Diffusion of StatsSA expertise on the African continent Respect for international norms to support normalization

elites. Still, the democracy is not being built from scratch. In all institutions, and, in our case, the statistical ones, old norms persist and influence the choices made, as the conservation between categories, or the GDP division. The links with political institutions and economics ones shape the direction of the statistical institution too. In this uncertainty, we observe different possible directions at first for statistics, in the direction of business interests opposed to trade unions in particular, two powerful types of actors. The highly rapid changes implied by the urgent social and economic programs of the new government add another difficulty. Thus, past structures also constrain the possible choices made during the critical juncture. The involvement of international actors from here constitute a way to support the legitimacy of the choices made in this uncertainty, and to compensate for many lacks inherited from the apartheid period and 'wrongs' to correct. Besides, for the new government, the need for comparison at the international level is fundamental, establishing legitimacy compared to the previous regime. It is consistent with the performativity of international statistics and the role of international organizations (section 3). International consultants and organizations got involved first to question the legitimacy of the statistical institution. Then, the statistical institution itself consistently asked for the support of international expertise in times of uncertainty, of mistrust by the users, of criticisms by the government. This image of international expertise as an arbiter has been important, and resonate with the diverse literature that has already demonstrated the role of international organizations as 'truth-tellers', outside of any partisan conflicts (Broome et al., 2018).

Present statistical conventions in Africa result from numerous factors: institutional path dependence, the political interests involved in accepting international norms, the economic and social specificities of individual countries. Although the case of South Africa is in many ways unique, it contains insights into the evolution of official statistics outside of the global north more generally. To many policymakers, academics and activists, official statistics and international standards appear as objective measures beyond question. If knowledge of the complexity of



reality is at the root of macroeconomic objects, it disappears in the simple and unified figures for growth and inflation. But in reality, statistical conventions result from complex coordination processes, contribute to shape social representations through classification, and have social consequences. For some African countries, complying with international standards helps them economically, even impacting on flows of aid (Chwieroth, 2015).

The centrality of statistics in governance should lead their users to reflect on their origins and on what they actually mean; we need to open the 'black box' of statistics to understand the actual context of internationally harmonized indicators. In history, macroeconomics and official statistics are linked to the power of the sovereign, of a nation. As we continue to depart from a realistic epistemology, sovereign power, through these standards, is increasingly shared with other actors, and in particular international actors (Samuel & Hibou, 2011). But standardization is not only due to outside forces imposing themselves on passive actors; the result of practice, it must be understood as an interactive process, as I have done here for South Africa, and others have done in this special issue.

Notes

- 1. The original resolution of 1994 and the new resolution of 2014 (affirming again the first principle) are available on the website of the United Nations Statistics Division.
- 2. The Partnership in Statistics for Development in the 21st Century Consortium has adopted the UN Fundamental Principles for Official Statistics, and promotes General Data Dissemination Standards, the Data Quality Assessment Framework, the International Comparison Program for Africa, the Strategy for the Harmonization of Statistics in Africa, etc.
- 3. Following the definitions of StatsSA and South Africa's national statistical system, economic statistics cover economic growth, inflation and agricultural statistics, while social statistics cover unemployment, the census, living conditions, crime, education, etc.
- 4. The debate has been important on the role of GDP in particular in relation to development, even by the early 1950s (Speich, 2011). Seers showed that 'the published national income series for a large number of countries have very little relevance to economic reality' (Seers, 1972, p. 27).
- 5. Bophuthatswana was one of the four independent states.
- 6. The Reconstruction and Development Program was the first socio-economic policy framework implemented by the ANC government of Nelson Mandela in 1994.
- 7. COSATU is the largest union in South Africa, representing more than two million members. In 2013, almost 70 percent of public sector and 24 percent of private sector employees were trade union members (the mining sector being the most unionized) (Bhorat et al., 2014).
- 8. The South African economy had been boycotted since the 1980s, one of the factors that ended apartheid (Johnson, 2017). Re-opening to the international economy was then a huge challenge.
- Mining has shaped the history of South Africa at all levels, being the bedrock of its economy since the discovery of minerals in 1886. With 1,712 mines in 2013, the sector contributes more than 7 percent of GDP, accounts for a quarter of FDI, and employs about 5 percent of the working population. The political context has been strained, especially since the Marikana shootings; relationships with the Zuma government, which views the mining sector as a vestige of apartheid, have been hostile. Conflicts and negotiations since the 2008 Mineral and Petroleum Resource Development Act have centered on labor conditions, environmental regulations, stakeholder ownership, etc. (Plagerson & Stuart, 2018).



10. A Johannesburg finance company founded in 1974, specialized in relationships between investors.

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