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African Social Security Systems: An Ordinal Evaluation

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ABSTRACT

The purpose of this paper is to rank the social security systems in 45 African countries using a comparative evaluation methodology that enables an assessment to be made of a country's statutory social security intention. The conclusion drawn is that the spread of African social security system design standards are comparable to those of Latin American countries, although the poorest designed African systems are somewhat superior to their Latin American counterparts. The very best designed African social security systems are in North Africa: Tunisia (with its world-class family support program), Algeria and Libya, although Mauritius also stands out.

Introduction

Descriptive and analytical comparative social security research on Africa began in the 1960s (Gerig 1966, Kessler 1966) and has continued on a modest scale ever since (Moulton 1975, ILO 1977, Ejuba 1982, Dixon 1987, Gruat 1990). This study contributes to this literature by incorporating an evaluative dimension that permits the ranking of African social security systems.

The major social security strategies used in Africa to meet the social security needs are: social insurance, social assistance, social allowances, mandatory public savings (National Provident Funds) and employee liability (see Table 1 and Dixon 1999: 20-24).

The objective of this paper is to rank the 45 African social security systems using a comparative evaluation methodology that enables an assessment to be made of each country's statutory social security intention. It draws upon a recently completed global study, which ranks the design standards of social security programs and systems in 172 countries (Dixon 1999).

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Table 1: Social Security Strategies

Social Security Strategy	Primary Social Security Goal	Primary Sources of Funding	Coverage	Primary Benefits Eligibility	Primary Forms of Benefits
Social Assistance	Poverty alleviation	Public revenue	Entire population or designated categories	Domicile Categorical tests Means test	Flat-rate periodic payments In-kind benefits
Social Insurance	Poverty prevention	Contributions from covered employees, their employers, and government	Employees in designated categories and their dependents	Categorical tests Contribution or employment record	Earnings-related or contribution related periodic payments In-kind benefits Healthcare benefits
Social Allowances	Social compensation	Public revenue	Entire population or designated categories	Categorical tests Domicile	Flat-rate periodic payments
Mandatory Public Savings	Poverty prevention	Contributions from covered employees and their employers	Employees in designated categories and their dependents	Categorical tests Past payment of contributions	Lump-sum, perhaps convertible to periodic payments
Employer Liability	Poverty prevention	Designated employers	Employees and their dependents	Current employment	Earning-related periodic payments Lump-sum payments

Source: Dixon 1999: 6

Approaches to Evaluating Social Security Systems

A variety of evaluation methodologies could be used to assess national social security systems (Dixon 1998, ISSA 1976). First, they could be evaluated by their inputs (using as measures, say, public social security receipts or expenditure as a percentage of Gross National Product (GNP), public social security receipts or expenditure per capita, indices of average annual benefit expenditure per capita over time, or indices of the real average annual benefit expenditure per capita over time). Undoubtedly, public social security expenditure data permit a statistical portrayal of social security system input levels and trends over time, but it does exclude programs financed only by employers or individuals and a careful appraisal of the comparability of expenditure data is obligatory. As a comparative evaluative methodology capable of broad application, input evaluation methodologies are found to be wanting.

Second, social security systems could be judged by their efficiency (using as an efficiency measure administrative cost per unit of social security benefit dispersed), which is problematic because of double counting and the existence of

gaps caused by social security services being delivered by agencies delivering a multiplicity of services (ILO 1988b: 6). As a comparative evaluative methodology capable of broad application, efficiency evaluation methodologies are also found wanting.

Third, a performance evaluation of social security systems can take a variety of forms, given the availability of reliable and compatible data. Program coverage measures could be used (such as the percentage of population or work force covered or the percentage program coverage of target population categories), but they are problematic because of the difficulties in determining, at any given moment, the number of people who are actually, rather than potentially, eligible for program benefits under general qualifying criteria specified (such as minimum residency, employment or contribution qualifying periods) (ILO 1972: 385). Benefit adequacy measures could be used (such as cash entitlements as a percentage of a poverty income threshold, of minimum earnings, of average earnings, or of GNP per capita), but they are all dubious because they ignore differential social security needs and the distribution of benefit payment above or below the chosen standard or benchmark (such as a poverty income threshold, an average wage level, GDP per capita). Beneficiary needs satisfaction or benefit adequacy perception measures could be used (such as measures of household financial security, of subjective deprivation and of subjective poverty), but they can be biased by the form of question posed and the measurement scales used. Additionally, two quite formidable efficiency or performance evaluation challenges remain. As a comparative evaluative methodology capable of broad application, performance evaluation methodologies are also found wanting.

Finally, social security systems could be assessed on the basis of the acceptability of their design features. This methodology permits a comparative evaluation of the statutory intentions of national social security systems. Only this evaluation methodology meets the long-standing comparative evaluative challenge issued by Rys (1966: 268) of defining the "classification scales by which to judge the respective merits and shortcomings of individual members of the [social security] universe observed."

A Design Feature Evaluation Methodology

A comparative evaluation methodology has been developed to assess a country's statutory social security intention (Dixon 1998, 1999). There is of course a potential, sometimes an actual implementation gap between what a social security system promises to deliver in terms of statutory program coverage, benefit eligibility, benefit generosity and program finance and administration; and what

Table 2: Social Security Design Feature Evaluative Dimensions

SYSTEM COMPONENT	PRIMARY STRATEGY: COVERAGE	ELIGIBILITY	BENEFITS	SUPPLEMENTARY STRATEGIES	TOTAL
OLD-AGE PROGRAM	21	18	32	3	74
DISABILITY PROGRAM	22	17	36	3	78
SURVIVORS' PROGRAM	23	39	33	3	98
SICKNESS PROGRAM	27	10	19	3	59
MATERNITY PROGRAM	25	13	35	3	76
EMPLOYMENT-RELATED TEMPORARY INJURY PROGRAM	20	8	15	3	46
EMPLOYMENT-RELATED PERMANENT INJURY PROGRAM	21	10	32	3	66
EMPLOYMENT-RELATED SURVIVORS' PROGRAM	20	29	40	3	92
UNEMPLOYMENT PROGRAM	12	15	34	3	64
FAMILY BENEFITS PROGRAM	24	10	19	3	56
CHILD BENEFITS PROGRAM	24	18	39	3	84
HEALTHCARE BENEFIT PROGRAM	13	2	14	4	84
FINANCIAL ARRANGEMENTS					27
ADMINISTRATIVE ARRANGEMENTS					7
TOTAL	**252**	**189**	**348**	**37**	**860**

Source: Dixon 1999: 200

it ultimately delivers. This gap can, of course, become very significant in countries where public administration and/or public finances have largely or totally collapsed, or have become severely restricted, because of war, natural disasters or severe economic dislocation. Operationalising this evaluation methodology involved the articulation of a comprehensive set of 860 design features, and the systematic attachment of a subjective score to the inclusion or exclusion of particular design features that makes a social security system "more" or "less" acceptable (see Table 2).

Central to any qualitative evaluative judgments must be a set of value premises. The ones adopted in this study relate to the set of benchmarks embodied by the International Labor Organization's (ILO's) conventions on minimum social security standards (ILO 1952, 1966, 1967 and 1989). These conventions are long-standing and define an internationally accepted set of conservative, minimum-standard benchmarks identifying the design features that should be embodied in "minimally acceptable" social security systems in both developed and developing countries (ILO 1989, Tamburi 1981), as targets to be achieved in most instances. This set of standards can, of course, be challenged. Yet they remain the only articulated set of social security values that have emerged from any international discourse as "universal" in their applicability and acceptability. Otting (1993: 169) considers that these conventions provide "an internationally accepted definition of the very idea of social security." Social security systems are thus considered more acceptable (to varying degrees) if their design features:

- cover all social security contingencies, which penalises countries that have made the policy choice, whether for ideological, political or economic reasons, of either:
  - using other public policy strategies (such as tax expenditure strategies) to achieve social security goals; or
  - not establishing social security programs for particular contingencies;
  - has embodied in its constituent programs:
  - universality of coverage, which penalises countries that have made the policy choice of restricting coverage by excluding specific population categories, whether for ideological, political or economic reasons;
  - minimal restrictions with respect to their categorising and general qualifying eligibility requirements, and the specification of needs-assessment criteria, which penalises countries if they have made the policy choice of restricting eligibility on any basis other than need, whether for

ideological, political or economic reasons;

• provision of periodic cash entitlements that enable recipients to maintain their accustomed lifestyle, relative to the prevailing community living standards, which penalises countries that have made the policy choice, whether for ideological, political or economic reasons, of:

• providing benefits on any basis other than past earnings; and/or

• not regularly adjusting such cash entitlements so as to ensure that they remain commensurate with prevailing community living standards;

• provision of health care benefits that include appropriate medical, hospital and paramedical care, of a standard comparable to that available to the community as a whole, to those covered by social security programs (including dependents) and to social security recipients who are in need of such services for as long as such services are medically required, which penalises countries that have made the policy choice, whether for ideological, political or economic reasons, of restricting the availability, and/or the range of health care benefits provided under the auspices of their social security systems; and

• provision of incentives to encourage and/or enable the social security recipients who are able to work to enter the work force, which penalises countries that have made the policy choice of not introducing a set of welfare-to-work measures in an effort to reduce dependency;

• minimises its costs, and share them amongst employers, employees and government in such a way as to ensure that cost burden to individuals (as taxpayers and contributors) is progressive rather than regressive, which penalise countries that have made the policy choice, whether for ideological, political or economic reasons, of:

• not adopting tripartite financing for all social security programs; and/or

• limiting the degree of vertical income redistribution sought; and

• has a mode of administration that is as simple and as decentralised as possible, especially from the perspective of the end user, which penalises countries that have made the policy choice, whether for ideological, political or economic reasons, of constructing a complex and/or centralised social security system.

For each country's social security system, the ranking score (R) has been calculated as follows:

$$R = a\,((Psum + H)/1\,l) + b(F) + c(A)$$

- where Psum is the sum of all the national social security program design assessment scores, where for each social security program:

$$P = 0.3\,((100 - Cd + Cb) + (100 - Ed + Eb) + (100 - Bd + Bb) + Sb)$$

- where Cd is the sum of all primary strategy coverage design shortcoming deductions, Cb is the sum of all primary strategy coverage design merit bonuses, Ed is the sum of all primary strategy benefit-eligibility design shortcoming deductions, Eb is the sum of all primary strategy benefit-eligibility merit bonuses, Bd is the sum of all primary strategy benefit design shortcoming deductions, Bb is the aggregate primary strategy benefit merit bonuses, and Sb is the merit bonus assigned to any supplementary strategies;

- F is the national social security financing assessment score, where:

$$F = 100 - Fd + Fb$$

- where Fd is the sum of all social security financing design shortcoming deductions, and Fb is the sum of all social security financing design merit bonuses;

- H is the national social security health services design assessment score, where:

$$H = 0.3\,((100 - HCd + HCb) + (100 - HEd + HEb) + (100 - HBd + HBb) + HS)$$

- where HCd is the sum of all primary health care benefit program coverage design shortcoming deductions, HCb is the sum of all primary health care coverage design merit bonuses, HEd is the sum of all primary health care benefit-eligibility design shortcoming deductions, HEb is the sum of all primary health care benefit design merit bonuses, HBd is the sum of all primary health care benefit design shortcoming deductions, HBb is the sum of all primary health care benefit design merit bonuses, and HS is the design merit bonus assigned to any supplementary health care strategies;

- A is the national social security administration assessment score, where:

$$A = (100 - Ad + Ab)$$

- where Ad is the sum of all social security administration design short-

coming deductions, and Ab is the sum of all social security administration design merit bonuses; and

- a, b and c are coefficients of relative importance that sum to unity, assigned the values of 0.8, 0.15 and 0.05 respectively.

The output is an African regional ranking of national social security systems: a league table (see Dixon 1999: 249-250). League tables, as Rose (1995: 113) quite correctly points out: "ignore whether a country is not only making progress in relation to its own past, but also catching up in relation to other nations."

The Database

The social security system features derive very largely from the 1995 edition of United States Social Security Administration's *Social Security Programs Throughout the World* (US SSA 1996). This information source is unique in both its scope which is global and its content which is program specific, although it is not without its blemishes (see Dixon 1998, 1999).

A Ranking of African Social Security Systems and Programs

The African social security system design standards are comparable to those achieved in Latin American countries, although Africa's poorest designed systems are superior to those of Latin America. The best designed African systems can be found in North Africa: Tunisia (lst), Algeria (3rd) and Libya (4th) (with Mauritius 2nd); while at the other end of the African design-standard spectrum comes Southern Africa, although the bottom ranked countries are Sierra Leone (45th), Malawi (44th) and Somalia (43rd) (see Dixon 1999: 249-250).

Sub-Regional Ranking

North Africa. This sub-region's social security systems are unequivocally the best designed in Africa. Tunisia unquestionably has the best designed system, containing Africa's best designed employment related permanent disability and family support programs (the latter being ranked equal 9th in the world (with Bulgaria)), being in the same class as Bolivia's and Uruguay's, Latin America's best designed systems. Of the remaining five countries in the sub-region, three are in the African top 10: Algeria (3rd, with Africa's best designed sickness program, employment related temporary disability programs), Libya (4th, with Africa's best designed disability program) and Egypt (equal 9th Egypt, which has Africa's best designed survivors' program). At the bottom of the sub-regional league table is Sudan, which is still only just within the bottom half of the African league table (24th).

Table 3: African Regional Social Security Rankings, 1995

Region/ Country *Africa*	Ranking	Social Security Design Score	Region/ Country *Africa*	Ranking	Social Security Design Score
Tunisia	1	898	Equatorial Guinea	23	743
Mauritius	2	865	Sudan	24	740
Algeria	3	854	Madagascar	25	734
Libya	4	843	Côte d'Ivoire	26	720
Cape Verde	5	829	Mauritania	27	705
South Africa	6	821	Burkina Faso	28	701
Burundi	7	810	Kenya	29	698
Congo	8	804	Nigeria	30	680
Eygpt	9	800	Uganda	31	667
Zaire	9	800	Zimbabwe	32	662
Rwanda	11	797	Senegal	33	659
Togo	12	789	Seychelles	34	653
Gabon	13	783	Ethiopia	35	624
Morocco	14	780	São Tomé & Principe	36	610
Niger	14	780	Tanzania	36	610
Mali	16	778	Botswana	38	604
Benin	17	774	Liberia	39	599
Chad	18	769	Ghana	40	593
Cameroon	19	763	Gambia, The	41	590
Zambia	20	754	Swaziland	41	590
Central African Republic	21	751	Somalia	43	542
Guinea	22	748	Malawi	44	462
			Sierra Leone	45	429

Source: Dixon 1999: 249-250

Middle Africa. This sub-region's social security systems design standards match those of the middle league countries in Central America (namely Panama (4th), Honduras (5th) and El Salvador (6th)). Its best two, Congo and Zaire (in that order), are ranked 8th and equal 9th in Africa. The sub-region's poorest designed system in the Central African Republic is still in the middle of the African league table (23rd).

West Africa. Design standards of social security systems in this sub-region correspond to those achieved in the Caribbean, although its poorest design system in Sierra Leone (19th and last) is clearly better than Surinam's, the poorest designed system in the Caribbean. Cape Verde, undoubtedly the sub-region's best designed system, is of a similar standard to that achieved by Trinidad and Tobago (ranked 2nd in the Caribbean behind the Bahamas), being the only country from this sub-region in the African top 10 (5th). Next come Togo (2nd) and Gabon (3rd). Cote d'Ivoire stands out only because it has a world-class designed maternity program, ranked equal 9th in the world (with Luxembourg, Sweden and Russia). The poorest designed system in the sub-region is in Sierra Leone, which is also the poorest designed in Africa.

East Africa. The design standards of this sub-region's best social security system in Mauritius, containing Africa's best designed old age, unemployment and health care benefit programs; compare favourably to the standards achieved by the Mexican and Chilean systems (ranked 6th and 7th in Latin America respectively), which makes Mauritius the second ranking country in Africa. Following it are Burundi (2nd) and Rwanda (3rd, with Africa's best designed employment related survivors' programs). The sub-region's poorest designed system in Malawi is considerably better than that of Sierra Leone (West Africa).

Southern Africa. The best designed system in this sub-region is that of South Africa, containing Africa's equally best designed health care benefit program, which compares favourably to systems in Barbados and Colombia (ranked 12th and 13th in Latin America respectively), being in the African top 10 (6th). The poorest designed system in Swaziland is considerably better than that of Malawi (East Africa).

Conclusion

This paper has sought to extend the comparative social security literature by incorporating an evaluative dimension, using a methodology that permits an evaluation of national statutory social security intent. The design feature evaluation methodology adopted, involved qualitative judgments taken from a set of value premises, derived from the ILO's conventions on minimum social security

standards.

The conclusion drawn is that African social security system design standards are comparable to those achieved in Latin America, the best being of comparable standard, while the poorest are somewhat superior to those in Latin America. The very best designed African social security systems are in North Africa: Tunisia (with its world-class family support program), Algeria and Libya; and in Mauritius, which dominates the East Africa sub-region, as does South Africa in its sub-region; and Cape Verde in West Africa. Cote d'Ivoire stands out due to its world-class designed maternity program.

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