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Statistical Visions in the Era of Structural Adjustment

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Gerardo SERRA *

Abstract. This article reconstructs the discourse built by the United Nations Economic Commission for Africa (ECA) on socio-economic indicators in the first decade of structural adjustment. While in the early 1980s such indicators were envisaged as a statistical language to translate the alternative ideas of the Lagos Plan of Action into an operational reality, over the course of the decade they were increasingly seen as tools to evaluate the human and social costs of the policies imposed by the World Bank and the International Monetary Fund. This shift in emphasis informs a reflection on the “governance of indicators”, problematizing the relationship between development visions and quantification, and the dynamics which prevented the ECA’s vision from shaping African statistics in the way that was intended.

Keywords. United Nations Economic Commission for Africa, development, structural adjustment, indicators, governance, statistical capacity, Africa, twentieth century

Résumé. Les indicateurs de développement de la Commission économique des Nations unies pour l’Afrique, 1980-1990. Représentations statistiques à l’ère de l’ajustement structurel. Cet article discute des indicateurs socioéconomiques utilisés par la commission des Nations unies pour l’Afrique (CEA) dans les programmes des réformes dites de l’ajustement structurel, lancées par le Fonds monétaire international (FMI). Alors qu’au début des années 1980 de tels indicateurs servaient à rendre opérationnelles les propositions des plans de développement pour l’Afrique comme le Plan d’action de Lagos (PAL), au cours de la décennie suivante ils furent davantage conçus comme des outils pour évaluer les coûts humains et sociaux des politiques de la Banque mondiale et du FMI. Ce déplacement invite à réfléchir à cette « politique des indicateurs », à problématiser les rapports entre projets de développement et quantification, ainsi que la dynamique qui empêcha la CEA de développer des indicateurs africains dans la voie qu’elle avait prévue.

Mots-clés. Commission économique pour l’Afrique (CEA) des Nations unies, développement, ajustement structurel, indicateurs, organisations internationales, expertise statistique, Afrique, xx^e siècle

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On 20 April 1983, the 25th anniversary of the United Nations Economic Commission for Africa (ECA), many African countries were in economic and political crisis. The hopes of economic and social progress that had underpinned the struggle for independence and the early years of postcolonial rule in the 1950s and 1960s seemed already to belong to a remote past, made more distant by a wave of military coups d'état, sluggish growth and rising public debt. In the 1980s and the 1990s, in response to this dismal state of affairs, and as a necessary condition to obtain additional credit from international financial institutions, most African states adopted so-called “structural adjustment policies” (SAPs).¹ Promoted by the World Bank (WB) and the International Monetary Fund (IMF), and in open contrast with the statist vision that had characterized development thinking up to that point, the SAPs placed emphasis on free trade, privatization, currency devaluation, and the dismantling of public bureaucracy.² However, the vision behind the SAPs was not the only template for African development circulating in the 1980s. With the Lagos Plan of Action (LPA hereafter),³ the ECA and the Organization of African Unity had produced a very different strategy. This plan – predicated on the belief that the most significant causes of the poor performance of African economies were the worsening terms of trade and exogenous shocks – recommended a strategy of industrialization and regional integration, and stressed that development was about promoting social change rather than simply increasing the size of macroeconomic aggregates.

Indicators are a useful lens for exploring the role of quantification in the 1980s debates on Africa's present and future. By reconstructing the discourse developed by the ECA around socio-economic indicators, this article makes two main contributions to the literature. The first pertains to a more nuanced historicization of the commission's evolution during a period dominated by severe anxiety over Africa's political and economic prospects. Despite the

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1. The literature on the impact of the SAPs on African economies is immense and cannot be summarized here. Useful starting points include T. MKANDAWIRE & C. C. SOLUDO, 1998, the essays in B. ONIMODE, 1989; A. ADEPOJU, 1993; T. MKANDAWIRE & C. C. SOLUDO, 2003.

2. WORLD BANK, 1981. The article follows the convention of referring to the combination of IMF stabilization programmes and WB adjustment programmes as “structural adjustment policies”. In short, while the former aimed “to return to macroeconomic equilibrium in the short-term”, the latter sought to “promote more rapid sustainable economic growth in the long term”, N. VAN DE WALLE, 2001, p. 7. For a more extensive presentation of the theoretical models used by the two institutions, their functioning and complementary relationship in shaping the SAPs, see R. LENSINK, 1996, especially Chapters 4-6.

3. ORGANIZATION OF AFRICAN UNITY, 1980.

significant interest in the statistical work of international organizations,⁴ and the crucial role played by the United Nations as a key centre for the dissemination of statistical templates,⁵ its African regional commission has received relatively little attention. The literature has tended to focus on the ECA's attempt to advance the cause of African political and economic integration, or on its commitment to elaborating a distinctive development strategy.⁶ This tendency has created a disjuncture between the commission as a producer of blueprints and its statistical work. By documenting the ECA's attempt to translate the LPA into a statistical framework, this article is a step towards filling this gap. This connection is reconstructed using the sources contained in the ECA Knowledge Repository. Although this online archive, comprising more than 18,000 documents, illuminates many crucial issues in the ECA's evolution, it has remained largely underexplored by historians.⁷ The ECA repository being composed of official published sources, it presents two main shortcomings for analysing the context described here. First, it provides no visible evidence of the internal debates, negotiations, tensions and clashes that took place behind closed doors, and that shaped the process whereby the commission's vision of indicators came into being. Secondly, it tends to favour a continental outlook on statistical matters, preventing a fine-grained understanding of the different national and local contexts in which ECA's templates were received.

Notwithstanding these limitations, the sources analysed still raise interesting questions and allow a reconstruction of the changing political meanings attached to indicators. While in the early 1980s the ECA saw socio-economic indicators as tools to translate the general framework of the LPA into numbers, statistical practices and policies, within a few years indicators came to be primarily seen as monitoring devices to quantify the human and social repercussions of adjustment policies. On the basis of these considerations, this article makes a second contribution by offering a more nuanced view of the indicators as "technologies of governance" in neoliberal Africa.

1. Indicators and governance

Despite their pervasive presence (or maybe because of it), indicators are elusive statistical objects. Some are extremely simple, like the mid-upper arm circumference used as a proxy for malnutrition, while others – like the ones discussed here – presuppose the collection and aggregation of vast amounts

4. See, for example, R. CUSSÓ, 2012 on the League of Nations and M. SCHMELZER, 2016 on the Organization for Economic Co-operation and Development (OECD).

5. M. WARD, 2004.

6. I. V. GRUHN, 1979; A. ADEDEJI, 2004.

7. See <http://repository.uneca.org/>.

of data by a wide range of institutional actors.⁸ Even though, as noted by the ECA, the line separating indicators from other forms of statistics may be blurred, the former are, by definition, distinguished by the fact that they are “a measure pointing to or indicating a variable which is different from the one of which it is direct measure”.⁹ Indicators have a long history, “stretching back to the creation of modern nation states in the early nineteenth century, and practices of business management a few centuries earlier”,¹⁰ but only in recent decades have they become influential political technologies. In the historical trajectory of the co-construction of politics and statistics, indicators have been perceived as the statistical language of forms of governance that are potentially “global” in scope, and “neoliberal” in nature.¹¹

Both aspects are made possible by the characteristics of indicators as knowledge-producing objects. By simplifying a complex reality, indicators are defined by their capacity to “submerge local particularities and idiosyncrasies into universal categories, thus generating knowledge that is standardized and comparable across nations and regions”.¹² If this helps explain the centrality of indicators in the articulation of “development discourse” and in the work of international organizations, the new importance that indicators acquired from the 1980s “was part of a radical redefinition of the relations between democracy and market”.¹³ As part of the toolkit of “neoliberal governance”, indicators have helped to institutionalize an “audit culture” that, in the name of decentralization, transparency and accountability, subtly introduces new forms of domination.¹⁴ The proliferation of indicators in social life can also be conceived as a process whereby forms of corporate governance have “colonized” other domains, contributing to an erosion of the boundaries traditionally separating corporations, the state and civil society.¹⁵

In the African context, discussions of neoliberal governance have a different (but not entirely separate) origin, being inextricably tied to the adoption of SAPs in the 1980s. As put by Graham Harrison, structural adjustment is “neoliberalism codified”.¹⁶ Many authors have argued that the SAPs helped

8. For a fascinating history of the mid-upper-arm circumference tape, see J. GLASMAN, 2018.

9. UNITED NATIONS ECONOMIC AND SOCIAL COUNCIL (UNESCO); ECA, 1981b, p. 2. For a more comprehensive definition of indicators, see K. E. DAVIS, B. KINGSBURY & S. E. MERRY, 2012, pp. 73-74.

10. S. E. MERRY, 2011, p. S83.

11. For a long-run discussion of how “government by law” has been paralleled and replaced by “governance by numbers”, see A. SUPLOT, 2015.

12. S. E. MERRY, 2011, p. S84.

13. R. ROTTENBURG & S. E. MERRY, 2015, p. 3.

14. C. SHORE, 2008.

15. S. E. MERRY, 2011, p. S90.

16. G. HARRISON, 2010, p. 38.

to undermine the functioning and stability of African nation-states.¹⁷ The void resulting from the crisis of the “developmental states”¹⁸ was filled by non-governmental organizations and international institutions,¹⁹ which in turn instituted and consolidated new regimes of quantification. Yet, despite substantial methodological and narrative differences, many analyses of the political implications of SAPs in Africa share an understanding of governance that, while implicitly acknowledging the importance of quantification in shaping neoliberal discourse and practice, neglects the specific statistical forms it has acquired.²⁰

Reconstructing the ECA’s vision of indicators amounts to an operation of institutional and conceptual de-centring. Placing the ECA at the core of the analysis shifts the gaze from the relationship between the international financial institutions and African states, and rescues a context in which the language of indicators was mobilized to imagine and operationalize an alternative to the policies imposed by the WB and the IMF. From a conceptual viewpoint, understanding why this alternative did not materialize leads to a more nuanced view of the relationship between statistical visions, indicators and governance. While much recent literature explores “governance *by* indicators”,²¹ the focus of this article is the “governance *of* indicators”. These two expressions do not stand in mutual opposition; in practice they denote complementary, and largely overlapping, processes. Nonetheless, they suggest a difference in emphasis. The expression “governance *by* indicators” emphasizes the striking capacity of indicators to reconfigure power relations and travel smoothly across political and epistemic domains. Studying “governance *by* indicators” typically means identifying, documenting and classifying the different ways in which numbers alter the distribution of resources, influence the behaviour of the monitored (“governed”) subjects, or even actually “perform” and bring into existence the phenomena they claim to measure.²²

17. This literature is far too vast to be summarized here. Notable examples include J. HERBST 1990; J.-F. BAYART, 1990; J.-F. BAYART, S. ELLIS & B. HIBOU, 1997.

18. T. MKANDAWIRE, 2001; J. FERGUSON, 2006.

19. For a more nuanced discussion on the relationship between NGOs and governance, see G. MANN, 2015.

20. Relevant exceptions, placing the construction of numbers at the centre of the analysis of political dynamics include B. SAMUEL, 2011 and M. JERVEN, 2013, but their focus is on macroeconomic statistics and national income accounts, rather than indicators. Conversely, although not dealing primarily with structural adjustment or with the ECA, the recent historical and sociological literature on indicators contains many interesting African case studies. See, for example, J. MUGLER, 2015, and O. ZENKER, 2015, on South Africa, R. GERRETS, 2015, on Tanzania, and S.-J. PARK, 2015, on Uganda. More broadly, on the political implications of poverty knowledge in South Africa, see G. DAVIE, 2015.

21. See for example the essays in K. DAVIS *et al.*, 2012.

22. For further discussion on performativity, see the essays in D. MACKENZIE, F. MUNIESA & L. SIU, 2007.

In contrast, by using the expression “governance of indicators” I intend to take a step back and focus on the processes whereby an institutional actor integrates the production of indicators into its ideological and political discourse. I am particularly interested in understanding how the statistical language of indicators informed the ECA’s construction of its identity and role. Secondly, talking about the “governance of indicators” is more conducive to a focus on the power exerted by different actors *over* indicators. Here, my aim is not to explore the production of specific numbers and their consequences, but rather to determine how discussions on the role of indicators can shed light on the set of representations and power relations that connected different institutional actors. The case study presented here concerns an institutional subject that did not succeed in reshaping the world according to its statistical vision. Locating the ECA’s take on indicators at the intersection between debates on the means and ends of “development”, the political and administrative challenges faced by African statistical services and changing international dynamics, this article is a reminder that the power of indicators to act as effective tools of governance is not intrinsic to their statistical format, but rather the outcome of the alignment of contingent ideological, political and administrative conditions.

2. Translating development visions into indicators

The construction and dissemination of economic and social statistics has been an important area of the ECA’s work since its establishment in 1958. The commission’s early statistical work fell under three headings:

- “Promotion in Africa of statistical activities adequate to meet the requirements of economic and social planners for statistical data. [...]”
- Formulation of statistical methods and standards appropriate to conditions prevalent in Africa.
- Servicing member countries by publishing statistical series covering the African region, presented in as comparable form as possible”.²³

Over the decades, these goals have given rise to a series of training programmes, institutions and meetings aiming at developing statistical capacity across the continent. In the 1960s, the ECA was particularly active in establishing training centres for African statistical personnel. The commission focused on industrial policy as the lynchpin of regional integration and structural economic transformation, and published some pioneering studies on the economics of racial discrimination and on the role of women in economic development.²⁴ The 1970s were characterized by a crucial expansion of the

23. ECA, 1961, p. 1.

24. ECA, 1963a; *id.*, 1963b; *id.*, 1967. For a discussion of the ECA’s statistical work in the 1960s, and its relationship with Pan-Africanism, see G. SERRA, 2015, Chapter 5.

commission's statistical programmes, with the launching of the Statistical Training Programme for Africa (STPA) in 1978, the Africa regional component of the UN Household Survey Capability Programme (also in 1978), and a specifically designed assistance project for the construction of national income accounts in least developed and newly independent countries (1979). From the viewpoint of the UN and its specialized agencies (and other organizations such as the International Labour Organization), the 1970s marked an explicit commitment to the production of social statistics in the form of indicators.²⁵ By the end of the decade, the view that Africa was a continent in a state of crisis that called for urgent coordinated action had become widespread. Although in the *Revised Framework of Principles for the Implementation of the New Economic Order in Africa* the ECA emphasized the external causes of the crisis and identified in self-reliance the key to unlocking Africa's potential,²⁶ the Bank Governors of several African countries asked the WB to write a report on the state of the continent.²⁷

This bifurcation was destined to have profound implications, as the 1980s began with the emergence of two very different documents as possible templates for Africa's future: the ECA's *Lagos Plan of Action* (1980) and the World Bank's *Accelerated Development in Sub-Saharan Africa: An Agenda for Action* (1981), also known as the Berg Report. According to Adebayo Adedeji, the former ECA Executive Secretary (and the main architect of the LPA) this confrontation of development paradigms amounted to nothing less than a "battle for the African mind".²⁸ Both documents presented a diagnosis of the causes of Africa's deteriorating economic and social conditions, as well as a list of recommendations for rectifying that lamentable state of affairs. Although the World Bank claimed that the Berg report and the LPA were complementary,²⁹ the two texts expressed very different and largely incompatible visions.

The Berg report claimed to advance an "agriculture-based and export-oriented strategy"³⁰ that would provide the foundation for future industrialization. While acknowledging the impact of external shocks on African economies, it differed substantially from the LPA through its emphasis on internal policy failure. According to the Bank, the African economies could have been saved from the crisis they were experiencing by means of a "cure" involving currency devaluation and a significant reduction of state

25. On the debates about social statistics and the associated technical and political problems, see M. WARD, 2004, Chapter 3.

26. ECA; UNESCO, 1975.

27. J. E. NYANG'ORO, 1992, p. 13.

28. A. ADEDEJI, 2004, p. 266. For an exhaustive discussion of Adedeji's contribution to development thinking, see S. K. B. ASANTE, 1991.

29. WORLD BANK, 1981, pp. 1, 6.

30. *Ibid.*, p. 6.

intervention in the economy. The emphasis was on “getting the prices right”, and on replacing the state with the market as the main allocative mechanism. In contrast with the Berg Report, the analysis of the African crisis presented in the LPA focused much more closely on the “structural weaknesses” of African economies, impoverished by adverse external conjunctures. Rather than relying on markets as the main allocation mechanisms and on “comparative advantage” as the principle to guide policy decisions, the LPA called for a more ambitious strategy to diversify African economies by making them less vulnerable to changes in the prices of primary products. The social aspects of the development process were much more clearly emphasized, especially in relation to the importance of raising educational levels, increasing food production and improving security. Whereas the Berg Report suggested a strategy of export-oriented agriculture that tied the fate of African nations to the world markets, the Commission was keen to reinforce industrial policy, and to promote economic development within a framework of regional cooperation and integration. Significantly, and not surprisingly given the longer time-span covered by the LPA, much emphasis was also placed on science, technology and research as drivers of modernization. The last chapter of the report also contained a brief discussion of the importance of strengthening African statistical machinery for economic and social planning.³¹

Despite this unglamorous debut, over the course of the 1980s quantification became a crucial battleground in the confrontation between the ECA and the WB.³² In 1989, for example, the Commission published a report on the optimistic appraisals of SAPs by the WB and the United Nations Development Programme (UNDP).³³ The ECA firmly stated that the “most striking feature of the World Bank Report is its one-dimensionality which pertains to underlying assumptions, to the statistical/methodological approach chosen as well as the analysis of the data”.³⁴ Although the ECA’s 1989 report focused on trade figures and national income accounts, it would be simplistic to confine the commission’s “statistical war” against the WB to the realm of these economic statistics.³⁵

Indeed, by imagining new indicator-based statistical frameworks, the ECA did not want simply to criticize the WB’s use of data, but rather to render operational the alternative principles and goals of the LPA. A document circulated in 1982 at the Joint Conference of African Planners, Statisticians and Demographers suggested that in order to translate the vision of the

31. OAU, 1981, Chapter XIII.

32. T. W. PARFITT, 1990.

33. WORLD BANK, 1989.

34. ECA, 1989, p. 4.

35. In contrast, Reginald Green claimed that the “Bank-UN Economic Commission for Africa (ECA) statistical war is waged from both sides with highly selective and less than appropriate data”, R. H. GREEN, 1993, p. 66.

LPA into planning and policy, the necessary categories of indicators had to include population, human resources, modernization, income and economic growth, self-reliance, African cooperation, health and welfare.³⁶ While there is nothing surprising, or specific to the LPA, in the mention of population, income and economic growth, the impact of the ECA's distinctive vision of development was particularly evident in the ambition to quantify concepts like "self-reliance", "modernization" and "African cooperation".

Modernisation:

- 1. Share of agriculture in GDP
- 2. Share of manufacturing in GDP
- 3. Agricultural labour force as proportion of the total labour force
- 4. Proportion of wage earners in labour force
- 5. Share of government and public enterprises in GDP
- 6. Fertilizer use per unit of cultivated area
- 7. Proportion of commercial and industrial establishments using electricity
- 8. Non-marketed production as proportion of GDP
- 9. Motor vehicles per household
- 10. Telephones per household
- 11. Proportion of women in agricultural labour force
- 12. Proportion of women among civil servants
- 13. Proportion of girls in school enrolment

Self-reliance:

- 1. Proportion of capital of firms with assets over 10^x dollars owned by nationals
- 2. Percentage of nationals among researchers, managers, professionals and teachers
- 3. Deficit in goods and services as a proportion of GDP
- 4. Foreign capital flows as a proportion of GDP
- 5. National savings as a proportion of capital formation
- 6. Cereal imports per head

African cooperation:

- 1. Intra-African trade as a proportion of total trade
- 2. Travellers to/from other African countries as a proportion of total travellers
- 3. African foreigners as proportion of total population
- 4. Value added in joint ventures as a proportion of total value added in the modern sector.³⁷

36. UNESC; ECA, 1981b, p. 13.

37. *Ibid.*, Annex I, pp. 1-2.

The 1982 joint conference of African statisticians, planners and demographers led to the setting up of an expert consultation group to prepare a list of socio-economic indicators for Africa, based on an appraisal of the experience of different African countries, and on the work conducted by different international organizations. The resulting “proposed list of indicators for use by African planners” presented in Addis Ababa in 1984 represented a considerable expansion of the one drafted in 1982. It included ten macro-categories and almost two hundred specific indicators:

Basic needs

- 1. Health, food, nutrition (26 indicators)
- 2. Education (13 indicators)
- 3. Housing and human settlements (10 indicators)
- 4. Social services (not yet defined)

Employment, household expenditures, income and assets

- 1. Labour force participation (5 indicators)
- 2. Household expenditures, income and assets (15 indicators)

Economic activity

- 1. Institutional structure of production (6 indicators)
- 2. Macroeconomic structure (9 indicators)
- 3. Economic growth (2 indicators)
- 4. Economic stability (2 indicators)
- 5. Investment (1 indicator)
- 6. Productivity and elimination of wastage (5 indicators)

Participation in development

- 1. Population participation in social and development activities (7 indicators)
- 2. Social stability (to include human rights concerns) (6 indicators)
- 3. Social cohesion and integration (to be defined, and to include equity)
- 4. Social integration and mobility (to be defined)

National autonomy

- 1. Food security (5 indicators)
- 2. Endogenous technology (8 indicators)
- 3. Cultural development (13 indicators)
- 4. Economic and financial independence (20 indicators)

Collective self-reliance (11 indicators)

Demographic structures and trends (11 indicators)

Environment and land use (5 indicators)

Information improvement (5 indicators)

Special national concerns (6 indicators).³⁸

The 1984 list of indicators was different in scope and ambition from its predecessor. At the basis of this reconceptualization was the idea that even the notion of “social indicators” was too narrow; instead, they were to be called “development indicators”, thus strengthening a vision that transcended the dichotomous, and somewhat artificial, distinction between economic and social variables.³⁹ Of particular interest is the way in which the ECA translated the most ambitious aspects of the LPA into specific indicators. This was the case, for example, for the introduction of indicators about endogenous technology (with data on national scientists and qualified researchers, patents and innovations registered and used by local firms) and cultural development (mostly related to the circulation of newspapers, but also including an ambitious “perception indicator of the relevance of the contents of radio and TV programmes from the viewpoint of development”).

In the scholarly literature, the LPA received contrasting reviews. While one approving commentator, quoting Adedeji himself, hailed it as the “first continent-wide effort by Africans to forge a comprehensive, unified approach to their continent’s economic development”,⁴⁰ others described it as a “utopian” document “lacking in practicable prescriptions”,⁴¹ or dismissed it on the grounds that while claiming to give voice to Africa’s authentic aspirations it simply reflected the class bias of a political and technocratic elite imbued with a Eurocentric worldview.⁴² Despite their diversity, all these positions treated the LPA as an ideological manifesto, rather than as a conceptual framework feeding into the process of imagining statistical tools that, under different circumstances, could have facilitated its operationalization and implementation.

The ways in which the principles and goals of the LPA were re-invented as statistical frameworks can be compared to a process of translation, made possible by the intermediate act of *naming* the indicators. This seemingly trivial task performs two distinct functions. Firstly, it asserts the existence of the phenomenon that the indicators purport to measure, and secondly, it claims that it can indeed be quantified.⁴³ The indicators’ names embody the connection between the LPA as a text, and the numbers that are the expected outcome of the prescribed acts of measurement and calculation. ECA’s lists

38. UNESCO; ECA, 1984, Appendix, “Proposed list of indicators for use by African planners”.

39. *Ibid.*

40. F. N. IKOME, 2007, p. 51.

41. J. RAVENHILL, 1986, p. 104.

42. For further discussion and references to these positions see R. J. CUMMINGS, 1992.

43. K. E. DAVIS, B. KINGSBURY & S. E. MERRY, 2012, pp. 75-76.

establish and make visible new relationships and hierarchies between the variables that are selected as the objects of measurement (“cereal imports”, “national savings”), the phenomena that they claim to measure (“basic needs”, “national autonomy”, “self-reliance”), and the overall ideological and political framework in which they originated.

This procedure appeals to the power of quantification to “depoliticize”. Translating a vague or complex concept into a list of quantifiable elements detaches it from the ideological framework in which it originated, while simultaneously validating it by making it resemble the outcome of “objective” calculations.⁴⁴ Yet, as noted in a recent study on the UN’s experience of measuring development through indicators, an expansion in scope combined with increased reach, like that observed in the ECA’s successive lists of indicators, could also mean that “as the goals expand, the indicator numbers have an even more limited overall representing power not just for individual goals but also for development as an overall ‘good’”.⁴⁵ But the ECA did not seek to condense its vision of development into a single measure; rather it saw indicators as a widely shared language that could serve to legitimize the commission’s role as the spokesman of Africa’s aspirations, and the architect of a conceptual infrastructure capable of reconfiguring the relationship between development discourse and statistical practice on African soil.

3. Monitoring, statistical capacity and fragmentation

For the ECA to turn its envisaged indicators into effective technologies of governance, exercising the “power to name” was not enough. To gain global acceptance and circulation, indicators require the support of influential political and institutional actors, and must be capable of taking into account the needs, constraints, and changing identities of the relevant data producers and users.⁴⁶ In the case of the ambitious list of development indicators envisaged by the ECA, none of these conditions were met. The LPA, authored by the ECA, was published by the Organization of African Unity (OAU) to signal the widespread support of African heads of state. Although in 1982 the endorsement of the LPA by African nations – and the rejection of the Berg Report – was reiterated in a declaration of the ECA Conference of Ministers, by 1985 the OAU conceded that the LPA had not been translated into action, and that it had had no impact on national planning.⁴⁷ Furthermore, the oppositional dichotomy that characterized the relationship between the

44. T. M. PORTER, 1995. The classic study of development discourse and depoliticization in the African context remains that of J. FERGUSON, 1994.

45. M. S. MORGAN & M. BACH, 2018, p. 203.

46. K. E. DAVIS, B. KINGSBURY & S. E. MERRY, 2012.

47. OAU, 1985, p. 3. However, this was only part of the story. On the uneven reception and different interpretations of the LPA among African states, see T. M. SHAW, 1983.

Berg Report and the LPA was eroded by an apparent convergence. While the catchphrase “adjustment with growth” signalled the WB’s and the IMF’s recognition of the dangers of import strangulation following the adoption of the SAPs,⁴⁸ the WB increasingly acknowledged the unsustainability of African debt, and paid lip-service to the legitimacy of the OAU’s vision of regional integration.⁴⁹ The OAU, on the other hand, admitted the unsustainability of the continent’s policy regimes up to that point, and accepted (or claimed to accept) the SAPs as a painful necessity. Although this was not a linear and cumulative process,⁵⁰ some scholars have also pointed up a convergence between the ECA and the WB around a common platform of increasing concern over the social costs of adjustment.⁵¹

This state of affairs did not weaken the ECA’s emphasis on indicators as part of its intellectual, statistical and political engagement with the SAPs. Instead, it changed their main function. Rather than attempting to give credibility and statistical embodiment to an alternative blueprint for development, the role of indicators became, more modestly, that of quantifying, and thus making visible, what the SAPs had neglected:

“the orthodox stabilisation and structural adjustment programmes not only ignore the human dimension, but also tend to worsen the well-being of large categories of the population, especially the poor and the vulnerable. Most seriously the implementation of these programmes has entailed significant reduction in the public expenditures on the social sectors, especially education, primary health care as well as water and sanitation, with dire consequences for the future of the African people and economies”.⁵²

The 1988 Khartoum declaration, representing the commission’s position after almost a decade of SAPs, expressed the hope that the information (presumably including statistics) produced by ECA could be mobilized by African governments to improve their negotiating position vis-à-vis international financial institutions, and thus partly rectify the power imbalance at the core of the SAPs.⁵³ Besides attempting to empower African governments, this strategy reflected an understanding of statistics as monitoring tools, with the aim of influencing the behaviour of the WB on the basis of numbers that quantified the outcome of its actions.⁵⁴ If “indicators are exercises in social power that interact with the status of the ranker in the broader international

48. J. RAVENHILL, 1988, p. 179.

49. *Id.*, 1993.

50. The 1989 “statistical war” discussed in the previous section is an important counterexample.

51. See, for example, J. RAVENHILL, 1993.

52. ECA, 1989, p. 8. Another important critique of SAPs is found in the Abuja declaration, ECA, 1987.

53. ECA, 1988, p. 27.

54. J. G. KELLEY & B. A. SIMMONS, 2015.

community”;⁵⁵ how did the power of indicators to potentially exert pressure on the WB tie in with the changing role of the ECA as a statistical provider?

The lists of indicators prepared by the ECA in the early 1980s had been replaced by an invitation for international organizations to “intensify their efforts in the development and use of appropriate indicators for closely monitoring the human and social dimensions of the adjustment process”.⁵⁶ The task of creating statistical evidence to assess the human and social implications of SAPs fell principally on institutions like the World Health Organization, the World Food Programme, the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the United Nations International Children’s Emergency Fund (UNICEF). All these organizations shared with the ECA the view that SAPs were resulting in a “decline in quality of and access to health services, resurgence of endemic and epidemic diseases”,⁵⁷ and that the “objective of monitoring human and social indicators in the adjustment process is therefore to protect vulnerable population groups, such as young children, from the negative impact of structural adjustment policies”.⁵⁸

If the ECA’s vision of indicators as tools to quantify the human and social impact of SAPs echoed that of other institutions (and particularly UNICEF’s call for “adjustment with a human face”),⁵⁹ the commission’s emphasis on self-reliance and regional integration did not find a voice in the global statistical sphere.⁶⁰ What might appear to be a partial success, actually implied the collapse of the ECA’s distinctive statistical vision. By cutting the connection with the unified conceptual and political framework of the LPA, the indicators on the social and human costs of SAPs re-established the barrier separating the “economic” from the “social” that the ECA was committed to overcome. Furthermore, the resulting statistical picture of Africa as a fragile entity in need of help had the potential to legitimize further external interventions,⁶¹ and subverted the commission’s vision of a continent that, by imagining development indicators, thought it could take control of its own destiny.

The translation of ECA’s statistical agenda into action was further complicated by the difficulties of the African national statistical services. The commission, which envisaged a pivotal role for them in turning the LPA into development plans and policies,⁶² claimed that “data requirements for

55. J. G. KELLEY & B. A. SIMMONS, 2015, p. 59.

56. ECA, 1988, p. 17.

57. WORLD HEALTH ORGANIZATION & WORLD FOOD PROGRAMME, 1988, p. 1.

58. ECA; UNESCO, 1988, p. 1.

59. G. A. CORNIA, R. JOLLY & F. STEWART, 1987; 1988.

60. For a nuanced discussion of the impact of SAPs on science and technology, see J. L. ENOS, 1995.

61. An interesting analogy is provided by the statistical representations of poverty and famine in the Sahel region in the 1970s discussed by V. BONNECASE, 2011, Chapter 5.

62. UNESCO; ECA, 1986, p. 2.

development indicators would not entail any extra demand on statistical data collection programmes of African countries, except in areas of details and emphasis”.⁶³ On the other hand, there was no doubt that the “new emphasis of giving social dimension to development planning has profound implications for data requirements, as it demands new sets of data”.⁶⁴

Yet, a ranking of priorities expressed by 22 African statistical offices suggests that the expansion of data collection on health, education, communication and environment, where demand for new statistics was particularly strong, was not considered of critical importance.⁶⁵ The Commission noted a significant divergence between its priorities and those of policy-makers on the one hand, and of statistical offices on the other. This was the case, for example, for agricultural statistics which – including data on food production and consumption – were seen by the ECA, as well as by many African heads of state, as the first priority; they were ranked only sixth in importance by the statistical services.⁶⁶ This “statistical conservatism” and preservation of the status quo was largely the consequence of practical difficulties. A 1985 survey revealed that for the 22 African statistical offices that responded, an inadequate budget was the most common problem, followed by the “insufficient number of posts” and the “difficulty in attracting qualified personnel”.⁶⁷ In the 1970s “the resources for statistical development have either not increased at all or the increases have been made only to offset inflation”.⁶⁸ With the shrinking of the public sector that followed the adoption of SAPs, the funding and staffing problems of African statistical offices were further exacerbated.⁶⁹ As put by Ben Kiregyera, state-sponsored “statistics was one of the victims” of SAPs.⁷⁰

That said, national statistical services did not represent the full range of actors potentially involved in the production of indicators. Indeed, the construction of socio-economic indicators is typically based on the aggregation of heterogeneous data collected by a wide variety of sources and institutional actors. Looking back at the work done by UNICEF in the 1980s to monitor the impact of SAPs, Richard Jolly recollected how

the evidence was far from adequate. Few countries systematically collected data on the most important indicators of human welfare. [...] This said, the study noted a surprising availability of relevant data at the country level, once one moved beyond the confines of conventional indicators available in national or international statistical digests [...]. These other indicators were often most carefully collected

63. UNESCO; ECA, 1984, p. 10.

64. *Ibid.*, p. 1.

65. *Id.*, 1985b, pp. 5-6.

66. *Ibid.*, 1985b, p. 6.

67. *Id.*, 1985a, Tables 11 and 12, pp. 19-20.

68. *Id.*, 1981a, p. 2.

69. M. JERVEN, 2013.

70. B. KIREGYERA, 2015, p. 40.

and processed by health workers, school and housing administrators and research workers.⁷¹

The ECA was aware that a large share of the data used to construct development indicators lay outside the statistical offices' standard scope of operations, and that large bodies of data had been collected but remained underused.⁷² The authority of indicators (and of numbers more generally) stems in part from their capacity to conceal the web of relationships linking the different subjects involved in their construction, the stages of data production, and the ways in which concepts, procedures and methods are negotiated and contested at different stages of data collection and aggregation. Drawing on the work and insights of organization and information theorists of the 1950s, Wendy Espeland and Mitchell Stevens have characterized this process of "uncertainty absorption" as follows:

"Raw" information typically is collected and compiled by workers near the bottom of organizational hierarchies; but as it is manipulated, parsed and moved upward, it is transformed so as to make it accessible and amenable for those near the top, who make the big decisions. This "editing" removes assumptions, discretion and ambiguity. The premises behind the numbers disappear, with the consequence that decisions seem more obvious than they might otherwise have been. An often unintended effect of this phenomenon is numbers that appear more authoritative as they move up a chain of command. The authority of the information parallels the authority of its handlers in the hierarchy.⁷³

Seen through this lens, the ECA did not possess the administrative and institutional capacity in the 1980s to capitalize on the increasingly atomized landscape of data production on African economic and social life. Without coercive power to impose concepts, standards and procedures on African statistical offices, facing the "competition" of other international organizations,⁷⁴ and inhabiting a world in which NGOs, rather than governments, increasingly collected grassroots information on social issues,⁷⁵ the ECA was not well equipped to deal with a scenario in which the "governance of numbers" was characterized by extreme fragmentation.

71. R. JOLLY, 1991, 1810.

72. ECA, 1981b, pp. 8-9.

73. W. N. ESPELAND & M. L. STEVENS, 2008, pp. 421-422.

74. One of the reasons that eventually led to the temporary closure of the ECA Statistics Division was precisely the fact that the World Bank had developed its own database, B. KIREGYERA, 2015, p. 41.

75. Even without explicitly mentioning statistics, the Khartoum declaration also mentioned the increasingly important role of non-governmental organizations in "monitoring the implementation of international commitment" and making the public aware of "the realities of the African countries and societies"; ECA; UNESCO, 1988b, p. 30. Although there is a considerable literature on the place of NGOs in African development and governance, it is unfortunate that their role as producers and users of statistics has received little scholarly attention.

Conclusion

In 1989, the ECA reasserted the notion that the SAPs had not succeeded in mitigating Africa's economic crisis, and further developed the ideas of the LPA in the *African Alternative Framework to Structural Adjustment Programs for Socio-Economic Recovery and Transformation*.⁷⁶ With the approval of the *Addis Ababa Plan of Action for Statistical Development in Africa in the 1990s*, the Commission reiterated both the crucial importance of statistics as a tool of African development, and the centrality of the ECA in promoting their expansion.⁷⁷ Yet, there is a certain irony in the fact the "governance of indicators" described in this paper was followed by the rise of "governance indicators". By turning issues like human rights and accountability into numbers, the indicators that emerged in the 1990s under WB sponsorship expanded the realm of what could be an object of measurement and intervention.⁷⁸

When compared with the significant impact of the WB governance indicators, or with other UN metrics like the Human Development Index (HDI), the Millennium Development Goals (MDG) and the Sustainable Development Goals (SDG),⁷⁹ ECA's 1980s lists might appear as little more than *trivia* in the history of quantification. Yet, even without shaping African statistics, planning and policies in the way their creators intended, the indicators listed by ECA do exactly what – etymologically – they are supposed to do: like the index finger, they point.⁸⁰

Firstly, sharing the fate of the LPA, ECA's lists of indicators point at an alternative future that failed to materialize, or at a counterfactual dimension in which industrialization, regional integration and developmental states are the building blocks of a prosperous and self-reliant Africa. While the contemporary state of African statistics is often debated in dichotomous terms, oscillating between narratives of "Africa's statistical tragedy" and expressions of "Afro-statistical optimism",⁸¹ there is a consensus that the 1980s marked a low point. Morten Jerven observed that the 1980s were not simply Africa's "lost decade" from the viewpoint of economic growth: they were also characterized by a steady decline in the quantity and quality of economic statistical output.⁸²

76. ECA, 1990a.

77. *Id.*, 1990b.

78. For a discussion of the transformation in the WB's governance over "economies" in the 1980s to "states and institutions" in the 1990s, see G. HARRISON, 2004.

79. On the HDI, see E. STANTON, 2007, and K. E. DAVIS, B. KINGSBURY & S. E. MERRY, 2012, p. 95-99. On the HDI, MDG and SDG from the perspective of the UN, see M. S. MORGAN & M. BACH, 2018.

80. T. PORTER, 2015, p. 34.

81. S. DEVARAJAN, 2011; B. KIREGYERA, 2015.

82. M. JERVEN, 2013, p. 45.

Yet, by taking this view at face value, we may potentially overlook the ways in which statistical frameworks, regardless of their impact and degree of implementation, were imagined, and how their meanings evolved in light of changing political circumstances. Seen through the lens of the literature on “governance by indicators”, the experience of ECA corroborates the insight that the power of indicators as tools of governance is not embedded in their capacity to produce comparable numbers that transcend their context of inception. Rather, it requires the alignment of stringent political, economic, administrative and ideological conditions. As noted by Sally Engle Merry, given that the “vast majority of indicators search in vain for global interest and influence”,⁸³ there is certainly more scope for studying the political and administrative difficulties that hinder the implementation and circulation of statistical templates, rather than looking only at those indicators that have transformed the world in profound ways. Moving from the governance of indicators to the governance of Africa under structural adjustment, the story recounted here can be read as an invitation to consider indicators not simply as expressions of the hegemonic power and neoliberal governance imposed by international financial institutions, but as a flexible platform that informed the “translation” of alternative political visions, and an intersection between the evolution of development discourse and the opportunities and constraints faced by African statistical machineries and institutions.

However, these are only preliminary considerations. Archival research, interviews and ethnographic studies are necessary to enhance our understanding of the political and statistical culture of the ECA, and to bring to life the tensions and debates hidden by the opacity of the sources in the commission’s repository. Only a fine-grained exploration of the experience of African planning and statistical machineries, and a deeper comparative perspective on the indicators designed by other UN agencies and international organizations can lead simultaneously to a more precise understanding of what was distinctive about ECA’s approach, and a fuller appraisal of the political lives of quantification in contemporary Africa.

83. S. E. MERRY, 2016, p. 15.

Bibliography

ECA Sources

- ECA, *Report on regional co-operation in the field of statistics. UN. ECA (4th session: 1962, Feb. - Mar.: Addis Ababa, Ethiopia)*, Addis Ababa, 1961.
URL: <http://repository.uneca.org/handle/10855/6552>.
- , *Industrial Growth in Africa*, New York, United Nations, 1963a.
- , *Economic and Social Consequences of Racial Discriminatory Practices*, New York, United Nations, 1963b.
- , *The Status and Role of Women in East Africa*, New York, United Nations, 1967.
- , *The International Conference on Africa: The Challenge of Economic Recovery and Accelerated Development, Abuja, Nigeria, 15-19 June 1987, the Abuja Statement*, 1987.
URL: <https://repository.uneca.org/handle/10855/5713>.
- , *Statistics and Policies: ECA's Preliminary Observations on the World Bank Report "Africa's Adjustment and Growth in the 1980s"*, New York, United Nations, 1989.
URL: <http://repository.uneca.org/handle/10855/5690>.
- , *African alternative framework to structural adjustment programmes for socio-economic recovery and transformation (AAF-SAP)*, Addis Ababa, 1990a.
URL: <http://hdl.handle.net/10855/5670>.
- , *Addis Ababa plan of action for statistical development in Africa in the 1990s*, Addis Ababa, 1990b.
URL: <http://hdl.handle.net/10855/3798>.
- ECA; UNESC, *Revised framework of principles for the implementation of the new international economic order in Africa: 1976-1981-1986. UN. ECA Executive Committee Meeting (13th: 1975, November 17-18: Addis Ababa, Ethiopia)*, Addis Ababa, 1975.
URL: <http://repository.uneca.org/handle/10855/12705>.
- , *Monitoring human and social indicators in the adjustment process: Food and nutrition surveillance. UN. ECA Joint Conference of African Planners, Statisticians and Demographers (5th session: 1988, March 21-28: Addis Ababa, Ethiopia)*, E/ECA. PSD.5/56, 1988a.
URL: <http://repository.uneca.org/handle/10855/11232>.
- , *The International Conference on the Human Dimension of Africa's Economic Recovery and Development, The Khartoum Declaration, Towards a Human-Focused Approach to Socio-Economic Recovery and Development in Africa, Khartoum 8 March 1988*, 1988b.
URL: <https://repository.uneca.org/handle/123456789/16570>.
- UNESC; ECA, *Statistical priorities: working group on statistical organization and manpower. Working Group on Statistical Organization and Manpower (1981 Jul. 26-30: Addis Ababa, Ethiopia)*, ST/ECA/STPA/WG.1/3, 1981a.
URL: <http://repository.uneca.org/handle/10855/8138>.
- , *The Design and Applicability of Socio-Economic Indicators in the African Context. UN. ECA Joint Conference of African Planners, Statisticians and Demographers (2nd session: 1982, Mar. 8-17: Addis Ababa, Ethiopia)*, Addis Ababa, 1981b.
URL: <http://repository.uneca.org/handle/10855/8391>.

- UNESCO; ECA, *Silver Jubilee anniversary of the Economic Commission for Africa, April 1983. UN. ECA Conference of Ministers Meeting (8th: 1982, Apr. 27-30: Tripoli, Libyan Arab Jamahiriya)*, Addis Ababa, 1982.
URL: <https://repository.uneca.org/handle/10855/8439>.
- , *Development indicators: data requirements and availability. UN. ECA Expert Consultation on a System of Socio-economic Indicators for African Planners (1984: Jan. 23-27: Addis Ababa, Ethiopia)*, E/ECA/SERPD/INDIC/2, 1984.
URL: <http://repository.uneca.org/handle/10855/9929>.
- , *A review of statistical organization and staffing problems in Africa, including an assessment of the effectiveness of national statistical service. UN. ECA Joint Conference of African Planners, Statisticians and Demographers. (4th session: 1986, March 3-12: Addis Ababa, Ethiopia)*, E/ECA/PSD.4/17, 1985a.
URL: <http://repository.uneca.org/handle/10855/10017>.
- , *The establishment of an African list of statistical priorities. UN. ECA Joint Conference of African Planners, Statisticians and Demographers. (4th session: 1986, March 3-12: Addis Ababa, Ethiopia)*, E/ECA/PSD.4/18, 1985b.
URL: <http://repository.uneca.org/handle/10855/9992>.
- , *The role of African statistical services in the implementation of the Lagos Plan of Action. UN. ECA Joint Conference of African Planners, Statisticians and Demographers (4th session: 1986, March 3-12: Addis Ababa, Ethiopia)*, E/ECA/PSD.4.15, 1986.
URL: <http://repository.uneca.org/handle/10855/10189>.

Research works

- ADEDEJI, Adebayo, “The ECA: Forging a Future for Africa”, in Yves Berthelot (ed.) *Unity and Diversity in Development Ideas: Perspectives from the UN Regional Commissions*, Bloomington and Indianapolis, Indiana University Press, 2004, pp. 233-306.
- ADEPOJU, Aderanti (ed.), *The Impact of Structural Adjustment on the Population of Africa: The implications for Education, Health & Employment*, London and New Hampshire, United Nations Population Fund in association with James Currey and Heinemann, 1993.
- ASANTE, S. K. B., *African Development: Adebayo Adedeji's Alternative Strategies*, Ibadan, Spectrum Books, 1991.
- BAYART, Jean-François, *L'État en Afrique. La politique du ventre*, Paris, Fayard, 1990.
- BAYART, Jean-François, ELLIS, Stephen & HIBOU, Béatrice (eds.), *La criminalisation de l'État en Afrique*, Brussels, Complexe, 1997.
- BONNECASE, Vincent, *La pauvreté au Sahel. Du savoir colonial à la mesure internationale*, Paris, Karthala, 2011.
- CORNIA, Giovanni Andrea, JOLLY, Richard & STEWART, Frances (eds.), *Adjustment with a Human Face*, Vol. I: *Protecting the Vulnerable and Promoting Growth*, Oxford, Clarendon Press, 1987.
- CORNIA, Giovanni Andrea, JOLLY, Richard & STEWART, Frances (eds.), *Adjustment with a Human Face*, Vol. II: *Case Studies*, Oxford, Clarendon Press, 1988.
- CUMMINGS, Robert J., “A Historical Perspective on the Lagos Plan of Action”, in Julius E. NYANG'ORO & Timothy M. SHAW (eds.), *Beyond Structural Adjustment: The Political Economy of Sustainable and Democratic Development*, New York, Westport (Connecticut) and London, Praeger, 1992, pp. 29-48.

- CUSSO, Roser, "L'activité statistique de l'Organisation économique et financière de la Société des Nations. Un nouveau lien entre pouvoir et quantification", *Histoire & Mesure*, 27(2), 2012, pp. 109-138.
- DAVIE, Grace, *Poverty Knowledge in South Africa: A Social History of Human Science, 1855-2005*, New York, Cambridge University Press, 2015.
- DAVIS, Kevin E., KINGSBURY, Benedict & MERRY, Sally Engle, "Indicators as a Technology of Global Governance", *Law & Society Review*, 46(1), 2012, pp. 71-104.
- DAVIS, Kevin E., FISHER, Angelina, KINGSBURY, Benedict & MERRY, Sally Engle (eds.), *Governance by Indicators: Global Power through Quantification and Rankings*, Oxford, Oxford University Press, 2012.
- DEVARAJAN, Shanta, "Africa's Statistical Tragedy", *Africa Can End Poverty: A blog about the economic challenges and opportunities facing Africa*, 2011.
URL: <http://blogs.worldbank.org/african/africa-s-statistical-tragedy>.
- ENOS, John L., *In Pursuit of Science and Technology in Sub-Saharan Africa: The Impact of Structural Adjustment Programmes*, London and New York, Routledge, 1995.
- ESPELAND, Wendy Nelson & STEVENS, Mitchell L., "A Sociology of Quantification", *European Journal of Sociology*, 49(3), 2008, pp. 401-436.
- FERGUSON, James, *The Anti-Politics Machine: "Development", Depoliticization and Bureaucratic Power in Lesotho*, Minneapolis, University of Minnesota Press, 1994.
- , *Global Shadows: Africa in the Neoliberal World Order*, Durham (NC) and London, Duke University Press, 2006.
- GERRETS, Rene, "Charting the Road to Eradication: Health Facility Data and Malaria Indicator Generation in Rural Tanzania", in Richard ROTTENBURG *et al.* (eds.) *The World of Indicators: The Making of Governmental Knowledge Through Quantification*, Cambridge, Cambridge University Press, 2015, pp. 151-187.
- GLASMAN, Joël, "Measuring Malnutrition: The History of the MUAC Tape and the Commensurability of Human Needs", *Humanity: An International Journal of Human Rights, Humanitarianism, and Development*, 9(1), 2018, pp. 19-44.
- GREEN, Reginald Herbold, "The IMF and the World Bank in Africa: How much learning?", in Thomas M. CALLAGHY & John RAVENHILL (eds.), *Hemmed In: Responses to Africa's Economic Decline*, New York, Columbia University Press, 1993, pp. 54-89.
- GRUHN, Isebill V., *Regionalism Reconsidered: The Economic Commission for Africa*, Boulder, Westview Press, 1979.
- HARRISON, Graham, *The World Bank and Africa: The Construction of Governance States*, London and New York, Routledge, 2004.
- , *Neoliberal Africa: The Impact of Global Social Engineering*, London, Zed Press, 2010.
- HERBST, Jeffrey, "The Structural Adjustment of Politics in Africa", *World Development*, 18(7), 1990, pp. 949-958.
- IKOME, Francis Nguendi, *From the Lagos Plan of Action to the New Partnership for Africa's Development: The Political Economy of Africa's Regional Initiatives*, Midrand, Institute for Global Dialogue, 2007.
- JERVEN, Morten, *Poor Numbers: How We Are Misled by African Development Statistics and What to Do about It*, Ithaca (NY), Cornell University Press, 2013.
- JOLLY, Richard, "Adjustment with a Human Face: A UNICEF Record and Perspective on the 1980s", *World Development*, 19(12), 1991, pp. 1807-1821.

- KELLEY, Judith G. & SIMMONS, Beth A., "Politics by Number: Indicators as Social Pressure in International Relations", *American Journal of Political Science*, 59(1), 2015, pp. 55-70.
- KIREGYERA, Ben, *The Emerging Data Revolution in Africa: Strengthening the Statistics, Policy and Decision-making Chain*, Stellenbosch, Sun Press, 2015.
- LENSINK, Robert, *Structural Adjustment in Sub-Saharan Africa*, London and New York, Longman, 1996.
- MACKENZIE, Donald, MUNIESA, Fabian & SIU, Lucia (eds.) *Do Economists Make Markets? On the Performativity of Economics*, Princeton (NJ) and Oxford, 2007.
- MANN, Gregory, *From Empires to NGOs in the West African Sahel: The Road to Nongovernmentality*, New York, Cambridge University Press, 2015.
- MERRY, Sally Engle, "Measuring the World: Indicators, Human Rights, and Global Governance", in Marina WELKER, Damani J. PARTRIDGE & Rebecca HARDIN (eds.), *Corporate Lives: New Perspectives on the Social Life of the Corporate Form*, *Current Anthropology*, 52, supplement 3, 2011, pp. S83-S95.
- , *The Seductions of Quantification: Measuring Human Rights, Gender Violence, and Sex Trafficking*, Chicago and London, The University of Chicago Press, 2016.
- MKANDAWIRE, Thandika, "Thinking about Developmental States in Africa", *Cambridge Journal of Economics*, 25(3), 2001, pp. 289-314.
- MKANDAWIRE, Thandika & SOLUDO, Charles C., *Our Continent, Our Future: African Perspectives on Structural Adjustment*, Dakar, Ottawa and Trenton (NJ), CODESRIA, International Development Research Centre and Africa World Press, 1998.
- MKANDAWIRE, Thandika & SOLUDO, Charles C. (eds.), *African Voices on Structural Adjustment: a Companion to Our Continent, Our Future*, Dakar, Ottawa and Trenton (NJ), CODESRIA, International Development Research Centre and Africa World Press, 2003.
- MORGAN, Mary S. & BACH, Maria, "Measuring Development – from the UN's Perspective", in Michele ALACEVICH & Mauro BOIANOVSKY (eds.), *The Political Economy of Development Economics: Historical Perspectives*, annual supplement to *History of Political Economy*, 50, 2018, pp. 193-210.
- MUGLER, Johanna, "By Their Own Account: (Quantitative) Accountability, Numerical Reflexivity and the National Prosecuting Authority in South Africa", in Richard ROTTENBURG, Sally E. MERRY, Sung-Joon PARK & Johanna MUGLER (eds.), *The World of Indicators: The Making of Governmental Knowledge through Quantification*, Cambridge, Cambridge University Press, 2015, pp. 76-101.
- NYANG'ORO, Julius E., "The Evolving Role of the African State under Structural Adjustment", in Julius E. NYANG'ORO & Timothy M. SHAW (eds.), *Beyond Structural Adjustment: The Political Economy of Sustainable and Democratic Development*, New York, Westport (Connecticut) and London, Praeger, 1992, pp. 11-27.
- ONIMODE, Bade, (ed.), *The IMF, The World Bank, and the African Debt*, Vol. 1: *The Economic Impact*; Vol. 2: *The Social Impact*, London, Zed Books, 1989.
- ORGANIZATION OF AFRICAN UNITY, *Lagos Plan of Action for the Economic Development of Africa, 1980-2000*, Addis Ababa, 1980.
- , *Africa's Priority Programme for Economic Recovery, 1986-1990*, Food and Agriculture Organization for the OAU, Addis Ababa, 1985.

- PARFITT, Trevor W., "Lies, Damned Lies and Statistics: The World Bank/ECA Structural Adjustment Controversy", *Review of African Political Economy*, 47, 1990, pp. 128-141.
- PARK, Sun-Joon, "'Nobody is Going to Die': An Ethnography of Hope, Indicators and Improvizations in HIV Treatment Programmes in Uganda", in Richard ROTTENBURG, Sally E. MERRY, Sung-Joon PARK & Johanna MUGLER (eds.), *The World of Indicators: The Making of Governmental Knowledge Through Quantification*, Cambridge, Cambridge University Press, 2015, pp. 188-219.
- PORTER, Theodore M., *Trust in Numbers: The Pursuit of Objectivity in Science and Public Life*, Princeton (NJ), 1995.
- , "The Flight of the Indicator", in Richard ROTTENBURG, Sally E. MERRY, Sung-Joon PARK & Johanna MUGLER (eds.), *The World of Indicators: The Making of Governmental Knowledge Through Quantification*, Cambridge, Cambridge University Press, 2015, pp. 34-55.
- RAVENHILL, John, "Collective Self-reliance or Collective Self-delusion: Is the Lagos Plan a Viable Alternative?", in John RAVENHILL (ed.), *Africa in Economic Crisis*, Basingstoke, Macmillan, 1986, pp. 85-107.
- , "Adjustment with Growth: A Fragile Consensus", *The Journal of Modern African Studies*, 26(2), 1988, pp. 179-210.
- , "A Second Decade of Adjustment: Greater Complexity, Greater Uncertainty", in Thomas M. CALLAGHY & John RAVENHILL (eds.), *Hemmed In: Responses to Africa's Economic Decline*, New York, Columbia University Press, 1993, pp. 18-53.
- ROTTENBURG, Richard & MERRY, Sally Engle, "A World of Indicators: the Making of Governmental Knowledge through Quantification", in Richard ROTTENBURG, Sally E. MERRY, Sung-Joon PARK & Johanna MUGLER (eds.), *The World of Indicators: The Making of Governmental Knowledge Through Quantification*, Cambridge, Cambridge University Press, 2015, pp. 1-33.
- ROTTENBURG, Richard, MERRY, Sally E., PARK, Sun-Joon, & MUGLER, Johanna (eds.) *The World of Indicators: The Making of Governmental Knowledge Through Quantification*, Cambridge, Cambridge University Press, 2015.
- SAMUEL, Boris, "Calcul macroéconomique et modes de gouvernement : les cas de la Mauritanie et du Burkina Faso", in Béatrice HIBOU & Boris SAMUEL (eds.) *La macroéconomie par le bas, Politique africaine*, 124(4), 2011, pp. 106-126.
- SCHMELZER, Matthias, *The Hegemony of Growth: The OECD and the Making of the Economic Growth Paradigm*, Cambridge, Cambridge University Press, 2016.
- SERRA, Gerardo, "From Scattered Data to Ideological Education: Economics, Statistics and the State in Ghana, 1948-1966," unpublished PhD thesis, London School of Economics and Political Science, 2015.
- SHAW, Timothy M., "The African Crisis: Alternative Development Strategies for the Continent", *Alternatives*, Vol. IX, 1983, pp. 111-127.
- SHORE, Cris, "Audit Culture and Illiberal Governance: Universities and the Politics of Accountability", *Anthropological Theory*, 8(3), 2008, pp. 278-298.
- STANTON, Elizabeth A., "The Human Development Index: A History", Political Economy Research Institute, University of Massachusetts Amherst, working paper series, 127, 2007.
- SUPIOT, Alain, *La gouvernance par les nombres. Cours au Collège de France (2012-2014)*, Paris, Fayard, 2015.

- VAN DE WALLE, Nicholas, *African Economies and the Politics of Permanent Crisis, 1979-1999*, Cambridge and New York, Cambridge University Press, 2001.
- WARD, Michael, *Quantifying the World: UN Ideas and Statistics*, Bloomington, Indiana University Press, 2004.
- WORLD BANK, *Accelerated Development in Sub-Saharan Africa: An Agenda for Action*, Washington, The World Bank, 1981.
- , *Africa's Adjustment and Growth in the 1980s*, Washington, The World Bank, 1989.
- WORLD HEALTH ORGANIZATION & WORLD FOOD PROGRAMME, *International Conference on the Human Dimension of Africa's Economic Recovery and Development - Structural Adjustment, Health, Nutrition and Food Aid in the African Region*, Khartoum, Sudan, 5-8 March 1988.
URL: <https://repository.uneca.org/handle/10855/14860>.
- ZENKER, Olaf, "Failure by the Numbers? Settlement Statistics as Indicators of State Performance in South African Land Restitution", in Richard ROTTENBURG *et al.* (eds.) *The World of Indicators: The Making of Governmental Knowledge Through Quantification*, Cambridge, Cambridge University Press, 2015, pp. 102-126.